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APPENDIX

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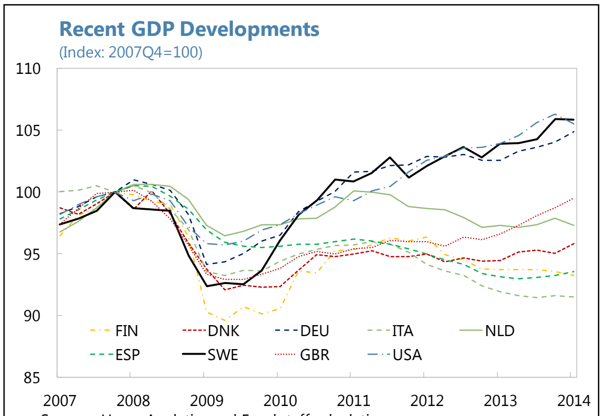
RECENT ECONOMIC DEVELOPMENTS AND OUTLOOK

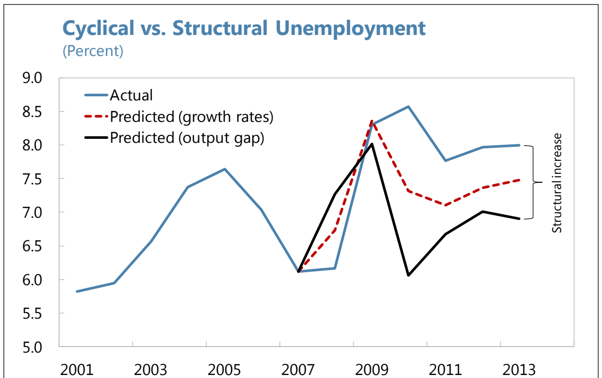
A. Recent Economic Developments

1. Sweden's economy has re-gained speed. Following a moderate slowdown in 2011–12, GDP growth reached 1.6 percent in 2013, driven by accelerating private consumption in the second half of the year. This lifted real GDP at end-2013 to nearly 15 percent above its 2009 trough, compared to the EU average of less than 4 percent. Consistent with this robust performance, various methodologies point to a narrowing output gap, estimated to average about -¾ percent of potential GDP in 2013.



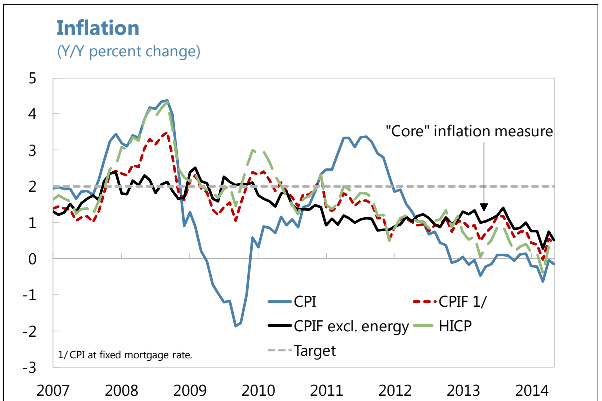
Sources: Haver Analytics and Fund staff calculations.

2. Unemployment has remained high, reflecting largely structural factors. Despite solid employment growth of around 1 percent in 2013, driven mostly by strong employment growth in the services sector, an even stronger expansion of the labor force resulted in the unemployment rate remaining flat at around 8 percent, well above its pre-crisis level of around 6½ percent. The increase in the labor force reflected both past reforms and Sweden's growing immigrant population. The increase in unemployment has been borne disproportionately by the young, the low-skilled, and the foreign-born. Combined with a reduced responsiveness of unemployment with respect to growth (i.e., Okun's law), this suggests that much of the increase in unemployment is structural.



Sources: IMF World Economic Outlook and Fund staff calculations.
Note: Based on a regression of the change in (level of) unemployment on GDP growth (output gap) during 1998-2013.

3. Despite accelerating domestic demand, inflation has continued to decline. Headline consumer price index (CPI) inflation averaged 0 percent in 2013 and declined slightly to -0.2 percent in the first half of 2014.[1] Core inflation, measured as CPI with constant mortgage



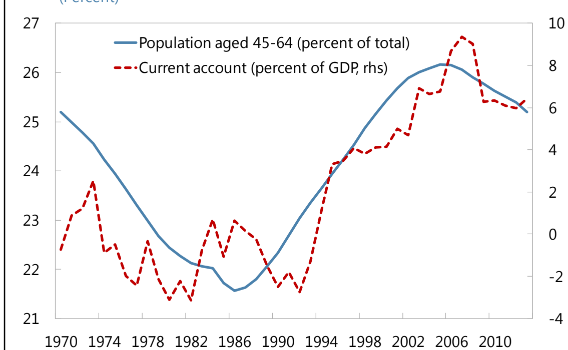
Sources: Eurostat, Haver Analytics, Statistics Sweden and Fund staff calculations.

[1] Headline CPI includes mortgage interest costs in its consumption basket. The Riksbank's preferred measure of inflation is CPI at a fixed mortgage rate (CPIF), which averaged 0.9 percent in 2013 and 0.4 percent in 2014:H1.

rates and excluding energy, averaged 1.1 percent in 2013 and 0.6 percent in the first half of 2014. In part, low inflation reflected imported global price trends and the continuing strength of the *krona*, a moderate depreciation during the second half of 2013 notwithstanding (see Box 1). Service sector inflation in particular has slowed since early 2013, partly due to second-round effects of declining fuel prices on transportation costs. Favorable unit labor cost (ULC) developments in services, with productivity improvements roughly compensating for nominal wage growth of around 2 percent in 2013, also reduced pressure on prices (see Figure 2). While inflation expectations have drifted downward, they remain relatively well-anchored at the policy horizon.

4. **The large and positive external balance largely reflects structural factors.** The current account surplus reached 6.4 percent of GDP in 2013, a moderate increase from 6 percent in 2012. Among the structural factors are the very large financial sector and pension and household savings patterns, which are consistent with Sweden's population aging dynamics. These trends have been reinforced by social protection reforms since the mid-1990s. In addition, Swedish investment income rose in 2013, on account of high returns from equity assets and low interest payments on debt liabilities, as did net trade in services, driven by an increase in merchanting trade. The moderate depreciation of the *krona* exchange rate helped as well. Overall, staff estimates the *krona* to be broadly in equilibrium, with Sweden's strong external position reflecting mostly structural factors (see Box 1).

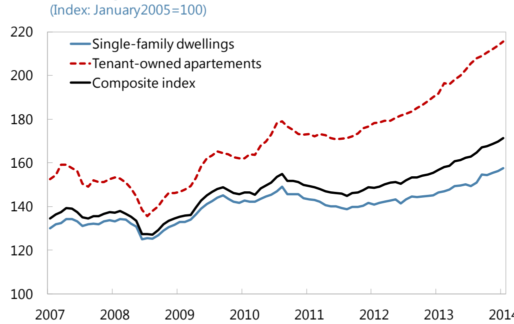
Current Account and Demographics
(Percent)



Sources: Sveriges Riksbank and Fund staff calculations.

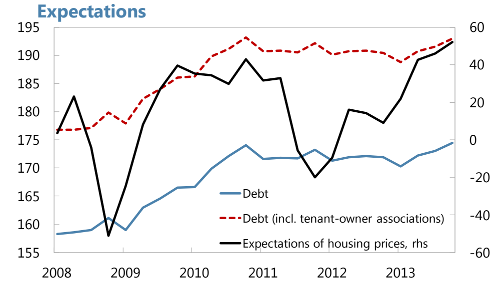
5. **Housing prices and household indebtedness have increased from already high levels.** Reflecting strong demand fueled by low interest rates, as well as structural factors such as ongoing urbanization and insufficient housing supply, house price increases have picked up again, at about 7½ percent annual growth for single-family homes and nearly 13 percent for tenant-owned apartments in the first half of 2014. Household credit growth remained equally strong, pushing household indebtedness to almost 175 percent of disposable income in 2013, and over 190 percent

Housing Prices
(Index: January2005=100)



Sources: Sveriges Riksbank and Fund staff calculations.

Swedish Household Indebtedness and Housing Price Expectations



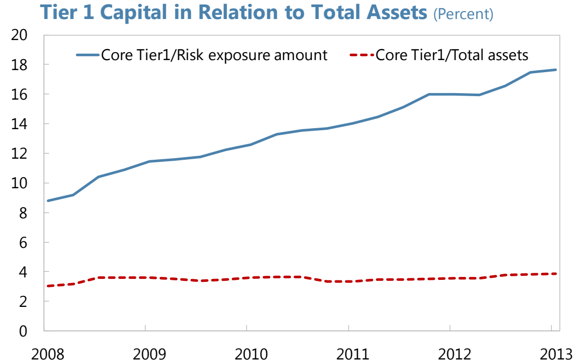
Sources: SEB, Sveriges Riksbank and Fund staff calculations.
Note: The debt ratios are expressed as shares of household disposable income. House price expectations are defined as the share of households believing housing prices will rise less the share of households believing they will fall.

if debt from tenant-owned housing associations is included. Amortization rates are very low, with about 40 percent of households having increased or failed to reduce their debt stock in 2013. Recent data indicate that debt ratios are particularly high for indebted lower-income households who are especially vulnerable to income, interest rate, and house price shocks.

6. Economic policies have supported the recovery and strengthened the resilience of the large banking sector. In particular:

- *Financial sector reforms continued.* The authorities have rolled out Basel III measures ahead of schedule, including implementing systemic risk buffers and plans to impose counter-cyclical buffer and strengthen liquidity coverage ratios (LCRs), in addition to increasing mortgage risk weights. However, with assets close to four times GDP, the Swedish banking sector is large and leverage ratios are low, having improved little in recent years.

Swedish Major Banks' Core Tier1 Capital Ratios and Tier 1 Capital in Relation to Total Assets (Percent)



Sources: Sveriges Riksbank and Fund staff calculations.

- *Monetary policy has been supportive while stressing financial stability risks.* The Riksbank reduced the repo rate by 25 basis points in December 2013 and a further 50 basis points in July 2014, setting it at 0.25 percent, but highlighted the growing tension between addressing low inflation and further fueling household borrowing.

- *Fiscal policy remains expansionary for now.* Net lending is projected to increase to -1.9 percent of GDP in 2014, up from -1.3 percent in 2013, primarily on account of lower revenues. Given strengthening growth, this implies—at least in hindsight—a procyclical structural expansion of about ½ percent of potential GDP.

B. Outlook and Risks

7. The outlook is for accelerating growth. Real GDP growth is projected to strengthen further, to about 2.6 percent in 2014 and about 2.8 percent in 2015. Exports are expected to pick up along with euro area growth and global trade, but private consumption and investment should provide most of the dynamics, while fiscal policy is set to consolidate. With the output gap fully closing, staff expects inflation to gradually rise to around 1½ percent in 2015, as disinflationary pressures from falling imported prices dissipate and wage growth picks up.

8. Financial instability is a key downside risk. Household debt ratios have continued to rise and remain particularly high among indebted lower-income households, and the share of new mortgages with a variable rate has increased from over one half in 2012 to more than two thirds in 2013. While many households show large net asset positions, a significant share of assets is illiquid. As a consequence, adverse shocks to interest rates, house prices, or income could quickly translate into lower consumption, employment, and growth, and ultimately impact the banking system, especially if these shocks occurred at a time of high global funding stress.[2] Sweden's large and regionally connected banks are also vulnerable to a sudden increase in financial tensions in the wider Nordic region or to surges in global financial market volatility. Conversely, financial instability in Sweden would quickly spread to other Nordic and Baltic countries.[3] (See also the Risk Assessment Matrix, Box 3.)

9. Low inflation and moderating global trade also pose risks. An extended period of very low inflation could cause longer-run inflation expectations to fall significantly below the inflation target. This, in turn, could act as a drag on growth if households and firms defer expenditures in anticipation of lower prices in the future. At the same time, rising oil prices or a depreciation of the *krona* could help lift Swedish inflation above the baseline. Geopolitical tensions could lead to lower external demand.

The Authorities' Views

10. The authorities broadly agreed with staff on the outlook and the risks. They saw a recovery driven by private domestic demand and a gradual increase of inflation to the Riksbank's target of 2 percent, with risks stemming from lower external demand and financial instability related to high household debt. The authorities, however, also noted upside risks from stronger than currently anticipated global growth.

POLICY AGENDA

11. Sweden's main challenge is to reduce financial risks, while additional structural reforms will help lower unemployment.

- *Progress on the financial stability agenda is urgent.* This will take measures targeted directly at household credit demand and further strengthening banking resilience. More fundamentally, tax reforms and improving housing supply will help arrest the rise in house prices and credit growth in the medium to long term.

- *The Riksbank still has to balance financial stability and low-inflation concerns.* Effective macroprudential policy should be the first line of defense and would allow the Riksbank to pursue its inflation target with less concern about financial risks.

- *Lowering unemployment requires structural reforms.* With vulnerable groups experiencing substantially higher unemployment rates than others, there is scope for improvement.
- *The time has come for fiscal consolidation.* Fiscal policy has supported the recovery, but with

[2] See Chapter III of the 2013 Selected Issues for Sweden for a discussion of funding risks.

[3] See the 2013 Nordic Regional Report for a discussion of regional spillovers.

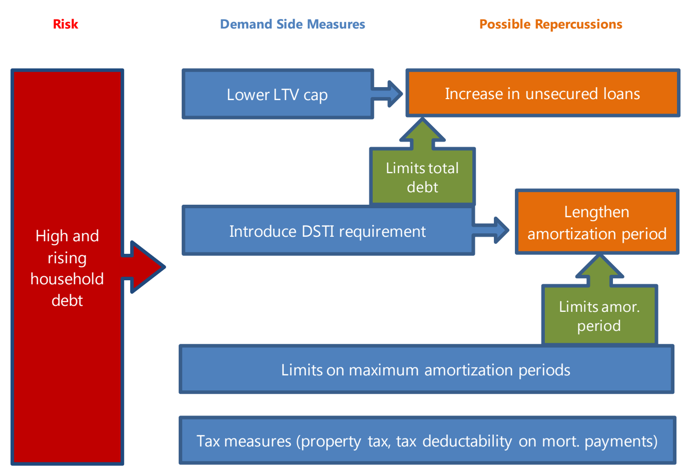
robust growth ahead, a steady consolidation path will help preserve fiscal buffers.

A. Financial Policies: Addressing Stability Risks

12. A number of financial reforms are on the way. The authorities have announced plans to further improve banks' capital buffers, including raising minimum mortgage risk weights to 25 percent at the end of 2014 and introducing Basel III measures such as systemic risk and countercyclical capital buffers. This should help to further improve the balance sheets of Swedish banks. However, reflecting very low borrowing costs and strong expectations that house prices will continue to increase, household credit has picked up again recently and, under current policies, is projected by the Riksbank to continue rising in 2014 and 2015.

13. Macroprudential policies focused more directly on mortgage demand stand a better chance of curbing credit growth. Further measures on the credit supply side are likely to have limited additional impact, not least given banks' favorable funding conditions and the low mortgage rates they allow.[4] On the demand side, following an agreement with the Financial Supervisory Authority (FSA), banks are committed to encourage new customers to agree to voluntary amortization plans. However, with no sign of credit slowing down, real progress might require the gradual introduction of mandatory amortization requirements. Such regulation has been enforced, for example, in Singapore in 2012, where new mortgages have to be amortized within 35 years.

Illustration of Demand Side Measures



Source: Fund staff calculations.

14. A gradual introduction of a debt service-to-income (DSTI) limit, combined with a lower binding loan-to-value (LTV) cap, would further help contain mortgage demand. The LTV cap of 85 percent is relatively generous compared with that in many other advanced economies. Nevertheless, in 2013, about 10 percent of households have taken on supplementary unsecured loans that were in part used to help finance house purchases. In addition, given rising housing values, even a more binding LTV cap might not keep debt-to-income ratios from rising. This suggests that adding a DSTI limit to the Swedish macroprudential toolbox could help keep debt at sustainable levels. It would tie households' debt to their income level, independent of house values,

[4] See the Selected Issues paper *Macroprudential Policies in Sweden: An Overview* for details.

and could work as an automatic stabilizer that helps contain excessive increases in credit (and asset prices) relative to income, further reducing household vulnerabilities.

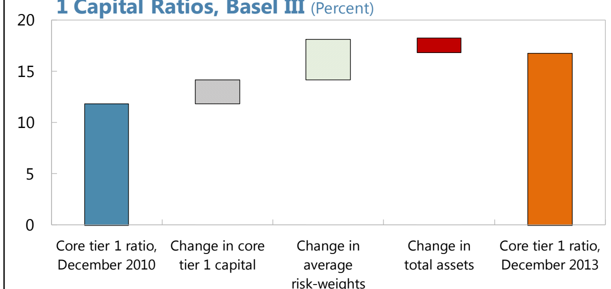
15. Mortgage interest tax deductibility contributes to high household debt by providing an incentive to accumulate debt and keep it at high levels.[5] As a result, many Swedish households are more leveraged and vulnerable to economic or financial shocks than they would otherwise be. A gradual reduction in mortgage interest deductibility—as is, for example, being done in Finland—would reduce this distortion.

16. A longer-term solution to rising house prices and mortgage levels will require alleviating housing supply constraints. Insufficient housing supply growth is a fundamental factor behind the rise in residential property prices, especially in metropolitan areas, where ongoing urbanization and immigration trends boost demand. This has resulted in higher housing prices, driving up the size of mortgages. While some steps have been taken, containing house price pressures will require a continuing effort to expand the stock of affordable housing and further reforms to zoning, permitting, and the rent-setting process. Public infrastructure investments, coordinated with municipalities, would also make private housing investments more attractive.

17. Recent progress notwithstanding, there is scope for additional measures to increase the resilience of Sweden's banking system. This includes:

- *Capital*. While the average core Tier I risk-weighted capital ratio rose from 11.8 to 16.8 percent between end-2010 and end-2013, most of the improvement reflected changes in average risk weights, in part driven by the introduction of new risk models. The average leverage ratio (measured by core Tier 1 capital as share of total assets) has increased only slightly from 3.6 percent to 3.9 percent, which remains low in comparison to other large banking systems. A higher leverage ratio requirement, such as the 5 percent minimum leverage ratio requirement proposed by the U.S. Federal Reserve, would ensure a more substantial increase in shock-absorbers. Introducing the countercyclical capital buffer at or close to 2½ percent—the maximum value subject to international reciprocity—would also help.

Development of Major Swedish Banks' Core Tier 1 Capital Ratios, Basel III (Percent)



Sources: Sveriges Riksbank and Fund staff calculations.
Note: The intermediate columns show how different factors have contributed to the change in weighted average of Swedish major banks' core Tier 1 capital ratios between December 2010 and December 2013. Lower average risk weights contributed largest part of the increase, which was partly driven by the implementation of advanced internal ratings-based models.

- *Liquidity*. Over half of Swedish bank funding comes from wholesale sources, consisting mostly of relatively short-maturity covered bonds and certificates. According to the Riksbank's measure of

[5] Currently, mortgage interest costs up to 100,000 *krona* (in excess of capital income) can be deducted at a 30 percent income tax rate, with amounts over that deducted at a 21 percent rate.

structural liquidity, the resulting maturity mismatch has improved only marginally in recent years and remains low compared to other European banks. Rapid progress towards fulfilling the Basel III Net Stable Funding Ratio (NSFR) requirement at 100 percent would help in this regard; and introducing a minimum LCR requirement in Swedish *krona* could add to banks' ability to withstand a short-term *krona* liquidity squeeze.

18. The size and regional orientation of Sweden's banks makes cross border cooperation essential. The coordinated Nordic approach to raising mortgage lending standards in Norway—with the Swedish and Danish authorities ensuring the compliance of local bank branches—marks important progress towards the necessary macroprudential cooperation in the highly integrated regional banking market. The implementation of the EU Bank Recovery and Resolution Directive (BRRD) should allow the completion of the work of the Nordea Crisis Management Group (CMG) and facilitate a binding ex-ante burden sharing agreement. Retaining the option of Sweden joining the Banking Union would keep the door open to further improving the level of regulatory and macroprudential cooperation and coordination across the Nordic-Baltic region.

The Authorities' Views

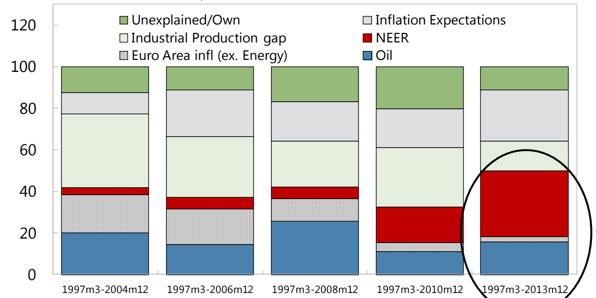
19. The authorities broadly concurred with staff's assessment of financial vulnerabilities and stressed that measures were under way to address them. They saw household indebtedness as high both from a historical and international perspective. However, they also noted that the ongoing push for higher capital and liquidity standards—often well in advance of the Basel III timetable—should help contain emerging risks. There was also support for the call for demand-side measures, with the Riksbank and the Ministry of Finance emphasizing the need to make further progress on improving the amortization culture. The FSA argued that to assess whether further policy action would be warranted, the effects of the already implemented measures, such as increased risk weights and voluntary amortization plans, needed to be evaluated first.

B. Monetary Policy: Balancing Price and Financial Stability

20. Inflation has been persistently below target, driven by a combination of external and domestic factors. "Flight to safety" dynamics in financial markets, together with relatively higher interest rates in Sweden, contributed to a strong appreciation of the *krona* and lowered import prices. In 2013, even as *krona* appreciation eased, declines in global oil and food prices created additional disinflationary pressures.[6] Domestic inflation also slowed, in part reflecting the indirect impact of lower energy prices on transportation services inflation. Moderate nominal wage growth along with slightly stronger productivity growth, helped bring aggregate ULC growth down from 2.7 percent in 2012 to 1.4 percent in 2013, reducing cost-push pressures on inflation (see Figure 2).

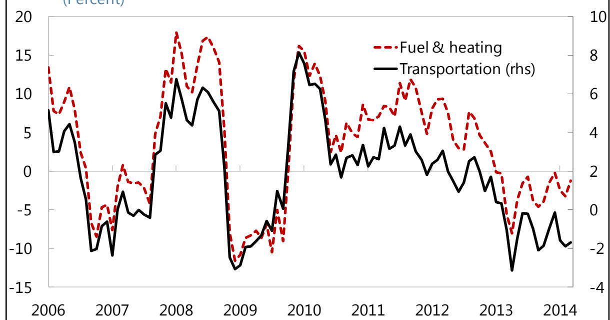
[6] See the Selected Issues paper *Low Inflation in Sweden: What's Driving It?* for details.

Swedish Inflation: VAR Variance Decomposition
(Share of variance in percent)



Sources: Eurostat, Haver Analytics, Statistics Sweden, and Fund staff calculations.
Note: This illustrates the variance decomposition of a VAR estimated over sample periods of increasing length, with sample periods ending in 2004m12, 2006m12, 2008m12, 2010m12, and 2013m12, respectively (all start in 1997m3). As the sample length increases the share of the variance explained by different variables changes, providing an indication of what factors are driving recent inflation changes.

Transportation and Fuel Price Inflation
(Percent)

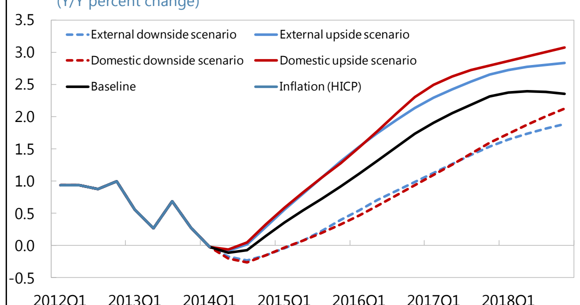


Sources: NIER, Statistics Sweden, and Fund staff calculations.
Notes: Transportation inflation is on RHS scale to better illustrate the comovement with fuel price inflation, though the latter is more volatile.

21. **Staff analysis suggests that inflation will converge back to the two-percent target, but there is uncertainty around the baseline.** A Philips curve model confirms that the forces to lift inflation from its current low level are in place, including dissipating external disinflationary pressures and a pick-up in growth supported by very low interest rates (see Box 2). However, the speed of convergence back to the target depends on the pace of domestic growth and external developments, including in particular oil price and exchange rate dynamics.

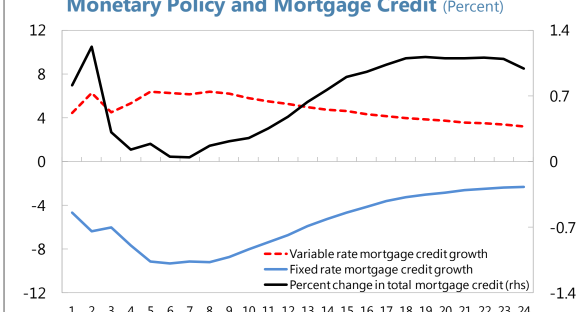
22. **As long as inflation remains low, the presence of increasing financial stability risks forces monetary policy into a difficult balancing act.** A reduction in interest rates tends to depreciate the *krona* and raise domestic demand, which should increase inflation. At the same time, lower policy rates are associated with a reduction in mortgage rates, higher overall mortgage credit growth, and a shift from fixed to variable interest rate mortgages. For example, a simple VAR exercise suggests that, over a two-year period, a 50 basis point decrease in the policy rate increases the ratio of debt to disposable income by about 2 percentage points and the share of variable rate mortgages in the total mortgage stock by about 5 percentage points. This increases financial stability risks, particularly in an environment where buoyant expectations in the housing market invite speculative price dynamics.

Simulated Inflation Paths under Different Scenarios
(Y/Y percent change)



Source: Fund staff calculations.
Note: Figure plots the stimulated inflation paths using the median model from the ones forming the baseline range.

Monetary Policy and Mortgage Credit (Percent)



Sources: Fund staff calculations.
Note: This chart depicts the impulse response functions following an exogenous 60 bp negative shock in the Stibor rate, which is equivalent to a 50bp decrease in the repo rate. Total mortgage credit growth is calculated based on the March 2014 variable and fixed rate mortgage stocks as starting points, and applying the credit growth rates separately to the corresponding stock of mortgages.

23. **The balance between price and financial stability can change.** The policy rate

cuts in December 2013 and July 2014 have reaffirmed the Riksbank's commitment to achieving its inflation objective. However, while effective macroprudential policies must be the first line of defense, a substantial rise in financial stability risks—such as a further acceleration in house price increases and mortgage credit growth—might mean interest rates will have to rise sooner than otherwise to help contain financial vulnerabilities.

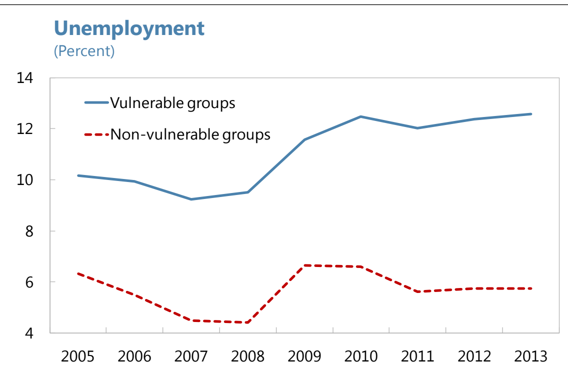
24. This only adds to the urgency of implementing a comprehensive set macroprudential policy measures to contain rising household credit. While monetary policy can "lean against the wind" to help subdue mortgage growth, higher interest rates than warranted by macroeconomic conditions alone are an economically costly instrument, as the cost of credit would increase for all borrowers, including firms. Instead, successfully addressing financial stability risks with macroprudential measures would allow monetary policy to more freely pursue its inflation target.

The Authorities' Views

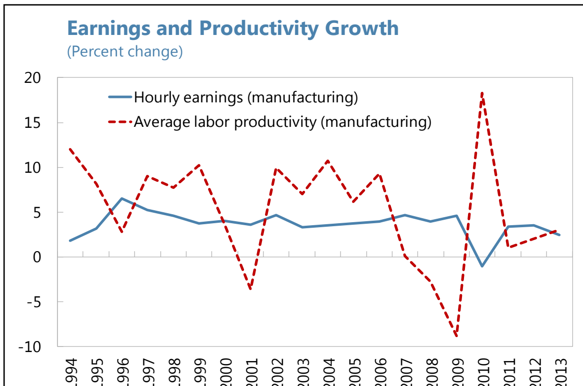
25. The authorities agreed that low inflation and rising financial stability concerns are pulling monetary policy in different directions. They welcomed further inquiries into the external and domestic sources of low inflation, including the role played by monetary policy. At the same time, they shared the view that the repo rate was not the first-best policy instrument to address financial sector risks and that, to ensure financial stability, macroprudential and fiscal policies required continued attention—especially given the recent reduction in policy rates.

C. Structural Reforms: Reducing Unemployment

26. Recent reforms and relatively strong GDP growth have fostered employment—but unemployment remains high especially among vulnerable groups. The introduction of an Earned-Income Tax Credit (EITC), reforms to disability insurance, and enhanced Active Labor Market Programs (ALMPs) have resulted in a substantial expansion of the labor force. Increased immigration inflows have added to these dynamics. Despite solid employment growth overall, unemployment rates have risen markedly among the low-skilled, especially youths, foreign-born, and older workers while they have remained low among others, suggesting that much of the rise in unemployment is structural.



Sources: Statistics Sweden and Fund staff calculations.
Notes: Vulnerable groups are individuals born outside of Europe, over the age of 55, or with low educational attainment.

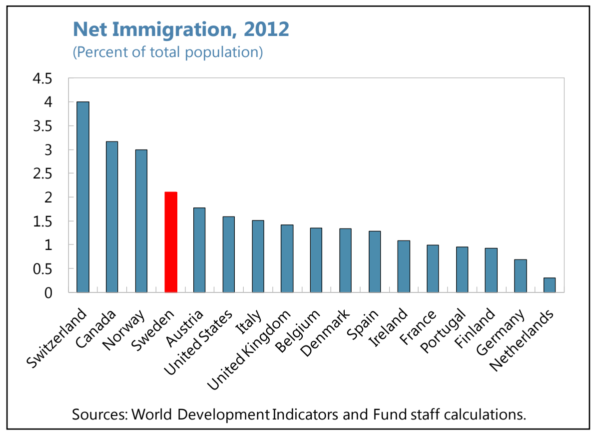


Sources: Haver Analytics, National Institute of Economic Research and Fund staff calculations.

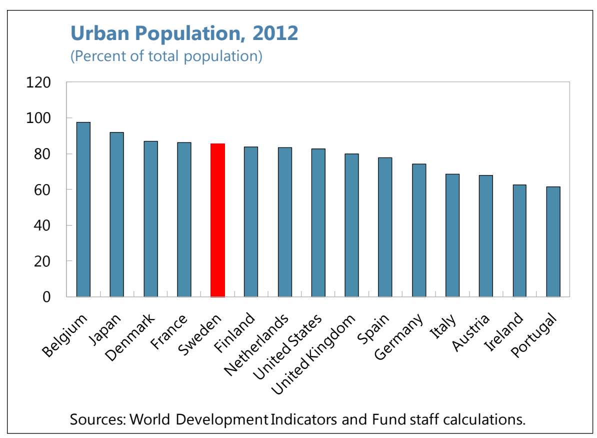
27. Further reforms can help accelerate and sustain the transition of vulnerable groups into employment. The Swedish wage formation process has contributed to creating one of the most compressed wage distributions among OECD economies. While Sweden's collective bargaining institutions have, on average, delivered wage growth in line with productivity, a narrow wage range can limit employment opportunities at the lower end where unemployment is most pronounced. Here, social partners have an important role to play—for example, by exploring ways to increase wage flexibility at the firm level. They, and the government, can also help the young and the low-skilled add to their human capital. For example, developing vocational training programs that are aligned with employers' needs would allow these groups to gain better-paying, higher-productivity jobs. An expansion of training-based ALMPs can also help in this context.[7]

28. Addressing structural housing market constraints will facilitate labor mobility and improve financial stability. High urbanization rates and immigration flows have added to high and rising demand for housing and boosted residential property prices.

- Meeting this demand will require *expanding the supply of affordable housing*, including by tackling well-known problems with zoning regulations and adjusting the rent setting mechanism, which can prevent the efficient allocation of the existing stock of properties and, by keeping the average rent below market levels, limits incentives for the construction of rental properties.[8] Exempting new construction from rental regulations for longer than is currently the case would help.



- *Tax reforms* also have a role to play. The capital gains tax acts as a deterrent to moving and complicates the efficient allocation of the existing stock of housing. A reform in this area could be complemented by an increase in the property tax on private residences. Property taxation, reduced in 2008 to a municipal property fee capped at 0.75 percent, is below the values in many other advanced countries, such as up to 4 percent in the U.S. and up to 3 percent in Denmark.



[7] See the Selected Issues paper *The Swedish Labor Market—Responding to Global Challenges* for details.

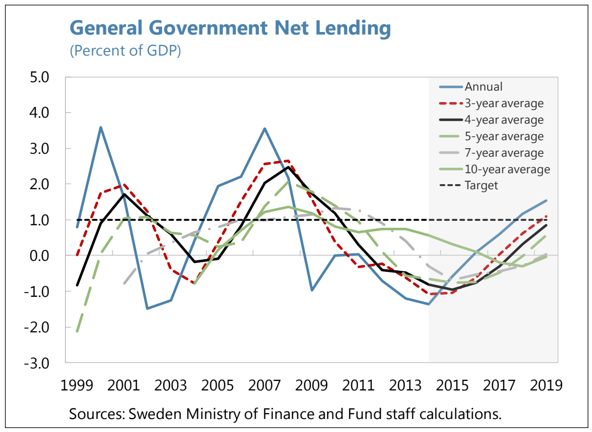
[8] See Boverket Market Report (Fall 2013).

The Authorities' Views

29. The authorities shared staff's concern over high unemployment and housing market rigidities. They were concerned over the high level of unemployment and how vulnerable groups are affected. The authorities noted that the persistent recession, combined with an expansion of the labor force, has contributed to the relatively high unemployment rate. However, there were differing views among the authorities on whether the high level of unemployment is mainly cyclical or structural. On housing, the authorities agreed with the need to address supply constraints and noted several measures they had already taken and that over time are expected to increase housing supply. However, in this context, they saw little scope for substantial tax reforms in the near term.

D. Fiscal Consolidation: Moving To Protect Buffers

30. Fiscal policy is rightly turning toward consolidation. Underpinned by the "*krona*-for-*krona*" strategy, which requires any reforms to be (at least) counterfinanced, the government has suggested a structural consolidation path with annual adjustments of about ½ percent of potential GDP starting in 2015. On staff's numbers, this would help achieve a headline fiscal surplus of above 1 percent of GDP by 2018 and reduce the public debt-to-GDP ratio to around 30 percent of GDP, from nearly 42 percent currently (see the DSA in the Appendix). The Swedish fiscal framework requires a 1 percent surplus "over the cycle," a target chosen to build up sizable fiscal buffers. While the length of a "cycle" is open to interpretation, under most definitions the target will not be met until later.



31. The current fiscal framework serves Sweden well. While public debt is not high, prudent policy requires maintaining a borrowing capacity at or below this level—in line with the potentially large contingent government liabilities arising in a small open economy with an aging population and a large financial sector.[9] This means making clear progress towards the current net lending target and keeping it in place for some time. In this context, there are synergies between fiscal consolidation needs and efforts to rein in financial stability risks, including gradual reforms of mortgage interest deductibility and the property tax to contain mortgage credit growth.

[9] The 2013 Staff Report estimated the contingent liabilities from financial sector risks alone to be in the range of 17 to 90 percent of GDP, depending on the severity of the underlying event and the resolution approach.

The Authorities' Views

32. The authorities were in broad agreement with the staff's fiscal assessment. They agreed on the importance of adhering to the ambitious consolidation plan to retain the credibility of the fiscal framework. They also saw the need to further strengthen fiscal buffers given the size of Sweden's banking sector and the associated risks, and to ensure the possibility for fiscal policy to weather serious economic downturns without incurring large deficits. The authorities saw no substantial need for modifications of the framework in the near future. The Ministry of Finance also noted that it saw higher spare capacity than estimated by staff.

STAFF APPRAISAL

33. Sweden's economy is doing well. Growth is gaining speed ahead of many European peers, helped by buoyant household consumption and supportive macroeconomic policies. Employment has been rising, but the labor force expanded even more. The resulting increase in unemployment is largely structural, borne disproportionately by the young, the low-skilled, and the foreign-born. Inflation is low, reflecting global commodity price trends and a still strong *krona*. Domestically, lower imported energy prices and moderate nominal wage growth along with strong productivity gains have reduced cost pressures. While Sweden's external position is moderately stronger than the level consistent with medium-term fundamentals and desirable policies, structural factors, including demographics and the large banking sector, explain much of Sweden's high and persistent current account surplus. This suggests that the *krona* is moderately undervalued or close to its equilibrium level.

34. However, financial stability risks are high and increasing. Sweden's banking system is large and wholesale-dependent, and household debt has grown to 190 percent of disposable income on some measures while house prices are increasing rapidly. Behind this are very low interest rates and structural factors, such as housing supply constraints and tax incentives that keep amortization rates low. With indebtedness particularly high among lower-income households, their vulnerability to income, interest rate, and house price shocks is high as well.

35. Containing mortgage demand is urgent. Policies to further strengthen banks need to continue, including higher mortgage risk weights and the introduction of many Basel III measures ahead of schedule. However, there is little evidence that mortgage credit or house price growth is slowing in the current low-interest rate environment. This will require macroprudential measures directly targeting credit demand, including the gradual introduction of statutory amortization rates if voluntary measures remain ineffective, lower LTV caps, and the introduction of DSTI limits to improve households' resilience to shocks. More fundamentally, gradually phasing-out the tax deductibility of mortgage interest rates would reduce incentives to accumulate debt.

36. Longer term, housing supply rigidities need to be addressed. A fundamental factor behind the growth in Swedish housing prices and mortgage lending is insufficient housing supply growth in the face of strong urbanization trends. A number of policies are available to expand the stock of affordable housing, including continuing reforms to zoning, permitting, and the rent-setting process, and through public infrastructure investments. In addition, it will be important to improve the allocation of the existing housing stock—for example through a tax reform that reduces capital gains taxation while raising very low property tax rates.

37. Monetary policy still has to balance price and financial stability risks. The outlook is for a gradual increase in inflation, as external disinflationary forces dissipate and the output gap is set to close on the back of strong GDP growth. However, while the policy rate cut to 0.25 percent in July 2014 will help in this regard, very low interest rates are also likely to fuel household borrowing. In the absence of effective macroprudential measures, a further acceleration in housing prices and mortgage credit growth could mean that interest rates will have to rise sooner than otherwise to help reduce the resulting financial stability risks. This will require careful consideration of the trade-off between the possible impact on the recovery and the ultimate cost of rising financial vulnerabilities. It also adds to the urgency of implementing a comprehensive set macroprudential policy measures to contain household credit demand.

38. Structural unemployment requires structural reforms. High unemployment is concentrated among vulnerable groups where the gap between entry-level sectoral wages and productivity can be large. Social partners have an important role to play, both by exploring ways to increase wage flexibility at the firm level and, together with the government, to develop vocational training programs that are aligned with employers' needs. This would help the vulnerable add to their human capital, which would allow them to gain better-paying, higher-productivity jobs.

39. It is time for fiscal consolidation. Given the strong growth outlook, 2015 is the right time to embark on a consolidation path towards the one-percent net lending surplus target over the cycle. Doing so would help preserve the prudent borrowing capacity adequate for a small open economy preparing for an aging population and facing potentially significant contingent liabilities from a large financial sector.

40. It is recommended that Sweden remains on the standard 12-month Article IV consultation cycle.

Box 1. Current Account, External Assessment and the Equilibrium Real Exchange Rate

Since its trough in early 2009, the *krona* has appreciated nearly 20 percent against the euro and in real effective terms, partly driven by safe-haven flows reflecting Sweden's relatively strong growth and solid fiscal position.[1] Despite this, the IMF's External Balance Assessment (EBA) methodology, using data up to June 2014, suggests that the *krona* remains substantially undervalued relative to the value consistent with medium-term fundamentals and desirable policies. Similarly, the EBA approach estimates Sweden's current account to have exceeded the level implied by fundamentals and policies in 2013 by about 8½ percent. These results are reflective of Sweden's relatively large and persistent current account surplus, which reached 6.4 percent of GDP in 2013.

External Balance Assessment (EBA) Methodologies, 2013 1/

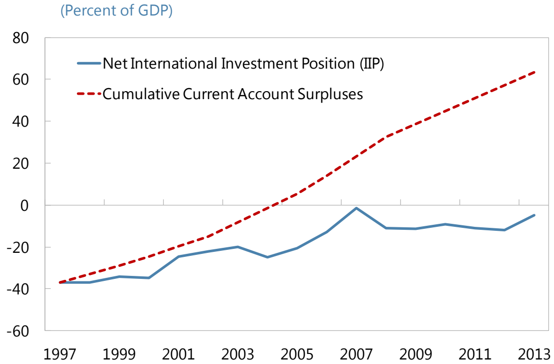
Methodology	CA gap (percent of GDP)	REER gap (percent)
EBA CA Analysis	8.4	-28
EBA REER Analysis	-	-6
Staff Assessment	-½ to +3½	-10 to +2

Source: Fund staff calculations.

1/ CA gaps: minus indicates overvaluation. REER gaps: minus indicates undervaluation. EBA estimates are based on data available as of June 2014.

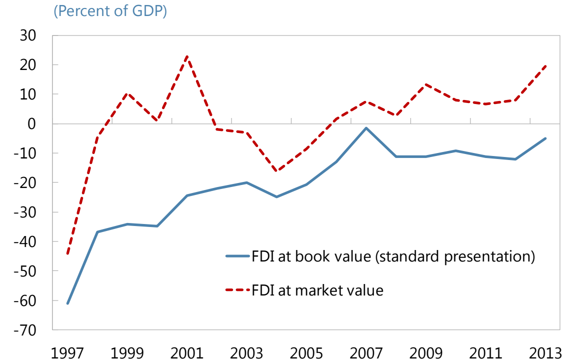
In 2013, gross external assets reached 298.5 percent of GDP and gross external liabilities at 304.0 percent of GDP, including sizable external liquid liabilities from Sweden's large banking sector. The resulting Swedish net international investment position (IIP) of -5.6 percent of GDP in 2013 is a substantial improvement from -12.7 percent in 2012, but the discrepancy between the recorded net IIP and the balance implied by cumulative past current account balances has widened over time. Valuation effects account for much of the difference. For example, if FDI was valued at market prices, instead of the standard book value, the Swedish net IIP would be nearly 25 percentage points higher in 2013.

Net IIP vs. Cumulative Current Account
(Percent of GDP)



Sources: Sveriges Riksbank and Fund staff calculations.

Net IIP: Valuation Effects
(Percent of GDP)



Sources: Sveriges Riksbank and Fund staff calculations.

A number of factors are important when evaluating the Swedish external position:

- The *krona* is *freely floating* and there are no significant policy gaps that would impact the current account.
- *Demographic factors* tend to influence the current account but these can be difficult to capture fully in a cross-country approach such as the EBA. Sweden's high saving rate is not unusual for an aging society, and has been reinforced by pension and other social protection reforms since the mid 1990s, notably a phased shift to a defined contributions pension scheme and a progressive shrinkage in transfers. High private savings tend to be associated with high capital exports and current account surpluses (see also the text figure in ¶4).
- In addition, the EBA-estimated gap does not reflect important other *structural factors* shaping the current account. Sweden operates as regional financial center for the Nordic region (with total assets about four times GDP, Sweden's banks are among the largest in Europe) and plays a significant role in merchanting trade[2]. Both characteristics have been shown to lead to persistently larger current

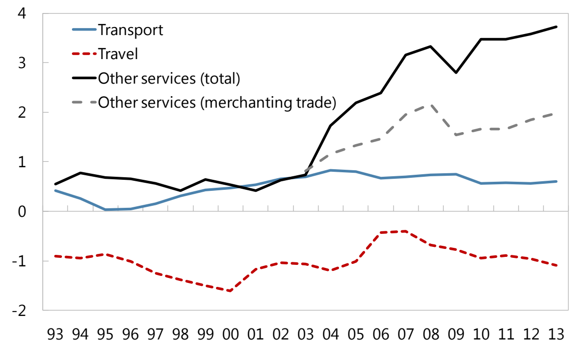
Box 1. Current Account, External Assessment and the Equilibrium Real Exchange Rate (concluded)

account balances, with merchanting trade in particular having accounted for a substantial share of the past decade's current account dynamics.

In staff's view, this suggests that a significant part of the Swedish current account surplus is structural in nature and likely to persist into the medium term. Staff assesses Sweden's adjusted current account norm to be around 2–6 percent of GDP and the current account gap to be in the range of -½ to +3½ percent of GDP in 2013. In line with this, the REER gap is assessed to be in the range of -10 to +2.

Net Trade in Services

(Percent of GDP)



Sources: Sveriges Riksbank and Fund staff calculations.

[1] A moderate nominal depreciation against the euro and the dollar since December 2013, in part reflecting reductions in the repo rate, still leaves the *krona* in a position of relative strength.

[2] Merchanting trade refers to transactions in which a resident purchases a good from a non-resident and subsequently resells the good to another non-resident without the good entering the resident merchant's economy. The difference between the value of goods when acquired and when sold represents the value of merchanting services provided.

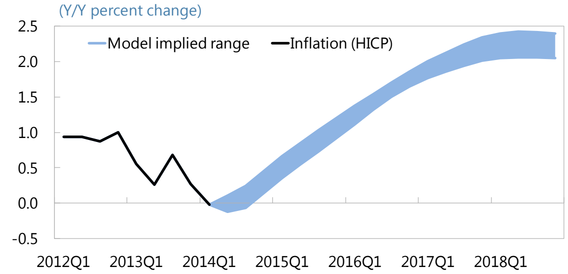
Box 2. Inflation Simulations Based on a Philips Curve Model

Swedish inflation is projected to reach the 2-percent target towards the end of 2016. However, with a number of external and domestic factors at play, there is uncertainty in both directions. To allow for a more structured discussion, a simple, small open economy Philips curve is estimated based on the following equation:

$$\pi_t = \alpha_1 + \alpha_2 \pi_{t-1} + \alpha_3 y_t + \alpha_4 \pi_t^{EA} + \alpha_5 oil_t + \alpha_5 NEER_t + \varepsilon_t$$

where π is HICP inflation in Sweden and y is the output gap estimated based on the Hodrick-Prescott filter (with λ = 1,600). Euro area core inflation (π_t^{EA}) is used to capture imported inflation from Sweden's main trading partners, in addition to oil prices (oil_t) and the nominal effective exchange rate ($NEER_t$).[1] The disturbance term ε_t can be seen as representing supply (cost-push) shocks, and the lagged inflation term represents adaptive inflation expectations. The model is estimated by two-stage least-squares (2SLS) using quarterly data during 1994Q1–2013Q4. Alternative estimation approaches, including GMM and system estimation, yield similar results.

Simulated Inflation Paths with Different Models
(Y/Y percent change)



Source: Fund staff calculations.
Note: The model implied range refers to the simulated inflation paths (not the WEO projections) generated using the same baseline assumptions but with the three different models as explained in the box. This exercise focuses on HICP which tends to be below Swedish CPI during periods of increasing interest rates, as in the assumed baseline.

The estimated model allows the simulation of alternative scenarios of inflation going forward. While not an inflation forecast, the exercise sheds light on some of the factors entering staffs' projections. In a baseline scenario, the output gap is assumed to close by early 2015, while the euro area recovery drives up euro area core inflation, and the oil price continues to decline. In this scenario, simulations suggest that HICP inflation will exceed 1½ percent in mid-2016 and converge to the 2-percent mark sometime between end-2016 and mid-2017 (see the text chart above).[2]

Alternative assumptions about domestic growth, the euro area recovery, and energy price dynamics alter the simulated inflation path. To illustrate possible deviations from the baseline simulation, four scenarios are considered:

Scenario 1: *External Downside Scenario*. Euro area inflation reaches currently predicted levels only with a two-year delay; imported oil prices fall by 20 percent by end of 2018; and the *krona* strengthens by 1 percentage point a year over the simulation horizon.

Scenario 2: *External Upside Scenario*. Euro area inflation reaches 2 percent by end of 2016, two years earlier than in the baseline projection; and the NEER depreciates moderately as safe haven flows dissipate.

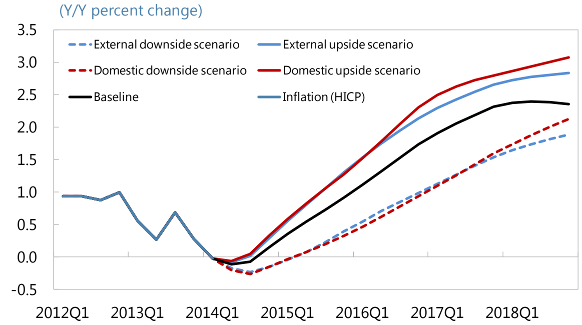
Scenario 3: *Domestic Downside Scenario*. The Swedish output gap closes by around end-2016, two years later than in the baseline scenario.

Scenario 4: *Domestic Upside Scenario*. The Swedish output gap closes by end of 2014, and the Swedish economy will be running a slightly larger (positive) output gap than in the baseline during 2016-2018.

Box 2. Inflation Simulations Based on a Philips Curve Model (concluded)

The simulation results show that under the downside scenarios, the expected pick-up in inflation would be delayed until mid-2018, converging to the target of 2 percent with a 6-8 quarter delay relative to the baseline. Conversely, under the upside scenarios, inflation would reach 2 percent already 2-4 quarters earlier, in early 2016.

Simulated Inflation Paths under Different Scenarios
(Y/Y percent change)



Source: Fund staff calculations.
Note: Figure plots the stimulated inflation paths using the median model from the ones forming the baseline range.

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1 Euro area core inflation is used instead of the headline CPI to avoid potential endogeneity as oil is separately included as an explanatory variable in the Philips curve model.

2 In the Riksbank's July 2014 forecast, CPIF inflation (which is very similar to the HICP) reaches 2 percent in 2016, while CPI inflation is projected to rise to around 3 percent reflecting the impact of forecast repo rate hikes.

Box 3. Sweden: Risk Assessment Matrix[1/]

Potential Deviations from Baseline

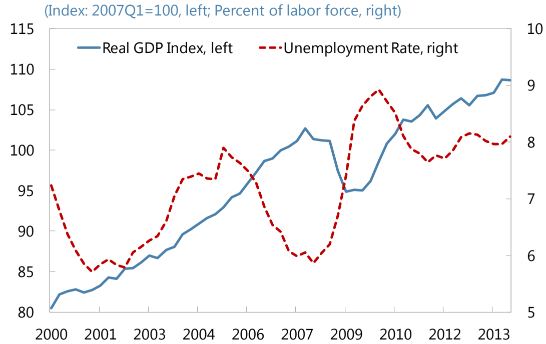
Source of Risks	Overall Level of Concern: Relative Likelihood	Overall Level of Concern: Impact if Realized
1. Surges in global financial market volatility.	**High** • Triggered, e.g., by geopolitical tensions or revised market expectations on UMP exit. • Swedish banks are reliant on wholesale funding and directly and indirectly exposed to international financial markets.	**Medium** • Bank losses and funding stress could translate into curtailed lending, with negative effects for investment, consumption, and 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 using Sweden's large borrowed reserves and possible swap arrangements.	
2. Protracted period of slow European growth.	**High** • Exacerbated, e.g., by geopolitical tensions. • Sweden's exports are tightly linked to European markets.	**Medium** • As exports and income decline, domestic demand will slow as well, further reducing growth.
Policy response:	Provide monetary support, let automatic fiscal stabilizers operate, consider slowing structural fiscal adjustment.	
3. Significant house price decline in Sweden (or an interconnected neighboring Nordic country).	**Medium** • Household debt is high due to easy access to credit, low interest rates, and housing tax incentives. • Property prices remain elevated. • Swedish banks are active throughout the Nordic region.	**High** • The flow-on effect to consumption and employment will lower growth. • Rising non-performing loans (NPLs) and bank funding costs, e.g., during times of high global financial stress, could translate into curtailed lending, with negative effects on investment.
Policy response:	Preventively, reduce vulnerabilities in the housing market through macroprudential measures. Failing to do so will add to the risk. In the event, lower the policy rate and provide liquidity support to banks.	
4. Significant and lasting decline in inflation expectations leading to lower growth.	**Low** • Following a strong negative shock to inflation (e.g., linked to much weaker euro area growth or dropping global energy prices), inflation and inflation expectations drop persistently to very low or negative levels. • Wage growth could fall to very low or negative levels along with inflation.	**Medium** • This could drag down growth if households and firms deferred expenditure in anticipation of lower prices in the future. • Falling nominal income could trigger debt sustainability issues for households.
Policy response:	Lower the policy rate and keep low for longer; reconsider fiscal consolidation.	

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

Figure 1. Sweden: Macroeconomic Indicators

Output is recovering strongly, but unemployment persists at high levels.

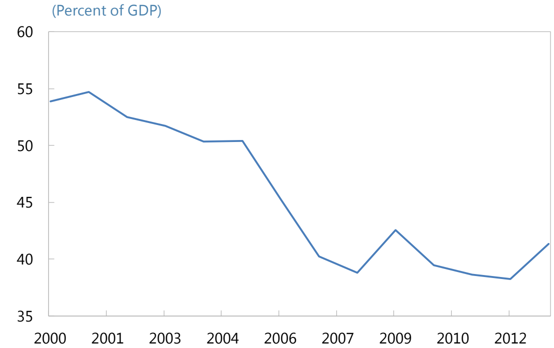
Real GDP and Unemployment
(Index: 2007Q1=100, left; Percent of labor force, right)



Sources: Statistics Sweden and Fund staff calculations.

Public debt is low but recently has increased slightly…

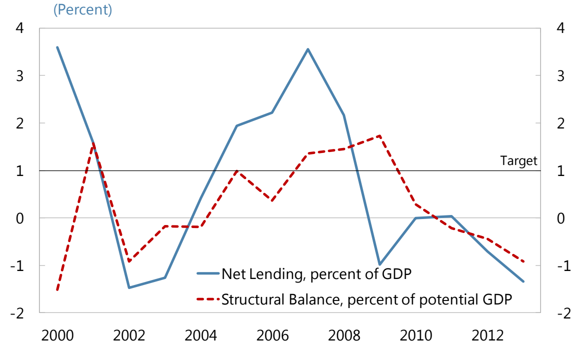
General Government Gross Debt
(Percent of GDP)



Sources: IMF World Economic Outlook and Fund staff calculations.

…as fiscal policy has been supportive, with net lending remaining below the surplus target over the cycle.

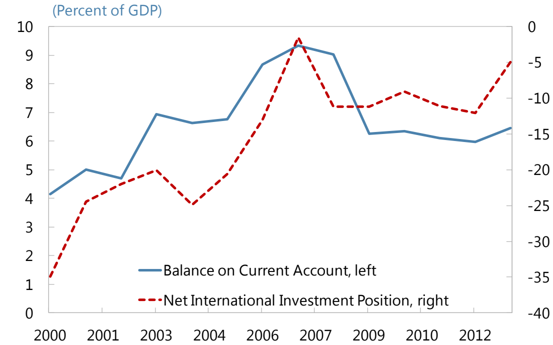
Net Lending
(Percent)



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

The current account has stabilized at a high level.

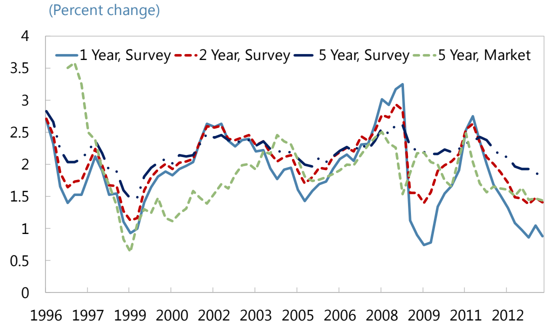
External Position
(Percent of GDP)



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

Inflation expectations have edged downwards, in particular at the short end, following actual inflation…

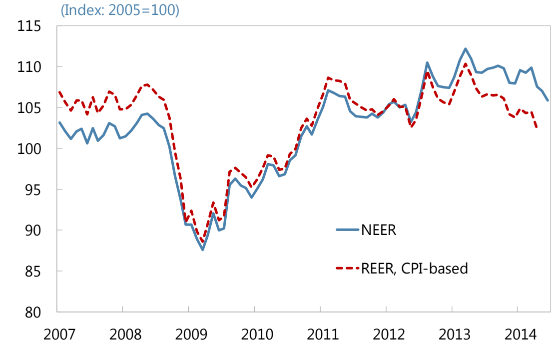
Inflation Expectations
(Percent change)



Sources: Sveriges Riksbank, TNS Prospera and Fund staff calculations.

…even though the krona recently stabilized after almost 4 years of appreciation.

Effective Exchange Rates
(Index: 2005=100)

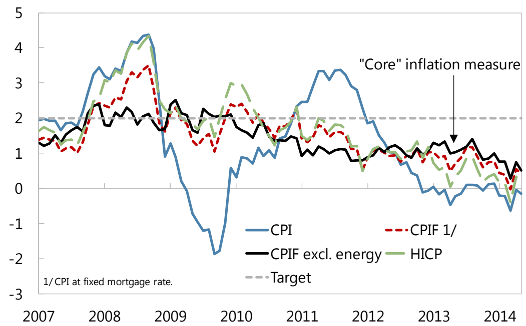


Sources: IMF International Financial Statistics, Sveriges Riksbank and Fund staff calculations.

Figure 2. Sweden: Inflation and Monetary Policy

Inflation has trended down since 2010…

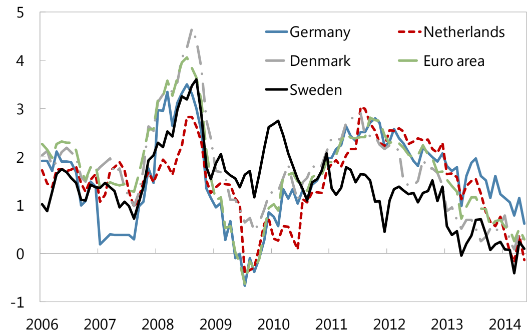
Inflation
(Y/Y percent change)



Sources: Eurostat, Haver Analytics, Statistics Sweden and Fund staff calculations.

…though this is hardly unique to Sweden.

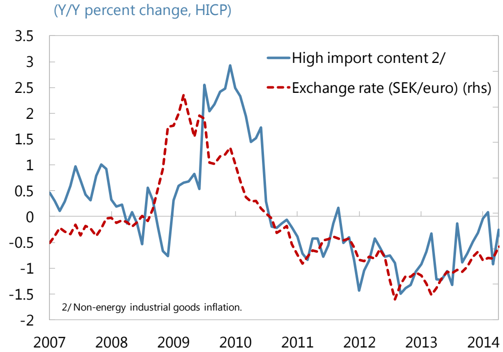
Inflation in Sweden and Select Trade Partners
(Y/Y percent change, HICP at constant tax rates)



Sources: Eurostat and Fund staff calculations.

Imported disinflation, linked in part to a stronger krona, played a role, while more recently…

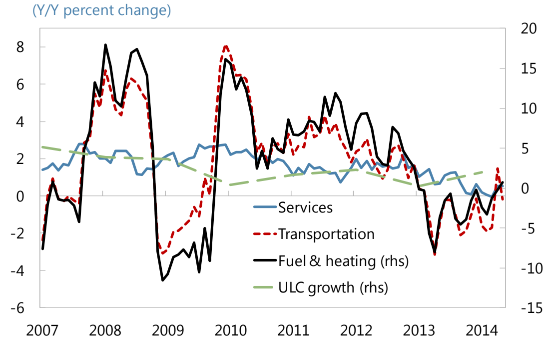
Imported Inflation and the Exchange Rate
(Y/Y percent change, HICP)



Sources: Eurostat, Haver Analytics, Statistics Sweden and Fund staff calculations.

…lower fuel prices and slower ULC growth have pulled down services inflation, especially for transportation.

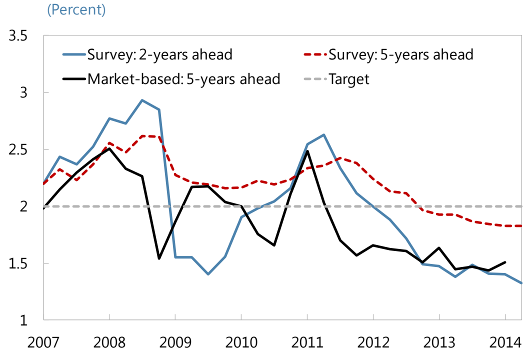
Services Inflation, Unit Labor Costs and Fuel Prices
(Y/Y percent change)



Sources: Eurostat, Haver Analytics, NIER, Statistics Sweden and Fund staff calculations.

Long-term inflation expectations remain close to the 2 percent target, but shorter-term expectations are lower…

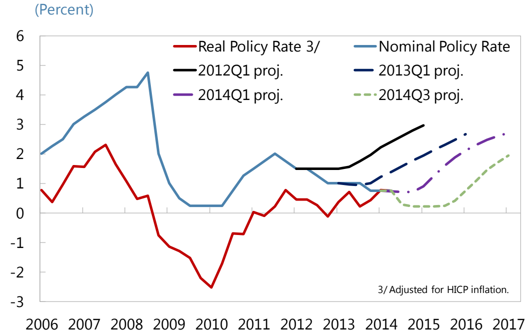
Inflation Expectations
(Percent)



Sources: Sveriges Riksbank, TNS Prospera and Fund staff calculations.

…and the Riksbank has recently lowered policy rates as well as its policy rate forecast.

Real Policy Rate, Nominal Policy Rate and Forecasts
(Percent)

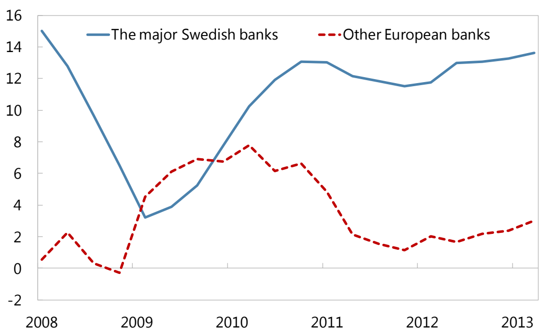


Sources: Haver Analytics, Statistics Sweden, Sveriges Riksbank and Fund staff calculations.

Figure 3. Sweden: Performance of the Banking System

Swedish banks are more profitable than many European peers…

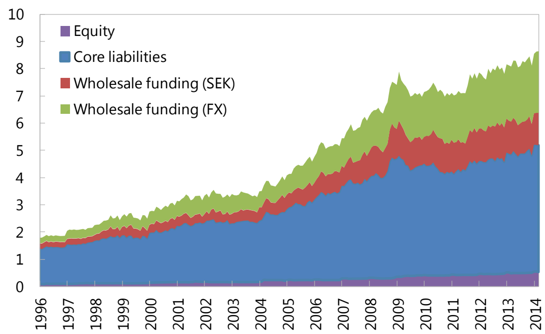
Swedish Banks' Return on Equity
(Percent, rolling 4 quarters)



Sources: Sveriges Riksbank and Fund staff calculations.

…driven, in part, by an increasing share of low-cost foreign-currency-denominated wholesale funding.

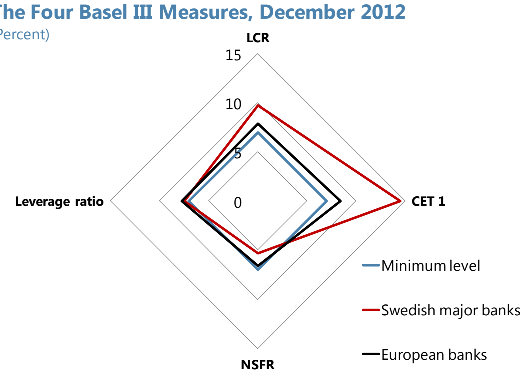
Swedish Banks' Funding Structure
(Trillions of SEK)



Sources: Statistics Sweden, Sveriges Riksbank and Fund staff calculations.

Banks' CET1 ratio is above the European average, but their leverage ratio is underperforming…

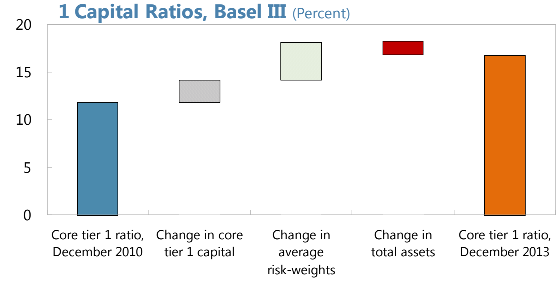
The Four Basel III Measures, December 2012
(Percent)



Sources: Sveriges Riksbank and Fund staff calculations.

…as improvements in CET1 ratios were driven by changes in risk weights.

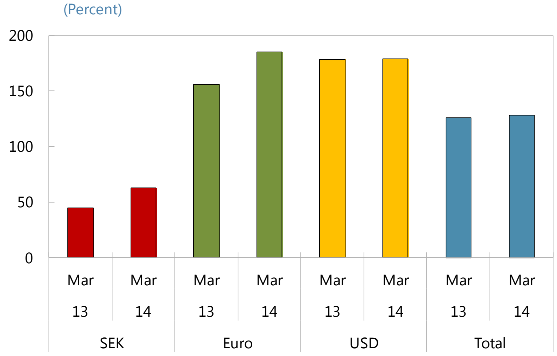
Development of Major Swedish Banks' Core Tier 1 Capital Ratios, Basel III (Percent)



Sources: Sveriges Riksbank and Fund staff calculations.
Note: The intermediate columns show how different factors have contributed to the change in weighted average of Swedish major banks' core Tier 1 capital ratios between December 2010 and December 2013. Lower average risk weights contributed largest part of the increase, which was partly driven by the implementation of advanced internal ratings-based models.

Banks have further strengthened their liquidity positions…

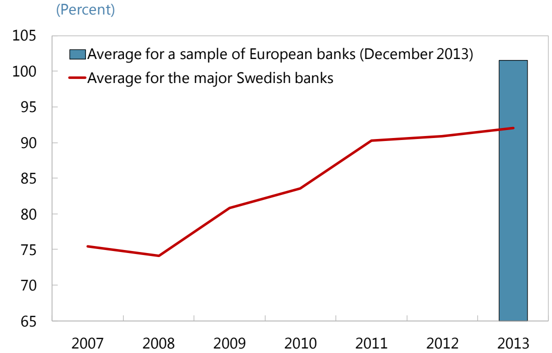
The Major Swedish Banks LCR
(Percent)



Sources: Finansinspektionen, Sveriges Riksbank and Fund staff calculations.

…but improvements in structural liquidity have slowed and its level remains below the European average.

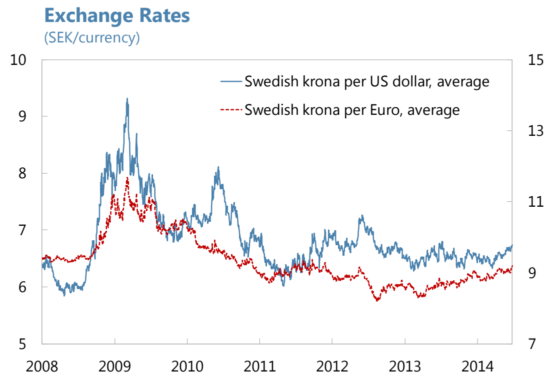
Riksbank's Structural Liquidity Measure
(Percent)



Sources: Sveriges Riksbank and Fund staff calculations.

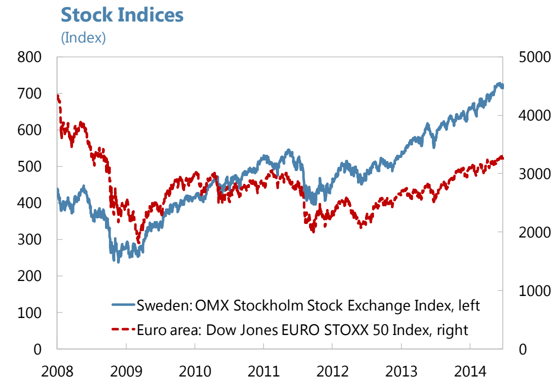
Figure 4. Sweden: Selected Financial Market Indicators

Since the global financial crisis, the krona has remained appreciated against key currencies…



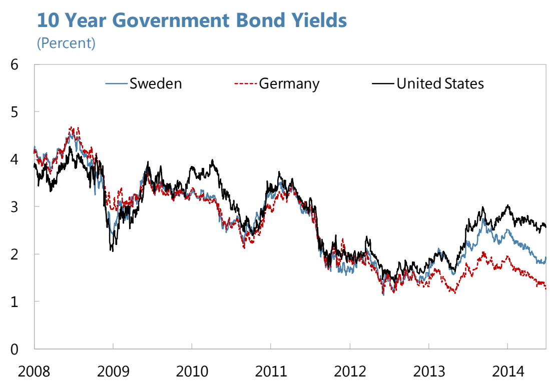
Sources: Bloomberg and Fund staff calculations.

…while Swedish equities exceed their pre-crisis values.



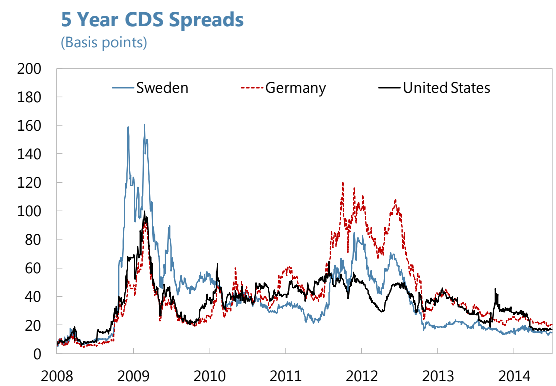
Sources: Bloomberg and Fund staff calculations.

Swedish sovereign bond yields are very low, but have recently picked up along with U.S. rates…



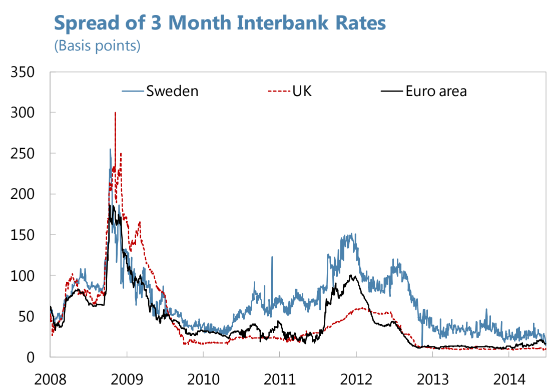
Sources: Bloomberg and Fund staff calculations.

…while sovereign CDS spreads remain close to or below key AAA economies.



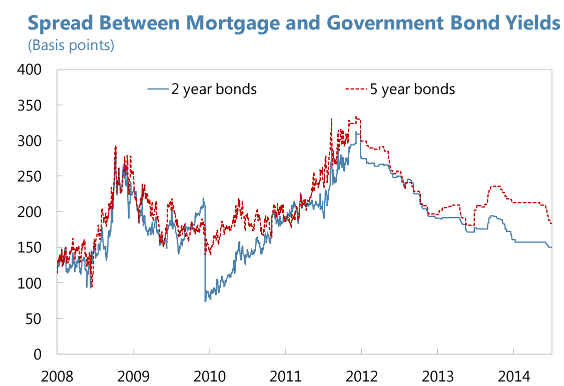
Sources: Datastream and Fund staff calculations.

Interbank rates fell further and are below pre-crisis levels…



Sources: Bloomberg, Datastream and Fund staff calculations.

…and mortgage bond yields have declined since 2011.

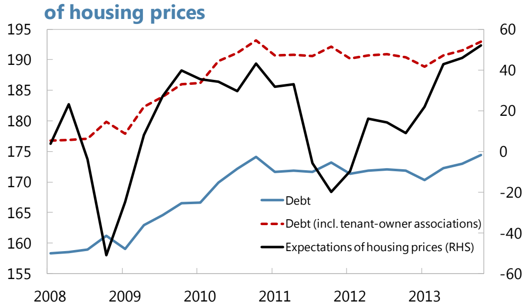


Sources: Datastream and Fund staff calculations.

Figure 5. Household Balance Sheets and Consumption

Swedish households' debt is high and rising…

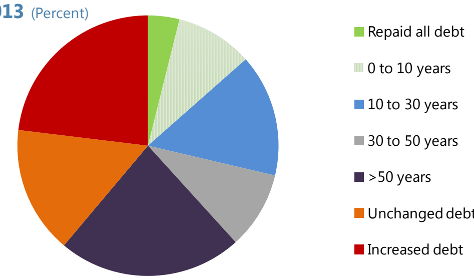
The Swedish Households' Debt and Expectation of housing prices



Sources: The Riksbank and SEB
Note: The debt ratios are expressed as a share of household's disposable income. The expectation of housing prices is defined as the difference between the percentage of households who believe bousing prices will fall.

…and households have little incentive to pay down their existing debt.

Proportion of Mortgage Borrowers That Have Increased, Decreased, or Kept Their Debt Unchanged Between 2012 and 2013 (Percent)

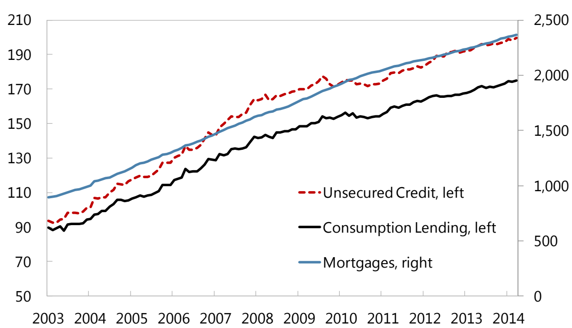


Sources: Sveriges Riksbank and Fund staff calculations.
Note: The chart shows how deficit balance of mortgage holders changed between 2012 and 2013 and the average repayment period if those who reduce their debts do so at the same rate as during the period.

Household debt consists mostly of mortgage loans, but unsecured borrowing has also increased…

MFIs' Unsecured and Consumption Lending to Households

(Billions of SEK)

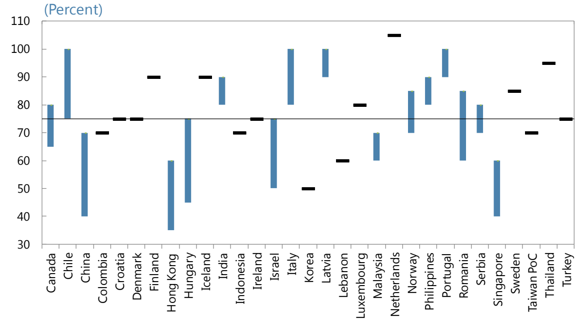


Sources: Statistics Sweden, Sveriges Riksbank and Fund staff calculations.

…while the recently introduced LTV cap is less restrictive than in many other countries.

Limits on LTV Ratios

(Percent)

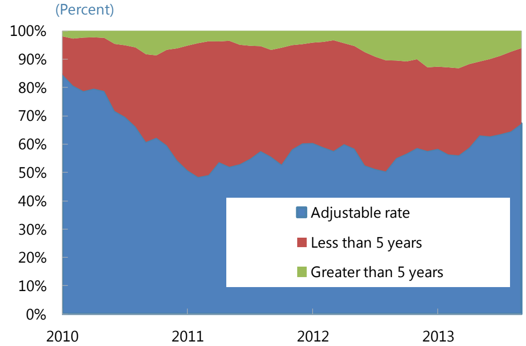


Sources: National authorities and Fund staff calculations.
Note: When calculating the sample average LTV, the mid-point of LTV ranges was used.

At the same time, the share of new variable-rate mortgages is increasing, driven by low interest rates…

Fixed-rate Periods in Sweden for New Mortgages

(Percent)

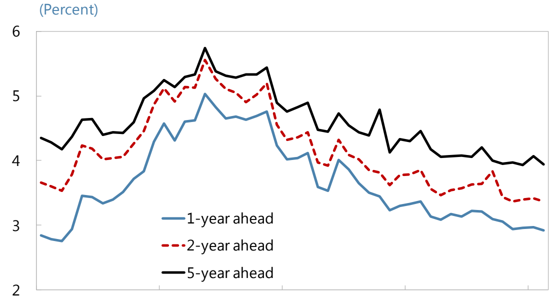


Sources: Statistics Sweden and Fund staff calculations.

…and by households' expectations of continued low (or lower) interest rates.

Households' Mortgage Rate Expectations

(Percent)

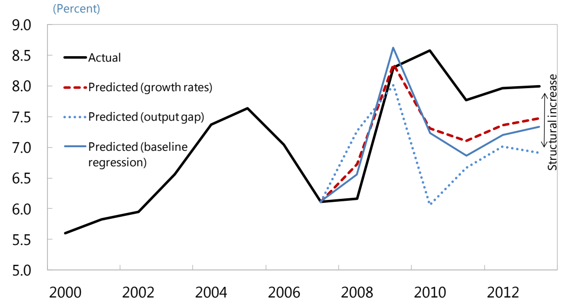


Sources: NIER and Fund staff calculations.
Note: The households' mortgage-rate expectations refer to expectations regarding the variable mortgage rate.

Figure 6. Sweden: Labor Market Indicators

Much of the post-crisis increase in unemployment has been structural…

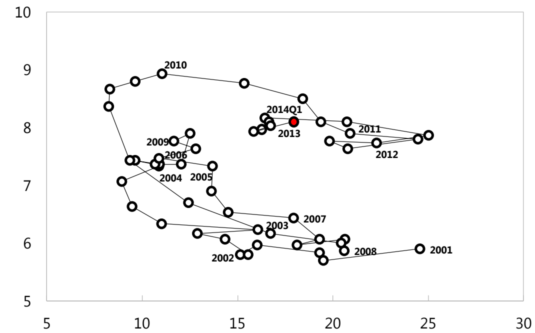
Okun's Law
(Percent)



Sources: IMF World Economic Outlook and Fund staff calculations.
Note: Based on a regression of the change in (level of) unemployment on GDP growth (output gap) during 1998-2013. The third series is based on the baseline regression (column 1) in Table 1 and includes both inflation and the output gap during 1960-2013.

…reflecting, in part, a decline in labor market matching efficiency.

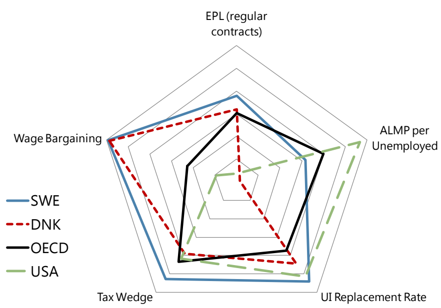
Beveridge Curve
(X-axis: thousands; Y-axis: percent of labor force)



Sources: Statistics Sweden and Fund staff calculations.

Swedish labor market institutions are unique, with strong collective bargaining and high replacement rates…

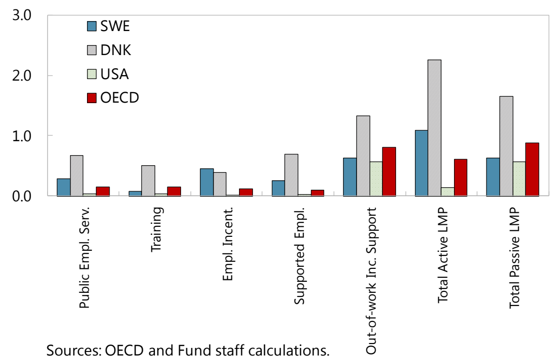
Labor Market Institutions Across Countries



Sources: European Commission, OECD and Fund staff calculations.
Notes: Larger distances from the center are associated with higher unemployment rates. The upper limit is scaled by the maximum values observed in the OECD in 2011 (inverted scale for ALMP per unemployed).

…while training-related ALMP expenditures are not as high as elsewhere.

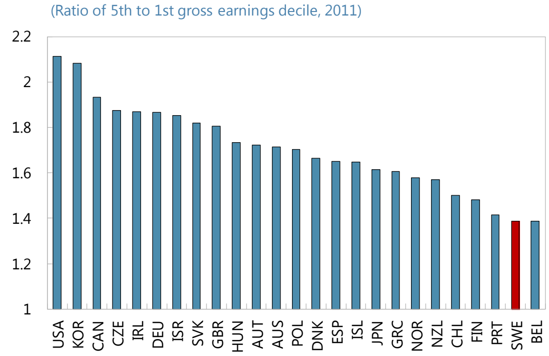
Labor Market Program Expenditures
(Percent of GDP)



Sources: OECD and Fund staff calculations.

Wages are highly compressed, including at the lower end…

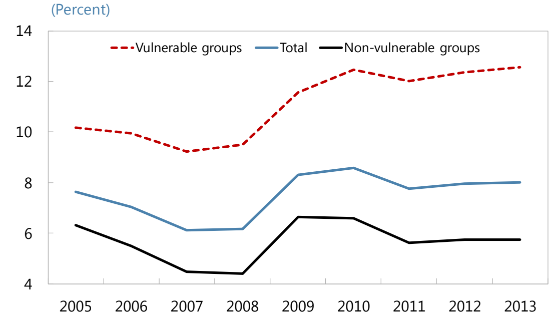
Wage Dispersion
(Ratio of 5th to 1st gross earnings decile, 2011)



Sources: OECD and Fund staff calculations.

…contributing to particularly high unemployment rates among vulnerable groups.

Unemployment Rates Among Subgroups
(Percent)



Sources: Statistics Sweden and Fund staff calculations.
Notes: Vulnerable groups are individuals born outside of Europe, over the age of 55, or with low educational attainment.

Table 1. Sweden: Selected Economic Indicators, 2011–19

	2011	2012	2013	Projections 2014	2015	2016	2017	2018	2019
Real economy (in percent change)									
Real GDP	2.9	0.9	1.6	2.6	2.8	2.7	2.6	2.5	2.4
Domestic Demand	3.2	0.3	1.6	2.8	2.4	2.6	2.7	2.7	2.6
CPI inflation	3.0	0.9	0.0	0.1	1.4	1.9	2.1	2.1	2.0
Unemployment rate (in percent)	7.8	8.0	8.0	8.1	7.7	7.5	7.4	7.3	7.1
Gross national saving (percent of GDP)	26.0	24.9	24.6	25.6	25.9	26.3	26.6	26.9	27.2
Gross domestic investment (percent of GDP)	19.5	18.8	18.4	19.1	19.3	19.7	20.1	20.6	21.1
Output Gap (as a percent of potential)	0.5	-0.5	-0.8	-0.5	0.3	0.7	1.0	0.9	0.8
Public finance (in percent of GDP)									
Total Revenues	51.5	51.4	51.7	50.3	50.9	51.2	51.2	51.2	51.2
Total Expenditures	51.5	52.1	53.0	52.2	51.4	51.1	50.6	49.9	49.5
Net lending	0.0	-0.7	-1.3	-1.9	-0.6	0.1	0.6	1.3	1.7
Structural balance (as a percent of potential GDP)	-0.2	-0.4	-0.9	-1.6	-0.7	-0.2	0.2	0.8	1.3
General government gross debt, official statistics	38.6	38.3	40.5	41.8	40.7	38.5	35.9	32.6	29.1
Money and credit (year-on-year, percent change, eop)									
M1	0.9	5.9	9.0	...	...	...	...	...	...
M3	6.9	3.1	3.1	...	...	...	...	...	...
Bank lending to households	6.0	11.7	3.8	...	...	...	...	...	...
Interest rates (year average)									
Repo rate (end of period)	1.8	1.0	0.8	...	...	...	...	...	...
Three-month deposit rate	1.7	1.3	0.9	...	...	...	...	...	...
Ten-year government bond yield	2.6	1.6	2.1	...	...	...	...	...	...
Balance of payments (in percent of GDP) 2/									
Current account	6.1	6.0	6.4	6.0	6.1	6.1	5.9	5.8	5.6
Trade balance	5.3	5.3	5.3	4.9	5.0	5.0	4.9	4.7	4.6
Foreign Direct Investment, net	-3.2	-2.4	-4.2	-4.2	-4.2	-4.2	-4.2	-4.2	-4.2
International reserves, changes (in billions of US dollars)	-0.7	-0.5	-14.6	...	...	...	...	...	...
Reserve cover (months of imports of goods and services)	2.8	2.7	3.5	3.4	3.2	3.1	2.9	2.7	2.6
Exchange rate (period average, unless otherwise stated)									
Exchange rate regime					Free floating exchange rate				
SEK per U.S. dollar (as of July 24, 2014)					6.8				
Nominal effective rate (2010=100)	105.7	107.0	110.1	...	...	...	...	...	...
Real effective rate (2010=100) 1/	97.0	98.3	100.4	...	...	...	...	...	...
Fund Position (May 31, 2014)									
Holdings of currency (in percent of quota)					78.5				
Holdings of SDRs (in percent of allocation)					92.6				
Quota (in millions of SDRs)					2395.5				

Other Indicators

GDP per capita (2013, USD): 58.014; **Population** (2013, million): 9.6; **Main products and exports**: Machinery, motor vehicles, paper products, pulp and wood; **Key export markets**: Germany, Norway, United Kingdom

Sources: Haver Analytics, IMF Institute, Sveriges Riksbank, Sweden Ministry of Finance and Fund staff calculations.
1/ Based on relative unit labor costs in manufacturing.
2/ Based on Balance of Payments Manual 5.

Table 2. Sweden: General Government Statement of Operations, 2012–19

	2012	2013	2014	2015	2016	2017	2018	2019
			Projections					
				Billions of SEK				
Revenue	1,825	1,882	1,893	1,996	2,102	2,204	2,305	2,408
Tax revenue	1,309	1,362	1,359	1,442	1,524	1,601	1,675	1,750
Taxes on income, profits, and capital gains	636	664	682	713	755	800	844	882
Payable by individuals	540	568	579	605	639	677	710	742
Payable by corporations	95	96	102	108	116	123	134	140
General taxes on goods and services	448	459	467	483	501	520	539	563
Other Taxes	225	238	210	246	269	281	293	306
Social Contributions	275	273	279	288	299	312	325	340
Grants	3	3	3	3	3	3	3	3
Other revenue	238	244	252	263	275	289	302	316
Interest income	33	33	34	36	38	39	41	43
Expenditure	1,850	1,930	1,962	2,018	2,098	2,177	2,248	2,328
Compensation of employees	504	522	540	554	569	589	610	637
Intermediate consumption	323	350	362	377	395	414	433	452
Interest payments	33	31	35	37	38	38	38	38
Social benefits	645	673	660	676	708	735	751	766
Expense not elsewhere classified	306	316	329	338	349	362	377	393
Net acquisition of nonfinancial assets	38	38	37	35	38	40	40	41
Gross operating balance	13	-11	-33	13	42	68	97	122
Net lending / borrowing	-25	-49	-70	-22	4	28	57	80
Net financial worth, transactions	-12							
Net acquisition of financial assets	-25							
Net incurrence of liabilities	-11							
				Percent of GDP				
Revenue	51.4	51.7	50.3	50.9	51.2	51.2	51.2	51.2
Tax revenue	36.9	37.4	36.1	36.8	37.1	37.2	37.2	37.2
Taxes on income, profits, and capital gains	17.9	18.2	18.1	18.2	18.4	18.6	18.7	18.7
Payable by individuals	15.2	15.6	15.4	15.4	15.6	15.7	15.8	15.8
Payable by corporations	2.7	2.6	2.7	2.7	2.8	2.9	3.0	3.0
General taxes on goods and services	12.6	12.6	12.4	12.3	12.2	12.1	12.0	12.0
Other Taxes	6.3	6.5	5.6	6.3	6.5	6.5	6.5	6.5
Social Contributions	7.7	7.5	7.4	7.3	7.3	7.3	7.2	7.2
Grants	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other revenue	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
Interest income	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Expenditure	52.1	53.0	52.2	51.4	51.1	50.6	49.9	49.5
Compensation of employees	14.2	14.3	14.4	14.1	13.9	13.7	13.5	13.5
Intermediate consumption	9.1	9.6	9.6	9.6	9.6	9.6	9.6	9.6
Interest payments	0.9	0.9	0.9	1.0	0.9	0.9	0.8	0.8
Social benefits	18.2	18.5	17.5	17.2	17.3	17.1	16.7	16.3
Expense not elsewhere classified	8.6	8.7	8.7	8.6	8.5	8.4	8.4	8.4
Net acquisition of nonfinancial assets	1.1	1.0	1.0	0.9	0.9	0.9	0.9	0.9
Gross operating balance	0.4	-0.3	-0.9	0.3	1.0	1.6	2.1	2.6
Net lending / borrowing	-0.7	-1.3	-1.9	-0.6	0.1	0.6	1.3	1.7
Net financial worth, transactions	-0.3							
Net acquisition of financial assets	-0.7							
Net incurrence of liabilities	-0.3							
Structural Balance (percent of potential GDP) 1/	-0.4	-0.9	-1.6	-0.7	-0.2	0.2	0.8	1.3
Fiscal Impulse (expansionary +)	0.2	0.5	0.7	-0.9	-0.4	-0.4	-0.7	-0.6
Memorandum items:								
Compliance with fiscal rule								
Overall balance 10-year average	0.6	0.6	0.3	0.1	0.0	-0.2	-0.2	0.0
Overall balance 7-year rolling average (±3 years)	0.8	0.3	-0.4	…	…	…	…	…
Structural balance (percent of potential GDP) 2/	-0.4	-0.9	-1.6	-0.7	-0.3	0.1	0.8	1.3
Gross Public Debt (percent of GDP)	38.3	40.5	41.8	40.7	38.5	35.9	32.6	29.1
Real GDP growth (percent change)	0.9	1.6	2.6	2.8	2.7	2.6	2.5	2.4
Output gap (percent of potential GDP)	-0.5	-0.8	-0.5	0.3	0.7	1.0	0.9	0.8
Nominal GDP (in billions of SEK)	3550	3641	3762	3922	4106	4302	4503	4705

Sources: 2008-2013 Fiscal Policy Bills and Fund staff calculations.

1/ Structural balance takes into account output and employment gaps.

2/ Overall balance adjusted for the output gap, based on authorities' measure.

Table 3. Sweden: Public Sector Balance Sheet

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
					(In billions of SEK)					
Assets	**2,981**	**3,097**	**3,333**	**3,575**	**3,681**	**3,503**	**3,743**	**3,867**	**3,875**	**3,990**
Financial assets	1,559	1,674	1,909	2,150	2,256	2,077	2,315	2,438	2,446	2,560
Currency and deposits	50	48	52	76	73	119	79	65	90	75
Securities other than shares	211	232	262	317	349	362	366	399	397	425
Loans	318	329	355	376	383	406	499	504	533	548
Shares and other equity	725	790	931	1,074	1,116	921	1,088	1,150	1,128	1,203
Other financial assets	256	275	310	308	335	269	282	320	298	309
Capital stock net of depreciation	1,421	1,422	1,423	1,424	1,425	1,426	1,427	1,428	1,429	1,430
Liabilities	**1,560**	**1,608**	**1,696**	**1,600**	**1,555**	**1,601**	**1,621**	**1,645**	**1,730**	**1,732**
Financial liabilities	1,560	1,608	1,696	1,600	1,555	1,601	1,621	1,645	1,730	1,732
Currency and deposits	46	47	51	29	37	58	50	53	64	70
Securities and other equity	1,224	1,262	1,327	1,214	1,106	1,112	1,077	1,109	1,131	1,123
Loans	137	143	149	168	209	213	271	230	287	270
Other liabilities	152	156	170	189	203	218	223	253	247	269
Net worth	**1,421**	**1,489**	**1,636**	**1,975**	**2,126**	**1,903**	**2,122**	**2,222**	**2,146**	**2,258**
Financial net worth	**0**	**67**	**213**	**551**	**701**	**476**	**694**	**793**	**716**	**828**
					(In percent of GDP)					
Assets	**117.1**	**116.4**	**120.3**	**121.4**	**117.8**	**109.3**	**120.5**	**115.9**	**111.3**	**112.4**
Financial assets	61.3	62.9	68.9	73.0	72.2	64.8	74.5	73.1	70.3	72.1
Currency and deposits	2.0	1.8	1.9	2.6	2.3	3.7	2.6	2.0	2.6	2.1
Securities other than shares	8.3	8.7	9.5	10.8	11.2	11.3	11.8	12.0	11.4	12.0
Loans	12.5	12.4	12.8	12.8	12.3	12.7	16.1	15.1	15.3	15.4
Shares and other equity	28.5	29.7	33.6	36.5	35.7	28.7	35.0	34.5	32.4	33.9
Other financial assets	10.0	10.3	11.2	10.5	10.7	8.4	9.1	9.6	8.6	8.7
Capital stock net of depreciation	55.9	53.5	51.4	48.4	45.6	44.5	46.0	42.8	41.1	40.3
Liabilities	**61.3**	**60.4**	**61.2**	**54.3**	**49.8**	**50.0**	**52.2**	**49.3**	**49.7**	**48.8**
Financial liabilities	61.3	60.4	61.2	54.3	49.8	50.0	52.2	49.3	49.7	48.8
Currency and deposits	1.8	1.7	1.8	1.0	1.2	1.8	1.6	1.6	1.8	2.0
Securities and other equity	48.1	47.4	47.9	41.2	35.4	34.7	34.7	33.2	32.5	31.6
Loans	5.4	5.4	5.4	5.7	6.7	6.6	8.7	6.9	8.3	7.6
Other liabilities	6.0	5.8	6.1	6.4	6.5	6.8	7.2	7.6	7.1	7.6
Net worth	**55.8**	**56.0**	**59.1**	**67.1**	**68.0**	**59.4**	**68.3**	**66.6**	**61.6**	**63.6**
Financial net worth	**0.0**	**2.5**	**7.7**	**18.7**	**22.4**	**14.9**	**22.4**	**23.8**	**20.6**	**23.3**
Memorandum items:										
GDP (SEK billions)	2,545	2,661	2,769	2,944	3,126	3,204	3,106	3,338	3,481	3,550

Sources: Eurostat and Fund staff calculations.

Table 4. Sweden: Balance of Payments Accounts, 2012–19

	2012	2013	2014	2015	2016	2017	2018	2019
			Projections					
				Billions of SEK				
Current Account Balance	212	235	225	239	249	255	260	265
Trade Balance	189	194	183	196	205	210	214	218
Exports of G&S	1678	1626	1677	1757	1850	1952	2062	2179
Imports of G&S	-1490	-1432	-1494	-1561	-1645	-1742	-1848	-1961
Factor income, net	88	102	105	107	110	113	116	118
Current Transfers, net	-65	-61	-63	-64	-66	-68	-69	-71
Financial Account Balance	-77	-124	-209	-217	-226	-228	-239	-249
Investment Abroad [1]	388	72	-27	-52	-71	-109	-136	-166
Investment in Sweden [2]	-461	-101	-181	-165	-157	-121	-104	-86
Reserves, change	-4	-95	0	0	0	0	0	0
				Percent of GDP				
Current Account Balance	6.0	6.4	6.0	6.1	6.1	5.9	5.8	5.6
Trade Balance	5.3	5.3	4.9	5.0	5.0	4.9	4.7	4.6
Exports of G&S	47.3	44.7	44.6	44.8	45.1	45.4	45.8	46.3
Imports of G&S	-42.0	-39.3	-39.7	-39.8	-40.1	-40.5	-41.0	-41.7
Factor income, net	2.5	2.8	2.8	2.7	2.7	2.6	2.6	2.5
Current Transfers, net	-1.8	-1.7	-1.7	-1.6	-1.6	-1.6	-1.5	-1.5
Financial Account Balance	-2.2	-3.4	-5.5	-5.5	-5.5	-5.3	-5.3	-5.3
Investment Abroad 1/	10.9	2.0	-0.7	-1.3	-1.7	-2.5	-3.0	-3.5
Direct Investment	-5.5	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2	-6.2
Portfolio Investment	18.8	13.9	11.4	10.8	10.4	9.3	8.8	8.3
Financial Derivatives	25.0	19.3	17.8	17.2	16.8	15.8	15.3	14.8
Other Investment	-2.3	-5.7	-5.9	-5.9	-5.9	-5.7	-5.7	-5.7
Reserves	-0.1	-2.6	0.0	0.0	0.0	0.0	0.0	0.0
Investment in Sweden 1/	-13.0	-2.8	-4.8	-4.2	-3.8	-2.8	-2.3	-1.8
Direct Investment	3.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Portfolio Investment	-15.0	-4.2	-6.4	-5.8	-5.4	-4.4	-3.9	-3.4
Financial Derivatives	-23.9	-17.5	-17.8	-17.2	-16.8	-15.8	-15.3	-14.8
Other Investment	-1.1	-0.6	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Errors and Omissions	-0.5	-0.4	0.0	0.0	0.0	0.0	0.0	0.0
				Percent change				
Exports of G&S 2/								
Value	-4.8	0.8	1.8	5.3	6.4	7.5	8.2	8.2
Volume	-3.4	3.6	3.5	6.1	6.4	7.0	7.5	7.3
Deflator	-1.4	-2.8	-1.6	-0.7	0.0	0.5	0.7	0.8
Imports of G&S 2/								
Value	-5.1	0.0	2.9	5.0	6.6	8.0	8.7	8.6
Volume	-4.1	2.9	4.3	5.6	6.6	7.7	8.2	8.1
Deflator	-1.0	-2.8	-1.4	-0.5	0.0	0.3	0.5	0.5
Memorandum								
Nominal GDP (SEK billion)	3550	3641	3762	3922	4106	4302	4503	4705

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.

Note: Based on Balance of Payments Manual 5.

Table 5. Sweden: Net International Investment Position, 2006–13

(Percent of GDP)

	2006	2007	2008	2009	2010	2011	2012	2013
ASSETS	238.0	265.6	274.2	293.4	281.3	280.1	280.3	298.5
Direct investment	81.1	92.8	106.7	110.7	102.0	100.1	97.2	98.6
Equity & investment fund shares	56.9	64.1	74.7	78.9	73.3	70.9	69.0	71.8
Debt instruments	24.2	28.7	32.0	31.9	28.8	29.1	28.2	26.8
Portfolio investment	92.5	99.1	78.8	98.7	99.1	87.0	92.6	107.2
Equity & investment fund shares	60.5	63.9	45.0	64.1	67.1	58.5	65.1	77.3
Debt securities	32.0	35.2	33.8	34.6	32.0	28.4	27.5	29.9
Fin. deriv. (other than reserves)	5.9	7.1	16.8	11.6	10.6	14.2	13.7	9.3
Other investment	51.9	60.1	64.6	61.5	59.8	69.0	67.1	71.9
Reserve assets	6.6	6.4	7.3	10.9	9.7	10.0	9.6	11.5
LIABILITIES	251.1	267.1	285.5	305.5	291.1	291.9	293.0	304.0
Direct investment	72.9	85.1	96.0	105.9	96.8	94.4	91.6	88.4
Equity & investment fund shares	35.9	41.2	42.7	49.5	47.6	46.9	49.5	50.1
Debt instruments	37.0	43.9	53.2	56.3	49.2	47.5	42.1	38.3
Portfolio investment	111.4	108.8	92.9	121.3	126.2	126.1	133.4	152.6
Equity & investment fund shares	48.7	41.9	21.2	32.1	40.7	33.7	40.9	49.1
Debt securities	62.6	66.9	71.7	89.3	85.4	92.4	92.5	103.5
Other investment	60.6	65.9	81.4	68.7	59.9	60.7	57.2	55.3
NET INVESTMENT POSITION	-13.1	-1.6	-11.2	-12.0	-9.8	-11.8	-12.7	-5.6
Direct Investment	8.2	7.7	10.8	4.9	5.2	5.6	5.6	10.2
Portfolio Investment	-18.9	-9.7	-14.1	-22.6	-27.1	-39.2	-40.8	-45.4
Other Investment	-8.7	-5.8	-16.7	-7.2	-0.1	8.2	9.9	16.6

Sources: International Financial Statistics and Fund staff calculations.

Note: Based on Balance of Payments Manual 5.

Table 6. Sweden: Financial Soundness Indicators, 2008–13

Percent unless stated otherwise

	2008	2009	2010	2011	2012	2013
Regulatory Capital to Risk-Weighted Assets	10.2	12.7	12.0	11.5	11.7	12.0
Regulatory Tier 1 Capital to Risk-Weighted Assets	7.7	10.6	10.5	10.8	11.3	11.2
Non-performing Loans Net of Provisions to Capital	8.1	12.5	11.2	9.7	9.4	8.8
Non-performing Loans to Total Gross Loans	0.5	0.8	0.8	0.7	0.7	0.6
Sectoral Distribution of Total Loans: Residents	43.0	45.4	47.1	45.3	48.3	48.0
Sectoral Distribution of Total Loans: Deposit-takers	1.5	1.3	1.7	1.3	0.9	1.0
Sectoral Distribution of Total Loans: Central Bank	1.4	1.7	0.1	0.2	-	0.1
Sectoral Distribution of Total Loans: Other Financial Corporations	0.5	0.5	0.5	0.5	0.6	0.2
Sectoral Distribution of Total Loans: General Government	1.0	1.8	0.9	0.9	0.9	0.7
Sectoral Distribution of Total Loans: Nonfinancial Corporations	17.5	16.6	17.5	16.6	17.9	17.5
Sectoral Distribution of Total Loans: Other Domestic Sectors	21.1	23.5	26.4	25.8	28.0	28.5
Sectoral Distribution of Total Loans: Nonresidents	57.0	54.6	52.9	54.7	51.7	52.0
Return on Assets	0.6	0.4	0.6	0.6	0.7	0.7
Return on Equity	16.9	8.0	14.1	14.9	15.3	16.7
Interest Margin to Gross Income	59.9	59.7	57.1	59.3	60.1	60.1
Non-interest Expenses to Gross Income	54.2	55.4	56.4	57.4	53.1	51.6
Liquid Assets to Total Assets (Liquid Asset Ratio)	19.0	21.6	20.9	22.5	21.4	9.7
Liquid Assets to Short Term Liabilities	45.0	49.1	55.3	55.9	50.7	123.7
Net Open Position in Foreign Exchange to Capital	5.4	6.7	8.5	5.4	5.4	4.7
Household Debt to GDP	70.4	81.4	87.0	81.8	83.6	85.4
Household Debt Service and Principal Payments to Income	6.3	4.8	4.3	6.1	5.9	5.2
Residential Real Estate Prices	2.9	2.0	7.0	1.0	-1.0	4.1

Source: Financial Soundness Indicators (FSI)

(-) Indicates that a figure is zero

(...) Indicates a lack of statistical data that can be reported or calculated from

Table 7. Sweden: Financial Soundness Indicators: Banks, 2008–13

(End of period, in percent)

	2008	2009	2010	2011	2012	2013
(End of period, percent)						
Capital Adequacy						
Regulatory capital to risk-weighted assets 1/	10.7	13.0	12.6	12.2	12.5	12.7
of which: Four major banks 2/	10.2	12.7	12.0	11.5	11.7	12.0
Regulatory Tier I capital to risk-weighted assets 1/	8.1	10.9	11.0	11.3	11.7	12.0
of which: Four major banks 2/	7.6	10.5	10.4	10.7	11.1	11.2
Capital as percent of assets (leverage ratio)	4.6	5.0	4.8	4.1	4.4	4.5
of which: Four major banks 2/	4.7	5.0	4.7	4.0	4.2	4.4
Asset quality and exposure						
Nonperforming loans to total gross loans	1.1	2.0	1.9	1.6	1.5	1.3
of which: Four major banks 2/	1.0	2.0	1.9	1.5	1.4	1.2
Nonperforming loans net of loan-loss provisions to capital	7.4	10.7	9.9	9.5	9.3	8.2
of which: Four major banks 2/	6.5	11.0	10.6	9.9	10.0	8.8
Loan-loss provisions to nonperforming loans	49.1	55.4	44.3	41.3	39.8	38.8
of which: Four major banks 2/	47.1	53.7	43.8	40.7	38.7	38.1
Distribution of MFI credit (percent) 4/						
Sweden	75.7	75.7	79.1	78.2	78.1	78.2
Financial corporation	1.1	1.1	2.0	1.7	1.8	1.7
Non financial corporations	33.9	31.4	31.0	31.1	30.3	31.1
Public sector	3.1	3.1	3.7	2.4	2.8	2.4
Households	37.6	40.1	42.4	43.0	43.3	43.0
Outside Sweden	16.6	20.5	19.2	17.6	18.2	17.6
Other EUs	7.8	10.7	9.1	8.9	9.1	8.9
Rest of the world	8.8	9.7	10.1	8.7	9.2	8.7
Large exposures as percent of tier 1 capital 3/	34.1	12.3	40.1	37.2	29.5	20.0
of which: Four major banks 3/	30.9	8.1	36.8	31.4	22.0	10.7
Earnings and profitability						
Return on assets (net income as percent of average total assets)	0.5	0.3	0.4	0.5	0.5	0.6
of which: Four major banks 2/	0.6	0.2	0.4	0.5	0.5	0.6
Return on equity (Net income as percent of average equity capital)	12.7	13.0	9.8	10.6	11.4	11.4
of which: Four major banks 2/	14.3	5.4	10.1	11.1	12.0	11.4
Net interest income as percent of gross income	55.2	56.8	52.7	54.4	55.4	55.3
of which: Four major banks 2/	56.9	57.7	55.3	57.3	58.3	58.6
Noninterest expenses as percent of gross income	57.0	56.9	66.2	66.1	63.2	63.9
of which: Four major banks	54.2	55.4	65.1	65.7	61.0	60.7
Noninterest income as percent of total income	44.8	43.2	55.1	52.9	51.7	53.7
of which: Four major banks	43.1	42.3	53.5	51.0	49.7	50.5
Trading income and foreign exchange gains (losses) to gross income	8.6	11.7	11.6	9.4	10.7	8.4
of which: Four major banks 2/	9.8	13.6	12.6	10.0	11.2	9.6
Personnel expenses as percent of noninterest expenses	55.0	53.2	52.6	53.6	52.2	53.9
of which: Four major banks 2/	59.2	57.1	57.4	57.8	59.4	60.5
Liquidity						
Liquid assets as percent of total assets	4.0	6.3	4.8	6.2	8.5	8.9
of which: Four major banks 2/	4.3	6.7	5.2	6.7	9.1	9.7
Liquid assets as percent of short-term liabilities	23.6	43.6	44.4	66.7	97.2	95.0
of which: Four major banks 2/	30.5	54.7	58.9	87.9	121.6	123.7
Customer deposits as a percent of total (non-interbank) loans	46.1	47.1	47.8	49.8	52.9	53.8
of which: Four major banks 2/	45.5	45.3	46.6	48.5	50.9	52.7
Noninterbank loans to noninterbank deposits	139.6	144.8	155.0	153.8	148.8	145.9
of which: Four major banks 2/	149.7	156.1	165.9	163.5	158.0	153.7
Foreign exchange risk						
Foreign currency loans as percent of total loans	39.0	37.8	36.5	37.4	34.9	39.9
Foreign currency assets as percent of total assets	33.0	31.2	31.4	34.5	33.1	33.8
Foreign currency-denominated liabilities as percent of total liabilities	35.4	29.8	31.4	35.1	31.1	28.7
Exposure to derivatives						
Gross asset position in derivatives as percent of Tier 1 capital	336.8	210.8	222.3	351.2	243.9	153.1
Gross liability position in derivatives as percent of Tier 1 capital	320.7	198.9	217.9	335.2	232.8	141.7

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/ From 2010 onward, exposures to credit institutions are included.
4/ Non consolidated bases, and parent banks only. Monetary financial institutions include banks and housing credit institutions.

Table 8. Sweden: Financial Soundness Indicators: Non-Banks, 2008–13

(End of period, in percent)

	2008	2009	2010	2011	2012	2013
(End of period, percent)						
Insurance sector						
Solvency ratio (margin/required margin)						
Life insurance companies	8.4	7.8	14.2	8.0	9.9	13.8
Non-life insurance companies	6.8	7.7	10.6	10.6	10.8	11.4
Return on equity						
Life insurance companies	-86.3	45.3	20.3	-30.1	32.5	28.7
Non-life insurance companies	-21.4	29.7	35.4	3.5	40.0	11.7
Households						
Household debt as percent of GDP	75.6	81.8	80.4	83.2	84.8	85.3
Household debt as percent of disposable income	164.6	166.5	172.6	175.8	172.6	175.1
Household interest expense as percent of disposable income	5.2	3.5	3.2	4.4	4.4	3.7
Corporate sector						
Debt stock as percent of GDP (non-financial sector borrowing from financial sector)	36.2	38.0	35.8	35.0	34.8	36.0
Total debt stock as percent of GDP	49.5	52.5	49.1	49.7	48.5	49.8
Equity risk						
OM Stockholm Stock Exchange Index (annual percent change)	-42.0	46.7	23.1	-16.7	12.0	23.2
Market capitalization in percent of GDP	136.2	189.8	212.4	167.5	182.8	226.9
Real estate markets (prices; year on year percent change)						
One- or two dwelling buildings	-0.8	8.6	3.2	-3.1	2.7	3.9
Greater Stockholm region	-0.6	9.2	2.9	-2.5	1.4	4.8
Buildings for seasonal and secondary use	4.3	17.5	8.4	-0.3	3.4	13.3
Memorandum items						
GDP (year on year percent change, constant prices)	-0.6	-5.0	6.6	2.9	0.9	1.6
GDP bn SEK, current prices	3,204	3,106	3,338	3,481	3,550	3,641

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

Table 9. Sweden: Financial System Structure, 2009–13

	2009				2010				2011				2012				2013			
	Number of institutions	Total assets (in millions of SEK)	Percent of total assets	Percent of GDP	Number of institutions	Total assets (in millions of SEK)	Percent of total assets	Percent of GDP	Number of institutions	Total assets (in millions of SEK)	Percent of total assets	Percent of GDP	Number of institutions	Total assets (in millions of SEK)	Percent of total assets	Percent of GDP	Number of institutions	Total assets (in millions of SEK)	Percent of total assets	Percent of GDP
Four Major Banks, consolidated																				
Nordea	1	5,212,530	30.3	167.8	1	5,207,511	30.0	156.0	1	6,382,811	33.3	183.4	1	5,813,615	30.4	163.8	1	5,585,078	27.3	153.4
Handelsbanken	1	2,122,843	12.3	68.4	1	2,153,530	12.4	64.5	1	2,454,366	12.8	70.5	1	2,387,858	12.5	67.3	1	2,489,806	12.2	68.4
S.E.B	1	2,308,227	13.4	74.3	1	2,179,821	12.6	65.3	1	2,362,653	12.3	67.9	1	2,453,456	12.8	69.1	1	2,484,834	12.1	68.2
Swedbank	1	1,794,687	10.4	57.8	1	1,715,681	9.9	51.4	1	1,857,065	9.7	53.4	1	1,846,941	9.7	52.0	1	1,820,807	8.9	50.0
Total Top Four Banks	4	11,438,287	66.5	368.3	4	11,256,543	64.9	337.3	4	13,056,895	68.1	375.1	4	12,501,870	65.3	352.2	4	12,380,525	60.5	340.0
Four major banks in Sweden 1/																				
Banks	4	7,040,183	40.9	226.7	4	5,464,340	31.5	163.7	4	6,016,174	31.4	172.9	4	6,076,915	31.8	171.2	4	6,261,408	30.6	172.0
Insurance companies	8	509,691	3.0	16.4	8	544,463	3.1	16.3	8	500,273	2.6	14.4	8	554,856	2.9	15.6	9	616,742	3.0	16.9
Mortgage credit institutions	3	1,899,919	11.0	61.2	3	1,971,472	11.4	59.1	3	2,098,457	11.0	60.3	3	2,209,594	11.5	62.2	3	2,309,254	11.3	63.4
Securities firms	3	30,242	0.2	1.0	3	14,109	0.1	0.4	3	14,112	0.1	0.4	2	14,910	0.1	0.4	2	3,804	0.0	0.1
Other credit market companies	8	235,297	1.4	7.6	8	167,768	1.0	5.0	8	170,213	0.9	4.9	7	167,150	0.9	4.7	7	166,422	0.8	4.6
Top four banks in Sweden	26	9,715,332	56.5	312.8	26	8,162,152	47.1	244.6	26	8,799,229	45.9	252.8	24	9,023,425	47.2	254.2	25	9,357,630	45.7	257.0
Other Banks in Sweden																				
Of which:																				
Banks	30	481,797	2.8	15.5	29	546,619	3.2	16.4	29	578,692	3.0	16.6	29	656,814	3.4	18.5	28	709,534	3.5	19.5
Savings banks	53	164,177	1.0	5.3	49	147,512	0.9	4.4	50	157,045	0.8	4.5	49	171,406	0.9	4.8	49	181,634	0.9	5.0
Mortgage credit institutions	4	436,302	2.5	14.0	3	338,789	2.0	10.2	3	361,378	1.9	10.4	3	361,305	1.9	10.2	3	365,487	1.8	10.0
Member bank	2	1,521	0.0	0.0	2	1,621	0.0	0.0	2	1,757	0.0	0.1	2	1,909	0.0	0.1	2	2,080	0.0	0.1
Other credit market companies	43	790,385	4.6	25.4	40	722,164	4.2	21.6	39	772,237	4.0	22.2	35	818,635	4.3	23.1	32	816,881	4.0	22.4
Total other banks in Sweden	132	1,874,182	10.9	60.3	123	1,756,705	10.1	52.6	123	1,871,109	9.8	53.8	118	2,010,069	10.5	56.6	114	2,075,616	10.1	57.0
Nonbank credit institutions																				
Insurance companies	253	2,351,945	13.7	75.7	254	2,536,287	14.6	76.0	217	2,555,220	13.3	73.4	208	2,717,606	14.2	76.6	201	3,675,409	18.0	100.9
Life insurance	43	1,782,371	10.4	57.4	44	1,965,284	11.3	58.9	40	1,987,109	10.4	57.1	39	2,143,215	11.2	60.4	40	2,962,745	14.5	81.4
Nonlife insurance 2/	210	569,574	3.3	18.3	210	571,003	3.3	17.1	177	568,111	3.0	16.3	169	574,392	3.0	16.2	150	565,733	2.8	15.5
Pension funds	14	105,567	0.6	3.4	13	117,511	0.7	3.5	11	123,277	0.6	3.5	11	135,266	0.7	3.8	11	146,931	0.7	4.0
Mutual funds 3/	849	1,393,337	8.1	44.9	896	1,635,074	9.4	49.0	911	1,534,817	8.0	44.1	866	1,737,564	9.1	48.9	863	2,158,227	10.5	59.3
Other nonbank credit institutions																				
Asset management firms	82	7,346	0.0	0.2	80	7,662	0.0	0.2	0	0	0.0	0.0	75	7,731	0.0	0.2	73	9,592	0.0	0.3
Securities firms	132	28,895	0.2	0.9	132	23,817	0.1	0.7	129	22,467	0.1	0.6	125	22,615	0.1	0.6	123	12,206	0.1	0.3
Total financial system	1466	17,199,559	100.0	553.8	1502	17,333,599	100.0	519.4	1395	19,163,785	100.0	550.6	1407	19,132,721	100.0	539.0	1389	20,458,506	100.0	561.9
of which: Total banking sector 4/		13,312,469	77.4	428.6		13,013,248	75.1	389.9		14,928,004	77.9	428.9		14,511,939	75.8	408.8		14,456,141	70.7	397.0
Memorandum item:																				
Foreign bank branches in Sweden	24	686,265	4.0	22.1	26	760,045	4.4	22.8	27	789,061	4.1	22.7	27	832,627	4.4	23.5	28	865,580	4.2	23.8
Swedish bank branches abroad	55	1,411,402	8.2	45.4	61	1,456,017	8.4	43.6	61	2,063,291	10.8	59.3	61	1,993,116	10.4	56.1	64	1,972,162	9.6	54.2
Nominal GDP (in millions of SEK)				3,105,790				3,337,531				3,480,543				3,549,709				3,640,976

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

1/ Including 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. Debt Sustainability Analysis

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

(in percentage of GDP unless otherwise indicated)

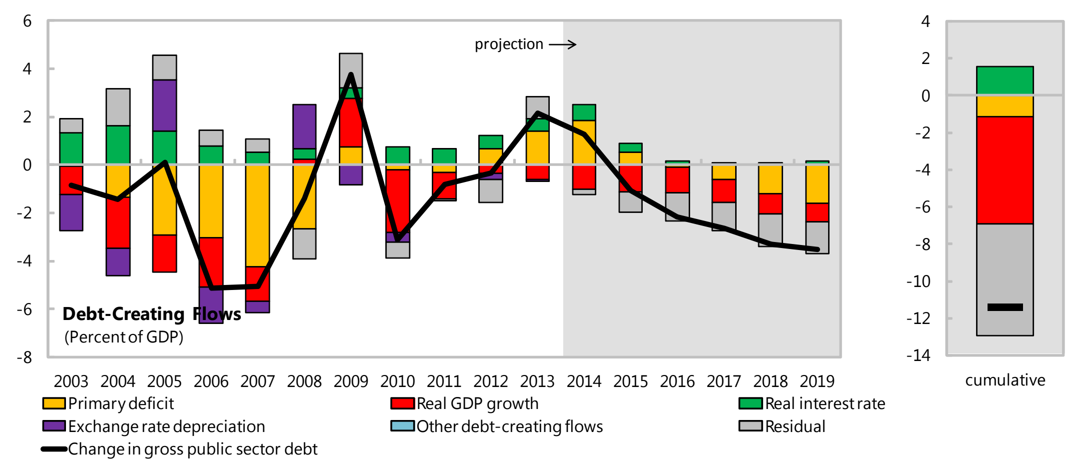
Debt, Economic and Market Indicators [1/]

	Actual			Projections					
	2003-2011 [2/]	2012	2013	2014	2015	2016	2017	2018	2019
Nominal gross public debt	44.1	38.3	40.5	41.8	40.7	38.5	35.9	32.6	29.1
Public gross financing needs	8.4	9.4	10.0	12.5	13.2	11.7	10.8	9.2	8.2
Real GDP growth (in percent)	2.4	0.9	1.6	2.6	2.8	2.7	2.6	2.5	2.4
Inflation (GDP deflator, in percent)	1.7	1.0	0.9	0.7	1.4	1.9	2.1	2.1	2.0
Nominal GDP growth (in percent)	4.0	2.0	2.6	3.3	4.3	4.7	4.8	4.7	4.5
Effective interest rate (in percent) [4/]	3.7	2.5	2.3	2.4	2.4	2.4	2.4	2.4	2.6

As of July 11, 2014		
Sovereign Spreads		
Spread (bp) 3/		-29
CDS (bp)		19
Ratings	Foreign	Local
Moody's	Aaa	Aaa
S&Ps	AAA	AAA
Fitch	AAA	AAA

Contribution to Changes in Public Debt

	Actual			Projections							
	2003-2011	2012	2013	2014	2015	2016	2017	2018	2019	cumulative	debt-stabilizing primary balance [9/]
Change in gross public sector debt	-1.5	-0.33	2.17	1.3	-1.1	-2.2	-2.6	-3.3	-3.5	-11.4	
Identified debt-creating flows	-2.0	0.61	1.23	1.6	-0.4	-1.1	-1.7	-2.2	-2.5	-6.3	
Primary deficit	-1.6	0.7	1.4	1.8	0.5	-0.1	-0.6	-1.2	-1.6	-1.1	-0.9
Primary (noninterest) revenue and gra	53.0	50.5	50.8	49.4	50.0	50.3	50.3	50.3	50.3	300.5	
Primary (noninterest) expenditure	51.5	51.2	52.2	51.2	50.5	50.2	49.7	49.1	48.7	299.4	
Automatic debt dynamics [5/]	-0.4	-0.1	-0.2	-0.2	-0.9	-1.0	-1.1	-1.0	-0.9	-5.2	
Interest rate/growth differential [6/]	-0.2	0.2	-0.1	-0.4	-0.8	-0.9	-0.9	-0.8	-0.6	-4.3	
Of which: real interest rate	0.9	0.5	0.5	0.7	0.4	0.2	0.1	0.1	0.2	1.5	
Of which: real GDP growth	-1.1	-0.4	-0.6	-1.0	-1.1	-1.1	-1.0	-0.9	-0.8	-5.8	
Exchange rate depreciation [7/]	-0.2	-0.3	-0.1	...	...	...	...	...	...	...	
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other debt-creating flows (specify)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes [8/]	0.4	-0.9	0.9	-0.2	-0.8	-1.2	-1.2	-1.3	-1.3	-6.0	



Source: Fund staff calculations. 1/ Public sector is defined as general government. 2/ Based on available data. 3/ Bond Spread over U.S. Bonds.

4/ Defined as interest payments divided by debt stock at the end of previous year. Its relatively stable path reflects long debt maturities (> 5 years on average) and a gradual projected increase in interest rates.

5/ Derived as [(r - p(1+g) - g + ae(1+r)]/(1+g+p+gp)) times previous period debt ratio, with r = interest rate; p = 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 denominator in footnote 4 as r - π (1+g) and the real growth contribution as -g.

7/ The exchange rate contribution is derived from the numerator in footnote 2/ as ae(1+r).

8/ For projections, this line 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.