INTERNATIONAL MONETARY FUND

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REPUBLIC OF ESTONIA

January 2017

2016 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR THE REPUBLIC OF ESTONIA

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 [Consultation Year] Article IV consultation with the Republic of Estonia, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its January 9, 2017 consideration of the staff report that concluded the Article IV consultation with the Republic of Estonia.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on January 9, 2017, following discussions that ended on December 5, 2016, 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 December 21, 2016.
- An **Informational Annex** prepared by the IMF staff.
- A **Statement by the Executive Director** for the Republic of Estonia.

The documents 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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FOR IMMEDIATE RELEASE
January 13, 2017

IMF Executive Board Concludes 2016 Article IV Consultation with the Republic of Estonia

On January 9, 2017, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with the Republic of Estonia.

Notwithstanding sound economic and institutional fundamentals, including one of the strongest public finances in Europe and a business friendly environment, Estonia's recent growth has been subdued. Labor productivity and external competitiveness have weakened. Growth in 2016 is estimated at only 1.3 percent, driven mainly by private consumption on the back of strong wage growth in a tightening labor market. Exports are gradually recovering, but investment continues to contract. Import growth is accordingly low, keeping the current account in small surplus. Inflation rose moderately to around 1 percent.

The economy should gradually strengthen going forward, as the external environment improves and existing pro-growth policies come to fruition. Growth is projected at 2.3 percent for 2017 and 2.8 percent for 2018, supported by continued robust consumption and higher investment and exports, as well as planned fiscal stimulus in 2018. Inflation should pick up to 2.5 percent in 2017, reflecting rising energy prices, sizable contributions from excise tax hikes, and a moderate pickup in underlying price dynamics. The current account should swing into mild deficit as investment gathers steam and consumption continues to be strong. However, risks to this outlook are mainly to the downside, including failure of external demand to pick up and continued rapid wage growth denting competitiveness.

[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]

Executive Directors commended Estonia for its strong institutions and determined reforms, which have delivered solid growth and substantial gains in living standards over the past two decades. Despite a more disappointing recent growth performance, Directors concurred that the outlook is for a pick-up in growth, as the external environment improves and existing pro-growth policies come to fruition. Nevertheless, they cautioned that downside risks dominate and challenges lie ahead. In particular, Directors noted that rapid wage growth in tandem with stagnant productivity have started to reduce competitiveness. Against this background, they underscored the need for structural reforms that improve productivity, supported by prudent fiscal policies, and measures to mitigate financial sector risks.

To address these challenges, Directors recommended enhancing productivity and preserving competitiveness through a three-pronged approach that focuses on (i) improving the effectiveness, scale, and take-up of existing pro-growth programs, including by establishing a dedicated productivity unit; (ii) re-anchoring wage growth in fundamentals, including by ensuring that increases in public wages and minimum wages do not front-run private-sector wage growth, as well as by promoting greater female labor force participation and further streamlining government employment to boost labor supply; and (iii) enhancing competitiveness through tax reforms.

Directors agreed that Estonia's strong public finances provide room to support the strengthening of the supply side of the economy under the above-recommended three-pronged approach, while preserving strong fiscal institutions. They also supported the planned further increase in public investment, while stressing the need to ensure high rates of return for both new and existing projects. Directors welcomed the government's steps to tackle income inequality, and took note of the authorities' intention to reform the income tax system to help achieve distributional objectives.

Directors concurred that the financial sector is in a strong position and adequately supports the economy. They cautioned against spillover risks from potential vulnerabilities in Nordic parent banks, and recommended further mitigating these risks by strengthening cooperation with home-country and European authorities in a revamped Nordic-Baltic Stability Group.

[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.

Republic of Estonia: Selected Macroeconomic and Social Indicators, 2013–18

	2013	2014	2015	2016	2017	2018
				Projections		
National income, prices, and wages						
GDP (billions of Euro)	18.9	19.8	20.3	20.8	21.8	22.9
Real GDP growth (year-on-year in percent)	1.4	2.8	1.4	1.3	2.3	2.8
Private consumption	3.7	3.2	4.6	3.8	2.6	2.8
Gross fixed capital formation	-2.9	-8.1	-3.4	-0.9	4.6	5.3
Exports of goods and services	2.3	3.0	-0.6	4.1	5.2	5.3
Imports of goods and services	3.3	2.2	-1.4	5.7	5.7	5.6
Average HICP (year-on-year change in percent)	3.2	0.5	0.1	0.9	2.5	2.4
GDP deflator (year-on-year change in percent)	3.9	1.7	1.0	1.6	2.1	2.2
Average monthly wage (year-on-year growth in percent)	7.8	5.6	5.9	6.5	5.5	5.0
Unemployment rate (ILO definition, percent, pa)	8.6	7.4	6.1	6.5	7.6	8.3
Unemployment rate, excluding work capacity reform (pa)	…	…	…	5.9	5.8	5.7
Average nominal ULC (year-on-year growth in percent)	6.8	3.6	6.7	6.5	4.8	3.3
General government (ESA10 basis; percent of GDP)						
Revenue	38.4	39.1	40.5	41.4	42.2	42.2
Expenditure	38.5	38.5	40.3	40.7	41.9	42.5
Financial surplus (+) / deficit (-)	-0.2	0.7	0.1	0.8	0.3	-0.2
Structural balance	0.9	1.1	0.9	1.5	0.9	0.0
Total general government debt	10.2	10.7	10.0	9.7	9.3	9.1
External sector (percent of GDP)						
Trade balance	-4.8	-5.1	-4.3	-4.6	-5.4	-6.3
Service balance	7.0	8.5	8.4	8.2	8.0	8.0
Income balance	-2.4	-2.5	-2.1	-2.5	-2.6	-2.6
Current account	-0.1	1.0	2.2	1.2	0.2	-0.7
Gross external debt/GDP (percent) 1/	92.4	96.7	94.8	89.5	83.1	76.8
Net external debt/GDP (percent) 2/	-5.4	-10.2	-10.3	…	…	…
General government external debt/GDP (percent)						
Excluding government assets held abroad	10.2	10.7	10.0	9.7	9.3	9.1
Including government assets held abroad 3/	-1.5	-1.3	-1.7	-1.6	-1.6	-1.2
Exchange rate (US$/Euro - period averages)	1.3	0.0	1.1	…	…	…
Real effective exchange rate (annual changes in percent)	2.7	0.1	-1.9	…	…	…
Nominal effective exchange rate (annual changes in percent)	1.6	1.6	-1.0	…	…	…
Money and credit (year-on-year growth in percent)						
Credit to the economy 4/	1.1	3.3	4.8	6.2	…	…
Output gap (in percent of potential output)	-2.4	-0.8	-0.9	-1.4	-0.7	-0.3
Growth rate of potential output (in percent)	1.8	1.2	1.5	1.7	1.7	2.4

Social Indicators (reference year):

Population (2014, pa): 1.32 million; Per capita GDP (2014): $20,126; Life expectancy at birth (2013): 81.1 (female) and 71.2 (male);

Poverty rate (share of the population below the established risk-of-poverty line, 2013): 21.7 percent; Main exports: machinery and appliances.

Sources: Estonian authorities; Eurostat; and IMF staff estimates and projections.
1/ Includes trade credits.
2/ Net of portfolio assets (including money market instruments, financial derivative assets, other investment assets, and reserve assets held by Estonian residents.
3/ Includes the Stabilization Reserve Fund (SRF).
4/ Loans and leases to households and non-financial corporations. For 2016, based on data at end-September 2016.

INTERNATIONAL MONETARY FUND

REPUBLIC OF ESTONIA

STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION

December 21, 2016

Despite solid fundamentals, strong institutions, and a history of impressive output growth, Estonia's more recent growth and productivity performance has disappointed, and wage rises are putting competitiveness at risk. Growth is projected at 1.3 and 2.3 percent for this year and next. If competitiveness is maintained and policies to boost innovation and labor supply bear fruit, it could reach some 3 percent in the medium term.

KEY ISSUES

- **Effectively addressing low productivity growth and risks to competitiveness requires a three-pronged approach:** (i) making growth promotion more effective through oversight of programs by a dedicated productivity unit in the Prime Ministry, better calibrating programs to company's needs, incentivizing take-up, and scaling-up selected programs; (ii) re-anchoring wage developments in fundamentals by moderating government and minimum wage policies and mobilizing additional labor resources for the private sector, including through faster reduction of government employment; and (iii) social security contribution cuts to provide relief from pressures on profitability.

- **Fiscal policy has primarily been stability oriented, but should do more to strengthen the economy's supply side while preserving Estonia's strong fiscal institutions.** Demand stimulus is not necessary, but Estonia's extraordinarily strong public finances should be utilized to finance the three-pronged approach to boosting productivity detailed above.

- **Estonia's financial sector is sound, though subject to spillover risks from Nordic parent banks.** High capitalization and ample liquidity are formidable lines of defense. Cross-border crisis preparedness and management should be further strengthened in a revamped Nordic-Baltic Stability Group.

Approved By
P. Gerson and V. Kramarenko

Discussions on the 2016 Article IV consultation mission were held in Tallinn during October 13–24 and were followed up with video conferences after the change of government in late November. The Estonia team conferred with the team of Prime Minister Ratas, former Prime Minister Rõivas, Finance Minister Sester, Bank of Estonia Governor Hansson, and other senior officials, as well as the Parliamentary Finance Committee, labor and employer organizations, private sector representatives, and non-governmental think tanks. A conference call was held with banking supervisors at the ECB on October 17. The team comprised Mr. Klingen (head), Messrs. Abdoun, Tudyka (both EUR), and Mr. Stanger (STA). Ms. Anni (OED) participated in the meetings.

CONTENTS

CONTEXT AND OUTLOOK 4
A. Context and Recent Developments 4
B. Outlook and Risks 7

POLICY DISCUSSIONS 9
A. Securing Sustainable Income Convergence and Safeguarding Competitiveness 9
B. Putting Fiscal Policy at Fuller Service to the Economy 15
C. Further Bolstering Financial Sector Resilience 17

STAFF APPRAISAL 18

BOXES
1. External Stability Assessment 6
2. Characteristics of Productivity Growth at the Firm Level 11
3. Developments of Unit Labor Costs and Implications for Competitivenes 12

FIGURES
1. Real Sector Developments, 2009–16 21
2. External Developments, 2004–15 22
3. External Competitiveness, 2008–16 23
4. Fiscal Developments and Structure, 2003–15 24
5. Financial Sector Developments 25
6. Public Sector Debt Sustainability Analysis (DSA)–Baseline Scenario 26
7. Public Sector DSA–Composition of Public Debt and Alternative Scenarios 27

TABLES

1. Selected Macroeconomic and Social Indicators, 2013–18 ____ 28
2. Summary of General Government Operations, 2012–18 ____ 29
3. General Government Financial Assets and Liabilities, 2010–2016:Q2 ____ 30
4. Summary Balance of Payments, 2010–18 ____ 31
5. Macroeconomic Framework, 2010–21 ____ 32
6. Indicators of External Vulnerability, 2010–15 ____ 33
7. Households, Financial Assets and Liabilities, 2010–15 ____ 34
8. Financial Soundness Indicators, 2009–2016Q2 ____ 35

CONTEXT AND OUTLOOK

A. Context and Recent Developments

1. Thanks to strong institutions and determined market-oriented reforms, Estonia's economic fundamentals remain solid. The business environment is one of the best in the region, there is no net public debt, and financial soundness indicators are exceptionally strong. The macroeconomy is broadly in internal and external balance, with labor force participation historically high, inflation running slightly above 1 percent, and the current account in small surplus. Some limited economic slack remains, mainly in the export and energy sectors. There is likewise some room for unemployment to decline further from its current rate of 7.5 percent and for hours worked per employee to increase.

2. Economic growth has, however, disappointed in recent years. Since mid-2013, growth has only marginally exceeded that of the euro area and labor productivity has been flat. During 2015 and the first three quarters of 2016 income convergence went into reverse. Adverse shocks are partly responsible, such as the particularly weak external environment,[1] an investment hiatus related to the transition between the 2007–13 and 2014–20 Multiannual Financial Frameworks (MFF) for EU-funds, and more recently challenges for the oil shale sector from sharply lower global energy prices.[2] But considering the rather long stretch of weak growth, it likely reflects not only adverse shocks, but also soft underlying dynamics. Private consumption was and remains the main engine of growth on the back of rapidly rising wages and expanding employment. Exports have started to recover, but contracting investment has not yet turned the corner.

Estonia and Euro Area: GDP Growth and Main Components, 2013:Q3 - 2016:Q3
(In percent per year)

	2013:Q3 - 2016:Q3	2015	2016:Q1 - 2016:Q3	2013:Q3 - 2016:Q3	2015	2016:Q1 - 2016:Q3
	Estonia			Euro Area		
GDP	1.8	1.4	1.2	1.5	2.0	1.8
Private consumption	3.7	4.6	4.1	1.3	1.8	1.9
Gross fixed capital formation	-3.3	-3.7	-1.3	2.6	2.4	2.8
Exports	1.6	-0.5	3.8	4.4	6.5	2.7
Imports	1.5	-1.4	5.8	4.7	6.4	3.4

Sources: Statistics Estonia; and Eurostat.

3. Inflation is rising moderately, but remains contained amid muted euro area price dynamics. In November, headline inflation stood at 1.35 percent, compared to an average of 0.7 percent for the first eleven months of the year—a pickup reflecting primarily base effects, excise tax increases, and some pass-through from higher wages. But with core inflation hovering around 1.5 percent for the past 12 months and pass-through limited by the low inflation environment in Europe, price pressures remain well contained. The ECB's monetary policy stance is broadly appropriate for Estonia. Estonia mainly benefits indirectly through higher growth in the euro area and hence better export opportunities in its most important market.

[1] Since 2013:Q2, trading partner import growth has averaged only 1.2 percent per year, compared to 3.2 percent for the euro area. The gap has been even larger since 2015:Q1 with 0.1 percent against 3.0 percent.

[2] The oil shale sector accounted for some 3 percent of GDP in 2014, through mining, electricity generation, and crude oil production. Its contraction reduced annual growth by an estimated 0.5 ppts during 2015:Q1–2016:Q2. However, during 2013:Q3–2016:Q2 the sector performed in line with the rest of the economy, neither subtracting nor adding to overall growth.

4. Wages are rising rapidly, partly reflecting a tightening labor market. Wage growth picked up to 7.6 percent in the first 9 months of 2016, from 5.9 percent in 2015, and 5.5 percent in 2014. With employment close to record highs, a tightening labor market is a key driver, but strong wage growth in the government sector and large minimum wage hikes are also important factors. In addition, wage growth seems to feed off expectations for a rapid narrowing of the pay gap with neighboring Finland.

5. Strong wage growth is eroding competitiveness, but poses no immediate threat to Estonia's external position. With productivity stagnating, unit labor costs are sharply up, eroding Estonian firms' profit margins and diminishing their ability to compete abroad. Export market shares have started to slip and resources are shifting toward nontradable sectors, where higher labor costs are easier to pass through to prices. However, despite subdued export growth, Estonia's current account recorded a surplus of 1.7 percent of GDP in the first three quarters of this year—moderately stronger than consistent with medium-term fundamentals. Imports have been weak in recent years because of a decline in investment, which is currently some 6 ppts of GDP below its historical average. The real effective exchange rate is broadly in line with fundamentals (Box 1).

6. Public finances remain extraordinarily strong and are overperforming this year. Estonia's fiscal policy has been firmly stability oriented and subject to a stringent fiscal rule. Gross public debt stands at only about 10 percent of GDP and is broadly matched by liquid fiscal reserves. The budget has been in structural surplus since 2009. Estonia's Stability Program targeted a general government deficit of 0.4 percent of GDP this year, but so far fiscal outturns have been stronger than expected, mainly on account of buoyant revenues.

7. Estonia's banking sector is sound and adequately supports the economy. Capital adequacy above 30 percent, liquidity coverage ratios of over 200 percent, and returns-on-assets running at 2 percent are all well above regulatory minima and readings in peers. Credit and leases to households and nonfinancial companies are expanding at a rate of some 6 percent, remaining prudent while providing adequate financing for investment, although companies chose to use much of the funding to retire foreign debt instead of investing. The loan-to-deposit ratio has been brought down sharply in recent years, but recently picked up mildly again to 110 percent when one bank discontinued accepting non-resident deposits. There are no immediate risks to financial stability, but the largely Nordic-owned banking sector remains subject to potential spillovers from vulnerabilities in parent banks.

8. Estonia's new government has pledged to boost output growth and make it more inclusive. The coalition government headed by the pro-market Reform Party fell in November when the junior partners, the Social Democrats and the conservative Pro Patria and Res Publica Union, switched sides to form a new collation government with the Center Party. This is the first time an Estonian government has been led by a Prime Minister from the Center Party, ending a 17-year stretch of Reform Party governments. A coalition agreement sets out the new government's policy intentions. In some areas reforms have already been spelled out in specific terms while other issues

are addressed only in broad terms, pending further elaboration.[3] The new government will retain the broad policy thrust of its predecessor, but:

- try boost growth through (i) corporate income tax reform to lift investment; (ii) additional public investment of 0.5 percent of GDP in 2018, 2019, and 2020; (iii) raising labor supply by lowering the personal income tax for low-wage earners; (iv) yet to be specified plans to simplify and lower taxes and the administrative burden for small enterprises; and (iv) demand stimulus associated with somewhat looser fiscal policy.
- try redress income inequality, primary through a more progressive personal income tax schedule, as well as moderate increases of child allowances and yet-to-be-specified spending on social benefits.

Box 1. Estonia: External Stability Assessment

In 2016, the external position was assessed moderately stronger than the level consistent with medium-term fundamentals. The EBA-lite methodology finds a positive current account gap of 3.8 percent of GDP, more than half of which reflects current policy settings. Because the rest of the world is running a significantly looser fiscal policy than its norm, while Estonia is running a somewhat tighter fiscal policy than its norm, the current account is unusually strong. In addition, there are a number of temporary factors that boosted Estonia's external balance in 2016: (i) investment was some 6 ppts of GDP below its long-run level; and (ii) Estonia's current account is benefiting from substantial inflows of EU funds, which could decrease by over 1 percent of GDP in the 2021-27 MFF. Staff expects these factors to unwind over time with the current account deficit settling at just under 3 percent of GDP. The 2017 current account surplus is projected to decline to 0.2 percent of GDP.

Summary Table: External Stability Assessment

CA-Actual	1.2%	CA-Fitted	-0.5%
CA-Norm	-2.6%	Residual	1.7%
CA-Gap	**3.8%**	Policy gap	2.1%
Elasticity	-0.51		
Real Exchange Rate Gap	**-7.5%**	Cyclical Contributions	0.0%
		Cyclical adjusted CA	1.2%
		Cyclical adjusted CA norm	-2.6%

Source: IMF staff estimates.

Considerable uncertainties surround the exchange rate assessment, but there is no clear indication of a sizable over- or undervaluation. The EBA-lite methodology estimates an undervaluation of 7.5 percent based on the unusually strong current account in 2016. But at least half the factors identified above that are behind this strength should unwind and deteriorate the current account without a need for the exchange rate to adjust. Moreover, undervaluation is not confirmed by the supplementary direct assessment of the equilibrium real exchange rate using the EBA-lite REER model, which suggests a small overvaluation of around 7 percent. On balance, this points to the exchange rate currently being broadly in line with fundamentals. Nonetheless, the exchange rate could become overvalued over time should the current wage and productivity trends persist.

Estonia's net international investment position is improving and compares well with regional peers. Substantial inward direct investment is chiefly responsible for a position of -37 percent of GDP. At over 90 percent of GDP, gross external debt is high, but concerns about sudden withdrawals are largely mitigated by much of it being owed to parent companies or parent banks (Country Report No. 10/4, Box 2). Moreover, Estonia has large external debt claims, including from investment of the fiscal reserve and second-pillar pension funds abroad. Net external debt is negative, standing at about -12 percent of GDP by end-September 2016.

[3] The projections and government policies of this staff report reflect the policy intentions of the new government as of mid-December 2016 to the extent that they have been articulated.

B. Outlook and Risks

9. The economy should gradually strengthen in the remainder of this year and next. Growth is projected at 1.3 percent in 2016 and 2.3 percent in 2017, with private consumption remaining robust and exports and investment befitting from the dissipation of the effects of adverse shocks. Medium-term growth could settle at around 3 percent despite adverse demographics, but this would require successfully implementing productivity-promoting policies, unlocking additional labor supply, and reining in wage growth. These projections imply reinvigorated convergence with living standards in Western Europe. Inflation is set to rise to 2.5 percent next year, reflecting a large contribution from further excise tax hikes together with a moderate pickup in underlying price dynamics. The current account should swing into moderate deficit as investment gathers steam and consumption continues to be strong.

10. Risks to the outlook are mainly to the downside. Compared to baseline projections, economic developments in trading partners are more likely to be weaker rather than stronger, partly because of political fragmentation risks, which if realized would pull down prospects for Estonia's highly open economy. Direct effects from potentially more volatile global financial conditions would likely be limited, because of Estonia's low public debt, its small financial markets, and euro area membership. But spillovers through more exposed Nordic banks cannot be ruled out and would likely affect credit supply and growth. On the domestic front, there is a risk that productivity growth fails to pick up and wages continue growing rapidly, undermining competitiveness and pulling resources into the less dynamic nontradable sector. On the upside, growth and productivity could rebound more forcefully as adverse shocks run their course and firms make the most of their existing work force.

Views of the Authorities

11. The authorities broadly concurred with the outlook and the risk assessment, but put more emphasis on the role of shocks in depressing growth. The Finance Ministry's macroeconomic projections for the 2017 budget is close to those of staff, while the Bank of Estonia's December projections revised growth down to a somewhat more pessimistic 1 percent for 2016. The authorities shared concerns about the disconnect between wage and productivity developments, although competitiveness effects are difficult to discern so far, perhaps because firms have sufficient liquidity to satisfy wage demands, and there is no convincing evidence of exchange rate misalignment. There was agreement that recent disappointing economic performance partly reflected weak underlying dynamics, but the Bank of Estonia put more emphasis on headwinds from feeble external demand, especially from Finland, and low energy prices that hit the oil shale sector hard. Moreover, adverse shocks affected primarily capital intensive sectors, pulling down the economy's productivity through composition effects and helping explain simultaneous labor market tightness and growth weakness. It saw little to no slack in the economy and, to the extent that it existed, it was in sectors where domestic demand could not unlock it. Accordingly, the ECB's monetary policy stance was seen as somewhat on the loose side for Estonia. The new government expressed concern about the "economic standstill." Addressing it is a central plank of its program.

Estonia: Risk Assessment Matrix[1]

Source of Risks, Likelihood, and Time Horizon	Impact on Estonia	Recommended Policy Response
Economic fallout from political fragmentation: **High** (short to medium term) **Rise in populism and nationalism in large economies**—especially those with near-term elections—could slow down or even reverse policy coordination and collaboration; international trade liberalization; financial, and labor flows; and lead to unsustainable policies, weighing on global growth and exacerbating financial market volatility. **Medium** (short to medium term) **Protracted uncertainty associated with negotiating post-Brexit arrangements** could weigh on confidence and investment more than expected—most prominently in the UK and the rest of Europe with possible knock-on effects elsewhere. Increased barriers could also dampen the longer-run economic performance of affected countries more than expected. **High** (short term) **Heightened risk of fragmentation/security dislocation in part of the Middle East, Africa, and Europe**, leading to a sharp rise in migrant flows, with negative global spillovers.	**Medium** As a highly open economy, Estonia would be affected, primarily through trade channels, including indirect ones, as well as confidence effects. But with the functioning of the European single market—Estonia's main export destination—fundamentally unchanged, the fallout from Brexit should be limited. Trade with Russia in value-added terms has already fallen to very low levels.	Participate in global and European policy responses. Diversify risk by pushing ahead with export diversification.
High (medium term) **Structurally weak growth in key advanced and emerging economies:** Weak demand, low productivity growth, and persistently low inflation from a failure to fully address crisis legacies and undertake structural reforms, leading to lower medium-term path of potential growth (the Euro area, Japan, and the United States) and exacerbating legacy financial imbalances especially among banks (the Euro area).	**Medium / High** Estonia would be affected through trade, confidence, and FDI channels. Economic growth and employment would suffer.	Participate in coordinated policy response at the European level. Allow automatic fiscal stabilizers to operate. If shock is of large magnitude, consider discretionary fiscal action.
Medium (short to medium term) **Risks to competitiveness from a further tightening of the labor market.** Wage growth continues to significantly outstrip productivity growth for an extended period, starting to affect external competitiveness and to shift resources from the tradable to the nontradable sector.	**High** Exports are critical for Estonia's small open economy. Increased reliance on the nontradable sector could weaken economic dynamism and deteriorate the current account.	Moderate government sector and minimum wage policies, mobilize additional labor resources, and boost productivity growth.
Medium (medium term) **Disappointing potential growth performance.** Policies to foster innovation, productivity, and labor supply are not fully implemented or prove less effective than envisaged. Potential growth fails to pick up toward long-term levels.	**Medium** Convergence with living standards in Western Europe would slow. Coping with demographic aging would become more difficult. Additional pro-growth measures by the new government are reassuring.	Strengthen pro-growth policies, if necessary by mobilizing additional fiscal resources and letting the fiscal balance deteriorate.
Medium (short to medium term) **Risks to vulnerable Nordic parent banks.** They could come under pressure from a decline in domestic housing markets or tighter global financial conditions with lower risk appetite.	**Medium** Curtailed credit supply, confidence loss, and liquidity pressures in local affiliates. Strong local financial soundness is strong line of defense.	Preserve high capitalization and liquidity. Strengthen cooperation with home-country authorities.

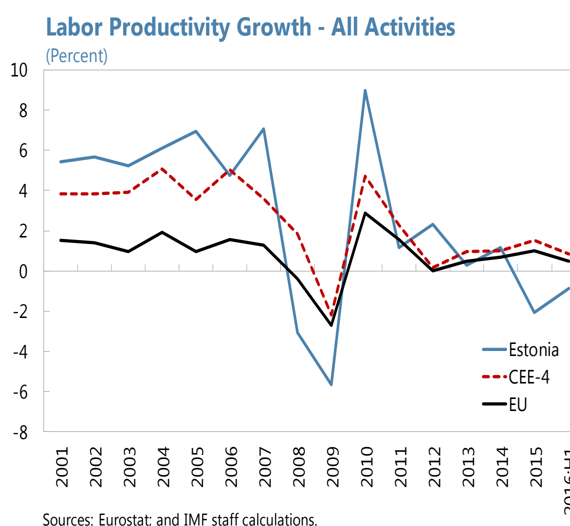
[1]The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability 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. "Short term" and "medium term" are meant to indicate that the risk could materialize within 1 year and 3 years, respectively.

POLICY DISCUSSIONS

The consultation centered on policies to boost productivity and contain wage pressures with a view to securing sustainable convergence with living standards in Western Europe and to safeguarding competitiveness. This included exploring the supportive role that fiscal policy could play in this context. Separately and regarding financial sector issues, the discussions also covered policies to best contain potential spillovers from vulnerabilities in Nordic parent banks.

A. Securing Sustainable Income Convergence and Safeguarding Competitiveness

12. Labor productivity growth has been worryingly weak in the past three years. It has stagnated since mid-2013 and turned negative more recently, lagging the performance in regional peers. Poor total factor productivity growth is chiefly responsible—growth contributions of employment have been small everywhere and investment in Estonia has historically been higher than in peers, although it has declined relatively strongly more recently. Detailed analysis shows that catching-up of firms with initially poor performance indicators has been a major driver of productivity growth in Estonia. There is also evidence that firms with larger productivity gains had lower employment growth, implying that some of the labor saved from productivity gains might have been reallocated to low productivity segments of the economy, dragging down average productivity in the economy. Only the moderate productivity gains in the high-tech services sector went together with relatively large employment gains (Box 2).



13. Estonia's policy settings are already conducive to productivity growth, but could nonetheless be optimized further. Predictable and stability-oriented policies are important assets. The business environment is ranked the best in Central and Eastern Europe, although there remain a few issues that should be addressed.[4] This leaves three main areas for further policy action:

- **Making existing growth-promoting programs more efficient.** Estonia has a large number of programs in place, but the outcomes appear not to be commensurate with the scale of the

[4] Estonia is the highest ranked country in Central and Eastern Europe in the World Bank's Doing Business Report (rank 16 out of 189 countries) and the World Economic Forum's Global Competitiveness Index (rank 30 out of 140 countries). Areas for further optimization include: (i) shortening bankruptcy procedures and increasing recoveries; (ii) strengthening the position of minority shareholders; (iii) reducing exclusive rights for accountants and engineers; (iv) allowing non-residents to invest in law firms and registering ships; (v) updating the Labor Code to allow modern forms of employment, such a job sharing; (vi) better connecting transportation modes; (vii) raising weight limits for timber trucks; and (viii) streamlining environmental inspections.

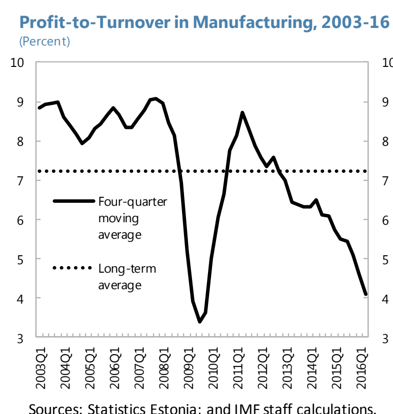
efforts expended. A productivity unit housed at the highest executive level in the Prime Ministry should be established to oversee and guide these programs in a coherent and comprehensive manner. A report on growth commissioned by the previous Prime Minister was a positive step.

- **Filling gaps and selectively scaling-up growth promotion.** There are numerous entities that offer innovation support, including competence centers, university technology transfer centers, science parks, and regional competence centers, but take-up by Estonian firms remains limited. Similarly, commendable offers for re-education and training of adults in the context of Estonia's life-long learning strategy have still to attract more applicants. This may suggest a mismatch with companies' needs and insufficient demand incentives. Program design needs to take fully into account that traditional firms still dominate the economy, despite a sizable ICT sector, and are responsible for the bulk of productivity growth and employment.[5] Take-up incentives could be strengthened through an expanded voucher program that allows the purchase of more application-oriented services from a wider range of suppliers. The new Company Development Program is a welcome initiative and should be scaled up. Active labor market programs also remain too small with spending of only 0.2 percent of GDP.

- **Restoring high public investment.** Estonia's public investment has traditionally been among the highest in Europe, but has come down in recent years. Its envisaged reinvigoration in the 2017 budget and medium-term fiscal plans is welcome and should help fill remaining infrastructure gaps, provided that it is geared toward projects with high economic returns.

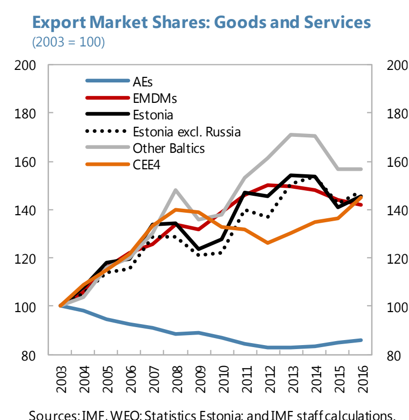
14. Despite stagnant productivity, wages have been growing rapidly in recent years, which is starting to undermine competitiveness. Since 2011, labor compensation has risen by 5.6 percent annually, pushing up nominal unit labor costs by 3.1 percent per year for the whole economy and by 5.1 percent in manufacturing. In contrast, unit labor costs were essentially flat in Central and Eastern Europe and the EU (Box 3). At the same time, export market shares have started to slip, profit margins are falling and economic resources are reallocating toward nontradable activities. So far, the current account has remained strong though, because declining investment has helped hold down import growth and because terms-of-trade have moved in Estonia's favor.

Profit-to-Turnover in Manufacturing, 2003-16
(Percent)



Sources: Statistics Estonia; and IMF staff calculations.

Export Market Shares: Goods and Services
(2003 = 100)



Sources: IMF, WEO; Statistics Estonia; and IMF staff calculations.

[5] Estonia scores only 23rd out of 28 European countries on "Integration of Digital Technology," despite being a leader in e-government services, according to the European Commission's Digital Economy and Society Index.

Box 2. Characteristics of Productivity Growth at the Firm Level[1]

Productivity growth has slowed significantly since 2005, despite a sizeable productivity gap with Western Europe. Labor productivity registered only a modest increase according to macroeconomic data. Similarly, firm-level data point toward disappointing labor productivity and total factor productivity developments. Like in most countries, productivity growth slowed markedly following the 2008/09 crisis, but the extent of it in Estonia is surprising, considering the still very sizeable productivity gap of over 50 percent with Western Europe.

Exploring sectoral and firm-level data offers important clues about what drives aggregate productivity, as well as associated employment trends. Sectoral data help disentangle within-sector productivity developments from what is due to shifts between sectors with different productivity levels. The sectoral makeup of the Estonian economy changed significantly over the past decade, but this composition effect was nonetheless quantitatively of little importance for aggregate productivity developments. Analysis of firm-level data reveal which firm attributes, such as size, age, export-orientation, or high technology, are conducive to productivity growth. One can also explore the implications of these same attributes for employment generation.

Catching-up in the more traditional sectors accounted for the bulk of aggregate productivity gains. Low initial productivity and unfavorable performance metrics were key characteristics of firms with strong subsequent productivity growth. It was not the high-technology sectors that registered particularly large productivity gains, but rather the more traditional sectors within manufacturing and agriculture. The role of firm age changed over time—younger firms no longer posted superior productivity growth after 2009. This may be an indication of reduced economic dynamism.

Initial Productivity and Firm Age

(Percent of average firm productivity)

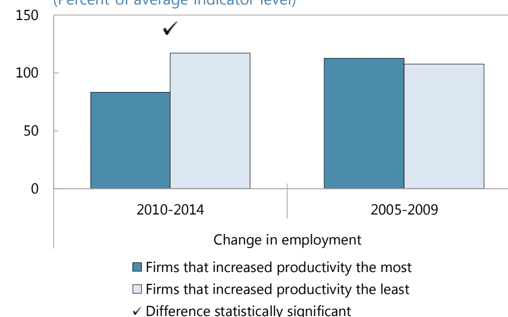
Sources: Orbis; and IMF staff calculations.

Firms that witnessed greater productivity gains were more labor intensive and had lower average labor costs. Firms that increased productivity the most had lower assets per employee, and higher labor cost shares than firms that increased productivity the least. The labor costs per worker—a proxy for workers' skill levels—was lower for firms belonging to the high productivity growth group, suggesting that firms that did well relied more on lower-skilled labor.

High productivity gains were associated with low employment reduction growth. Firms with relatively higher productivity growth tended to feature relatively lower employment growth—an association also visible in other countries but particularly strong in Estonia. This can be seen by looking at the elasticity of labor productivity with respect to the employment-share elasticity, calculated from sectoral data provided by Eurostat for Estonia and Western Europe. These elasticities are larger for Estonia. In line with the above findings, they are particularly large in the more traditional sectors.

Employment Change

(Percent of average indicator level)



Sources: Orbis; and IMF staff calculations.

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1/ Based on Selected Issues Chapter "Productivity Developments in Estonia: Evidence from Firm-level Data."

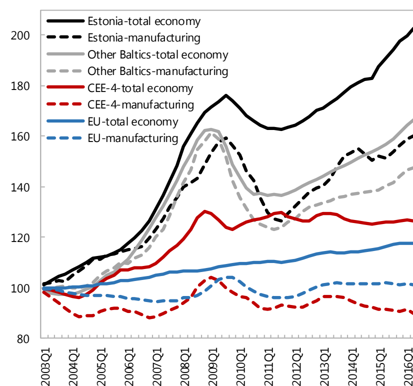
Box 3. Developments of Unit Labor Costs and Implications for Competitiveness[1]

Unit labor costs (ULCs) are a key indicator for assessing developments in external price competitiveness. Defined as the ratio of labor compensation per employee and real output per employed person, they are identical to real effective exchange rates when compared to ULCs in trading partners and expressed in a common currency. The concept has its shortcomings, primarily because of its crude measurement of productivity. Empirically, catching-up economies often feature faster ULC growth without losing competitiveness and the association between ULC and export developments is not straightforward to establish. Therefore, supplementary indicators need to be invoked. Powerful ones include: (i) real ULCs, which relate labor compensation to nominal productivity and resemble the labor share of income; (ii) export market shares; and (iii) exporters' profitability.

ULC developments in Estonia raise a red flag. Over the last three years, they have risen by 17 percent, but were stable in the EU and declined slightly in Central and Eastern Europe (CEE). Conceptual shortcoming in ULCs do generally not bias results against Estonia, except for income convergence that might explain some 30 percent of the gap in ULC growth with the EU.

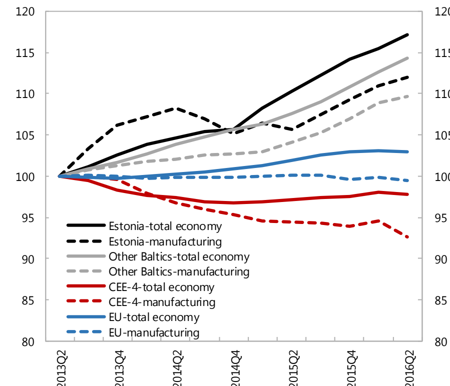
Recent real ULC growth also looks rather worrisome. In manufacturing, they have risen by 10 percent over the past three years, compared to a 5 percent decline in the EU and in CEE. Case studies for Korea and Italy suggest that sustained increases of real ULCs above 10 percent could begin to undermine growth and income convergence.

Nominal Unit Labor Costs, 2003-2016:Q2
(Four-quarter moving average, in euros, 2002=100)



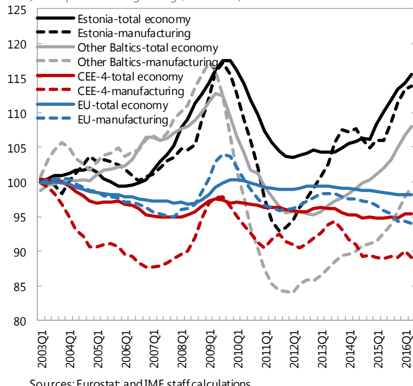
Sources: Eurostat; and IMF staff calculations.
CEE-4 comprises the Czech Republic, Poland, Slovakia, and Hungary.

Nominal Unit Labor Costs, 2013:Q2-2016:Q2
(Four-quarter moving average, in euros, 2013:Q2=100)



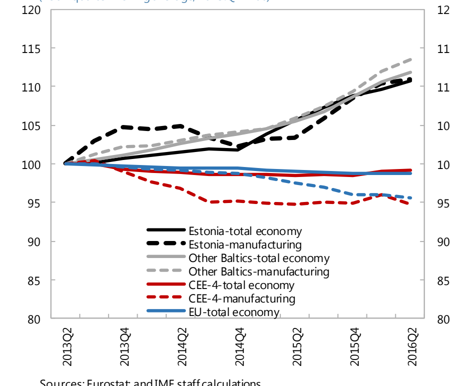
Sources: Eurostat; and IMF staff calculations.
CEE-4 comprises the Czech Republic, Poland, Slovakia, and Hungary.

Real Unit Labor Costs, 2003-2016:Q2
(Four-quarter moving average, 2002=100)



Sources: Eurostat; and IMF staff calculations.

Real Unit Labor Costs, 2013:Q2-2016:Q2
(Four-quarter moving average, 2013:Q2=100)



Sources: Eurostat; and IMF staff calculations.

It is mainly developments in wages rather than productivity that set Estonia apart from the rest of CEE. Labor productivity growth has been somewhat weaker than in CEE, but wage developments have diverged much more. They accounted for two-thirds of the difference in ULC growth since mid-2013.

Strong wage growth reflects labor market tightness, but is further fueled by wage policies and momentum. Empirically, wage developments are closely linked to economic growth and the business cycle. But public sector and minimum wages also play a role, contributing one percentage point each to annual wage growth in Estonia in the past three years. Contrary to popular perception, Estonia's unfavorable demographics do not emerge as an important wage-push factor. Wages by sector of economic activity seem rather unrelated to sectors' performance or sectors' vacancy rates, suggesting that labor market tightness is far from the only reason why wages grow so rapidly in Estonia.

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1/ Based on Selected Issues Chapter "How Worried Should We Be About Fast ULC Growth in Estonia?"

15. Efforts to contain wage growth need to complement measures to raise productivity. The current divergence between labor cost and productivity developments is unsustainable. Cooling wage growth requires both measures to address genuine labor market tightness by enhancing labor supply and measures to address wage dynamics where they are detaching from fundamentals. There are three levers to directly influence wage growth:

- **Government wages.** Government wage policies have strong direct bearing on the average wage in the economy as sectors that are dominated by government employment account for almost a quarter of employment.[6] They spill over to private-sector wages, because the average wage is a "household number" in Estonia serving as a key reference point for all wage agreements. Wages in the general government have been front-running general wage developments in the last few years with raises of 9 percent in 2013 and 8 percent in 2014 and 2015 each. This was partly deliberate policy as pay for certain occupational groups was seen as in need of catching up. It also reflects Estonia's newly decentralized expenditure allocation system whereby government entities are given autonomy to raise wages at the expense of employment or sometimes even other current expenditure. Moreover, in some subsectors, such as health care, government is inadequately represented in wage negotiations. Going forward, the government should phase in relative raises for specific occupational groups more slowly and balance the effect on average government wages through lower increases for the rest of the government sector. Wage decentralization should be accompanied by strict performance targets for government entities, overall spending envelopes that anticipate efficiency gains, and safeguards that ensure equal pay for equal work across the general government. Government representation in wage negotiations should also be strengthened as needed.

- **Minimum wages.** They are primarily determined in negotiations between social partners, but government representatives are present, minimum wage agreements are given legal force by government decree, and minimum wages feature in parties' political platforms. Minimum wages have risen by 10 percent each year since 2013 and a further 10 percent increase has already been agreed for 2017. Even though only a small fraction of workers earns the minimum wage in Estonia, there are important knock-on effects for other wages that help fuel general wage dynamics. The government should exert its influence to cool minimum wage growth. A formal role for independent experts in minimum wage formation could also be useful.

- **Communication.** Wage growth in Estonia seems to go much beyond what can be explained by labor market tightness alone. Effective government and Central Bank communication to the public on the risks of unmitigated wage growth when productivity stagnates could help break this momentum.

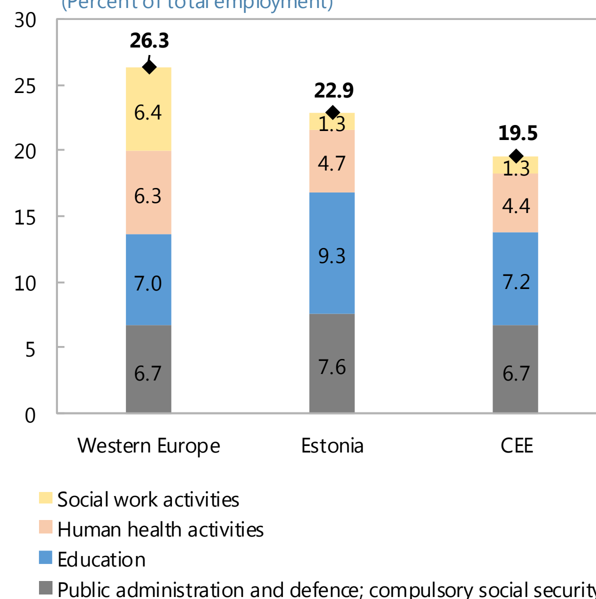
16. Efforts to boost labor supply are key to addressing genuine labor market tightness. With unemployment low by historical standards, employment at record highs, and the labor force declining for demographic reasons, there are genuine wage pressures. Mobilizing additional labor

[6] These sectors comprise public administration, defense, compulsory social security, social works, health, and education.

supply for the private sector and making the most of existing labor resources are the main avenues to alleviate them. Possible measures include:

- **Reducing general government employment.** Employment in sectors dominated by the government is higher than in Central and Eastern Europe, as well as in Western Europe when social work activities are excluded. While a commendable policy to cut government employment in line with the declining labor force is in place, there seems to be room for a faster reduction that would free up labor resources for the private sector.[7]

Employment in Public Administration, Defence, Education, Humand Health, and Social Works Activities, 2013
(Percent of total employment)



Sources: Eurostat; and IMF staff calculations.

- **Boosting labor force participation of younger women.** Estonia's total and female labor force participation rates are above the EU average, though not as high as in the Nordic countries. But this reflects primarily high rates for the older cohorts, presumably because of limited pension benefits. Rates for women in the age bracket 20–39 years are actually below the EU average. The design of parental leave, which is for 3 years with 18 months at full pay, may play a role. The recent reform that allows parents returning to work earlier to keep at least half the benefits they would otherwise be entitled to goes a long way toward reducing disincentives to work, but it will be important to monitor the results with a view to identifying other impediments, such as the unavailability of child care facilities, or to improving the design of parental benefits further.

- **Reforming the disability system.** The authorities are rolling out their commendable "Work Ability Reform." It will strengthen assessment of the capacity to work, step up activation measures, tie the receipt of benefits to the use of activation measures, compensate employers for workplace adjustment costs, and subsidize social security contributions for those with partial work capacity. The authorities expect the reform to raise employment by around 1.5 percent by 2018.

- **Allowing more immigration from outside the EU.** It is currently capped at only 0.1 percent of the population and immigrants must be paid at least 1.24 times the average wage.

17. Social security contribution cuts would provide useful relief from competitiveness pressures. With social security contributions paid by employers, cuts would initially help counteract pressures from wages on profits. In the longer run and as wage contracts are renegotiated, the

[7] The government has pledged to keep government employment in full-time equivalent terms pegged at 12 percent of the population aged 15–74 years.

benefits would be shared by employers and employees. The previous government had embarked on a program to reduce social security contribution rates by 0.5 ppts annually in 2016, 2017, and 2018, which should be accelerated, but the new government reversed course and plans to leave rates unchanged.

Views of the Authorities

18. The authorities shared the concerns about stagnant productivity and agreed on the need to boost labor supply. While composition effects may have dragged down labor productivity, underlying dynamics have also been weak and the low take-up of innovation promotion programs is an issue. The new government has not yet formed a view on the establishment of a productivity unit in the Prime Ministry or how to make innovation programs more effective, but plans a number of steps to boost growth: (i) a cut in corporate income taxes; (ii) reduced taxes and minimal red tape for small companies and startups; and (iii) additional public investment worth 0.5 percent of GDP from 2018 onward over and above the increase envisaged by the previous government. The authorities underscored their determination to keep the government sector lean, targeting a yearly staff reduction of 0.7 percent, which has been overachieved in the past 12 months. They will follow up on staff's finding regarding the size of government. The reform of the disability pension system should make more labor resources available. The planned lowering of the personal income tax for low-wage earners may also boost labor supply.

19. On wages, the authorities are keenly aware of their rapid rise, but see little scope for the government to influence them directly. Wage growth looks worrisome and needs close monitoring, but it may partly be a natural byproduct of an economy advancing out of labor intensive activities. Company closures have been rare so far, and, where they happened, displaced workers mostly secured other jobs with relative ease. The authorities maintained that minimum wages are outside the government's control. They agreed in principle that the government should not front-run general wage developments, but underscored their determination to bring pay for teachers to 120 percent of average wages by 2019 and noted that labor turnover in the government sector has become very high. Wage decentralization was designed to incentivize efficiency gains in government entities.

20. The authorities were skeptical about social security contribution cuts. While they conceded that the proposal has some logic, the new government has opted to direct fiscal resources to lowering personal income taxes instead. Both approaches would reduce Estonia's still relatively high labor tax wedge, but the planned personal income tax cut also helps address income inequality.

B. Putting Fiscal Policy at Fuller Service to the Economy

21. Public finances are likely to record a surplus in 2016. Considering the good performance during the first nine months of this year and the revenue-friendly growth composition with strong wage and consumption growth, a surplus of 0.8 percent of GDP is likely, corresponding to a structural surplus of 1.5 percent of GDP. An additional contributing factor is the low execution rate of investment, due to delays in unlocking EU funds from the 2014–20 MFF.

22. The 2017 draft budget targets a small headline deficit and a structural surplus, but better results are likely. It was largely prepared by the previous government with only limited and budget neutral changes added by the new administration. Public investment is to rise from 4.2 percent to 4.9 percent of GDP, especially at the local government level and as EU-funds from the 2014–20 MFF are coming fully on stream. Excise tax hikes finance higher family benefits, a moderate increase of the basic income tax allowance, and higher agricultural subsidies. Previously planned social security contribution rate cuts, diesel excise hikes, and increases in the VAT for accommodation services will not go ahead, which is broadly revenue neutral overall. According to the Ministry of Finance, the fiscal balance will deteriorate to a deficit of 0.6 percent of GDP, corresponding to a structural surplus of 0.2 percent of GDP. However, revenue projections are on the conservative side and higher-than-budgeted revenues in 2016 will carry over into next year. In staff's view, a headline surplus of 0.3 percent of GDP and a structural surplus of 0.9 percent of GDP are more likely. This corresponds to a small and unproblematic fiscal stimulus, especially as much of the reduction of the structural surplus reflects higher investment, which has a high import content.

23. The new government plans to implement more far-reaching fiscal policy changes from 2018 onward. They comprise a variety of initiatives:

- **Tax policy.** Under the corporate income tax firms will have the new option to avail themselves of a reduced rate of 14 percent (instead of 20 percent) if they regularly distribute dividends. Corporate investors will be better off, but any benefit for domestic household investors will be offset by an additional 6 ppts tax on dividend income under the personal income tax. For the personal income tax, the reform plan is to more than double the basic allowance to €500 per month, bringing it to about 45 percent of the average wage in Estonia. At the same time, the allowance will become income dependent, phasing out with rising incomes. These changes to the personal income tax are likely to cost over 1 percent of GDP. There are also plans to introduce an excise on sugared beverages, a motor vehicle registration levy, a yet-to-be-specified small tax on the financial sector, additional excises on alcohol, etc. Funds of 0.1 percent of GDP for sectoral tax cuts to improve competitiveness have also been set aside.

- **Expenditure policy.** Investment equivalent to 0.5 percent of GDP will be added to previous plans each year during 2018–20, with some projects already specified. Funds of about 0.4 percent are reserved for yet to be specified measures, including improving social benefits. Additional support for local governments and local transport will cost another 0.1 percent of GDP each.

- **Fiscal framework.** Estonia's current fiscal rule mandates public finances to be at least in structural balance every year. Unforeseen deficits need to be compensated with subsequent surpluses, while unforeseen surpluses are not allowed to be credited against subsequent deficits. The new government intends to remove this asymmetry, subject to a ceiling of 0.5 percent of GDP on structural deficits. Financing deficits by issuing bonds in financial markets is also under consideration, which Estonia has eschewed for over a decade.

These plans imply a considerable fiscal impulse of almost 1 percent of GDP in 2018 and a structural deficit of about 0.2 percent of GDP. On current projections, there is no need for such a large stimulus in 2018 because economic slack is located in sectors where it would not be reached. The stimulus associated with the reform of the personal income tax should be reduced or at least spread out over several years by gradual implementation, while preserving its welcome redistributive properties. Instead, fiscal space should be reserved for measures that strengthen the supply side of the economy without much affecting domestic demand. The following package should be considered: (i) a one percentage point cut in social security contributions; (ii) a 50 percent increase in ALMP spending; (iii) a tripling of outlays for the innovation voucher program; and (iv) a doubling of the Company Development Program. It would cost about 0.6 percent of GDP, which could be accommodated by redesigning the personal income tax reform to make it less costly.

24. More generally, Estonia's successful fiscal institutions should be preserved. They have served the country well, underwriting one of the strongest public finances in Europe, keeping the tax system simple, low-rate, and predictable, and securing high public investment. There is substantial fiscal space and more of it could be accessed through the welcome envisaged modification of the fiscal rule, while still preserving a high degree of fiscal prudence. But it will be important to ensure that fiscal space is put to good use, i.e. that it strengthens the economy's supply side and that existing spending programs are efficient.

Views of the Authorities

25. The government underscored its commitment to fiscal policies in support of broadly-shared growth, but the Bank of Estonia also saw risks of counterproductive fiscal stimulus and weakening fiscal discipline. There was agreement that fiscal policy should help promote productivity growth and investment. Corporate income tax reform and better conditions for smaller firms and startups are important in this regard. Making the personal income tax more progressive while preserving the standard flat rate of 20 percent takes precedence over social security contribution cuts. The Ministry of Finance saw the associated demand stimulus as an additional boon, but the Bank of Estonia expressed concern about untimely fiscal stimulus, further fueling already high wage and consumption growth. In addition, the envisaged modification of the fiscal rule could lead to persistent fiscal deficits given the practical difficulties of estimating structural fiscal deficits in real time, thereby risking to undermine fiscal discipline.

C. Further Bolstering Financial Sector Resilience

26. Efforts to address potential spillovers from vulnerabilities in Nordic parent banks should be stepped up further. Subsidiaries are strongly capitalized and liquidity coverage is high thanks to both sizable central bank deposits and parent bank funding at reasonably long maturities. In addition to these formidable lines of defense, cross-border crisis preparedness and management should be further strengthened in a revamped Nordic-Baltic Stability Group that also comprises ECB supervisors. MoUs should be concluded by all involved agencies on pertinent issues in areas of their respective mandates. Conducting cross-border crisis simulation exercises would also be helpful.

Recovery and resolution plans that recognize the systemic importance of the subsidiaries in Estonia should be finalized expeditiously.

27. Locally owned banks are losing established correspondent banking relationships, but alternative providers have already been lined up. The one remaining western correspondent bank is retreating from Estonia, putting locally-owned banks at risk of losing access to dollar clearing. Alternative providers based in China and Russia have been lined up, but it will be important that these new relationships are stable and that strict AML/CTF standards are in place.

28. The planned establishment of a pan-Baltic bank requires vigilance. Earlier this year, DNB and Nordea announced their intention to merge their Baltic businesses in a joint venture. The new bank would be domiciled in Estonia and operate branches in Latvia and Lithuania. It would be the largest bank in Estonia—and as such fall under direct ECB supervision—and increase the size of the banking system by about one third. While the establishment of the new entity will take time, relevant permissions and approvals are being sought in the nearer term. In this context it will be important to ensure that the new entity will be comfortably capitalized and that existing parent bank funding is either retained or replaced by other equally reliable arrangements.

Views of the Authorities

29. The authorities assess the near-term risks to the financial sector in Estonia as small. They put risks associated with Nordic parent banks at a 4 on a 1-to-6 scale and concur that solid capitalization, high liquidity, and home-host cooperation are key to reducing spillovers. They look forward to the revitalization of the Nordic-Baltic Stability Group to be kicked off at the forthcoming meeting under Swedish chairmanship, including progress on a new MoU. Regarding correspondent banking relationships, the authorities noted that the issue was less critical than in many other small jurisdictions, because subsidiaries have access to dollar clearing through their parents and all banks have access to euro clearing. But they agreed that stability in the new relations is important and noted that all new correspondents were top-tier banks. As far as the DNB-Nordea joint venture is concerned, the authorities were confident that parent funding would continue. They also noted that Estonia's Deposit Guarantee Fund is adequately positioned to take over coverage of the additional deposits. The authorities are keen to see bank recovery and resolution plans with due attention to the Estonian subsidiaries finalized expeditiously.

STAFF APPRAISAL

30. Strong institutions and determined reforms have delivered solid growth over the long run, but more recent performance has disappointed. Gains in living standards have been among the largest in the region over the past two decades on the back of a business friendly environment, steady policies, and prudent macroeconomic management. However, since mid-2013 GDP has expanded by only 1.8 percent annually and labor productivity has stagnated. While negative shocks played a role, these developments also speak to weaker underlying dynamics. As the external environment improves and existing pro-growth policies come to fruition, growth should pick up

from 1.3 percent this year to 2.3 percent in 2017 and around 3 percent in the medium term, but this acceleration cannot be taken for granted and downside risks dominate.

31. Rapid wage growth in an environment of stagnant labor productivity adds another layer of concern. Wage growth keeps increasing, reaching 7.6 percent so far this year. The diverging paths of wages and labor productivity are unsustainable and are already denting competitiveness. Profit rates are falling and are below their long-term average. Export market shares have started to slip.

32. A three-pronged policy approach is needed to address these challenges.

- **Making pro-growth programs more effective.** A commendable set of programs is already in place, but outcomes could be improved by establishing a dedicated productivity unit in the Prime Ministry for coherent and comprehensive guidance and oversight. There is also scope to scale up certain programs, such as ALMPs and the Company Development Program, and improve the take-up of innovation promotion and educational programs by better matching them to companies' needs and by providing additional financial incentives.

- **Re-anchoring wage growth in fundamentals.** Policies can contribute to this goal by ensuring that increases in public wages and in the minimum wage do not consistently outpace private sector wage raises. Leaning against the demographic decline of labor supply by releasing labor resources from the relatively large government sector faster, allowing more immigration, and boosting female participation rates would also be helpful.

- **Alleviating pressures on competitiveness.** Previous plans to cut social security contributions should be retained and accelerated to provide valuable breathing space for profits that are under pressure from rapidly rising wage costs. Over time, these benefits would be shared by labor and firms as wages adjust.

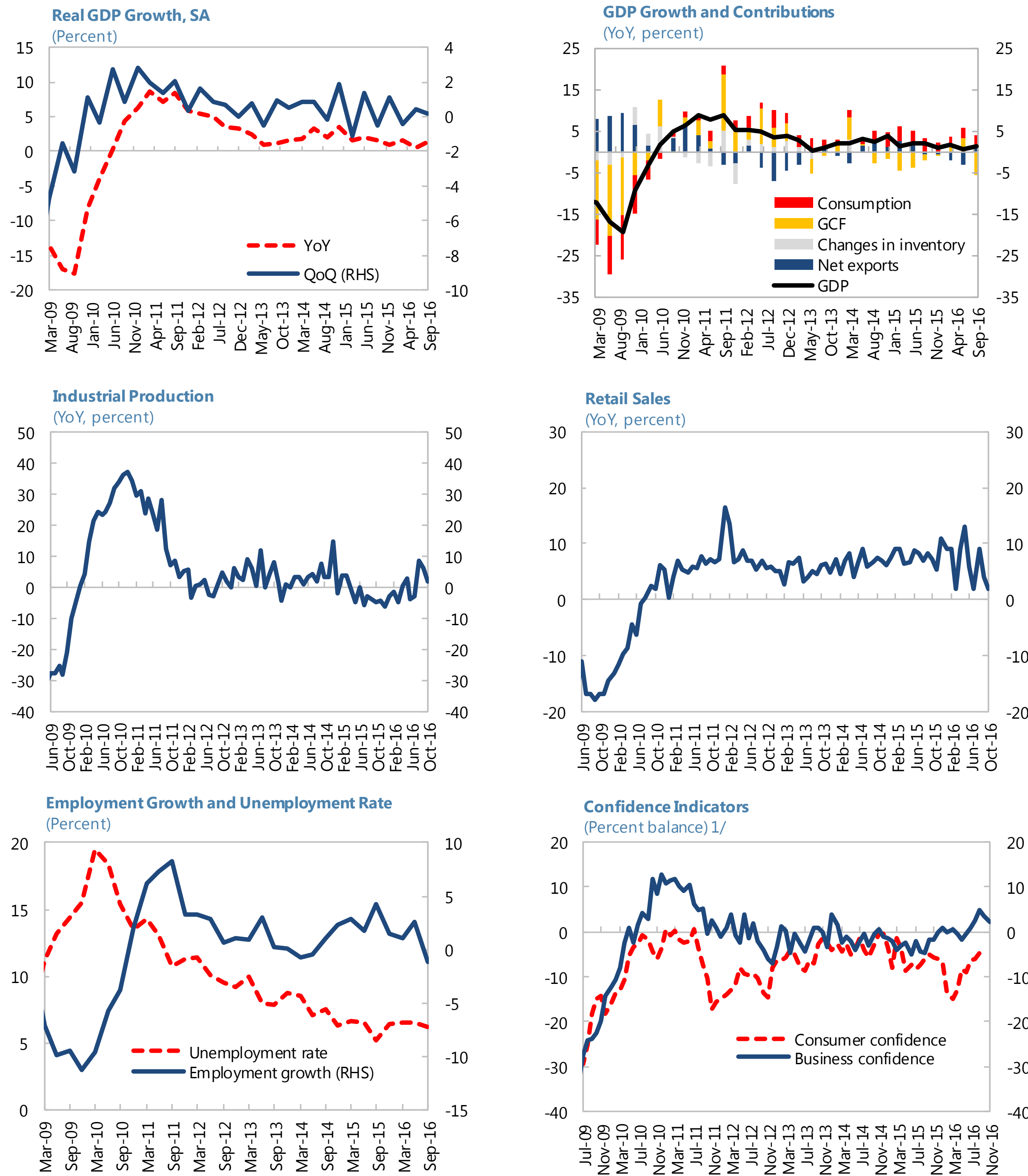
33. Public finances are in excellent shape with room to support the three-pronged policy approach while preserving Estonia's strong fiscal institutions. Net of liquid reserves, government debt is close to zero and the budget has been in structural surplus since 2009. There is no convincing case for general demand stimulus because economic slack is mainly in the export and energy sectors, which are beyond the reach of conventional fiscal policy. Instead, fiscal space should be used judiciously to strengthen the economy's supply side and finance the measures under the three-pronged approach, subject to the private sector's ability to usefully absorb them and the public sector's ability to efficiently provide them. Public investment should also be lifted while ensuring high rates of return. Steps to tackle Estonia's high degree of income inequality are welcome but should be redesigned so as to achieve distributional objectives at lower costs.

34. Estonia's financial sector is strong and supports the economy, but spillover risks from Nordic parent banks could be further mitigated. Indicators of capitalization, liquidity, asset quality, and profitability are all impressive. The return to measured credit growth of some 6 percent currently is welcome. The financial sector remains subject to spillover risks from vulnerabilities in

Nordic parent banks. Those could be further mitigated by strengthening cooperation with home-country and European authorities in the Nordic-Baltic Stability Group and expeditiously finalizing recovery and resolution plans for cross-border banking groups that fully recognize the systemic nature of their Estonian subsidiaries.

35. It is recommended that Estonia remain on the 12-month consultation cycle, with the next Article IV consultation anticipated to be held in early 2018, after Estonia's EU presidency in the second half of 2017.

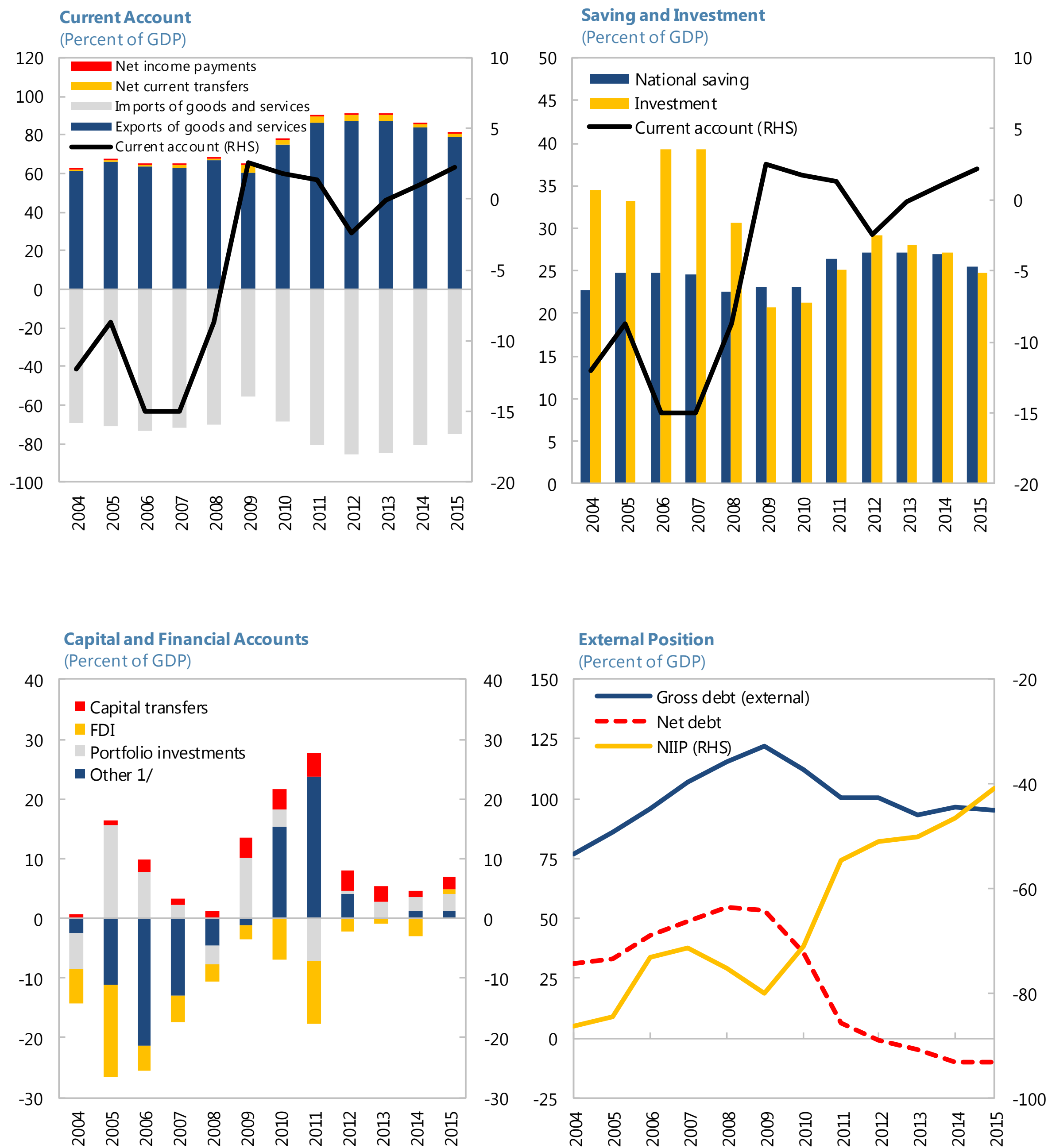
Figure 1. Estonia: Real Sector Developments, 2009–16



Sources: Haver; and national authorities.

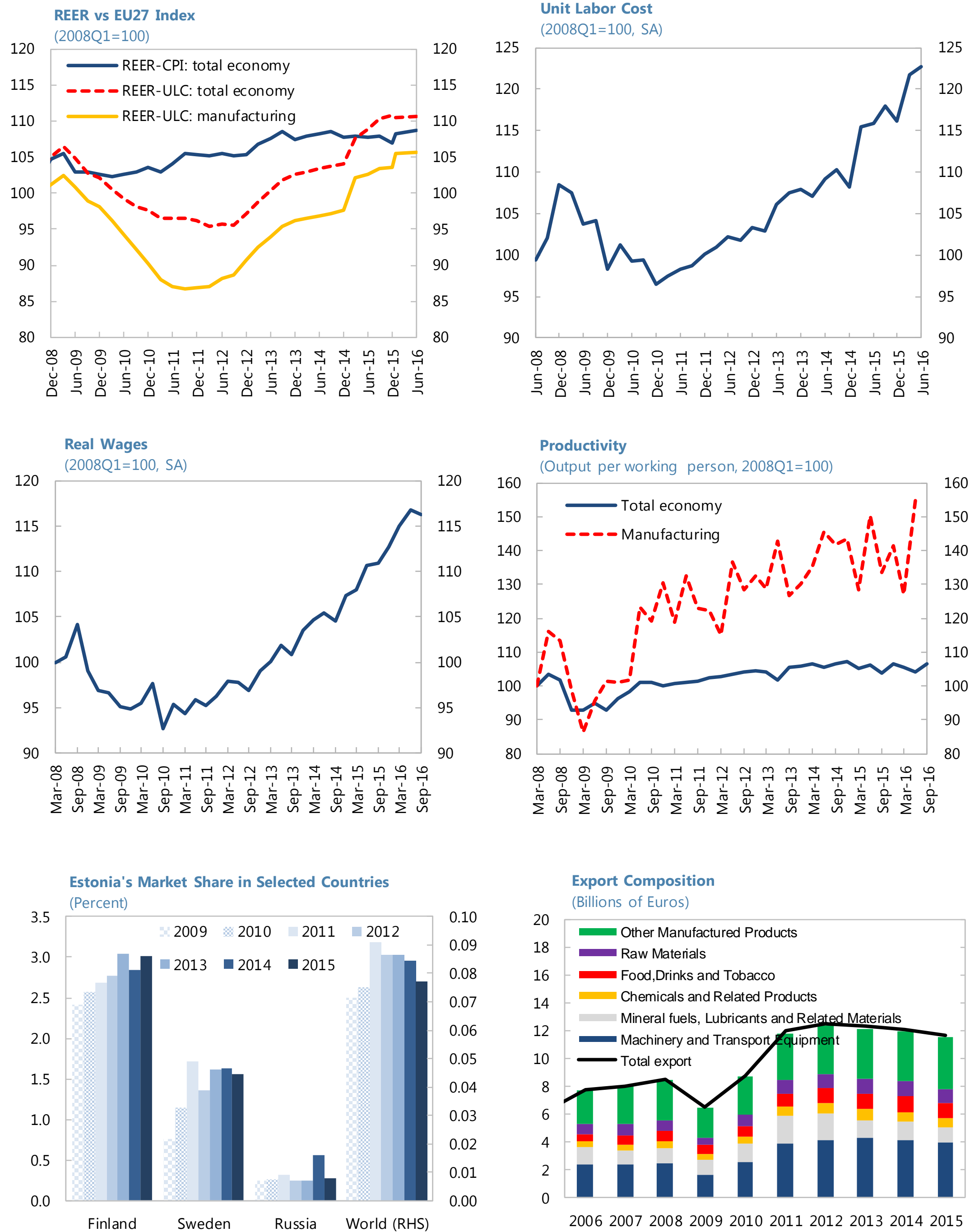
1/ Balance equals percent of respondents reporting an increase minus the percent of respondents reporting a decrease.

Figure 2. Estonia: External Developments, 2004–15



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

Figure 3. Estonia: External Competitiveness, 2008–16

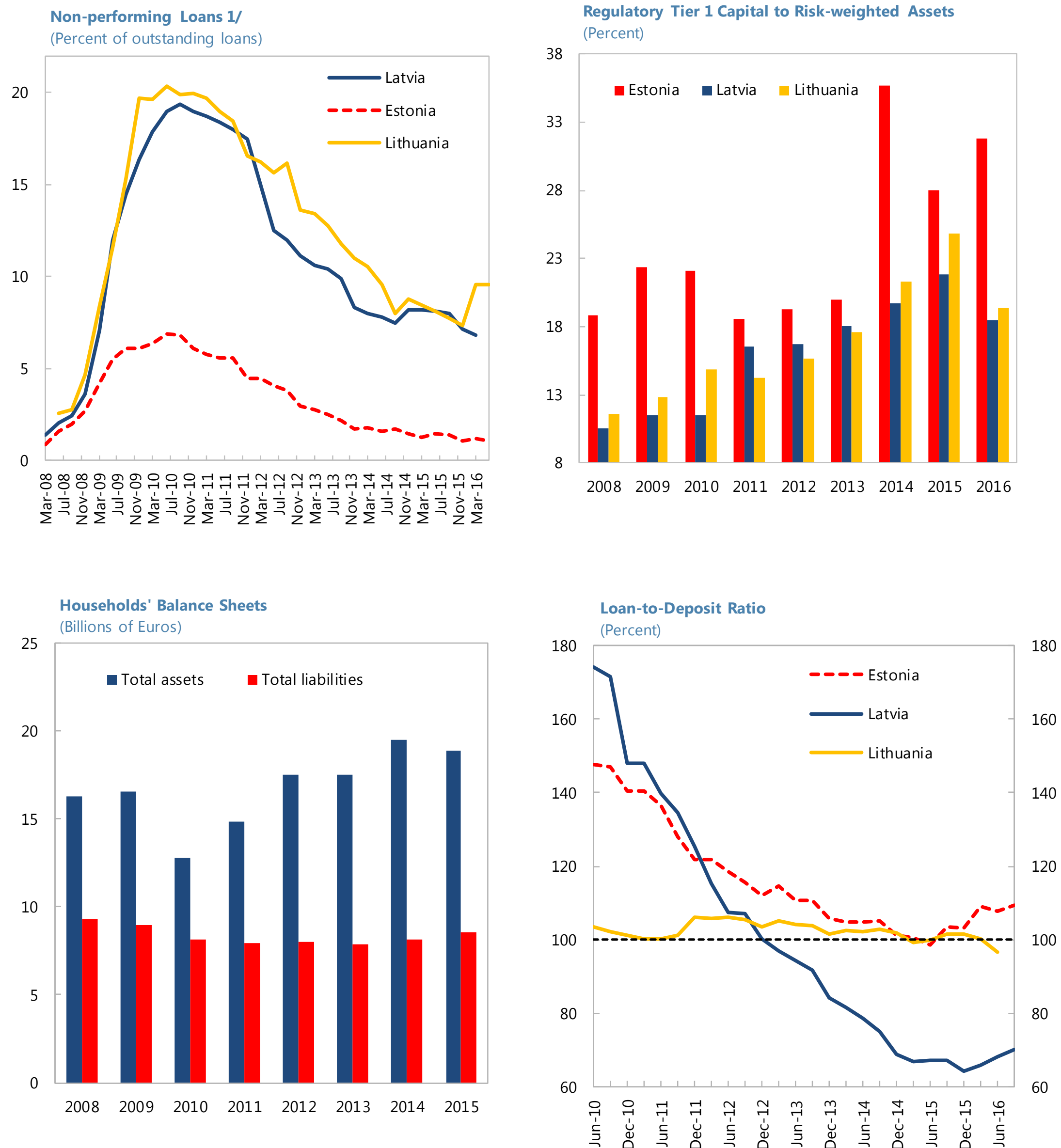


Sources: DOTS; Haver; WEO; and EU Commission.

Figure 4. Estonia: Fiscal Developments and Structure, 2003–15

Sources: WEO; Eurostat; and OECD.
1/ Data is from 2014.

Figure 5. Estonia: Financial Sector Developments



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 6. Estonia: Public Sector Debt Sustainability Analysis (DSA)–Baseline Scenario

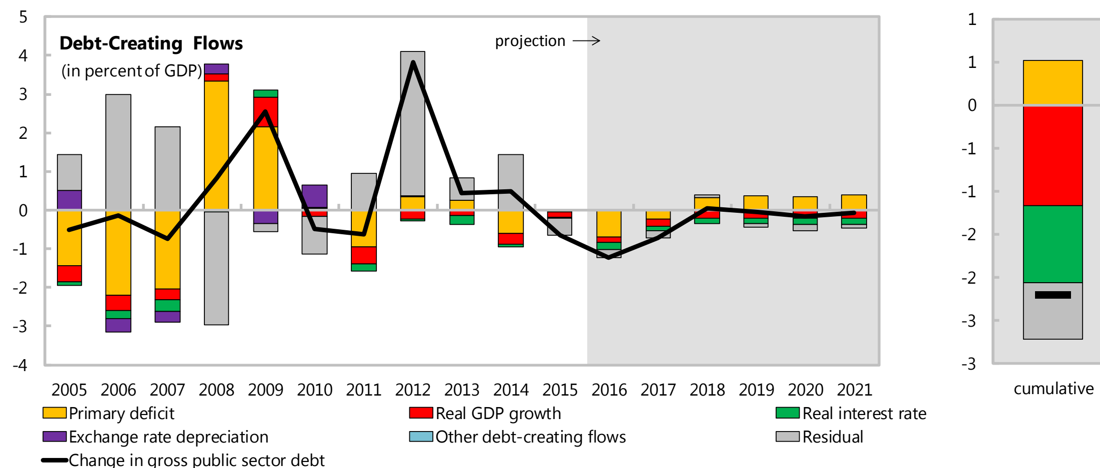
(in percent of GDP unless otherwise indicated)

Debt, Economic and Market Indicators [1]

	Actual			Projections						As of December 02, 2016		
	2005-2013 [2]	2014	2015	2016	2017	2018	2019	2020	2021	Sovereign Spreads		
Nominal gross public debt	6.3	10.7	10.0	8.8	8.1	8.1	8.1	7.9	7.8	EMBIG (bp) 3/		0
Public gross financing needs	1.1	1.5	3.1	-0.9	1.5	2.2	2.3	2.2	2.3	5Y CDS (bp)		64
Real GDP growth (in percent)	2.6	2.8	1.4	1.3	2.3	2.8	2.7	2.8	2.9	Ratings	Foreign	Local
Inflation (GDP deflator, in percent)	5.4	1.7	1.0	2.0	2.6	2.8	2.8	3.1	3.1	Moody's	A1	A1
Nominal GDP growth (in percent)	8.2	4.6	2.5	3.3	4.9	5.6	5.5	5.9	6.1	S&Ps	AA-	AA-
Effective interest rate (in percent) [4]	3.4	1.1	0.9	0.0	1.1	1.1	1.1	1.1	1.1	Fitch	A+	A+

Contribution to Changes in Public Debt

	Actual			Projections							
	2005-2013	2014	2015	2016	2017	2018	2019	2020	2021	cumulative	debt-stabilizing primary balance [9]
Change in gross public sector debt	0.6	0.5	-0.6	-1.2	-0.7	0.1	-0.1	-0.2	-0.1	-2.2	
Identified debt-creating flows	-0.2	-0.9	-0.2	-1.0	-0.5	0.0	0.0	0.0	0.0	-1.5	
Primary deficit	-0.1	-0.6	0.0	-0.7	-0.2	0.3	0.4	0.4	0.4	0.5	-0.4
Primary (noninterest) revenue and grant:	37.6	38.9	40.3	41.2	42.0	41.9	42.5	42.2	41.7	251.6	
Primary (noninterest) expenditure	37.5	38.3	40.2	40.5	41.8	42.3	42.9	42.5	42.1	252.1	
Automatic debt dynamics [5]	-0.2	-0.3	-0.2	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-2.1	
Interest rate/growth differential [6]	-0.2	-0.3	-0.2	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-2.1	
Of which: real interest rate	-0.1	-0.1	0.0	-0.2	-0.1	-0.1	-0.1	-0.2	-0.2	-0.9	
Of which: real GDP growth	-0.1	-0.3	-0.2	-0.1	-0.2	-0.2	-0.2	-0.2	-0.2	-1.2	
Exchange rate depreciation [7]	0.0	0.0	0.0	…	…	…	…	…	…	…	
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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 Euroar	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]	0.8	1.4	-0.4	-0.2	-0.2	0.1	-0.1	-0.2	-0.1	-0.7	



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 $[(r - \pi(1+g) - g + ae(1+r)]/(1+g+\pi+g\pi))$ 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).

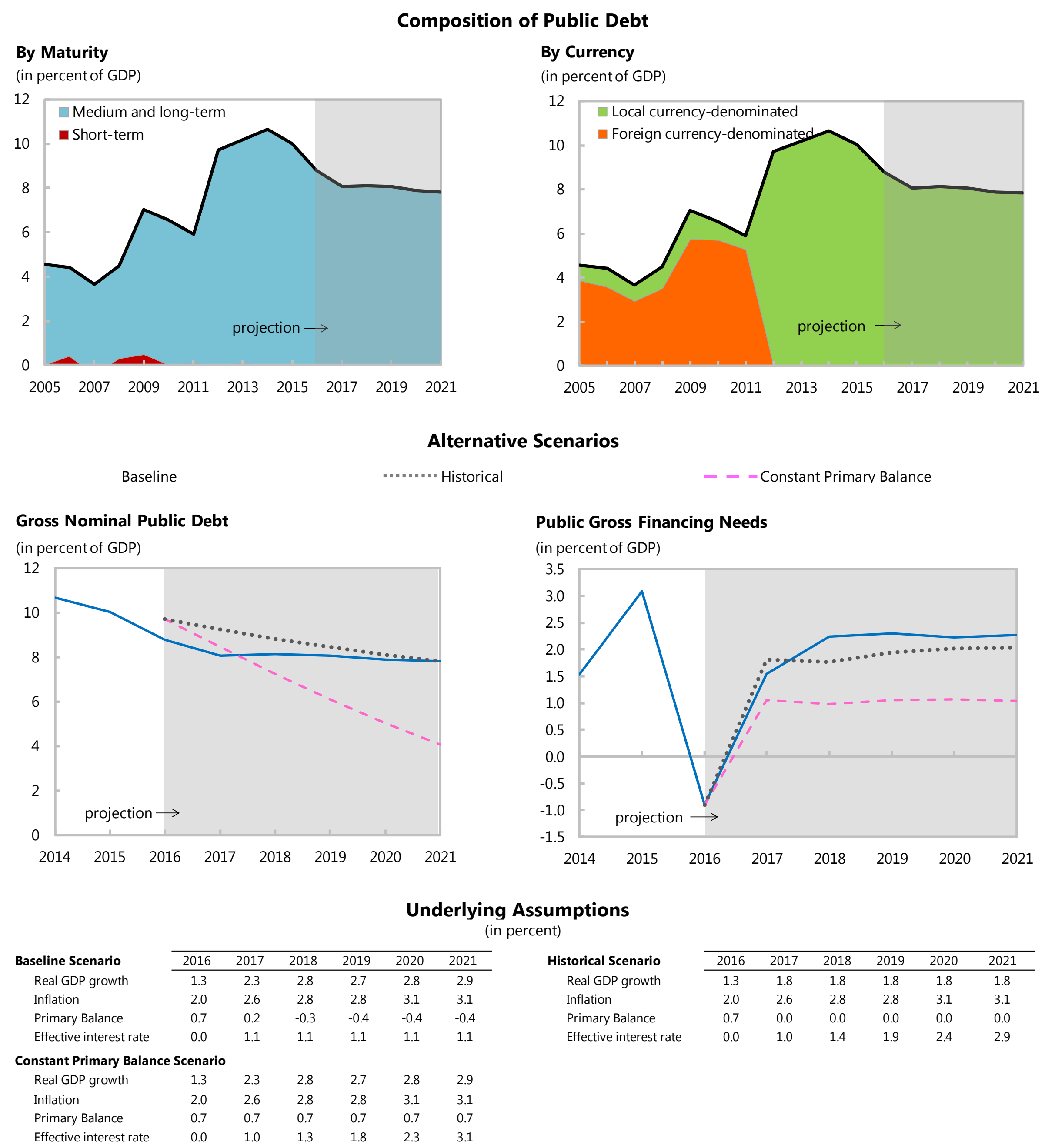
6/ The real interest rate contribution is derived from the numerator in footnote 5 as $r - \pi (1+g)$ and the real growth contribution as $-g$.

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 7. Estonia: Public Sector DSA–Composition of Public Debt and Alternative Scenarios



Underlying Assumptions
(in percent)

Baseline Scenario	2016	2017	2018	2019	2020	2021
Real GDP growth	1.3	2.3	2.8	2.7	2.8	2.9
Inflation	2.0	2.6	2.8	2.8	3.1	3.1
Primary Balance	0.7	0.2	-0.3	-0.4	-0.4	-0.4
Effective interest rate	0.0	1.1	1.1	1.1	1.1	1.1
Constant Primary Balance Scenario						
Real GDP growth	1.3	2.3	2.8	2.7	2.8	2.9
Inflation	2.0	2.6	2.8	2.8	3.1	3.1
Primary Balance	0.7	0.7	0.7	0.7	0.7	0.7
Effective interest rate	0.0	1.0	1.3	1.8	2.3	3.1

Historical Scenario	2016	2017	2018	2019	2020	2021
Real GDP growth	1.3	1.8	1.8	1.8	1.8	1.8
Inflation	2.0	2.6	2.8	2.8	3.1	3.1
Primary Balance	0.7	0.0	0.0	0.0	0.0	0.0
Effective interest rate	0.0	1.0	1.4	1.9	2.4	2.9

Source: IMF staff calculations.

Table 1. Estonia: Selected Macroeconomic and Social Indicators, 2013–18
(Units as indicated)

	2013	2014	2015	2016	2017	2018
				Projections		
National income, prices, and wages						
GDP (billions of Euro)	18.9	19.8	20.3	20.8	21.8	22.9
Real GDP growth (year-on-year in percent)	1.4	2.8	1.4	1.3	2.3	2.8
Private consumption	3.7	3.2	4.6	3.8	2.6	2.8
Gross fixed capital formation	-2.9	-8.1	-3.4	-0.9	4.6	5.3
Exports of goods and services	2.3	3.0	-0.6	4.1	5.2	5.3
Imports of goods and services	3.3	2.2	-1.4	5.7	5.7	5.6
Average HICP (year-on-year change in percent)	3.2	0.5	0.1	0.9	2.5	2.4
GDP deflator (year-on-year change in percent)	3.9	1.7	1.0	1.6	2.1	2.2
Average monthly wage (year-on-year growth in percent)	7.8	5.6	5.9	6.5	5.5	5.0
Unemployment rate (ILO definition, percent, pa)	8.6	7.4	6.1	6.5	7.6	8.3
Unemployment rate, excluding work capacity reform (pa)	…	…	…	5.9	5.8	5.7
Average nominal ULC (year-on-year growth in percent)	6.8	3.6	6.7	6.5	4.8	3.3
General government (ESA10 basis; percent of GDP)						
Revenue	38.4	39.1	40.5	41.4	42.2	42.2
Expenditure	38.5	38.5	40.3	40.7	41.9	42.5
Financial surplus (+) / deficit (-)	-0.2	0.7	0.1	0.8	0.3	-0.2
Structural balance	0.9	1.1	0.9	1.5	0.9	0.0
Total general government debt	10.2	10.7	10.0	9.7	9.3	9.1
External sector (percent of GDP)						
Trade balance	-4.8	-5.1	-4.3	-4.6	-5.4	-6.3
Service balance	7.0	8.5	8.4	8.2	8.0	8.0
Income balance	-2.4	-2.5	-2.1	-2.5	-2.6	-2.6
Current account	-0.1	1.0	2.2	1.2	0.2	-0.7
Gross external debt/GDP (percent) 1/	92.4	96.7	94.8	89.5	83.1	76.8
Net external debt/GDP (percent) 2/	-5.4	-10.2	-10.3	…	…	…
General government debt/GDP (percent)						
Excluding government assets held abroad	10.2	10.7	10.0	9.7	9.3	9.1
Including government assets held abroad 3/	-1.5	-1.3	-1.7	-1.6	-1.6	-1.2
Exchange rate (US$/Euro - period averages)	1.3	0.0	1.1	…	…	…
Real effective exchange rate (annual changes in percent)	2.7	0.1	-1.9	…	…	…
Nominal effective exchange rate (annual changes in percent)	1.6	1.6	-1.0	…	…	…
Money and credit (year-on-year growth in percent)						
Credit to the economy 4/	1.1	3.3	4.8	6.2	…	…
Output gap (in percent of potential output)	-2.4	-0.8	-0.9	-1.4	-0.7	-0.3
Growth rate of potential output (in percent)	1.8	1.2	1.5	1.7	1.7	2.4

Social Indicators (reference year):
Population (2014, pa): 1.32 million; Per capita GDP (2014): $20,126; Life expectancy at birth (2013): 81.1 (female) and 71.2 (male);
Poverty rate (share of the population below the established risk-of-poverty line, 2013): 21.7 percent; Main exports: machinery and appliances.

Sources: Estonian authorities; Eurostat; and IMF staff estimates and projections.
1/ Includes trade credits.
2/ Net of portfolio assets (including money market instruments, financial derivative assets, other investment assets, and reserve assets held by Estonian residents.
3/ Includes the Stabilization Reserve Fund (SRF).
4/ Loans and leases to households and non-financial corporations. For 2016, based on data at end-September 2016

Table 2. Estonia: Summary of General Government Operations, 2012–18

(In percent of GDP)

	2012	2013	2014	2015	2016	2017	2018
					Projections		
Revenue and Grants	39.0	38.4	39.1	40.5	41.4	42.2	42.2
Revenue	36.0	35.8	37.1	38.2	39.6	40.2	40.0
Tax revenue	20.4	20.6	21.4	22.4	23.1	23.6	23.3
Direct taxes	6.6	7.2	7.5	7.9	8.2	8.2	7.5
Personal income tax	5.2	5.5	5.7	5.8	6.1	6.3	6.1
Corporate profits tax	1.4	1.7	1.7	2.1	2.1	2.0	1.4
Indirect taxes	13.8	13.4	13.9	14.5	14.9	15.3	15.8
VAT	8.4	8.2	8.7	9.2	9.3	9.4	9.5
Excises	4.4	4.2	4.3	4.3	4.7	5.1	5.4
Other taxes (incl. land tax)	0.9	0.9	1.0	0.9	0.9	0.9	0.9
Social contributions	11.4	11.2	11.2	11.5	12.0	12.2	12.2
Pension insurance (net)	5.6	5.7	5.6	5.8	6.0	6.1	6.1
Health insurance	4.3	4.4	4.5	4.7	4.9	5.0	5.0
Unemployment insurance tax	1.2	0.9	0.9	0.8	0.8	0.8	0.8
Other (incl. self employed)	0.3	0.3	0.3	0.3	0.4	0.4	0.4
Nontax revenue	4.3	4.1	4.4	4.2	4.4	4.4	4.4
O/w: Interest income	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Grants	3.1	2.5	2.1	2.3	1.9	2.0	2.3
O/w: EU	2.7	2.2	1.8	1.9	1.4	1.5	1.7
Expenditure	39.3	38.5	38.5	40.3	40.7	41.9	42.5
Expense (current expenditure)	33.0	33.3	33.3	35.1	36.1	37.1	37.1
Compensation of employees	10.3	10.6	10.9	11.5	11.8	12.1	12.3
Wages and salaries	7.2	7.5	7.7	8.0	8.3	8.6	8.7
Employers' social contributions	3.1	3.2	3.3	3.5	3.5	3.6	3.6
Other goods and services	6.6	6.7	6.7	6.9	7.0	7.1	7.0
Transfers and subsidies	16.1	16.0	15.6	16.7	17.2	17.9	17.7
Subsidies	0.9	0.7	0.5	0.4	0.4	0.4	0.4
Transfers to households	12.5	12.4	12.5	13.5	13.9	14.6	14.7
Social benefits	10.7	10.7	10.8	11.6	12.0	12.5	12.6
Social transfers in kind	1.7	1.7	1.8	1.9	1.9	2.0	2.1
Other transfers	2.7	2.9	2.6	2.8	2.8	2.8	2.6
Property income	0.1	0.1	0.1	0.1	0.1	0.1	0.1
O/w: Interest	0.1	0.1	0.1	0.1	0.1	0.1	0.1
International cooperatioon	1.7	1.9	1.7	1.9	1.9	1.9	1.8
Capital transfers	0.8	0.9	0.8	0.8	0.8	0.8	0.7
Net acquisition of NFA (capital expenditure)	6.3	5.3	5.2	5.2	4.6	4.9	5.4
Acquisition	6.4	5.5	5.3	5.4	…	…	…
Disposal	-0.1	-0.2	-0.1	-0.1	…	…	…
Financial surplus (+) / deficit (-)	-0.3	-0.2	0.7	0.1	0.8	0.3	-0.2
One-off items	-0.9	-0.3	-0.2	-0.5	-0.3	-0.4	-0.1
Cyclical adjustment	-0.7	-0.8	-0.3	-0.3	-0.5	-0.3	-0.1
Structural balance	1.3	0.9	1.1	0.9	1.5	0.9	0.0
Financing (accrual basis)	0.3	0.5	-0.1	-0.1	-0.8	-0.3	0.2
Net incurrence of liabilities	4.3	1.0	1.0	-0.8	0.0	0.0	0.2
Net acquisition of financial assets	4.0	0.4	1.1	-0.8	-0.8	-0.3	0.0
Other and Errors and Omissions	0.0	0.3	0.6	0.1	0.0	0.0	0.0

Sources: Estonian authorities; and IMF staff projections.

Table 3. Estonia: General Government Financial Assets and Liabilities, 2010–2016:Q2

(In millions of euros)

	2010	2011	2012	2013	2014	2015	2016 June
Total Assets	**6,915**	**7,138**	**7,988**	**8,506**	**8,858**	**11,123**	**11,479**
Fiscal reserves	2,134	1,994	2,207	2,201	2,371	2,371	2,278
Currency and deposits	855	953	1,107	1,289	1,300	1,002	1,193
Securities other than shares, excl. financial derivatives	1,109	862	912	738	879	825	861
Short-term securities, excl. financial derivatives	565	352	492	501	552	342	411
Long-term securities, excl. financial derivatives	544	510	421	236	327	483	451
Financial derivatives	0	0	0	0	0	0	0
Other	169	180	187	175	192	544	223
Loans	250	299	597	728	707	663	654
Short-term	9	50	10	7	6	6	4
Long-term	241	249	588	722	702	657	650
Equity	3,853	4,124	4,433	4,875	5,010	7,430	7,653
Other	678	721	750	702	769	659	893
Total Liabilities 1/	**1,758**	**1,567**	**2,361**	**2,581**	**2,782**	**2,621**	**2,749**
Securities other than shares, excl. financial derivatives	241	254	247	279	271	228	225
O/W: Long-term securities, excl. financial derivatives	241	254	247	279	271	228	225
Loans	726	736	1,472	1,613	1,802	1,768	1,720
Short-term	7	9	12	11	7	8	6
Long-term	719	727	1,460	1,602	1,795	1,760	1,715
Other accounts receivable/payable	780	567	602	645	662	577	753

Source: Statistics Estonia.

1/ Including commitments under the European Financial Stability Fund.

Table 4. Estonia: Summary Balance of Payments, 2010–18

	2010	2011	2012	2013	2014	2015	2016	2017	2018
							Projections		
					(Millions of Euros)				
Current Account	265	223	-438	-20	204	447	250	35	-240
Primary Current Account 1/	1,889	2,083	1,288	1,579	1,805	1,856	1,771	1,614	1,402
Trade Balance	-406	-351	-1,179	-898	-1,006	-861	-957	-1,182	-1,519
Exports of goods	7,482	10,384	11,104	11,624	11,287	10,853	11,187	11,754	12,466
Imports of goods	7,887	10,735	12,283	12,522	12,293	11,714	12,145	12,937	13,985
Services Balance	1,341	1,306	1,356	1,319	1,689	1,702	1,710	1,749	1,844
Exports of services	3,567	4,040	4,486	4,876	5,321	5,204	5,469	5,788	6,048
Imports of services	2,226	2,734	3,131	3,556	3,633	3,502	3,759	4,039	4,204
Primary Income	-779	-850	-721	-451	-490	-418	-529	-560	-593
Receipts	845	1,011	1,005	1,148	1,111	991	991	1,019	1,048
Payments	1,624	1,861	1,726	1,599	1,601	1,409	1,521	1,579	1,641
Secondary Income	108	118	107	9	11	25	26	27	29
O/w: General government	-95	-31	-93	-11	0	22	22	25	18
Capital Account	512	677	612	525	214	421	436	451	467
Non-produced non-financial assets	135	189	20	-86	-104	71	...	...	...
Capital transfers	377	487	592	611	318	350	...	...	...
Of which: General Government	198	227	327	276	191	233	...	...	...
Net lending (+) / borrowing (-) balance	777	899	173	505	418	868	686	486	228
Financial Account	831	1,008	508	467	204	1,006	686	486	228
Direct investment	-1,012	-1,769	-398	-86	-617	174	-264	-376	-545
Assets	923	-951	996	578	604	-423	166	168	121
Liabilities	1,936	818	1,394	664	1,221	-597	429	544	666
Portfolio investment	431	-1,190	100	501	496	564	592	604	616
Financial derivatives	-33	48	-62	-98	-75	-85	-84	-91	-99
Loans and other investments (net) 2/	2,276	3,907	796	142	279	330	407	342	310
SDRs	0	0	1	0	0	0	0	0	0
Change in reserves	-831	13	70	8	120	23	35	7	-54
Errors and Omissions	54	109	334	-39	-215	138	0	0	0
					(In percent of GDP, unless otherwise specified)				
Current Account	1.8	1.3	-2.4	-0.1	1.0	2.2	1.2	0.2	-1.0
Trade balance	-2.8	-2.1	-6.6	-4.8	-5.1	-4.3	-4.6	-5.4	-6.6
Service balance	9.1	7.8	7.6	7.0	8.5	8.4	8.2	8.0	8.0
Primary income balance	-5.3	-5.1	-4.0	-2.4	-2.5	-2.1	-2.5	-2.6	-2.6
Seconadry income balance	0.7	0.7	0.6	0.0	0.1	0.1	0.1	0.1	0.1
Net lending (+) / borrowing (-) balance	5.3	5.4	1.0	2.7	2.1	4.3	3.3	2.2	1.0
Exports of goods and services (growth in percent)	28.5	30.5	8.1	5.8	0.7	-3.3	3.7	5.3	6.0
Imports of goods and services (growth in percent)	28.0	33.2	14.4	4.3	-1.0	-4.5	4.5	6.7	6.9
Net FDI from abroad	6.9	10.6	2.2	0.5	3.1	-0.9	1.3	1.7	2.4
Total external debt 3/									
Gross	112.0	100.3	100.2	92.4	96.7	94.8	89.5	83.1	75.6
Net 4/	35.8	6.0	-0.9	-5.4	-10.2	-10.3	...	...	...
NIIP	-71.2	-54.8	-51.3	-47.2	-46.7	-40.9	-36.4	-32.7	-29.8
General government external debt 5/									
Excluding Govt. assets held abroad	6.6	6.1	9.7	10.2	10.7	10.0	9.7	9.3	8.8
Including Govt. assets held abroad	4.8	4.4	-2.6	-1.5	-1.3	-1.7	-1.6	-1.6	-1.5
Debt Service/Exports of GNFS (percent)	77.0	62.6	65.5	63.4	65.0	70.6	68.9	63.5	58.3

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.

5/ Includes government guaranteed debt.

Table 5. Estonia: Macroeconomic Framework, 2010–21

(Percent of GDP, unless otherwise indicated)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
							Projections					
Real GDP growth (percent)	2.5	7.6	4.3	1.4	2.8	1.4	1.3	2.3	2.8	2.7	2.8	2.9
Domestic demand real growth (percent)	0.5	8.7	8.5	1.5	2.5	0.7	2.1	2.7	3.1	3.0	3.1	3.1
Final consumption real growth (percent)	-1.3	3.0	4.0	3.3	3.1	4.4	3.2	2.2	2.4	2.3	2.2	2.2
Capital formation real growth (percent)	7.0	28.2	20.6	-2.7	0.8	-8.9	-1.0	4.3	5.2	5.3	5.6	5.7
Fixed capital formation real growth (percent)	-2.6	34.3	12.8	-2.9	-8.1	-3.4	-0.9	4.6	5.3	5.5	5.8	5.9
Net exports contribution to real GDP (ppts)	2.9	-0.6	-3.7	-0.8	0.7	0.6	-1.0	-0.2	-0.1	-0.2	-0.2	-0.2
Exports real growth (percent)	24.3	24.2	4.8	2.3	3.0	-0.6	4.1	5.2	5.3	5.4	5.5	5.6
Imports real growth (percent)	21.2	27.2	9.7	3.3	2.2	-1.4	5.7	5.7	5.6	5.8	5.8	5.8
Statistical discrepancy contribution to real GDP (ppts)	-0.6	0.0	0.0	0.7	-0.4	0.1	0.5	0.0	0.0	0.0	0.0	0.0
Gross saving	23.1	26.4	27.2	27.2	27.0	25.4	23.5	23.2	22.9	22.6	22.6	22.7
Private	19.6	21.8	21.2	22.1	21.2	20.1	18.1	18.0	17.8	17.0	16.4	16.3
Public	3.5	4.6	6.0	5.1	5.8	5.4	5.4	5.2	5.1	5.6	6.1	6.5
Investment	21.3	25.1	29.1	28.0	27.1	24.7	23.8	24.5	25.0	25.6	26.2	26.7
O/w: Fixed investment	21.2	26.2	28.6	27.6	24.4	23.7	22.8	23.5	24.1	24.7	25.2	25.8
Private	16.3	21.3	22.2	22.1	19.1	18.3	18.2	18.6	18.7	18.8	18.9	19.1
Public	4.9	4.9	6.4	5.5	5.3	5.4	4.6	4.9	5.4	5.9	6.4	6.7
Current account	1.8	1.3	-2.4	-0.1	1.0	2.2	1.2	0.2	-0.7	-1.6	-2.3	-2.7
Memorandum items:												
Fiscal balance 1/	0.1	1.1	-0.3	-0.2	0.7	0.1	0.8	0.3	-0.2	-0.3	-0.3	-0.2
Revenues	40.7	38.5	39.0	38.4	39.1	40.5	41.4	42.2	42.2	43.0	42.8	42.6
Expenditure	40.5	37.4	39.3	38.5	38.5	40.3	40.7	41.9	42.5	43.3	43.1	42.8
Structural balance	1.8	1.1	1.3	0.9	1.1	0.9	1.5	0.9	0.0	-0.1	-0.2	-0.2
Total general government debt	6.6	6.1	9.7	10.2	10.7	10.0	9.7	9.3	9.1	9.0	8.8	8.5
Net non-debt creating capital inflows ("+" inflow)	19.6	1.8	11.7	8.9	9.8	1.9	7.0	7.3	7.6	7.9	8.1	8.3
Capital transfers 2/	3.5	4.1	3.4	2.8	1.1	2.1	2.1	2.1	2.0	2.0	2.0	1.9
Portfolio investment (net)	2.9	-7.1	0.6	2.7	2.5	2.8	2.8	2.8	2.7	2.6	2.5	2.4
FDI liabilities	13.2	4.9	7.8	3.5	6.2	-2.9	2.1	2.5	2.9	3.3	3.7	4.0
HICP inflation (average, in percent)	2.7	5.1	4.2	3.2	0.5	0.1	0.9	2.5	2.4	2.5	2.6	2.6
Unemployment rate (percent)	16.7	12.3	10.0	8.6	7.4	6.1	6.5	7.6	8.3	8.5	8.7	8.8
Average wage growth (percent)	0.9	5.4	5.9	7.8	5.6	5.9	6.5	5.5	5.0	4.5	4.2	4.0
Labor compensation share of GDP	47.3	44.7	44.9	45.0	45.2	46.8	47.3	47.6	47.8	48.0	48.2	48.2
Output gap (in percent of potential output)	-10.7	-4.6	-2.1	-2.4	-0.8	-0.9	-1.4	-0.7	-0.3	-0.2	-0.2	0.0
Growth rate of potential output (in percent)	1.7	1.4	1.8	1.8	1.2	1.5	1.7	1.7	2.4	2.6	2.7	2.7

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, 2010–15

(Percent of GDP, unless otherwise indicated)

	2010	2011	2012	2013	2014	2015
Financial Indicators						
Public sector external debt 1/	6.6	6.1	9.7	10.2	10.7	10.0
Private sector credit (year-on-year, percent) 2/	-6.2	-4.1	1.0	1.1	3.3	4.8
External Indicators						
Exports of goods and services (year-on-year, percent)	28.5	30.5	8.1	5.8	0.7	-3.3
Imports of goods and services (year-on-year, percent)	28.0	33.2	14.4	4.3	-1.0	-4.5
Current account balance	1.8	1.3	-2.4	-0.1	1.0	2.2
Capital and financial account balance	5.3	5.4	1.0	2.7	2.1	4.3
Total external debt 3/	112.0	100.3	100.2	92.4	96.7	94.8
of which: Public sector debt 1/	6.6	6.1	9.7	10.2	10.7	10.0
Net external debt 4/	35.8	6.0	-0.9	-5.4	-10.2	-10.3
Debt service to exports of GNFS	77.0	62.6	65.5	63.4	65.0	70.6
External interest payments to exports of GNFS (percent)	3.3	3.0	2.3	2.0	2.0	1.8
External amortization payments to exports of GNFS (percent)	73.7	59.6	63.2	61.4	63.0	68.8
Exchange rate (per US$, period average) 5/	11.8	1.4	1.3	1.3	0.0	1.1
Financial Market Indicators						
Stock market index 6/	698	531	734	818	755	899
Foreign currency debt rating 7/	A	AA-	AA-	AA-	AA-	AA-

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

1/ Total general government and government-guaranteed debt excluding government assets held abroad.

2/ Loans and leases to households and non-financial corporations.

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

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

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

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

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

Table 7. Estonia: Households, Financial Assets and Liabilities, 2010–15
(In millions of euros)

	2010	2011	2012	2013	2014	2015
Total Assets	**12,766**	**14,821**	**17,540**	**17,546**	**19,511**	**18,867**
Currency and deposits	3,940	4,886	5,305	5,391	5,865	6,348
Securities other than shares	30	26	26	31	31	58
Shares and other equity	8,166	9,113	11,015	11,566	13,026	11,779
Insurance technical reserves	86	92	99	62	66	70
Other	545	705	1,095	495	523	613
Total Liabilities	**8,142**	**7,950**	**8,006**	**7,844**	**8,134**	**8,545**
Loans	7,586	7,317	7,324	7,328	7,561	7,969
Short-term	141	117	128	164	192	198
Long-term	7,445	7,200	7,197	7,163	7,369	7,771
Other	556	633	681	516	573	576
Net Financial Assets	**4,625**	**6,871**	**9,534**	**9,702**	**11,378**	**10,322**
Memorandum item						
Total liabilities as a ratio of total gross wages and salaries	158.0	143.3	133.0	123.8	123.1	116.6

Source: Statistics Estonia.

Table 8. Estonia: Financial Soundness Indicators, 2009–2016Q2
(Percent)

	2009	2010	2011	2012	2013	2014	2015	2016 June
Capital adequacy								
Regulatory capital to risk-weighted assets	22.3	22.1	18.6	19.3	20.0	35.7	28.0	31.8
Regulatory Tier I capital to risk-weighted assets	16.1	16.5	17.8	19.3	21.0	35.2	27.7	31.5
NPLs net of provisions to capital	28.1	25.6	22.4	14.5	8.3	7.0	5.7	5.1
Capital adequacy ratio	22.3	22.1	18.6	19.3	20.0	35.7	28.0	31.8
Asset composition and quality								
NPLs to gross loans (non-financial sector)	5.2	5.4	4.0	2.6	1.5	1.4	1.0	1.0
Sectoral distribution of loans to non-financial sector:								
Loans to households	42.0	42.4	40.2	41.4	40.9	42.3	41.4	40.7
Loans to non-financial corporations	45.4	47.0	47.3	46.1	44.8	46.1	44.3	42.6
Earnings and profitability								
Return on assets	-2.8	0.3	3.5	1.9	2.4	1.7	3.0	1.9
Return on equity	-24.6	2.1	33.3	14.2	17.1	12.2	24.1	15.8
Interest margin to gross income	42.3	54.5	55.0	57.8	41.2	55.5	47.5	49.5
Noninterest expenses to gross income	63.1	55.1	47.8	53.2	50.0	59.3	53.1	48.3
Liquidity								
Liquid assets to total short-term liabilities	24.9	25.2	25.7	25.8	21.6	28.7	32.1	28.8
Loans to deposits	168.4	149.3	132.5	121.4	117.4	102.0	105.4	108.5

Sources: Eesti Pank; and Financial Supervisory Authority.

INTERNATIONAL MONETARY FUND

REPUBLIC OF ESTONIA

STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

December 21, 2016

Prepared By European Department

CONTENTS

FUND RELATIONS 2

STATISTICAL ISSUES 4

FUND RELATIONS

(As of November 30, 2016)

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

General Resources Account

	SDR Million	Percent Quota
Quota	243.6	100.00
Fund holdings of currency	193.98	79.63
Reserve Tranche Position	49.63	20.37

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 December 14, 2015 on a LOT basis.

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.

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, 2000–16

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

STATISTICAL ISSUES

General: Estonia's data provision to the Fund is adequate for surveillance purposes. A May 2001 data ROSC mission found that the quality of macroeconomic statistics was generally good. 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 subscribed to the SDDS on September 30, 1998, with metadata posted on the DSSB on January 27, 1999, and met SDDS specifications on March 30, 2000. The latest (2010) annual observance report for Estonia for the SDDS was posted on the Fund's website in May 2011:
(http://dsbb.imf.org/images/pdfs/AnnualReports/2010/EST_SDDS_AR2010.pdf)
SDDS webpage for EST: http://dsbb.imf.org/Pages/SDDS/CtyCtgList.aspx?ctycode=EST

National Accounts: 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.

However, there is room to improve the quality of national account statistics. Early releases are often subject to large subsequent revisions, statistical discrepancies between headline GDP and its expenditure components tend to be sizable, and indirect taxes minus subsidies in the production accounts sometimes make implausibly large growth contributions. All this complicates economic analysis.

The authorities plan to address these issues by implementing a number of methodological upgrades suggested by the 2016 Article IV Consultation mission. These include: (i) more timely compilation of supply-and-use tables; (ii) use of volume indexes as the primary source for all real indirect taxes minus subsidies rather than partly deriving them by deflating nominal values; (iii) relying more on direct measures of volumes in estimating real gross value added generated by real estate activities; (iv) carrying forward input-output ratios in volume terms rather than in value terms when calculating value added by economic activity for non-financial corporations; and (v) integrating the estimation of gross fixed capital formation with the production and imports of capital goods and services. The authorities are working toward implementation in time for submitting revised national accounts statistics to Eurostat by September 2017.

Public Finance: Fiscal data are published by the Ministry of Finance (MoF), while historical data are also available on Statistics Estonia'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 one of its two allowed SDDS flexibility options on the timeliness of monthly central government operations data, and disseminate these data on the National Summary Data page. Comprehensive annual data on central and general government operations (accrual basis) are

compiled according to the ESA2010 methodology. They are also reported in the *GFS Yearbook*. These data include a statement of operations and the government 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*.

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. Estonia also regularly provides requested Financial Soundness Indicators.

External Sector: 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.

Dissemination of Statistics: The Estonian authorities disseminate a range of economic statistics, with a significant amount of data are available on the Internet:

- metadata for data categories defined by the Special Data Dissemination Standard are posted on the IMF's DSBB (http://dsbb.imf.org);
- the Bank of Estonia website (http://www.eestipank.info/frontpage/en/) provides data on monetary statistics, balance of payments, IIP, external debt and other main economic indicators;
- the Statistics Estonia website (http://www.stat.ee/en) provides information on economic and social development indicators;
- the Ministry of Finance homepage (http://www.fin.ee/?lang=ee) includes information on the government's annual multi-year State Budget Strategy, as well as information and data on the national budget, and government finance statistics (deficit, debt, financial assets).

Republic of Estonia: Table of Common Indicators Required for Surveillance

As of October 31, 2016

	Date of latest observation	Date received	Frequency of Data[6]	Frequency of Reporting[6]	Frequency of publication[6]	Memo Items: Data Quality—Methodological soundness[7]	Memo Items: Data Quality—Accuracy and reliability[8]
Exchange Rates	December 15, 2016	December 15, 2016	D	D	D		
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	November 2016	December 2016	M	M	M		
Reserve/Base Money	October 2016	November 2016	M	M	M	O, LO, LO, LO	O, O, O, NA
Broad Money	October 2016	November 2016	M	M	M		
Central Bank Balance Sheet	October 2016	November 2016	M	M	M		
Consolidated Balance Sheet of the Banking System	October 2016	November 2016	M	M	M		
Interest Rates[2]	October 2016	November 2016	M	M	M		
Consumer Price Index	November 2016	December 2016	M	M	M	O, O, O, O	LO, LO, O, LO
Revenue, Expenditure, Balance and Composition of Financing[3]—General Government[4]	Q3/2016	December 2016	Q	Q	Q	LO, LO, O, O	LO, LO, O, NO
Revenue, Expenditure, Balance and Composition of Financing[3]—Central Government	Q3/2016	December 2016	M	M	M		
Stocks of Central Government and Central Government-Guaranteed Debt[5]	Q3/2016	December 2016	Q	Q	Q		
External Current Account Balance	Q3/2016	December 2016	Q	Q	Q	O, O, LO, O	O, O, O, O, O
Exports and Imports of Goods and Services	September 2016	December 2016	M	M	M		
GDP/GNP	Q3/2016	December 2016	Q	Q	Q	O, O, O, LO	LO, LO, LO, LNO
Gross External Debt	Q3/2016	December 2016	Q	Q	Q		
International Investment Position[9]	Q3/2016	December 2016	Q	Q	Q		

[1] 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.
[2] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[3] Foreign, domestic bank and domestic nonbank financing.
[4] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.
[5] Including currency and maturity composition.
[6] Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A); Not Available (NA).
[7] Reflects the assessment provided in the data ROSC published on November 6, 2001, and based on the findings of the respective missions that took place during May 10–18, 2001 for the dataset corresponding to the variable in each row. For fiscal data, also takes account of the 2009 Fiscal Transparency ROSC. The assessment indicates whether international standards concerning concepts and definitions, scope, classification/sectorization, and basis for recording are fully observed (O), largely observed (LO), largely not observed (LNO), or not observed (NO).
[8] Same as footnote 7, except referring to international standards concerning (respectively) source data, statistical techniques, assessment and validation, and revision studies.
[9] Includes external gross financial asset and liability positions vis-à-vis nonresidents.

Statement by Thomas Ostros, Executive Director for the Republic of Estonia and Eve Anni, Alternate Executive Director
January 9, 2017

On behalf of the Estonian authorities, we would like to thank staff for the comprehensive and constructive policy discussions in Tallinn during the Article IV consultations as well as for the insightful set of reports. The authorities broadly agree with staff's assessment and appreciate the policy recommendations.

Recent macroeconomic developments and outlook

Estonia's real GDP growth remains around 1 percent in 2016 after having lost the momentum in recent years. Robust private consumption, supported by rapidly rising real wages, has been the main driver of growth, while weak external demand and uncertainty about trade prospects have been a drag on exports and investment. The primary dampeners on economic growth in 2016 were oil shale and energy sectors that suffered from the low oil price. However, recent data indicates a turning point with manufacturing growth picking up as the oil shale sector's negative effect dissipates and exports recover.

Going forward, economic growth is forecast to gather pace as exports and investment strengthen. In particular, public sector investment is expected to contribute significantly as the EU structural funds under the new allocation period are absorbed. Domestic demand, being supported partly by favorable monetary environment, will remain the main driver of growth, however, external demand and corporate investment will strengthen gradually and exports will play a more important role.

The authorities share the view that a sustained acceleration in growth requires a solid pick up in productivity. Productivity gains are considered critical in order to avoid growth falling behind the projected trajectory, particularly given that the growth contribution of increased employment becomes exhausted. While there is some room to increase labor productivity through lifting average hours worked, the decline in corporate investments in recent years has probably reduced growth potential for the economy. The authorities concur with the staff assessment that it is essential to increase productive investments. Estonia's recently appointed new government envisages further simplifications of business regulation for SMEs, reductions in corporate tax rates for intercompany dividends in order to stimulate investments, and improvements in the regulative and tax environment for high growth potential sectors in order to enhance competitiveness. The government has renewed the commitment to achieve the 1 percent of GDP level of public R&D expenditures and seeks to further encourage the business start-up rate. The authorities also agree with staff that strengthening the oversight of government programs for enhancing competitiveness is beneficial for ensuring their effective implementation. Staff's advice on setting up a separate productivity unit within the Prime Minister's Office, following examples of best practices from around the world, is already being considered.

The authorities agree that risks to the growth outlook are skewed to the downside. Estonia's small and very open economy is particularly vulnerable to the external environment, including political risks in Europe, and weaker economic prospects for its main trading partners could further delay a rebound in growth. Domestically, it is primarily the labor market developments that could dampen prospects for productivity growth and erode competitiveness and the authorities will monitor labor market developments particularly closely.

Labor market developments

The labor market participation rate in Estonia has reached historically high levels, partly as a result of higher wages, which have motivated more active labor market participation of the working age population. Additionally, measures like raising the official retirement age and more specifically, the phasing in of the Work Ability Reform aimed at reviewing the assessment of capacity to work within the disability pension system, should unlock resources for lower paid sectors. After a long lasting decline, 2016 was the first year when the population of Estonia increased. Nevertheless, total employment is likely to shrink due to demographics, keeping the labor market tight and a continuous upward pressure on wages.

The rapid wage increase, which has been consistently above productivity growth in recent years, is a concern and the authorities agree that the divergence between labor costs and productivity developments is unsustainable. Although the latest data indicates moderation in the growth of labor costs, the associated risks to competitiveness persist. While wage negotiations in Estonia are outside the authorities' direct control, the government acknowledges that public sector should not front-run general wage dynamics and future developments in this area will be closely monitored.

Fiscal policy

Estonia's fiscal rules and actual outcomes have been fully compliant with the requirements of the EU's Stability and Growth Pact. Estonia's gross public debt is currently at around 10 percent of GDP and net debt is close to zero due to sizable liquid reserves. The budget has been in surplus from 2014 onwards. In 2016, the nominal budgetary position of the general government will reach a surplus of 0.3 percent of GDP as revenues exceeded expectations while the execution rate of investments was lower than anticipated.

The new coalition government will introduce changes to fiscal and tax policies but has confirmed a commitment to preserving a sound and sustainable fiscal policy while maintaining a structurally balanced budget in the medium term. The fiscal rule will be made more symmetric by allowing structural surpluses of previous years to be followed by structural deficits, which cannot exceed 0.5 percent of GDP. To promote long-term economic growth, the government foresees stepping up public investments into infrastructure and information technology. The government envisages fully or partly privatizing a number of state owned enterprises. A significant change will be introduced to the personal income tax system by lowering the tax wedge for lower and middle income earners. The corporate income tax rate on regular dividend payments will be reduced to 14 percent and adjustments

are going to be made to the excise tax system. The cuts to social security contributions planned by the previous government are not going to be implemented. However, labor tax alleviations or tax credits for rapidly growing and start-up companies together with the indirect effect of raising the tax free personal income are assumed to work for the same purpose.

The authorities agree that fiscal policy should be geared towards improving competitiveness. However, in the environment of already robust wage growth and a historically high employment rate, public investments should be scaled up only when there are clear supply side benefits and positive returns for the entire economy without causing labor market distortions.

Financial stability

Estonia's financial sector is sound and stable, with well capitalized, liquid, and profitable banks, whose asset quality is high and non-performing loan ratios low. Risks to the financial sector are reduced by the financial buffers of non-financial corporates, the relatively good finances of the households and the high level of capitalization in the banking sector. Credit demand has been relatively strong, while the ability of corporates and households to service their loans has remained good due to previous buildup of financial buffers and the low interest rate environment.

The dominant Nordic cross-border banks (over 90 percent of the banks operating in Estonia are part of the large Nordic banking groups) imply mainly external financial risks that are mitigated by sizable capital buffers of the banks. Domestic risks relate mostly to potential spillovers from the housing market but these risks are not acute as mortgage lending growth remains moderate.

Various macro-prudential measures have been introduced in recent years to increase the resilience of the financial system and to reduce systemic risks. Since August 2016, a systemic risk buffer requirement of 1 percent applies to all banks in Estonia with additional capital buffers of 2 percent required for the two systemically important credit institutions. The counter-cyclical capital buffer requirement was introduced in 2016 and its level is adjusted according to quarterly assessments of changes in the credit cycle.

Close cooperation with Nordic banks' home-country authorities is essential and mutual efforts will continue to revitalize the Nordic Baltic Financial Stability Group. A few weeks ago the Nordic and Baltic central banks signed an agreement on the principles for sharing information and providing emergency liquidity assistance with regard to cross-border banking groups. The new agreement, which replaces the one agreed in 2003, will further improve financial stability in the region.