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BELGIUM

March 2019

2019 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR BELGIUM

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 2019 Article IV consultation with Belgium, 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 March 6, 2019 consideration of the staff report that concluded the Article IV consultation with Belgium.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on March 6, 2019, following discussions that ended on December 14, with the officials of Belgium on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on February 19, 2019
- An **Informational Annex** prepared by the IMF staff.
- A **Statement by the Executive Director** for Belgium

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March 11, 2019

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IMF Executive Board Concludes 2019 Article IV Consultation with Belgium

On March 6, 2019, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Belgium.

Belgium's economy has performed well since the global financial crisis. Real GDP per capita has surpassed its pre-crisis level, unemployment has reached its lowest level in four decades, and employment has risen. The fiscal deficit narrowed to under 1 percent of GDP in 2018, and public debt, though still high, continued to decline. These outcomes have been supported by fiscal and structural reforms undertaken in recent years, including a key pension reform, an overhaul of the corporate income tax regime, and a reduction in labor taxes, among others.

Over the last year, activity has moderated, with real GDP growth declining to 1.4 percent in 2018 from 1.7 percent in 2017, as weaker external demand weighed on export growth, and private consumption growth slowed. Growth is expected to reach 1.3 percent in 2019 and remain moderate at around 1.5 percent over the medium term.

Key challenges ahead include sluggish potential growth and a still high level of public debt.

Executive Board Assessment[2]

Executive Directors commended the authorities for their reform efforts in recent years, which have contributed to sustained growth, strong employment growth, and a notable reduction of the

[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.

[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.

fiscal deficit. They encouraged the authorities to take advantage of the current favorable economic conditions to press ahead with further reforms to enhance the economy's resilience and boost its growth potential.

Directors agreed that rebuilding fiscal buffers remains a priority given the high level of public debt and pressures from population aging. They encouraged the authorities to pursue further fiscal consolidation to achieve their medium term objective of a structurally balanced budget and put debt on a firmly downward path, with some Directors noting a need to strike a balance between consolidation and growth. Directors emphasized that spending reforms, notably increasing the efficiency of spending and better targeting social benefits, will contribute to a more sustainable fiscal position. They also recommended further reform of the pension system to curb the long term costs of aging. Directors highlighted that spending reforms should be complemented by measures to safeguard revenues, including further reducing deductions and exemptions.

Directors emphasized that reforms to enhance labor force participation and reduce the fragmentation of the labor market are critical for achieving higher, more inclusive growth, and encouraged the authorities to implement the planned "jobs deal" reform. To better integrate vulnerable groups, Directors also recommended pursuing further efforts to address educational gaps, improve the quality of training and lifelong learning, and reduce barriers to geographical mobility. They noted that better linking wages to productivity could help to improve the allocation of resources and support overall competitiveness.

Directors encouraged continued implementation of reforms of product and service markets and the business environment to support productivity and growth. They welcomed recent initiatives to promote financing, through the new "Growth Fund", and develop an ecosystem for young, innovative firms with growth potential. Directors saw scope to further streamline and harmonize regulations, increase investment in infrastructure, improve the efficiency of R&D spending, and strengthen competition in services and regulated professions.

Directors recognized the improved resilience of the financial sector but noted that recent strong credit growth has contributed to rising corporate and household debt and housing prices. They welcomed the central bank's new macroprudential measures aimed at the housing market and encouraged the authorities to stand ready to activate the countercyclical buffer to build up further resilience, should cyclical risks intensify. Directors also encouraged the authorities to continue to enhance risk monitoring and ensure the feasibility and effectiveness of bank resolution strategies. Continuing the implementation of the remaining FSAP recommendations will be helpful in this regard.

Belgium: Selected Economic Indicators (2016–19)

	2016	2017	2018 Est.	2019 Proj.
Real economy				
Real GDP	1.5	1.7	1.4	1.3
Domestic demand	2.1	1.1	0.7	1.3
Foreign balance[1]	-0.5	0.6	0.8	0.0
Exports, goods and services	7.6	5.0	3.3	2.8
Imports, goods and services	8.5	4.3	2.5	2.9
Potential output growth	1.2	1.2	1.3	1.4
Output gap (in percent)	-0.4	0.1	0.2	0.2
Employment				
Unemployment rate (in percent)	7.8	7.1	5.9	5.9
Employment growth	1.3	1.4	1.6	1.0
Prices				
Consumer prices	1.8	2.2	2.3	1.9
GDP deflator	1.8	1.7	1.3	1.8
Public finance				
Revenue	50.6	51.3	51.3	50.7
Expenditure	53.0	52.2	52.1	51.9
General government balance	-2.4	-0.9	-0.8	-1.2
Structural balance	-2.2	-1.4	-1.6	-1.4
Primary balance	0.4	1.6	1.5	0.9
General government debt	105.5	103.0	101.0	99.2
Balance of payments				
Goods and services balance	1.1	1.0	0.9	0.8
Current account	-0.6	0.7	0.4	0.3
Exchange rates				
Euro per U.S. dollar, period average	0.9	0.8	0.9	...
NEER, ULC-styled (2005=100)	98.9	101.3	100.9	...
REER, ULC-based (2005=100)	99.4	102.9	103.4	...
Memorandum items				
Nominal GDP (in billions of euros)	424.7	439.1	451.3	465.2
Population (in millions)	11.3	11.4	11.4	11.5

Sources: Haver Analytics, Belgian authorities, and IMF staff projections.

[1] Contribution to GDP growth.

INTERNATIONAL MONETARY FUND

BELGIUM

STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION

February 19, 2019

KEY ISSUES

Context: Since the global crisis, Belgium has experienced nine consecutive years of economic growth. Per capita GDP has surpassed pre-crisis levels, and unemployment is at its lowest level in four decades. The financial sector has also undergone structural changes and increased its resiliency to shocks. But some challenges remain, related to the high public debt level, a still fragmented labor market, sluggish potential growth, and rising cyclical financial vulnerabilities.

Outlook: Economic growth has moderated recently and is expected to reach around 1.3 percent in 2019 and 1½ percent over the medium run. Risks have risen and are tilted to the downside, related to increasing trade tensions, uncertain Brexit negotiation outcomes, broader European financial market stress, and heightened domestic political uncertainty, given the recent collapse of the coalition government and upcoming elections.

Policies: The authorities have implemented important reforms in recent years that have contributed to job creation, improved competitiveness, and lowered the deficit. But the reform agenda is unfinished, and the new government should take advantage of the still favorable economic conditions to press ahead with further reforms to strengthen the resilience and growth potential of the economy. The priorities should be to:

- Rebuild fiscal buffers by gradually moving toward a balanced budget in the medium term, supported by efficiency-oriented spending reforms.
- Continue to address the fragmentation of the labor market by improving education and training and reducing barriers to mobility.
- Boost productivity growth by supporting entrepreneurship, increasing investment in infrastructure, strengthening competition in services, and fostering innovation.
- Closely monitor the build-up of cyclical risks in the financial sector and stand ready to tighten macroprudential policy further.

Approved By
Ms. Detragiache (EUR), Ms. Gonzalez (SPR)

Discussions took place in Brussels December 4–14, 2018. The staff team comprised D. Velculescu (head), L. Antoun de Almeida, M. Arena, A. Jewell, and S. Voigts (all EUR) and was assisted at headquarters by T. Mohd Nor and K. Vanegas. A. de Lannoy and D. Cools (OED) participated in the discussions. Staff met with P. Wunsch (Deputy Governor of the National Bank of Belgium), A. De Croo (Minister of Finance), K. Peeters (Minister of Economy and Labor), S. Wilmès (Minister of Budget), J. Crucke (Minister of Budget, Finance, Energy, Climate, and Airports of Wallonia), senior officials from Flanders and the Brussels Capital Region, other senior government officials, representatives from the private sector, and trade unions.

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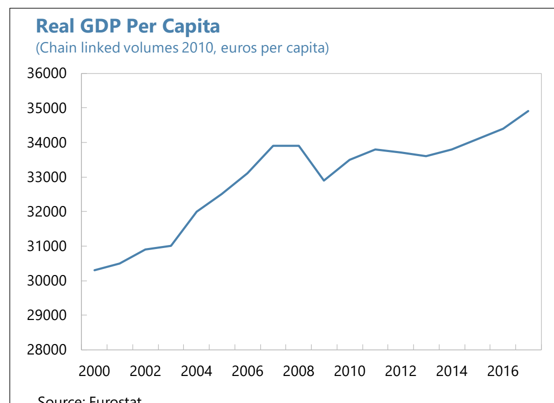
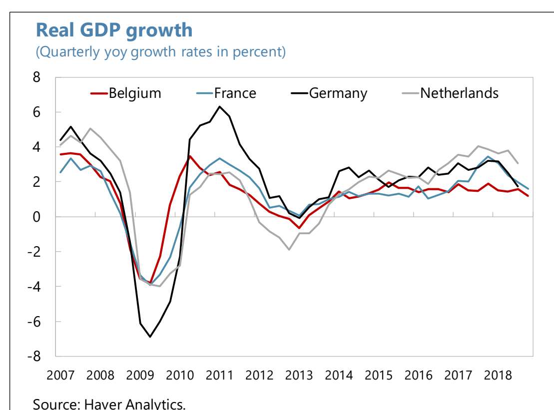
CONTEXT: A MODERATING RECOVERY

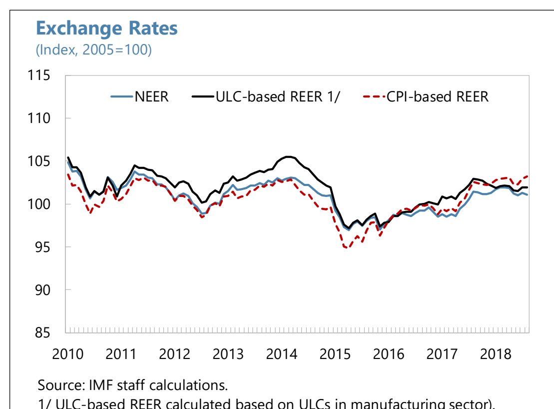
1. Ten years after the global financial crisis, Belgium's economy is performing well by many measures, in part reflecting recent reforms. The economy is entering its tenth year of expansion, with real GDP per capita surpassing pre-crisis levels. Unemployment is back to pre-crisis levels, and employment rates have reached historic highs. The fiscal deficit has narrowed, and public debt, though still high, has started to decline. These outcomes have been supported by reforms over the last four years (Box 1). The financial sector, which suffered heavy losses during the crisis, is more resilient thanks to structural changes and an improved regulatory and supervisory framework.



2. Growth, however, has moderated recently. Real GDP growth slowed to 1.4 percent in 2018 from 1.7 percent in 2017, as weaker external demand weighed on export growth. Moderating private consumption growth was partially compensated by a temporary boost to public investment spending linked to the local election cycle. Although the slowdown in growth has been in line with developments in the euro area, Belgium continues to experience lower growth rates than its peers. The unemployment rate fell to 5.9 percent in 2018, and labor shortages intensified. Yet, despite healthy job growth, some groups remain largely excluded from the labor market. Headline inflation edged higher to 2.3 percent in 2018, as excise duties contributed to higher food inflation and domestic supply constraints boosted energy prices. Core inflation was lower, at 1.3 percent. The fiscal deficit narrowed to 0.8 percent of GDP at end-2018, supported by strong corporate income tax receipts (boosted by advance payments), while public debt declined to around 101 percent.



3. The external position in 2018 is estimated to have been moderately weaker than medium-term fundamentals and desirable policy settings would imply (Annex II). Since the crisis, the current account has averaged a deficit of 0.3 percent of GDP. In 2018, it is estimated to have reached a surplus of 0.4 percent, slightly lower than its level of 0.7 percent in 2017, owing to somewhat weaker export growth and a deterioration in the terms of



trade. Unit labor costs (ULCs), which had stabilized after 2013 thanks in part to wage moderation and labor cost-cutting measures, have been rising moderately more recently, with the ULC-based real effective exchange rate (REER) having appreciated by 5.3 percent since 2015, compared to a 3.5 percent appreciation of the nominal effective exchange rate. The external balance assessment (EBA) model yielded a cyclically adjusted current account norm of 2.4 percent in 2018, implying a preliminary estimated current account gap of 1–3 percent of GDP below the norm.

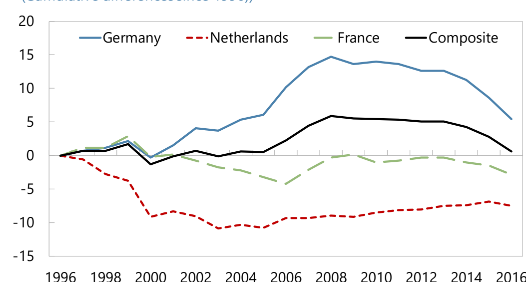
4. The Michel government collapsed last December, after four years in power. The Flemish national party left the ruling center-right coalition in protest of government's support for a UN pact on migration. A caretaker government has been in place since then, preparing the ground for federal and regional elections planned for May 2019.

Box 1. An Overview of Key Reforms Over the Last Four Years

Pension Reform

Several measures were taken in 2015 to improve the sustainability of the pension system. The statutory retirement age was increased, stricter eligibility requirements were introduced for early retirement and for pre-pension benefits ("unemployment benefits with employer top-up"), and the pension bonus system was abolished. Further modifications were introduced in 2015, including the elimination of years of study from civil servants' pension calculation.

Belgium's Wage Gap with Neighboring Countries 1/
(Cumulative differences since 1996))



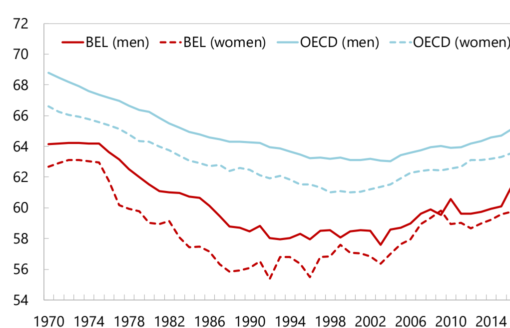
Source: Central Economic Council.
1/ A positive sign implies a competitiveness gain for the relevant country compared with Belgium.

Staff assessment: Pension reform represents an important step toward addressing the long-term cost of aging. The measures adopted are expected to cut the annual growth in pension costs by about a third and increase the participation rate of older workers. However, the effective retirement age remains below the OECD average, and further reforms are needed to strengthen the long-term sustainability of the pension system.

Wage Moderation

To close the wage gap accumulated with neighboring countries since 1996, the government suspended the wage indexation mechanism from April 2015 to April 2016 ("index jump"), resulting in real wage losses of 2 percent for all employees. To prevent wage gaps from reemerging, in 2017, the government adjusted the framework for determining the maximum real wage increase allowed at the sectoral level (the wage norm). The new framework requires social partners to correct for past slipages when establishing the wage norm and includes a safety margin to hedge against forecast errors.

Average Effective Retirement Age



Source: OECD.

Staff assessment: By curbing wage growth, the index jump enhanced Belgium's cost competitiveness and contributed to employment growth. The reform of the wage-setting mechanism should prevent wage gaps from reemerging, but the calculation of the wage norm does not take into account deviations in labor productivity growth between Belgium and its key trading partners, which could be a weakness going forward.

Box 1. An Overview of Key Reforms Over the Last Four Years (concluded)

Labor Market Reforms

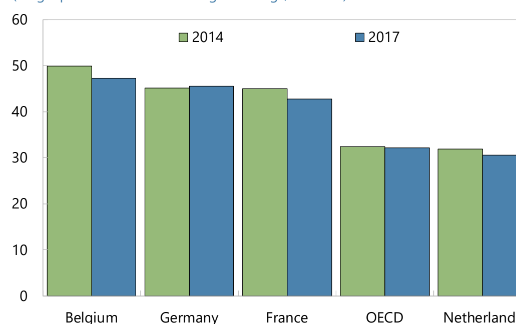
The government implemented a number of reforms designed to reduce unemployment traps, increase labor market participation, and introduce more flexibility in the labor market. Measures include tightening eligibility for unemployment benefits, allowing shorter notice periods during the initial months of employment, extending "flexi-jobs" to retail industries, introducing more working-hour flexibility in the e-commerce industry, and granting tax advantages to employers hiring their first worker.

Staff assessment: Labor market reforms have contributed to rapid employment growth and a decline in the unemployment rate to historically low levels. But the labor market remains severely fragmented. Older workers account for much of the employment increase, whereas progress has been more limited in integrating vulnerable groups—especially immigrants born outside the EU, the young, and the low-skilled.

Tax Shift

The tax shift, adopted in 2015 and phased in over 2016–2020, aims to improve competitiveness and strengthen purchasing power by shifting taxes away from labor. The reform, which was targeted especially to low wage earners, entails lowering social security contributions for employers and employees and reducing personal income taxes for employees. Partially compensating measures include higher excise duties on alcohol, tobacco, diesel, and soft drinks; a higher VAT on electricity; and tax increases on non-labor income.

Average Tax Wedge
(Single person at 67% of average earnings, no child)



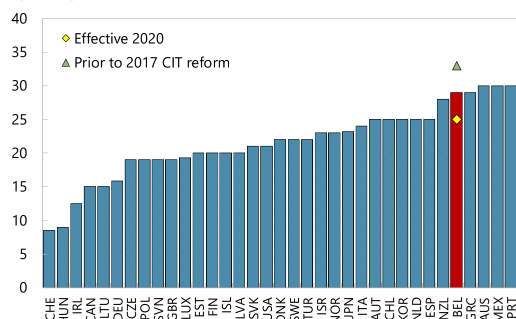
Source: OECD Tax Statistics.

Staff assessment: The tax shift has supported growth and job creation. However, taxes on labor remain relatively high, and the reform is not revenue-neutral, even taking into account beneficial equilibrium effects on the supply side. Moreover, the tax shift only partially exploited opportunities to promote more environmentally friendly taxation.

Corporate Income Tax Reform

Agreed in 2017, the corporate income tax (CIT) reform cut the standard CIT rate from 33 percent to 29 percent in 2018 and will further reduce it to 25 percent in 2020. SMEs, which were previously subject to a progressive rate structure, now benefit from a rate of 20 percent on the first €100,000 of their tax base. To compensate for the resulting revenue loss, the reform broadened the tax base through a series of measures, including changes to the notional interest deduction (NID) scheme.

Statutory Corporate Income Tax Rates, 2018
(Percent)



Source: OECD.

Staff assessment: The reduction in the headline CIT rate should improve Belgium's competitiveness and attract foreign investment. Changes to the NID help to render the reform broadly revenue neutral but reintroduce a degree of debt bias into the tax system. The CIT reform should be complemented by measures that further broaden the tax base and address remaining distortions in the tax system.

OUTLOOK: STEADY GROWTH, BUT INCREASED DOWNSIDE RISKS

5. Staff projects real GDP growth to decline to 1.3 percent in 2019. Private consumption is expected to be supported by further cuts in payroll taxes coming into effect this year, together with continued wage growth. However, business investment and export growth are expected to soften, as foreign demand for European exports continues to moderate (the projections assume an orderly Brexit scenario). Inflation is projected to moderate to 1.9 percent as energy price inflation recedes.

Belgium: Selected Economic Indicators, 2017–24

	2017	2018	2019	2020	2021	2022	2023	2024
Real GDP (change in percent)	1.7	1.4	1.3	1.4	1.5	1.5	1.5	1.5
Private consumption	1.1	0.8	1.4	1.5	1.7	1.6	1.6	1.6
Public consumption	0.6	0.7	0.9	1.0	1.0	1.0	1.0	1.0
Gross fixed investment	1.8	1.8	1.5	2.0	2.4	2.7	2.7	2.7
Exports of goods and services	5.0	3.3	2.8	2.9	2.8	2.6	2.4	2.5
Imports of goods and services	4.3	2.5	2.9	3.1	3.1	2.9	2.7	2.8
CPI (year average)	2.2	2.3	1.9	1.5	1.8	1.9	2.0	2.0
General government balance (percent of GDP)	-0.9	-0.8	-1.2	-1.4	-1.4	-1.4	-1.5	-1.6
Structural balance (percent of potential GDP)	-1.4	-1.6	-1.4	-1.5	-1.5	-1.5	-1.5	-1.6
General government gross debt (percent of GDP)	103.0	101.0	99.2	97.7	96.0	94.4	92.7	90.7
Output gap (percent of potential GDP)	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1

Sources: Haver Analystics, Belgian authorities, and IMF staff calculations.

6. Growth is expected to remain steady at about 1½ percent over the medium term, in line with staff's estimate of potential output growth. The latter is supported by the recent tax, pension, and labor market reforms, which should increase the labor participation rate and support investment and productivity growth. Plans to scale up investment over the next decade, should they come to fruition, should further boost potential growth.[1] The output gap is expected to remain closed in the medium term.

7. Downside risks to the outlook have increased (Annex III). As a small, open economy deeply integrated into global value chains, Belgium is exposed to external risks related to a "no-deal" Brexit, escalating protectionism, broader financial market stress in Europe, and weaker-than-expected global growth (Box 2). On the domestic front, a tightening labor market could lead to production constraints, which, together with continued energy supply limitations, could add to inflationary pressures. Political uncertainty has also increased, as the current caretaker status of the government, together with the possibility of a protected delay in the formation of a new government, reduces the prospects for significant reforms in the near term and could amplify the consequences of the above-mentioned external risks.

[1] The government's Strategic Investment Pact aims to mobilize €150 billion in investment between now and 2030, split between the public and private sectors.

Box 2. Key External Risks

Brexit

Belgium's close economic ties with the UK leave it vulnerable to Brexit. A recent IMF study found that, among EU countries, Belgium is the second mostly highly integrated with the UK after Ireland.[1] Using a multi-country CGE model and focusing on the trade channel, the study estimates that Belgium's output would fall by about 0.5 percent in the long run in a scenario where the UK and the EU settled on a standard free trade agreement and by about 1 percent in a "no-deal" Brexit scenario where parties defaulted to WTO rules. The government formed a high-level working group in 2016 to examine the implications of Brexit for the Belgium economy. Belgium would be affected mainly through trade channels, reflecting the fact that two-thirds of Belgian companies depend directly or indirectly on demand from the UK, and a quarter import either directly or indirectly from the UK. The high-level working group has developed recommendations to improve the resilience of the agriculture, textiles, and customs sectors and has created an online tool ("Brexit Impact Scan") to help companies prepare, with recommendations related to exchange rate exposure, business operations, commercial contracts, supply chains, and information technology. The government has also prepared an emergency law in case of a "no-deal" Brexit, including the possibility to hire more customs officials and agents in the Federal Food Agency. The Belgian financial sector is relatively less exposed to Brexit, although the possibility of a no-deal Brexit has created uncertainty over whether Belgian and other EU banks could continue using British clearing houses for derivatives transactions (see paragraph 26).

Escalating Trade Tensions

With exports of goods and services equal to 85 percent of GDP, Belgium is among the countries in the euro area most highly dependent on external demand. It is also deeply integrated in global value chains, with two-thirds of Belgian firms contributing to export value-added in Belgium. The potential for further tariffs and counter-tariffs represents a downside risk, though it's possible that some trade could be diverted toward Belgium as tariffs are raised elsewhere. If trade tensions lead to a global shock to confidence, the impact on Belgium could be significant.[2]

Tighter Financial Conditions

Financial conditions have tightened considerably in some parts of Europe, driven by domestic political and policy uncertainty, with the potential for spillover effects in Belgium and other European markets. While the exposure of Belgian banks to vulnerable countries is limited, and Belgium's sovereign bonds have thus far benefited from flight-to-safety flows, contagion effects from future stress cannot be excluded, especially if fiscal consolidation efforts falter.

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[1] Chen, J. and others, 2018, "The Long-term Impact of Brexit on the EU," IMF Country Report No. 18/224. Other studies on the long-term impact of Brexit suggest GDP losses of about 1 percent for Belgium in a no-deal Brexit scenario (WTO rules) compared to about 0.6 percent in the EU27 countries. See Bisciari, P., "A Survey of the Long-term Impact of Brexit on the UK and on the EU27 Economies," National Bank of Belgium Working Paper 366.

[2] See the October 2018 World Economic Outlook for a discussion of the potential economic consequences of further escalation in trade tensions and rising trade barriers.

Authorities' Views

8. **The authorities broadly shared staff's views on the outlook and risks**. They saw near term growth at around 1½ percent, with the Ministry's projections underpinned by somewhat more robust employment gains from planned labor market reforms (somewhat varying in their scale depending on the institutions in charge of the projections). Over the medium term, they considered the outlook to be relatively more constrained by the weak external environment and slowing productivity growth. The authorities agreed that risks are tilted to the downside, especially related to Brexit and

protectionism, to which Belgium is significantly exposed. On the domestic side, some interlocutors saw risk to the prospect of continuing reforms in the near term in case of political gridlock.

POLICY DISCUSSIONS

9. Belgium should take advantage of solid growth and historically low unemployment to continue reforms to support growth and strengthen the resilience of the economy. Commendable progress was made on fiscal and structural reforms over the last few years, which, as noted above, has contributed to the improved macroeconomic outcomes, including competitiveness. However, the agenda is not yet finished, and the next government should continue to focus policies on addressing remaining domestic and external imbalances:

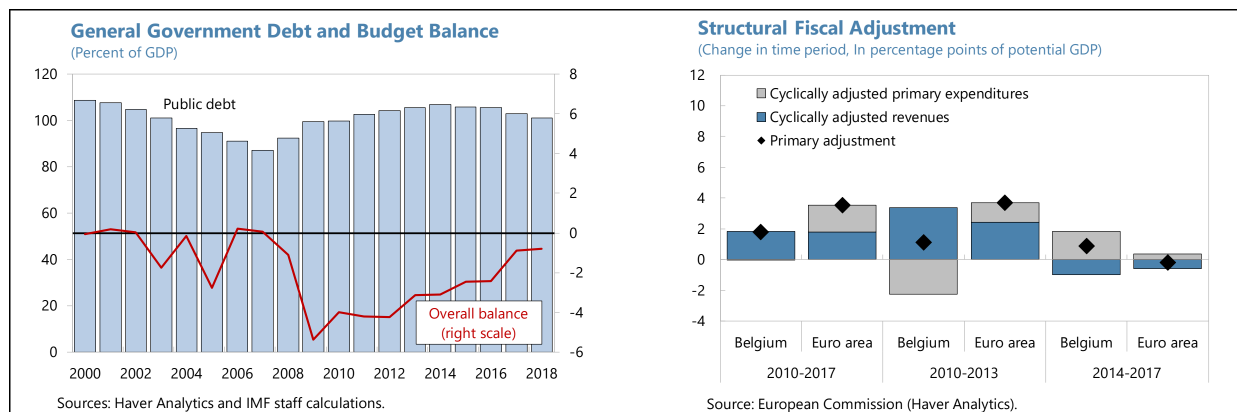
- *Rebuilding fiscal buffers:* While the deficit has been reduced substantially since the onset of the global crisis, it has not returned to pre-crisis levels despite growth in recent years. Moreover, debt remains too high, leaving little room to maneuver in case of shocks. A key priority going forward is to further rein in the deficit and place debt on a sustained downward path to better position Belgium for the next downturn.

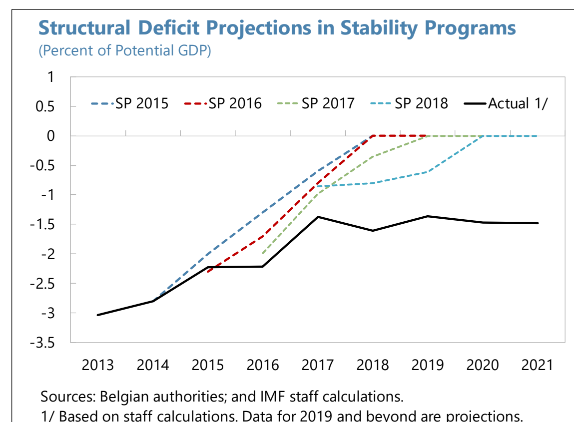
- *Pursuing structural reforms to raise potential growth and make it more inclusive:* Belgium's potential growth, at around 1½ percent, remains sluggish. Building on progress so far, reforms will need to continue to address the fragmentation of the labor market, support the integration of vulnerable groups, stimulate business dynamism, and improve productivity. These reforms can also complement fiscal consolidation to help to strengthen Belgium's external position.

- *Guarding against cyclical vulnerabilities in the financial sector:* While the resilience of the financial sector has improved since the crisis, rising cyclical vulnerabilities, particularly in the real estate market, merit close monitoring and preemptive action.

A. Rebuilding Fiscal Buffers

10. Belgium's current fiscal position suggests limited, if any, fiscal buffers to deal with shocks. Although public debt has been falling gradually since 2015, thanks in part to low interest rates, it is nevertheless the fifth highest in Europe and remains far above the Maastricht limit of 60 percent of GDP. While the fiscal deficit has narrowed in recent years, it is larger than the EU average, mainly on account of one of the highest spending ratios in Europe (52.2 percent of GDP). Efforts since 2014 to contain structural spending through wage moderation have helped to offset the spending relaxation that took place immediately after the crisis. Thus, most of the net structural adjustment during 2010−17 was on the revenue side, and this is now being partially unwound with the tax shift reform.





11. A credible plan for achieving the stated fiscal goals is currently lacking. The authorities postponed, on successive occasions, reaching their medium-term objective of structural balance (which in 2015 was expected to be reached by 2018), arguing that too rapid a fiscal consolidation would jeopardize the recovery. The 2018 Stability Program called for the structural deficit to fall to 0.6 percent of GDP in 2019 and achieve balance in 2020. The draft 2019 budget subsequently relaxed the 2019 structural deficit target to 0.8 percent of GDP but lacked concrete structural measures to achieve even this less ambitious goal, relying on an expectation of employment growth from a planned labor market reform. In the event, the 2019 budget was not approved in parliament following the fall of the coalition government, and Belgium is now operating under a rule that prevents new spending initiatives.

12. The new government should take advantage of the still solid current growth to pursue further fiscal consolidation as soon as feasible. Under staff's current policy baseline scenario (which relies on the above-mentioned spending rule), the deficit is projected to widen to around 1¼ percent of GDP in 2019 and to further deteriorate to 1½ percent over the medium term (corresponding to a modest loosening in structural terms). Revenues are expected to fall, as the next phase of the already legislated tax shift reform further reduces taxes on labor income and the temporary boost to CIT revenues from advance payments ends. Spending is expected to stay broadly constant as a share of GDP over the medium term. Consequently, public debt is projected to remain elevated at over 90 percent of GDP over the medium term and is vulnerable to shocks, in particular growth, macro-fiscal, and contingent liability shocks (Annex V). With the output gap closed and unemployment at its lowest levels in decades, staff recommended a steady structural effort of about 0.5 percent of GDP per year during 2019−21 to attain structural balance, thereby putting public debt on a firmer downward path and creating fiscal space to prepare for the next downturn. Continued fiscal consolidation would also help strengthen Belgium's external position.

Fiscal Projections
(Percent of GDP)

	2018	2019	2020	2021	2022	2023	2024
Baseline forecast							
Revenue	51.3	50.7	50.4	50.4	50.4	50.4	50.4
Expenditure	52.1	51.9	51.8	51.8	51.8	51.8	51.9
Fiscal balance	-0.8	-1.2	-1.4	-1.4	-1.4	-1.5	-1.6
Structural balance	-1.6	-1.4	-1.5	-1.5	-1.5	-1.5	-1.6
Gross government debt	101.0	99.2	97.7	96.0	94.4	92.7	90.7
Recommended policies (illustrative scenario)							
Revenue	51.3	50.7	50.4	50.4	50.4	50.4	50.4
Expenditure	52.1	51.6	51.1	50.6	50.6	50.5	50.4
Fiscal balance	-0.8	-0.9	-0.7	-0.2	-0.2	-0.1	0.0
Structural balance	-1.6	-1.0	-0.5	0.0	0.0	0.0	0.0
Gross government debt	101.0	99.1	97.2	94.7	91.9	89.0	85.5

Source: IMF staff calculations.

13. Spending reform is the key to achieving a more sustainable fiscal position. Staff reiterated its recommendations to rationalize spending while improving its efficiency by reducing duplication in the public administration, streamlining the civil service—particularly at the Entity II level (regions, communities, and local authorities)—curtailing the high level of subsidies, and better targeting social benefits to the most vulnerable.[2] Strengthened coordination at all levels of government is equally critical. Fiscal sustainability also hinges on Belgium's ability to follow up on the 2015 pension reform with further measures to contain the long-term costs of aging (Box 3). Achieving a lasting reduction in current spending is also key for growth, as it would create space for needed additional public investment.[3] Spending reforms should be complemented by measures to safeguard revenues, including further reducing deductions and exemptions. The authorities should review the taxation of dividends and capital gains, the preferential tax treatment of rental income and real estate, and tax preferences on savings accounts, with a view to restoring balance between different forms of business income and limiting tax arbitrage.[4] Further revenue-neutral reductions in the labor tax wedge could also be considered.

Authorities' Views

14. The authorities agreed that reducing the deficit and debt were important to safeguard fiscal sustainability. While the Ministry of Finance concurred with staff that there could be further room to streamline certain public spending items while protecting investment, they considered that a careful balance needs to be struck between consolidation and growth. Thus, they regarded reforms supporting job creation as the key priority to lay the foundation for faster growth and lower fiscal deficits to help to meet Belgium's MTO. In this regard, they emphasized that their planned

[2] See Hallaert, J.J., 2016, "Belgium—Making Public Expenditure More Efficient," IMF Country Report 16/78.

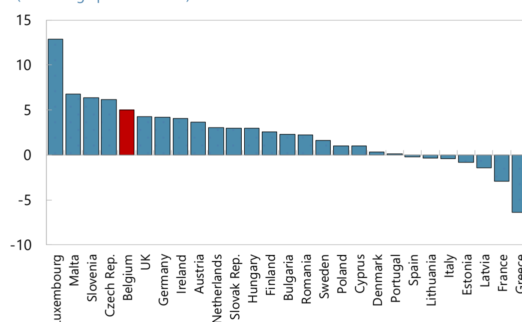
[3] Previous staff analysis suggests that underinvestment in public infrastructure and its deteriorating quality are likely to be significant factors constraining productivity growth in Belgium. See Shabunina, A., 2018, "Understanding Productivity Growth in Belgium: Sectoral and Firm-level Analysis," IMF Country Report No. 18/72.

[4] See De Mooij et al., 2017, "Growth-Enhancing Corporate Tax Reform in Belgium," IMF Country Report 17/70.

Box 3. Belgium's Intertemporal Net Worth

Belgium faces significant pressures from population aging, which will add to fiscal pressures going forward. Belgium's old age dependency ratio (share of persons above 65 years to the working population) is expected to increase from about 30 percent in 2017 to 45 percent by 2070. This will put pressure on pension and healthcare spending, which will rise with the increase in the elderly population, even as the working-age contributor base shrinks. According to the EC's 2018 Aging Report, age-related spending is projected to add around 5 percentage points of GDP to the fiscal deficit between 2017 and 2070—among the highest aging costs in Europe.[1]

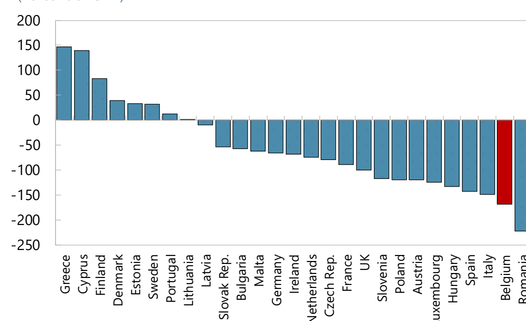
Change in Age-Related Expenditure (2016-70)
(Percentage points of GDP)



Sources: European Commission 2018 Aging Report.

Measures of intertemporal net worth (INW),[2] which account for both the current fiscal position and future fiscal costs, suggest a long-term imbalance. The INW is defined as the sum of current financial net worth (public assets minus debt) and the discounted sum (NPV) of future primary balances, including aging costs. Using the EC's aging costs, Belgium's INW is estimated at about -170 percent of GDP for 2018–70, among the highest in Europe.[3] While point estimates are dependent on assumptions and should be interpreted with caution, they nonetheless indicate a deep intertemporal imbalance in the projected ability of the government to generate revenues to cover the current and future liabilities associated with aging in the absence of reforms.

Finite Horizon Intertemporal Net Worth
(Percent of GDP)



Sources: WEO, European Commission 2018 Ageing Report, and IMF staff calculations.

Belgium will require additional reforms to address its intertemporal imbalance. Achieving the MTO by undertaking a structural adjustment of some 1.5 percent of GDP, as recommended by staff, would improve the intertemporal net worth by about 70 percent of GDP. To further reduce the intertemporal gap, the authorities should consider additional pension reforms to contain aging costs over the long run. Reforms could include linking the retirement age to longevity and other parametric reforms that limit benefits or raise contribution rates. At the same time, productivity-enhancing reforms, together with measures to integrate vulnerable groups and better align wages with productivity, would also improve Belgium's long-run fiscal position by boosting employment and growth.

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[1] The authorities' estimate of long run aging costs is around 1.9 percent of GDP, largely on account of differing demographic and employment projections.

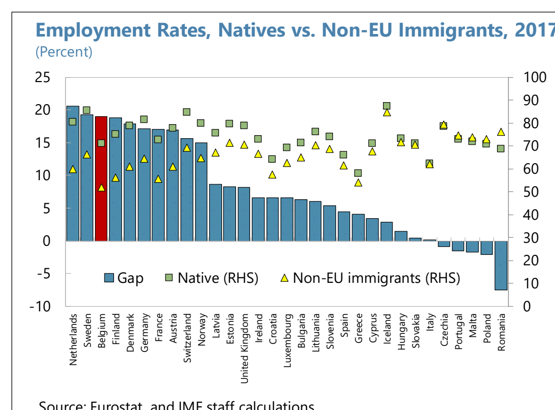
[2] See IMF Fiscal Monitor, October 2018.

[3] Belgium's current net financial worth (financial assets minus liabilities) is estimated at around -90 percent of GDP at end-2017. The remaining gap adding to the negative intertemporal net worth position is due to a projected increase in the primary balance-to-GDP ratio in the long run, due to aging costs. Non-age-related spending and revenues are expected to remain constant in percent of GDP relative to their 2023 level. Growth is projected to converge to the long-term assumptions in the EC's 2018 Aging Report (1.6 percent by 2070). Discount rates used in NPV calculations are based on a real interest rate assumed to be higher than growth by 1 percentage point in the long run, in line with the findings from the empirical literature. Inflation is projected to stay at the ECB's target of 2 percent in the long run.

labor market reforms had the potential for boosting labor force participation and thus for increasing revenues over the medium run, even as tax rates were being reduced. There was agreement that better coordination between the regional and federal governments could help improve decision making.

B. Raising Potential Output

15. The labor market remains fragmented despite recent reforms. While unemployment has declined, the inactivity rate in Belgium is among the highest in Europe, suggesting ample unexploited room for boosting employment and long-term growth. Belgium continues to have difficulties integrating vulnerable groups into the labor force—especially immigrants born outside the EU, the young, and the low-skilled.[5] Since end-2014, nearly all of the increase in employment can be attributed to high-skilled workers, whereas the employment rate of low-skilled workers has declined, and that of non-EU migrants remains far below that of natives. Youth employment is also much lower compared to other age groups, and large regional disparities in unemployment have persisted. Firm-level analysis suggests that there are wage-productivity gaps at the regional level, suggesting that the wage-setting system may not be providing enough flexibility to account for productivity differentials (Annex IV).



Source: Eurostat, and IMF staff calculations.

16. A package of labor market reforms under a new "jobs deal" aimed at boosting employment and growth was announced last summer. However, following the government's collapse, the implementation of the jobs deal remains uncertain. Key elements of the announced reforms included:

- *A reform of the unemployment insurance scheme*: An increase in unemployment benefits during the first six months of unemployment was proposed, combined with a reduction of benefits more rapidly thereafter, until the (unchanged) minimum level would be reached. Exemptions were contemplated for people undergoing relevant job training.

- *Incentives for job training*: Various tax advantages were envisioned for the unemployed pursuing training for professions experiencing labor shortages.

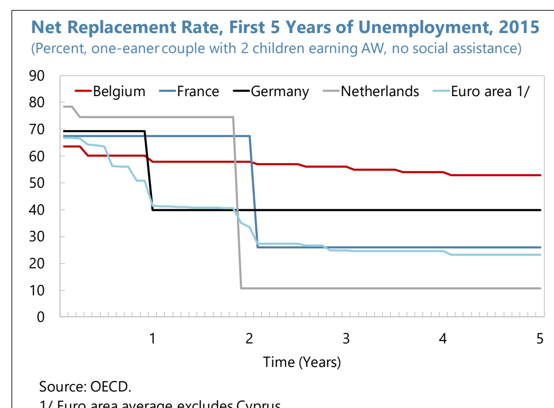
- *Tighter eligibility for pre-pension benefits*: The eligibility age for pre-pension benefits in the event of corporate restructuring was to be raised from 56 to 59 in 2019 and 60 in 2020.

- *Potential changes to salary scales*: The government, together with social partners, was to examine the implications of linking salary scales to productivity and skills rather than to seniority.

[5] See Belgium—Staff Report for the 2017 Article IV Consultation, IMF Country Report No. 17/69.

17. The jobs deal measures, together with further reforms to support inclusive growth, should be pursued by future governments.

- *Implementing the planned reform:* The proposal to re-phase unemployment benefits can help bring Belgium's net replacement rate (i.e., the proportion of net income that is maintained after job loss) more in line with that of peers in the initial years of unemployment, which could help to incentivize the return to work. Tightening eligibility for pre-pension benefits should encourage people to work longer while generating some fiscal savings. The proposal to consider linking salary scales to productivity can also help to provide flexibility for firms.



- *Following up with additional measures:* Ultimately, to preserve competitiveness and reduce the fragmentation of the labor market, the wage-setting framework should be sufficiently flexible to allow for better linking wages with productivity. Moreover, further reforms are needed to address educational gaps, improve training and lifelong learning, and reduce barriers to mobility, which could also help to reduce skills mismatches and better integrate vulnerable groups in the labor market.[6]

18. Anemic business dynamism and a weak entrepreneurial environment hinder productivity growth. The rates of entry and exit of Belgian firms are among the lowest in Europe, preventing the efficient reallocation of resources and hampering productivity growth. Indeed, surveys indicate that Belgium has one of the weakest entrepreneurial cultures in Europe.[7] The share of young or small firms that experience high growth has declined since 2000 and is now the third lowest among the EU-15 countries.[8]

19. Recent efforts have been focused on encouraging entrepreneurship and facilitating access to financing for young firms. A new initiative has set up a Belgian Growth Fund, along the lines of the Danish fund-of funds, that would channel savings from institutional investors into

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[6] See "Les immigrés nés en dehors de l'Union européenne sur le marché du travail en Belgique," 2018 report of the High Council for Employment.

[7] De Mulder, J. and Godefroid, H., 2016. "How to stimulate entrepreneurship in Belgium?" Economic Review of the National Bank of Belgium.

[8] See Bijnens, G. and J. Konings, 2018, "Declining Business Dynamism", CEPR Discussion Paper 12615.

venture capital funds that in turn invest in Belgian growth companies (Box 4). Other aspects of the initiative are intended to strengthen the ecosystem for entrepreneurs and growth companies, including by establishing knowledge exchanges, providing training for managers of young firms, and organizing conferences. Finally, to improve the availability of equity financing, an income tax credit was introduced for individuals who invest in shares issued by young SMEs.

20. These initiatives are welcome and should be complemented with additional measures to further boost productivity growth. Increasing the availability of domestic venture capital—including through the creation of a fund of funds with public support—could help relieve existing bottlenecks related to fragmented capital that is often insufficient to support firm growth. Risks to the public-sector balance sheet will need to be carefully managed, including by limiting the extent of public support, ensuring an adequate diversification strategy, and maintaining strong governance arrangements. Strengthening the domestic ecosystem for growth companies by fostering the exchange of information and best practices can help support entrepreneurship. At the same time, efforts should be intensified to address other impediments to entrepreneurship and growth by increasing investment in infrastructure, including energy, boosting competition in services (e.g., telecommunications, retail, distribution, transportation) and regulated professions (e.g., accounting, legal services), streamlining regulations, and fostering innovation (e.g., through tax incentives, investments in human capital, and improving the efficiency of R&D spending).[9]

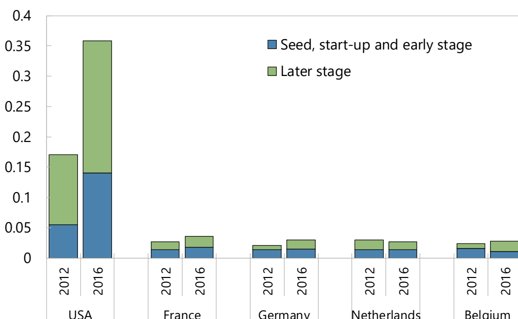
Authorities' Views

21. The authorities agreed with staff's views, stressing that increasing the labor force participation rate has been a key policy priority. They highlighted the efforts made over the years to improve the economy's competitiveness as well the new measures proposed in the jobs deal to encourage labor market participation and facilitate flexibility. At the same time, they agreed that further efforts will be needed to support education and training, particularly for vulnerable groups. They also concurred with the need to increase public investment, in particular in energy and infrastructure, as planned in their Strategic Investment Pact. Finally, the authorities acknowledged that more efforts should be made to further liberalize services and regulated professions and boost the economy's productivity.

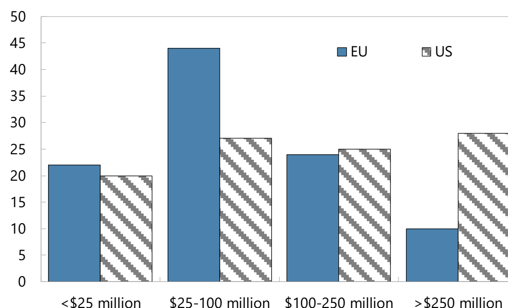
[9] See Shabunina, A., 2018, "Understanding Productivity Growth in Belgium: Sectoral and Firm-level Analysis," IMF Country Report No. 18/72.

Box 4. Financing Innovation and Growth: The Belgian Growth Fund

The academic literature suggests that there is a positive correlation between venture capital (VC) activity and growth.[1] This is because VC funds can successfully select and finance innovative firms—especially those with limited access to traditional banking finance—and help them to expand their operations, bring products to market, and forge strategic alliances. The US VC industry goes back to the 1960s, whereas it developed only decades later in Europe. Currently the US market is larger by a factor of 10, measured by VC investments relative to GDP. In Belgium, the size of the VC market is small, amounting to only about 0.03 percent of GDP, of which about half is "scale-up" VC financing that is needed to support companies to develop and grow.[2]

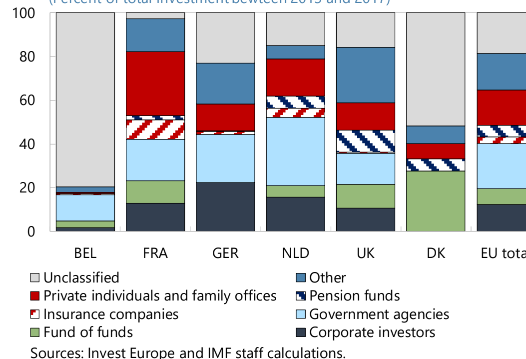


Source: OECD - Entrepreneurship at a Glance 2017.



Sources: Duruflé, G., Hellmann, T. and Wilson, K., 2018, "From Start-up to Scale-up: Examining Public Policies for the Financing of High-Growth Ventures.", Bruegel Working Paper.

European, including Belgian, companies have less access to scale-up VC financing,[3] due not only to the smaller overall size of the VC market, but also to its composition. Scale-up investments are typically large (the average late-stage investment is about $30 million in the US) and therefore undertaken by large VC funds. However, large funds are less common in Europe, as the VC market is more fragmented than in the US, with a higher density of funds below $100 million, and a lower density of large funds above $250 million. The average European VC fund had a size of €65 million in 2015, compared to about $140 million in the US.[4] Moreover, European institutional investors (pension and insurance funds) play a relatively limited role (only 8 percent of total VC investments during 2013–17) compared to their US counterparts (35 percent), and the share of institutional investors in Belgium is even smaller (less than 1 percent).[5] One explanation is the stricter regulations (including higher capital requirements for



Sources: Invest Europe and IMF staff calculations.

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[1] For a survey see Da Rin, M., Hellmann, T. and Puri, M., 2013. "A survey of venture capital research" in Handbook of the Economics of Finance (Vol. 2, pp. 573–648). Elsevier.

[2] Venture financing is provided in two stages: "seed financing," which is more limited and aimed at supporting the setup of a new company, and "scale-up financing," which is larger and helps support the expansion of companies ahead of an IPO or sale.

[3] In a 2014 survey by the World Economic Forum ("Enhancing Europe's Competitiveness: Fostering Innovation-driven Entrepreneurship in Europe"), 41 percent of European entrepreneurs describe the condition for scale-ups as favorable, compared to 63 percent in the US.

[4] US data is from the 2018 PitchBook NVCA Venture Monitor and data on Europe is from Szkuta, K., Stamenov, B., Ianshyna A., 2017, "Improving access to finance for young innovative enterprises with growth potential: evidence of impact on firms' output," European Commission JRC Science for Policy Report.

[5] Data on European funds shown in the chart comes from Invest Europe. The category 'other' includes Academic institutions, Banks, Capital markets, Endowments and foundations, other asset managers (including PE houses other than fund of funds), and Sovereign wealth funds. Belgium has a high share of unclassified funding. US data is from PREQIN and indicates the share of institutional investors in the total number of VC deals between 2009 and 2018.

Box 4. Financing Innovation and Growth: The Belgian Growth Fund (concluded)

equity investment) on European pension and insurance funds in Europe compared to the US.

To address the limitations in the Belgian VC market, the authorities have set up a Belgian growth fund. The so-called fund-of-funds, which is modeled after the Danish fund established in 1992, aims to attract and pool funding from institutional investors, which would then be invested in VC and private equity funds that support Belgian start-up companies with strong growth potential. The funds-of-fund benefits from public support through the direct involvement of the state-owned holding and investment company SFPI. Given this structure, as an alternative to a full equity investment, institutional investors can invest 40 percent in equity and 60 percent as a loan to the SFPI (the total loan amount to the SFPI from all institutional investors would not exceed €150 million, or about 0.035 percent of GDP), which would be re-invested into the fund-of-funds. This increases the attractiveness of the investment particularly for insurance firms, given the regulatory framework. In parallel, a Europe-wide fund-of-funds program has been launched by the European Commission and the European Investment Fund, which aims to raise up to €2.1 billion in public and private investment to support start-ups and scale-ups in Europe.

The Belgian growth fund would support the VC market in Belgium, which in turn can support productivity and growth. Along the new Europe-wide initiatives, the state support for the domestic fund-of-funds can help leverage more institutional financing to support domestic VC funds to reach the size required to make significant scale-up investments in Belgian growth companies. The investment of the Danish fund-of-funds, for example, was found to support the creation of 5,000 jobs.[6] If the Belgian growth fund had proportionally the same impact, it could increase employment by up to 10,000, corresponding to 0.2 percent of the current workforce (these figures, should, however, be interpreted with caution). Moreover, relative to a more direct provision of financing via, say, a development bank, the fund-of-funds has the advantage that the government is "further away" from the ultimate investment. There remains, however, a modest risk for the state, given the issuance of public debt, pointing to the need for a strong governance framework and prudent risk-diversification strategies.

The development of the domestic VC market is only one of many elements that are needed to support the development of growth companies in Belgium. The literature highlights the importance of the legal environment, financial market development, the tax system, labor market regulation, cultural and managerial practices, and public spending on research and development, among others.[7] The Belgian authorities have taken a number of initiatives in this regard, including supporting the development of an ecosystem that allows sharing of information and best management practices, providing tax incentives (e.g., an income tax credit for people investing in shares or securities issued by young companies), introducing the legal status of student-entrepreneurs, and other educational measures to promote entrepreneurship among the youth. It will be important to complement these with additional reforms to support a flexible labor market, improve education and training to reduce skills mismatches, and further strengthen the business environment by facilitating competition and reducing regulations, among others.

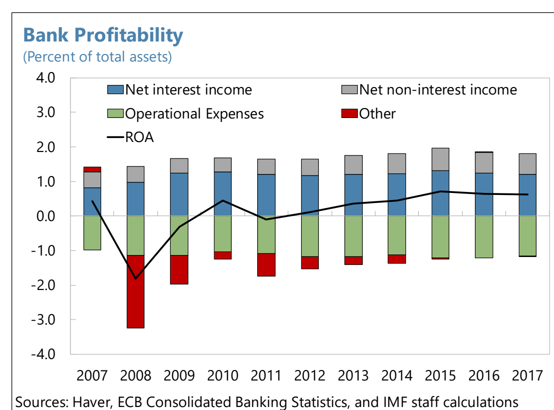
[6] See DAMVAD Analytics, 2013, "The Danish Growth Fund's (DGF) Activities: Mapping the Effects of DGF."

[7] Lerner, Josh, and Joacim Tåg, 2013, "Institutions and venture capital," Industrial and Corporate Change, vol. 22, issue 1.

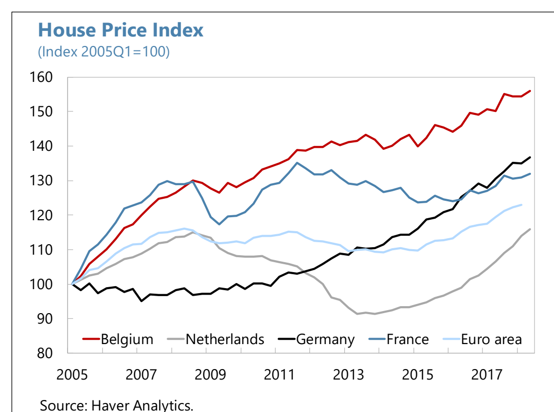
C. Safeguarding Financial Sector Stability

22. The financial sector has become more resilient since the crisis, although challenges remain. Banks have reduced their balance sheets and adopted more conservative business models, with greater emphasis on domestic lending and deposit funding. Stricter regulations have been introduced, and financial sector supervision has been upgraded, including macroprudential supervision. As a result, banks have relatively healthy loan portfolios and limited exposure to market and liquidity risks, while insurance companies have sound solvency levels and reduced exposures to

guaranteed rates. Stress tests indicate that banks and insurance companies can withstand a severe deterioration in macro financial conditions.[10] However, the persistent low interest rate environment, together with increased competition from digitalization, have been weighing on financial institutions' profitability. While a normalization of interest rates is expected to support profitability, a sudden rise in interest rates could put pressure on interest margins if funding costs increased rapidly but interest income adjusted only gradually.



23. Private sector indebtedness, primarily associated with household debt, and sustained increases in housing prices pose additional challenges. Strong growth in mortgage lending (9 percent in 2018) has contributed to a sizeable increase in household debt and housing prices. Models, however, point to only a modest house price overvaluation, depending on location.[11] Meanwhile, the share of loans with a loan-to-value (LTV) ratio below 80 percent has declined by about 10 percentage points during 2014–2017. Although default rates are currently low, households have substantial assets in the aggregate, and household debt-to income is in line with peers, a sharp housing (and asset) price correction could result in rising defaults for some groups of the population and affect banks' solvency, with second round effects on investment, consumption, and growth.[12] Belgian unconsolidated corporate debt has also increased over the last few years to a relatively high level, although, the level is more in line with peers after accounting for intragroup loans. Nonetheless, its dynamics warrant close monitoring, given recent strong bank credit growth to the corporate sector (6 percent growth in 2018, see Box 5).



[10] See Belgium Financial System Stability Assessment, IMF Country Report No. 18/67. Belgian banks performed well relative to the euro area average in stress tests conducted by the European Banking Authority in 2018.

[11] The NBB's model, which considers mortgage rates, household disposable income, demographic developments, and structural changes in the real estate market, estimates that prices are overvalued by 6.5 percent, down from a recent high of 9 percent at end-2015.

[12] Mortgage loans represent 20 percent of bank's total assets, compared to 8 percent in 2007. The vast majority of mortgage loans carry fixed interest rates. The 2018 Financial Stability Report notes that a significant share of mortgage-indebted households lack the liquid financial resources to continue servicing their mortgage debt in the event of severe income loss.

24. Staff welcomed the authorities' recent macroprudential measures to address risks in the housing market and encouraged the authorities to remain proactive. To guard against a correction in housing prices and discourage banks from taking excessive credit risk, the National Bank of Belgium (NBB) introduced in May 2018 an add-on to risk weights on bank mortgage exposures as a new macroprudential measure.[13] In view of the robust overall level of credit growth (5.9 percent in 2018) and credit gap (the NBB estimates this at 2 percent at end Q3-2018),[14] staff recommended that the NBB continue to closely monitor the build-up of cyclical risks in both the household and corporate sectors and stand ready to tighten macroprudential policy further, including through the use of a countercyclical capital buffer. The authorities could also consider revising the framework for macroprudential decision-making to ensure the ability to deploy a broader range of macroprudential policies in a timely manner, as recommended by the 2017 Financial Sector Assessment Program (FSAP) mission.[15]

25. Staff also encouraged the authorities to guard against broader macroeconomic risks. The authorities made progress in implementing the 2018 FSAP recommendations (Table 6) and are initiating an exercise to test and enhance the preparedness of banks to deal with cyberthreats. Staff welcomed these efforts and encouraged the supervisory and resolution authorities to continue implementing their plans to: (i) enhance the risk analytical framework for both banks and non-banks, (ii) strengthen supervision and oversight, including by ensuring consistency of bank internal models and prudent provisioning practices, and enhancing broader financial center supervision and SWIFT oversight; and (iii) ensure the feasibility and effectiveness of bank resolution strategies, including by maintaining a sufficient and consistent allocation of MREL as needed. The authorities should also encourage banks to continue to adapt their business models to address the challenges from the growing digitalization of finance. Finally, in view of macroeconomic risks related to Brexit, staff called for vigilance and for ensuring the preparedness of the financial and non-financial sector to deal with a "no-deal" Brexit scenario.

[13] Specifically, the NBB reinstated a 5 percentage-point risk weight add-on for internal ratings-based (IRB) banks' exposure to all mortgage loans and added a second, more targeted component that further increases risk weights in line with the risk profile of banks' residential mortgage portfolios. The measure increased the implied risk weight of Belgian mortgage loans from 10 percent to 18 percent on average—slightly above the European average.

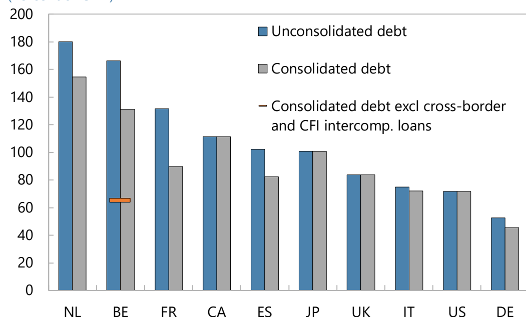
[14] This includes resident loans (adjusted for securitization and loans otherwise transferred) to the resident non-financial private sector.

[15] See Belgium Financial System Stability Assessment, March 8, 2018, IMF Country Report No. 18/67.

Box 5. Is Belgium's Corporate Debt a Source of Concern?

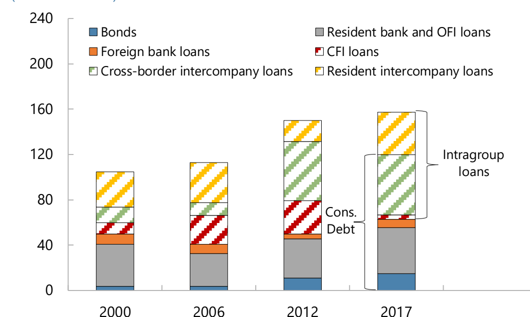
While Belgium's unconsolidated corporate debt has risen rapidly toward a high level, its level is less high when accounting for intragroup loans. Unconsolidated corporate debt increased from about 110 percent of GDP in 2000–06 to 160 percent of GDP at end-2017. Consolidated debt (excluding resident intercompany loans) was lower, but still above the euro area average of 80 percent of GDP. However, when accounting for all types of intragroup loans (including cross border and captive financial institutions[1]), debt was more in line with peers, at 63 percent of GDP in 2017. Indeed, the increase in unconsolidated debt between 2006 and 2017 was largely driven by cross-border intercompany loans, which, together with resident intercompany loans and loans from captive financial institutions (CFI), accounted for over 60 percent of the corporate debt stock at end-2017. Moreover, about half of the increase over this period was due to the debt of the Belgium-headquartered global brewery giant AB Inbev, which borrowed to finance acquisitions abroad.

Corporate Debt, 2016
(Percent of GDP)



Sources: OECD, NBB, Haver, and IMF staff calculations.

Composition of Corporate Debt
(Percent of GDP)



Sources: NBB, and IMF staff calculations.

How does Belgian corporate leverage compare to that in peer countries? To answer this question, we conducted a cross-country panel analysis using consolidated firm-level data on listed firms to identify whether, after controlling for firm characteristics–such as initial leverage, size, profitability, tangible assets, and sector–Belgian firms are more or less leveraged than their peers abroad.[2] Specifically, we regressed both the level and change in the debt-to-assets ratio between 2010 and 2016 on firm and sector characteristics and checked whether country-specific fixed effects were significant. The results suggest that Belgian firms do not stand out compared to peers.

Nevertheless, corporate credit growth has been notably strong recently. Growth in banking lending to Belgian NFCs rose by 6 percent in 2018, partly reflecting one-off transactions linked to cross border mergers and acquisitions, but also driven by long-term investment in the context of low interest rates and favorable economic conditions. Credit growth

Firm-Level Cross-Country Regressions

Dependent variable:	debt/assets	Δ(debt /assets)2010-
	(1)	(2)
Firm level variables		
Dependent variable	0.0556***	-1.0282***
ROA	0.0061**	-0.1113***
Total assets	-0.0052	0.2258***
Fixed assets, % of total assets	0.0008	0.1185***
Sales, % total assets	-8.63e-09	7.35e-06
Sales growth	-3.37e-25*	-0.0001
Country fixed effects (BEL=omitted country)		
CAN	2.4***	11.6***
DEU	-1.2	-1.0
ESP	10.6***	12.0***
FRA	-1.5	0.3
GBP	-5.1***	-1.4
ITA	4.8***	6.4
JPN	-2.8***	-2.6
NLD	-0.1	-0.7
USA	1.7*	7.8**
Year indicator variables (2010=omitted year)		
2011	-0.0686	
2012	0.1756	
2013	0.8298***	
2014	1.8568***	
2015	3.1484***	
2016	5.3981***	
Obs	47,092	5,326
R-squared	0.06	0.54

[1] CFIs are subsidiaries of multinational firms responsible for financial operations, such as Special Purpose Entities (SPEs).

[2] For more information on the methodology, please see France's 2018 Selected Issues Papers, IMF Country Report No. 18/244.

Box 5. Is Belgium's Corporate Debt a Source of Concern? (concluded)

has been broad-based across firm sizes and industries. Over half of outstanding credit to NFCs carried a maturity of more than five years—a share that has been fairly stable in recent years.

In sum, while Belgium's corporate debt level appears in line with peers when taking into account intra-group loans, its strong dynamics warrant continued monitoring.

Source: NBB and IMF staff calculations.

Authorities' Views

26. The authorities broadly agreed with staff's assessment and policy recommendations. They concurred that developments in the housing market warranted close monitoring, although they noted that housing prices were not strongly misaligned relative to fundamentals and considered that the banking sector currently had adequate buffers to absorb a potential shock to housing prices. However, they considered that close monitoring of current credit conditions and pricing of new mortgage credit remains needed. They also shared staff's views that credit developments in the corporate sector warrant close monitoring. In this context, they agreed on the need to stay vigilant and be prepared to tighten macroprudential policy as necessary. The NBB highlighted their commitment to follow up on the implementation of the FSAP recommendations. Finally, the authorities agreed with the need for preparedness in case of a "no-deal Brexit," noting efforts made at the European level in this regard, including to facilitate derivative contracts.[16]

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27. A decade after the onset of the global financial crisis, Belgium has achieved significant economic progress, supported by ambitious reforms. The economy is entering its tenth year of expansion, real GDP per capita has surpassed pre-crisis levels, and employment is at historic highs. The government has contributed to these positive outcomes by implementing important structural reforms in recent years.

28. Nevertheless, there is scope to raise potential growth further and strengthen the resilience of the economy. Growth has slowed recently, in line with broader developments in Europe, and is expected to remain modest over the medium term. The economy is exposed to rising external risks related to escalating protectionism, Brexit, increased financial turbulence in Europe, and domestic political uncertainty, given the collapse of the coalition government and the

[16] A significant portion of over-the-counter derivative contracts are cleared via central counterparties in the UK. The European Commission has announced that it will take measures to maintain banks' access to UK-based clearing houses in case of a no-deal Brexit.

approaching elections. The challenge for the upcoming government is to continue to build the foundation for higher growth while enhancing buffers against shocks.

29. Fiscal consolidation remains a priority. Although the fiscal deficit has narrowed significantly in recent years, it remains below pre-crisis levels and is expected to widen over the medium term in the absence of new reforms. Public debt is the fifth highest in the euro area, leaving Belgium with little room to maneuver in the event of future shocks. To safeguard fiscal sustainability, staff recommends reducing the structural deficit by about ½ percent of GDP per year until structural balance is reached, starting in 2019.

30. Achieving a more sustainable fiscal position hinges on making spending more efficient. The next government should reduce duplication in the public administration, streamline the civil service, curtail the high level of subsidies, and better target social benefits to the most vulnerable. Moreover, to address the challenge of population aging, the authorities should build on previous reforms to further bolster the sustainability of the pension system. Spending reforms should be complemented by measures to safeguard revenues, including further reducing deductions and exemptions.

31. Reforms to reduce the fragmentation of the labor market are key to supporting higher, more inclusive growth. Despite strong gains in employment, vulnerable groups—especially non-EU immigrants, the young, and the low-skilled—remain largely excluded from the labor market. Moreover, regional disparities in competitiveness and unemployment persist, and labor supply-demand mismatches are widespread. More efforts are thus needed to address educational gaps, improve the quality of training and lifelong learning, and reduce barriers to mobility. Better linking wages with productivity can also help to improve the allocation of resources, support overall competitiveness and strengthen Belgium's external position, which remains moderately weaker than implied by fundamentals.

32. Unlocking the economy's growth potential also requires removing bottlenecks to business growth. Belgium suffers from anemic business dynamism and a weak entrepreneurial culture. In this context, the recent initiative to promote equity financing and develop an ecosystem for young, innovative firms with growth potential is encouraging. Further efforts are needed to streamline and harmonize regulations, increase investment in infrastructure, including in energy, improve the efficiency of R&D spending, and strengthen competition in services and regulated professions.

33. The financial sector has become more resilient since the crisis, but new challenges are emerging. While banks have bolstered capital and liquidity buffers, recent strong credit growth has pushed up corporate and household debt and housing prices, posing new challenges. Staff welcomes the new macroprudential measures aimed at the housing market and encourage the authorities to stand ready to activate the countercyclical capital buffer to build up further resilience, should cyclical risks persist or intensify. At the same time, the supervisory and resolution authorities need to continue to enhance risk monitoring and ensure the feasibility and effectiveness of bank resolution strategies.

34. It is proposed that the next Article IV consultation take place on the standard 12-month cycle.

Table 1. Belgium: Selected Economic Indicators, 2017–24

		Est.	Projections					
	2017	2018	2019	2020	2021	2022	2023	2024
	(Percent change, unless otherwise indicated)							
Real economy								
Real GDP	1.7	1.4	1.3	1.4	1.5	1.5	1.5	1.5
Domestic demand	1.1	0.7	1.3	1.5	1.7	1.7	1.7	1.7
Private consumption	1.1	0.8	1.4	1.5	1.7	1.6	1.6	1.6
Public consumption	0.6	0.7	0.9	1.0	1.0	1.0	1.0	1.0
Gross fixed investment	1.8	1.8	1.5	2.0	2.4	2.7	2.7	2.7
Stockbuilding[1]	0.0	-0.3	0.0	0.0	0.0	0.0	0.0	0.0
Foreign balance[1]	0.6	0.8	0.0	-0.1	-0.2	-0.2	-0.2	-0.2
Exports, goods and services	5.0	3.3	2.8	2.9	2.8	2.6	2.4	2.5
Imports, goods and services	4.3	2.5	2.9	3.1	3.1	2.9	2.7	2.8
Household saving ratio	11.5	11.4	12.0	12.0	12.0	12.2	12.3	12.3
Potential output growth	1.2	1.3	1.4	1.4	1.5	1.5	1.5	1.5
Potential output growth per working age person	1.6	1.1	1.3	1.3	1.4	1.5	1.5	1.5
Output gap (in percent)	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Employment								
Unemployment rate (in percent)	7.1	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Employment growth	1.4	1.6	1.0	0.7	0.5	0.5	0.5	0.5
Prices								
Consumer prices	2.2	2.3	1.9	1.5	1.8	1.9	2.0	2.0
GDP deflator	1.7	1.3	1.8	1.6	1.7	1.8	1.9	1.8
	(Percent of GDP; unless otherwise indicated)							
Public finance								
Revenue	51.3	51.3	50.7	50.4	50.4	50.4	50.4	50.4
Expenditure	52.2	52.1	51.9	51.8	51.8	51.8	51.8	51.9
General government balance	-0.9	-0.8	-1.2	-1.4	-1.4	-1.4	-1.5	-1.6
Structural balance	-1.4	-1.6	-1.4	-1.5	-1.5	-1.5	-1.5	-1.6
Structural primary balance	1.1	0.7	0.7	0.5	0.4	0.4	0.4	0.3
Primary balance	1.6	1.5	0.9	0.6	0.5	0.5	0.4	0.4
General government debt	103.4	101.0	99.2	97.7	96.0	94.4	92.7	90.7
Balance of payments								
Goods and services balance	1.0	0.9	0.8	1.1	1.1	1.1	1.0	1.0
Current account	0.7	0.4	0.3	0.6	0.6	0.6	0.5	0.5
Exchange rates								
Euro per U.S. dollar, period average 2/	0.9	0.8	...	...	...	...	...	...
NEER, ULC-styled (2005=100) 2/	100.1	101.3	...	...	...	...	...	...
REER, ULC-based (2005=100) 2/	102.0	103.0	...	...	...	...	...	...
Memorandum items								
Gross national savings (in percent of GDP)	25.3	24.8	24.8	25.1	25.2	25.4	25.6	25.9
Gross national investment (in percent of GDP)	24.6	24.4	24.5	24.5	24.7	24.9	25.1	25.4
Nominal GDP (in billions of euros)	439.1	451.3	465.2	479.2	494.5	511.0	528.2	546.0
Population (in millions)	11.4	11.4	11.5	11.5	11.6	11.6	11.7	11.8

Sources: Haver Analytics, Belgian authorities, and IMF staff projections

[1] Contribution to GDP growth.

[2] As of December 2018.

Table 2. Belgium: Balance of Payments, 2017–24

	Est.		Projections					
	2017	2018	2019	2020	2021	2022	2023	2024
	(In percent of GDP)							
Balance on current account	0.7	0.4	0.3	0.6	0.6	0.6	0.5	0.5
Balance on goods and services	1.0	0.9	0.8	1.1	1.1	1.1	1.0	1.0
Balance of trade (f.o.b., c.i.f.)	122.8	126.1	126.5	125.5	125.1	124.1	123.1	122.2
Exports of goods and services	85.6	87.9	88.1	87.6	87.3	86.6	85.9	85.2
Exports of goods	61.4	63.1	63.2	62.9	62.6	62.1	61.6	61.1
Exports of services	24.2	24.8	24.9	24.8	24.7	24.5	24.3	24.1
Imports of goods and services	-84.6	-87.0	-87.3	-86.5	-86.2	-85.5	-84.9	-84.2
Imports of goods (f.o.b.)	-61.4	-63.1	-63.2	-62.7	-62.5	-62.0	-61.5	-61.0
Imports of services	-23.3	-23.9	-24.0	-23.8	-23.7	-23.6	-23.4	-23.2
Income, net	1.2	1.2	1.2	1.2	1.3	1.3	1.4	1.4
Current transfers, net	-1.5	-1.7	-1.7	-1.8	-1.8	-1.8	-1.9	-1.9
Balance on capital account	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Balance on financial account	-0.9	0.5	0.4	0.7	0.7	0.6	0.6	0.6
Direct investment, net	6.1	6.3	6.5	6.7	6.9	7.1	7.3	7.5
Portfolio investment, net	2.2	3.6	3.1	2.9	2.6	1.9	1.5	1.1
Financial derivatives, net	0.2	-0.3	-0.2	-0.2	-0.3	-0.1	-0.1	-0.2
Other investment, net	-9.6	-9.3	-9.1	-8.9	-8.7	-8.5	-8.3	-8.1
Reserve assets	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Errors and omissions, net	-1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Sources: Haver Analytics, Belgian authorities, and IMF staff projections.

Table 3. Belgium: General Government Statement of Operations, 2015–24

	2015	2016	2017	Est. 2018	Projections 2019	2020	2021	2022	2023	2024
	(In percent of GDP)									
Revenue	51.3	50.6	51.3	51.3	50.7	50.4	50.4	50.4	50.4	50.4
Taxes	30.3	30.0	30.7	30.7	30.1	29.8	29.8	29.8	29.8	29.8
Personal income tax	12.9	12.4	12.4	12.2	12.1	12.0	12.0	12.0	12.0	12.0
Corporate income tax	3.4	3.5	4.2	4.4	3.9	3.7	3.7	3.7	3.7	3.7
Taxes on property	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
VAT	6.7	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
Excise	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Other taxes	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Social contributions	16.5	15.9	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8
Actual social contributions	14.3	13.7	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
Imputed social contributions	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Other revenue (incl. grants)	4.5	4.7	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
Expenditure	53.7	53.0	52.2	52.1	51.9	51.8	51.8	51.8	51.8	51.9
Expense	50.2	49.8	49.0	48.8	48.6	48.5	48.5	48.4	48.5	48.6
Compensation of employees	12.4	12.3	12.3	12.2	12.2	12.1	12.1	12.0	12.0	12.0
Use of goods and services	4.1	4.0	4.0	4.1	4.0	4.0	4.0	4.0	4.0	4.0
Interest	3.0	2.8	2.5	2.3	2.1	2.0	1.9	1.9	1.9	1.9
Subsidies	3.4	3.4	3.3	3.3	3.3	3.2	3.1	3.1	3.1	3.1
Grants	1.2	1.3	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Social benefits	25.2	25.1	25.0	25.0	25.0	25.2	25.4	25.5	25.5	25.6
Other expense	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Net acquisition of nonfinancial assets	3.6	3.3	3.2	3.3	3.3	3.3	3.3	3.4	3.4	3.4
Gross operating balance	1.1	0.8	2.3	2.5	2.1	1.9	1.9	2.0	1.9	1.8
Net lending/borrowing	-2.5	-2.4	-0.9	-0.8	-1.2	-1.4	-1.4	-1.4	-1.5	-1.6
Memorandum items										
Primary balance	0.6	0.4	1.6	1.5	0.9	0.6	0.5	0.5	0.4	0.4
Structural fiscal adjustment	0.6	0.0	0.8	-0.2	0.2	-0.1	0.0	0.0	0.0	-0.1
Structural fiscal primary adjustment	0.4	-0.2	0.5	-0.4	0.1	-0.2	-0.1	0.0	0.0	0.0
Gross government debt	106.5	106.1	103.4	101.0	99.2	97.7	96.0	94.4	92.7	90.7
Real growth of primary expenditure[1]	-0.8	0.4	0.6	1.8	1.2	1.4	1.7	1.5	1.6	1.6

Sources: Haver Analytics, Belgian authorities, and IMF staff projections.

[1] Excludes the 2012 Dexia recapitalization.

Table 4. Belgium: General Government Consolidated Balance Sheet, 2010–17

	2010	2011	2012	2013	2014	2015	2016	2017
	(In percent of GDP)							
Net financial worth	-81.5	-83.3	-91.9	-90.1	-97.6	-94.9	-92.8	-87.9
Financial assets	26.4	27.3	28.6	28.3	33.0	32.4	35.0	33.4
Currency and deposits	4.8	4.9	4.6	4.5	4.1	4.1	4.4	4.3
Securities other than shares	0.6	0.5	0.5	0.4	0.3	0.3	0.3	0.4
Loans	5.9	6.4	7.6	8.1	9.0	8.8	9.2	9.1
Shares and other equity	10.3	10.4	10.9	10.3	14.1	13.6	15.3	14.4
Insurance technical reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial derivatives	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other accounts receivable	4.8	5.1	5.0	5.1	5.5	5.6	5.8	5.3
Liabilities	108.0	110.6	120.5	118.5	130.6	127.3	127.8	121.4
Special Drawing Rights	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Currency and deposits	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
Securities other than shares	88.5	89.7	98.7	96.0	105.5	103.0	104.6	99.4
Loans	15.1	16.5	17.3	18.2	20.6	19.7	19.0	18.0
Shares and other equity	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0
Insurance technical reserves	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0
Financial derivatives	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other accounts payable	3.8	3.8	3.9	3.7	3.9	3.9	3.8	3.6

Sources: Haver Analytics and IMF staff calculations.

Table 5. Belgium: Financial Soundness Indicators for the Banking Sector, 2010–18[1]

	2010	2011	2012	2013	2014	2015	2016	2017	2018Q2
Earnings and profitability									
Return on assets	0.5	0.0	0.1	0.3	0.5	0.6	0.6	0.6	0.5
Return on equity	10.7	0.7	3.0	5.9	7.7	10.1	9.1	8.7	8.1
Net interest income to total income	68.3	71.2	71.6	62.6	70.2	67.7	66.0	61.2	63.3
Interest margin	1.2	1.2	1.3	1.2	1.6	1.8	1.8	1.9	1.9
Average yield on assets	2.8	2.9	2.9	2.6	2.7	2.6	2.6	2.4	2.4
Average cost of funding	1.6	1.7	1.7	1.4	1.1	0.8	0.6	0.5	0.5
Noninterest income to gross income	31.7	28.8	28.4	37.4	29.8	32.3	34.0	38.8	36.7
Of which: Net fee and commission income	25.6	26.8	28.3	27.7	25.8	26.7	25.1	24.3	25.3
(Un)realized capital gains booked in P&L	-0.2	-3.9	0.2	6.0	-0.3	5.3	6.7	3.7	6.6
Cost/income ratio	66.0	67.3	73.4	62.4	61.2	58.6	58.4	58.2	65.6
Composition of assets									
Total assets (in percent of GDP)	323.2	310.2	278.7	251.0	249.0	236.5	266.1	227.3	235.6
Of which (in percent of total assets):									
Loans to credit institutions	17.0	15.2	12.4	12.3	9.1	8.5	7.5	6.8	5.7
Debt securities	20.1	18.5	18.4	18.9	19.6	18.0	16.4	14.4	13.1
Equity instruments	0.5	0.4	0.6	0.4	0.6	0.7	0.4	0.4	0.4
Derivatives	11.6	14.6	11.5	6.8	8.4	6.4	5.8	4.4	3.8
Loans to customers	44.0	44.4	48.1	53.9	54.1	56.4	55.4	59.4	59.0
Of which: Belgian residents (in percent of loans)	64.0	69.7	72.0	69.4	69.2	69.2	71.0	70.7	70.6
Other EMU residents (in percent of loans)	19.0	16.9	15.0	15.7	16.2	16.1	15.1	15.0	15.0
Rest of the world (in percent of loans)	17.0	13.4	13.0	14.9	14.5	14.7	13.9	14.2	14.3
Mortgage loans (in billions euros)[2]	178.5	183.9	188.3	190.8	202.4	216.1	229.7	227.4	235.0
Consumer loans (in billions euros)[2]	23.7	23.2	24.0	26.9	17.2	19.7	24.8	26.2	21.9
Term loans (in percent of loans)	42.3	40.0	39.3	40.8	n.a	n.a	n.a.	n.a.	n.a.
Reverse repo operations (in percent of loans)	7.3	4.2	3.3	3.1	1.7	1.5	1.0	1.1	0.9
Funding and liquidity (in percent of total assets)									
Debts to credit institutions	15.4	11.2	11.0	10.7	9.1	8.5	10.3	9.0	10.8
Bank bonds and other debt securities[3]	10.9	8.8	10.6	10.1	9.3	9.1	9.3	9.6	8.67
Customer deposits	46.0	46.5	49.3	54.7	58.5	61.0	58.4	62.2	61.5
Of which: Sight deposits[4]	13.7	12.6	15.1	18.1	24.2	28.4	26.4	30.3	30.11
Saving deposits[5]	16.2	16.0	18.9	21.0	19.9	20.8	25.6	26.07	25.43
Term deposits[4]	8.5	9.6	9.2	9.6	8.9	8.1	6.2	5.7	5.66
Retail deposits[5]	26.1	26.5	30.6	34.8	33.5	35.1	35.6	37.7	36.54
Repo's	5.0	5.2	2.3	2.7	2.3	1.7	0.2	0.1	0.31
Liquid assets[6]	32.5	34.3	36.4	36.8	32.8	32.2	32.5	31.7	32.2
Sectoral distribution of loans (in percent of total assets)									
Credit institutions	17.0	15.2	12.4	12.3	9.1	8.5	6.1	6.8	5.6
Corporate (until 2013) /Non financial corporations (as of 2014)	17.2	16.4	16.3	18.5	20.6	22.0	21.4	22.7	23.8
Retail (until 2013) / Households (as of 2014)	22.1	22.9	26.3	29.4	25.5	27.4	27.5	29.6	27.7
Central governments (until 2013)/ General government (as of 2014)	1.0	0.8	0.8	1.0	4.4	4.3	4.1	4.3	4.4
Non-credit institutions (until 2013) / Other financial corporations (as of 2014)	3.8	4.3	4.7	5.0	3.5	2.7	2.4	2.9	2.7
Asset quality									
Non-performing loans (NPL) as percent of gross loans[6]	2.8	3.2	3.2	3.1	2.7	2.6	2.4	2.1	1.9
Provisions and write-offs as percent of NPL[6]	53.0	49.4	53.0	54.1	57.1	54.3	55.7	57.2	60.4
Capital adequacy									
Regulatory capital to risk-weighted assets	19.3	18.5	18.1	18.7	17.3	18.7	18.8	19.0	18.4
Regulatory Tier 1 capital to risk-weighted assets	15.5	15.1	15.8	16.4	15.1	16.0	16.2	17.0	16.3
Capital to assets	5.0	4.6	5.8	6.4	6.6	6.5	7.1	7.1	6.8
NPL net of provisions as percent of Tier 1 capital[6]	12.2	14.2	13.4	12.3	12.0	12.9	10.7	7.9	6.7
Net open position in foreign exchange to capital	3.3	1.4	2.1	2.1	3.4	2.6	2.1	1.6	1.4

Source: National Bank of Belgium.

[1] Consolidated data. Data are based on the IAS/IFRS reporting scheme.

[2] Only loans to households as of 2014

[3] Excluding saving certificates as of 2014

[4] Deposits booked at amortized cost only.

[5] Only household deposits as of 2014

[6] Unconsolidated data.

Table 6. Belgium: Main Recommendations from the 2017 FSAP Mission

Recommendation	Timing*	Status
Systemic risk analysis		
Enhance the risk analytical framework by: (i) incorporating bank stress testing to the toolkit for systemic risk assessment and macroprudential policy; (ii) extending the horizon of insurance stress tests; (iii) intensifying monitoring of insurers' mortgage loan portfolios and related underwriting standards; (iv) in cooperation with the FSMA, further developing the shadow banking monitoring framework; (v) enhancing the coverage and quality of commercial real estate data. (NBB)	ST	(i) The NBB has initiated a review of the credit risk and net interest income satellite models used by other central banks. (ii) The European Insurance and Occupational Pensions Authority (EIOPA) will begin work in 2019 on formalizing different methodologies for performing stress tests for insurance, including multi-period stress tests. This work will serve as a basis for the NBB to develop its own policy. (iii) Following a detailed analysis on regulatory arbitrage, a specific reporting methodology was developed and launched which serves to capture the micro- and macroprudential risks of residential mortgage lending by Belgian insurers. (iv) In October 2018, the NBB and FSMA published an update of the joint NBB-FSMA report on asset management and shadow banking. To close data gaps, new and improved Belgian reporting requirements for certain public investment funds have entered into force. (v) Work to enhance the coverage and quality of commercial real estate data is ongoing, including as part of the NBB's future compliance with the ESRB's recommendation on closing data gaps in residential and commercial real estate.
Prudential policy, supervision, and oversight		
Approve promptly the new macroprudential measure proposed by the NBB and enhance the NBB's ability to implement cyclical macroprudential tools in a timely manner. (MoF)	ST	The new macroprudential measure was enacted by royal decree in May 2018 and will be applicable for two years. The NBB plans to intensify informal communication with the Ministry of Finance to facilitate approval of future macroprudential measures.
Continue to strengthen bank supervision by: (i) ensuring the reliability and consistency of internal models and (ii) proactively assessing loan classifications to ensure prudent provisioning practices. (NBB/SSM)	C	(i) The SSM's Targeted Review of Internal Models (TRIM) is expected to be completed by 2019. Furthermore, the NBB Governance Manual for the banking sector was amended in October 2018 to further specify the oversight of internal models by banks' boards. (ii) The NBB stands ready to implement guidance from both the ECB (NPL) and the EBA (NPL and loan origination and disclosure), once finalized, in 2019. Furthermore, the NBB has submitted to the Minister of Finance a draft modification of the Banking Law requiring banks to take account of total indebtedness of entities to which they extend credit.
Adjust to insurers' evolving risk profiles by: (i) seeking to address the sector's increasing liquidity risk; (ii) continuing to analyze the business growth of reinsurance operations; and (iii) engaging with the industry to gradually improve the quality of insurers' capital. (NBB)	ST	(i) A new article of the Insurance Law was drafted that would allow the NBB to forbid lapses in case of a run on insurance companies. (ii) The budget for insurance supervision was increased, and 8 additional staff members were hired. Specific attention will be given to insurance groups considering filing for a Belgian license (including in the Brexit context). (iii) Based on an analysis of the insurance industry, the NBB has concluded that there are no Belgian insurers with a high reliance on low-capital instruments.
Enhance FC supervision by: (i) setting supervisory expectations for FC governance and risk management; and (ii) enhancing monitoring of intra-group transactions at FC level and the risk of regulatory arbitrage between insurance and banking sectors. (NBB/SSM)	ST	(i) The NBB has asked the ECB to set expectations for FC governance and integrated risk management and will consider setting the same expectations for FCs under its direct supervision. (ii) Draft technical standards on the reporting of intra-group transactions and risk concentration have been submitted to the EBA, EIOPA, and ESMA with the aim of being published for consultation by end-2018.

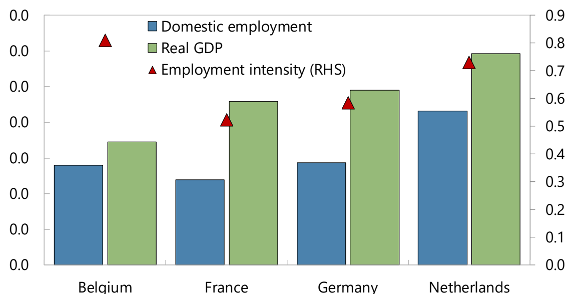
Table 6. Belgium: Main Recommendations from the 2017 FSAP Mission (concluded)

Recommendation	Timing*	Status
Enhance SWIFT oversight by (i) aiming at complementing the NBB's use of moral suasion in the oversight of SWIFT with additional regulatory and supervisory powers; (ii) broadening membership in the SWIFT Oversight Forum; and (iii) improving information sharing on SWIFT oversight and assurance reports. (NBB)	ST	(i) The NBB has submitted to the G10 SWIFT oversight group several options for complementing the current moral suasion approach. A decision on the actual approach to be chosen is pending. (ii) The central banks of Argentina, Brazil, Indonesia, Mexico and Spain have been invited to join the SWIFT Oversight Forum, with the first meetings of the extended forum to take place in Q1 2019. (iii) Several initiatives have been taken, including: extended reporting on SWIFT Oversight conclusions in the NBB's FMI report, SWIFT Oversight session on invitation for central banks at SIBOS, increased participation in international meetings, and regulatory outreach activities.
Financial safety net and crisis management		
Ensure the feasibility of resolution strategies for banking groups with systemically important subsidiaries (SRM) and prioritize resolution planning for the two less significant institutions with the highest share of insured deposits. (NBB)	MT	To ensure a smooth and decisive transition from early intervention to resolution for LSIs, preparatory work by the resolution unit was launched in November 2018 on a service level agreement between the supervisory units and the resolution unit. To strengthen the NBB ELA framework to support early horizon scanning and prepositioning of collateral, the service level agreement between the supervisory units and the Financial Markets Department was modified in April 2018 so that the latter will be informed about all changes in the solvency, capital, and liquidity position of medium risk banks. The NBB Resolution Board will be invited to agree with the draft resolution plan, submitted to the SRB, of all LSIs under the responsibility of the NBB. Draft provisions amending the Banking Law have been prepared to eliminate or expedite ex ante judicial review of resolution measures.
Strengthen the DIS by (i) publicly committing to shortening the DIS pay-out period to seven days by 2019; (ii) establishing credit lines with the MoF; and (iii) segregating the Guarantee Fund from government funds. (MoF)	ST	(i) The authorities are working on a new DGS law and intend to revisit a 2009 royal decree to allow faster information flows from banks to the DGS. (ii) The Guarantee Fund is currently developing a manual—in cooperation with the Ministry of Budget and the Belgian Court of Auditors—to ensure an on-time credit line when a pay-out event occurs. Although the procedures in this manual are already operational, the manual is expected to be finalized at the end of February 2019. (iii) At present, no legislative steps have been taken to segregate the Guarantee Fund from government funds, pending further clarification at the European level.
AML/CFT		
Ensure adequate transparency of beneficial ownership of legal persons and arrangements. (MoF)	MT	Following the adoption of regulations in July 2018, legal entities incorporated in Belgium, and trustees of foreign legal arrangements administered in Belgium, are required to submit beneficial ownership (BO) information to a centralized publicly accessible register by March 31, 2019, and to update the information within one month from the date of change in the BO.

*C=continuous; I=immediate (within one year); ST=short term (within 1–2 years); MT=medium term (within 3–5 years)

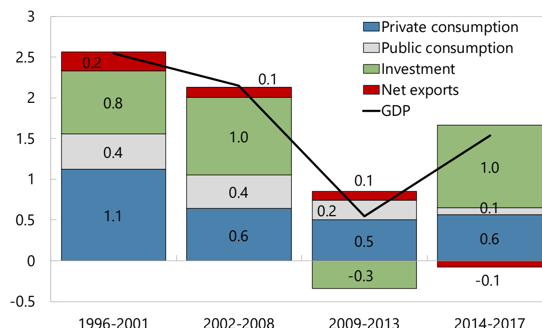
Figure 1. Belgium: Macroeconomic Context

Belgium's recovery has been rich in jobs created.



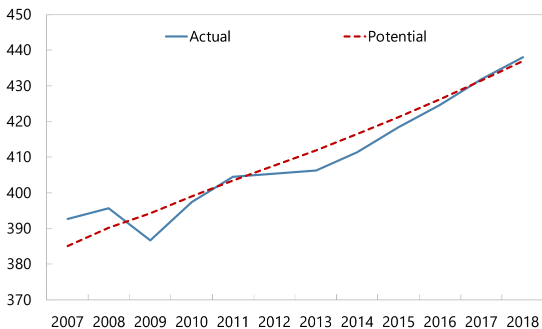
Note: Employment intensity of growth is ratio of employment growth to real GDP growth
Source: Eurostat (Haver Analytics).

Investment has been the key driver of growth in recent years while net exports have turned negative.



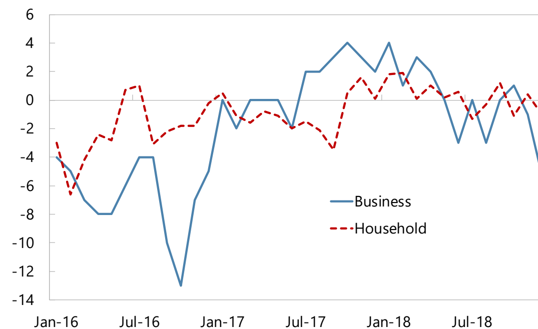
Sources: Haver Analytics; and IMF staff calculations.

The output gap has closed.



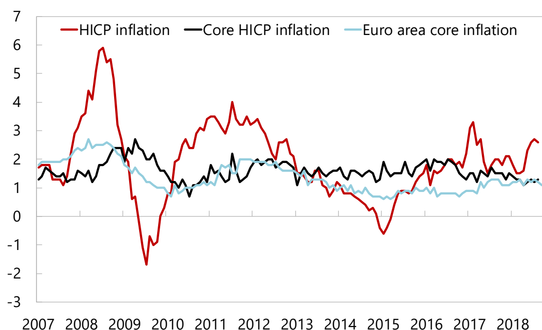
Source: Haver Analytics; and IMF staff calculations.

Business confidence deteriorated in 2018.



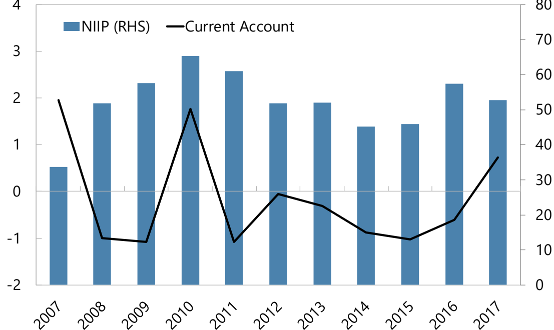
Source: National Bank of Belgium.

Rising food and energy prices have kept inflation above 2 percent, but core inflation remains subdued.



Source: Eurostat (Haver Analytics).

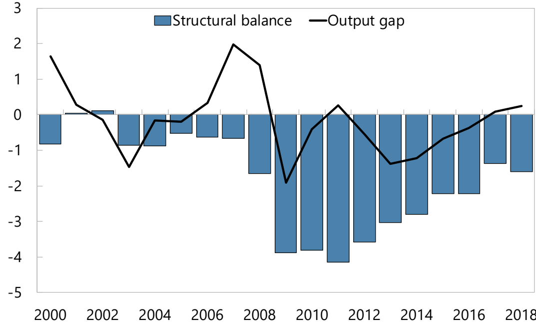
The current account continues to hover close to balance, while the NIIP remains strong.



Source: National Bank of Belgium.

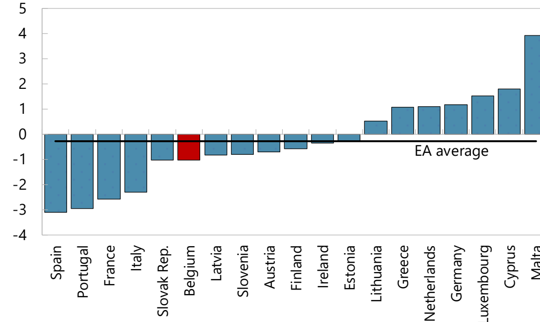
Figure 2. Belgium: Fiscal Context

The structural balance has not returned to pre-crisis levels even as the output gap has closed.



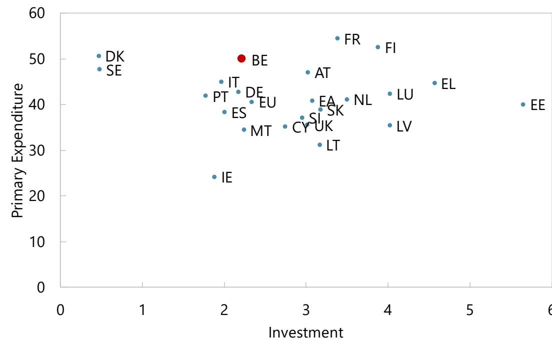
Sources: NBB (Haver Analytics) and IMF staff calculations.

Although the fiscal deficit has narrowed, it remains higher than the euro area average.



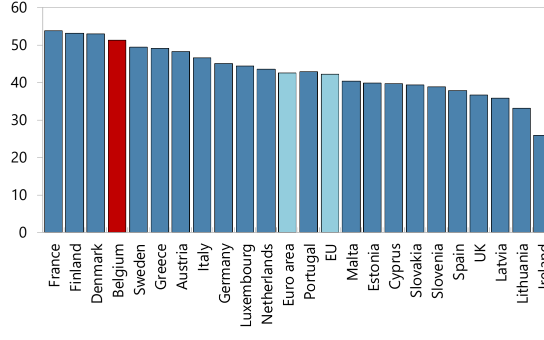
Source: World Economic Outlook.

Government spending is among the highest in Europe despite low levels of investment.



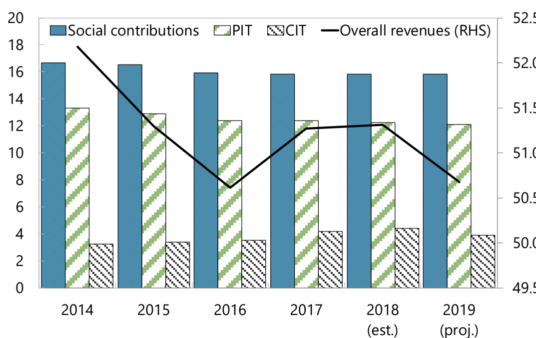
Sources: World Economic Outlook, Eurostat, and IMF staff calculations.

Government revenues are also high by European standards…



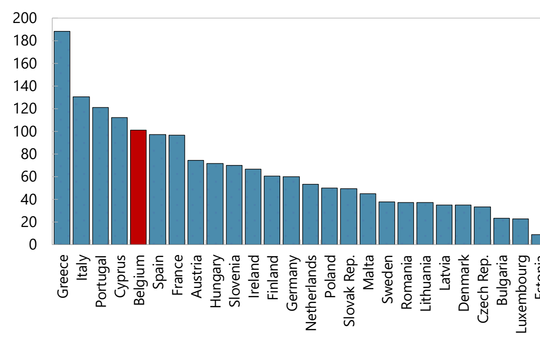
Source: World Economic Outlook and IMF staff calculations.

…although the tax shift reform has put downward pressure on revenues.



Sources: Belgian authorities; and IMF staff contributions.

Public debt is the fifth highest in the euro area.

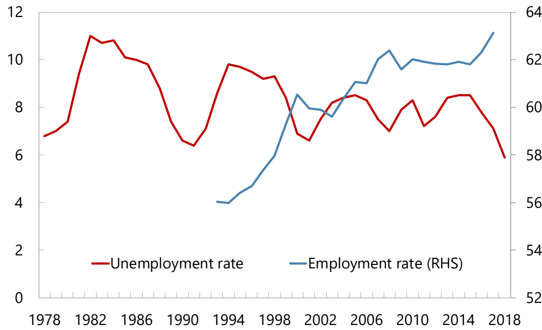


Source: WEO.

Figure 3. Belgium: Labor Market Developments

Unemployment has fallen to its lowest level in four decades, while employment has reached new highs.

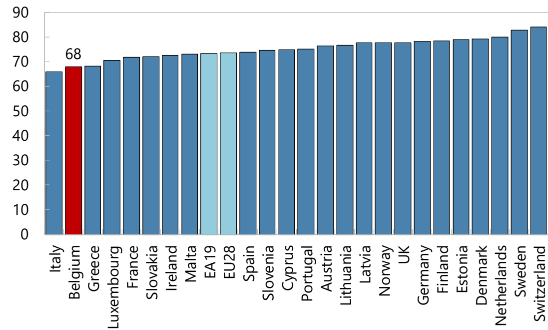
Employment and Harmonized Unemployment Rate
(Percent of population; percent of active population)



Source: NBB.

Labor force participation, however, is among the lowest in the euro area.

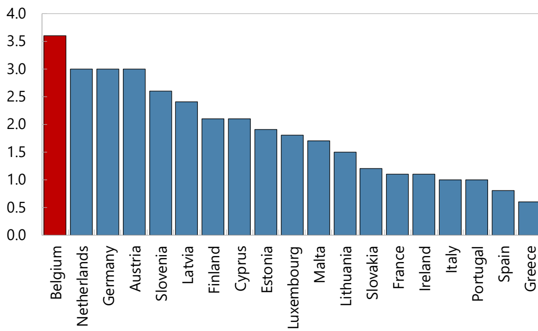
Labor Force Participation Rate, 2018H1
(Percent of working age population, 15-64 years)



Sources: Eurostat and IMF staff calculations (Haver Analytics) .

Labor shortages are becoming more acute.

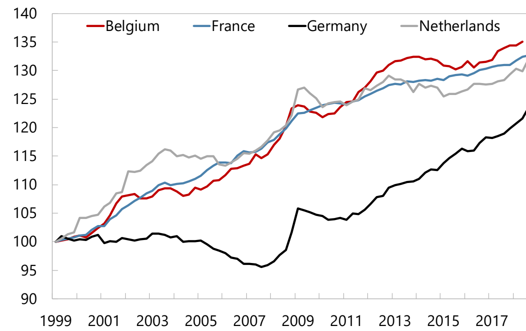
Job Vacancy Rate, 2018Q3
(Percent of total posts)



Source: Eurostat.

Unit labor costs have picked up.

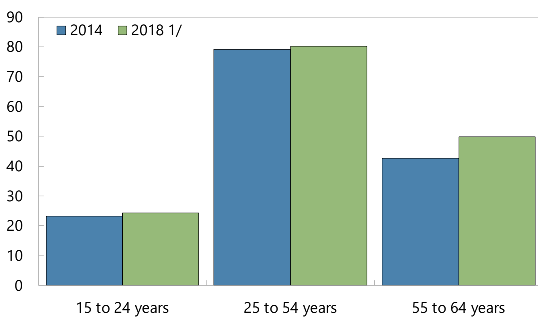
Evolution of Unit Labor Costs
(Index 1999Q1=100)



Sources: Eurostat (Haver Analytics) and IMF staff calculations.

Older workers have made strong employment gains, whereas youth employment rates remain low.

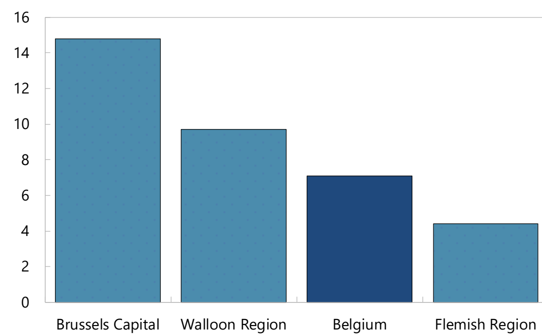
Employment Rate, by Age Group
(Percent of group's working age population)



1/ Average through Q3.
Source: Eurostat (Haver Analytics).

Significant regional disparities remain.

Unemployment Rate by Regions, 2017
(Percent)

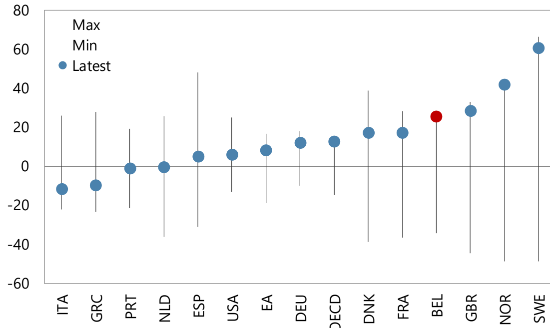


Sources: Eurostat (Haver Analytics).

Figure 4. Belgium: Housing Market and Household Debt

The housing price-to-rent ratio has reached historically high levels…

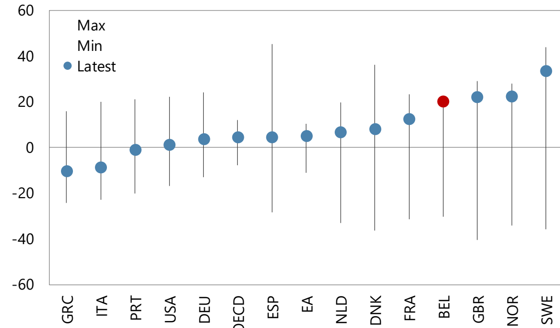
Price-to-Rent Ratio
(Percent deviation from historical mean; 1995Q1-2018Q3)



Source: OECD and IMF staff calculations.

…as has the housing price-to-income ratio.

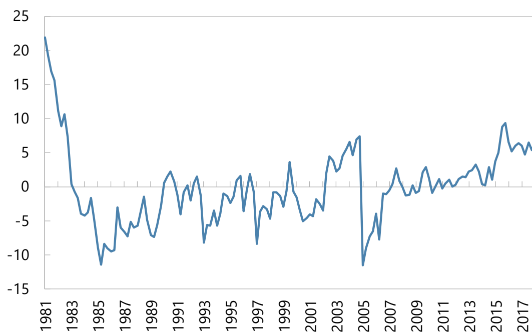
Price-to-Income Ratio
(Percent deviation from historical mean; 1995Q1-2018Q3)



Source: OECD and IMF staff calculations.

Nevertheless, some models suggest only a modest overvaluation.

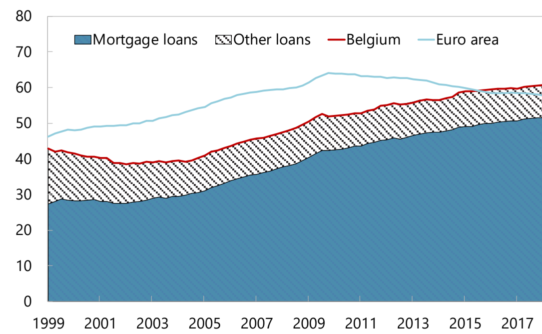
Valuation of the Property Market
(Percentage deviation from the equilibrium price)



Source: NBB.

Mortgage lending has been driving up household debt.

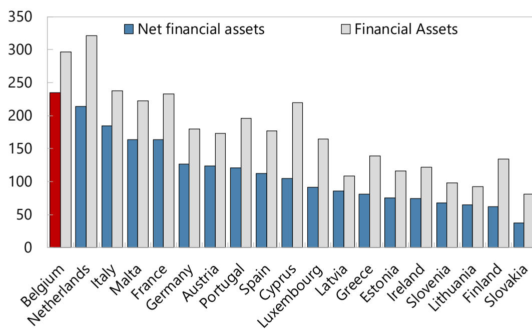
Household Debt
(Percent of GDP)



Sources: NBB.

Large financial assets mitigate the risks associated with household debt.

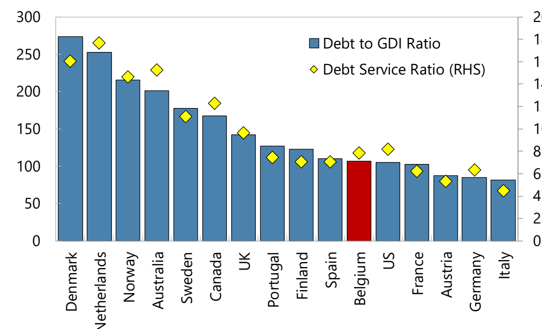
Household Financial Assets, 2018Q3
(Percent of GDP)



Source: ECB.

Household debt as a share of gross disposable income is relatively low.

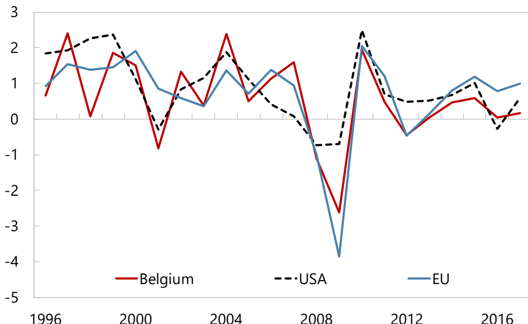
Household Debt, 2016
(Percent of gross disposable income)



Source: OECD.

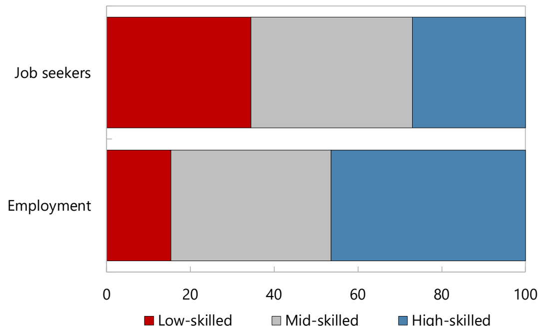
Figure 5. Belgium: Structural Obstacles to Growth

TFP growth lags the EU average.



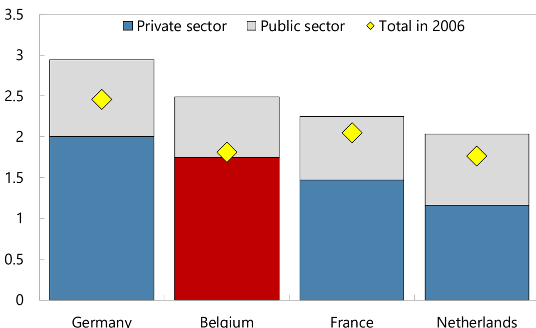
Source: AMECO and IMF staff calculations. (Haver Analytics)

Many job seekers lack the requisite skills, pointing to a weak educational outcome.



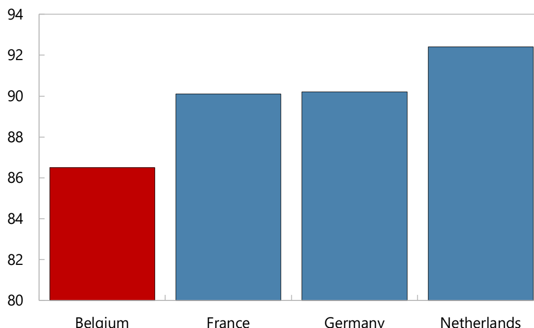
Sources: Eurostat and IMF staff calculations.

Expenditures on research and development are in line with peer countries.



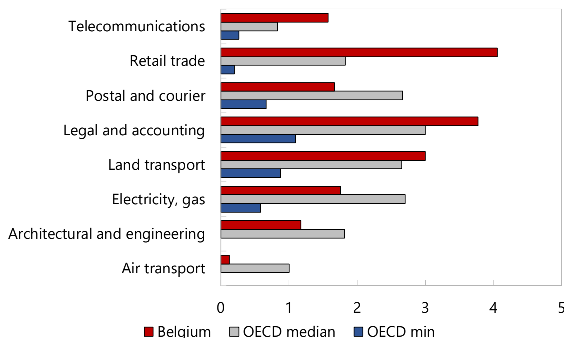
Source: Eurostat.

Infrastructure is weaker than in neighboring countries.



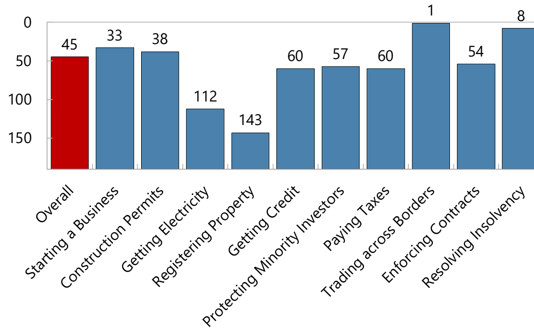
Source: Global Competitiveness Report 2018.

Most sectors are more heavily regulated than the OECD average.



Source: OECD (2013), Product Market Regulation Database.

Doing Business indicators point to weaknesses especially in electricity supply and in the registration of property.



Sources: World Bank Doing Business 2019.

Annex I. Main Recommendations of the 2018 Article IV Consultation and Authorities' Response

Fund Recommendations	Policy Actions
Fiscal policy	
Continue to pursue gradual fiscal consolidation based on deeper reforms to make public spending more efficient.	The fiscal deficit is estimated to have narrowed further in 2018, although this is in large part due to temporary factors (e.g. advanced payments). Plans to reach structural balance by 2020 have been postponed.
Create space for more public investment.	While the authorities have developed a Strategic Investment Pact, reforms to finance it have not yet been identified.
Complement CIT reform with additional measures to safeguard revenues and promote economic efficiency.	No significant revenue measures have been introduced since the CIT reform.
Structural reforms	
Step up efforts to upgrade infrastructure, particularly transport and energy.	The government has announced a plan to scale up investment over the next decade, including in infrastructure (see above).
Enhance competition in services by lowering regulatory barriers.	Efforts have focused on supporting the financing and ecosystem for start-ups and high-growth firms.
Integrate vulnerable groups into the labor market by addressing educational gaps, improving training, and reducing barriers to mobility.	The planned job deal includes various tax advantages for unemployed people pursuing training for professions experiencing labor shortages. However, its legislation and implementation remain uncertain.
The wage-setting process should reflect productivity developments as well as local and sectoral labor market conditions.	The planned jobs deal also calls on the government and social partners to examine the implications of linking salary scales to productivity and skills rather than to seniority.
Financial sector	
Stand ready to tighten macroprudential policy if balance sheet risks grow significantly.	The NBB introduced a new macroprudential measure targeting riskier mortgage loan portfolios.

Annex II. External Sector Assessment

	Belgium	Overall Assessment
Foreign asset and liability position and trajectory	**Background**. The net international investment position (NIIP) remains strong at 51 percent of GDP as of 2018:Q3 compared to 51 percent a year earlier, reflecting the continued positive net financial wealth of households. Gross foreign assets were large at 461 percent of GDP, inflated by intra-group corporate treasury activities. Gross foreign assets of the banking sector stood at 78 percent of GDP, down considerably from the pre-crisis peak. External public debt was 63 percent of GDP as of 2018Q3, predominantly denominated in euros. Target 2 balances stood at -€12.2 billion (-2.7 percent of GDP) as of 2018:Q3. **Assessment**. Belgium's large gross international asset and liability positions are inflated by the presence of corporate treasury units, without creating macro-relevant mismatches. The remaining risk exposures on the asset side mostly relate to financial sector claims. Risk exposures on the liability side are related to external public debt. Based on the projected current account and growth paths, the NIIP to GDP ratio is expected to decline gradually going forward. The strongly positive NIIP and its trajectory do not raise sustainability concerns.	**Overall Assessment**: *The external position in 2018 was moderately weaker than medium-term fundamentals and desirable policy settings would imply*. Recent measures to improve competitiveness, together with an improving investment income balance, should support the external position over the medium term. The strong net international investment position mitigates vulnerabilities associated with the high external public debt. **Potential policy responses**: Steady fiscal consolidation, reductions in labor taxes, and wage moderation would help make the external position fully consistent with fundamentals and policy settings. Productivity enhancing structural reforms (especially reforms to address the severe labor market fragmentation) would also be helpful.
Current account	**Background**. Since the global financial crisis, the current account has hovered around balance, averaging -0.3 percent of GDP over the period 2009–2017. In 2017, the current account recorded a surplus of 0.7 percent of GDP. The stability in the current account balance masks significant movements in the trade and primary income balances. The goods balance moved back into a surplus in 2016 for the first time since the crisis, whereas the primary income balance turned negative in 2015, driven by a worsening in the investment income balance. The current account surplus is estimated to have narrowed slightly in 2018 to 0.4 percent of GDP and is projected to remain slightly positive over the medium term, supported by an improving investment income balance as monetary conditions normalize. **Assessment**. Preliminary EBA model estimates yield a CA gap of -2.0 percent of GDP for 2018, based on a cyclically adjusted CA balance of 0.5 percent (relative to an estimated norm of 2.4 percent). This is within the range estimated by staff for the CA gap of between -3 to -1 percent of GDP, which applies a standard range for the CA gap of +/- 1 percent of GDP.	
2018 CA Assessment	Actual CA 0.4 | Cycl. Adj. CA 0.5 | EBA CA Norm 2.4 | EBA CA gap -2.0 | Staff Adj. 0.0 | Staff CA gap -2.0	
Real exchange rate	**Background**. The REER (both ULC- and CPI-based) appreciated by nearly 20 percent between 2000–09. Over the past decade the REER has been more volatile, with wage moderation contributing to an 8 percent depreciation of both the ULC- and CPI-based REER in 2014–15 which has since been reversed. In 2018, the ULC-based REER appreciated by 1.0 percent and the CPI-based REER appreciated by 2.0 percent relative to the 2017 average. **Assessment**. Preliminary EBA model estimates point to an REER overvaluation of between 12 and 21 percent, based on the CPI-based REER index and level models; the REER overvaluation resulting from the EBA CA gap model is 3 percent. Staff's assessment is an overvaluation in the range of 2½ to 7 percent, using an elasticity of 0.42.	
Capital and financial accounts: flows and policy measures	**Background**. Gross financial outflows and inflows were on an upward trend during the pre-crisis period as banks expanded their cross-border operations. Since the crisis, these flows have shrunk and become more volatile as banks have deleveraged. Short-term external debt accounted for 28 percent of gross external debt as of 2018:Q3. The capital account is open. **Assessment**. Belgium remains exposed to financial market risks, but the structure of financial flows does not point to specific vulnerabilities. The strong NIIP reduces the vulnerabilities associated with the high public debt.	
FX intervention and reserves level	**Background**. The euro has the status of a global reserve currency. **Assessment**. Reserves held by the euro area are typically low relative to standard metrics, but the currency is free floating.	

Annex III. Risk Assessment Matrix

Source of Risk and likelihood	Impact if realized and transmission channel	Policy response
Medium Structurally weak growth in key advanced economies due to low productivity growth, a failure to fully address crisis legacies and undertake structural reforms, and persistently low inflation.	**High** Weak growth in partner countries would negatively impact Belgian exports and discourage export-related investment. A protracted growth shortfall could lower potential growth, raise structural unemployment, and complicate fiscal adjustment.	*Implement reforms to improve productivity and raise potential growth.*
High Policy and geopolitical uncertainties (e.g., a no-deal Brexit, spreading protectionism, retreat from multilateralism, political tensions in Europe).	**High** An increase in protectionism could result in a loss in external demand and make fiscal and structural reforms more difficult.	*Gradual fiscal adjustment to reduce public debt should be a driving policy objective. Pursue complementary reforms in product markets and reduce the regulatory burden.*
High Tighter global financial conditions due to continued monetary policy normalization, changes in global risk appetite, and policy uncertainty in some parts of Europe.	**Medium** Limited exposure of domestic banks to global risks. Sovereign-bank nexus is gradually being unwound. Effects would be mainly indirect, through spillovers from neighbors. Financial market stress elsewhere in Europe could have spillover effects.	*Euro area monetary policy is first line of defense against liquidity stress, supported by activation of backstops and resolution mechanism.*
High Political uncertainty related to the 2019 federal elections.	**High** Reforms could stall if election results are inconclusive and lead to a protracted delay in the formation of a new government.	*Seek early consensus on priorities for the next government.*
Medium Rapid and disruptive housing price correction.	**Medium** The direct impact of a housing price correction on banks would be mitigated by banks' increased capital buffers, but a housing price correction coupled with a shock to incomes could likely impact banks' asset encumbrance and increase funding costs.	*The NBB should stand ready to tighten macroprudential policy further.*

Annex IV. An Analysis of Regional Wage and Productivity Differentials in Belgium[1]

A. Introduction

1. Despite recent reforms, Belgium's labor market remains rigid and fragmented. While the unemployment rate has fallen in recent years, and competitiveness gaps with trading partners have been largely closed, a number of labor market disparities persist, including large differences in unemployment rates across regions as well as socio-economic groups (e.g., high-skilled native populations versus the young, the low-skilled, and non-EU immigrants), as well as emerging labor shortages (see Figure 3 and Figure IV.1). One question is whether the wage-setting mechanism in Belgium has affected these outcomes by limiting the flexibility needed for wages to adjust to regional productivity differentials or to other personal characteristics. This annex attempts to answer the question by examining the wage-setting mechanism and conducting a firm-level econometric analysis of differences in wages, productivity, and competitiveness at the regional level.[2]

B. The Wage-Setting Framework in Belgium

2. Collective bargaining in Belgium is conducted at three levels: national, industry, and firm. It is structured such that an agreement concluded at one level cannot be less favorable than agreements reached at a higher level (pyramidal basis). Negotiations occur every two years, with national (interprofessional) agreements setting both a floor on minimum wages and an upper bound on wage increases that may be negotiated at lower levels. Industry agreements are conducted within permanent Industry Joint Committees made up of employers' associations and trade unions, which set industry standards (minimum wages by category of workers) for all employees within the parameters set at the national level.[3] Firm-level agreements complement industry agreements but cannot be less favorable than industry agreements.[4]

3. The key mechanisms set nationally regulating the system are the automatic indexation and the "wage norm." The indexation mechanism implies that all gross wages automatically rise with consumer prices (health index),[5] imposing, in practice, a floor for wage increases. This is

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[1] Prepared by Marco Arena (EUR).

[2] A microeconomic analysis of wages and productivity that takes into account compositional effects was not feasible at this stage, given data limitations.

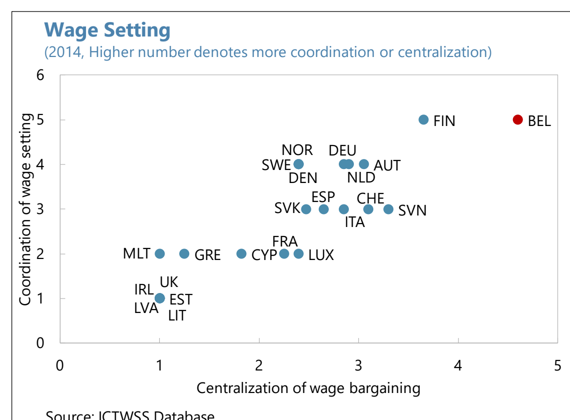
[3] As pointed out by Rusinek and Tojerow (2014, page 304), Joint Committees "are not only the key bargaining body for collective wage increases beneath the wage norm, but also set up, to a large extent, job grading and specific pay scales for each employee category."

[4] In addition, according to the OECD, Belgium is characterized by a collective bargaining coverage rate of 90 percent (OECD, 2017).

[5] The health index is defined as the national index of consumer prices with the exclusion of alcoholic beverages, tobacco, and motor fuels.

complemented by the "wage norm," which sets an overall maximum margin for the growth of nominal hourly labor costs based on an estimate of the weighted average of the expected increase in nominal labor costs in Germany, France, and the Netherlands, produced by the official Central Economic Council (CCE). To correct for deviations in wage costs and competitiveness relative to trading partners that had accumulated since the mid-1990s, the indexation mechanism was suspended during 2015–16; to prevent such gaps from reemerging, in 2017 the law governing the wage norm was amended to include: (i) a factor to correct for wage gaps with trading partners and (ii) a safety margin to account for forecasting errors.[6]

4. Belgium's collective bargaining system is thus predominantly centralized and coordinated. Based on a taxonomy of collective bargaining systems done by the OECD (OECD, 2017), Belgium appears to have the most centralized wage bargaining system in Europe, as well as one of the most coordinated one (along with Finland). Main trading partners such as Germany and the Netherlands appear to have a more decentralized albeit still coordinated collective bargaining systems where sector-level agreements play an important role, but they also leave significant space for lower-level agreements to set the standards. As a result, wage differentiation at the sectoral level in Belgium is one of the lowest across European countries (Figure IV.3).



C. Regional Differences in Wages, Productivity, and Competitiveness

5. Aggregate data point to regional differences in competitiveness, with Wallonia lagging. Regional wage competitiveness indicators suggest that the ULC of Wallonia has grown faster relative to the ULC of Flanders, especially since 2010 (this is also true of Brussels, but to a much lesser extent). In the case of Wallonia, this result appears to be mainly driven by lower labor productivity relative to Flanders (Figure IV.2). Looking at specific sectors, Brussels appears to have experienced slower labor productivity growth relative to Flanders in services in recent years (especially financial and insurance activities; real estate activities; professional, scientific and technical activities; administrative and support service activities), while Wallonia has lagged Flanders in construction and services.[7]

[6] The methodology does not factor in wage subsidies, nor tax-shift-derived reductions of social security contributions in excess of those resulting from the Competitiveness Pact when calculating the maximum margin available (National Bank of Belgium, 2016)

[7] Since 2011, it appears that Wallonia has had slower labor productivity growth in the manufacturing sector (industry).

6. Firm-level data can provide an additional layer of analysis to explore regional differences in competitiveness. In this regard, we follow the approach presented in Konings and Marcolin (2014) and Rycx et al. (2016), where three equations are estimated at the firm level, one for the value-added per worker, one for wage per worker, and another where the dependent variable is the difference between the two previous variables, the so-called competitiveness gap. The main regressors of interest are dummy variables for the location of the firm in Flanders, Wallonia, or the Brussels region:

$$\ln(W)_{ijt} = \alpha_o + \beta_0 D_{ijt}^{BX} + \beta_1 D_{ijt}^{WA} + \beta_2 ln\,(Age)_{ijt} + \beta_3\, ln(Size)_{ijt} + \beta_4 \ln(Cap)_{ijt} + \sum_{j=1}^{k} \delta_j D_j + \sum_{t=2003}^{2015} \gamma_t D_t + \varepsilon_{ijt} \quad (2)$$

$$\ln(Prod)_{ijt} = \alpha_o + \beta_0 D_{ijt}^{BX} + \beta_1 D_{ijt}^{WA} + \beta_2 ln\,(Age)_{ijt} + \beta_3\, ln(Size)_{ijt} + \beta_4 \ln(Cap)_{ijt} + \sum_{j=1}^{k} \delta_j D_j + \sum_{t=2003}^{2015} \gamma_t D_t + \varepsilon_{ijt} \quad (3)$$

$$\ln\left(\frac{Prod}{W}\right)_{ijt} = \alpha_o + \beta_0 D_{ijt}^{BX} + \beta_1 D_{ijt}^{WA} + \beta_2 ln\,(Age)_{ijt} + \beta_3\, ln(Size)_{ijt} + \beta_4 \ln(Cap)_{ijt} + \sum_{j=1}^{k} \delta_j D_j + \sum_{t=2003}^{2015} \gamma_t D_t + \varepsilon_{ijt} \quad (4)$$

In the equations above, the dependent variables are: (i) the average wage per employee (wage bill divided by the number of employees) of firm i, sector j and year t.; (ii) labor productivity (value-added divided by the number of employees); and the log of the ratio between value-added per employee and the average wage per employee. The regressors include: Dj and Dt are dummy variables for economic sectors (NACE Rev. 2) and years; age stands for the period past from the year of firm establishment (incorporation) to the reporting year; size is a proxy for firm's size and will be specified in the estimation as total sales; and Cap is the stock of tangible assets per employee. We use data extracted from the ORBIS database of Bureau van Dijk, compiled by the IMF's research department (Gal and Hijzen, 2016). The data includes balance sheets, income statements, and sectoral classifications of active firms over 2002–2015. For the analysis, we focus on firms that belong to the industrial, construction, and services sectors, where, as of 2015, 70 percent are located in Flanders, 19 percent in Wallonia and 11 percent in Brussels (Tables IV.1 and Table IV.2).

7. The results confirm the existence of a competitiveness gap in Wallonia. Table IV.1 reports the results of the estimation of equations (2) – (4), which show the impact of the region in which a firm is located on its average productivity, average wage, and cost competitiveness (i.e., productivity-wage gap). During the period 2002–2015, firms located in Brussels appear to have been more productive as the ones in Flanders (a premium of 10 percent), but firms located in Wallonia appear to have been less productive than the ones in Flanders, with an estimated discount of about 19 percent. Regarding wage cost differentials, relative to Flanders, Brussels had an estimated premium of 9.6 percent and Wallonia had an estimated discount of 8.8 percent. Consequently, a competitiveness gap is found of about 10 percent in Wallonia relative to Flanders (the gap declines to

about 6 percent for the sample of firms with at least 10 employees). This result appears to be driven by regional productivity differentials, in particular in the services sector.[8] [9]

8. A number of sensitivity tests were run; still, the results should be interpreted with caution, **given data limitations**. To test whether the results are driven by larger firms, the regression was run excluding the firms whose total assets were above the 75th percentile of the distribution of firms' total sales. The results point to a productivity-wage gap of about 9 percent in the case of Wallonia relative to Flanders. In this context, the results are not driven by larger firms (in terms of total sales). Nonetheless, the results should be interpreted with caution because they do not control for composition effects, such as worker and job characteristics (Rusinek and Tojerow, 2014; Rycx et al., 2016).[10] Also, the results could be sensitive to potential heterogeneity in the cost of living across regions, which would amplify differences in real terms.

9. A key question is whether the wage-setting framework contributes to regional competitiveness gaps. To answer this question, we use the methodology developed by Vamvakidis (2008), which aims to assess the impact of the collective bargaining system's characteristics (e.g., coordination or centralization) on regional wage differentiation (dispersion) across countries. The sample includes196 regions covering 12 European countries for the period 2003–2015. The specification is as follows:[11]

$$
\begin{aligned}
Wage\ differential_{it} &= \alpha_0 + \alpha_1 Index_{it} + \alpha_2 Prod_differential_{it-1} + \alpha_3 Unemployment_differential_{it-1} \\
&+ \alpha_4 Activity\ rate_differential_{it-1} + \alpha_5 Index * Prod_differential \ + \phi_{it} + \delta_t + \xi_{it}
\end{aligned}
$$

In the equation above, the dependent variable is the difference between the average country and regional wage, divided by the average country wage, and the explanatory variables include similarly specified differentials with respect to productivity, unemployment, activity rate, and an interaction

[8] An alternative regression was performed using a measure of capital stock in real terms, constructed following the perpetual inventory method as described in Gal and Hijzen (2016), and expressing the average wage, sales and average productivity in real terms (deflation using the production price index). The results were qualitatively similar to the ones presented in Table IV.3.

[9] Konings and Marcolin (2014) find that the wage-productivity gap reached 11 percent for Brussels and 4.2 percent for Wallonia in the years 2005–2012, mainly driven by the negative performance in labor productivity of firms in these regions relative to Flanders. However, Rycx et al. (2016) find that inter-regional differences in productivity and wages vanish almost totally, both in industry and services, when controlling for a wide range of covariates (worker, job, and establishment characteristics) for the period 1999-2010. Differences in the results could be related to the use of different data sets. On the one hand, Rycx et al. (2016) used a combination of two large data sets: the Structure of Earnings Survey and the Structure of Business Survey. On the other hand, Konings and Marcolin used firm-level data covering the population of Belgian firms. Our data set is a subset of the latter.

[10] In addition, issues of endogeneity and controlling for time-invariant unobserved heterogeneity can also play a role in the estimation results. In this context, we estimated the set of regressions using the system-GMM approach. While the estimated coefficients of the regional dummies were statistically significant and still close to the values observed under the OLS estimation, the over-identification tests were not satisfied under different lag structure of internal instruments.

[11] The countries are: Belgium, Denmark, Germany, Spain, France, Italy, Netherlands, Austria, Portugal, Finland, Sweden and the UK. The definition of the regions follows Eurostat (NUTS2).

terms between the OECD's index of coordination/centralization of wage bargaining and productivity differential. The results confirm that wage differentiation is positively associated with productivity differentials, but that regional wages reflect productivity differentials to a smaller extent than otherwise in countries with a high degree of coordination or centralization in their collective bargaining system (see Table IV.4). In other words, centralized and highly coordinated bargaining systems, such as the one in Belgium, could restrict the flexibility of regional wages to adjust to productivity, requiring employment to adjust and leading to regional unemployment differentials.

D. Conclusions

10. Empirical evidence presented in this annex points to the existence of regional competitiveness gaps, particularly in Wallonia. While the empirical firm-level analysis presented in this paper is preliminary and limited by data availability, the findings are corroborated at the aggregate level and with the literature. One explanation for the results could be that the current wage-setting framework does not establish any formal link between wages and productivity trends. Indeed, our cross-country empirical analysis suggests that more centralized bargaining systems could lead to less responsiveness of regional wages to productivity and could thus contribute to regional competitiveness gaps and to regional unemployment differentials, which, unless corrected, could lead to even more regional disparities in the future. This, coupled with other barriers to labor mobility (e.g., language, gaps in education and training for certain groups, other disincentives for work exacerbated by regional differences in income), could depress labor demand and result in an inefficient allocation of resources, as well as depress aggregate productivity and competitiveness.

11. Additional consideration could thus be given to the wage-setting framework, as well as to the coordination of other federal and regional labor market policies. The wage-setting framework would benefit from establishing a formal link between wages and domestic productivity trends, rather than the current setting that links wage growth to productivity developments of main trading partners (also see European Commission, 2015). In this regard, the authorities' intention to better link wage developments to productivity (mentioned in their recent proposals) would be a step in the right direction and would need to be followed with more concrete proposals on how to achieve this objective. Moreover, the wage indexation mechanism could be revisited to minimize or remove terms-of-trade effects (e.g., from increases in energy prices) on domestic competitiveness. Finally, strengthening labor mobility, cross-regional training programs, and coordination of public employment services could facilitate job matching and reduce regional unemployment disparities. In the medium and long term, it will be necessary to assess the changes needed in the education system to address new labor demands.

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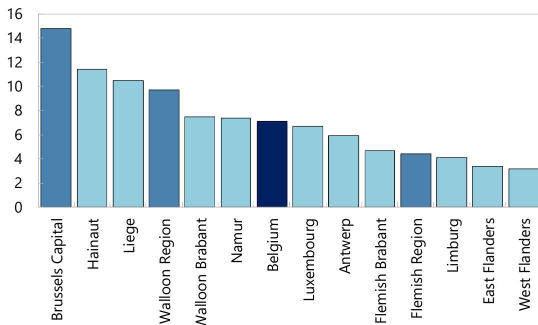
Figure 1. Regional Labor Market Indicators

There are significant differences in unemployment across regions.

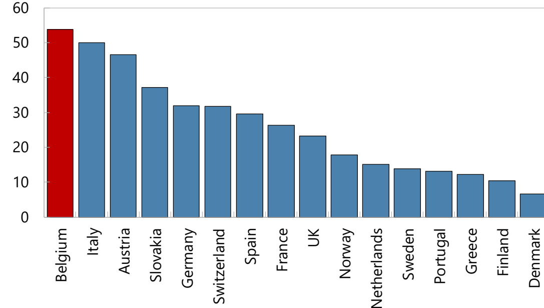
Unemployment Rate by Regions and Provinces
(2017, Percent)



Source: Eurostat (Haver Analytics).

Within-country regional differences in unemployment rates are the largest in Europe.

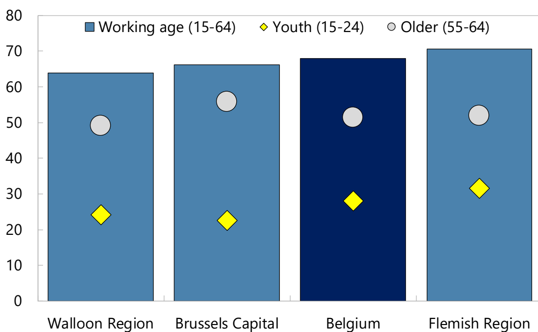
Regional Unemployment Rate Dispersion (2017)
(Coefficient of variation of regional employment rates, by NUTS2 area: Ratio of the unemployment rate standard deviation to the mean in percent)



Source: Eurostat.

Wallonia has the lowest activity rate…

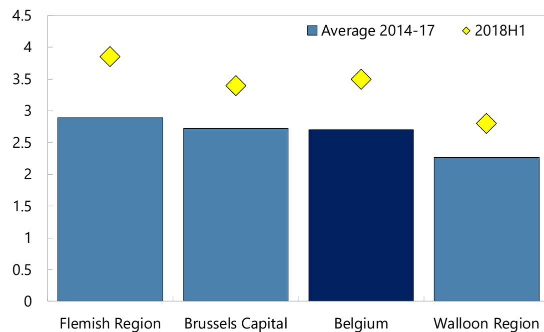
Activity Rate, by Region
(2017, Percent of group's population)



Source: Eurostat.

…while Flanders exhibits the highest vacancy rate.

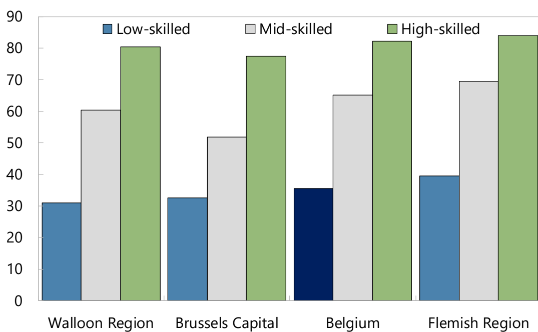
Job Vacancy Rates, by Region
(Percent of total jobs excluding agriculture)



Source: Eurostat.

Across regions, labor market outcomes are comparatively challenging for people with low-skills…

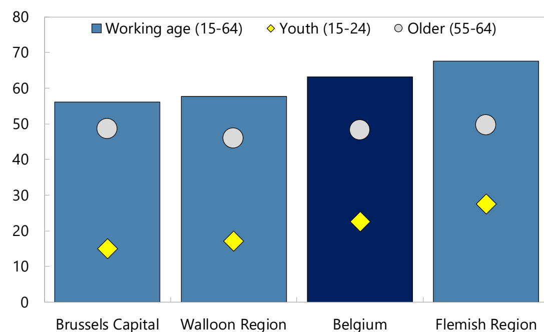
Regional Employment Rate, by Educational Attainment
(2017, Percent of group aged 15-64 years)



Source: Eurostat.

… and for the young.

Regional Employment Rate, by Age
(2017, Percent of group's population)



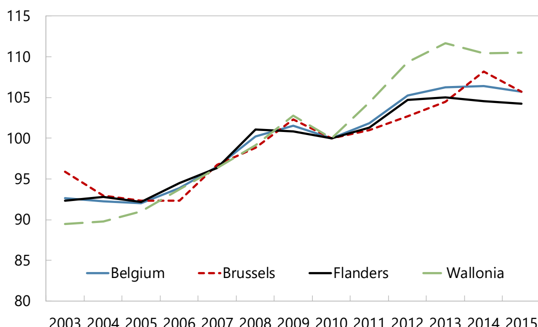
Source: Eurostat.

Figure 2. Recent Trends in Regional Unit Labor Costs

ULCs have moderated in recent years.

Evolution of ULCs by Region

Sectors included: Industry, Construction and Services, 2010=100)

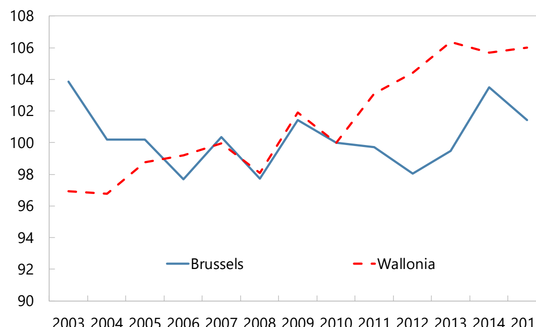


Sources: Eurostat, IMF staff calculations.

However, Wallonia's ULCs have grown faster relative to Flanders.

Evolution of ULCs by Region

(ULCs of Brussels and Wallonia relative to Flanders, %)

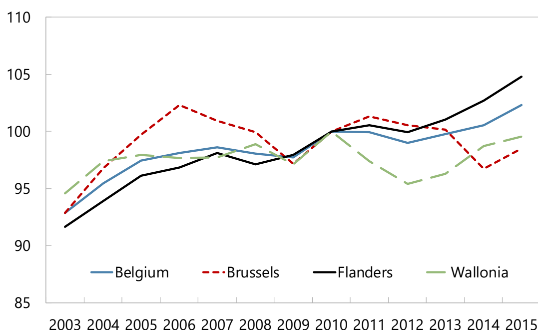


Sources: Eurostat, IMF staff calculations.

Flanders' labor productivity has grown faster…

Hourly Labor Productivity by Region

(Sectors included: Industry, Construction, and Services, 2010=100)

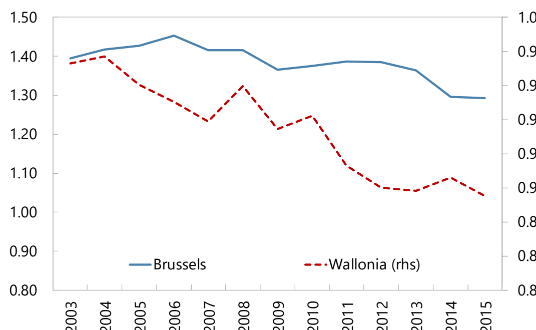


Sources: Eurostat, IMF staff calculations.

…relative to Brussels and Wallonia in recent years.

Relative Real Hourly Labor Productivity

(Real GVA per hour of Brussels and Wallonia relative to Flanders)

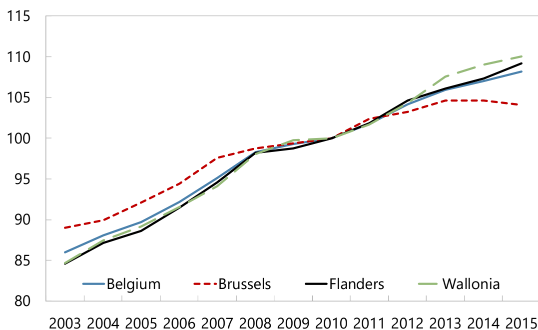


Sources: Eurostat, IMF staff calculations.

Labor costs exhibit a similar pattern in levels across regions…

Evolution of Hourly Compensation by Regions

(Sectors included: Industry, Construction, and Services, 2010=100)

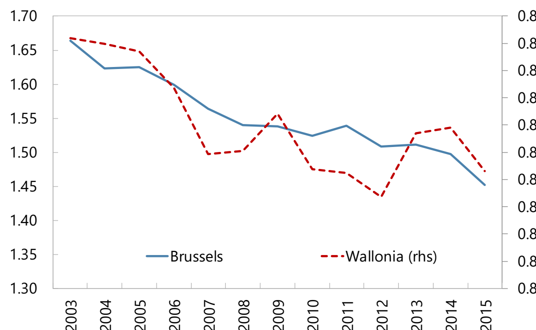


Sources: Eurostat, IMF staff calculations.

…with labor costs in Brussels growing more slowly than in Flanders in recent years.

Relative Hourly Labor Compensation

(Hourly Labor Compensation of Brussels and Wallonia relative to Flanders)

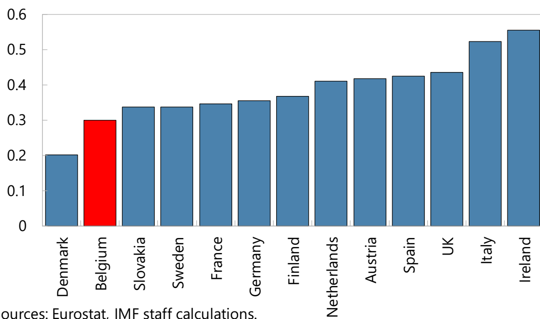


Sources: Eurostat, IMF staff calculations.

Figure 3. Sectoral and Regional Wage Differentiation

At the sectoral level, Belgium has one of the lowest dispersion of wages, both in terms of levels....

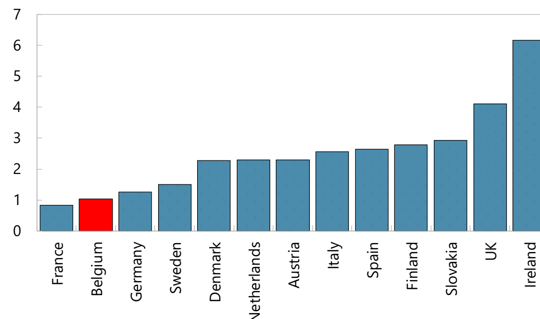
Sectoral Wage Differentiation[1/]
(Based on wage levels, 2017Q2-2018Q1)



Sources: Eurostat, IMF staff calculations.
[1/] Standard deviation across sectors of sectoral average wages measured in percent of the national average wage.

...and growth rates.

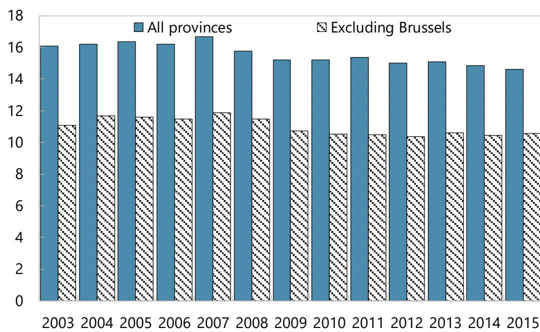
Sectoral Wage Differentiation[1/]
(Based on wage growth rates, 2017q2-2018q1)



Sources: Eurostat, IMF staff calculations.
[1/] Standard deviation across sectors of sectoral average wage growth rates.

At the regional level, wage dispersion is impacted by the wage dynamics of Brussels.

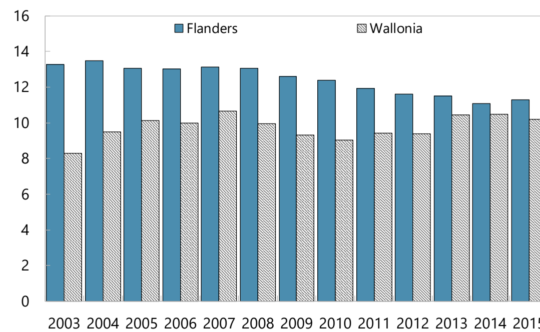
Belgium: Wage Dispersion Across Provinces
(Coefficient of variation at NUTS2, %)



Sources: Eurostat, IMF staff calculations.

Wage dispersion is similar in Flanders and Wallonia.

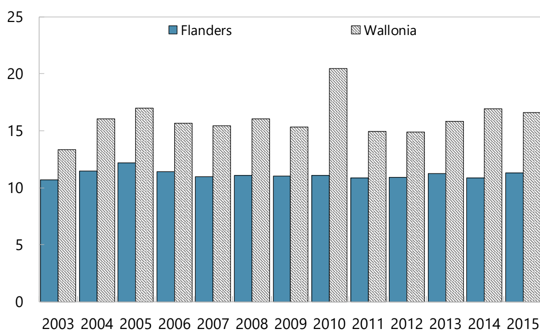
Wage Differentiation in Flanders and Wallonia
(Coefficient of variation for the period 2003-2015, %)



Sources: Eurostat, IMF staff calculations.

However, Wallonia exhibits a higher dispersion in productivity.

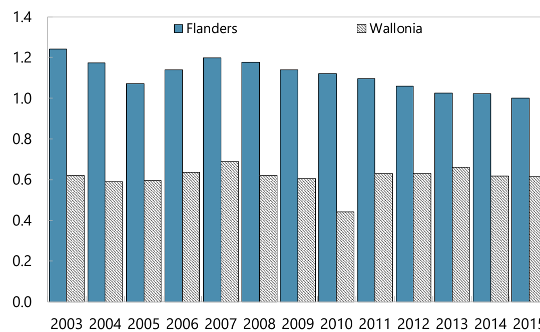
Hourly Labor Productivity Differentiation
(Coefficient of variation for the period 2003-2015, %)



Sources: Eurostat, IMF staff calculations.

In the case of Wallonia, wage dispersion is not aligned with productivity dispersion.

Wage Differentiation Relative to Productivity Differentiation
(Flanders and Wallonia)



Sources: Eurostat, IMF staff calculations.

Table 1. Number of Firms Used in the Analysis

	Belgium	Brussels	Flanders	Wallonia		Belgium	Brussels	Flanders	Wallonia
2002	4,222	475	2,931	816	2009	6,723	773	4,671	1,279
2003	4,706	573	3,263	870	2010	7,259	821	5,042	1,396
2004	5,047	625	3,509	913	2011	7,643	854	5,292	1,497
2005	5,189	634	3,587	968	2012	8,444	924	5,891	1,629
2006	5,965	735	4,131	1,099	2013	9,158	1,018	6,409	1,731
2007	6,352	772	4,412	1,168	2014	9,463	1,037	6,614	1,812
2008	6,624	798	4,572	1,254	2015	9,632	1,029	6,737	1866

Source: ORBIS, Bureau van Dijk. Number of firms with at least 3 years of incorporation in the market, have the status of active have at least two employees, belong to the industrial sector or construction sector or services sector (excluding education, health, and public sector services).

Table 2. Descriptive Statistics at the Firm-Level by Region

	A. Mean				B. Median			
	Belgium	Brussels	Flanders	Walllonia	Belgium	Brussels	Flanders	Wallonia
Wage per employee (in log)								
2002-2015	11.15	11.31	11.14	11.05	11.11	11.28	11.12	11.02
No. Obs.	*96,427*	*11,068*	*67,061*	*18,298*	*96,427*	*11,068*	*67,061*	*18,298*
2002-2010	11.10	11.27	11.10	11.01	11.07	11.25	11.07	10.98
No. Obs.	*52,087*	*6,206*	*36,118*	*9,763*	*52,087*	*6,206*	*36,118*	*9,763*
2011-2015	11.20	11.36	11.17	11.05	11.16	11.32	11.20	11.09
No. Obs.	*44,340*	*4,862*	*30,943*	*8,535*	*44,340*	*4,862*	*30,943*	*8,535*
Productivity per employee (in log)								
2002-2015	11.72	11.91	11.74	11.56	11.58	11.73	11.59	11.45
No. Obs.	*96,427*	*11,068*	*67,061*	*18,298*	*96,427*	*11,068*	*67,061*	*18,298*
2002-2010	11.71	11.90	11.72	11.54	11.57	11.72	11.58	11.44
No. Obs.	*52,087*	*6,206*	*36,118*	*9,763*	*52,087*	*6,206*	*36,118*	*9,763*
2011-2015	11.75	11.93	11.77	11.57	11.59	11.74	11.61	11.46
No. Obs.	*44,340*	*4,862*	*30,943*	*8,535*	*44,340*	*4,862*	*30,943*	*8,535*

Descriptive statistics based on firms with at least 3 years of incorporation in the market, have the status of active have at least two employees, belong to the industrial sector or construction sector or services sector (excluding education,

Table 3. Wage-Productivity Gaps by Regions

Table IV.3. Wage-Productivity Gaps by Regions
OLS estimation.

	Number of firm employees>1			Number of firm employees>9		
	Value added per worker	Wage per worker	Value added-wage gap	Value added per worker	Wage per worker	Value added-wage gap
Flanders	*Reference*	*Reference*	*Reference*	*Reference*	*Reference*	*Reference*
Brussels	0.101 ***	0.096 ***	0.005	0.072 ***	0.073 ***	-0.002
	0.008	*0.004*	*0.007*	*0.008*	*0.005*	*0.006*
Wallonia	-0.188 ***	-0.088 ***	-0.099 ***	-0.146 ***	-0.086 ***	-0.060 ***
	0.005	*0.003*	*0.004*	*0.004*	*0.003*	*0.004*
Sector FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
R-squared	0.32	0.24	0.28	0.34	0.30	0.26
No. Obs.	95,537	95,537	95,537	78,441	78,441	78,441

Table 3. Wage-Productivity Gaps by Regions (concluded)

By sectors: Industry

	Number of firm employees>1			Number of firm employees>9		
	Value added per worker	Wage per worker	Value added-wage gap	Value added per worker	Wage per worker	Value added-wage gap
Flanders	*Reference*	*Reference*	*Reference*	*Reference*	*Reference*	*Reference*
Brussels	0.196 ***	0.153 ***	0.043 **	0.130 ***	0.112 ***	0.018
	0.022	*0.011*	*0.018*	*0.020*	*0.009*	*0.016*
Wallonia	-0.068 ***	-0.033 ***	-0.035 ***	-0.062 ***	-0.032 ***	-0.030 ***
	0.008	*0.004*	*0.007*	*0.008*	*0.004*	*0.006*
Sector FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
R-squared	0.23	0.30	0.16	0.28	0.36	0.18
No. Obs.	25,126	25,126	25,126	23,115	23,115	23,186

By sectors: Manufacturing

	Number of firm employees>1			Number of firm employees>9		
	Value added per worker	Wage per worker	Value added-wage gap	Value added per worker	Wage per worker	Value added-wage gap
Flanders	*Reference*	*Reference*	*Reference*	*Reference*	*Reference*	*Reference*
Brussels	0.240 ***	0.163 ***	0.077 ***	0.144 ***	0.113 ***	0.030 *
	0.023	*0.012*	*0.018*	*0.020*	*0.010*	*0.016*
Wallonia	-0.055 ***	-0.022 ***	-0.033 ***	-0.049 ***	-0.024 ***	-0.026 ***
	0.008	*0.004*	*0.007*	*0.008*	*0.004*	*0.006*
Year FE	YES	YES	YES	YES	YES	YES
R-squared	0.19	0.28	0.12	0.25	0.34	0.14
No. Obs.	23,392	23,392	23,392	21,825	21,758	21,825

By sectors: Services

	Number of firm employees>1			Number of firm employees>9		
	Value added per worker	Wage per worker	Value added-wage gap	Value added per worker	Wage per worker	Value added-wage gap
Flanders	*Reference*	*Reference*	*Reference*	*Reference*	*Reference*	*Reference*
Brussels	0.073 ***	0.078 ***	-0.006	0.050 ***	0.058 ***	-0.008
	0.009	*0.005*	*0.008*	*0.010*	*0.005*	*0.007*
Wallonia	-0.244 ***	-0.122 ***	-0.123 ***	-0.196 ***	-0.119 ***	-0.077 ***
	0.007	*0.004*	*0.005*	*0.006*	*0.004*	*0.005*
Sector FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
R-squared	0.25	0.20	0.25	0.24	0.25	0.22
No. Obs.	61,413	61,413	61,413	47,294	47,294	47,294

Robust standard errors in italics. ***p-value<0.01, **p-value<0.05, and *p-value<0.1.
Based on the NACE Rev. 2 classification, the economic sectors included in the regressions are: (1) industry: (b) mining and quaring, (c) manufacturing, (d) electricity, gas, steam, and air conditioning supply, (e) water supply and sewerage, (2) services: (g) wholesasle retail trade, (h) transporting and storage, (i) accomodation and food services, (j) information and communication, (k) financial and insurance services, (l) real estate 'activities, (m) professional and scientific technical activities, and (n) administrative support and service activities.

Table 4. Regional Wage Differentiation and Wage Bargaining

Table IV.4. Regional Wage Differentiation and Wage Bargaining

Fixed-effects estimation for the period 2003-2015, annual data. Dependent variable: regional wage differentiation [1/]

Lagged activity rate differential		0.081	Lagged activity rate differential		0.080
		0.071			*0.073*
Lagged unemployment differential	0.000	0.002	Lagged unemployment differential	0.001	0.003
	0.007	*0.006*		*0.007*	*0.006*
Lagged productivity differential	0.285 ***	0.279 ***	Lagged productivity differential	0.263 ***	0.255 ***
	0.078	*0.079*		*0.081*	*0.081*
Index of coordination in wage bargaining	0.004	0.003	Index of centralization in wage bargaining	0.002	0.001
	0.003	*0.003*		*0.005*	*0.005*
Index of coordination in wage bargaining *	-0.049 *	-0.047 *	Index of centralization in wage bargaining *	-0.054 *	-0.050
Productivity differential	*0.027*	*0.027*	Productivity differential	*0.033*	*0.033*
Time dummies	YES	YES	Time dummies	YES	YES
No. Obs	2,315	2,315	No. Obs	2232	2232
Number of regions	196	196	Number of regions	189	189
R-square	0.55	0.52	R-square	0.48	0.48

P-values in italics. ***,**,* represent statistical significance at the 1, 5, and 10 percent, respectively.

[1/] The sample includes 196 regions from the following countries: Belgium, Denmark, Germany, Spain, France, Italy, Netherlands, Austria, Portugal, Finland, Sweden and the UK. The definition of the regions follows Eurostat (NUTS2). The dependent variable is the difference between the wage in a region and the wage in the whole country of this region, measured as the absolute value of 1 minus the ratio of the wage in a region with the national wage. The explanatory variables include the lagged regional labor productivity differential compared with the labor productivity in the respective country, the lagged regional unemployment differential compared with the unemployment rate in the respective country, the lagged regional activity differential compared with the activity rate in the respective country (all three variables are measured the same way as the regional wage differential, and the OECD's index of the degree of coordination or centralization of the collective bargaining process in each country, which is the same for each region within. the same country. Regional wage is defined as the ratio of regional compensation to hours worked, labor productivity is defined as the ratio of regional gross value added to hours worked. Data for these variables, unemployment rate and activity rate is obtained from Eurostat.

Annex V. Debt Sustainability Analysis

Public debt sustainability risks remain high. Under the baseline scenario, the public debt-to-GDP ratio is projected to decline to 92.7 percent by 2023 under broadly unchanged policies and steady, but moderate, growth. Gross financing needs are estimated at 15 percent of GDP in 2019 and are expected to average around 14 percent over the medium term. The projected decline in public debt is sensitive to a real GDP growth shock, a combined macro-fiscal shock, and a contingent liability shock.

At end-2017, Belgium's public debt was equal to €452 billion, or 103.0 percent of GDP. Around 85 percent of the debt was owed by the federal government; the remainder was owed by regions, communities, local authorities, social security, and other federal entities. All federal debt was denominated in euros, of which 9.7 percent was short-term debt and 10.7 percent carried a variable interest rate. The average weighted duration of federal debt was 9.3 years, up from 8.7 years at end-2016. The average weighted interest rate of federal debt was 2.3 percent, down from 2.6 percent the previous year.

Baseline Scenario and Realism of Projections

1. In the baseline scenario, the ratio of public debt to GDP declines gradually over the medium term under the assumption of continued primary surpluses, moderate growth, and low real interest rates.

- **Macroeconomic assumptions.** Growth continues at about 1½ percent over the medium term, in line with potential growth, and the output gap remains closed. Inflation rises to 2 percent by 2023.
- **Fiscal assumptions.** The fiscal deficit widens to 1.2 percent in 2019 as revenues weaken. The deficit widens to 1½ percent over the medium term under the assumption of broadly unchanged policies. The structural deficit stays at around 1½ percent, while the primary surplus narrows to ½ percent by 2023.
- **Debt levels and gross financing needs.** Belgium's high level of government debt calls for using the higher scrutiny framework.[1] Government gross debt has increased significantly since 2007, reflecting large fiscal stimulus and substantial support to the banking sector. After peaking at 107.0 percent of GDP in 2014, debt has declined gradually and is projected to fall to 92.7 percent by 2023. Gross financing needs average 14 percent of GDP over the medium term.
- **Realism of baseline assumptions.** The median forecast errors for real GDP growth (0.11 percent), the primary balance (-0.31 percent), and inflation (0.33 percent) are all relatively small, measured over the period 2009–17.

[1] For advanced economies that (i) have a current or projected debt-to-GDP ratio above 60 percent; or (ii) have current or projected gross financing needs-to-GDP ratio above 20 percent; or (iii) have or are seeking exceptional access to Fund resources; teams are required to use an extended set of tools to identify and assess specific risks to debt sustainability. For these "higher scrutiny" cases, teams are also required to produce a standardized summary of risks in a heat map and prepare a write-up to discuss risks, including any country-specific considerations.

- **Heat map.** Risks from the debt level are deemed high given that the relevant threshold to which Belgium's values are compared is 85 percent and this threshold is breached under baseline and all stress test scenarios. Belgium's gross financing needs are below the benchmark of 20 percent of GDP in 2018 and decline slightly over the medium term. Belgium also faces risks relating to its external financing requirement and the large share of public debt held by foreigners. At 87 percent of GDP in 2017, the external financing requirement was significantly above the upper threshold of early warning benchmarks, and the share of debt held by foreigners is relatively high at 52 percent of total.[2]

Stress Tests

2. Stress tests suggest that debt levels are sensitive to a real GDP growth shock and a combined macro-fiscal shock. Debt would increase significantly under a financial sector contingent liability shock.

- **Growth shock.** Under this scenario, real GDP growth is reduced by one standard deviation starting in 2018–19, i.e., 1.4 percentage points relative to the baseline scenario. The assumed decline in growth leads to lower inflation (0.25 percentage points per 1 percentage point decrease in GDP growth). Under this scenario, the debt-to-GDP ratio increases to 104 percent of GDP in 2020 and declines thereafter.

- **Interest rate shock.** This scenario examines the implications for debt sustainability of an increase in interest rates by 511 basis points (calibrated based on a historical high in interest rates observed in 1995) starting in 2019. The debt-to-GDP ratio continues to decline, but at a slower rate. Gross financing needs are 2½ percentage points of GDP higher in 2023 relative to the baseline scenario.

- **Exchange rate shock.** This scenario assumes 13 percent depreciation in the real exchange rate in 2019. This shock results in small effects relative to the baseline.

- **Primary balance shock.** This scenario examines the implications of a revenue shock and a rise in interest rates leading to a cumulative 1.2 percentage points of GDP deterioration in the primary balance (one standard deviation shock) in 2018–19. This scenario illustrates risks of delayed fiscal adjustment, due to insufficient adjustment measures. This shock leads to a modest deterioration in the debt-to-GDP ratio relative to the baseline scenario.

- **Combined macro-fiscal scenario.** This scenario aggregates shocks to real growth, the interest rate, the exchange rate, and the primary balance while avoiding double-counting the effects of individual shocks. Under this scenario, debt stands at 104 percent of GDP and gross financing needs equal 17 percent of GDP at the end of the projection period.

- **Contingent liability shock.** In this scenario, non-interest expenditures in 2019 increase by the equivalent of 10 percent of banking sector assets, and growth slows by 1 standard deviation for two years. Debt increases to 122 percent of GDP before declining slowly.

[2] It should be noted, however, that Belgium has one of the strongest net international investment positions in the euro area, and a substantial portion of the external financing needs of non-financial corporations stems from intragroup lending.

Figure V. 1. Belgium: Public Sector Debt Sustainability Analysis (DSA)—Baseline Scenario

(in percent of GDP unless otherwise indicated)

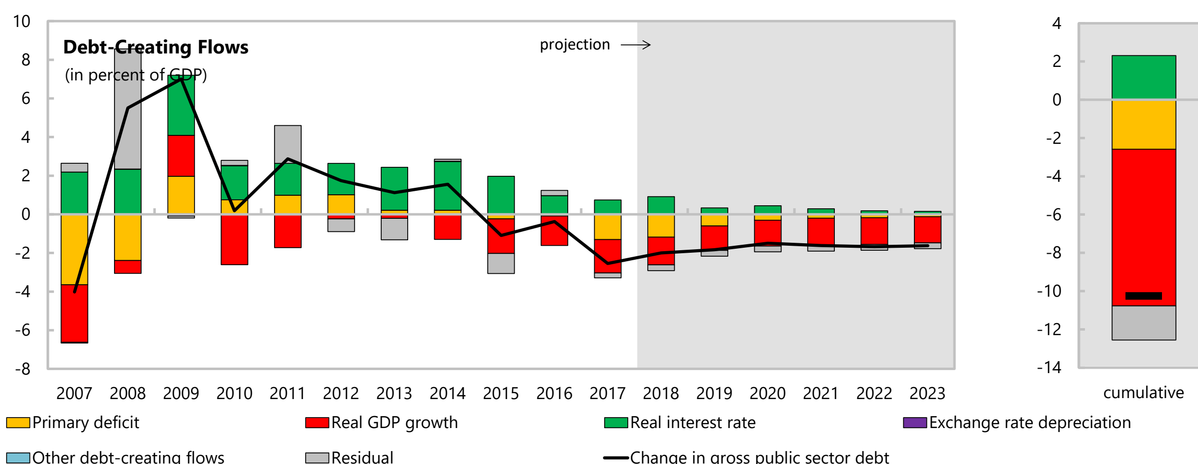
Debt, Economic and Market Indicators [1/]

	Actual			Projections					
	2007-2015 [2/]	2016	2017	2018	2019	2020	2021	2022	2023
Nominal gross public debt	100.5	106.1	103.4	101.0	99.2	97.7	96.0	94.4	92.7
Public gross financing needs	10.8	9.8	17.1	14.8	15.2	13.7	12.6	15.5	13.0
Real GDP growth (in percent)	1.1	1.5	1.7	1.4	1.3	1.4	1.5	1.5	1.5
Inflation (GDP deflator, in percent)	1.5	1.8	1.7	1.3	1.8	1.6	1.7	1.8	1.9
Nominal GDP growth (in percent)	2.6	3.3	3.4	2.8	3.1	3.0	3.2	3.3	3.4
Effective interest rate (in percent) [4/]	3.8	2.8	2.4	2.3	2.1	2.1	2.0	2.0	2.1

As of February 04, 2019		
Sovereign Spreads		
EMBIG (bp) 3/		33
5Y CDS (bp)		28
Ratings	Foreign	Local
Moody's	Aa3	Aa3
S&Ps	AA	AA
Fitch	AA-	AA-

Contribution to Changes in Public Debt

	Actual			Projections							
	2007-2015	2016	2017	2018	2019	2020	2021	2022	2023	cumulative	debt-stabilizing primary balance [9/]
Change in gross public sector debt	1.7	-0.4	-2.5	-2.0	-1.8	-1.5	-1.6	-1.7	-1.6	-10.2	
Identified debt-creating flows	1.0	-0.6	-2.3	-1.7	-1.5	-1.2	-1.3	-1.4	-1.3	-8.5	
Primary deficit	-0.1	-0.1	-1.3	-1.2	-0.6	-0.3	-0.2	-0.2	-0.1	-2.6	-1.2
Primary (noninterest) revenue and grants	50.0	50.3	51.0	51.0	50.4	50.1	50.1	50.1	50.1	301.7	
Primary (noninterest) expenditure	49.9	50.2	49.7	49.8	49.8	49.8	49.9	49.9	50.0	299.2	
Automatic debt dynamics [5/]	1.1	-0.6	-1.0	-0.5	-0.9	-0.9	-1.1	-1.2	-1.2	-5.9	
Interest rate/growth differential [6/]	1.1	-0.6	-1.0	-0.5	-0.9	-0.9	-1.1	-1.2	-1.2	-5.9	
Of which: real interest rate	2.2	1.0	0.7	0.9	0.3	0.4	0.3	0.2	0.1	2.3	
Of which: real GDP growth	-1.0	-1.5	-1.7	-1.4	-1.3	-1.3	-1.4	-1.4	-1.4	-8.2	
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	
Residual, including asset changes [8/]	0.7	0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-1.8	



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 $-g$.

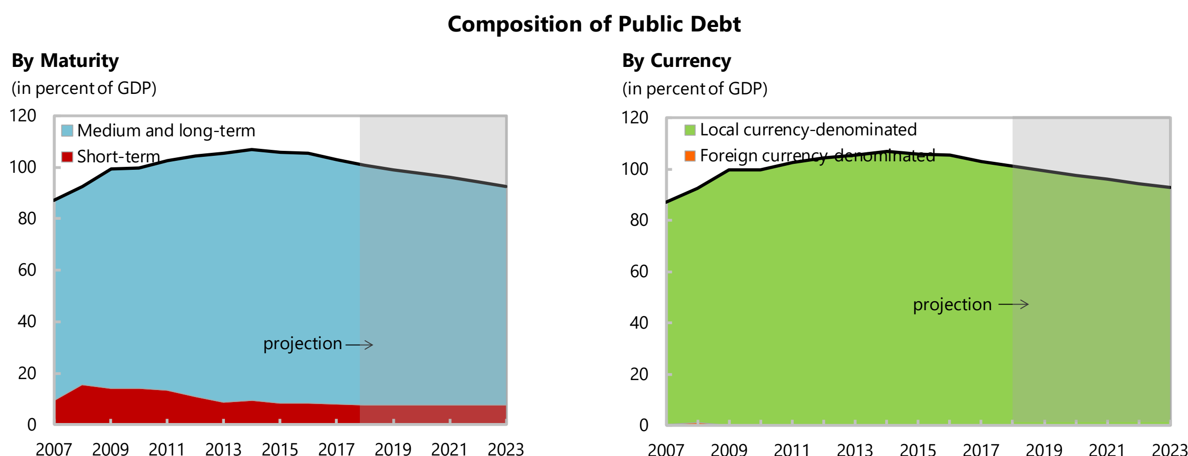
7/ The exchange rate contribution is derived from the numerator in footnote 5 as $ae(1+r)$.

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

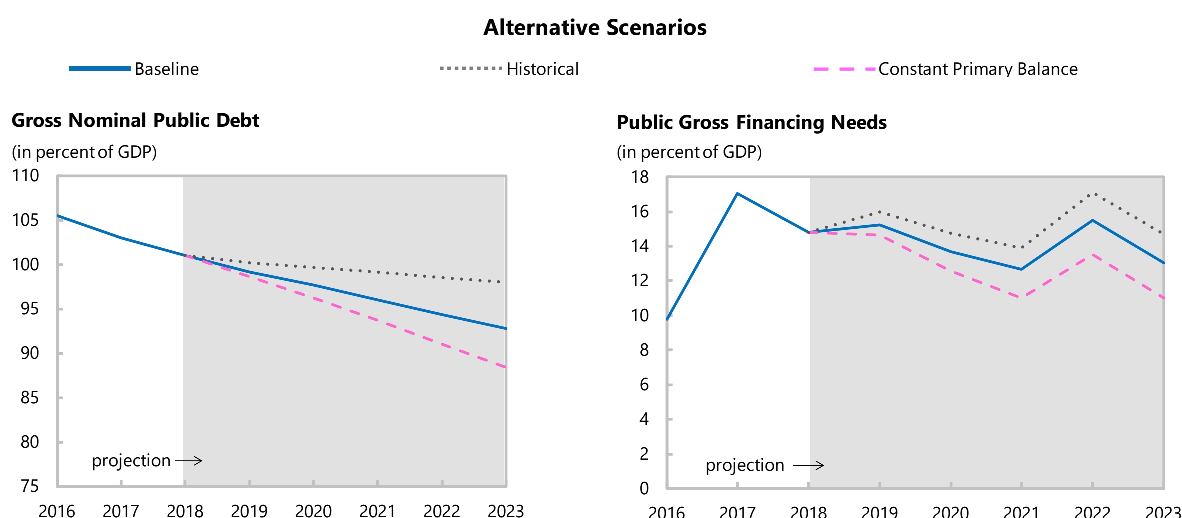
9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

Figure V. 2. Belgium: Public DSA—Composition of Public Debt and Alternative Scenarios

Composition of Public Debt



Alternative Scenarios



Underlying Assumptions
(in percent)

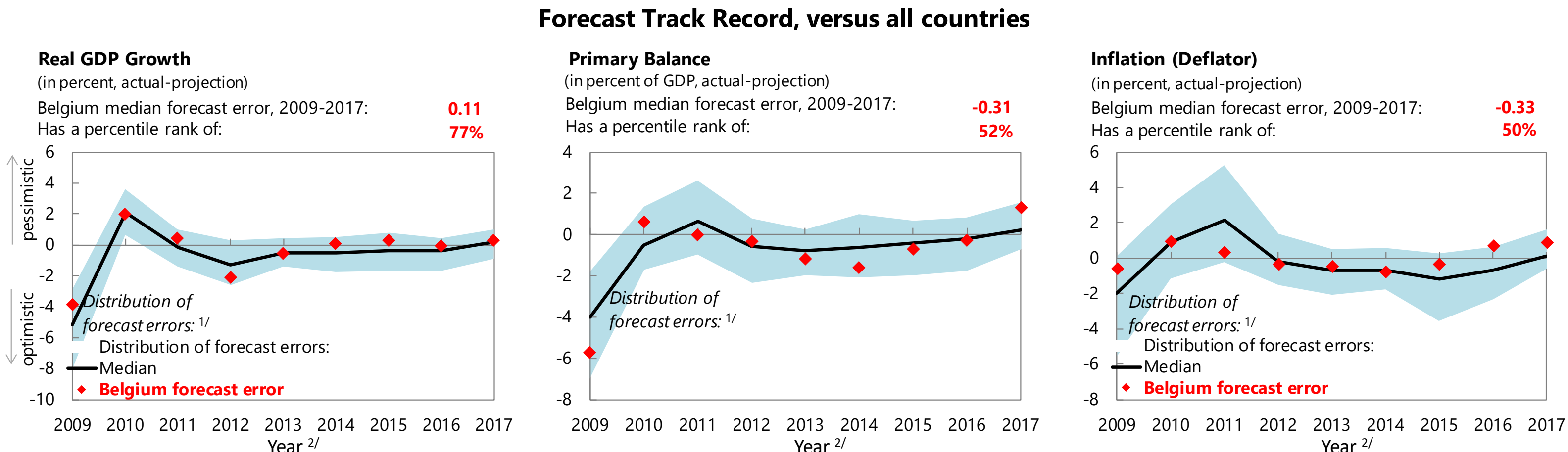
Baseline Scenario	2018	2019	2020	2021	2022	2023
Real GDP growth	1.4	1.3	1.4	1.5	1.5	1.5
Inflation	1.3	1.8	1.6	1.7	1.8	1.9
Primary Balance	1.2	0.6	0.3	0.2	0.2	0.1
Effective interest rate	2.3	2.1	2.1	2.0	2.0	2.1
Constant Primary Balance Scenario						
Real GDP growth	1.4	1.3	1.4	1.5	1.5	1.5
Inflation	1.3	1.8	1.6	1.7	1.8	1.9
Primary Balance	1.2	1.2	1.2	1.2	1.2	1.2
Effective interest rate	2.3	2.1	2.1	2.0	2.1	2.1

Historical Scenario	2018	2019	2020	2021	2022	2023
Real GDP growth	1.4	1.0	1.0	1.0	1.0	1.0
Inflation	1.3	1.8	1.6	1.7	1.8	1.9
Primary Balance	1.2	-0.1	-0.1	-0.1	-0.1	-0.1
Effective interest rate	2.3	2.1	2.3	2.3	2.4	2.5

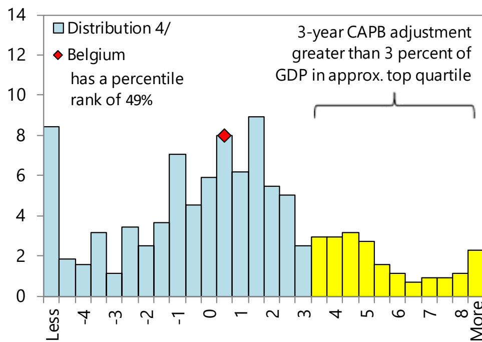
Source: IMF staff.

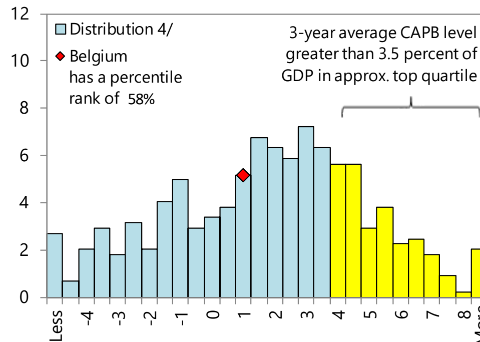
Figure V. 3. Belgium: Public DSA—Realism of Baseline Assumptions

Forecast Track Record, versus all countries

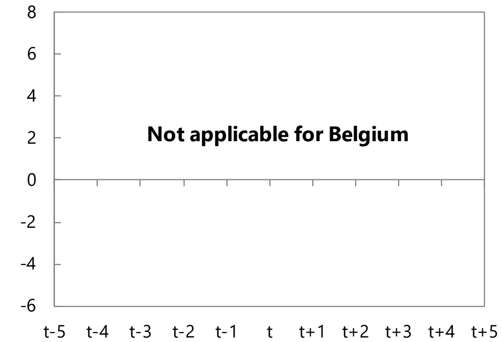


Assessing the Realism of Projected Fiscal Adjustment





Boom-Bust Analysis 3/



Source : IMF Staff.

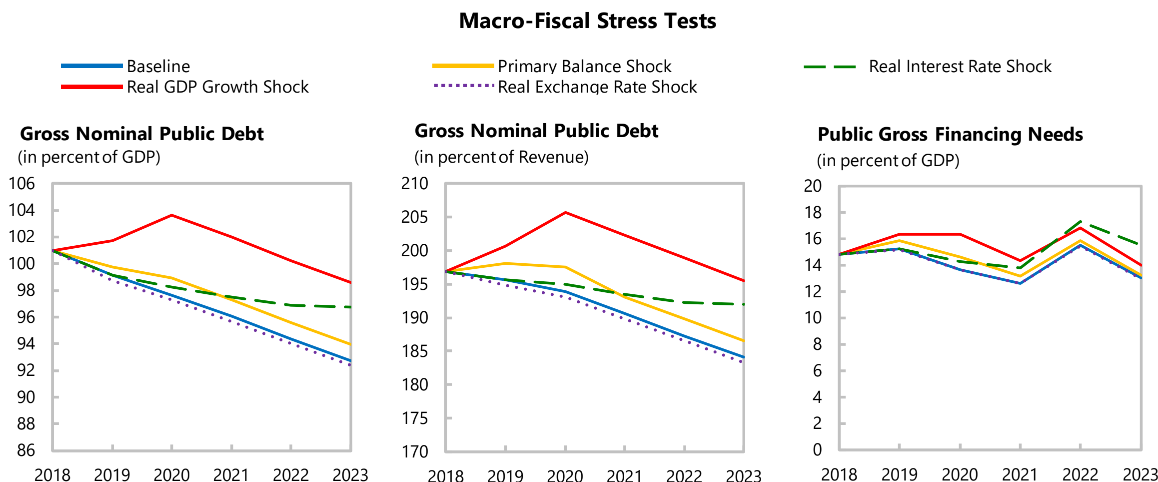
1/ Plotted distribution includes all countries, percentile rank refers to all countries.

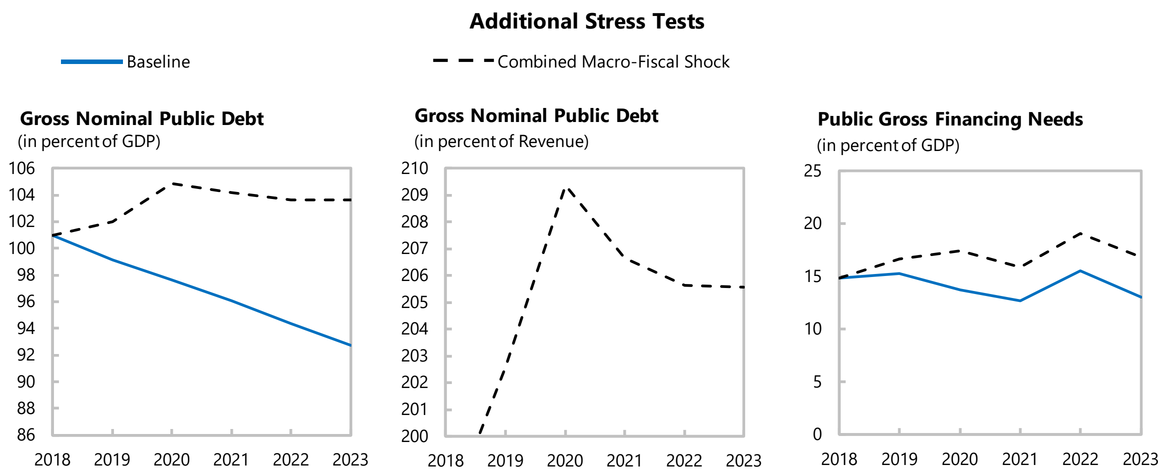
2/ Projections made in the spring WEO vintage of the preceding year.

3/ Not applicable for Belgium, as it meets neither the positive output gap criterion nor the private credit growth criterion.

4/ Data cover annual obervations from 1990 to 2011 for advanced and emerging economies with debt greater than 60 percent of GDP. Percent of sample on vertical axis.

Figure V. 4. Belgium: Public DSA—Stress Tests





Underlying Assumptions
(in percent)

Primary Balance Shock	2018	2019	2020	2021	2022	2023
Real GDP growth	1.4	1.3	1.4	1.5	1.5	1.5
Inflation	1.3	1.8	1.6	1.7	1.8	1.9
Primary balance	1.2	0.0	-0.3	0.2	0.2	0.1
Effective interest rate	2.3	2.1	2.1	2.0	2.0	2.1
Real Interest Rate Shock						
Real GDP growth	1.4	1.3	1.4	1.5	1.5	1.5
Inflation	1.3	1.8	1.6	1.7	1.8	1.9
Primary balance	1.2	0.6	0.3	0.2	0.2	0.1
Effective interest rate	2.3	2.1	2.7	2.9	3.2	3.7
Combined Shock						
Real GDP growth	1.4	-0.1	0.0	1.5	1.5	1.5
Inflation	1.3	1.4	1.3	1.7	1.8	1.9
Primary balance	1.2	-0.6	-1.7	0.2	0.2	0.1
Effective interest rate	2.3	2.1	2.7	3.0	3.3	3.8

Real GDP Growth Shock	2018	2019	2020	2021	2022	2023
Real GDP growth	1.4	-0.1	0.0	1.5	1.5	1.5
Inflation	1.3	1.4	1.3	1.7	1.8	1.9
Primary balance	1.2	-0.2	-1.4	0.2	0.2	0.1
Effective interest rate	2.3	2.1	2.1	2.1	2.1	2.1
Real Exchange Rate Shock						
Real GDP growth	1.4	1.3	1.4	1.5	1.5	1.5
Inflation	1.3	2.2	1.6	1.7	1.8	1.9
Primary balance	1.2	0.6	0.3	0.2	0.2	0.1
Effective interest rate	2.3	2.1	2.1	2.0	2.0	2.1

Source: IMF staff.

Figure V. 5. Belgium: Public DSA Risk Assessment

Source: IMF staff.

1/ The cell is highlighted in green if debt burden benchmark of 85% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

2/ The cell is highlighted in green if gross financing needs benchmark of 20% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

3/ The cell is highlighted in green if country value is less than the lower risk-assessment benchmark, red if country value exceeds the upper risk-assessment benchmark, yellow if country value is between the lower and upper risk-assessment benchmarks. If data are unavailable or indicator is not relevant, cell is white.
Lower and upper risk-assessment benchmarks are:

400 and 600 basis points for bond spreads; 17 and 25 percent of GDP for external financing requirement; 1 and 1.5 percent for change in the share of short-term debt; 30 and 45 percent for the public debt held by non-residents.

4/ Long-term bond spread over German bonds, an average over the last 3 months, 06-Nov-18 through 04-Feb-19.

5/ External financing requirement is defined as the sum of current account deficit, amortization of medium and long-term total external debt, and short-term total external debt at the end of previous period.

Annex VI. Legislated and Planned Labor Market and Pension Reform Measures

Date of reform	Description	Status
	UNEMPLOYMENT BENEFITS	
Search requirements		
January 1, 2012	Suitable job is 25 km away or less → Suitable job is 60 km away or less.	Implemented
January 1, 2012	Restrict rights to search for the same kind of job to six months → Restrict right to search for the same kind of job to three months (young unemployed) and five months (other unemployed).	Implemented
July 1, 2014	Monitor search efforts for 18–21 months after unemployment, with an annual follow-up → Monitor search efforts nine months (<26 years old) or 12 months (26 or older) after start of unemployment, with follow-ups every nine months.	Implemented
January 1, 2015	Search requirement until 60 → Search requirements applicable until 60 and according to concept of "adequate availability" between 60 and 65. Exemptions are still possible according to the length of the career.	Pending the agreement on the definition of "adequate availability"
January 1, 2015	Exemption of search requirements for familial and social reasons → Use of the exemption is restricted (exemption for caregivers with more restrictive access conditions).	Implemented
	To obtain unemployment benefits, unemployed have to be registered as job seekers within 2 weeks from the day they are laid off → Registration as job seeker has to be done within 4 weeks following the notice of lay-off.	Proposed in the 2018 jobs deal
Unemployment benefit levels		
November 1, 2012	Initial unemployment benefits are 60 percent of last wage, falling after one year to 55 percent for people living alone and 40 percent for people living in a family with another income → Initial unemployment benefits are 65 percent of last wage for three months, then 60 percent for the following nine months. After 13 months there is a reduction to 55 percent for people living alone and 40 percent for people living in a family with another income. Between 15 and 24 months of unemployment, depending on career length before unemployment, a stepwise reduction to arrive after maximum 48 months at a level just above social assistance.	Implemented
November 1, 2012 November 1, 2015 November 1, 2016	No degressivity of unemployment benefits for unemployed proving long periods of work → Required career length did raise from 20 years in 2012, to 23 years in 2015, and will become 25 years from November 2016 on.	Implemented
September 1, 2012	Higher unemployment benefits for unemployed above 50 (Seniority complement) → Eliminated for new entrants, except in specific cases related to collective dismissals or heavy jobs.	Implemented
January 1, 2015	Unemployment benefit based on the wage of the last work period of at least 4 weeks → No legislative change, but at	Implemented

	random inquiry of suspicious wage growth in the last weeks of a contract.	
January 1, 2015	Involuntary part time workers can obtain an allowance for income support so that their net income is higher than the unemployment benefit in case of full unemployment → Allowance for income support in case of part time job (AGR) is divided by 2 after two years of work. Replaced by mechanism to suspend allowance when employee does not accept more hours; employer who does not give available supplementary hours to part time workers with an allowance pays an extra charge. Efforts towards more working hours are evaluated after one year by the PES, leading eventually to loss of unemployment benefits if efforts are judged insufficient. Calculation of the allowance for income support (AGR) is reviewed based on the calculation that was made before 2008.	In draft law. Comes into force in early 2019 Applied by the PES since July 2018 Adapted calculation: implemented January 2015
	The degressivity of unemployment benefits will be strengthened.	Proposed in the 2018 jobs deal
Unemployment benefits for the young entering the labor force		
January 1, 2012	Available after nine months of unemployment → Available after 12 months of unemployment.	Implemented
August 1, 2013	Evaluation of search efforts before opening the right on unemployment benefits for young people leaving school → Two evaluations of search efforts 7 and 11 months after registering as jobseeker. Opening of right on unemployment benefits only after two positive evaluations.	Implemented for all youth that have left school after June 1, 2013
2013	WIJ-projects in Flanders → Work immersion projects for low-educated youths with poor labor market prospects, offering them orientation, guidance, training, and internships.	Implemented
July 1, 2014	Search effort requirement every 12 or 16 months when on unemployment benefits based on studies (insertion benefits, the earlier waiting allowances) → Evaluation of search requirements every six months. In case of negative evaluation: no UB until the next evaluation, and no earlier than after 6 months.	Implemented
January 1, 2012	Unlimited → Limited to three years (five years for worker on the margin of the labor market) for unemployed living with family with other income, or until the age of 33 in other family situations. Period of three years could be extended by six months if at least worked six months in the last 24 months.	Implemented—first application started in January 2015
September 1, 2015	Young school leavers can apply for unemployment benefit if they have participated in the secondary education final exam → Until 21, young school leavers can only apply for unemployment benefit if they have obtained a secondary education degree or another degree opening good prospects on the labor market.	Implemented
January 1, 2015	For school leavers, the maximum age to introduce a demand for unemployment benefits is 30 → Maximum age reduced to 25.	Implemented

Easing the transition to the labor market for low-skilled youth		
January 1, 2014 September 1, 2015	At sectoral level social partners have to conclude collective agreements addressing the employment needs of groups at risk for the equivalent of at least 0.10 percent of gross wage cost of the whole sector. → 2013: at least one quarter (0.025 percent) of the money spent has to go to unemployed youth < 26 years. 2015: sectors are invited to raise the effort for youth: at least 0.05 percent has to go to actions for youth.	Implemented
September 1, 2015	Supplementary efforts at sectorial level for so called "ingrown" jobs for youth < 26 years without work-experience → Sectorial plans to offer supplementary job experience for youth in ingrown-jobs (total budget of €12 million), only accessible for sectors that have foreseen an effort of at least 0.05 percent (see previous line).	13 plans approved—implementation in 2015-2016. New series of plans approved for the period 2017-2018.
July 2018	Launch of "coup de poing pénuries" in the Walloon Region, a series of actions aimed at addressing labor market shortages through tailor-made training by FOREM or IFAPME and partly carried out in-company.	Implemented
	The measure "Incitant +" in the Walloon Region aims to encourage job seekers to seek training in sectors where labor shortages exist. The program comprises a financial incentive for job seekers who successfully complete their training and line up a job interview.	In draft law
	The existing "Formation-Insertion" plan has the dual objective of enabling job seekers to develop their competences while being employed with a fixed term contract and enabling companies to train their future employees. This plan, however, is underutilized by companies due to administrative constraints and despite high insertion rates. A proposed reform of the plan aims to make it more flexible and in line with corporate needs.	In draft law
Government subsidy for temporary unemployment		
January 1, 2012 April 1, 2016	Without employer penalty → Employers will pay a penalty if there is excess use of the system.	Implemented and strengthened from 2016 on
January 1, 2015	Allowance for temporary unemployment is 70 percent of last salary → Reduced to 65 percent of salary.	Implemented
January 1, 2012 April 1, 2016	No limits on the use by employers of temporary unemployment → Stronger penalty in case of excessive use.	Implemented
Government subsidy for time-credit and career break system		
January 1, 2012 September 1, 2012 January 1, 2015 April 1, 2017	Five-year duration before the age of 50 → 2013: One-year duration (two to five years if part-time), with supplementary credit of maximum 36 months for specific motivated breaks, such as childcare or studies (maximum 48 months for specific cases such as taking care of a handicapped child less than 21 years old). 2015: Removal of the rights to benefits for one-year non-motivated break. The rights to a one-year non-motivated break are maintained, but without any payment. For childcare, one supplementary year of break with benefits.	Implemented Implemented Implemented

	2017: Abrogation of the rights to a one-year non-motivated break. Credit for studies prolonged from 36 to 48 months.	Draft law approved November 2018
January 1, 2012 September 1, 2012 January 1, 2015	Unlimited duration above the age of 50 (time reduction) → 2013: Unlimited duration above the age of 55 (time reduction). 2015: Unlimited duration (time reduction) above the age of 60 and 25 years of seniority (with transitional measures and possible derogations till 2019). All exceptions beyond the age of 60 are abrogated.	Implemented Implemented with some exceptions (age limit 55) for long periods of night- and shiftwork Draft royal decree approved by the government in November 2018
January 1, 2012	72-month duration in public sector → 60-month duration in public sector.	Implemented
	More favorable rights on career breaks in the public sector → Progressive harmonization of career break in the public sector with time credit in the private sector (full harmonization by 2020).	Planned by the government. Draft law submitted to social dialogue end-2017.
September 2, 2016	Since the 6th state reform, the career break system in the public sector has been devolved to the regions. In Flanders, the career break scheme for public sector workers over 55 was abolished and replaced by a system based on care motives. People caring for a child of up to 12 years of age, a disabled child, or a sick relative, or who are performing palliative care, are eligible for 18 months of full-time leave, 36 months halftime, or 90 months of 1/5th working time reduction.	Implemented
PENSION BENEFITS		
Supplementary pensions		
Law of February 18, 2018	The possibility of installing a supplementary pension (second pillar) will be available to self-employed workers who are not company managers.	Implemented
2018	Employees will have the opportunity to voluntarily invest in a supplementary pension in the second pillar through payroll deductions made by the employer.	Submitted to Parliament
Pre-pension benefits (renamed to "unemployment benefits with employer top-up")		
January 1, 2012 January 1, 2015	Minimum age and career length: 60/30 (men) 60/26 (women) → 2012/13: Minimum age and career length 60/40 for new collective agreements (60 years in 2015 for existing agreements with 40 years career in 2015 for men and in 2024 for women).	Implemented
January 1, 2012 January 1, 2015	Or: 58/37 (men) and 58/33 (women) for long careers → 2012/13: 60/40 for men, 35 for women (40 in 2015) for new collective agreements. For existing agreements: 60 in 2015 for men and 38 for women (40 in 2017)	Implemented
January 1, 2015	Or: 58/35 for heavy jobs → 58/35 for heavy jobs Minimum age 58 for new entrants in case of hardship jobs (60 on a date to be fixed by the National Labor Council) Special schemes 56/33 become 58/33 (60 on a date to be fixed by the National Labor Council).	Implemented – transitional period 2015–2017 with possibility to maintain 60 instead of 62

SPF Pensions	Pre-pension years count fully towards pension rights at the last wage level → Pre-pension years below the age of 60 do not count towards pension rights at last wage level but on a lower fictive level	Implemented
January 1, 2016 and January 1, 2017	Reduced social security contributions on employer's top-up payment → Employer social security contributions will be higher and linked to age of worker entering pre-pension	Implemented
January 1, 2015	The age limit in restructuring companies and loss-making companies is between 50 and 55 → 2015: The age limit is 55 in 2015 and rises every year with one year to arrive at the minimum age of 60 in 2020 for companies in difficulty. For companies undergoing restructuring, the age limit will be 59 in 2019 and 60 in 2020.	Implemented
January 1, 2016	Top-up from the employer is submitted to taxation → No taxation during periods of work by another employer	Implemented
Part-time pre-pension system		
	Part-time pre-pension system → No new entries from 2012	Implemented
Government subsidy for working time reduction to part time (time-credit with unlimited duration)		
January 1, 2012	Minimum age 50 → 2013: Minimum age 55 (with exceptions for physically demanding jobs)	Implemented
January 1, 2015	2015: Minimum age 60 (with exceptions for physically demanding jobs). Only for the benefits (not the rights).	Planned by the new government
	All exceptions beyond the age of 60 are abrogated.	Draft royal decree approved by the government in November 2018
Statutory early retirement benefit		
	2013: minimum age increased by six months every year to 62 by 2016, career length increased by one year every year to 40 years by 2015. Exceptions for long career: 61/41 or 60/42 in 2016.	Implemented
Program Act of December 19, 2014	From 2015 onwards: minimum age will increase by six months in 2017 and 2018 to 63 on condition of a full career length that will increase by one year to 41 in 2017 and to 42 in 2019. Exceptions for long career will be stricter: required career length to retire at 60 will increase from 42 years in 2016 to 43 years in 2017 and 44 in 2019 (and for an early retirement at the age of 61 career length rises from 41 in 2016 to 42 in 2017 and 43 in 2019).	Implemented
Program Act of December 19, 2014	After introducing a unified pension bonus for workers, self-employed persons and statutory government employees by the previous government, the pension bonus is phased out. Only people who met conditions for early retirement by December 31, 2014 or were 65 years old and had a career of 40 before December 31, 2014 were still eligible to a pension bonus.	Implemented
Law of April 28, 2015	Diploma bonus for career condition early retirement: years spent to get a bachelor or a master's degree required to become civil servants are accounted for in the calculation of the career condition for early retirement. Diploma bonus is being phased out since the start of 2016.	Implemented

Law of October 2, 2017	Harmonization of the diploma bonus for the pension calculation: the years spent to get a bachelor or a master degree required to become civil servants were taken into account for free in the pension calculation of statutory government employees. This will be abolished from December 1, 2017 onwards, and the same system of paid regularization of the study period will be applicable to all pension regimes.	Implemented
January 1, 2020	Introduction of "heavy jobs" in the pension system—will replace the so-called "tantièmes" in the civil servants' scheme: the preferential career fractions ("tantièmes") will be adapted and integrated in the general pension scheme for civil servants. The preferential regimes that exist for the military and the mobile personnel of the national railway company will be abolished. These measures will be accompanied by the introduction of specific pension measures for "heavy jobs" ("zwaar werk"/"métier lourd" = particularly demanding and tough jobs).	Will be applicable from January 1, 2020 onwards. Principles confirmed by the Council of Ministers on October 25, 2018.
Employer obligations towards older workers		
January 1, 2013	Draw up a plan to retain older workers	Implemented by collective agreement n° 104
Social security contributions and wage subsidies		
January 1, 2014 January 1, 2015 January 1, 2016 January 1, 2017	Reduction for small SME's → 2014: First hiring in SMEs extended to 4 and 5 2015: strengthening for first three 2016: First hirings extended to 6+, strengthening for 1–5 hirings (complete exemption for 1st employee during unlimited period) 2017: further strengthening (period of advantage extended to 3 years for 4th to 6th employees)	Fully implemented
July 1, 2016	Following the 6th state reform, reductions in social security contributions for target groups became a regional competence. In Flanders, the existing reductions for the youth, older workers, and the long-term unemployed were reformed into two major reductions: for the hiring of young workers (<25) without a higher education degree and with a low wage, and for older workers (55+), with a higher reduction when hiring older jobseekers. Policy expanded as of January 1, 2019. Young workers without a secondary education degree, and jobseekers over 55 who are hired, are exempt from employers' social security contributions during the first two years of their employment.	Implemented
Encourage longer employment via pension system reforms		
Law of August 10, 2015	Legal pension age of 65 is increased to 66 in 2025 and 67 in 2030.	Implemented
Law of August 10, 2015	Previously: survivors' pension for widow(er)s: always for survivors of 45 years and older; under certain conditions in case of survivors younger than 45. Previous government: for widow(er)s younger than 45 survivors' pension replaced by transition allowance	Implemented

	(12 months if no children, 24 months if children) that can be combined without limitation with work income, followed by automatic access to unemployment benefit if no gainful occupation and entitled to appropriate and early guidance. Eligibility age of 45 increased gradually to 50 by 2025. This government: as for 2025, the eligibility age of 50 will increase gradually by one year each year to reach 55 in 2030.	Partially overturned by the Constitutional Court in November 2017.
Royal decree of January 20, 2015	Previous government: for pensioners aged 65 or more, ceiling on permitted earned incomes is abolished for those with careers spanning more than 42 years. From 2015 onwards: no limits to income for pensioners who are 65 years old or have a career of 45 years.	Implemented
January 1, 2019	Previously: full valorization of assimilated periods in pension calculation at last wage earned: unemployment, unemployment with company top-up and time credit. Previous government: limited valorization of assimilated periods in pension calculation of the 3rd period of unemployment, unemployment with company top-up before 60 and end of career time credit before 60 at pension minimum wage. Unmotivated time credit limited to 1-year assimilation. From 2019 onwards, assimilated periods of the 2nd and 3rd period of unemployment as well as unemployment with company top-up, regardless of age, at pension minimum wage. Exceptions to these principles include: • with regard to unemployment: periods of unemployment after the age of 50; • with regard to unemployment with company top-up: companies in restructuration and companies in difficulties, unemployment with company top-up after a career of "heavy job" as well as unemployment with company top-up for medical reasons.	Applicable from January 1, 2019 onwards
Royal decree of December 30, 2014	Unmotivated time credit is no longer taken into account for pension calculation from 2015 onwards, as an unemployment benefit is no longer granted for this type of time credit.	Implemented
Law of December 5, 2017	Previously: principle of career unity in pension calculation in pension schemes of workers, self-employed persons and statutory government employees: career fraction or sum of career fractions cannot exceed 1 (45/45). Previous government: from 2015 onwards, notion of career no longer expressed in years (45), but in full time equivalent days (14,040). From January 1, 2019, onwards: all days that are effectively worked will result in pension rights, even if they exceed the reference career of 14.040 days. Days of unemployment or pre-pension that exceed the reference career of 14.040 days will no longer result in supplementary pension rights.	Implemented
July 1, 2019	Introduction of the partial pension. The partial pension will allow taking up a part of the pension rights while accumulating pension rights for the (partially) continued activity.	Applicable from July 1, 2019, onwards

Law of December 18, 2015	Access to the second pillar pension has been adapted to be in line with the statutory retirement age: second pillar pension accessible only when conditions for legal pension are met.	Implemented
Decrease pension expenditure		
Program Act of December 19, 2014	Previously: pension complement for frontier or seasonal workers in workers' pension scheme: frontier or seasonal workers residing in Belgium granted pension complement to increase foreign pension to level of pension they would have received if they had worked in Belgium. As of 2015, pension complement for frontier or seasonal workers is no longer granted to people who did not work as frontier or seasonal workers before 2015. For those who have worked as a frontier or seasonal worker before December 1, 2015, the pension complement: • takes into account all other pension benefits; • is only granted when the foreign legal pension is taken up.	Implemented
Royal decree of December 9, 2014	Minimum pension: Career condition to benefit from 1/45th of the minimum pension is 30 years of 208 days. If condition is met, 1 day suffices to obtain an additional 1/45 of the minimum pension. From 2015, at least 52 days in a year are required to obtain 1/45th of the minimum pension.	Implemented
Law of March 30, 2018	Introduction of the "mixed pension": the periods during which a civil servant worked as an employee and not as a statutory member of the personnel will no longer be taken into account for the statutory pension but create a pension as employee. The legal framework for supplementary pensions will be adapted to encourage public administrations and companies to offer a supplementary pension scheme to their employees. The federal government will install a supplementary pension system, financed by sufficient contributions, for its employees.	Implemented
	Reform of the pension for physical incapacity: the procedure for the pension for physical incapacity, which exists only in the public sector, will be adapted. This measure will act as a stimulus for the professional reintegration of the civil servant: instead of deciding immediately about the pension for physical incapacity as is the case today, which functions as an inactivity trap, the civil servant cannot be declared inapt after the first examination. The second examination can take place only after a minimum interval of 2 years (exception in case of definitive incapacity after 36 years of career).	Draft law approved by the Council of Ministers
	Structural reform of the pension scheme: a points-based pension system will be implemented by 2030. This will allow a closer and more transparent monitoring of the financial sustainability and equilibrium of the Belgian pension system.	Preparatory work continues
Sources: Belgian Federal Public Service Employment, Labor and Social Dialogue, National Bank of Belgium, National Employment Office, Federal Planning Bureau, Ministry of Pensions, and Belgian Stability Program 2012–15.		

INTERNATIONAL MONETARY FUND

BELGIUM

February 19, 2019

STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

Prepared By European Department

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FUND RELATIONS

(As of January 31, 2019)

Membership Status: Joined December 27, 1945; Article VIII.

General Resources Account:

	SDR Million	Percent of Quota
Quota	6,410.70	100.00
IMF's Holdings of Currency (Holdings Rate)	5,736.20	89.48
Reserve Tranche Position	674.53	10.52
Lending to the Fund		
New Arrangements to Borrow	330.96	

SDR Department:

	SDR Million	Percent of Allocation
Net Cumulative Allocation	4,323.34	100.00
Holdings	3,894.35	90.08

Outstanding Purchases and Loans: None

Latest Financial Arrangements:

Type	Date of Arrangement	Expiration Date	Amount Approved (SDR Million)	Amount Drawn (SDR Million)
Stand-By	Jun 19, 1952	Jun 18, 1957	50.00	50.00

Overdue Obligations and Projected Payments to Fund [1/]

(SDR Million; based on existing use of resources and present holdings of SDRs):

	Forthcoming				
	2019	2020	2021	2022	2023
Principal					
Charges/Interest	4.81	4.84	4.83	4.83	4.83
Total	4.81	4.84	4.83	4.83	4.83

[1/] When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

Implementation of HIPC Initiative: Not applicable

Safeguards Assessments: Not applicable

Exchange Rate Assessments:

- Belgium's currency is the euro, which floats freely and independently against other currencies.
- Belgium has accepted the obligations under Article VIII, Section 2(a) and 3, and maintains an exchange system free of restrictions on payment and transfers for current international transactions except for restrictions maintained solely for security reasons, which have been notified to the Fund pursuant to Executive Board Decision No. 144-(52/51).

Last Article IV Consultation:

The last Article IV consultation was concluded on March 7, 2018. The associated Executive Board assessment is available at https://www.imf.org/en/News/Articles/2018/03/08/pr1879-belgium-imf-executive-board-concludes-2018-article-iv-consultation and the staff report (IMF Country Report No. 18/71) at https://www.imf.org/~/media/Files/Publications/CR/2018/cr1871.ashx. Belgium is on the standard 12-month consultation cycle.

Financial Sector Assessment Program (FSAP) Participation:

- **Belgium: Financial System Stability Assessment** IMF Country Report No. 18/67

Summary: The FSAP conducted in late 2017 concluded that the Belgian financial sector has become more resilient as a result of structural changes experienced since the global financial crisis, but is facing growing vulnerabilities, mostly in the form of risky mortgages. Nonetheless, banks and insurance companies remain capable of absorbing credit, sovereign, and market losses in the event of a severe deterioration in macro financial conditions. To contain rising mortgage-related risks, macroprudential policies recently proposed by the NBB should be enacted promptly. Other risks, including banks' capacity to cope with interest rate shocks, credit risk vulnerabilities in selected portfolios, and growing liquidity risk in insurance companies, should be monitored closely.

Financial sector supervision and crisis management arrangements have been upgraded markedly. However, the transition to a full banking union must be carefully managed by national and European authorities given the presence in Belgium of large subsidiaries of euro area banks. Sufficient capital and loss absorbing capacity should be kept in these subsidiaries to ensure the viability of group resolution strategies. The NBB and European authorities should continue ongoing efforts to upgrade their supervisory and crisis management frameworks and operational capacity, including by prioritizing the resolution planning for important banks and strengthening the deposit insurance system. It will also be important to address the challenges posed by complex financial conglomerates, ongoing changes in the risk profile of the insurance sector, and potential challenges arising from the low quality of some insurers' capital.

The oversight arrangement for the Belgium-based Society for Worldwide Interbank Financial Telecommunication (SWIFT) has proven effective but is being challenged by new risks. To strengthen the NBB's ability to exercise its role as overseer and protect Belgium's reputation as a key hub for financial market infrastructures, the authorities should consider complementing the NBB's use of

moral suasion with regulatory and supervisory powers and should enhance the NBB's ability to share information with foreign authorities.

Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT):

Belgium underwent a mutual evaluation of its AML/CFT regime by the Financial Action Task Force (FATF) in 2015. The FATF 2015 report noted that Belgium has the core elements of a sound AML/CFT regime, although some elements are not yet fully in line with the 2012 FATF Recommendations. Following the adoption of the mutual evaluation report, Belgium was placed in enhanced follow-up process. The latest report (third enhanced follow-up) noted Belgium's progress in strengthening its framework to tackle money laundering and terrorist financing since the mutual evaluation. However, efforts need to continue to fully implement the FATF Standard, including Recommendations 13 and 14 on corresponding banking, and money and value transfer services.

STATISTICAL ISSUES

Belgium's economic and financial statistics are adequate for surveillance purposes. The National Bank of Belgium (NBB) regularly publishes a full range of economic and financial data and provides calendar dates of main statistical releases. On-line access to these comprehensive databases is facilitated by the NBB's data search engine, NBB.Stat. Belgium is a SDDS subscriber. Statistics for International Financial Statistics on banking institutions and monetary aggregates are prepared on a monthly basis and are timely.

Belgium adopted the European System of Integrated Economic Accounts 2010 (ESA 2010) in 2014. Revisions of national accounts were released in September 2014 to comply with EUROSTAT requirements to provide national accounts statistics in ESA 2010. Unlike in other countries, the central bank is responsible for compiling national accounts statistics. Quarterly accounts are published within a lag of three months. Both annual and quarterly accounts data are of good quality, with shortcomings mainly related to export and import deflators, which are based on unit values, rather than prices collected directly from exporters and importers.

Belgium compiles and publishes a complete set of general government accounts on an accrual basis (ESA 2010). The NBB publishes annual and quarterly data on general government revenue, expenditure, and net lending/ borrowing; transactions in financial assets and liabilities and a financial balance sheet data; and details on the consolidated gross debt.

The overall quality and availability of financial indicators are good. The authorities are providing quarterly updates of financial sector indicators (FSIs) in a timely manner.

Key publicly accessible websites for macroeconomic data and analysis are:

NBB.Stat, http://stat.nbb.be/?lang=en

National Statistics Institute, www.statbel.fgov.be

National Bank of Belgium, www.nbb.be

Federal Planning Bureau, www.plan.be

High Council of Finance, https://www.highcounciloffinance.be

Central Economic Council, www.ccecrb.fgov.be

Belgium: Common Indicators Required for Surveillance

(As of January 2019)

	Date of latest observation	Date received	Frequency of Data[6]	Frequency of Reporting[6]	Frequency of Publication[6]
Exchange Rates	12/18	1/19	M	M	M
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	12/18	1/19	M	M	M
International Investment Position	2018:Q3	12/18	Q	Q	Q
Reserve/Base Money	12/18	1/19	M	M	M
Broad Money	12/18	1/19	M	M	M
Central Bank Balance Sheet	12/18	1/19	M	M	M
Consolidated Balance Sheet of the Banking System	12/18	1/19	M	M	M
Interest Rates[2]	12/18	1/19	M	M	M
Consumer Price Index	12/18	1/19	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[3]—General Government[4]	2017	3/18	A	A	A
Revenue, Expenditure, Balance and Composition of Financing[3]—Central Government[5]	12/18	1/19	M	M	M
Stock of Central Government Debt	2018:Q3	12/18	Q	Q	Q
External Current Account Balance	9/18	12/18	M	M	M
Exports and Imports of Goods and Services	9/18	12/18	M	M	M
GDP/GNP	2018:Q3	11/18	Q	Q	Q
Gross External Debt	2018:Q3	12/18	Q	Q	Q

[1] Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.

[2] Both market-based and officially-determined, including discount rates, money market rates, and 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] This information is provided on a budget-accounting basis (not on a national accounts basis).

[6] Daily (D), weekly (W), monthly (M), quarterly (Q), annually (A), irregular (I), and not available (NA)

Statement by Mr. De Lannoy, Executive Director for Belgium and Mr. Cools, Advisor
March 6, 2019

The authorities thank staff for the candid exchange of views during the Article IV consultation mission. Staff's outreach to all stakeholders has been greatly appreciated as Belgium has a long political tradition of consensus building and social concertation. Over the last years, Belgium has implemented a wide set of reforms, including pension, labor market and a corporate income tax reform, while bringing public finances on a sounder footing. Given the increased external uncertainties related to Brexit and trade tensions, the authorities consider that continuing the reform momentum and sustaining fiscal prudence are more crucial than ever for an open economy like Belgium.

A continuing recovery

In 2018, Belgium's economy continued to recover at an annualized growth rate of 1.4 percent and a 1.2 percent expansion of employment. The authorities' policies have been successful in creating jobs. They have stimulated demand for labor through wage moderation and reductions in employers' contributions and have supported the labor supply by reducing taxes, extending the working life and activating job-seekers. As a result, the labor supply has expanded, and unemployment has fallen, making Belgium's recovery remarkably job-rich. Over the past four years, the labor force has expanded by around 120,000 units, of which more than half is due to an increase in the participation rate. Nonetheless, over the same period, the number of unemployed dropped by around 100,000 units, bringing the unemployment rate down to 6 percent, the lowest level since the 1970s. In all, no less than 220,000 jobs were created in Belgium during the last four years, and mainly in the business sector rather than in the public or state-aided sectors.

Notwithstanding these labor market developments, the Belgian economy also shows signs of strains. In line with staff's advice, the authorities acknowledge three key areas for further work: 1) addressing labor shortages and labor market disparities, 2) boosting productivity growth and improving infrastructure, and 3) completing fiscal consolidation.

Addressing Labor Shortages and Labor Market Disparities

70percent of the Belgian population in the 20-64 age group is now at work. This is 2 percentage points higher than at the start of the global financial crisis. Nonetheless, the under-used labor potential is still significant. Mobilization of that potential could create considerable scope for the economy's production capacity and could have a positive impact on public finances, by increasing revenue while also reducing recourse to replacement incomes. The Federal Parliament is therefore discussing the so-called "Jobs Deal" and is expected to reach agreement in the coming weeks about a set of labor market measures, including tighter eligibility requirements for early retirement schemes and incentives for job training.

Like staff, the authorities recognize that labor market shortages and productivity gains vary between businesses, sectors and sub-regions. The revised Wage Law has been effective in

capping nominal hourly labor cost developments based on a weighted average of the expected increase in nominal labor costs in France, Germany and the Netherlands. However, as recommended by international organizations and the National Bank of Belgium (NBB), productivity differentials should be better taken into account in Belgium's wage setting process. Finally, the authorities are cognizant of the need for continued efforts to integrate vulnerable groups in the labor market, such as workers with a migrant background or low-skilled workers.

Boosting Productivity Growth and Improving Infrastructure

The authorities agree with staff's advice to take significant actions in view of increasing potential output and boosting productivity growth. The limited productivity gains during recent years are in part the result of the strong job creation. While this has a transient downward effect on productivity growth, it should ensure that future productivity gains will have a greater impact as more workers will share in these gains. That said, the authorities agree with staff that further efforts to enhance productivity are needed. First, the policy initiatives described by staff to increase access to growth financing (including the Belgian Growth Fund described in Box 4) should stimulate innovation. Second, the authorities are keenly aware of the need to boost the low level of productive public investments. Belgium's National Investment Pact lists six priorities where public investment is to be strongly increased by 2030 through public-private partnerships: the digital transition, cyber security, education, health care, the energy transition and mobility. Finally, the authorities agree that more focus should be given to liberalizing services and regulating professions.

Completing Fiscal Consolidation

The Belgian authorities' budget deficit decreased to 0.7 percent of GDP in 2018, while public debt declined by 1.5 percentage points to 102 percent of GDP. Although the deficit has been reduced considerably in recent years and the debt dynamic was reversed several years ago, the consolidation of public finances has not yet been fully achieved. **The authorities are committed to further progress towards a structurally balanced budget**.

Given the pressing needs for productive public investments, the still significant aging costs at the horizon, as illustrated in Box 3 on Belgium's Intertemporal Net Worth, will require further efforts in order to free up fiscal space. To strike a careful balance between consolidation and growth, the authorities agree that further increasing the labor force participation rate will be paramount to increasing revenues over the medium term. In addition, they recognize that there is room for streamlining certain current expenditures, as well as continued moderation of health care costs. Finally, the authorities agree that further improvement of coordination among the federal government and the regional governments on the fiscal trajectory is needed.

Financial sector

The Belgian banking sector has significantly increased its resilience in recent years and Belgian banks typically boast strong levels of capitalization, as demonstrated by the 2018 EBA stress test for Belgium's two biggest banking groups.

That said, **the NBB, in its capacity of macroprudential supervisor, will continue to keep a close watch on the Belgian property and credit markets**. The increase in Belgian household debt points to increasing systemic risks in the current credit cycle, especially as Belgian banks are still expanding their mortgage loan portfolios. Therefore, the NBB has introduced a new -and strict- macroprudential measure in 2018, whereby Belgian banks using internal models must build up capital buffers relative to the risk, and adequate to absorb potential losses on the mortgage portfolio in the event of a property crisis. The NBB is keeping a close eye on this measure's impact on mortgage lending and might consider supplementary measures if the risks continue to build up.

Simultaneously, and for the first time since the global financial crisis, the credit cycle is also accelerating for Belgian non-financial corporations. With growth of around 7 percent – well above the euro area average of 4 percent – the provision of business loans by Belgian banks is among the most dynamic in the EU. The NBB monitors the situation closely and might consider activating the countercyclical capital buffer.

Conclusion

Belgium has implemented a wide set of reforms, as described in Box 1. The federal and regional elections in May are nearing. While the outgoing federal government has lost its majority in Parliament in December 2018, **the reform momentum however has not faded**. A majority of components of the above-mentioned Jobs Deal is expected to be approved by Parliament in the coming weeks. In addition, social partners have agreed on a 1.1 percent real increase ceiling of wages nationally, in line with the Revised Wage Law. This agreement has now been submitted to the government for approval.

The Belgian authorities look forward to a continuation of the productive interaction with Fund staff.