INTERNATIONAL MONETARY FUND

IMF Country Report No. 17/350

SWEDEN

November 2017

2017 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR SWEDEN

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 2017 Article IV consultation with Sweden, 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 November 15, 2017 consideration of the staff report that concluded the Article IV consultation with Sweden.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on November 15, 2017, following discussions that ended on September 29, 2017, with the officials of Sweden on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on October 31, 2017.
- An **Informational Annex** prepared by the IMF staff.
- A **Statement by the Executive Director** for Sweden.

The documents listed below have been or will be separately released.
Selected Issues

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

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FOR IMMEDIATE RELEASE
November 17, 2017

International Monetary Fund
Washington, D.C. 20431 USA

IMF Executive Board Concludes 2017 Article IV Consultation with Sweden

On November 15, 2017, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Sweden.

Sweden's strong economic growth continues, with real GDP expected to rise by 3.1 percent in 2017, driven by domestic demand and exports each growing at a similar pace. Robust job creation of over 2 percent has lowered unemployment to 6.8 percent, or just 4.5 percent excluding full-time students. Yet, inflation remains subdued, with core HICP inflation at only 1.3 percent y/y excluding some volatile items. Wage rises are also low, at an estimated 2.2 percent y/y in 2017, and the three-year wage agreement reached earlier in the year could imply that wage rises remain low, posing a downside risk to the inflation outlook. The central bank has kept the policy rate unchanged at -0.5 percent since early 2016 and has slowed its purchases of government bonds during 2017.

House price increases have moderated somewhat in 2017, to 7 percent y/y in September. Aided by large increases in new dwelling construction, signs of further market cooling have emerged in recent months. Household credit growth has also eased somewhat this year, and the minimum mortgage amortization requirement that came in effect in mid-2016 led to a modest decline in the share of mortgages with a high debt-to-income ratio. Unexpectedly strong government revenues in 2016 have carried forward into 2017, with the general government fiscal surplus projected at 1 percent of GDP. The 2018 budget proposal includes 0.9 percent of GDP in new initiatives to address priorities in public services, defense and security, welfare and the environment.

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

Executive Board Assessment[2]

Executive Directors agreed with the thrust of the staff appraisal. They commended the Swedish authorities on maintaining policies that have supported robust economic growth and declining unemployment. At the same time, Directors noted that elevated housing prices and household debt levels, subdued wage growth, and persistently low core inflation pose challenges. They encouraged the authorities to take advantage of the economy's strong position to undertake deep reform of the housing market in order to durably address macrofinancial vulnerabilities and support inclusive growth.

Directors noted that the current accommodative stance of monetary policy remains appropriate given low underlying inflation and uncertainties around the inflation outlook. They agreed that an unwinding of monetary accommodation should await clearer signs of a sustained uptrend in inflation. Directors encouraged using the parliamentary review of the Riksbank Act as an opportunity to further enhance the specification of the inflation target and to put the financial stability role of the Riksbank on a firmer legal footing while preserving its financial autonomy.

Directors welcomed the significant measures in the budget for 2018 to promote employment including migrant integration, reduce inequality, and address climate and the environment. Given signs of high resource utilization and solid growth prospects, Directors considered that a phased reduction in the fiscal surplus to the new medium-term target of 0.33 percent of GDP over a period of a few years would strike an appropriate balance while maintaining a prudent fiscal policy.

Directors noted that moderate wage rises in recent years may have been a needed correction, but if low wage increases persist, inflation would likely remain below target, prolonging interest rate normalization. In this context, they considered that linking wages to domestic conditions, such as trends in Swedish labor productivity and medium-term inflation expectations, while maintaining adequate business sector profitability, would provide a more appropriate anchor. Directors welcomed new initiatives to raise employment among the low- skilled and migrants through a combination of targeted wage flexibility and suitable education.

Directors agreed that improving housing affordability would not only ease household debt burdens and saving needs, but would also bolster growth and reduce inequality. In addition to reforms to reduce high construction costs, they urged promoting better utilization of the housing stock by overcoming political hurdles to phasing out rent control and shifting the composition of property taxes. Reductions in mortgage interest deductibility, expanded support for affordable housing construction, and enhanced public transportation within regions would also be important to improve housing affordability over time.

[2] At the conclusion of the discussion, the Managing Director, as Chair 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.

Directors commended the further progress made in following up on the 2016 FSAP, including the augmentation of the 2018 budget for Finansinspektionen (FI) and the planned expansion of FI's macroprudential authority in early 2018. Noting that the recently adopted floors on mortgage amortization have shown positive initial results, Directors endorsed the proposed tightening targeted on high debt-to-income mortgages. Given the heavy reliance of Swedish banks on wholesale funding, Directors supported retaining liquidity requirements on their euro and U.S. dollar exposures and the Riksbank continuing to hold sufficient foreign reserves. Directors encouraged the Swedish and regional authorities to collaborate closely on sound supervisory and resolution arrangements regarding Nordea's proposed relocation.

Sweden: Selected Economic Indicators, 2014–20

	2014	2015	2016	Projections 2017	2018	2019	2020
Real economy (percent change)							
Real GDP	2.6	4.5	3.3	3.1	2.4	2.2	2.0
Domestic demand	2.9	4.3	3.3	3.1	2.6	2.4	2.1
Private consumption	2.1	3.1	2.2	2.5	2.5	2.3	2.1
Public consumption	1.5	2.4	3.4	0.8	1.2	1.1	1.0
Gross fixed investment	5.5	6.9	5.6	7.0	4.1	4.0	3.3
Net exports (contribution to growth)	-0.1	0.4	0.1	0.0	-0.1	-0.1	-0.1
Exports of G&S	5.3	5.7	3.3	3.8	4.0	3.9	3.8
Imports of G&S	6.3	5.2	3.4	4.2	4.6	4.5	4.4
HICP inflation (e.o.p)	0.3	0.7	1.7	1.8	1.5	1.8	2.0
Unemployment rate (percent)	7.9	7.4	7.0	6.6	6.3	6.3	6.3
Gross national saving (percent of GDP)	28.0	29.0	29.2	29.9	30.0	30.1	30.2
Gross domestic investment (percent of GDP)	23.3	24.3	24.7	25.9	26.2	26.6	27.0
Output gap (percent of potential)	-2.1	-0.3	0.3	0.9	0.8	0.7	0.5
Public finance (percent of GDP)							
Total revenues	48.9	49.3	49.7	49.2	48.3	48.2	48.2
Total expenditures	50.5	49.1	48.6	48.2	47.5	47.6	47.7
Net lending	-1.6	0.2	1.1	1.0	0.9	0.6	0.5
Structural balance (as a percent of potential GDP)	-0.6	0.0	0.8	0.7	0.5	0.3	0.3
General government gross debt, official statistics	45.2	43.7	41.3	38.4	36.5	34.3	32.1
Money and credit (year-on-year, percent change, eop) 1/							
M3	4.1	7.6	8.4	9.5	...	...	...
Bank lending to households	6.0	7.4	7.4	6.7	...	...	...
Interest rates (percent, end of period)							
Repo rate 2/	0.0	-0.4	-0.5	-0.5	...	...	...
Ten-year government bond yield 2/	1.7	0.7	0.5	0.6	...	...	...
Mortgage lending rate 3/	1.9	1.6	1.6	1.6	...	...	...
Balance of payments (percent of GDP)							
Current account	4.6	4.7	4.5	3.9	3.7	3.5	3.2
Foreign direct investment, net	0.9	1.6	0.3	0.8	0.5	0.3	0.2
International reserves, changes (in billions of US dollars) 4/	0.2	1.3	0.5	0.5	...	...	...
Reserve cover (months of imports of goods and services)	3.3	3.5	3.5	3.8	...	...	...
Net international investment position	1.2	4.6	11.2	12.8	14.3	15.7	16.9
Exchange rate (period average, unless otherwise stated)							
SEK per euro 2/	9.1	9.4	9.5	9.6	...	...	...
SEK per U.S. dollar 2/	6.9	8.4	8.6	8.5	...	...	...
Nominal effective rate (2010=100) 2/	103.7	97.5	97.1	96.7	...	...	...
Real effective rate (2010=100) 2/ 5/	100.6	92.8	92.6	91.7	...	...	...
Fund position (September 30, 2017)							
Quota (in millions of SDRs)	4,430						
Reserve tranche position (in percent of quota)	3.2						
Holdings of SDRs (in percent of allocation)	91.5						
Other Indicators							

GDP per capita (2016, USD): 51,473; **Population** (2016, million): 10.0; **Main products and exports**: Services, including computer and information; motor vehicles, forest products; **Key export markets**: Germany, Norway, United Kingdom.

Sources: IMF WEO, Riksbank, Swedish Ministry of Finance, Statistics Sweden, and Fund staff calculations.

1/ Data for 2017 are as of August 2017.

2/ Data for 2017 are as of September 2017.

3/ Mortgage rates for new contracts. Data for 2017 are as of August 2017.

4/ Data for 2017 are as of Q2:2017.

5/ Based on relative unit labor costs in manufacturing.

INTERNATIONAL MONETARY FUND

SWEDEN

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION

October 31, 2017

KEY ISSUES

Sweden's economy continues to perform well, yet wage rises and inflation remain low. Growth of just over 3 percent is expected in 2017, with job creation running at over 2 percent, and underlying inflation around 1.3 percent. The outlook is for further solid growth in coming years, yet, even as employment rates reach EU highs, business sector wage rises are only 2.2 percent, posing downside risks to an expected inflation pick up.

Clearer signs that inflation is on a sustained uptrend are needed before unwinding monetary accommodation. An accommodative monetary stance remains appropriate at this stage and can be maintained even with some further tapering of bond purchases. Rate hikes should be considered once labor cost growth and services inflation provide clearer signs that inflation is on a sustained upward trend.

The social partners should ensure wages are responsive to Swedish conditions at both the macroeconomic and sectoral level. Using trends in Sweden's labor productivity and medium-term inflation expectations to guide the industrial wage benchmark would facilitate inflation returning to target and interest rate normalization. Greater scope for differences in sectoral wage rises and firm-level flexibility would enable wage signals to play a larger role in meeting the changing labor needs ahead.

Improving housing affordability over time is important for inclusive growth and macrofinancial stability. Reforms to reduce construction costs and promote more efficient use of existing property, including reforms of rent control and property taxation, are key. Reducing mortgage interest deductibility, expanding support for construction of affordable rental housing, and enhancing public transportation within regions, would also help. The proposed stricter amortization requirement should be adopted, with further steps, including a possible debt-to-income (DTI) limit, implemented if needed.

A balanced approach to Sweden's fiscal management should continue. Upside revenue surprises lifted the fiscal position into surplus in recent years. The 2018 budget adopts initiatives to address key social goals, resulting in a mildly expansionary fiscal stance. Concerns around overheating are mitigated by uncertainties around the output gap and persistently low inflation. Looking ahead, allowing the surplus to decline to its new medium-term target over a period of a few years would strike a reasonable balance.

Approved By
Mahmood Pradhan (EUR) and Martin Kaufman (SPR)

Discussions for the 2017 Article IV consultation were held in Stockholm during September 19–28. The mission comprised Messrs. Beaumont (head) and Papageorgiou, and Mses. Geng and Zhang, and was assisted by Mr. Scutaru and Ms. Tenali (all EUR). The mission met with Ms. Andersson, Minister for Finance; Mr. Bolund, Minister for Financial Markets and Consumer Affairs; Ms. Ekholm, State Secretary to Minister for Finance; Mr. Holm, State Secretary to Minister for Financial Markets and Consumer Affairs; Mr. Ingves, Governor of the Sveriges Riksbank; the Parliamentary finance committee; and senior officials from the Financial Supervisory Authority, Swedish National Debt Office, Public Employment Service, and Migration Board. It also met with representatives of the banking sector, labor unions, enterprises, Fiscal Policy Council, Labor Policy Council, National Institute of Economic Research and academics. Mr. Östros (OED) joined the discussions.

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TABLES

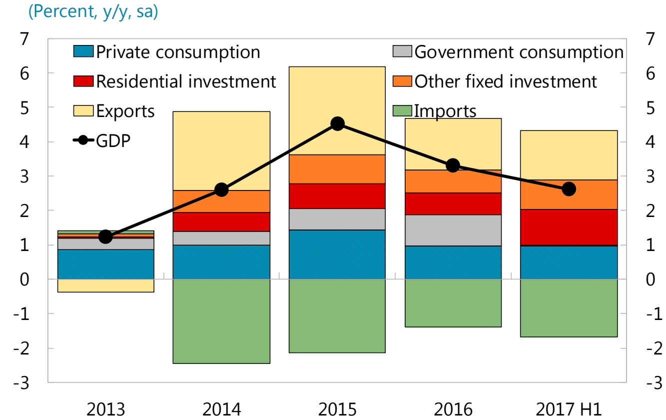
APPENDICES

RECENT DEVELOPMENTS

The Swedish economy continues to enjoy solid growth and job creation. Estimates of underlying inflation have edged up but remain low and wage rises agreed for coming years are subdued despite labor shortages. Strong investment growth, especially in residential construction, is contributing to a decline in the current account surplus, which is underpinned by high household savings. Recent macroprudential steps, aided by rising housing supply, helped moderate household credit risks.

1. **Sweden's solid and balanced growth is bolstered by strong residential investment** (Figure 2). GDP grew 2.6 percent y/y in the first half of 2017, modestly down from 3.3 percent in 2016. Growth in both final domestic demand and exports was close to 3 percent y/y, the latter consistent with trading partner growth. Investment rose 8 percent y/y in the first half of 2017, with the majority reflecting a 21 percent surge in residential construction.

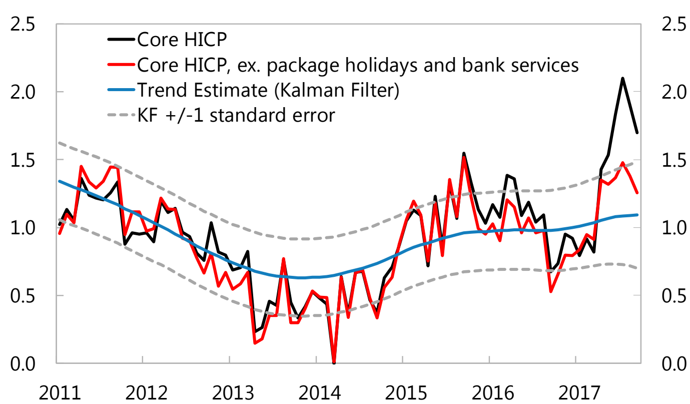
Real GDP Growth and Major Components
(Percent, y/y, sa)



Sources: Statistics Sweden; and Fund staff calculations.

2. **A few components boosted core inflation recently, but underlying inflation remains low** (Figure 3). After falling below 1 percent y/y in the six months to March 2017, core HICP inflation rose sharply to peak at over 2 percent in recent months. But the underlying rate is estimated at 1.3 percent in September after excluding large rises in package holiday prices and bank service fees. Estimates of the trend in adjusted core inflation are in a range centered at about 1.1 percent, still well below the 2 percent target.

Core HICP inflation
(Percent change, y/y)



Sources: Eurostat; and Fund staff calculations.

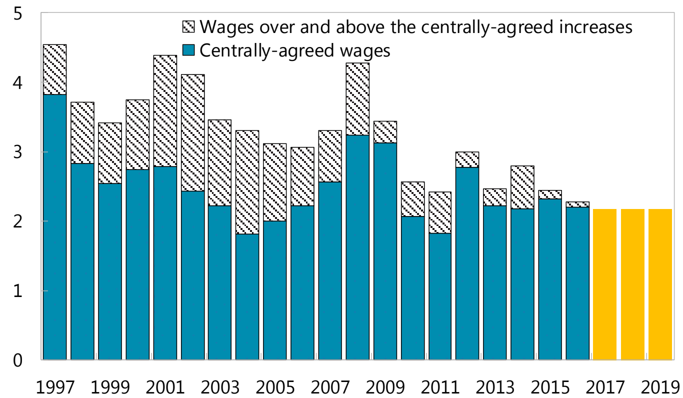
3. **Employers and unions agreed subdued wage rises despite strong job creation and rising labor shortages** (Figure 4). Employment growth firmed to 2¼ percent y/y so far in 2017, with Sweden's employment rate of over 81 percent being the highest in the EU.[1] Aided by high vacancy rates, labor force participation rose to historic highs, led by the cohort of 25 to 34 year-olds. This labor supply increase moderated the decline in the unemployment, which reached 6.8 percent in

[1] Employment figures for 2017 may be biased upwards as employment rates for earlier migrants are extrapolated to recent arrivals, but these data also exclude workers posted from other EU countries, e.g., in construction.

Q3 2017, or just 4.5 percent excluding full-time students. Business surveys find labor shortages exceeding 2007 peaks and approaching their historical high in 2000. Nonetheless, nominal wage growth remains low, with hourly earnings in the business sector rising 2.3 percent y/y in 2015–16, and the National Mediation Office estimates a rise of about 2.2 percent so far in 2017. The centralized wage agreement of March 2017 is for cumulative wage rises of only 6.5 percent over the next three years, with actual wages showing little "drift" over the centrally-agreed rate in recent years.

Centrally-Agreed Wages and Wage Drift

(Percent, y/y)

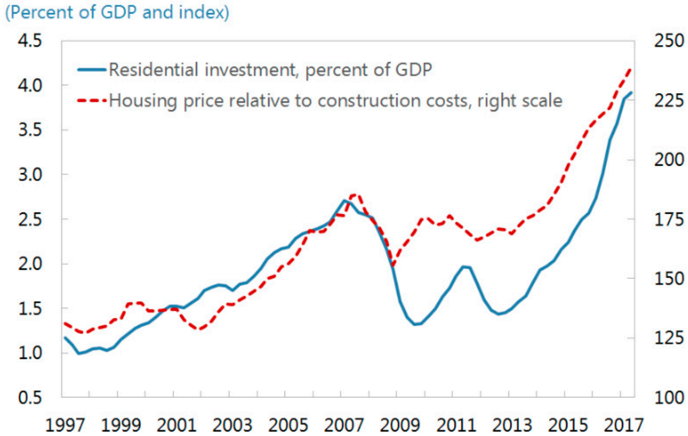


Sources: Riksbank and the National Mediation Office.

4. Although housing price rises remain high, some moderation is aided by rising supply, and recent macroprudential measures have promoted some improvement in lending quality (Figure 5). Residential investment has responded to housing prices rising by 40 percent more than construction costs in the past four years, with starts hitting 25-year highs in the first half of 2017. Housing price increases eased to 7 percent y/y in September, with markets reported to be cooling recently, in part owing to sales of apartments to be completed in coming years. Household credit growth edged down to 6.7 percent y/y in August from 7.4 percent a year earlier. The minimum mortgage amortization measure that became effective in mid-2016 achieved its principal goal of improving credit composition (Appendix I) with a preliminary analysis suggesting limited lasting impact on house prices.

Residential Investment and Housing Q Ratio

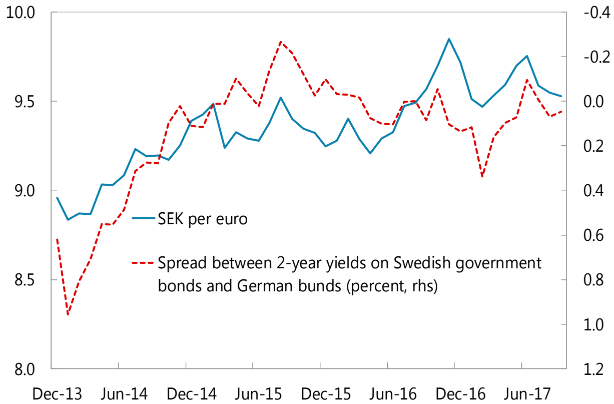
(Percent of GDP and index)



Sources: Haver and IMF staff calculations.

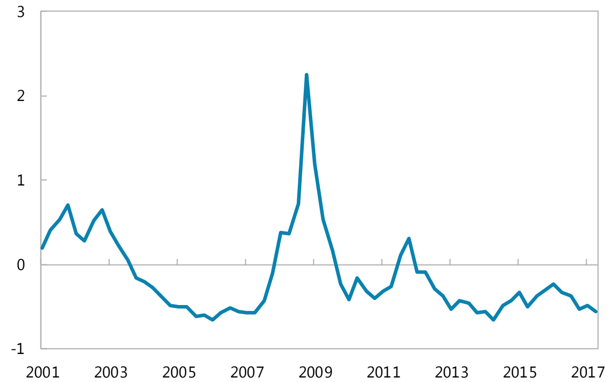
5. Financial conditions remain supportive of the real economy (Figure 3). Swedish bond yields have moved roughly in line with German bunds and the krona has been broadly stable in effective terms despite a recent appreciation against euro, which may reflect expectations for a faster unwinding of monetary accommodation following the recent high headline inflation figures. The real effective exchange rate is also little changed from its levels in 2015–16. Mortgage rates and corporate lending rates remain low, as do credit spreads on banks' covered bonds. Despite negative interest rates, bank profitability remains strong (Section D), and growth in overall MFI lending is solid, averaging 7.6 percent y/y in the first eight months of 2017.

Yield Differential to Bund and Exchange Rate



Sources: Sveriges Riksbank, Haver and fund staff calculations.

Financial Conditions Index



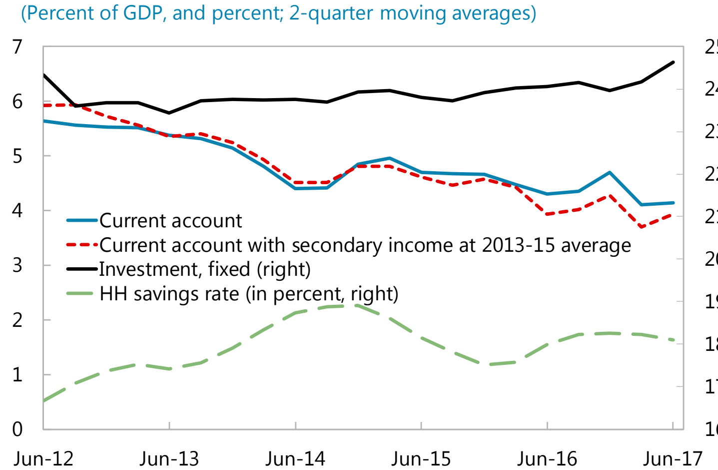
Source: IMF GFSR (October 2017).

6. **The 2017 fiscal balance is expected to come in significantly stronger than budgeted, a carry-forward from a surprise in 2016.** A general government surplus of 1 percent of GDP is projected in 2017, bringing the surplus in line with the current medium-term target in Sweden's fiscal framework, and well above the budgeted deficit of 0.3 percent. This overperformance reflects revenue surprises in 2016, driven primarily by higher business profits and capital gains as well as higher VAT collection linked to strong dwelling investment, lifting the 2016 balance 1.3 percentage points above that expected at the time of Budget 2017. The estimated structural balance declines only slightly to 0.7 percent of GDP in 2017, making the current fiscal stance broadly neutral.

7. **Sweden's current account surplus is declining but its external position remains strong.** Despite the unexpected sharp rise in the fiscal balance in 2016, the current account surplus declined to 4.1 percent of GDP—excluding large swings in EU contributions and ODA—down from 4.6 percent in 2015. This decline reflects a rise in fixed investment to 24 percent of GDP in 2016, among the highest in the EU. Yet, the need to maintain an accommodative monetary stance owing to output gaps in earlier years and still low inflation has likely weighed on the krona. Sweden's external position (a cyclically-adjusted headline surplus of 5 percent of GDP in 2016) is assessed to be stronger than the level consistent with medium-term fundamentals and policies, although progress in narrowing external gaps is seen in the first half of 2017 with the headline external surplus at 4.1 percent of GDP (Annex II). High household savings are the main driver of surpluses in recent years (figure).[2]

External Position

(Percent of GDP, and percent; 2-quarter moving averages)



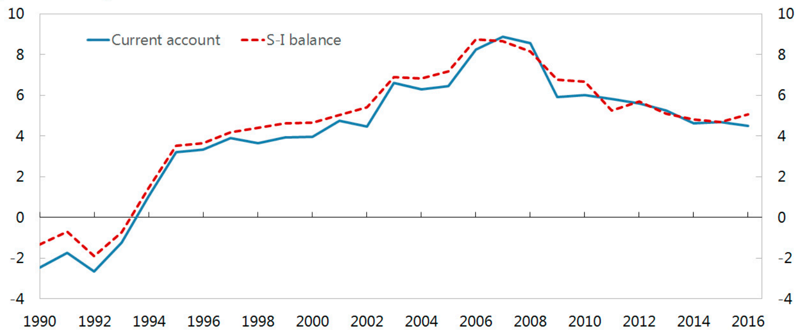
Sources: Statistics Sweden; and Fund staff calculations.

[2] Household savings developments are analyzed in chapter I of the Selected Issues paper.

Figure 1. Current Account Decomposition

The current account turned to surplus after Sweden's early 1990s crisis, and alongside pension reforms in the mid-1990s entailing a shift to a defined contribution system, consistent with trends in official saving and investment data.

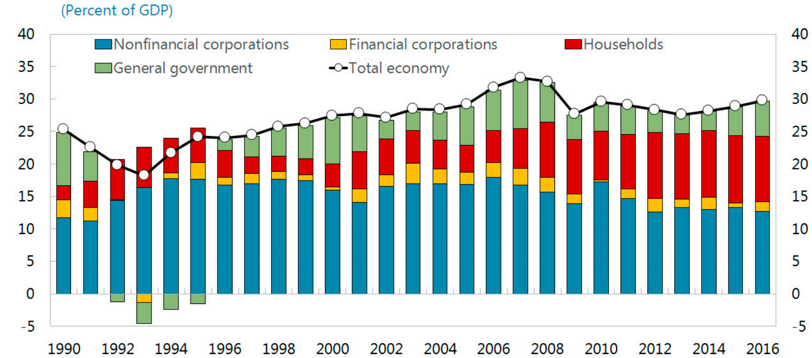
Current Account and Savings - Investment Balance
(Percent of GDP)



Sources: Statistics Sweden; and Fund staff calculations.

Total saving has remained high since the mid-2000s, with a decline in nonfinancial corporate savings offset by higher household savings.

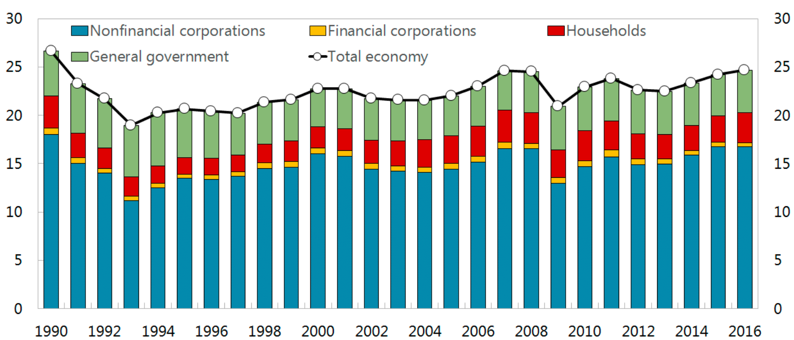
Saving by Sector
(Percent of GDP)



Sources: Statistics Sweden; and Fund staff calculations.

Investment dipped in the GFC, but has recovered to relatively high levels, led by nonfinancial corporations.

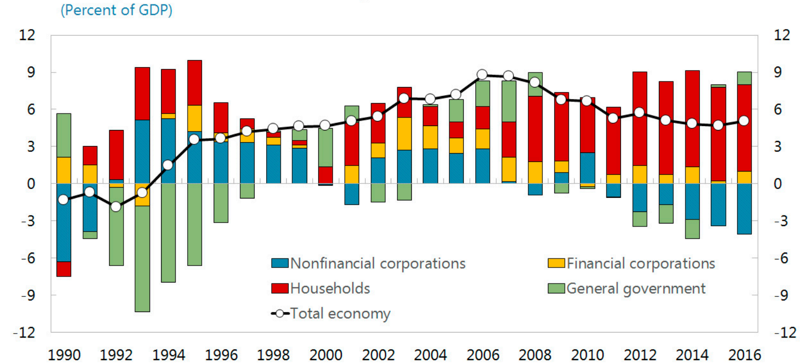
Investment by Sector
(Percent of GDP)



Sources: Statistics Sweden; and Fund staff calculations.

Since the mid-2000s, the external surplus is largely accounted for by the household sector savings-investment balance, with corporate sector investment exceeding its savings, and the general government having little net impact.

Saving - Investment Balances by Sector
(Percent of GDP)



Sources: Statistics Sweden; and Fund staff calculations.

OUTLOOK AND RISKS

8. **The economic outlook remains robust and the current account surplus should gradually decline** (Table 1). Aided by accommodative monetary policy, domestic demand growth has been strong in recent years and resource utilization has tightened. A gradual deceleration in domestic demand is expected, primarily because residential investment is likely to level out after further near-term gains. Underpinned by steady global growth, exports are expected to remain solid, supporting investment and productivity in coming years. Altogether, GDP growth is likely to moderate over the next few years, declining to about 2 percent in the medium term, consistent with estimates for trend labor productivity growth of 1¼ percent and labor force growth averaging ¾ percent. Unemployment is expected to decline to about 6.3 percent. A further decline in the current account surplus is expected, in part reflecting an appreciation of the krona with an eventual unwinding of the accommodative monetary policy stance, together with a contribution from a decline in the fiscal surplus toward its new medium-term target. Hence, Sweden's external position is expected to move towards a level consistent with medium-term fundamentals and policies.

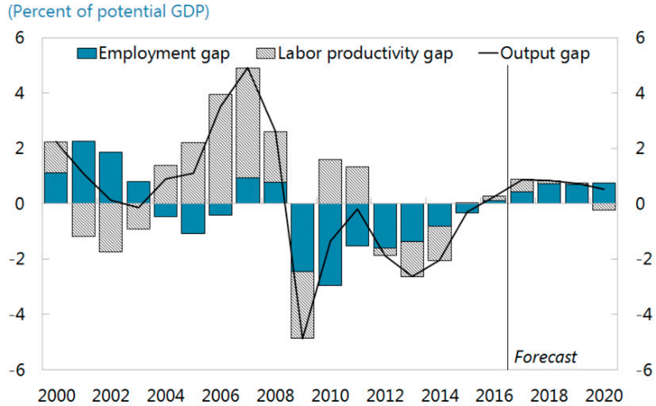
Select Macroeconomic Indicators

(Y/Y percent change, unless noted)	2014	2015	2016	2017	2018	2019	2020
GDP	2.6	4.5	3.3	3.1	2.4	2.2	2.0
Domestic demand	2.9	4.3	3.3	3.1	2.6	2.4	2.1
Exports of goods and services	5.3	5.7	3.3	3.8	4.0	3.9	3.8
Trading partner GDP	1.7	1.8	1.6	1.9	1.8	1.8	1.7
Current account (percent of GDP)	4.6	4.7	4.5	3.9	3.7	3.5	3.2
Unemployment rate (percent)	7.9	7.4	7.0	6.6	6.3	6.3	6.3
Output gap (percent of potential)	-2.1	-0.3	0.3	0.9	0.8	0.7	0.5
Core HICP inflation, e.o.p.	0.5	1.1	1.1	1.8	1.5	1.6	1.8

Sources: IMF World Economic Outlook, Riksbank, Statistics Sweden, and Fund staff calculations.

9. **But the timing of a rise in inflation is subject to heightened uncertainty.** On top of uncertainties around the scale of resource pressures, the transmission from resource pressures to inflation may have changed. Output is estimated to exceed potential by almost 1 percent, but potential could be higher than estimated if more of recent gains in labor participation and productivity are lasting rather than cyclical. With labor markets tight, the inflation projections assume higher wage drift lifts wage growth to over 3 percent, as would typically occur in Sweden. But recent wage behavior and the 3-year wage agreement indicate downside risks to this outlook, which are more likely to

Output Gap Decomposition
(Percent of potential GDP)

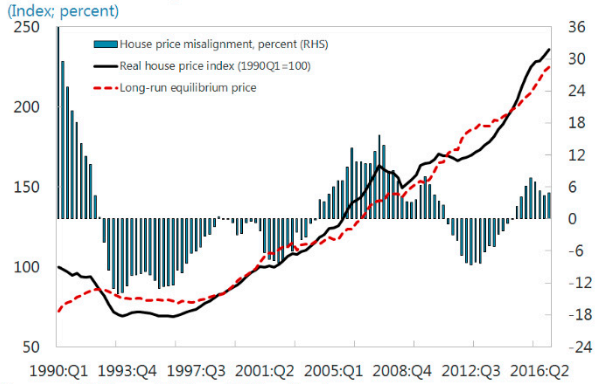


Sources: Statistics Sweden; and Fund staff calculations.

be realized if external labor market developments remain subdued (section B). Other external risks to Sweden are typical for a small open advanced economy, including weaker than expected global growth and tighter external financial conditions (Appendix V).

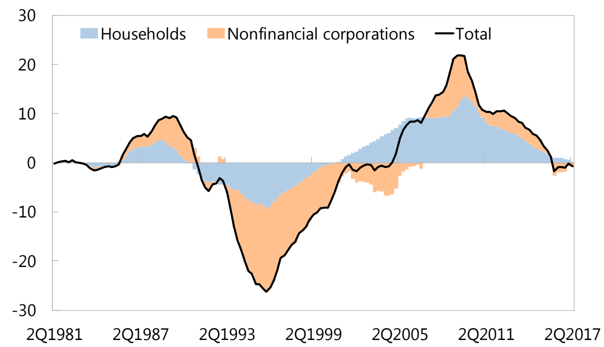
10. Accordingly, there is potential for low interest rates to be prolonged, but this does not appear to pose major systemic risks at this stage. A cross-country analysis finds housing overvaluation of about 5 percent at end-2016, which does not suggest large downside risks.[3] Moreover, the impact on banks from a sizable housing price fall is found to be manageable in last year's FSAP, in part reflecting borrowers' relatively low LTV ratios. It is also notable that credit gaps at both the total economy and aggregate household level have narrowed to be virtually absent.

Sweden: Housing Market Valuation
(Index; percent)



Sources: CBS, Haver, OECD, and IMF staff estimates.

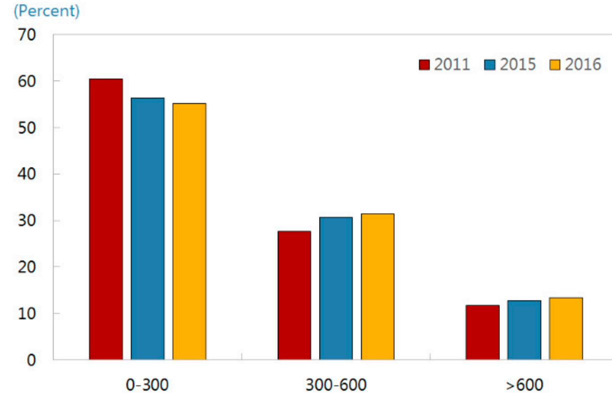
Credit-to-GDP Gap 1/
(Percent)



Sources: FI; and Statistics Sweden.
1/ Deviation from long-term trend.

11. However, macroeconomic vulnerabilities could build over time. House price levels are clearly high (Figure 5 and Section C) requiring new home purchasers to take out high debt-to-income (DTI) loans. Over time, the rising share of heavily-indebted households will make consumer spending more sensitive to shocks, especially an eventual rise in policy rates given the high reliance on floating rate mortgages. A longer period of low interest rates could reinforce the rise in the share of high-DTI loans, including through somewhat higher house prices.[4] This tendency may only be partly mitigated by existing prudential instruments, including stress tests at mortgage origination which incorporate mortgage rates of 7–8 percent despite current rates of below 2 percent.

Distribution of Debt-to-Income of Indebted Households
(Percent)



Source: Riksbank.

[3] Nan Geng, 2017, "Fundamental Drivers of House Prices in Advanced Economies," IMF Working Paper, forthcoming.

[4] The level of house prices is estimated to rise 4 percent in response to a 1 percentage point rate cut, see Rima Turk, 2015, "Housing Price and Household Debt Interactions in Sweden," IMF Working Paper, No. 15/276.

12. *Authorities' Views.* The authorities shared a similar growth outlook, yet the Finance Ministry anticipates a significantly larger unemployment fall in 2018. Although the Riksbank projects inflation to remain around 2 percent, it recognizes downsides, especially around the outlook for wage rises. The Riksbank also expects the krona to appreciate in the medium-term and the current account surplus to continue declining over time owing to demographic prospects. Noting the increasing risks that high and rising household indebtedness pose to the long-term sustainable development of the Swedish economy, the Riksbank supports further measures to manage these risks.

POLICIES FOR GROWTH AND STABILITY

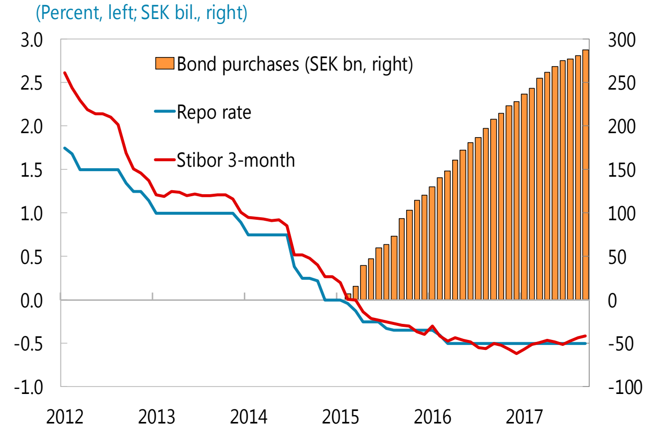
After a sharp decline in inflation expectations, monetary policy shifted to unconventional measures in early 2015, consistent with the Riksbank's firm commitment to returning inflation to target. Much progress has been made in restoring credibility, yet the return to target is not yet complete. In view of the costly reduction in monetary policy space from low inflation, and research indicating that housing price rises mostly reflect factors besides low interest rates, monetary policy should continue to focus on inflation. To facilitate inflation returning to target while preserving high employment and industrial harmony, the wage formation process should be anchored to trends in Sweden's labor productivity and medium-term inflation expectations rather than external wage growth. Reforms of the dysfunctional housing market remain a major shortfall in Swedish macrofinancial stability policies, where such reforms would also support more inclusive growth. A targeted tightening of recent macroprudential measures is appropriate, and further measures should be implemented if needed, making it critical to complete the expansion of Finansinspektionen's (FI) macroprudential mandate. Strong revenues enable the budget to support inclusive growth, including in housing supply and low-skill employment, while gradually easing the surplus in line with the new medium-term fiscal targets.

A. Monetary and Exchange Rate Policies

13. The Riksbank has slowed bond purchases while keeping the negative policy rate unchanged. The repo rate has remained at -0.5 percent since February 2016. But the Riksbank slowed the purchases of government bonds in 2017, following a similar step by the ECB, to a cumulative SEK 290 billion (40 percent of the total stock) by year end. In the light of lower downside risks to inflation, it also dropped signals regarding potential further rate cuts. Yet the Riksbank's central outlook for policy rates is little changed, with slow increases expected after mid-2018.

Monetary Instruments 1/

(Percent, left; SEK bil., right)

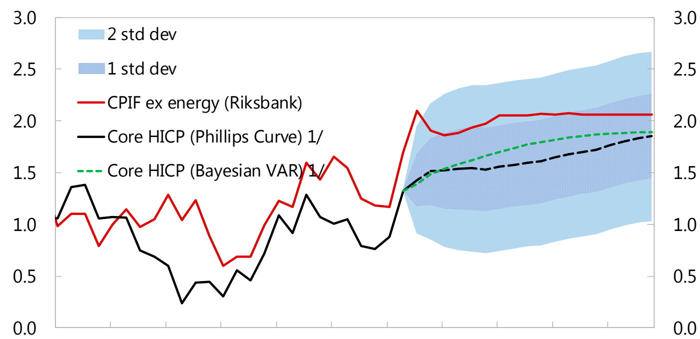


Sources: Sveriges Riksbank and Fund staff calculations.
1/ Orange bars represent the cumulative amount of government bonds that the Riksbank has already purchased by October 2017.

14. Inflation could stay below the target in the near-term with a durable increase depending on wage growth and foreign inflation. Staff projections are for core inflation of about 1.5 percent in 2018, somewhat below Riksbank projections in part because different core measures are used. A gradual convergence to target in later years is expected as wage rises respond to labor shortages and as inflation in the euro area picks up. This outlook for Swedish wages to support higher inflation is less likely to be realized if wage growth in Germany remains moderate or if unemployment declines in the euro area slow (section B).

Core Inflation Projections

(Percent change, y/y)



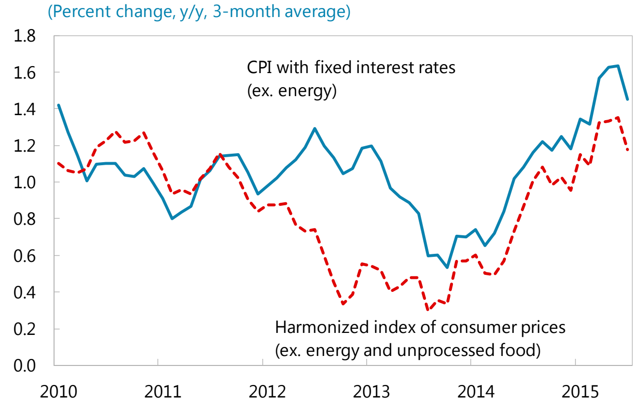
Sources: Eurostat, Riksbank, Statistics Sweden, and IMF staff calculations.
1/ Excludes package holidays and bank service fees in addition to energy and unprocessed food

15. Rate hikes will become appropriate once there are clearer signs that inflation is on a sustained upward trend. Although inflation expectations have returned to target, the prospects for inflation to dip in 2018, and uncertainties surrounding the projected pick up in following years, suggest that rate hikes would not be appropriate at this stage. Nonetheless, a further tapering of bond purchases may be warranted, especially if downward pressure on bond yields in the euro area is eased. Rising growth in unit labor costs and services inflation, accompanied by continued resource utilization pressures, would provide more confidence that a rise in inflation will prove to be durable. A rise in foreign inflation rates, especially in the euro area, would further support withdrawal of stimulus, including by easing risks of a large krona appreciation that could set back inflation and inflation expectations. Foreign exchange intervention should remain a last resort, being limited to containing a decline in inflation owing to a sharp appreciation in the krona.

16. The parliamentary review of the Riksbank Act is a welcome opportunity to analyze the current monetary and financial stability arrangements. The Riksbank recently announced a significant improvement in the inflation target by focusing on the CPI with fixed mortgage interest rates (CPIF).[5] The review should evaluate targeting the internationally-comparable HICP measure, which can provide better signals to policy makers at times, such as in 2012–13 when it

Measures of Core Inflation

(Percent change, y/y, 3-month average)



Sources: Haver Analytics and Fund staff calculations.

[5] See The Riksbank's inflation target – target variable and interval.

declined well ahead of CPIF inflation.[6] The Riksbank also restored a 1 percentage point variation band around the 2 percent target, but wage setters among others may see this as a widening of the goal posts. The 2016 Financial Sector Stability Assessment recommended that the Riksbank's financial stability role be put on a firmer legal footing, by providing explicit mandates for it to monitor systemic financial risks and to provide emergency liquidity to banks. It would also be important to protect the Riksbank's financial autonomy, such as in relation to capital and dividends.

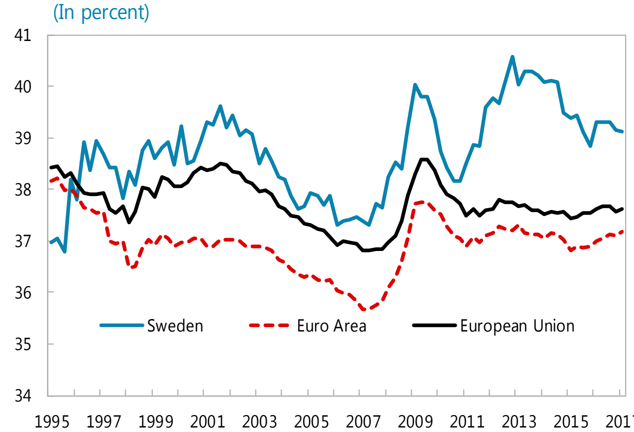
17. ***Authorities' Views***. The Riksbank agreed with staff views on monetary and exchange rate policies. It recognized downside risks to its somewhat higher inflation outlook, and sees a need to manage these risks, including by not changing course too early. Regarding the variation band, the Riksbank will enhance communication to safeguard the 2 percent inflation anchor. It also welcomes the support for codifying its role in financial stability and protecting its financial autonomy.

B. Labor Market

18. Since 1997, Swedish wage formation is led by bargaining in the industrial sector which faces international competition. The wage agreement of the industrial sector sets a benchmark (the "mark") that is expected to be adopted by other sectors, with close to 90 percent of employees covered by the collective bargaining system.[7] Following the sector-level agreements, firm-level negotiations take local conditions into account, with firm-level bargaining coverage rising from 10 percent of employees in 2013 to close to 20 percent by 2015. During the 1990s–2000s, Sweden enjoyed strong growth in productivity and real wages, together with high employment and few labor disputes, in part reflecting this wage formation framework.

19. The recent moderation of Swedish wages could prove to be a temporary correction.[8] Staff analysis finds that over the longer-term, Sweden's real product wages follow trends in labor productivity and have shown flexibility in relation to unemployment. Wage formation also reflects inflation expectations together with German wage growth and swings in euro area unemployment. Taking these factors into consideration, it appears that recent modest wage growth partly reflects the correction of an overhang from an earlier spell (2011–12) of wage rises outpacing labor productivity and inflation that raised the labor share of income.

Wage and Salary Share in GDP
(In percent)



Sources: Eurostat; IMF staff calculations.

[6] The CPIF includes the capital value of housing—using a moving average over a number of years—and some imputed items subject to one-off changes like depreciation, whereas the HICP includes only observable prices.

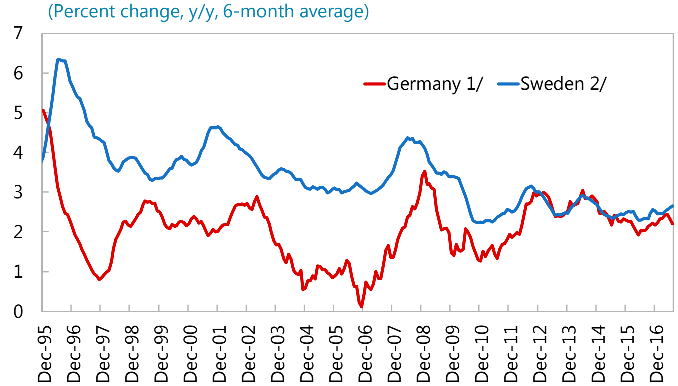
[7] This pattern bargaining model is similar to those in Germany and the Netherlands.

[8] See chapter II of the Selected Issues paper.

20. But a shift to closer external linkages in wage formation would be problematic if it persists. Collectively agreed wages have moved closely with those in Germany in recent years, reflecting a consensus among industrial sector employers and unions on maintaining cost competitiveness in order to protect export market share and industrial sector jobs.[9] However, anchoring to external wage growth likely makes Swedish wages less responsive to labor productivity that underpins sustainable real wage growth. It also weakens the linkages between wage rises and domestic inflation expectations and unemployment, impairing the capacity of monetary policy to achieve the inflation target. Moreover, basing nominal wage rises on an external leader may be ineffective in maintaining competitiveness given that Sweden has a floating exchange rate.[10]

Agreed Wage Rises in Germany and Sweden

(Percent change, y/y, 6-month average)

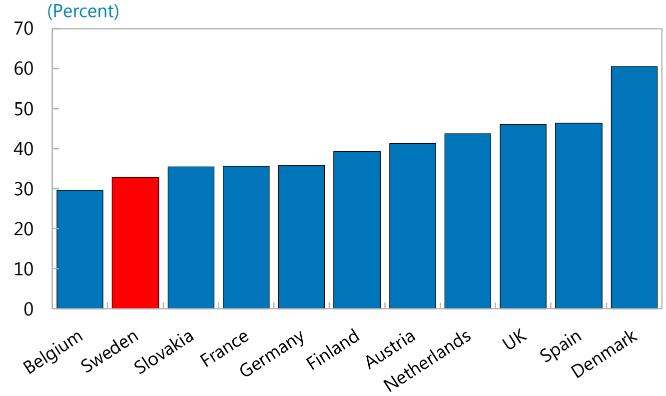


Sources: Haver; and IMF staff calculations.
1/ Hourly earnings agreed in the collective wage agreements.
2/ Hourly earnings agreed at sectoral and firm level.

21. The social partners should work to build consensus on making wages more responsive to Swedish conditions at both the macroeconomic and sectoral levels. A range of approaches could be considered while preserving collective bargaining and protecting high employment. Within the current pattern-bargaining approach, trends in Sweden's labor productivity and medium-term inflation expectations could be used as the main guideposts for industrial wage negotiations. Safeguards to ensure the adequacy of business sector profitability, as analyzed in the annual wage formation reports of the National Institute of Economic Research (NIER), could also be incorporated. Higher nominal wage rises may have more modest effects on real wage growth owing to higher inflation than otherwise, but they would relieve pressure on monetary policy to prolong low interest rates. Moreover, a combination of greater scope for sectoral wage differences and firm-level flexibility would help to better meet the changing labor needs ahead, including the growing labor needs in education, health care, and other social services owing to rises in the young and elderly populations.

Sectoral Wage Differentiation 1/

(Percent)



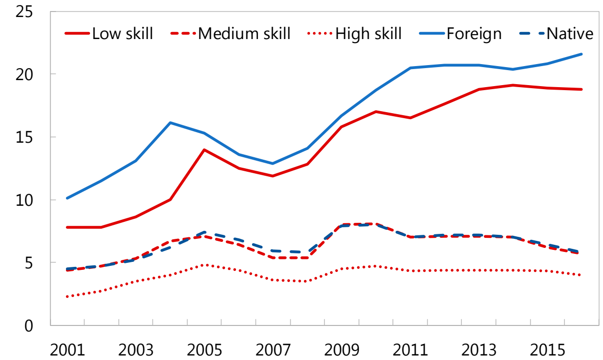
Sources: Eurostat, IMF staff calculation
1/ Standard deviation across sectors of sectoral average wages measured in percent of the national average wage.

[9] The 2017 Collective Agreement Negotiations Report prepared by employers' organizations in the industrial sector highlighted competitiveness as the decision factor for wage negotiations.

[10] The NIER raised similar concerns about a European norm in Wage Formation in Sweden, Summary 2012.

22. Foreign-born workers account for over half of the unemployed and unemployment rates are also high for the low-skilled. Job creation for low-skilled workers has fallen in the past decade so their unemployment rates have climbed to very high levels. Demand for workers without strong general skills and education is limited by strict job protection, high collectively-bargained minimum wages, and low wage differentiation across sectors.[11] Education and training are therefore critical, especially for refugees, as a significant portion of 2015 arrivals have limited education.[12]

Unemployment Rate by Skill and Nationality
(Percent)



Source: Eurostat.

23. Welcome new initiatives to tackle this challenge are emerging; these will be most effective as a coherent package of programs that meet the needs of different groups. Alongside other proposals, LO (the Swedish Trade Union Confederation) has put forward a Job and Education Initiative to facilitate labor market entry by adults who lack sufficient knowledge and skills. Temporarily lower wage costs for these employees would encourage employer participation, while the government would need to provide well-matched educational opportunities and student aid to ensure a reasonable standard of living. Employers have responded positively to this proposal, and it is currently moving forward to more in-depth discussions at the sectoral level. This initiative would be complemented by approaches that address the needs of other groups, with younger working age persons more likely to benefit from a greater emphasis on education, while older persons may need more prolonged wage subsidies and work that matches their capacities.

24. *Authorities' Views*. Deferring to the social partners regarding wage formation, the authorities noted that the integration of European labor markets had likely contributed to enabling much stronger employment growth before encountering wage pressures, but they anticipated that wage growth would pick up eventually. The social partners considered that the current system of wage formation works well in terms of generating employment, ensuring positive real wage growth, and limiting disputes. Changes in the system were possible if consensus could be reached, but there is concern that nominal wage growth exceeding that in key countries would threaten exports and jobs despite the floating exchange rate. The Swedish Labour Policy Council strongly supported shifting the focus of wage formation to domestic factors, noting that the structure of employment between industry and services would need to evolve given prospects for rising services demand. Regarding raising employment of low-skilled and migrants, the authorities noted the budget includes additional education resources and streamlines active labor market policies with the aim of increasing participation by employers. If the social partners agree new initiatives in this area the authorities would play a supportive role.

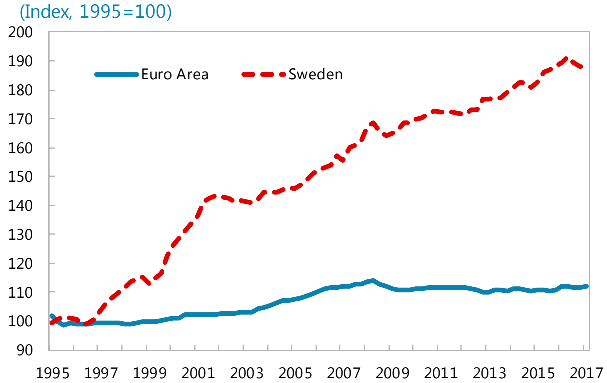
[11] See Ho and Shirono (2015), "The Nordic Labor Market and Migration", IMF Working Paper, WP/15/254.

[12] See OECD (2016), *Working Together: Skills and Labour Market Integration of Immigrants and their Children in Sweden*, Paris.

C. Housing Market

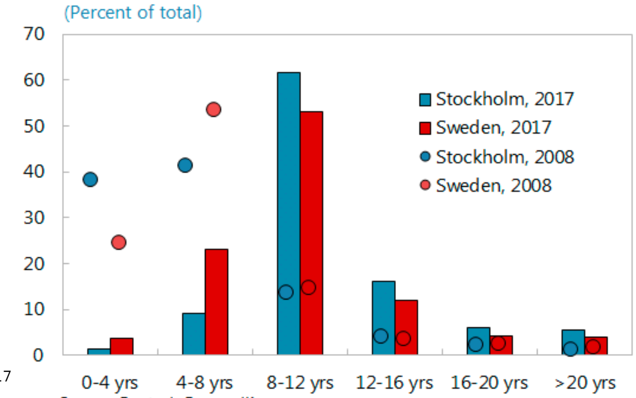
25. The Swedish housing market has deep structural problems. Large house price increases were necessary to overcome the hurdle of high construction costs before construction began rising. These costs reflect a combination of complex building regulations and limited competition in the sector owing to cumbersome municipal land sale and planning and approval procedures. The resulting supply shortfalls are present in 255 out of 290 municipalities, but are mostly in the three major metropolitan areas (Stockholm, Gothenburg, and Malmo) owing to ongoing urbanization.[13] Moreover, strict rent controls have resulted in a declining supply of rental apartments as they are converted into tenant-owned condominiums and as existing renters are "locked-in". The resulting long waiting times for rental apartments leave many households with no option but to purchase housing, which is incentivized by the tax deductibility of mortgage interest payments.[14]

Dwelling Investment Deflator Relative to GDP Deflator
(Index, 1995=100)



Sources: Haver; and IMF staff calculations.

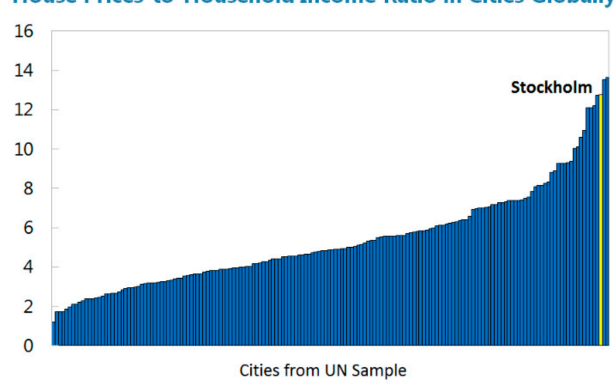
Wait Time for Rental Apartments
(Percent of total)



Source: Bostads Formedlingen.

26. Low housing affordability undermines financial stability, growth, and equality. Home costs relative to median household income have more than doubled since the mid-1990s (Figure 5). In Stockholm, the price-to-income ratio is nearly twice the national average and is among the highest worldwide. These factors reduce labor mobility, especially for those from outside the main centers, hindering inclusive growth. Equity is further undermined by overcrowding among low-income groups and the need to rely on parental savings for housing purchases. Households must borrow more at higher house prices, lifting household debt to 182 percent of disposable income (Figure 6), with new purchasers taking on debts averaging 402 percent of their disposable income.

House Prices-to-Household Income Ratio in Cities Globally



Sources: The Land and Housing Survey in the UN Sample of Cities (2016), Statistics Sweden, and Fund staff calculations.

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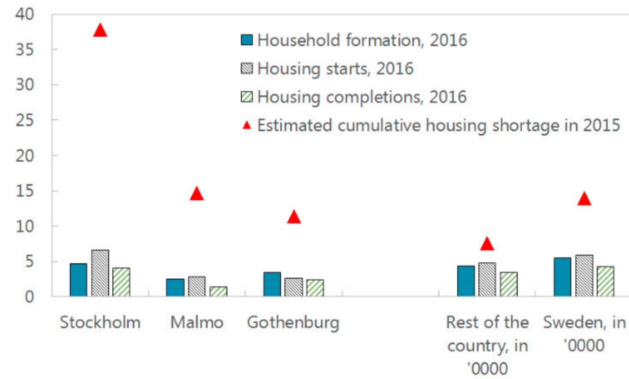
[13] See the 2016 Housing Market Survey by the Swedish National Board of Housing, Building and Planning.

[14] Some 30 percent of annual mortgage interest expenses up to SEK 100,000 are deductible from tax liabilities, and 21 percent of amounts exceeding that threshold.

27. Policies to bolster construction are welcome yet are unlikely to be sufficient to rebalance the housing market. The government targets building 250,000 dwellings during 2015– 20, including by subsidizing (0.1 percent of GDP) construction of affordable rental housing—which meets energy efficiency and rent limit requirements—and through state financing to municipalities for infrastructure related to housing development. Although construction has risen (Figure 5), housing starts only modestly exceed estimated household formation in most of the country, indicating that shortages will persist. Moreover, due to high land prices and construction costs, new development has been focused on the high-end of the market or located in more remote areas.

Housing Construction relative to Needs
(Housing units, in thousands unless mentioned o.w.)



Sources: Statistics Sweden, Boverket, and staff calculations.

28. Improving housing affordability should be a central priority, supported by deep structural reforms to promote more efficient use of existing property:

- **Sustaining housing supply.** High construction costs in Sweden need to be addressed by streamlining building regulations and promoting competition in the sector, including by harmonizing fragmented planning and approval processes. Improving public transportation within regions would help relieve demand pressures in major centers. Budgetary support for construction of rental housing that meets affordability tests should be expanded.

- **Phasing out rent control.** Providing incentives to better match housing to household needs will effectively increase supply in areas with high demand. All new construction of rental apartments should be fully exempt from controls. Rents on apartments under control should be steadily aligned with market rates, with low-income households protected by the housing allowance.[15]

- **Addressing tax incentives.** To promote efficient use of space, the composition of property taxes should be shifted by cutting capital gains taxes that deter sales while raising the recurrent property tax, which in 2008 was capped at a level among the lowest in OECD. If the property tax cannot be raised, it becomes more critical to reduce mortgage interest deductibility to ease demand and discourage high leverage. The macroeconomic impact would be modest while interest rates are low and such reforms could be part of a package that benefits households.

29. *Authorities' Views.* The authorities recognize the structural challenges in the Swedish housing market, as reflected in the appointment of committees to review the planning and building regulations as well as the model for setting rents on newly produced rental housing. The authorities

[15] A study by the Swedish Fiscal Policy Council finds that deregulating the rental market would contribute to increased labor mobility and raise long-term growth, with manageable impact on household rental expenditure. On average, the share of rental expenditure in disposable income would increase from 24 percent to 31 percent, with most impact on households in the lowest income decile, which could be cushioned by targeted housing allowances.

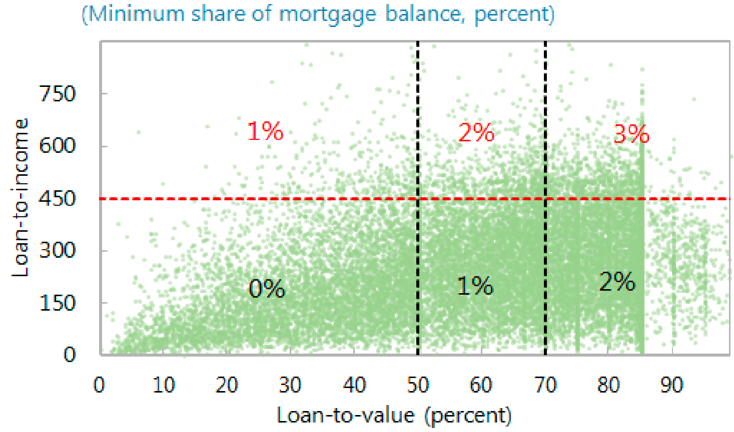
also recognize the need for further measures to reduce incentives for over-indebtedness. Political opposition to property tax is strong as it is considered to be unfair, and while a lower capital gains tax could improve property turnover, it could have distributional effects favoring older households that had often accumulated significant wealth. The government's view is that a reduction in mortgage interest deductibility is more feasible if broad political consensus can be reached. With rents on newly-produced rental properties being very high, the government is concerned that a transition to market-based rents would bring high rents, and it also has doubts that the supply of rental housing within the reach of lower income households would increase significantly. The Riksbank, on the other hand, stresses that a more market-based rent system would increase supply, benefitting young people.

D. Macrofinancial Stability Policies and Framework

30. Sweden's banks are healthy and progress is being made on FSAP recommendations. The banks remain very profitable, with their return on equity averaging 12 percent in 2016, little below that typical before negative rates were adopted in early 2015 (Figure 8 and Table 5). Capital buffers were raised to meet the minimum requirement of 24.6 percent of risk-weighted assets at end 2016. While their leverage ratio exceeds the European Commission proposal of 3 percent, it falls just short of 5 percent as recommended by the Riksbank. Banks meet liquidity regulations including additional requirements on major currencies, yet their high reliance on wholesale funding calls for close monitoring (¶35). As discussed below, the authorities are addressing key FSAP prescriptions, with progress in other areas set out in Annex IV.

31. FI's proposal for a targeted tightening of the recent amortization requirement should be adopted. The requirement adopted in mid-2016 is for minimum amortization of 2 percent for mortgages with LTV over 70 percent, and 1 percent in the 50–70 percent LTV range. This measure has encouraged households to purchase less expensive housing and marginally reduced the share of new mortgages with very high DTI ratios (Appendix I). Nonetheless, based on its assessment that household debt vulnerabilities continue to grow, the FI recently proposed a stricter requirement, with an additional 1 percentage point of annual amortization for new mortgages with a DTI ratio above 450 percent on a gross income basis, which is equivalent to about 630 percent on a disposable income basis (see FI study). This targeted measure would help contain macroeconomic vulnerabilities from a rising share of high DTI loans, although it is not a substitute for reforms to address high housing prices. The

Proposed Stricter Amortization Requirements
(Minimum share of mortgage balance, percent)

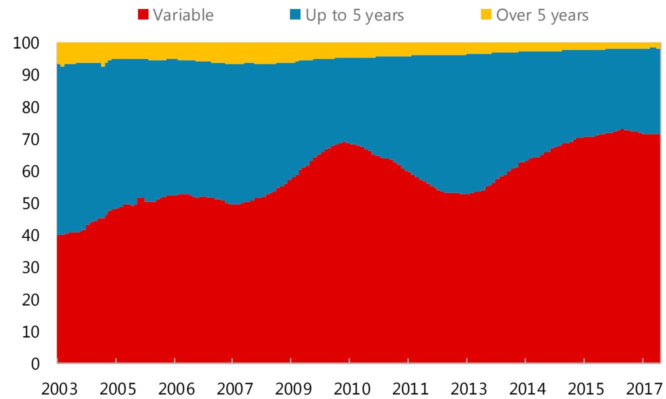


Source: Finansinspektionen.
Note: Each dot represents one household.

effectiveness of amortization requirements should continue to be monitored regularly, making it essential that the authorities collect information on households' balance sheets. Further steps, including a possible DTI limit, should be implemented if needed.[16]

32. Removing deterrents to fixed rate mortgages would help households manage their risks. Some 72 percent of mortgages have variable rates, with rate fixing for over 5 years being rare, partly because fixed rate loans can be subject to a prepayment fee. But households with a 500 percent DTI ratio with all loans at a floating rate would face a 10 percent cut in spending power from a 2 percentage point rise in rates.[17] Eliminating this fee would enable households to better manage their interest risk exposure, potentially easing vulnerabilities ahead of a likely rise in interest rates. This step would also make it feasible to adopt limits on variable rate mortgages if warranted by macrofinancial stability risks.

Share of Variable and Fixed Rate Mortgages
(Percent)



Source: Haver Analytics.

33. The expansion of the FI's macroprudential mandate should be implemented in a manner that facilitates timely and effective action. The government has submitted draft legislation that, from February 2018, would give FI authority to use macroprudential tools without parliamentary approval, but remaining subject to government approval. Completing this step would address a key recommendation of the 2016 FSAP. To ensure timely and effective measures, the government's approval responsibility should only be used as an "emergency brake".

Macroprudential Instruments
(Percent)

	2013	2014	2015	2016	2017
Lending measures					
Loan-to-value (LTV)					
Residential	85	85	85	85	85
Loan amortization				✓	✓
Capital requirements					
Capital conservation buffer (CCoB)		2.5	2.5	2.5	2.5
Countercyclical capital buffer (CCyB)				1.5	2.0
Systemic risk Buffer (SRB)			3.0	3.0	3.0
Pillar II capital add-on			2.0	2.0	2.0
Risk weight floor					
Residential	15	25	25	25	25
Commercial		100	100	100	100

Sources: FI; and Fund staff calculations.

34. Swedish financial supervision, and regional coordination in supervision, liquidity support and resolution, must remain strong. The augmentation of FI's budget in 2018 is welcome to build its capacity for robust supervision of Sweden's large and interconnected financial system. Nordea's proposal to move its headquarters to Finland will require sound supervisory and resolution arrangements to be established among the relevant authorities and it should not reduce Nordea's

[16] Paragraphs 23–25 of the 2016 Article IV consultation with Sweden discuss DTI limits in more detail.

[17] Using Swedish household level data, Flodén and others (2016) find that highly-indebted households reduce consumption by several percent more in response to a 1 ppt rise in interest rates than those with little debt.

capital. The Memoranda of Understanding on supervision, resolution, and liquidity support signed by the Nordic, Baltic, and euro area authorities in December 2016 are a valuable foundation for such cooperation, such as information sharing and joint examinations.

35. Swedish banks rely heavily on wholesale funding, requiring close liquidity monitoring and adequate foreign reserves. Swedish banks meet their deposit funding deficits by issuing covered bonds, unsecured bonds, and commercial paper, with half denominated in krona and the rest in foreign currencies, mainly euros and U.S. dollars. Alongside the adoption of EU liquidity regulations, Sweden should retain its own requirements on euro and U.S. dollar exposures. Monitoring an extended (three-month) Liquidity Coverage Ratio in U.S. dollars and euros will remain useful in ensuring the adequacy of liquidity buffers. To safeguard the stability of the Swedish and regional financial systems, the Riksbank must also hold sufficient foreign reserves. As discussed in *The Adequacy of Sweden's Foreign Reserves*, costs to the public sector from holding foreign reserves could be covered by charging banks a fee in relation to their foreign currency liquidity gaps.

36. *Authorities' Views*. The authorities are alert to macroeconomic vulnerabilities from housing prices and household debt, and the government awaits the final proposal from FI on stricter amortization after the usual consultation process. The effectiveness of these measures will be monitored, with analysis currently focusing on an increase in unsecured credit occurring near the time that amortization requirements became effective. Regarding fixed rate loans, they noted that the legislation regarding prepayment fees was amended in 2014, with the purpose of bringing fees more in line with the creditor's actual loss related to the prepayment. Yet households borrow on a floating rate basis to a large extent which gives reason to monitor developments. The authorities expected the expansion of the FI's macroprudential authority to proceed as planned. In practice, the approval requirement will operate as an "emergency brake" when needed. On Nordea, the authorities will engage closely with their respective euro area and regional counterparts to ensure effective cooperation in the event of its headquarters relocation, and in that cooperation they are seeking to preserve Nordea's strong capital and liquidity. The Riksbank sees a need to further tighten foreign currency liquidity regulation. The parliamentary review of the Riksbank Act will also consider foreign reserves and their financing.

E. Fiscal Policy

37. The 2018 budget adopts sizable initiatives to address social priorities, resulting in a mildly expansionary fiscal stance. New initiatives totaling 0.9 percent of GDP are proposed, addressing priorities for core public services, defense and domestic security, welfare, and climate and the environment. These measures are expected to help reduce inequality and the government anticipates they will help unemployment fall below 6 percent in 2018. Spending for programs specifically directed at supporting migrant integration is expected to decline modestly in 2018, primarily as exits from the 2-year introduction program begin to exceed new entrants. But the government expects the new budget initiatives will bolster employment in social services, which, together with a streamlining of active labor market policies to promote greater use by firms, should aid migrant integration significantly. Overall, the government projects a fiscal surplus of 0.9 percent of GDP in 2018, close to the current medium-term surplus target.[18] IMF staff estimates of the structural balance decline only slightly to about 0.5 percent of GDP in 2018, with the overall macroeconomic stimulus reinforced by the composition of measures, yet concerns around overheating are limited by persistently low inflation.

Key Indicators for General Government

(Percent of GDP unless otherwise noted)	Actual 2016	Proj. 2017	Budget 2018
Net lending 1/	1.1	1.0	0.9
Adjustment for one-off factors 2/	0.2	0.0	0.0
Net lending ex. one-offs	0.9	1.0	0.9
Cyclical contribution	-0.1	-0.3	-0.3
Structural balance (percent of potential GDP)	0.8	0.7	0.5
Migration-related adjustment 3/	0.7	0.7	0.4
Adjusted structural balance	1.5	1.4	0.9
Memo items			
Change in structural balance (percentage points)	0.8	-0.1	-0.1
Output gap (percent of potential GDP)	0.3	0.9	0.8
Migration-related spending	1.2	1.2	0.9
Gross public debt	41.3	38.4	36.5

Sources: Statistics Sweden, Swedish Ministry of Finance, NIER, ESV and Fund staff calculations.

1/ Projections from Budget Bill 2018. Net lending for 2016 reflects data released after the 2018 budget.

2/ Includes EU fee discount and extraordinary elements of corporate income and capital gains taxes.

3/ Migration-related spending in excess of an assumed medium-term outlook of 0.5 percent of GDP.

38. Looking to the medium-term, robust economic prospects urge a phased decline in the fiscal surplus, relying principally on revenues to help sustain inclusive growth. On a no-policy change basis, revenue growth in coming years provides additional resources averaging about ½ percent of GDP annually, providing substantial room for new spending or revenue initiatives. An immediate transition in the surplus to the new medium-term target of 0.33 percent of GDP when it becomes effective from 2019 could help bring forward the expected further decline in the external current account surplus of about ½ percentage point in coming years, but frontloaded fiscal stimulus is not warranted by cyclical considerations given the positive output gap. Hence the decline in the surplus to the new medium-term target should be relatively gradual, such as by phasing it over 2–3 years. Under the assumption that the surplus target is reached by 2021, public debt is expected to decline to 33 percent of GDP that year, below the 35 percent benchmark added to Sweden's fiscal framework (see Annex III). It is evident that Sweden's healthy fiscal position offers substantial fiscal space were it to be needed, which is not currently the case. If debt does in practice fall below the 35 percent of GDP benchmark, a further reduction in the surplus target may be appropriate at the time that the fiscal framework is due for its 8-yearly review.

39. *Authorities' Views*. After expectedly strong revenue performance in recent years, the 2018 budget strikes a reasonable balance, by taking steps to preserve confidence in strength of the Swedish economic and social model while maintaining a responsible fiscal policy. The authorities

[18] The medium-term surplus target is currently 1 percent of GDP, and it will be revised to 0.33 percent of GDP from 2019, a reduction that was supported in the 2016 Article IV consultation.

assessed the fiscal stance to be mildly stimulatory, which is supportive of the accommodative monetary policy, and they considered that the modest decline in the structural balance would enable a smoother transition to the new surplus target. The Fiscal Policy Council recognized the considerable improvement in public finances in recent years, but maintained that there is little need for stimulatory fiscal policy at a time of strong growth and a positive output gap, so it would recommend somewhat smaller net budgetary initiatives and a neutral fiscal stance in 2018.

STAFF APPRAISAL

40. Sweden's economy continues to perform well, putting the country in a strong position to undertake reforms. Robust growth, supported by an accommodative monetary policy, is expected in 2017. Prospects for solid growth and a further decline in unemployment in coming years also benefit from an improving international economy and a mildly expansionary fiscal stance. Yet, even as employment rates reach EU highs, business sector wage rises remain subdued, posing downside risks to an expected pick up in inflation. The current account surplus has narrowed in recent years, and this process is expected to continue over the medium term, aided by a decline in the fiscal surplus toward its new medium-term target.

41. Clearer signs that inflation is on a sustained uptrend are needed before unwinding monetary accommodation. At this stage an accommodative monetary stance remains appropriate given low underlying inflation and uncertainties around inflation prospects. This stance can be maintained even with some further tapering of bond purchases, especially if downward pressure on bond yields in the euro area is reduced. Rate hikes should be considered once labor cost growth and services inflation provide clearer signs that inflation is on a sustained upward trend. Foreign exchange intervention should remain a last resort. The parliamentary review of the Riksbank Act is a welcome opportunity to further enhance the inflation target specification and put the Riksbank's role in financial stability on a firmer legal footing, while preserving its financial autonomy.

42. The social partners should build consensus on making wages more responsive to Swedish conditions at both the macroeconomic and sectoral level. Swedish wage formation has long functioned well, but nominal wage rises in recent years are increasingly anchored to those in Germany. This approach helped unwind an earlier sharp rise in the labor share of income, but if such low nominal wage rises persist, inflation would likely remain below target, prolonging low interest rates. Within the current bargaining system, an approach that guides the benchmark industrial sector wage increase using trends in Sweden's labor productivity and medium-term inflation expectations, while preserving adequate business sector profitability, would better support Sweden's macrofinancial stability. A combination of greater scope for differences in sectoral wage rises and firm-level flexibility would enable wage signals to play a larger role in meeting the changing labor needs ahead. It is welcome that new initiatives to raise employment of the low-skilled and migrants are emerging, especially the scope for temporarily lower wages coupled with suitable education.

43. Deep reforms of the housing market are needed to durably address macrofinancial risks and support inclusive growth. Having more than doubled relative to median incomes since the mid-1990s, housing prices in Sweden are high, especially in the major centers. As a result, new purchasers must take on heavy debts, but high prices also hinder mobility and raise inequality. Construction costs in Sweden need to be reduced by streamlining complex and burdensome building regulations and promoting competition in the sector, including by harmonizing fragmented municipal planning and approval processes. Existing property needs to be used more efficiently, requiring political hurdles to reforming rent control and shifting the composition of property taxes to be overcome. Fiscal policy can further support market rebalancing by reducing mortgage interest deductibility, expanding support for construction of rental housing that meets affordability tests, and enhancing public transportation within regions.

44. Further macroprudential measures are appropriate to contain macroeconomic vulnerabilities. The mortgage amortization measure adopted in mid-2016 has shown positive initial results, including modestly reducing the share of new mortgages with high DTI ratios. The proposed stricter amortization requirement is a well-targeted tightening of this earlier measure, which should be adopted soon. The effectiveness of macroprudential measures should continue to be reviewed regularly, making it essential that the authorities collect information on households' balance sheets. Further steps, including a possible DTI limit, should be implemented if needed. The need for timely and effective macroprudential measures makes it important to expand the FI's macroprudential authority in early 2018 as planned, and it is welcome that the government intends to exercise its approval role for proposed measures as an "emergency brake."

45. Swedish financial supervision, and regional coordination in supervision, liquidity support and resolution, must remain strong. The augmentation of FI's budget in 2018 is welcome to build its capacity for robust supervision of Sweden's large and interconnected financial system. The Swedish and regional authorities should collaborate closely on establishing sound supervisory and resolution arrangements in relation to Nordea's proposed relocation, including by not reducing its capital. Given Swedish banks heavy reliance on wholesale funding, Sweden should retain its own liquidity requirements on euro and U.S. dollar exposures alongside the adoption of EU liquidity regulations. To safeguard the stability of the Swedish and regional financial systems, the Riksbank must also hold sufficient foreign reserves.

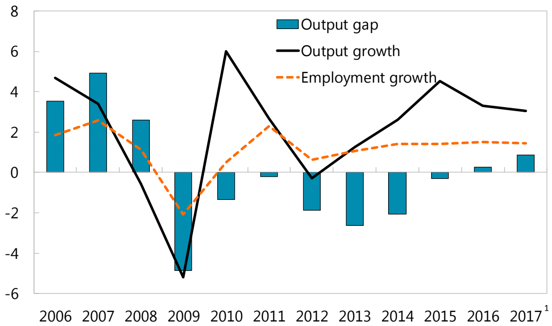
46. A balanced approach to Sweden's fiscal management should continue. Upside surprises on revenue lifted the fiscal position into surplus in recent years. The budget for 2018 mobilizes resources to strengthen the Swedish model in a manner that addresses climate and the environment, reduces inequality, and promotes employment including migrant integration. Concerns about overheating from the resulting mildly expansionary fiscal stance are mitigated by uncertainties around the output gap and persistently low inflation. Looking ahead, allowing the surplus to decline to its new medium-term target of 0.33 percent of GDP over a period of a few years would strike a reasonable balance. If public debt falls below the new 35 percent of GDP benchmark, a further reduction in the surplus target may be appropriate when the fiscal framework is next reviewed.

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

Figure 2. Sweden: Macroeconomic Indicators

Strong economic and employment growth is turning the output gap positive.

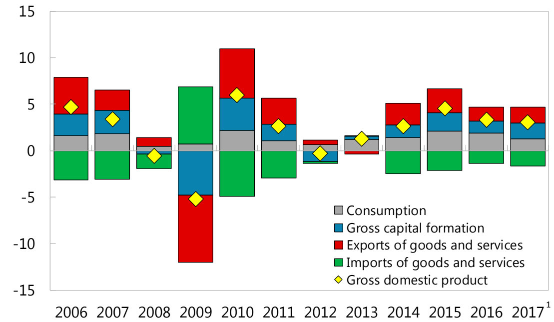
Swedish Economy
(Percent)



Sources: IMF World Economic Outlook, Statistics Sweden, and Fund staff calculations.
[1] Staff forecasts.

Residential investment, private consumption, and exports are key drivers of growth in recent years.

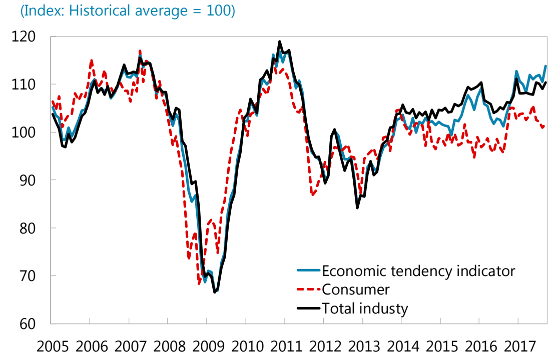
Contributions to Growth
(Percentage points)



Sources: IMF World Economic Outlook; and Fund staff calculations.
[1] Staff forecasts.

Confidence strengthened across business and consumers…

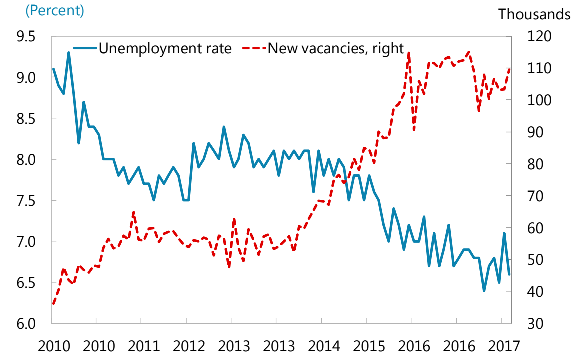
Confidence Indicators
(Index: Historical average = 100)



Sources: NIER and Fund staff calculations.

…aided by continuing improvements in the labor market.

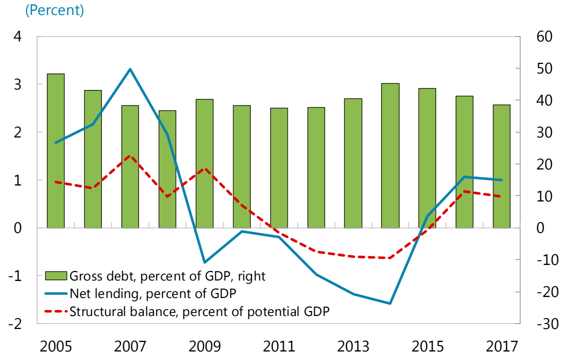
Labor Market Indicators
(Percent)



Sources: Employment Service, Statistics Sweden, and Fund staff calculations.

Solid government finances are reducing the debt ratio.

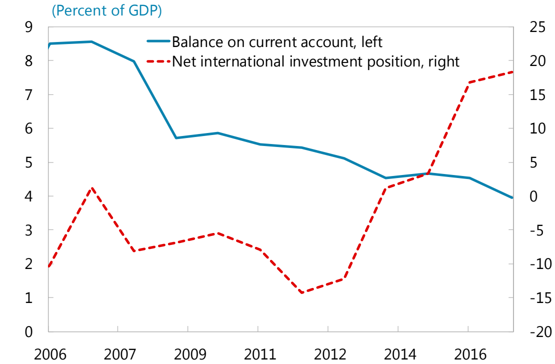
General Government Fiscal Balance
(Percent)



Sources: IMF World Economic Outlook, Sweden Ministry of Finance, and Fund staff calculations.

The current account surplus is declining from high levels.

External Position
(Percent of GDP)



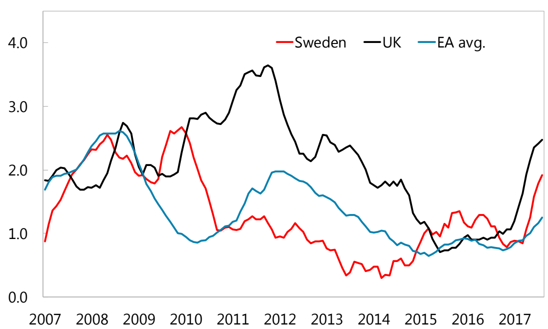
Sources: IMF World Economic Outlook, Statistics Sweden and Fund staff calculations.

Figure 3. Sweden: Inflation and Monetary Policy

Headline figures for core HICP inflation have risen sharply in recent month…

Core HICP Inflation

(Percent, y/y, 3-month average)

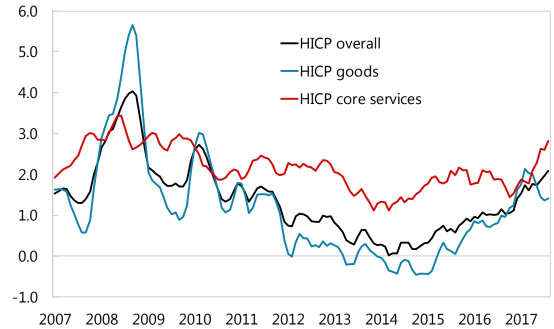


Sources: Eurostat and Fund staff calculations.

…led by higher services inflation, although a few items (package holidays and bank fees) played major role.

HICP Inflation

(Percent, y/y, 3-month average)

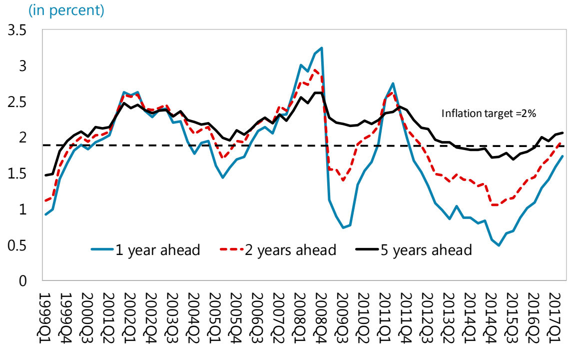


Sources: Haver Analytics and Fund staff calculations.

Survey measures of inflation expectations have risen to target, supported by monetary policy easing.

Inflation Expectations

(in percent)

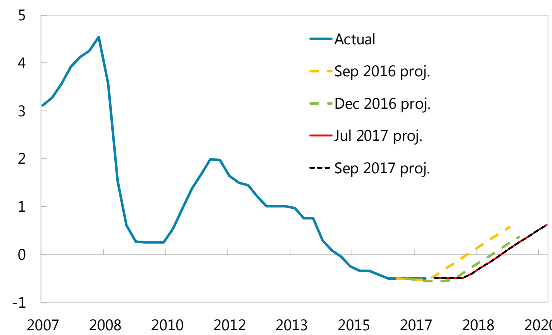


Sources: TNS Prospera, Staff calculations

The Riksbank's outlook for policy rates was little changed, with the first hike expected in the second half of 2018…

Riksbank Repo Rate Forecasts

(Percent)

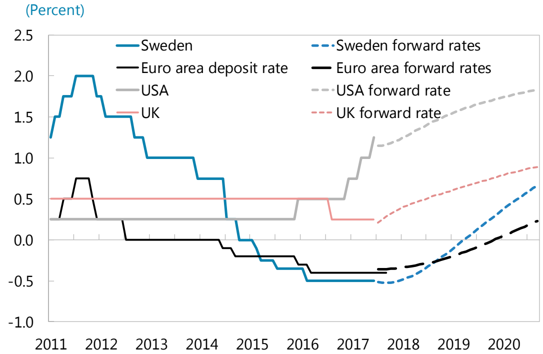


Sources: Sveriges Riksbank and Fund staff calculations.

…and markets expect the Riksbank to hike rates at a faster pace than other central banks.

Actual Policy Rates and Expected Overnight Rates

(Percent)

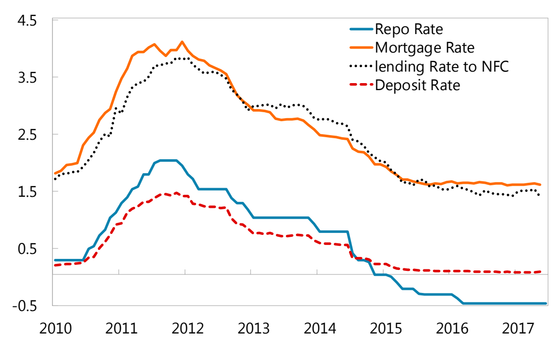


Sources: Riksbank, Macrobond

Accommodative monetary policies have kept retail lending and deposit rates low.

Interest Rates

(Percent)



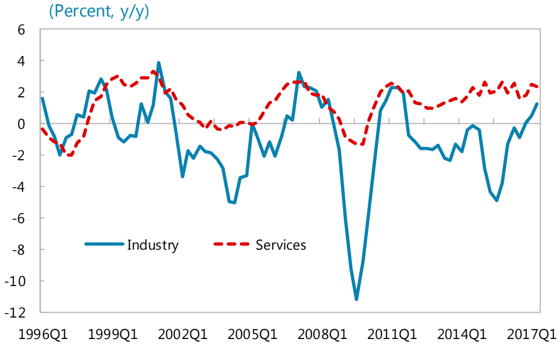
Sources: Statistics Sweden and Fund staff calculations.

Figure 4. Sweden: Labor Market Developments

Strong employment growth, especially in the service sector...

Employment Growth

(Percent, y/y)

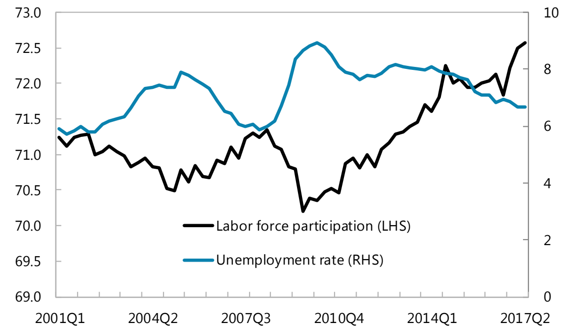


Sources: Haver, Staff Calculation

...lowered the unemployment rate to the pre-crisis level, even as labor force participation rose strongly.

Labor Market Development

(LHS, percent of working age population, RHS, percent of labor force)

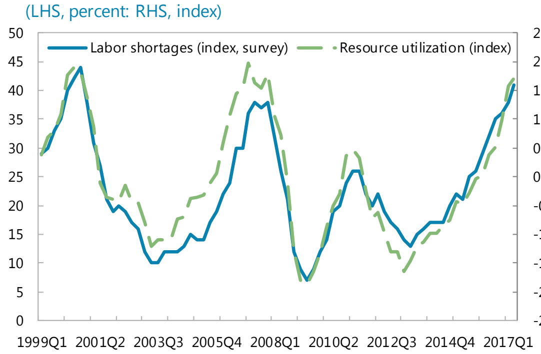


Sources: Haver, Staff Calculation

Survey and other indicators also point to rising labor shortages...

Labor Market Slack Indicators

(LHS, percent: RHS, index)

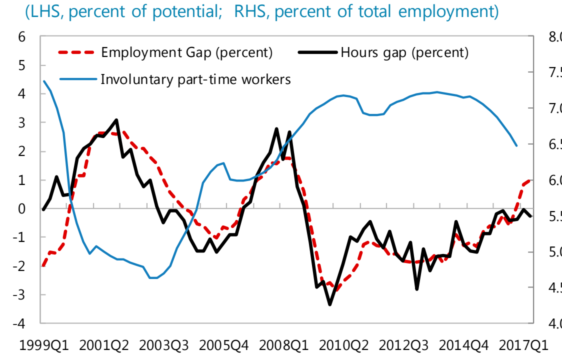


Sources: Riksbank. Statistics Sweden, NIER

...and declining slack in the labor market.

Other Labor Market Slack Indicators

(LHS, percent of potential; RHS, percent of total employment)

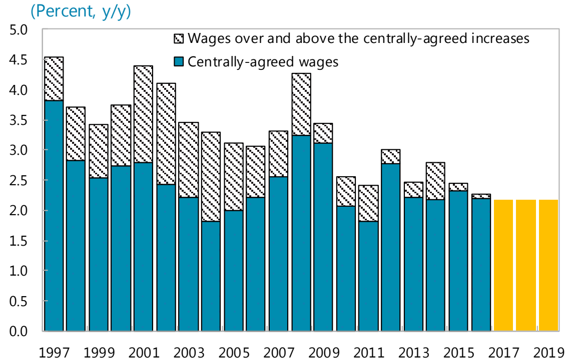


Sources: Riksbank. Statistics Sweden, NIER

But wage growth remains subdued...

Centrally-agreed Wages and Wage Drift

(Percent, y/y)

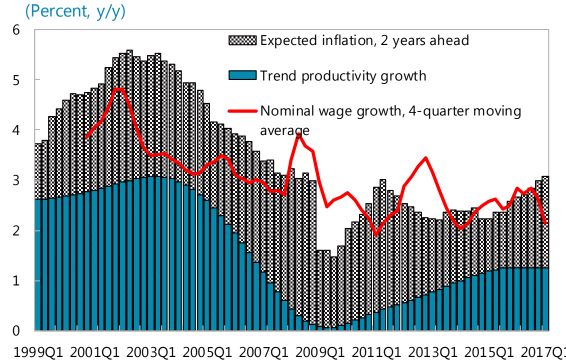


Sources: Riksbank, The National Mediation Office

...falling behind the sum of trend productivity and inflation expectations for the next two years.

Underlying Drivers of Nominal Wage Growth

(Percent, y/y)

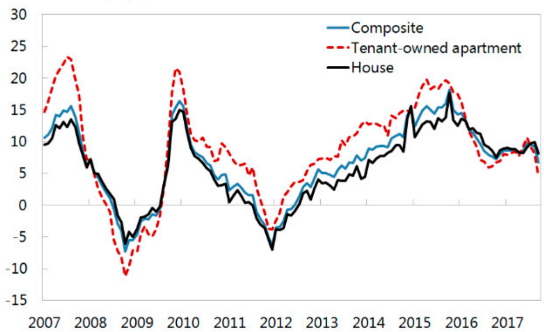


Sources: Eurostat and TNS Prospera.

Figure 5. Sweden: Housing Market Developments

House price growth has moderated since end-2015…

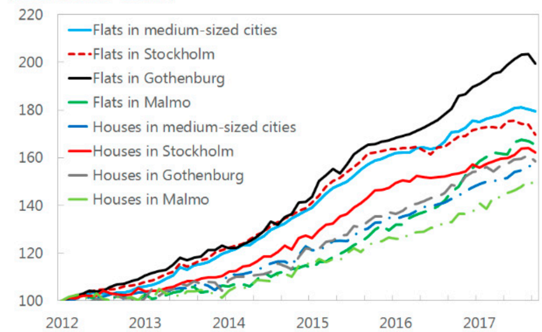
House Prices
(Percent change, y/y)



Sources: Valueguard and Fund staff calculations.

…being strongest in Gothenburg and Malmo in recent years, with signs of market cooling emerging recently.

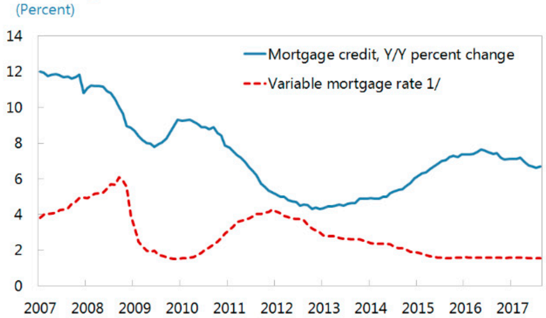
Flat and House Price in Major Cities
(Index, 2012M1=100, SA)



Sources: Haver and staff calculations.

Growth in mortgage credit has eased modestly despite very low mortgage rates.

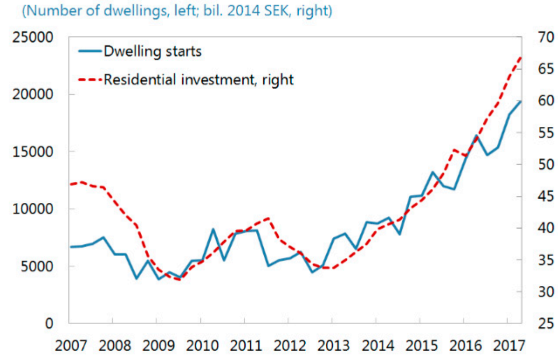
Mortgage Credit and Interest Rates
(Percent)



Sources: Statistics Sweden and Fund staff calculations.
1/ Variable rate refers to mortgages with initial interest rate fixation periods less or equal to 3 months.

Rising house prices have led to a rise in housing starts and investment.

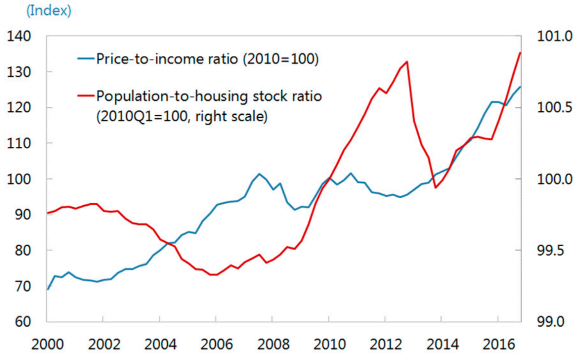
Dwelling Starts and Residential Investment
(Number of dwellings, left; bil. 2014 SEK, right)



Sources: Statistics Sweden and Fund staff calculations.

With population rising faster than housing supply, house prices have been rising faster than income, especially in big cities.

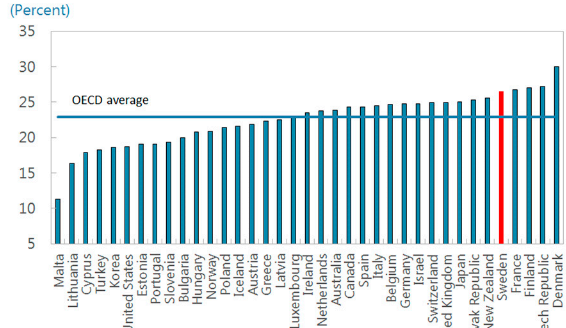
Housing Supply Relative to Demographic Needs
(Index)



Sources: OECD, Statistics Sweden, and Fund staff calculations.

Swedish households devote more than a quarter of their total expenditure to housing, exceeding the OECD average.

Housing Expenditure As Share of Household Final Consumption Expenditure, 2013
(Percent)

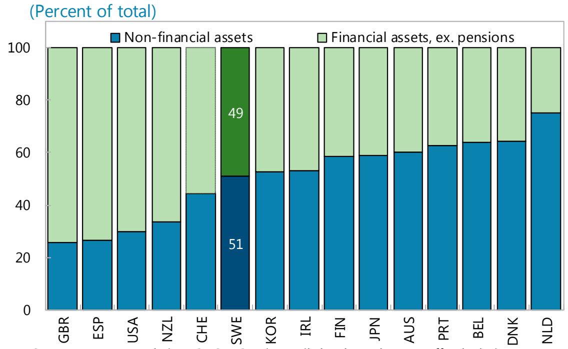


Sources: OECD.

Figure 6. Sweden: Cross-Country Household Balance Sheet Indicators*

Swedish household assets are broadly evenly split across financial and non-financial assets…

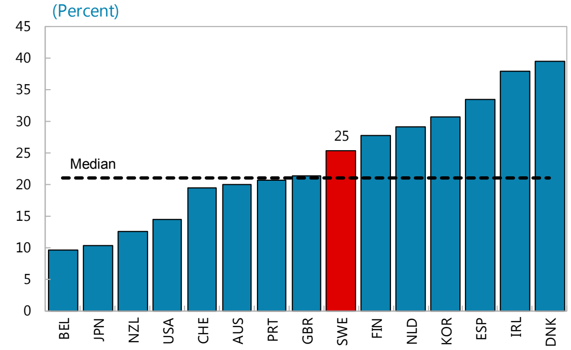
Composition of Household Assets ex-Pensions, 2015 1/
(Percent of total)



Sources: Haver Analytics; OECD; Sveriges Riksbank; and IMF staff calculations.
1/ 2014 data for BEL and PRT.

…with household debt representing about ¼ of assets.

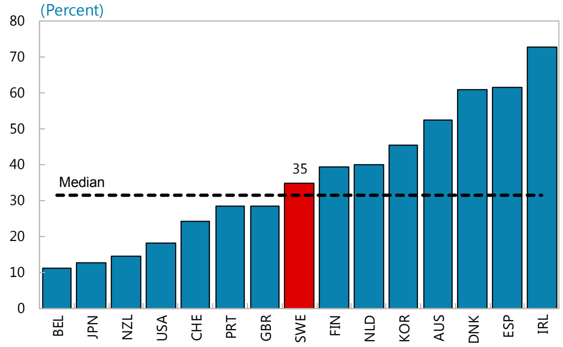
Household Liabilities to Assets ex-Pensions, 2015 1/
(Percent)



Sources: Haver Analytics, OECD, Sveriges Riksbank, and IMF staff calculations.
1/ Total assets excluding pensions. 2014 data for BEL and PRT.

Household debt relative to net worth is just above median of these peers with high housing ownership…

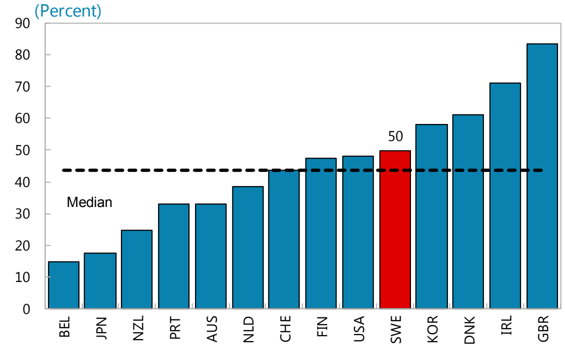
Household Liabilities to Net Worth, 2016 1/
(Percent)



Sources: Haver Analytics; OECD; Sveriges Riksbank; and IMF staff calculations.
1/ 2014 data for BEL and PRT; 2015 data for AUS, CHE, JPN, NZL and USA.

…and debt levels relative to the value of housing in Sweden are also just above the median.

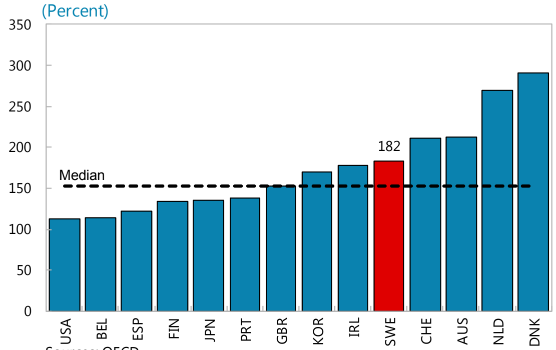
Household Liabilities to Non-Financial Assets, 2015 1/
(Percent)



Sources: Haver Analytics; OECD; Sveriges Riksbank; and IMF staff calculations.
1/ 2014 data for BEL and PRT.

Debt to disposable income is higher than the median, partly related to higher taxes for social services…

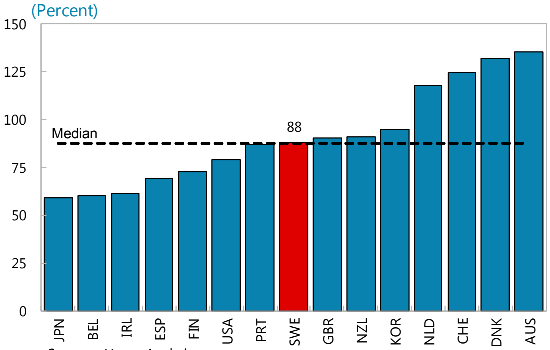
Household Debt to Net Disposable Income, 2016 1/
(Percent)



Sources: OECD.
1/ 2015 data for AUS, BEL, CHE, ESP, IRL, KOR, JPN, and USA.

…but household debt relative to GDP is at the median, similar to the UK.

Household and NPISHs Debt to GDP, 2016 1/
(Percent)



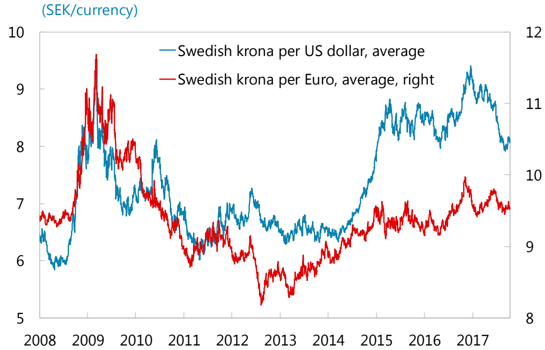
Sources: Haver Analytics.
1/ 2015 data for CHE and IRL.

* Countries with comparable income level and households predominantly purchased their home are selected as comparators.

Figure 7. Sweden: Selected Financial Market Indicators

The Krona has broadly stabilized against the USD and somewhat weakened against the euro.

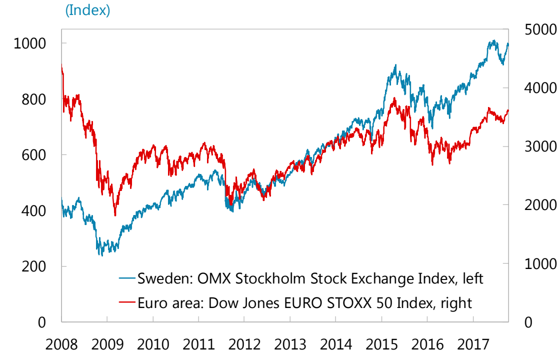
Exchange Rates
(SEK/currency)



Source: Bloomberg Finance L.P.

Equity values have trended up to substantially exceed pre-crisis levels.

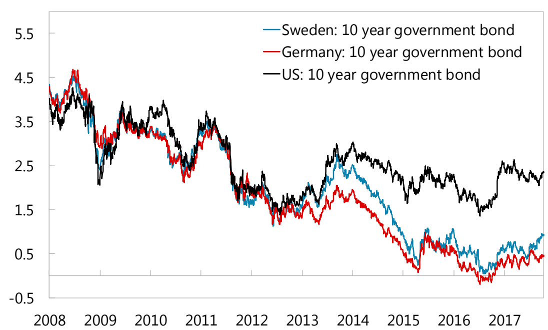
Stock Indices
(Index)



Sources: Bloomberg Finance L.P.

Swedish sovereign bond yields have been tracking German rates closely, especially since 2015.

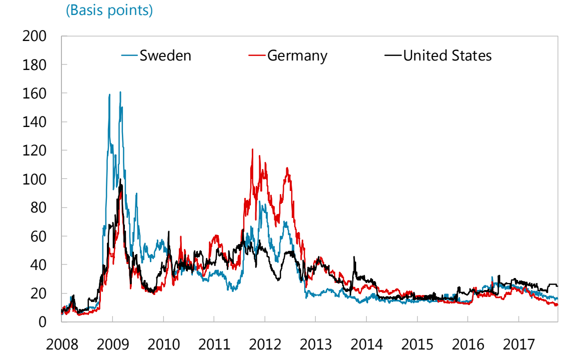
10 Year Government Bond Yields
(Percent)



Sources: Bloomberg Finance L.P.

And sovereign CDS spreads remain very close to other AAA rated countries.

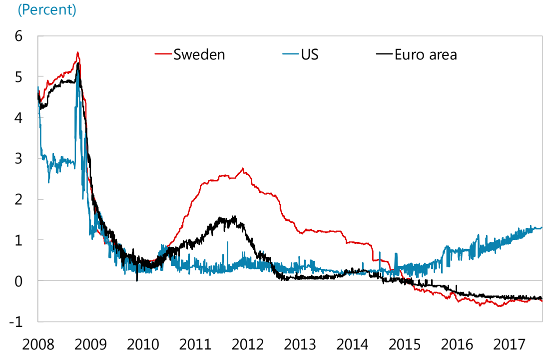
5 Year CDS Spreads
(Basis points)



Sources: Datastream and Fund staff calculations.

Interbank rates remained below zero.

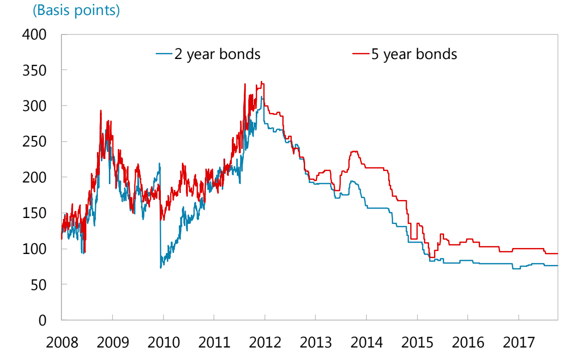
3-Month Interbank Rates
(Percent)



Sources: Sveriges Riksbank and Fund staff calculations.

Swedish banks' covered bond yields stayed very low, with stable spreads over government bonds, benefiting from the accommodative monetary stance.

Spread of Covered Bonds over Government Bond Yields
(Basis points)



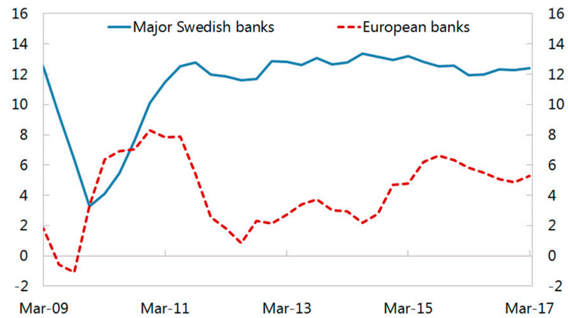
Sources: Datastream and Fund staff calculations.

Figure 8. Sweden: Banking Sector Developments

Swedish bank profitability greatly exceeds European averages with limited impact from negative interest rates in recent years…

Return on Equity 1/

(Rolling four quarters, percent)



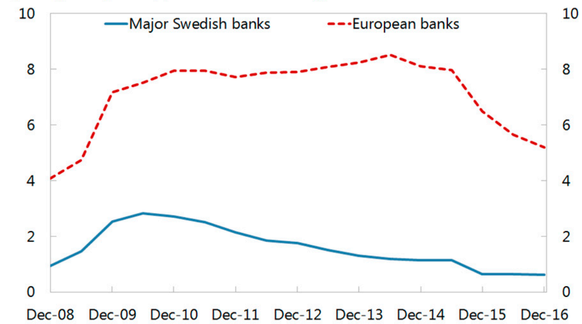
Source: Riksbank.

1/ Calculated over a a sample of European banks. Adjusted for nonrecurring items.

…and Swedish banks faced a smaller deterioration in loan performance and more quickly returned NPLs to a normal level.

Non-performing Loans 2/

(Rolling four quarters, percent of total lending)



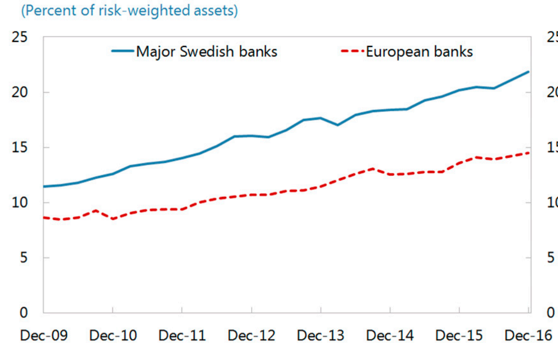
Source: Riksbank.

2/ Calculated over a a sample of European banks. Simple averages.

Capital positions of the major Swedish banks have risen…

Common Equity Tier 1 Capital 3/

(Percent of risk-weighted assets)



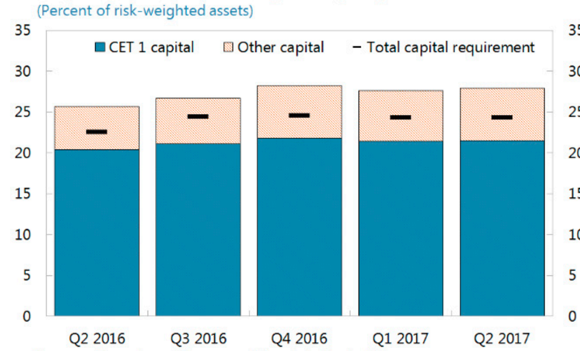
Source: Finansinspektionen.

3/ Simple average for Swedish banks, and median value for 55 European banks.

…and are comfortably above regulatory minima.

Major Swedish Banks Regulatory Capital 4/

(Percent of risk-weighted assets)



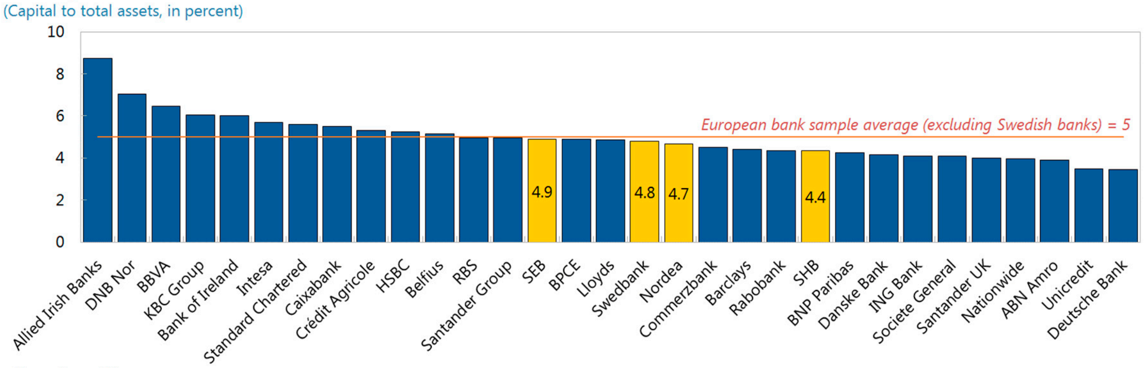
Sources: Finansinspektionen; and Fund staff calculations.

4/ Simple average for Nordea, SEB, Swedbank, and Handelsbanken.

The leverage ratio of the major Swedish banks has increased to just below the European average.

Leverage Ratio 5/

(Capital to total assets, in percent)



Source: Finansinspektionen.

5/ Average of the fully-loaded leverage ratio in Q2 and Q4 2016 financial reports.

Table 1. Sweden: Selected Economic Indicators, 2014–20

				Projections			
	2014	2015	2016	2017	2018	2019	2020
Real economy (percent change)							
Real GDP	2.6	4.5	3.3	3.1	2.4	2.2	2.0
Domestic demand	2.9	4.3	3.3	3.1	2.6	2.4	2.1
Private consumption	2.1	3.1	2.2	2.5	2.5	2.3	2.1
Public consumption	1.5	2.4	3.4	0.8	1.2	1.1	1.0
Gross fixed investment	5.5	6.9	5.6	7.0	4.1	4.0	3.3
Net exports (contribution to growth)	-0.1	0.4	0.1	0.0	-0.1	-0.1	-0.1
Exports of G&S	5.3	5.7	3.3	3.8	4.0	3.9	3.8
Imports of G&S	6.3	5.2	3.4	4.2	4.6	4.5	4.4
HICP inflation (e.o.p)	0.3	0.7	1.7	1.8	1.5	1.8	2.0
Unemployment rate (percent)	7.9	7.4	7.0	6.6	6.3	6.3	6.3
Gross national saving (percent of GDP)	28.0	29.0	29.2	29.9	30.0	30.1	30.2
Gross domestic investment (percent of GDP)	23.3	24.3	24.7	25.9	26.2	26.6	27.0
Output gap (percent of potential)	-2.1	-0.3	0.3	0.9	0.8	0.7	0.5
Public finance (percent of GDP)							
Total revenues	48.9	49.3	49.7	49.2	48.3	48.2	48.2
Total expenditures	50.5	49.1	48.6	48.2	47.5	47.6	47.7
Net lending	-1.6	0.2	1.1	1.0	0.9	0.6	0.5
Structural balance (as a percent of potential GDP)	-0.6	0.0	0.8	0.7	0.5	0.3	0.3
General government gross debt, official statistics	45.2	43.7	41.3	38.4	36.5	34.3	32.1
Money and credit (year-on-year, percent change, eop) 1/							
M3	4.1	7.6	8.4	9.5	...	...	...
Bank lending to households	6.0	7.4	7.4	6.7	...	...	...
Interest rates (percent, end of period)							
Repo rate 2/	0.0	-0.4	-0.5	-0.5	...	...	...
Ten-year government bond yield 2/	1.7	0.7	0.5	0.6	...	...	...
Mortgage lending rate 3/	1.9	1.6	1.6	1.6	...	...	...
Balance of payments (percent of GDP)							
Current account	4.6	4.7	4.5	3.9	3.7	3.5	3.2
Foreign direct investment, net	0.9	1.6	0.3	0.8	0.5	0.3	0.2
International reserves, changes (in billions of US dollars) 4/	0.2	1.3	0.5	0.5	...	...	...
Reserve cover (months of imports of goods and services)	3.3	3.5	3.5	3.8	...	...	...
Net international investment position	1.2	4.6	11.2	12.8	14.3	15.7	16.9
Exchange rate (period average, unless otherwise stated)							
SEK per euro 2/	9.1	9.4	9.5	9.6	...	...	...
SEK per U.S. dollar 2/	6.9	8.4	8.6	8.5	...	...	...
Nominal effective rate (2010=100) 2/	103.7	97.5	97.1	96.7	...	...	...
Real effective rate (2010=100) 2/ 5/	100.6	92.8	92.6	91.7	...	...	...
Fund position (September 30, 2017)							
Quota (in millions of SDRs)	4,430						
Reserve tranche position (in percent of quota)	3.2						
Holdings of SDRs (in percent of allocation)	91.5						

Other Indicators

GDP per capita (2016, USD): 51,473; **Population** (2016, million): 10.0; **Main products and exports**: Services, including computer and information; motor vehicles, forest products; **Key export markets**: Germany, Norway, United Kingdom.

Sources: IMF WEO, Riksbank, Swedish Ministry of Finance, Statistics Sweden, and Fund staff calculations.
1/ Data for 2017 are as of August 2017.
2/ Data for 2017 are as of September 2017.
3/ Mortgage rates for new contracts. Data for 2017 are as of August 2017.
4/ Data for 2017 are as of Q2 2017.
5/ Based on relative unit labor costs in manufacturing.

Table 2. Sweden: General Government Statement of Operations, 2014–20

	2014	2015	2016	2017	2018	2019	2020
				Projections			
				Billions of SEK			
Revenue	1,926	2,070	2,187	2,283	2,330	2,417	2,512
Tax revenue	1,561	1,688	1,775	1,858	1,920	1,994	2,072
Taxes on income, profits, and capital gains	691	759	798	844	857	881	912
Payable by individuals	584	632	679	709	717	732	751
Payable by corporations	103	124	117	133	138	146	158
General taxes on goods and services	485	520	547	571	582	595	609
Other Taxes	385	409	430	443	481	518	551
Social Contributions	147	155	161	169	174	178	183
Grants	3	3	3	3	3	3	3
Other revenue	216	225	248	254	234	242	255
Interest income	28	30	31	33	34	35	37
Expenditure	1,989	2,060	2,140	2,237	2,289	2,386	2,484
Compensation of employees	500	523	551	574	597	619	649
Intermediate consumption	287	299	314	330	336	342	355
Interest payments	30	20	19	19	21	22	22
Social benefits	686	715	737	757	766	778	802
Expense not elsewhere classified	446	462	465	499	510	561	591
Net acquisition of nonfinancial assets	41	43	54	58	59	63	66
Gross operating balance	-22	53	101	104	101	95	94
Net lending / borrowing	-63	10	47	46	41	32	28
				Percent of GDP			
Revenue	48.9	49.3	49.7	49.2	48.3	48.2	48.2
Tax revenue	39.6	40.2	40.3	40.0	39.8	39.8	39.8
Taxes on income, profits, and capital gains	17.5	18.1	18.1	18.2	17.8	17.6	17.5
Payable by individuals	14.8	15.1	15.4	15.3	14.9	14.6	14.4
Payable by corporations	2.6	3.0	2.7	2.9	2.9	2.9	3.0
General taxes on goods and services	12.3	12.4	12.4	12.3	12.1	11.9	11.7
Other Taxes	9.8	9.7	9.8	9.5	10.0	10.3	10.6
Social Contributions	3.7	3.7	3.7	3.6	3.6	3.6	3.5
Grants	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other revenue	5.5	5.3	5.6	5.5	4.9	4.8	4.9
Interest income	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Expenditure	50.5	49.1	48.6	48.2	47.5	47.6	47.7
Compensation of employees	12.7	12.4	12.5	12.4	12.4	12.3	12.5
Intermediate consumption	7.3	7.1	7.1	7.1	7.0	6.8	6.8
Interest payments	0.8	0.5	0.4	0.4	0.4	0.4	0.4
Social benefits	17.4	17.0	16.7	16.3	15.9	15.5	15.4
Expense not elsewhere classified	11.3	11.0	10.6	10.8	10.6	11.2	11.3
Net acquisition of nonfinancial assets	1.0	1.0	1.2	1.2	1.2	1.3	1.3
Gross operating balance	-0.6	1.3	2.3	2.2	2.1	1.9	1.8
Net lending / borrowing	-1.6	0.2	1.1	1.0	0.9	0.6	0.5
Structural Balance (percent of potential GDP) 1/	-0.6	0.0	0.8	0.7	0.5	0.3	0.3
Fiscal Impulse (expansionary +)	0.0	0.6	0.8	-0.1	-0.1	-0.2	0.0
Memorandum items:							
Gross public debt (percent of GDP)	45.2	43.7	41.3	38.4	36.5	34.3	32.1
Net public debt (percent of GDP)	11.1	10.7	8.0	6.7	6.0	5.0	3.9
Real GDP growth (percent change)	2.6	4.5	3.3	3.1	2.4	2.2	2.0
Output gap (percent of potential GDP)	-2.1	-0.3	0.3	0.9	0.8	0.7	0.5
Nominal GDP (in billions of SEK)	3,937	4,200	4,405	4,639	4,823	5,014	5,210

Sources: The 2018 Budget Bill; and Fund staff calculations.
1/ Structural balance takes into account output gaps.

Table 3. Sweden: Public Sector Balance Sheet, 2008–16

	2008	2009	2010	2011	2012	2013	2014	2015	2016
					Billons of SEK				
Assets	**5,056**	**5,376**	**5,651**	**5,967**	**6,137**	**6,459**	**6,912**	**7,087**	**7,522**
Financial assets	2,102	2,343	2,468	2,666	2,786	2,940	3,312	3,408	3,589
Currency and deposits	120	81	66	101	97	90	172	156	169
Debt securities	310	313	330	334	343	342	441	450	491
Loans	389	487	486	515	541	665	730	781	811
Shares and other equity	966	1,131	1,205	1,369	1,437	1,474	1,587	1,544	1,638
Other financial assets	317	331	381	348	368	370	383	476	481
Capital stock net of depreciation	2,954	3,033	3,182	3,300	3,351	3,519	3,600	3,679	3,932
Liabilities	**1,807**	**1,834**	**1,865**	**1,965**	**2,009**	**2,157**	**2,536**	**2,608**	**2,671**
Financial liabilities	1,807	1,834	1,865	1,965	2,009	2,157	2,536	2,608	2,671
Currency and deposits	61	53	55	66	71	51	53	38	55
Debt securities	1,045	1,058	1,096	1,114	1,116	1,215	1,427	1,489	1,445
Loans	236	295	257	312	302	329	434	423	454
Other liabilities	464	428	457	474	520	562	622	657	717
Net worth	**3,249**	**3,542**	**3,785**	**4,001**	**4,128**	**4,302**	**4,376**	**4,479**	**4,851**
Financial net worth	**295**	**509**	**603**	**701**	**777**	**783**	**777**	**800**	**919**
					Percent of GDP				
Assets	**149.2**	**163.5**	**160.5**	**163.2**	**166.6**	**171.3**	**175.6**	**168.7**	**170.8**
Financial assets	62.0	71.2	70.1	72.9	75.6	78.0	84.1	81.1	81.5
Currency and deposits	3.5	2.5	1.9	2.8	2.6	2.4	4.4	3.7	3.8
Debt securities	9.2	9.5	9.4	9.1	9.3	9.1	11.2	10.7	11.1
Loans	11.5	14.8	13.8	14.1	14.7	17.6	18.5	18.6	18.4
Shares and other equity	28.5	34.4	34.2	37.4	39.0	39.1	40.3	36.8	37.2
Other financial assets	9.4	10.1	10.8	9.5	10.0	9.8	9.7	11.3	10.9
Capital stock net of depreciation	87.2	92.2	90.4	90.3	90.9	93.3	91.4	87.6	89.3
Liabilities	**53.3**	**55.8**	**53.0**	**53.7**	**54.5**	**57.2**	**64.4**	**62.1**	**60.6**
Financial liabilities	53.3	55.8	53.0	53.7	54.5	57.2	64.4	62.1	60.6
Currency and deposits	1.8	1.6	1.6	1.8	1.9	1.4	1.3	0.9	1.2
Debt securities	30.9	32.2	31.1	30.5	30.3	32.2	36.3	35.5	32.8
Loans	7.0	9.0	7.3	8.5	8.2	8.7	11.0	10.1	10.3
Other liabilities	13.7	13.0	13.0	13.0	14.1	14.9	15.8	15.7	16.3
Net worth	**95.9**	**107.7**	**107.5**	**109.4**	**112.0**	**114.1**	**111.2**	**106.6**	**110.1**
Financial net worth	**8.7**	**15.5**	**17.1**	**19.2**	**21.1**	**20.8**	**19.7**	**19.0**	**20.9**
Memorandum items:									
GDP (SEK billions)	3,388	3,289	3,520	3,657	3,685	3,770	3,937	4,200	4,405

Sources: Eurostat; Statistics Sweden; and Fund staff calculations.

Table 4. Sweden: Balance of Payments Accounts, 2014–20

	2014	2015	2016	2017	2018	2019	2020
				Projections			
				Billions of SEK			
Current Account Balance	183	196	198	182	179	174	168
Trade Balance	172	207	188	195	199	202	203
Exports of G&S	1,758	1,896	1,911	1,996	2,092	2,190	2,288
Imports of G&S	1,586	1,689	1,723	1,801	1,893	1,988	2,085
Factor income, net	10	-11	10	-12	-20	-28	-36
Financial Account Balance	131	85	-74	179	175	170	163
Investment Abroad 1/	-379	-905	-710	-284	-322	-410	-448
Investment in Sweden	-510	-979	-600	-463	-497	-579	-611
Reserves, change	1	11	36	0	0	0	0
				Percent of GDP			
Current Account Balance	4.6	4.7	4.5	3.9	3.7	3.5	3.2
Trade Balance	4.4	4.9	4.3	4.2	4.1	4.0	3.9
Exports of G&S	44.7	45.1	43.4	43.0	43.4	43.7	43.9
Imports of G&S	40.3	40.2	39.1	38.8	39.2	39.6	40.0
Factor income, net	0.3	-0.3	0.2	-0.3	-0.4	-0.6	-0.7
Financial Account Balance	3.3	2.0	-1.7	3.9	3.6	3.4	3.1
Investment Abroad 1/	-9.6	-21.5	-16.1	-6.1	-6.7	-8.2	-8.6
Direct Investment	1.6	3.0	4.0	4.1	3.9	3.7	3.5
Portfolio Investment	5.1	-1.9	0.7	3.8	3.8	3.6	3.7
Financial Derivatives	-16.8	-21.7	-21.2	-17.7	-18.2	-19.1	-19.6
Other Investment	0.4	-0.9	0.3	3.7	3.8	3.7	3.8
Reserves	0.0	0.3	0.8	0.0	0.0	0.0	0.0
Investment in Sweden	-12.9	-23.3	-13.6	-10.0	-10.3	-11.6	-11.7
Direct Investment	0.7	1.3	3.6	3.2	3.3	3.4	3.3
Portfolio Investment	1.0	0.6	-0.5	1.0	1.0	0.6	1.3
Financial Derivatives	-16.2	-21.7	-20.7	-15.7	-16.0	-16.5	-17.4
Other Investment	1.6	-3.6	3.9	1.5	1.3	0.9	1.0
Errors and Omissions	-0.2	-0.3	-0.7	0.0	0.0	0.0	0.0
				Percent change			
Exports of G&S 2/							
Value	1.3	-12.3	-0.7	5.0	10.7	5.5	5.1
Volume	4.6	5.6	2.2	3.9	4.1	3.9	3.9
Deflator	-3.2	-16.9	-2.8	1.1	6.3	1.5	1.2
Imports of G&S 2/							
Value	3.1	-13.4	0.5	5.1	11.0	5.9	5.5
Volume	6.6	5.1	3.8	4.2	4.6	4.5	4.4
Deflator	-3.3	-17.6	-3.1	0.9	6.1	1.3	1.1
Memorandum							
Net International Investment Position (Percent of GDP)	1.2	4.6	11.2	12.8	14.3	15.7	16.9
Nominal GDP (SEK billion)	3,937	4,200	4,405	4,639	4,823	5,014	5,210

Sources: Statistics Sweden and Fund staff calculations.

1/ Positive number indicates an accumulation of foreign assets.

2/ Percent changes of exports of G&S and imports of G&S are calculated using numbers in USD terms.

Table 5. Sweden: Financial Soundness Indicators: Banks, 2011–16

	2011	2012	2013	2014	2015	2016
	(End of period, percent)					
Capital Adequacy						
Regulatory capital to risk-weighted assets 1/	12.2	12.5	12.7	22.4	24.2	26.7
of which: Four major banks 2/	11.5	11.7	12.0	22.5	24.2	26.9
Regulatory Tier I capital to risk-weighted assets 1/	11.3	11.7	12.0	19.5	21.1	23.0
of which: Four major banks 2/	10.7	11.1	11.2	19.4	21.2	23.2
Capital as percent of assets (leverage ratio)	4.1	4.4	4.5	5.0	5.5	6.3
of which: Four major banks 2/	4.0	4.2	4.4	5.1	5.6	6.1
Asset quality and exposure						
Nonperforming loans to total gross loans	1.6	1.5	1.3	2.1	1.9	2.0
of which: Four major banks 2/	1.5	1.4	1.2	2.1	1.9	2.3
Nonperforming loans net of loan-loss provisions to capital	9.5	9.3	8.2	16.1	14.6	13.2
of which: Four major banks 2/	9.9	10.0	8.8	17.2	15.7	13.6
Loan-loss provisions to nonperforming loans	41.3	39.8	38.8	19.6	20.8	19.3
of which: Four major banks 2/	40.7	38.7	38.1	18.7	19.5	19.2
Large exposures as percent of tier 1 capital	37.2	29.5	20.0	8.5	...	25.1
of which: Four major banks	31.4	22.0	10.7	8.8	...	6.0
Earnings and profitability						
Return on assets (net income as percent of average total assets)	0.5	0.5	0.6	0.5	0.6	0.7
of which: Four major banks 2/	0.5	0.5	0.6	0.5	0.6	0.8
Return on equity (Net income as percent of average equity capital)	10.6	11.4	11.4	10.2	11.4	12.1
of which: Four major banks 2/	11.1	12.0	11.4	9.3	11.6	12.8
Net interest income as percent of gross income	54.4	55.4	55.3	50.3	50.6	85.4
of which: Four major banks 2/	57.3	58.3	58.6	55.2	52.6	88.6
Noninterest expenses as percent of gross income	66.1	63.2	63.9	32.0	59.2	27.4
of which: Four major banks	65.7	61.0	60.7	55.8	56.2	33.9
Noninterest income as percent of total income	52.9	51.7	53.7	62.3	45.5	34.4
of which: Four major banks	51.0	49.7	50.5	65.5	47.9	29.2
Trading income and foreign exchange gains (losses) to gross income	9.4	10.7	8.4	9.3	10.6	7.0
of which: Four major banks 2/	10.0	11.2	9.6	8.3	12.2	7.1
Personnel expenses as percent of noninterest expenses	53.6	52.2	53.9	57.4	48.5	45.3
of which: Four major banks 2/	57.8	59.4	60.5	68.5	54.0	44.5
Liquidity						
Liquid assets as percent of total assets	6.2	8.5	8.9	7.1	9.2	9.3
of which: Four major banks 2/	6.7	9.1	9.7	8.2	7.2	9.5
Liquid assets as percent of short-term liabilities 3/	...	...	...	22.2	19.6	15.8
of which: Four major banks 2/ 3/	...	...	...	23.7	20.6	16.2
Customer deposits as a percent of total (non-interbank) loans	49.8	52.9	53.8	56.5	52.6	53.0
of which: Four major banks 2/	48.5	50.9	52.7	54.5	50.3	49.2
Noninterbank loans to noninterbank deposits	153.8	148.8	145.9	140.7	152.4	188.6
of which: Four major banks 2/	163.5	158.0	153.7	149.5	165.4	203.4
Foreign exchange risk						
Foreign currency loans as percent of total loans	37.4	34.9	36.8	39.4	39.4	39.4
Foreign currency assets as percent of total assets	34.5	33.1	33.8	35.6	35.6	35.6
Foreign currency-denominated liabilities as percent of total liabilities	35.1	31.1	28.7	32.9	32.9	32.9

Sources: Financial Supervisory Authority, Riksbank, and Fund staff calculations.

1/ The calculations follow rules under Basel II, including transition rules as reported by the Riksbank. Without transition rules, the capital ratios would currently be higher due to lower risk-weighted assets (the result of banks' implementation of the IRB approach).

2/ On consolidated basis.

3/ The calculation of liquid assets follows the EBA guideline.

Table 6. Sweden: Financial System Structure, 2014–16

	2014				2015				2016			
	Number of institutions	Total assets (in billions of SEK)	Percent of total assets	Percent of GDP	Number of institutions	Total assets (in billions of SEK)	Percent of total assets	Percent of GDP	Number of institutions	Total assets (in billions of SEK)	Percent of total assets	Percent of GDP
Four Major Banks, consolidated												
Nordea	1	5,843	26.5	148.4	1	5,476	25.4	130.4	1	5,335	23.7	121.1
Handelsbanken	1	2,722	12.4	69.1	1	2,418	11.2	57.6	1	2,513	11.2	57.0
S.E.B	1	2,250	10.2	57.1	1	2,092	9.7	49.8	1	2,166	9.6	49.2
Swedbank	1	1,979	9.0	50.3	1	1,996	9.2	47.5	1	1,994	8.9	45.3
Total Top Four Banks	4	12,793	58.1	325.0	4	11,981	55.5	285.3	4	12,008	53.3	272.6
Four major banking groups 1/												
Banks	4	7,140	32.4	181.4	4	6,820	31.6	162.4	6	6,944	30.8	157.6
Insurance companies	10	723	3.3	18.4	9	754	3.5	17.9	9	805	3.6	18.3
Mortgage credit institutions	3	2,458	11.2	62.4	3	2,594	12.0	61.8	3	2,742	12.2	62.2
Securities firms	2	3	0.0	0.1	2	4	0.0	0.1	2	4	0.0	0.1
Other credit market companies	3	111	0.5	2.8	3	109	0.5	2.6	6	117	0.5	2.7
Top four banks in Sweden	22	10,436	47.4	265.1	21	10,280	47.6	244.8	26	10,613	47.1	240.9
Other Banks in Sweden												
Of which:												
Banks	28	748	3.4	19.0	28	737	3.4	17.6	33	909	4.0	20.6
Savings banks	48	171	0.8	4.3	47	187	0.9	4.4	47	203	0.9	4.6
Mortgage credit institutions	2	377	1.7	9.6	2	390	1.8	9.3	2	439	2.0	10.0
Member bank	2	2	0.0	0.1	2	2	0.0	0.1	2	2	0.0	0.1
Other credit market companies	27	802	3.6	20.4	25	796	3.7	19.0	23	859	3.8	19.5
Total other banks in Sweden	107	2,100	9.5	53.3	104	2,112	9.8	50.3	107	2,413	10.7	54.8
Nonbank credit institutions												
Insurance companies	194	4,164	18.9	105.8	187	4,262	19.7	101.5	169	4,551	20.2	103.3
Life insurance	40	3,390	15.4	86.1	37	3,532	16.4	84.1	37	3,778	16.8	85.8
Nonlife insurance 2/	143	608	2.8	15.4	139	560	2.6	13.3	132	589	2.6	13.4
Pension funds	11	166	0.8	4.2	11	170	0.8	4.1	11	184	0.8	4.2
Mutual funds 3/	860	2,770	12.6	70.4	866	3,040	14.1	72.4	894	3,346	14.9	76.0
Other nonbank credit institutions												
Asset management firms	78	11	0.1	0.3	83	12	0.1	0.3	85	12	0.1	0.3
Securities firms	112	12	0.1	0.3	109	12	0.1	0.3	108	9	0.0	0.2
Total financial system	1366	22,016	100.0	559.2	1364	21,590	100.0	514.1	1378	22,522	100.0	511.3
of which : Total banking sector 4/		14,894	67.6	378.3		14,094	65.3	335.6		14,421	64.0	327.4
Memorandum item:												
Foreign bank branches in Sweden	27	1,023	4.6	26.0	28	1,038	4.8	24.7	28	1,056	4.7	24.0
Swedish bank branches abroad	69	2,456	11.2	62.4	74	2,005	9.3	47.8	76	2,032	9.0	46.1

Sources: Financial Supervisory Authority, Riksbank, and Fund staff calculations.

1/ Includes all major nonbank financial institutions of the banking groups and branches in abroad.
2/ Not including minor local companies
3/ Market value of funds
4/ Number of institutions is computed on unconsolidated basis.

Appendix I. Impact of the Amortization Requirement

1. To contain the build-up in household debt vulnerabilities, a minimum amortization requirement for new mortgages was announced by the FI in October 2015 and became effective in June 2016. This regulation requires new mortgage borrowers to make annual repayments of at least 1 percent of the debt principal for mortgages with an LTV over 50 percent, and at least 2 percent for those with an LTV above 70 percent. The primary objective of the measure is to dampen the macroeconomic risks associated with highly-indebted households by discouraging high borrowing and reducing household debt over time through amortization.

Impact on Credit Composition

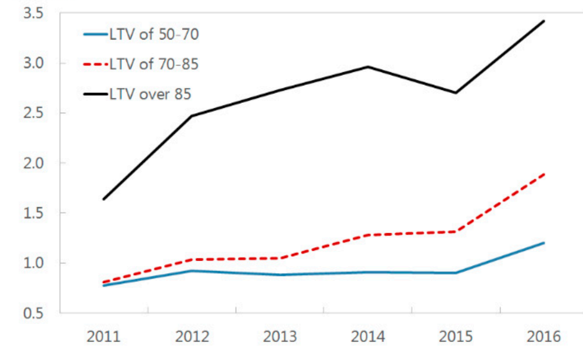
2. The risk profile of household credit composition has improved somewhat following the introduction of the measure. Households have responded to the new measure by amortizing more as well as borrowing less in relation to both house value and income:

- Amortization of mortgages with an LTV above 50 percent rose sharply as a share of principal in 2016, reaching 1.2, 1.9, and 3.4 percent for mortgages with LTVs of 50–70, 70–85, and over 85 percent respectively. The impact is most pronounced for households with an LTV higher than 70, with an average increase of about 0.7 percentage points in the annual amortization rate. Average repayments for mortgages with LTV of 50–70 percent have risen to a level broadly aligned with the new 2 percent requirement.

- The average LTV ratio for new mortgages also declined slightly in 2016 to 64 percent from 65 percent in 2015. This largely reflects the significant 3 percentage point decline in the share of loans with an LTV of 70– 85 percent in total new loans.

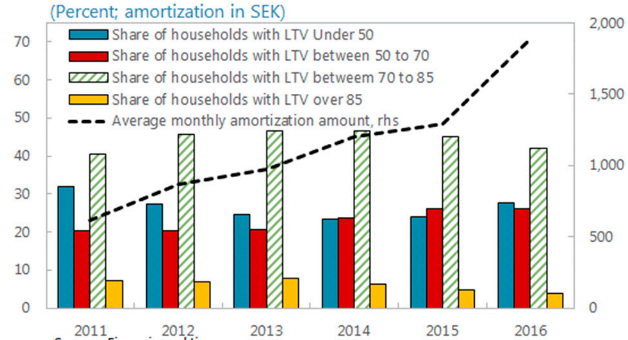
- The measure also led to a small decline in the share of new mortgages with DTI (disposable income basis) over 600 percent, although the share with DTI above 450 percent rose modestly.

Amortization As A Share of Total Loan Amount
(Percent)



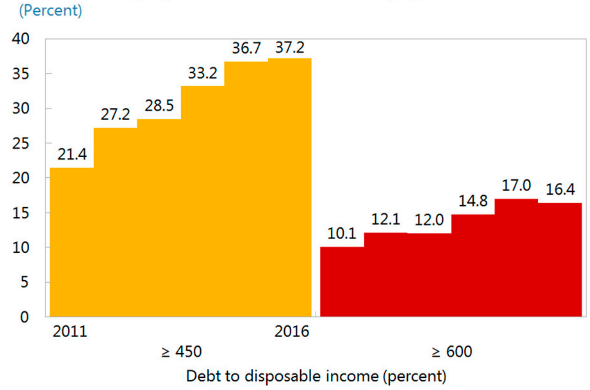
Source: Finansinspektionen.

Loan-to-Value Ratio Distribution and Amortization Amount, New Loans
(Percent; amortization in SEK)



Source: Finansinspektionen.

Share of Highly-Indebted New Mortgage Borrowers
(Percent)

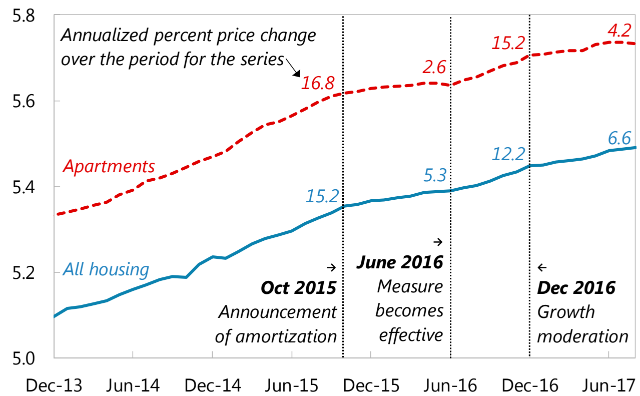


Sources: FI; and Fund staff calculations.

Impact on Household Debt and House Prices

3. The measure appears to have had at least a temporary moderating influence on house prices and household credit growth. A sharp slowing in house price growth was observed after the measure was announced in October 2015. However, this was followed by a temporary acceleration in 2016H2 after the measure became effective, possibly an unwinding of some of the announcement effect once uncertainties around its impact were reduced. After these swings, house price growth slowed in 2017 to an annualized pace just under 7 percent. Relatedly, household credit growth eased to 6.7 percent y/y in August 2017 from 7.4 percent a year earlier. Yet, a careful assessment of the effectiveness of macroprudential measures requires controlling for the economic environment in which they were taken.

Effect of the Amortization Measure on Property Prices
(SA, index level, in logarithm)

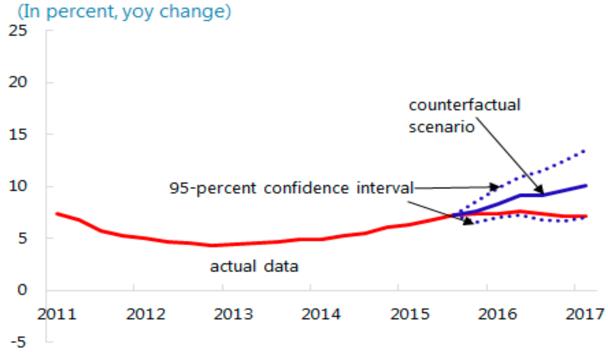


Sources: OMX Valueguard; and Fund staff calculations.

4. Using a difference-in-difference method, the FI's analysis finds that the measure resulted in households buying less expensive homes and borrowing less. The analysis divides households into three groups based on the policy design, where two groups were affected by the regulation and another was not, and assesses the policy impact by comparing development across these groups. The study estimates that the amortization measure reduced the average DTI ratio of new mortgage borrowers by 8 percentage points, in part because the households subject to the new requirement buy homes that on average are about 3 percent less expensive. Overall, it finds a smaller impact of the measure on house prices than on household debt possibly because households chose homes that are smaller or located in less attractive areas or chose to use more savings to finance home purchases.

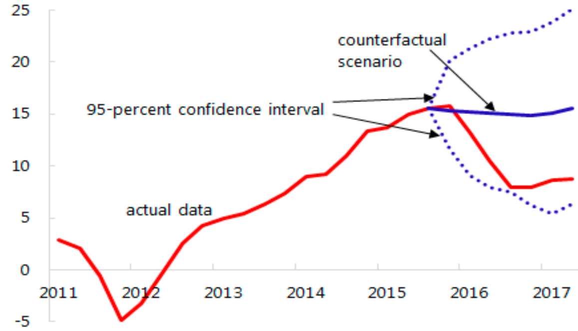
5. Staff's counterfactual analysis suggests that the measure has moved growth of household credit and housing price in the expected direction. Following Price (2014), we estimated the effectiveness of the amortization requirement in reining in growth of credit and house prices by projecting counterfactual growth rates of credit and prices. The estimation proceeded in two steps. First, a vector autoregression model (VAR) was estimated consisting of housing-specific variables (household credit growth, house price growth, housing starts, house sales) and macroeconomic variables (household income growth, net immigration, population growth, after-tax mortgage interest rate), using data prior to the announcement of the amortization requirement. Second, the dynamics of housing-specific variables were projected conditional on the actual behavior of macroeconomic variables in the periods after the announcement of the measure. Actual credit and house price growth paths are found to remain below this counterfactual, although the difference is not quite statistically significant at the 95 percent confidence level.

Household Credit Growth
(In percent, yoy change)



Source: IMF staff estimates.

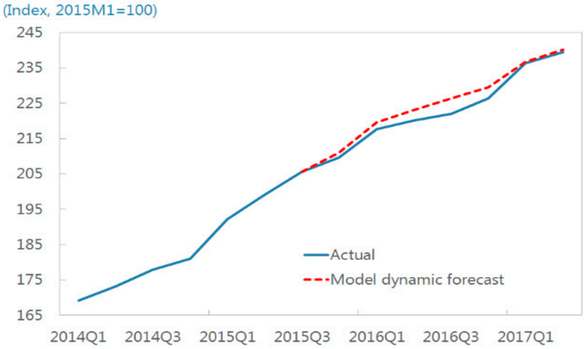
House Price Growth
(In percent, yoy change)



Source: IMF staff estimates.

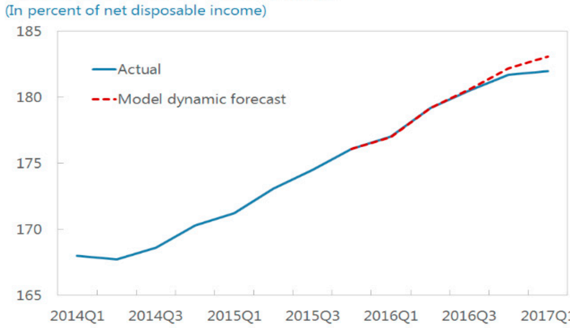
6. **A model-based dynamic forecasting points to a lasting moderating effect on the level of household debt, but only a transitory impact on the level of housing prices.** As the evolution of housing prices and household debt depends on their initial levels compared with their long-run equilibrium, it is important to also gauge the impact of the measure using counterfactual credit and price levels. Employing the error correction model in Turk (2015), we re-estimate the coefficients until 2015Q3 and generate dynamic forecasts for 2015Q4–2017Q2. The results suggest that housing prices and household debt were above their long-run equilibrium level by about 5 and 6 percent respectively in 2015Q3, which would be expected to moderate the rise in house prices and debt over time even absent policy actions. Compared with model-based predictions under the scenario with no policy change, the amortization requirement has helped reduce DTI by 1.2 percentage points by 2017Q1. There was also some initial moderating impact on house prices, but the more rapid house prices rises in 2016H2 has bought prices back to a level consistent with macroeconomic outturns.

Nominal House Price
(Index, 2015M1=100)



Sources: Haver, Statistics Sweden, and staff calculations.

Household Debt-to-Income Ratio
(In percent of net disposable income)



Sources: Haver and staff calculations.

7. **Overall, this preliminary analysis suggests that the amortization requirement achieved its goal of improving the composition of household credit and reducing household debt. Not surprisingly, there appears to have been limited lasting impact on house prices.** However, the results should be interpreted with care, bearing in mind the relatively short time span since the announcement of the measure and the well-known empirical challenge to isolate the impact of policy changes from that of other factors that may have evolved at or around the same time.

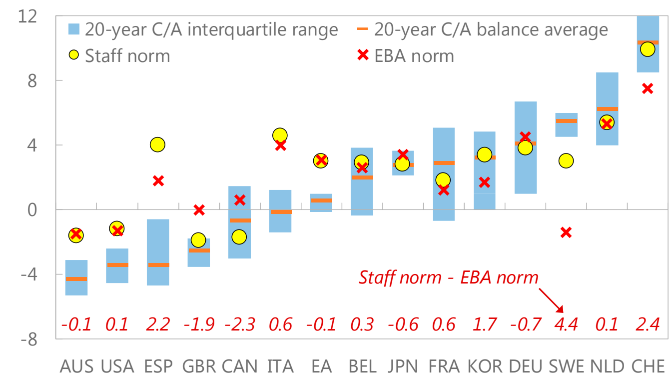
Appendix II. External Sector Assessment

	Sweden	Overall Assessment
Foreign asset and liability position and trajectory	**Background**. The Swedish net IIP rose to 11.3 percent of GDP in 2016, up 5.9 percentage points in the year. It is expected to rise further in the medium term, reflecting the outlook for continued current account surpluses. But in the last decade, the average increase in the net IIP was only about 2.1 percent of GDP annually, well below the average surplus of 5.8 percent of GDP. This gap may in part reflect negative valuation effects, but may also reflect some overstatement of the surplus given errors and omissions averaging -3.3 percent of GDP in the past decade. **Assessment**. Gross liabilities were 268 percent of GDP in 2016, with over a third being external debt (94 percent of GDP). Although rollovers of external debt (which include banks' covered bonds) pose some vulnerability, risks are moderated by the banks' liquidity and capital buffers. Sweden's strong FX reserves and low public debt help ensure capacity to manage pressures.	**Overall Assessment** Sweden's external position in 2016 was stronger than the level consistent with medium-term fundamentals and desirable policies. As of September 2017, the current account balance in the first half of 2017 has declined to 4.1 percent of GDP, suggesting progress in closing the CA gap may been seen in the external sector assessment for 2017. Staff assesses the Sweden's current account norm to be relatively high due to structural factors, including its fully-funded pension schemes its role as a hub for merchanting trade, and its status as a regional financial center. There is an absence of obvious policy distortions affecting the current account or the exchange rate. **Potential Policy Responses** Under current and prospective policies, a decline in the current account surplus can be expected in the medium-term. Expansionary monetary policy supports strong domestic demand growth and some appreciation of the krona is likely when inflation returns to target. Moreover, with the medium-term target for the fiscal surplus being cut from 1 to 0.33 percent of GDP effective from 2019, a gradual fiscal easing in coming years would also contribute to a decline in the external surplus while limiting the procyclicality of fiscal policy. Overall investment is solid, but it remains important to implement reforms to sustain the higher level of residential investment. Efforts to facilitate migrant integration into the labor market should continue in order to raise potential output and also reduce household uncertainties around the sustainability of Sweden's strong social model.
Current account	**Background**. The current account balance was 4.5 percent of GDP in 2016. Some appreciation of the krona is expected in the medium term as monetary policy eventually normalizes, tending to lower the CA surplus, aided by an expected decline in the fiscal surplus to its medium-term target. **Assessment**. The cyclically-adjusted current account was 5 percent of GDP in 2016, 6.4 percentage points above the cyclically-adjusted EBA norm of -1.4 percent of GDP. However, policy distortions impacting the current account do not appear to be significant. Sweden's mandatory contributions to fully-funded pension schemes of 5 percent of GDP may be contributing to the relatively high level of overall household savings rate (18.5 percent for 2016). Therefore, a number of country specific-factors need to be taken into account to ascertain the CA gap (background on these factors is provided in notes below): - The contributions of demographics to the current account balance might be some 1 percent of GDP higher than estimated by EBA, as the ageing speed variable does not properly capture life expectancy trends for Sweden. Moreover, the relatively high employment of persons over 65 years old in Sweden would also support this adjustor. - Measurement issues would reduce the actual CA by about 3½ percent of GDP, via the contribution of merchanting trade to the CA (averaging about 2 percent of GDP in recent years) and income flows from Sweden's systemically important financial center (with banking assets over 400 percent of GDP, of which about 170 percent of GDP in assets are outside Sweden). Taking these factors into consideration, staff assesses Sweden's adjusted CA gap at about 2 percent of GDP in 2016, with a range of +/- 1 percent of GDP.	
Real exchange rate	**Background**. The Swedish krona was mostly unchanged in 2016 in real effective terms relative to its average level in 2015, as monetary policy in Sweden helped keep the yield curve broadly aligned with that of German bunds. As of September 2017, the REER has weakened by almost 1 percent in 2017 relative to the 2016 average. **Assessment**. EBA analysis suggest a gap of -20 and -18 percent using the REER index and level approaches, respectively, for 2016. In contrast, a Total Competitiveness Weights index is only 3.8 percent below its 23-year average. Relying primarily on the assessment of the CA gap, staff assesses the *krona* to be undervalued by 5 to 10 percent. This REER gap is expected to be temporary, with the krona likely to appreciate once the monetary easing cycle ends.	
Capital and financial accounts: flows and policy measures	**Background**. Given their size and funding model, Sweden's large banks remain vulnerable to liquidity risks stemming from global wholesale markets even though banks have improved their structural liquidity measures in recent years. **Assessment**. A further decline in banks' short-term funding in favor of longer maturities is desirable over time. Macroprudential policies, including planned increases in capital buffers of domestic banks, raising funding stability standards, and mortgage amortization regulations on the household side, can help contain vulnerabilities and hence potential liquidity risks.	
FX intervention and reserves level	**Background**. The exchange rate is freely floating—Riksbank statements regarding their potential to intervene have not as yet been implemented. Foreign currency reserves stood at USD 58 bn in June 2017, which is equivalent to 18 percent of the short-term external debt of monetary and financial institutions (primarily banks) and about 12 percent of GDP. **Assessment**. In view of the high dependence of Swedish banks on wholesale funding in foreign currency, and the disruptions in such funding that have occurred at times of international financial distress, it would not be appropriate to reduce Sweden's existing reserves. A further tightening of FX liquidity requirements on banks should be evaluated.	

Notes on the External Sector Assessment

1. **Staff estimates the current account norm for Sweden at about 3 percent of GDP.** The external balance approach (EBA) in the IMF external sector report (ESR) estimates a norm for Sweden of -1.4 percent of GDP, which is the lowest among advanced EU economies and well below Sweden's 20-year average current account surplus of 5.5 percent of GDP. Indeed, the EBA model fitted values for Sweden are well below actual values for over two decades since 1995, a sustained large deviation that is difficult to reconcile with the floating exchange rate, generally sound macroeconomic policies, and a lack of other clear policy distortions. The country-specific factors at work are outlined below.

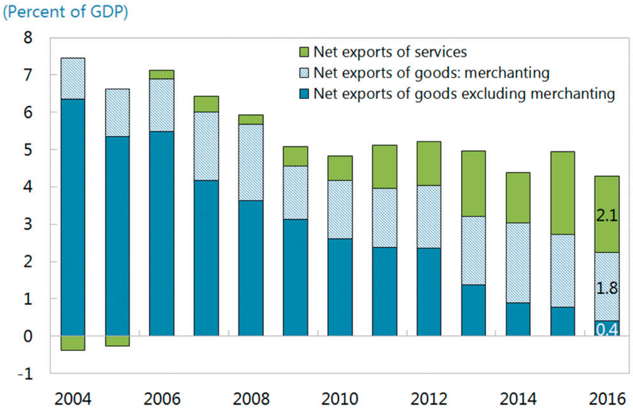
EBA Assessment and Historical Current Account Balances
(Percent of GDP)



Sources: IMF External Sector Report; and Fund staff calculations.
Note: Countries are ranked by the 20-year average C/A balance.

2. **Measurement issues (3½ percent of GDP).** Merchanting, or trade that does not cross the borders of the firm's resident country, creates structural current account surpluses. As Beusch et al. (2013) note, because merchanting firms operate outside their home country, they reinvest their earnings abroad to expand their international activities. The size of merchanting trade has increased steadily in Sweden, reaching 1.8 percent of GDP in 2016. A Riksbank *Staff Memo* on the effects of merchanting on the current account suggests that Swedish net exports are largely made up of goods that have been produced abroad by multinational companies. Sweden's large financial system also generates considerable income flows from abroad, as almost half of the banking assets are outside Sweden, yet Sweden is not treated as a financial center in the EBA analysis.

Trade Balance
(Percent of GDP)



Source: Statistics Sweden; and Fund staff calculations.

3. **Demographic factors (1 percent of GDP).** Sweden's demographic profile differs from many advanced economies, in that it has experienced substantial aging, yet rising employment among the old may have cushioned the associated decline in saving. Going forward, the increase in the elderly dependency ratio is smaller than average thanks to higher fertility rates and migration, implying a low speed of ageing in the EBA analysis. Yet, under Sweden's fully-funded occupational pension schemes, this variable may not capture the impact of rising life expectancy on household saving. Indeed, the transition to a defined contribution pension system can entail an extended period of higher household savings that is not captured in the current EBA analysis, but further work is being conducted in this area among others.

Appendix III. Debt Sustainability Analysis

Sweden Public Sector Debt Sustainability Analysis (DSA) - Baseline Scenario

(in percent of GDP unless otherwise indicated)

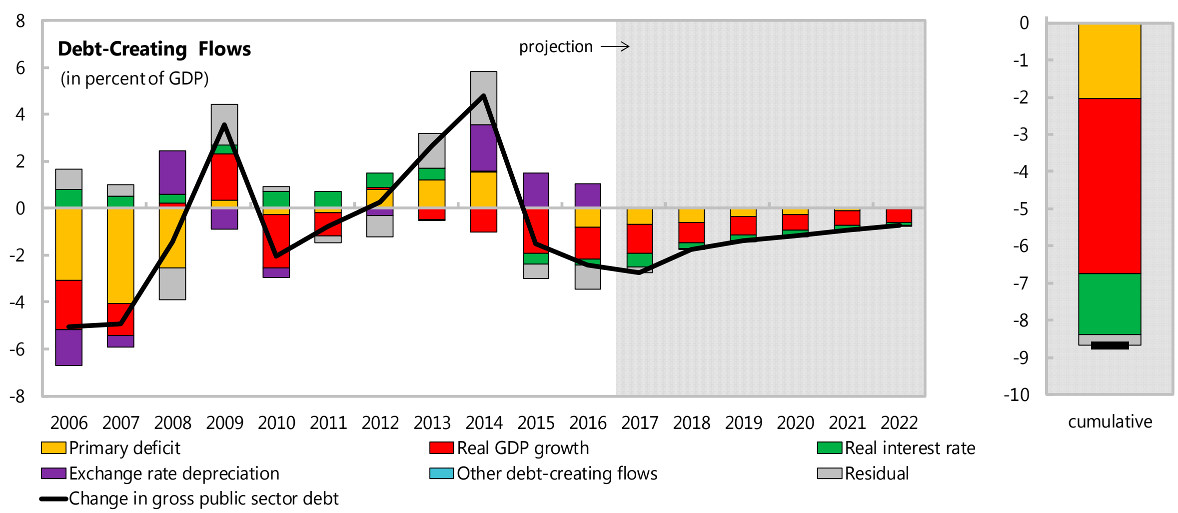
Debt, Economic and Market Indicators [1/]

	Actual			Projections					
	2006-2014 [2/]	2015	2016	2017	2018	2019	2020	2021	2022
Nominal gross public debt	39.7	43.7	41.3	38.6	36.8	35.5	34.3	33.4	32.6
Public gross financing needs	9.1	9.2	5.4	4.3	6.4	7.6	8.4	8.5	9.1
Real GDP growth (in percent)	1.6	4.5	3.3	3.1	2.4	2.2	2.0	1.8	1.7
Inflation (GDP deflator, in percent)	1.8	2.1	1.5	2.2	1.6	1.7	1.9	2.0	2.0
Nominal GDP growth (in percent)	3.5	6.7	4.9	5.3	4.0	4.0	3.9	3.9	3.8
Effective interest rate (in percent) [4/]	3.2	1.1	1.0	0.8	0.9	1.1	1.2	1.4	1.6

As of August 31, 2017		
Sovereign Spreads		
Spreads (bps) 3/		14
5Y CDS (bps)		16
Ratings	Foreign	Local
Moody's	Aaa	Aaa
S&Ps	AAA	AAA
Fitch	AAA	AAA

Contribution to Changes in Public Debt

	Actual			Projections							
	2006-2014	2015	2016	2017	2018	2019	2020	2021	2022	cumulative	debt-stabilizing primary balance [9/]
Change in gross public sector debt	-0.3	-1.5	-2.4	-2.7	-1.7	-1.4	-1.2	-0.9	-0.7	-8.7	
Identified debt-creating flows	-0.8	-0.9	-1.4	-2.5	-1.7	-1.4	-1.2	-0.9	-0.7	-8.4	
Primary deficit	-0.7	0.0	-0.8	-0.7	-0.6	-0.4	-0.3	-0.1	0.0	-2.0	-0.7
Primary (noninterest) revenue and grants	49.8	48.6	49.0	48.5	47.6	47.5	47.5	47.5	47.5	286.2	
Primary (noninterest) expenditure	49.1	48.6	48.2	47.8	47.0	47.1	47.3	47.4	47.5	284.1	
Automatic debt dynamics [5/]	-0.1	-0.9	-0.6	-1.8	-1.1	-1.0	-0.9	-0.8	-0.7	-6.3	
Interest rate/growth differential [6/]	-0.1	-2.4	-1.6	-1.8	-1.1	-1.0	-0.9	-0.8	-0.7	-6.3	
Of which: real interest rate	0.5	-0.5	-0.2	-0.6	-0.3	-0.2	-0.2	-0.2	-0.1	-1.6	
Of which: real GDP growth	-0.7	-1.9	-1.4	-1.2	-0.9	-0.8	-0.7	-0.6	-0.6	-4.7	
Exchange rate depreciation [7/]	0.0	1.5	1.0	…	…	…	…	…	…	…	
Residual, including asset changes [8/]	0.5	-0.6	-1.0	-0.3	0.0	0.0	0.0	0.0	0.0	-0.3	



Source: IMF staff.

1/ Public sector is defined as general government.

2/ Based on available data.

3/ Long-term bond spread over German bonds.

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

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

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

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

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

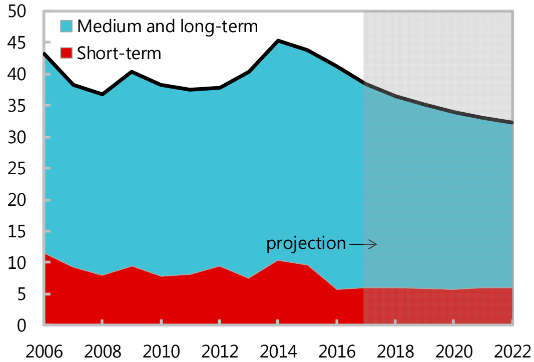
9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

Sweden Public DSA - Composition of Public Debt and Alternative Scenarios

Composition of Public Debt

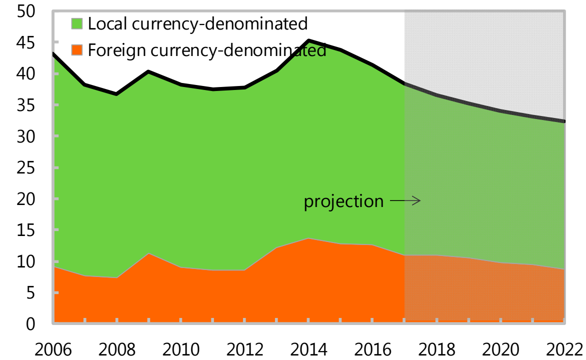
By Maturity

(in percent of GDP)



By Currency

(in percent of GDP)

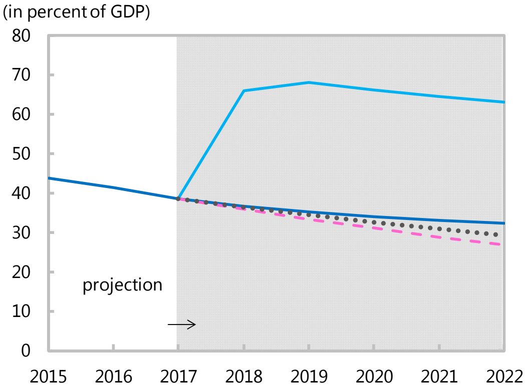


Alternative Scenarios

Baseline
Contingent Liability Shock
Historical
Constant Primary Balance

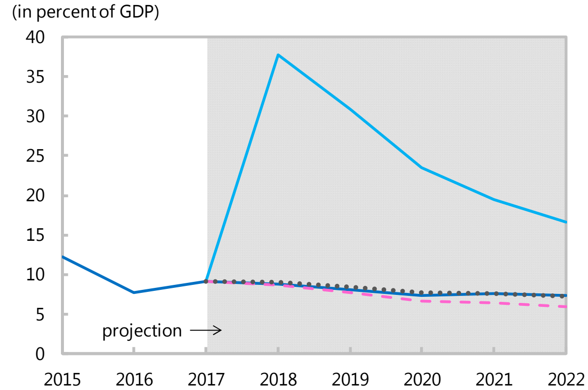
Gross Nominal Public Debt

(in percent of GDP)



Public Gross Financing Needs

(in percent of GDP)



Underlying Assumptions

(in percent)

Baseline Scenario	2017	2018	2019	2020	2021	2022
Real GDP growth	3.1	2.4	2.2	2.0	1.8	1.7
Inflation	2.2	1.6	1.7	1.9	2.0	2.0
Primary Balance	0.7	0.6	0.4	0.3	0.1	0.0
Effective interest rate	1.1	1.0	1.1	1.2	1.4	1.5
Constant Primary Balance Scenario						
Real GDP growth	3.1	2.4	2.2	2.0	1.8	1.7
Inflation	2.2	1.6	1.7	1.9	2.0	2.0
Primary Balance	0.7	0.7	0.7	0.7	0.7	0.7
Effective interest rate	1.1	1.0	1.1	1.2	1.5	1.7

Historical Scenario	2017	2018	2019	2020	2021	2022
Real GDP growth	3.1	1.8	1.8	1.8	1.8	1.8
Inflation	2.2	1.6	1.7	1.9	2.0	2.0
Primary Balance	0.7	0.4	0.4	0.4	0.4	0.4
Effective interest rate	1.1	1.0	1.4	1.7	2.1	2.4
Contingent Liability Shock						
Real GDP growth	3.1	-0.8	-0.9	2.0	1.8	1.7
Inflation	2.2	0.8	0.9	1.9	2.0	2.0
Primary Balance	0.7	-28.0	0.4	0.3	0.1	0.0
Effective interest rate	1.1	1.2	4.9	2.6	2.9	3.0

Source: IMF staff.

Appendix IV. Update on FSAP Recommendations

	Recommendations and Authority Responsible for Implementation	Time*
	Financial Stability	
1	**Introduce a cap on the debt-to-income ratio (FI/MoF)**	**NT**
	Status: Finansinspektionen (FI) has proposed the introduction of a stricter amortisation requirement for new mortgage holders who take on large loans in relation to their income. After 31 December 2017, new mortgage holders who borrow more than 4.5 times their gross income, i.e. pre-tax income, must amortise at least one percentage point more of their mortgage per year, according to the proposal. This would be introduced through amendments to the present amortisation requirement. Consequently, a new mortgage credit granted to households with a debt-to-income ratio exceeding 4.5 must be amortised by at least 1 percent if the loan-to-value ratio is below 50 percent and by at least 2 percent if the loan-to-value ratio exceeds 50 percent but is less than 70 percent and, finally, by at least 3 percent if the loan-to-value ratio exceeds 70 percent. The proposal is on referral until the 8th of September. FI must obtain the Government´s consent before adopting the amendments to the amortisation requirement.	
2	**Remove tax incentives to hold real estate assets and fund them with debt (MoF)**	**NT**
	Status: The existence of mortgage interest tax relief in Sweden has most likely contributed to the level of household debt. Measures regarding mortgage interest deductibility must however be seen in a long term perspective and be handled with great care, due to the potential negative effects that a change may have on households' financial position and economic growth. The design of the tax system can also have an impact on the functioning of the property market. Over the past ten years, the changes in property taxation in Sweden has moved away from recurrent taxation to taxation of capital gains at the time of sale. To increase the mobility on the property market, the Government implemented more generous rules for deferring capital gains tax in 2016.	
3	**Timely adoption of a leverage ratio as a backstop (FI)**	**NT**
	Status: FI views the Leverage Ratio as an important backstop element of the post-crisis reforms and supports its near term implementation across the EU through the upcoming legislative regulation package, CRR II. As such, the authorities view the adoption of the Leverage Ratio as being on track.	
4	**Monitor an extended (three-month) LCR in euro and U.S. dollar (FI)**	**NT**
	Status: FI has initiated a project aimed at reviewing the supervisory methods for liquidity and liquidity risks. One of the interim goals is to investigate the need for a Pillar 2-requirement on the European requirement on liquidity coverage ratio (LCR) according to the Commission's delegated act. The EU requirement becomes a binding minimum requirement in the EU from 1 January 2018 and the current Swedish LCR-requirement will repeal. Unlike the current national regulation that implies LCR-requirements in EUR and USD separately in addition to total currencies, the EU-regulation does not cover requirements in individual currencies. As a part of FI's liquidity stress testing project (mentioned below in point 7), the authority will explore the possibility to replicate LCR in different currencies through the use of the Maturity Ladder reporting template. The output from this project will hence serve as important input for the pillar 2 project. In sum, FI has the intention to follow the recommendation to adopt an extended (three-month) LCR in euro and USD. However, in order to come to a final conclusion on the Pillar-2 requirement, FI needs to make an updated assessment of the risks associated with Swedish banks' funding (both in SEK and foreign currency). The work is expected to be finalized by April 2018.	
5	**Introduce regular surveys on the distribution of household balance sheets (MoF)**	**I**
	Status: The Riksbank (RB) has given Statistics Sweden the task of establishing and managing two new databases, a credit database (KRITA) and a securities holdings database (VINN). Through these databases, RB will develop new statistics that include detailed data on credit issues in the form of loans, and investments in the form of securities. For example, it will be possible to analyze, with the help of the data from VINN, exposures and spread risks for Swedish securities portfolios. With the help of the data in KRITA, RB and FI will also be able to analyze risks and vulnerabilities of different borrowing groups at a level of detail which has not been possible so far. Household data will be reported on an aggregated level in VINN for secrecy purposes.	

6	**Introduce regular stress tests of corporate resilience (FI)**	I
	Status: Currently granular corporate credit data is not available to develop stress tests. A joint project between FI, RB and Statistics Sweden has been initiated with the purpose to collect and make the required data available (see above under recommendation 5). With the necessary data in hand a corporate credit resilience exercise, similar to the existing household exercise, could be developed. But because of the data issue, the timeframe of implementation is difficult to establish at this point.	
7	**Improve stress testing framework for banks and insurance companies (FI, RB)**	I
	Status: FI is currently working to improve the stress testing framework within the authority. During 2017 FI launched a project that aims to improve and develop the broader framework within the authority for the stress testing of primarily banks. The project will continue through 2018. FI is also developing a methodology on liquidity stress testing. The objective is to construct indicators on credit institutions' capacity to hold satisfactory volumes of liquid assets in time of stress. The stress test will use variables from the EBA technical reporting template of the Maturity Ladder and investigate the possibility to replicate or derive an approximate time dependent liquidity coverage ratio (LCR). The liquidity work is expected to be finalised by end March 2018. Further, FI and RB participate in the ESRB stress testing task force in order to monitor and influence the European stress testing exercises and the work and research currently being done in other countries and organizations. RB now has work in progress on building a comprehensive stress testing framework with modeling approaches as suggested by the FSAP. Furthermore, RB is using more granular data on banks' exposures to model interest income. To improve the existing stress test on Swedish banks, RB and FI have consulted two external experts from academia and Oesterreichische Nationalbank for guidance and recommendations.	
	Macroprudential Policy, Systemic Risk Oversight, and Systemic Liquidity Management	
8	**Give FI a clear legal mandate for macroprudential policy, ensuring that FI has tools to address systemic risks in a timely and effective manner (MoF)**	I
	Status: Based on a political agreement in October 2016, the Government presented a draft bill to the Council on Legislation in June 2017 with the aim to broaden FI's macroprudential toolbox. The main proposal in the draft bill is to strengthen FI's legal mandate to take measures to counteract financial imbalances on the credit market, such as household indebtedness. Since these types of measures may have macroeconomic impacts and may affect the finances of private individuals, the draft bill includes a requirement for FI to obtain the Government's consent before any new regulations are adopted. After deliberations in the Council on Legislation, the Government will present a draft bill to Parliament during the fall. The legislative changes are foreseen to enter into force on 1 February 2018.	
9	**Give the FSC, or a similar body, a statutory basis with power to issue recommendations, preferably with a 'comply or explain' attribute; expand its mandate to include crisis preparedness; establish two preparatory groups: (i) systemic risk monitoring; and (ii) crisis preparedness and management (MOF)**	MT
	Status: The Government's assessment is that the FSC can be a forum for discussion and cooperation but that it cannot issue recommendations with a "comply or explain" attribute, since this would be unconstitutional. Neither the Government nor any other authority is allowed to determine how another authority should decide in a particular case or how that authority should apply law (as stated in Section 2 of the Swedish Instrument of Government, which regulates the independence of administration). The fact that a Government minister is a member of the FSC could furthermore raise concerns of ministerial rule in such a set-up. The Swedish constitution does not prevent authorities from issuing recommendations to the Government, together or separately. However, neither the Government nor any other public authority can have an obligation to comply or explain in such circumstances.	
10	**Amend the RB Act to: (1) clarify the RB's role in financial stability, including by confirming the RB's authority to extend liquidity assistance for financial stability purposes; and (2) ensure the RB is in a strong financial position and protected from potential losses on such liquidity assistance (MoF)**	MT

	Status: At the request of the Committee on Finance, the Government appointed a parliamentary committee tasked with reviewing the monetary policy framework and the Riksbank Act in December 2016. Representatives of all parliamentary parties are included in the committee, which shall report on its mission to the Government by 31 May 2019. The committee will, among other things, investigate and clarify the monetary policy objectives as well as RB's responsibility for financial stability. Concerning financial stability, the Committee shall, in particular, assess if losses on liquidity assistance to individual firms should be guaranteed by the Government.	
11	**Seek to establish swap agreements with central banks in the Nordic countries, the Fed, and the ECB, aiming to strengthen the availability of ELA in relevant currencies (RB)**	**NT**
	Status: In December 2016, representatives of the central banks in the Nordic and Baltic countries signed a Memorandum of Understanding (MoU) on cooperation regarding banks with cross-border operations. The MoU concerns sharing information and cooperation with regard to banking groups that have operations in more than one Nordic-Baltic country and involves an intensification of the cooperation between the central banks in Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway and Sweden. Banks with subsidiaries and branches in several countries play an important role in the financial markets of the Nordic and Baltic countries. Cross-border banking groups provide benefits and improve efficiency in the financial system. At the same, they increase the risk that a problem arising in one bank or banking group can affect financial stability in more than one country. More in-depth cooperation between the central banks is therefore essential for financial stability. This MoU replaces the earlier agreements between the Nordic central banks signed in 2003 and the one between Sveriges Riksbank and the Baltic central banks in 2006. The MoU is not legally binding.	
	Financial Sector Regulation and Supervision	
12	**Broaden FI's mandate to issue binding regulations on safety and soundness issues (MoF)**	**MT**
	Status: FI has a relatively broad mandate which allows it to issue regulations in a number of areas, please see Chapter 16, Section 4 p. 4 of the Banking and Financing Business Act (SFS 2004:297). There have, however, been circumstances where adjustments to laws or ordinances have been necessary to allow FI to take action, and such circumstances may also arise in the future. In those cases, legislative action may be necessary. One important example where a broader mandate was needed is the issuance of credit risk standards, where the necessary changes were delayed whilst awaiting an amendment to provide FI with the necessary legal mandate. The Government is now taking the necessary steps to ensure this legal empowerment.	
13	**Ensure that the same level of protection is provided to occupational pensions as to life insurance (MoF)**	**NT**
	Status: When implementing the Directive on Institutions for Occupational Retirement Provision (IORP II) in Sweden, the EU regulatory framework will be complemented with a risk-based solvency regulation. FI has been given the task of proposing how such a solvency regulation can be designed. A first proposal from FI will be presented in September 2017.	
14	**Improve the availability and quality of investment fund data and enhance FI's ability to conduct stress testing and other analyses for investment funds (FI)**	**NT**
	Status: FI is preparing new regulation that will enable enhanced data collection and thus aquire improved quality data from investment funds. Further, the information required will also enable FI to perform stress tests when needed.	
15	**Enhance cross-border supervisory cooperation, including in the supervision of systemic bank branches and cross-border management of investment funds (FI)**	**NT**
	Status: A memorandum of understanding (MoU) has been agreed between countries in the Nordic-Baltic stability group in order to entail a coordinated approach to supervisors responsible for systemic branches. The MoU regulates how the competent authority, the home and host authority, should, within the framework of supervisory colleges established either under Article 116 or under Article 51(3) of Directive 2013/36/EU (CRD), cooperate to prudentially supervise and coordinate monitoring, including the assessment of recovery planning, for certain systemic important branches requiring intensified supervision. Furthermore, FI has initiated an internal project to implement such intensified supervision in operational work with the ambition to have processes in place by end of 2017. FI has also started an initiative for investment firms similar to one within investment funds which is a cooperation between the Nordic countries. The cooperation tasks are among others cross border supervision. FI has also joined the work programme of the Joint Committee of the European Supervisory Authorities for 2017 which includes a task for the subcommittee on Consumer Protection and Financial Innovation that focuses on cross border supervision of financial services (JC SC CPFI Sub-group on cross border supervision of retail financial services). The work aims e.g. at enhancing the	

	cooperation between home and host competent authorities in the supervision of firms providing cross-border retail financial services.	
	Crisis Readiness, Management, and Resolution	
16	**Under the FSC's auspices, ensure agency-specific and national financial crisis preparedness, including a national crisis management plan, updated bi- and multilateral cooperation MoUs, and regular single- and multi-agency financial crisis simulation exercises (MoF/NDO/FI/RB)**	**NT, C**
	Status: The FSC secretariat and the preparatory group (i.e. the Government and the authorities) plan and implement regular crisis simulation exercises (autumn 2016, spring 2017, and the next exercise is planned for the spring of 2018). Under the FSC work is ongoing regarding a common crisis management plan. Simultaneously, the respective authorities are in the process of implementing financial crisis preparedness within their own operational frameworks. Regular work is also performed to update cooperation MoUs.	
17	**Seek to revamp the Nordic-Baltic Stability Group, supported by updated bi- and multilateral MoUs, to strengthen crisis preparedness and management, including regular financial crisis simulations exercises (MoF/NDO/FI/RB)**	**NT, C**
	Status: The Swedish authorities, with the Ministry of Finance (MoF) in lead, initiated a work to revamp the Nordic Baltic Stability Group, NBSG, at the NBSG meeting in Stockholm October 2016. At the meeting in October it was decided that the tasks and mandate of the NBSG should be revised in order to reflect the regulatory development regarding crisis management, recovery and resolution (BRRD) which has taken place since the founding MoU. An international drafting group has worked with a revised version during spring 2017 of the MoU which is expected to be adopted at the NBSG meeting in Stockholm in November 2017. The MoF has coordinated the work and FI, RB and National Debt Office (NDO) have taken active part in the drafting. The revised MoU is expected to focus on financial stability, information exchange, general work to enhance preparedness of future crisis management and joint crisis simulation exercises. The parties to the MoU are Ministries, Central Banks, Financial Supervisory Authorities, and Resolution Authorities of the Signatory Countries. At the meeting of the NBSG in November 2016 it was decided to start the preparations for holding a regional (Nordic-Baltic) crisis simulation exercise in late 2018. A working group under the NBSG (working group on financial crisis simulation) has been formed with representatives from the Nordic-Baltic Central Banks, Financial Supervisory Authorities, Resolution Authorities and Ministries of Finance. A first meeting was held in Stockholm in January 2017. The Single Resolution Board and ECB had been invited to the meeting. It was decided to initiate a call for tender process in order to select an external consultant to help with preparing and running the simulation exercise. The call for tenders is expected to be concluded in September 2017.	
18	**Expedite resolution planning for systemic financial institutions (NDO)**	**I**
	Status: Group resolution plans for the four Swedish cross-border banks, Handelsbanken, Nordea, SEB and Swedbank, were adopted through "Joint Decisions" by the respective Resolution College in December 2016, as per the schedule agreed on by the colleges at the beginning of the year. As the NDO framework for the application of MREL was not finalized until February of this year, resolution plans from 2016 did not involve individual requirements. The NDO is currently in the process of producing and updating the 2017 resolution plans. Efforts are focused on the improvement and expansion of last year's versions of the group resolution plans for the cross-border banks, as well as on the development of the first resolution plans for the remaining systemically important institutions. The NDO expects resolution plans for all Swedish institutions subject to the BRRD to be adopted before year-end. With the MREL framework now in place, institutions will also be subject to individual requirements, effective as of January 2018.	
19	**Define strategies for liquidity assistance to banks in resolution, and conclude a cooperation agreement for the solvency and viability assessment of institutions that need ELA (RB/NDO/FI)**	**I**
	Status: There is currently ongoing work regarding liquidity in resolution between the NDO and the members of the resolution colleges of the four Swedish cross-border banks. This includes, among other things, mapping access to relevant central banks' standard facilities and available public sector mechanisms such as resolution funds. Preliminary findings show that resolution by itself is not a hindrance for an institution having access to central banks' ordinary facilities. This is in line with the NDO's view that an institution in resolution that is to be recapitalised, or that has already been recapitalised, should in general be considered solvent. However, central banks stress that provision of such facilities is generally at the discretion of the central bank and conditional on eligibility criteria such as solvency and ability to mobilise	

	eligible collateral. In contrast to the Bank of England and the Bank of Canada, none of the relevant central banks have lending facilities solely designed for liquidity support in resolution. Since ordinary central bank lending is provided on a collateral basis, the amount of liquidity available for an institution in resolution is in practice limited by the amount of available eligible collateral held by the institution. In addition to central bank facilities, public sector backstop mechanisms specially designed to support a resolution process have been established in three relevant jurisdictions, for Swedish banks, (Sweden, Banking Union and Denmark). All the mechanisms have their origins in the BRRD and are therefore similar in many aspects. For example, all arrangements can be used to issue both loans and guarantees and are flexible in terms of currency and duration. In addition to the discussion in the resolution colleges, a bilateral dialogue between the NDO and RB has been initiated. So far the dialogue has focused on practical aspects of liquidity support to banks under resolution, but no agreement on this issue has been reached yet. Further, there is an ongoing parliamentary review of the Riksbank Act inlcuding analysis of RB's role in ensuring liquidity in resolution.	
	Resources	
20	**Increase financial and human resources allocated for prudential supervision, and recovery and resolution planning, to ensure that resource levels are commensurate with the size and complexity of Sweden's financial sector and home-country responsibilities (MoF/FI/NDO)**	**I**
	Status: FI has received a substantial increase in their resources over the past years. In the Government's budget for 2017, the authority received an additional contribution of SEK 15 million specifically in order to handle new regulations and strengthen the banking oversight. Moreover, FI was allocated an additional SEK 25 million in the supplementary budget for 2017 for increased bank supervision, i.a. due to Nordea's branchification. In its budget proposal for 2018 the Government has proposed another SEK 80 million to be allocated to FI. The increase has been made in order for the FI to strengthen the bank supervision, including the branchification of Nordea, and for further strengthening work against money laundering and the financing of terrorism, new regulations and to integrate sustainability into existing and new regulations and in financial supervision. The NDO was appointed as resolution authority in 2015. Since then, the NDO has developed its financial stability department. All resolution planning work is funded by the state budget, but all administrative costs for carrying out resolution is imposed on the institution under resolution, or if that is not possible, on the resolution reserve (i.e. the industry collectively). The Government deems that the level of the NDO's appropriation is well balanced. The Government will review the level of the appropriation on an annual basis in accordance with the Swedish central Government budget process. In terms of human resources, the NDO has increased its staff at the *Department for financial stability and consumer protection* from 11,5 FTEs when the FSSA 2016 was published (November) to 15 FTEs today, i.e. a 30 per cent increase. One further FTE will be joining shortly and additional staff will be recruited going forward.	

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

Appendix V. Risk Assessment Matrix[1]

(Scale—high, medium, or low)

Source of Risks	Overall Level of Concern	
	Relative Likelihood[1]	Impact if Realized
1. Tighter global financial conditions. Fed normalization and tapering by ECB increase global rates and term premia, strengthen the US dollar and the euro, and correct market valuations.	**High** • Swedish banks are reliant on wholesale funding and are directly and indirectly exposed to international financial markets.	**Medium** • Higher bank funding costs translate into higher lending interest rates and curtailed lending, weighing on growth. • Adverse impact could be partially mitigated by safe-haven flows.
Policy response:	Preventively, reduce vulnerabilities of the financial sector and preserve fiscal buffers. In the event, provide liquidity support, including in foreign currency.	
2. Weaker-than-expected global growth. Significant slowdown in China and other large Emerging Market and frontier economies, and structurally weak growth in key advanced economies.	**Medium-High** • Sweden's economy is small and highly open with strong links to European markets. • Sensitivity to shocks could be increased by high household debt and more limited space for additional monetary easing.	**Medium** • As exports and income decline, investment will slow as well, further reducing growth. • Inflation will decline with falling growth, lower import prices, and possibly with an appreciation of the krona.
Policy response:	Provide additional monetary support, let automatic fiscal stabilizers operate fully, and make faster structural fiscal adjustment (easing) to medium-term targets.	
3. Policy uncertainty and retreat from cross-border integration: - Risks from difficult to predict U.S. policies; uncertainty associated with negotiating post-Brexit arrangements. - A fraying consensus about the benefits of globalization lead to protectionism and economic isolationism.	**Medium-High** • The UK is an important trading partner (Sweden exports over 2 percent of its GDP to the UK). • More generally, Sweden is a small open economy highly dependent on movement of labor, goods, and services.	**Medium** • Uncertainty during post-Brexit negotiations could weigh on confidence and investment. • Renewed large scale refugee inflows would increase spending and support activity but would further strain capacity to receive and integrate migrants, raising unemployment and undermining social cohesion. • Higher barriers to trade would dampen exports and investment and weaken the growth outlook.
Policy response:	Provide monetary and fiscal support, strengthen refugee integration policy and the demand for low-skilled workers, facilitate sectoral reallocation of labor and capital.	
4. Significant house price decline in Sweden.	**Medium** • High house prices largely reflect supply not keeping up with demand increases driven by demographics, incomes, financial assets, and interest rates. • Price levels remain high despite some recent growth moderation, but the slow reduction in supply shortfalls mitigates downside risks.	**High** • Large impact on consumption and employment lowers growth. • Loan quality impacted, primarily of firms serving domestic market. • Lending could be curtailed if doubts about the quality of covered bonds rise, elevating bank funding costs.
Policy response:	Preventively, reduce vulnerabilities in the housing market through macroprudential measures, phasing out tax incentives, and enhancing housing supply. In the event, provide monetary stimulus and funding support to banks.	

[1] In case the baseline does not materialize.

[1] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of the IMF staff). The relative likelihood of risks listed is the staff's subjective assessment of the risks surrounding this baseline ("low" is meant to indicate a probability below 10 percent, "medium" between 10 and 30 percent, and "high" between 30 and 50 percent). The RAM reflects staff's views on the source of risks and overall level of concern as of the time of discussions with the authorities.

INTERNATIONAL MONETARY FUND

SWEDEN

October 31, 2017

STAFF REPORT FOR THE 2017 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

Prepared By

European Department
(In Consultation with Other Departments)

CONTENTS

FUND RELATIONS

(As of September 30, 2017)

Membership Status: Joined: August 31, 1951; Article VIII.

General Resources Account:	**SDR Million**	**Percent of Quota**
Quota	4,430.00	100.00
Fund holdings of currency (Exchange Rate)	4,288.81	96.81
Reserve Tranche Position	141.20	3.19
Lending to the Fund		
New Arrangements to Borrow	294.31	

SDR Department:	**SDR Million**	**Percent Allocation**
Net cumulative allocation	2,248.96	100.00
Holdings	2,057.06	91.47

Outstanding Purchases and Loans: None

Latest Financial Arrangements: None

Projected Payments to Fund:

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

	Forthcoming				
	2017	2018	2019	2020	2021
Principal					
Charges/Interest	0.26	1.10	1.10	1.10	1.10
Total	0.26	1.10	1.10	1.10	1.10

Exchange Rate Arrangements:

The Krona has been floating freely since November 19, 1992. Sweden has accepted the obligations of Article VIII (sections 2(a), 3 and 4) and maintains an exchange system free of restrictions on payments and transfers for current international transactions, apart from those notified to the Fund pursuant to Decision No. 144-(52/51).

Resident Representative: None

Article IV Consultation:

Sweden is on the 12-month consultation cycle.

FSAP Participation:

A mandatory FSAP has been conducted in time for the 2016 Article IV consultation, in line with the five-year cycle for members or members' territories with financial sectors that are determined to be systemically important pursuant to Decision No. 15495-(13/111), adopted December 6, 2013.

STATISTICAL ISSUES

(As of October 7, 2017)

I. Assessment of Data Adequacy for Surveillance	
General: Data provision is adequate for surveillance. The country has a full range of statistical publications, many of which are on the internet. The quality and timeliness of the economic database are generally very good.	
II. Data Standards and Quality	
Subscriber to the Fund's Special Data Dissemination Standard (SDDS) since May 31, 1996. Uses an SDDS flexibility option for timeliness on the data category production index. The authorities have expressed initial interest to adhere to the Special Data Dissemination Standard Plus.	A data ROSC was published in September 2001, followed by an update in November 2002.

National Accounts: Sweden publishes the national accounts according to the *European System of Accounts* (*ESA*) *2010* since September 2014.

Government Finance Statistics: Government finance statistics were published based on *ESA 2010* methodology in September 2014.

External Sector Statistics: Sweden publishes external sector statistics based on the sixth edition of the *Balance of Payments and International Investment Position Manual* (*BPM6*) format since December 2014.

Monetary and Financial Statistics: Monetary data reported for *International Financial Statistics* are based on the European Central Bank's (ECB) framework for collecting, compiling, and reporting monetary data.

Sweden: Table of Common Indicators Required for Surveillance

(As of October 7, 2017)

	Date of latest observation	Date received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of Publication[7]
Exchange Rates	Current	Current	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	2017/10/01	2017/10/07	W	W	W
Reserve/Base Money	2017/10/01	2017/10/07	W	W	W
Broad Money	2017/10/01	2017/10/07	W	W	W
Central Bank Balance Sheet	2017/10/01	2017/10/07	W	W	M
Consolidated Balance Sheet of the Banking System	2017/09	2017/10	M	M	M
Interest Rates[2]	Current	Current	D	D	D
Consumer Price Index	2017/9	2017/10	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[3]—General Government[4]	2015	2017/8	A	A	A
Revenue, Expenditure, Balance, and Composition of Financing[3]—Central Government	2015	2017/8	A	A	A
Stocks of Central Government and Central Government-Guaranteed Debt[5]	2015	2017/8	A	A	A
External Current Account Balance	2017 Q2	2017/08	Q	Q	Q
Exports and Imports of Goods and Services	2017 Q2	2017/08	Q	Q	Q
GDP	2017 Q2	2017/09	Q	Q	Q
Gross External Debt					
International Investment Position[6]	2017 Q2	2017/08	Q	Q	Q

1/ Any reserve assets that are pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.
2/ Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
3/ Foreign, domestic bank, and domestic nonbank financing.
4/ The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.
5/ Including currency and maturity composition.
6/ Includes external gross financial asset and liability positions vis-à-vis nonresidents.
7/ Daily (D), weekly (W), monthly (M), quarterly (Q), annual (A), irregular (I); and not available (NA).

Statement by Mr. Thomas Ostros, Executive Director for Sweden, and
Ms. Gudrun Gunnarsdottir, Advisor to Executive Director
November 15, 2017

On behalf of the Swedish authorities would like to thank the mission teams for the reports as well as for the open and constructive policy discussions during the FSAP mission and Article IV consultation with Sweden. The authorities broadly agree with the conclusions and recommendations of the staff reports.

Recent macroeconomic development and outlook

The level of activity in the Swedish economy is high, and households as well as businesses are optimistic about the future. Positive signs include that the demand for labor remains high, inflation has picked up, and resource utilization is estimated to be higher than normal in 2017 and to rise even further in 2018. Sweden is expected to have GDP growth of around 3 percent in 2017 which will likely moderate in 2018 due to a slowing increase in housing investments.

While there is robust growth, Sweden faces challenges. Although migration inflows have dropped since 2015, the reception capacity remains stretched as the newly arrived migrants need to receive education and training and be given the opportunity to start working and contributing to society. Additionally, rapidly increasing house prices have led to high levels of household indebtedness, although the most recent data indicates that house prices have begun increasing at a slower pace. Despite positive signs, including a somewhat moderated growth in household credit, macroeconomic stability risks remain as debt levels relative to income are still increasing from an already high level.

Financial stability and macroprudential policy

Housing prices and household indebtedness in Sweden have steadily increased during a long period of time, giving rise to concerns. Recent signs suggest that the housing market is cooling off as house prices have fallen slightly during the autumn. Recently implemented amortization requirement, together with high construction activity in recent years, may have contributed to this development. Taking these recent developments into account, it is likely that there will be some further moderation in house prices in the time to come.

Still, Swedish household indebtedness has continued to rise at a faster pace than income. Increasing household debt and house prices have made households vulnerable. A sharp drop in house prices would affect households' wealth and hence have implications for consumption and economic growth. Furthermore, about 70 percent of household mortgages have a variable interest rate. Rising mortgage interest rates will therefore quickly transmit into households' cash flows. Nevertheless, the Finansinspektionen's (FI) stress-tests show that the households have adequate margins to cope with negative shocks like house price declines, unemployment and higher interest rates. However, the overall picture with the high indebtedness in the system gives rise to concern for macroeconomic and financial stability.

Several measures have been taken to tackle risks emanating from rapid credit growth and increasing household indebtedness. An amortization requirement was introduced last year as a measure to mitigate risks from the increase in household indebtedness. FI has recently proposed a tightening of the amortization requirement targeting households with high debt-to-income ratios. It is expected that the proposal will be sent to the Government in mid-November for approval. The authorities place importance on the issue and continuously monitor the situation and assess whether further measures are needed. Measures could be either of the macroprudential type or of a more structural nature.

The banking system is large relative to the Swedish economy. Moreover, it is exposed to the property market to a high degree, and it is also dependent on short-term wholesale funding on international capital markets. The authorities remain aware of the need to address these vulnerabilities from both a macroeconomic and a financial stability perspective. It is important that the banks keep sufficient capital and liquidity buffers. It is also important that the Riksbank has access to sufficient foreign reserves if it needs to support banks with liquidity in foreign currency.

The authorities agree that it is important to ensure a clear legal mandate for macroprudential policy and efficient supervision of financial stability. FI has been designated as the macroprudential authority. To strengthen the institutional setup, the proposed expansion of FI's macroprudential mandate has been put forth to the Parliament for adoption and will, according to the Government's proposal, enter into force on the 1st of February 2018. FI will, based on this new legislation, have powers to apply a range of macroprudential tools. The new framework should ensure swifter implementation of potential macroprudential measures.

The authorities also point to the on-going work in a parliamentary commission tasked to review the Riksbank Act. The review will, *inter alia*, clarify the Riksbank's role in financial stability and present measures aimed at strengthening the Riksbank's financial independence.

Regional cooperation

The Swedish economy, and especially the banking sector, is closely interconnected with its neighbours. Cooperation amongst the authorities within the Nordic-Baltic region is essential to safeguard financial stability and ensure preparedness should a crisis arise. Efficient arrangements between authorities and sound buffers kept by the banks must be ensured and require close engagement and dialogue.

The Nordic-Baltic Stability Group has recently been revamped under Swedish leadership and the authorities are planning a regional crisis-simulation exercise in the second half of 2018. The Nordic-Baltic Macroprudential Forum, created in 2011 between central banks and supervisory authorities, is continuing its work on financial stability risks and macroprudential policy. The authorities remain committed to continuing to deepen the already strong regional cooperation.

Monetary policy

Swedish monetary policy has for some time been conducted in an environment characterised by uncertain economic developments, weak inflationary pressures, low global interest rates and great political uncertainty abroad. The monetary policy conducted by the Riksbank in recent years, with a policy rate below zero and extensive purchases of government bonds, has been exceptional from a historical perspective. The policy is largely a consequence of a global declining trend in interest rates. The aim of the expansionary monetary policy is to stabilize inflation in Sweden around the target of 2 percent and to keep inflation expectations in line with the target. Since 2014, inflation has risen and is now close to target. Inflation expectations in both the short and long term have also risen and are again close to 2 percent, measured in terms of both the CPI and CPIF. Economic activity is strong and unemployment has declined. Monetary policy has played a significant role in this development.

Inflation has however, until recently, been below target for a long time and it has taken a great deal of support from monetary policy to bring up inflation and inflation expectations. As there is a risk that inflation expectations currently are sensitive to negative surprises, inflation outcomes below the inflation target may be more problematic to manage than inflation outcomes above the target. It is therefore important that the strong Swedish economic activity continues to have an impact on price developments so that inflation expectations remain well-anchored around the target.

Thus, while inflation is currently close to target and the Swedish economy is strong, the Riksbank shares the IMF view that it is too early to make monetary policy less expansionary, as it is important to ensure that inflation remains close to target and that inflation expectations are firmly anchored. It is also important that the krona exchange rate does not appreciate too quickly.

The strong growth in the Swedish economy has contributed to bringing back inflation close to target. The high level of growth could also create imbalances in the economy, entailing problems further ahead. However, the Riksbank's assessment is that there are no signs, as yet, that this high growth will lead to wages and prices rising too rapidly. Factors such as high savings and strong competitiveness indicate that there are no major imbalances in the economy in general. However, if the current high level of housing construction were to slow down rapidly it could pose risks that could contribute to or strengthen a future downturn.

The Riksbank continuously analyzes the effects of the negative policy rate and the extensive government bond purchases. One possible side effect of low interest rates is that assets can become overvalued and risks become incorrectly priced, and that the indebtedness of various agents increases in an unsustainable manner. In Sweden, the increase in household indebtedness has already been a source of concern for a long time (see the financial stability section). Another possible side effect is that the functioning of financial markets could be impaired. So far, financial markets are deemed to have been able to manage the negative interest rate in a relatively frictionless manner and the Riksbank's assessment is that the bond purchases have not significantly affected the functioning of the market. Overall, the

Riksbank's assessment is that the side-effects of a negative policy rate and government bond purchases have so far been manageable.

The IMF External Sector Assessment

We strongly encourage staff to retain a high degree of flexibility when assessing external imbalances and to continue supplementing EBA model results with a deeper analysis of country-specific developments, avoiding mechanical model interpretations when formulating policy advice. While the authorities generally agree with the external sector assessment and appreciate staff's attempts to further clarify how adjustments based on judgement are generally applied, the authorities are not entirely convinced by the reasons behind the changes in staff's judgement in 2016 compared to 2015. Although no obvious changes have occurred in the data during 2016, staff now deems Sweden's external position to be 'stronger' than warranted by medium-term fundamentals and desirable policies, compared with 'moderately stronger' in 2015. Hence, the authorities encourage further work on measurement issues and on the limitations of the EBA methodology, as well as continued efforts to clearly articulate and explain both levels and changes in judgement going forward.

Structural issues

Labor market policy

Overall, the Swedish labor market is performing well with the highest employment rate in the EU (81.7 percent) and falling unemployment (6.8 percent). Despite this, too many people are unemployed, and the Government's employment policy has the objective of reducing unemployment to the lowest in the EU by 2020. This objective should be reached by increasing employment and the number of hours worked in the economy.

Too many people still have trouble finding work, particularly those who have not completed upper secondary school or those who are born outside Europe. At the same time, employers have difficulties finding people with the right skills. Labor shortages are considerable in several parts of the Swedish labor market. The Government agrees with the IMF that it is important to invest in education and training in order to equip unemployed women and men who lack the relevant education, training, and experience to fill the vacant jobs. In order to achieve this, the Government has expanded adult education and increased resources for basic education. To make it easier for employers to hire those who, for instance, lack experience or have been unemployed for a long time, the Government has streamlined the system of subsidized employment. Five different forms of employment subsidies will be replaced with one uniform supportive measure. All these arrangements can help alleviate the labor shortage.

The next few years will be shaped by efforts to help a large number of newly arrived people become established in working and community life. Since 2010, there is a two-year introduction program in place for refugees coordinated by the Swedish Public Employment Service. In 2016, the Government, together with the social partners, put in place fast tracks to shorten the time from arrival to work in professions with a shortage.

To make the integration of newly arrived immigrants more effective, a new regulation will enter into force on January 1, 2018. The regulatory changes will harmonize the regulation of new arrivals' integration in working life and Swedish society to a greater extent with the regulations that apply to other jobseekers. The Government will also introduce targeted measures for foreign-born women, and also an education and training obligation for newly arrived immigrants who are considered in need of education and training to find work. The government also welcomes ongoing negotiations between social partners on new ways to facilitate labor market entry for people with a weak attachment to the labor market.

Regarding the IMF's discussion on wages and the need for relative wage changes, wage formation in Sweden is the responsibility of the social partners. This arrangement has contributed to stability and real wage development in line with productivity growth for the last two decades.

Housing and tax issues

The Government concurs with the IMF that there are challenges in the housing market. High construction costs and inefficient use of existing property need to be addressed and this could be done in different ways. The Government agrees that the support for construction of more affordable rental housing is vital and that is why an investment grant for rental dwellings and student housing was implemented in 2016. Further, the Government also agrees that efficient public transportation is a vital component. The Swedish housing policy has for a number of years been heavily focused on reforms that make the planning and building process smoother, faster, and more predictable. This work will continue in line with the 22-item list that was presented by the Government in 2016.

The rent-setting system is designed to create a balance between tenants' right of security and reasonable rents for both the individual tenant and the property owners. The model for rent setting on new production, which takes production costs and the need for a reasonable return on investment into account (presumption rents), has been reviewed by an inquiry. One of the proposals in the inquiry report aims at making the model less rigid and more adaptable to new, altered or unforeseen circumstances.

The Government has also implemented reforms to improve the functioning of the housing market. The threshold for deferring capital gains tax has been temporarily removed and will give greater incentives for those with high capital gains to move in the near future. The Government is continuously looking at different possibilities to improve the functioning of the housing market.

The design of the tax system is one of many factors that influence the level of household debt. Any potential measures in this area must be seen in a long-term perspective and therefore need to be based on a broad political consensus. Changes must be handled with great care due to the potential negative effects on growth. General changes to the rules on mortgage interest deductibility will affect those who have already made the decision to buy a house or part of a tenant-owned property. There must be predictable conditions forhouseholds' investment in property as this is among the largest financial decisions a household can make.

Fiscal policy

The Government agrees with staff's fiscal assessment that the current fiscal stance is broadly neutral and that the fiscal stance for 2018 is assessed to be mildly expansionary with a marginal decline in the structural balance. Yet, as the IMF notes, concerns around overheating the economy are limited by persistently low core inflation and modest wage growth, which is in line with the Government's assessment.

Furthermore, the Government agrees with staff that Sweden has a healthy fiscal position with substantial fiscal space were it to be needed. The Government also notes the IMF's view that if debt in practice falls below the 35 percent of GDP benchmark, a further reduction in the surplus target may be appropriate at the time when the fiscal framework is due for its 8- yearly review.