



The Swedish Economy
December 2013

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The National Institute of Economic Research (NIER) prepares analyses and forecasts of the Swedish and international economy and conducts related research. NIER is a government agency accountable to the Ministry of Finance.

The Swedish Economy is published four times a year and contains analyses and forecasts of the Swedish and international economy. It is a translation of the summary, the chapter on macroeconomic development and economic policy, and, occasionally, selected special analyses of the full report **Konjunkturläget**.

Data sets in the form of outcome and forecast data for the development of the Swedish and international economy are available on our website: www.konj.se/statistics.

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Summary of the Forecast

The economy is picking up as 2013 draws to a close. Rising consumer and business confidence in both Sweden and neighbouring countries points to stronger GDP growth. Fiscal policy will also be less contractionary in the majority of OECD countries in 2014 than in 2012 and 2013. Low resource utilisation in the global economy is keeping inflation down, and central banks are staying with extremely low policy rates. Monetary policy will begin to normalise in 2014, however, including in the US. In Sweden, inflation has surprised on the low side, and the Riksbank is expected to lower the repo rate to 0.75 per cent in December 2013.¹ This will help accelerate the recovery, but it will still take time, with the output gap not closing until 2017. Fiscal policy will be almost neutral in 2014 but will then need to be tightened considerably. Cyclically-adjusted net lending is forecast to be -1.2 per cent of potential GDP in 2014, and it is unlikely that fiscal policy will be tightened sufficiently for the surplus target to be met.

ECONOMY RECOVERING

Swedish GDP growth was weak in the third quarter of 2013, but the Economic Tendency Survey suggests that it will improve in the fourth quarter and strengthen further in the first quarter of 2014 (see Diagram 1), heralding a cautious economic recovery.

Both domestic demand and exports are expected to rise more quickly from the fourth quarter of 2013. Demand growth will also be boosted temporarily in the coming quarters as stockbuilding stops falling as quickly as in the third quarter. Household consumption, which is estimated to have increased by just under 2 per cent in 2013, will grow more quickly in 2014 as a result of further low interest rates and a strong rise in real disposable income (see Diagram 2). The rise in disposable income is due largely to tax reductions and low inflation boosting households' purchasing power.

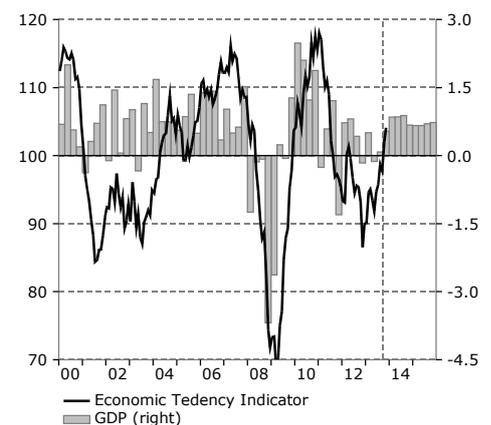
However, the main driver behind the acceleration in GDP growth in 2014 will be an upturn in investment and exports as external demand picks up. Investment will also be favoured by a clear increase in home-building.

SURVEYS MUCH STRONGER THAN HARD OUTPUT DATA

The manufacturing and service production indices through to October have not, however, shown any clear signs of stronger growth, and these are the measurements used in the calculation of GDP in the national accounts.

Diagram 1 Economic Tendency Indicator and GDP

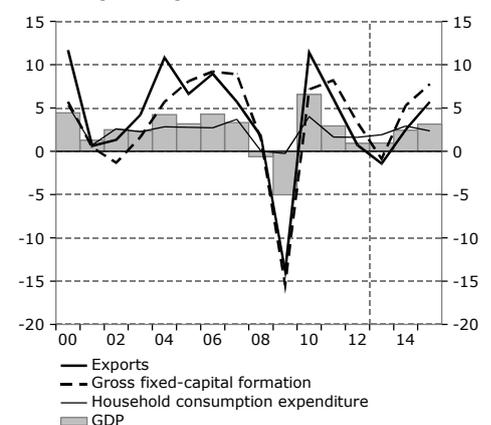
Index mean=100, monthly values, and percentage change, seasonally adjusted quarterly values, respectively



Sources: Statistics Sweden and NIER.

Diagram 2 GDP and Demand

Percentage change

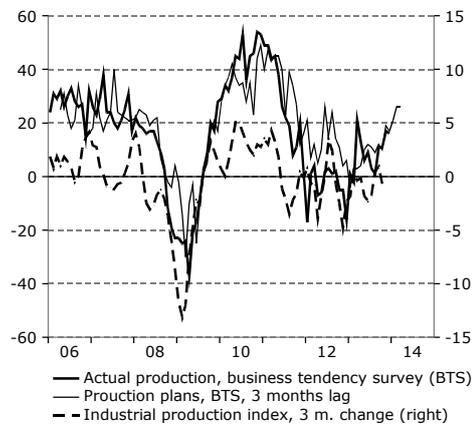


Sources: Statistics Sweden and NIER.

¹ The calculations underlying this forecast were finalised on 12 December; the Riksbank publishes its monetary policy decision on 17 December.

Diagram 3 Industrial Production

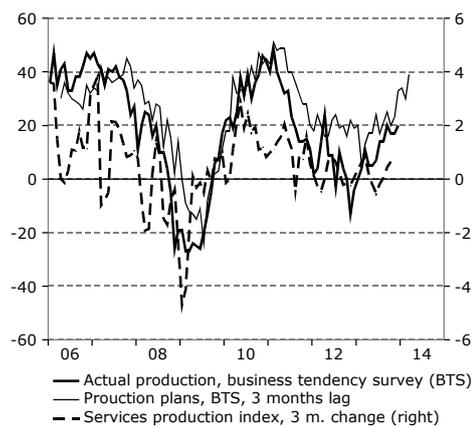
Net balances and percentage change 3 months on previous 3 months, seasonally adjusted monthly values, respectively



Sources: Statistics Sweden and NIER.

Diagram 4 Services Production

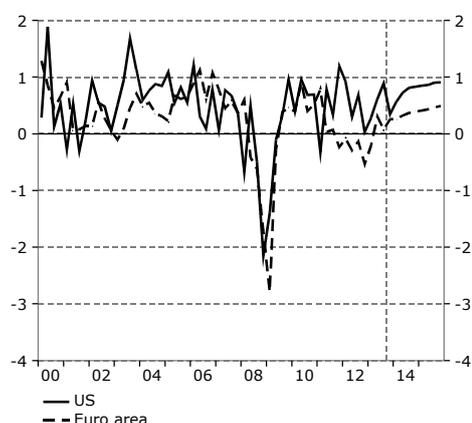
Net balances and percentage change 3 months on previous 3 months, seasonally adjusted monthly values, respectively



Sources: Statistics Sweden and NIER.

Diagram 5 US and Euro Area GDP

Percentage change, seasonally adjusted quarterly values



Sources: Bureau of Economic Analysis, Eurostat and NIER.

There is a slight divergence between survey data and hard data at present, with more companies reporting rising output in the Economic Tendency Survey than reflected in the manufacturing production index in particular (see Diagrams 3 and 4). Firms are also optimistic about future output in their plans, which indicates that output will grow more quickly in the time ahead. Which measure ultimately best describes underlying economic developments, and by extension employment, is very uncertain at present.

In general, short-term variation in the manufacturing and service production indices seems to be greater than in the Economic Tendency Survey's net balances for recent output. In the slightly longer term, there is considerable covariance, and it is often easier to detect more enduring changes in the survey data. Based on these data and other information, the NIER concludes that the downturn in manufacturing output in the three months to October was only temporary. Developments in the labour market, with a rising employment rate and falling unemployment during the course of 2013, also support the picture of an economy that is turning around.

GRADUALLY STRONGER GROWTH IN THE EURO AREA

In the euro area, GDP has now risen for the past two quarters (see Diagram 5). Growth is being driven primarily by Germany, but there have also been clear improvements in the debt-strapped countries of Ireland, Portugal, Greece and Spain. In some other countries, however, the picture is less favourable. Competitiveness has scarcely improved in France and Italy, as is required for GDP to grow sustainably in these countries. Significantly more far-reaching reforms of labour market rules, a smaller central government sector and other structural reforms will probably be needed to turn things around. The road to economic balance in the euro area is therefore long and uncertain.

Financial markets are optimistic nevertheless, as can be seen from reduced spreads between government bonds yields in the highly indebted countries of the euro area periphery and Germany. Share prices are also rising in most parts of the world. This is probably due mainly to the ongoing cyclical recovery in the global economy, which is providing something of a helping hand for the more vulnerable countries.

This optimism in financial markets should not, however, be interpreted as meaning that the danger is now over. The challenge going forward is to continue the work on reform to make these economies better equipped for the next downturn in the economy, which, based on normal cyclical patterns, will be in the next three to five years.

MORE MOMENTUM IN THE US ECONOMY

The recovery in the US has come considerably further, with unemployment falling continuously since the end of 2009. GDP grew by 0.9 per cent in the third quarter of 2013 (see Diagram 5), and employment increased by around 200,000 people a month during the autumn. The fall in unemployment, however, is also due to a decline in labour force participation.

Fiscal policy has been contractionary in 2013, but will be less so in the coming years. The recent budget deal has brought stability and greater predictability to fiscal policy, so boosting confidence in the economy. The Federal Reserve is expected to start phasing out its bond purchases at the beginning of 2014 and raise its policy rate from the second half of 2015. Monetary policy will remain highly expansionary, however, contributing to further strong growth.

SWEDISH UNEMPLOYMENT FALLING SLOWLY BUT SURELY

Unemployment in Sweden peaked at just over 8 per cent in the first quarter of 2013 and has fallen somewhat since (see Diagram 6). Unemployment averaged 8.0 per cent in 2012 and will do so again in 2013, but there is now a clear downward trend. Both employment and the labour force grew by around 1 per cent in 2012, and this has continued in 2013. This is surprisingly strong given that GDP has been growing at just 1 per cent per year. Historically, substantially higher growth levels have been needed for employment to increase at such a rate (see Diagram 7). The flipside of this is weak productivity growth.

As demand growth picks up in 2014, firms will first use existing production resources more efficiently, but then gradually have to increase the level of recruitment. With the labour force also expanding more slowly, mainly for demographic reasons, unemployment will fall more quickly towards the estimated equilibrium rate of around 6.5 per cent. However, the labour market will not return to cyclical balance until the second half of 2017.

REPO RATE TO STAY AT 0.75 PER CENT BEFORE RISING AGAIN FROM LATE 2014

The NIER assumes in this forecast that the Riksbank will lower the repo rate by 25 basis points to 0.75 per cent at its December 2013 monetary policy meeting (see Diagram 8).² The reduction is motivated primarily by low and falling inflation during the autumn, which surprised most commentators, including the Riksbank. Long-term inflation expectations have also come down and are now some way below 2 per cent for the first time in a very long period (see Diagram 9). This indicates that the markets

Diagram 6 Unemployment and Equilibrium Unemployment

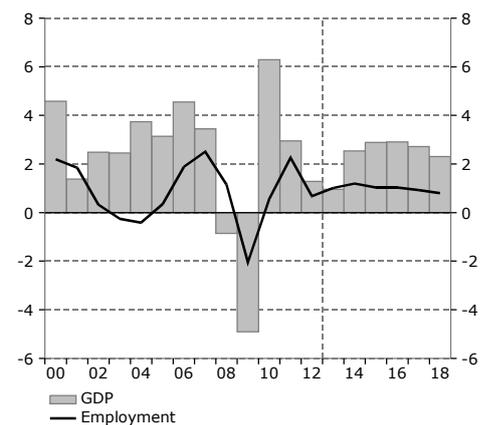
Per cent of labour force, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER.

Diagram 7 GDP and Employment

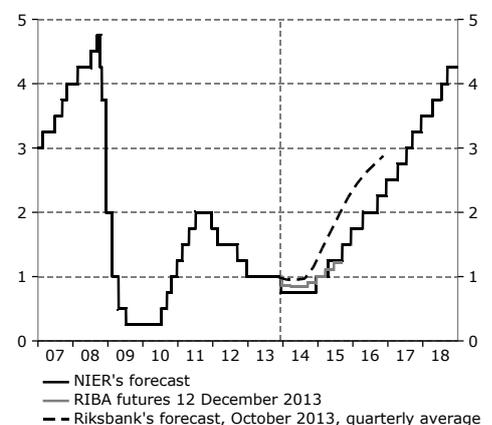
Percentage change, calendar-adjusted values



Sources: Statistics Sweden and NIER.

Diagram 8 Repo Rate

Per cent, daily values

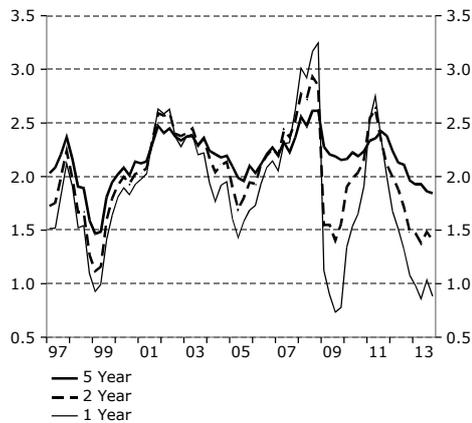


Sources: NASDAQOMX, The Riksbank and NIER.

² The calculations underlying this forecast were finalised on 12 December; the Riksbank publishes its monetary policy decision on 17 December.

Diagram 9 Inflation Expectations

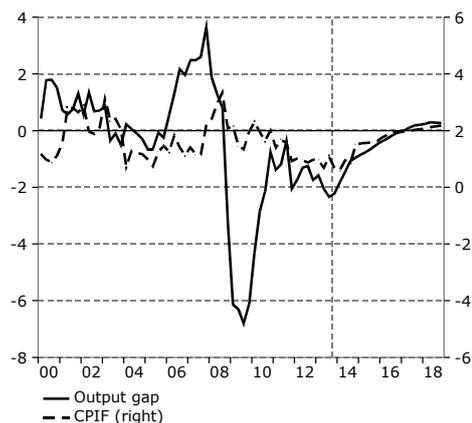
Per cent, quarterly values



Source: Prospera.

Diagram 10 Output Gap and CPIF

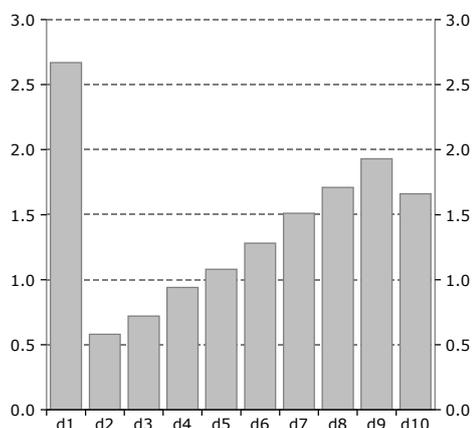
Per cent and annual percentage change, respectively, quarterly values



Sources: Statistics Sweden, The Riksbank and NIER.

Diagram 11 Debt Ratio for Household Income Categories

Per cent



Note. Bars represent deciles. Decile 1 (d1) includes households with negative income (due to, e.g., capital losses or negative business income).

Source: SOU 2013:78.

no longer dare count on the 2 per cent target for CPI inflation being met even on a five-year view.

A further argument for lowering the repo rate is that the Swedish Financial Supervisory Authority, Finansinspektionen, recently announced plans to raise the risk weight floor for mortgages to 25 per cent in 2014.³ This move, prompted by macroprudential considerations, will probably push up interest rate margins on mortgages and so put a damper on household demand. The Riksbank will then need to curb the increase in mortgage interest costs by keeping the repo rate slightly lower than would otherwise be the case (see also the special analysis “Higher Risk Weight Floor for Mortgages” later in this report).

The reduction in the repo rate will boost demand in the economy, accelerating recovery and moving inflation slightly more quickly towards the target level. Not until 2017, however, will the output gap close and CPIF inflation hit 2 per cent (see Diagram 10). With the benefit of hindsight, more expansionary monetary policy in recent years would have been more appropriate to bring inflation closer to the target and increase resource utilisation.

NEW INFORMATION ON HOUSEHOLD DEBT SHOULD ALLAY RIKSBANK’S FEARS

Over the past year, the Riksbank has made it ever clearer that one argument for not making monetary policy even more expansionary has been concern about the historically high ratio of household debt to disposable income. International experience shows that, in many cases, rapidly rising debt-to-income ratios have ultimately resulted in substantially increased (financial) saving, leading to falling house prices and weak consumption growth.

However, a government report published at the beginning of December⁴ has provided new data on individual households’ debt and income showing that the households with the highest debt-to-income ratios are those with the highest income (see Diagram 11). These households generally have large margins in their finances and are at low risk of unemployment. They can bear both higher interest costs and higher repayments should this prove necessary.

The data in the report also show that the average debt in income decile 10 is 16 times that in decile 3. The highest income decile accounts for 32 per cent of all debt, and the three lowest deciles together for only 5 per cent. In the light of this, the risks to the stability of the financial system, or of a sudden surge in

³ See *How FI can decrease the risks inherent in household debt*, Finansinspektionen, November 2013.

⁴ See *Överskuldssättning i kreditsamhället?* [Over-indebtedness in the credit society?], SOU 2013:78.

household saving, are considered small. The NIER does not therefore believe there is currently reason for monetary policy to be influenced by household debt beyond the effects this debt may have on inflation and resource utilisation during the forecast period.

Furthermore, the repo rate is something of a blunt instrument for managing the debt-to-income ratio. In the short term, a higher repo rate could even inflate the debt-to-income ratio, because disposable income will be affected more and faster by a change in interest rates than the debt stock will.

SURPLUS TARGET WILL NOT BE MET

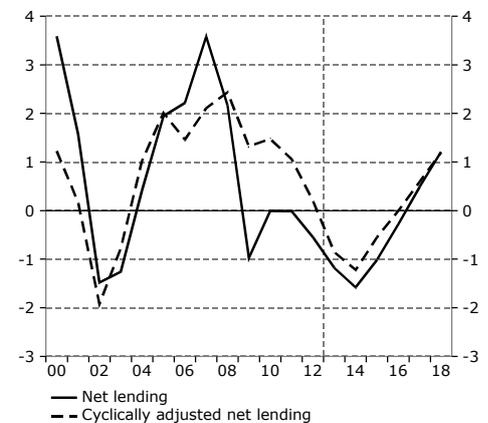
The measures proposed in the budget bill for 2014 will weaken public finances by SEK 21 billion in 2014 (see also the special analysis “The Budget Bill for 2014”).⁵ This means that fiscal policy will be approximately neutral in 2014, as the automatic stabilisers will be of the same magnitude. One important factor here is an automatic downward adjustment of income-based pensions by 2.7 per cent. Cyclically-adjusted general government net lending is nevertheless expected to deteriorate somewhat, but this is largely a one-off effect of the absence of any dividends from state-owned energy company Vattenfall, which made heavy losses in 2013 (see Diagram 12).

Cyclically-adjusted net lending will amount to –1.2 per cent of potential GDP in 2014. Based on the NIER’s interpretation of the surplus target for general government net lending, cyclically-adjusted net lending should be 1.2 per cent of GDP when the economy is in cyclical balance. In the present forecast, cyclical balance will come in 2017 when the output gap closes. To achieve this, fiscal tightening equivalent to 2.4 per cent of GDP will be required. It is considered unlikely that fiscal policy will be tightened so far and so quickly, however, because this would require unusually large discretionary budget reinforcements, and the government’s budget forecasts build on more optimistic macroeconomic assumptions. If the NIER’s forecast holds, future governments will gradually realise that underlying (cyclically-adjusted) public finances are weaker than suggested in the latest budget bill. By then, it will not be possible to adjust net lending quickly enough for the surplus target to be reached.

Other indicators used by the government to shed light on performance against the surplus target also suggest that the target will not be met in the NIER’s scenario. In the government’s scenario, performance against the target is better using the same indicators, mainly because the government’s forecast for potential GDP is higher.

Diagram 12 Actual and Cyclically Adjusted General Government Net Lending

Per cent of GDP and percent of potential GDP, respectively



Sources: Statistics Sweden and NIER.

⁵ The budget bill contains unfunded measures totalling SEK 24 billion, but the tax cut in the form of a higher threshold for state income tax has been blocked by the opposition in the Riksdag.

REVENUE REINFORCEMENTS NEEDED TO MAINTAIN PUBLIC SECTOR COMMITMENT

The NIER's fiscal policy forecast for 2015 assumes no measures in the central government budget on either the revenue side or the expenditure side. In the years after that, for which there is even less information about the orientation of fiscal policy, it is assumed that expenditure will rise in order to maintain the public sector commitment. This means active decisions on expenditure increases of around SEK 35 billion during the period 2016–2018. On the revenue side, tax increases totalling SEK 91 billion are assumed during the period so that the surplus target is met.⁶ Both actual and cyclically-adjusted net lending will then hit the target level of 1.2 per cent of GDP in 2018 (see Diagram 12). The NIER does not advise on whether the public sector commitment should be reduced and/or taxes raised – that is a political matter for the Riksdag and municipalities. However, the credibility of the surplus target will be undermined if the government does not present convincing plans for how it intends to meet the target. It may also be appropriate to investigate whether the surplus target should remain at 1 per cent of GDP in the light of demographic changes.

⁶ The equivalent calculation in *The Swedish Economy*, August 2013, showed a financing requirement of SEK 80 billion in 2014–2017 to maintain the public sector commitment at 2013 levels. The present calculation is based on the public sector commitment at 2015 levels, which reduces the financing cost. At the same time, however, potential GDP has been revised down, so further fiscal tightening will be required to achieve the surplus target. The calculations have also been updated with a number of other new assumptions. On balance, the financing requirement has been revised up.

Table 1 Selected Indicators

Percentage change unless otherwise indicated

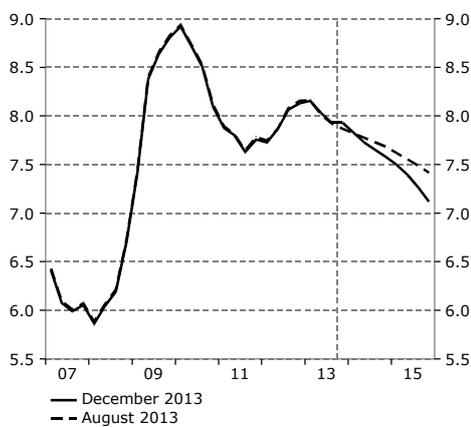
	2011	2012	2013	2014	2015	2016	2017	2018
GDP, market price	2.9	0.9	1.0	2.4	3.1			
GDP, calendar-adjusted	2.9	1.3	1.0	2.5	2.9	2.9	2.7	2.3
Current account ¹	6.2	6.5	6.2	5.4	5.2	4.9	4.5	4.2
Hours worked ²	2.0	0.7	0.5	1.2	1.1	1.3	1.1	0.8
Employment	2.3	0.7	1.0	1.2	1.0	1.0	0.9	0.8
Unemployment ³	7.8	8.0	8.0	7.7	7.3	6.9	6.6	6.3
Labour market gap ⁴	-1.4	-1.5	-1.6	-1.1	-0.8	-0.4	-0.1	0.2
Output gap ⁵	-1.2	-1.5	-2.0	-1.3	-0.7	-0.2	0.1	0.3
Hourly earnings ⁶	2.4	3.0	2.7	2.8	2.9	2.9	3.0	3.1
Labour cost, business sector ²	3.3	3.5	2.4	2.7	2.9	3.0	3.1	3.2
Productivity, business sector ²	1.6	1.3	0.7	1.5	2.1	2.1	2.0	1.9
CPI	3.0	0.9	-0.1	0.5	1.8	2.7	3.0	3.0
CPIF	1.4	1.0	0.8	1.0	1.6	1.9	2.0	2.1
Repo rate ^{7,8}	1.75	1.00	0.75	1.00	1.75	2.50	3.50	4.25
Interest rate, 10-year government bond ⁷	2.6	1.6	2.1	2.6	3.3	3.9	4.4	4.6
Index for the Swedish krona (KIX) ⁹	107.6	106.1	103.0	103.8	102.1	101.2	101.2	101.2
GDP, world-wide	3.9	3.2	2.9	3.7	4.0	4.1	4.1	4.1
General government net lending ¹	0.0	-0.5	-1.2	-1.6	-1.0	-0.3	0.5	1.2
General government consolidated gross debt (Maastricht debt) ¹	38.6	38.2	41.4	41.8	40.9	40.0	38.6	36.7
Cyclically adjusted net lending ¹⁰	1.1	0.2	-0.9	-1.2	-0.5	0.0	0.6	1.2

¹ Per cent of GDP. ² Calendar-adjusted. ³ Per cent of labour force. ⁴ Difference between actual and potential hours worked, in per cent of potential hours worked. ⁵ Difference between actual and potential GDP, in per cent of potential GDP. ⁶ According to Short-term Earnings Statistics. ⁷ Per cent. ⁸ At year-end. ⁹ Index 1992-11-18=100. ¹⁰ Per cent of potential GDP.

Sources: Statistics Sweden, National Mediation Office, the Riksbank and NIER.

Diagram 13 Unemployment

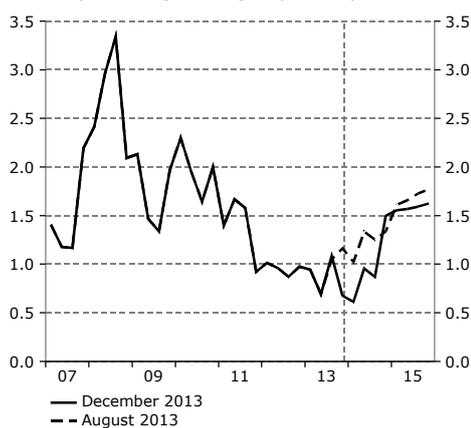
Per cent of labour force, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER.

Diagram 14 CPIF

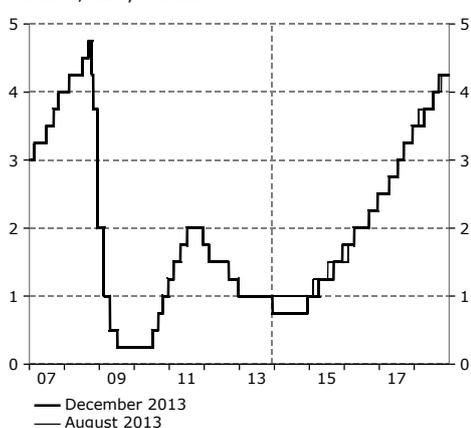
Annual percentage change, quarterly values



Sources: Statistics Sweden and NIER.

SAM200 Diagram 15 Repo Rate

Percent, daily values



Sources: The Riksbank and NIER.

Forecast Revisions 2013–2014

This section outlines the principal revisions to the forecast published in *The Swedish Economy*, August 2013. In general, the revisions are relatively small (see Table 2). Economic developments in Sweden will be largely in line with those predicted in August.

- GDP growth in the OECD countries is unchanged from the previous forecast, but growth in emerging markets has been weaker than anticipated and has been revised down in both 2013 and 2014. All in all, the global economy is expected to grow 2.9 per cent in 2013 and 3.7 per cent in 2014, which is 0.1 and 0.2 percentage points respectively less than in the August forecast.
- The forecast for Swedish GDP growth is almost unchanged, but the composition of demand has been revised. Household consumption will grow more slowly in both years, but will be offset by stronger investment and export growth in 2013. Stockbuilding will make a much smaller contribution to demand growth in 2013, but a much larger contribution in 2014.
- The number of hours worked and, to a slightly lesser extent, the number of employed are expected to grow more quickly in both years. The labour force will also expand a little faster, so the forecast for unemployment has been revised down only slightly (see Diagram 13).
- Perhaps the biggest surprise of the autumn was the low level of inflation both in Sweden and abroad. The forecast for CPIF inflation has been reduced to 0.8 per cent in 2013 and 1.0 per cent in 2014, and CPIF inflation at the end of 2015 has been lowered to 1.7 per cent (see Diagram 14).
- The surprisingly low inflation and falling long-term inflation expectations have contributed to the Riksbank lowering its repo rate to 0.75 per cent (see Diagram 15). This means that the repo rate in 2014 and much of 2015 will be 25 basis points lower than in the August forecast.
- Resource utilisation in the economy is now expected to be higher than in the August forecast. The output gap has been revised up in both 2013 and 2014 despite slightly weaker growth in actual GDP. In other words, potential GDP has been revised down further. This is due mainly to a downward revision of potential productivity.

Table 2 Current Forecast and Revisions Compared to the August 2013 Forecast

Percentage change unless otherwise indicated

	2013		2014	
	December 2013	Diff.	December 2013	Diff.
International				
GDP, world-wide	2.9	-0.1	3.7	-0.2
GDP, OECD	1.3	0.0	2.2	0.0
GDP, Euro Area	-0.4	0.1	1.1	0.0
GDP, United States	1.7	0.3	2.6	-0.2
GDP, China	7.6	0.0	7.5	-0.2
Federal funds target rate ^{1,2}	0.25	0.00	0.25	0.00
ECB refi rate ^{1,2}	0.25	-0.25	0.25	-0.25
Oil price ³	108.7	0.8	107.4	2.3
CPI, OECD	1.6	-0.1	1.8	-0.1
GDP by Expenditure				
GDP, calendar-adjusted	1.0	-0.2	2.5	-0.1
GDP	1.0	-0.1	2.4	-0.1
Household consumption	1.9	-0.5	2.9	-0.3
General government consumption	1.2	0.2	0.7	0.2
Gross fixed capital formation	-0.9	1.7	5.3	0.3
Stockbuilding ⁴	-0.2	-0.6	0.4	0.5
Exports	-1.4	0.6	2.5	-1.2
Imports	-1.8	0.0	4.4	-0.1
Labour Market, Inflation, Interest Rates etc.				
Hours worked ⁵	0.5	0.3	1.2	0.5
Employment	1.0	0.1	1.2	0.4
Unemployment ⁶	8.0	0.0	7.7	-0.1
Labour market gap ⁷	-1.6	-0.1	-1.1	0.3
Output gap ⁸	-2.0	0.3	-1.3	0.6
Productivity, business sector ⁵	0.7	-0.5	1.5	-0.6
Hourly earnings ⁹	2.7	-0.1	2.8	-0.1
CPI	-0.1	-0.1	0.5	-0.3
CPIF	0.8	-0.1	1.0	-0.3
Repo rate ^{1,2}	0.75	-0.25	1.00	0.00
Interest rate, 10-year government bond ¹	2.1	0.0	2.6	-0.1
Index for the Swedish krona (KIX) ¹⁰	103.0	0.3	103.8	1.9
Current account ⁴	6.2	0.2	5.4	-0.3
General government net lending ¹¹	-1.2	0.2	-1.6	-0.1

¹ Per cent. ² At year-end. ³ Dollar per barrel, annual average. ⁴ Change in per cent of GDP preceding year. ⁵ Calendar-adjusted.

⁶ Level, per cent of labour force. ⁷ Difference between actual and potential hours worked, per cent of potential hours worked.

⁸ Difference between actual and potential GDP, in per cent of potential GDP. ⁹ According to Short-term Earnings Statistics.

¹⁰ Index 1992-11-18=100. ¹¹ Per cent of GDP.

Note. The difference is between the current forecast and the August 2013 forecast. A positive value denotes an upward revision.

Source: NIER.

Macroeconomic Development and Economic Policy 2013–2018

The Swedish economy is at a turning point. GDP is set to grow by 0.5 per cent in the fourth quarter of 2013, marking the onset of recovery. Resource utilisation in the economy will not, however, return to balance until the beginning of 2017. The protracted recovery in the OECD area means that domestic demand will be more important than usual for Swedish growth. The NIER expects fiscal policy to be largely neutral in 2014. As cyclically-adjusted net lending will be negative in 2014, fiscal policy will need to be tightened in subsequent years. The deficit in net lending is such that the NIER does not expect general government net lending to reach 1 per cent of GDP until 2018, a year after the economy returns to cyclical balance. It is assumed that the Riksbank will cut the repo rate to 0.75 per cent. Low resource utilisation, low inflation and low interest rates abroad indicate that the Riksbank will then leave the repo rate alone until late 2014 before starting to raise interest rates again.

This chapter begins with an overview of the NIER's forecast for the global and Swedish economies in 2013–2018 before looking in greater depth at the forecast for monetary and fiscal policy. A more detailed presentation of economic developments in 2013–2015 can be found in the subsequent chapters of the report.

International Developments

TENTATIVE RECOVERY IN THE GLOBAL ECONOMY

Leading indicators suggest that the global economy will continue its tentative recovery, but the global picture is mixed.

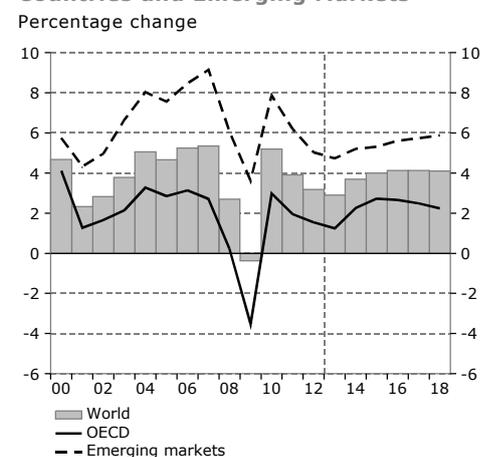
Growth is higher in the US, the UK and Japan, but much weaker in southern Europe. GDP growth in emerging markets is also weak (see Diagram 16), but they have fewer idle resources than in the OECD. The slowdown in emerging markets is due partly to structural factors. Some were also hit by financial turbulence after the Federal Reserve indicated in May that it would be scaling down its programme of quantitative easing.

All in all, global growth is expected to accelerate in the coming years (see Diagram 16).

PROLONGED SLUMP IN THE OECD

The NIER's forecast assumes further structural reforms in the euro area to boost competitiveness and reduce public and private indebtedness in the crisis countries. The adjustment of household, bank and public-sector balance sheets will continue,

Diagram 16 GDP World-wide, in OECD Countries and Emerging Markets

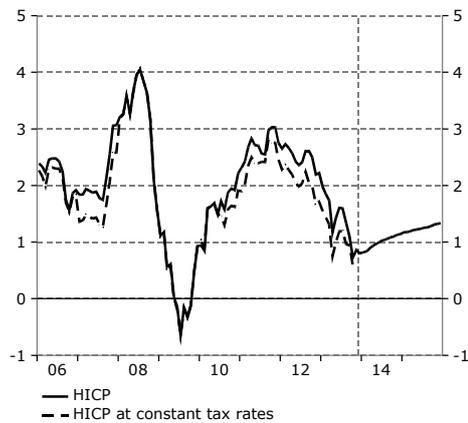


Note: Emerging markets here refer to all non-OECD member countries.

Sources: OECD, IMF and NIER.

Diagram 17 Euro Area Consumer Prices

Annual percentage change, monthly values



Source: Eurostat.

Diagram 18 Output Gap in OECD

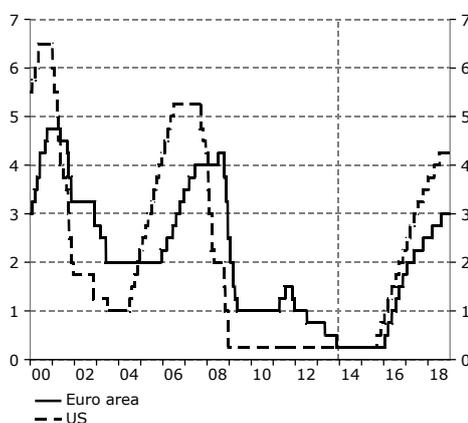
Per cent of potential GDP



Sources: National sources and NIER.

Diagram 19 Policy Rates

Per cent, daily values



Sources: ECB, Federal Reserve and NIER.

and borrowing rates for both consumers and firms are expected to come down as debt moves towards more stable levels. This will gradually enhance the effect of the region's expansionary monetary policy, contributing to continued recovery. However, the recovery will only reduce unemployment marginally in the coming years. High unemployment and weak resource utilisation point to low inflation (see Diagram 17).

In the US, high levels of public debt have necessitated contractionary fiscal policy, but fiscal policy is expected to be relaxed gradually in 2014–2015. US households' balance sheets will be favoured by rising asset prices, and the debt adjustment process is considered largely complete. Together with the labour market being on the right track, this has prompted growing confidence among both consumers and firms, which is stimulating consumption, investment and growth. The level of idle resources is expected to be high, however, which means that monetary policy will remain highly expansionary, contributing in turn to resource utilisation gradually increasing and returning to balance in 2017.

In Japan, expansionary fiscal and monetary policy has led to rising investment and improved financial conditions. The expansionary monetary policy has also led to substantial depreciation of the yen, helping exporters. This has brought higher growth and lower unemployment and raised households' inflation expectations. Higher inflation expectations, high resource utilisation and the upcoming increases in consumption tax in 2014 and 2015 are expected to turn deflation into a certain amount of inflation in the coming years.

All in all, GDP growth in the OECD will accelerate in the coming years, but resource utilisation is currently low, and the output gap will not close until 2018 (see Diagram 18). This low resource utilisation will put a damper on inflation, which means that the expansionary bias of monetary policy is not expected to threaten these countries' inflation targets. This means, in turn, that the recovery may continue to be bolstered by low global interest rates in the coming years (see Diagram 19). GDP in the OECD countries is expected to grow by an average of 2.5 per cent per year in 2015–2018 (see Table 3).

WEAKER ACTIVITY IN EMERGING MARKETS

Activity in emerging markets has been slowing for a while, although recent developments have been stronger in some countries. The slowdown is due partly to structural problems. In India, low productivity, low investment, weak infrastructure and over-regulated markets for goods and labour have led to a downward trend in growth. In China, the slowdown is due to the transition to a growth model based on a higher share of private consumption. Efforts to reduce investment's share of GDP and curb credit expansion mean that growth in China in

2015–2018 will be below the average of just over 10 per cent in 2000–2012. Emerging markets are nevertheless expected to continue to outgrow the OECD countries, with GDP growth averaging 5.6 per cent per year in 2015–2018 (see Table 3).

Table 3 GDP and CPI World-wide

Percentage change

	2012	2013	2014	2015	2016	2017	2018
GDP, OECD	1.6	1.3	2.2	2.7	2.7	2.5	2.2
GDP, emerging markets ¹	5.0	4.7	5.2	5.4	5.6	5.7	5.9
GDP, world-wide	3.2	2.9	3.7	4.0	4.1	4.1	4.1
CPI, OECD	2.2	1.6	1.8	2.0	2.1	2.2	2.2
CPI, world-wide	4.0	3.7	3.7	3.6	3.4	3.4	3.4

¹ Emerging markets here refer to all non-OECD member countries.

Note. GDP figures are calendar-adjusted. Aggregates are calculated using purchasing-power adjusted GDP weights from the IMF.

Sources: IMF, OECD and NIER.

Developments in Sweden

PROLONGED SLUMP

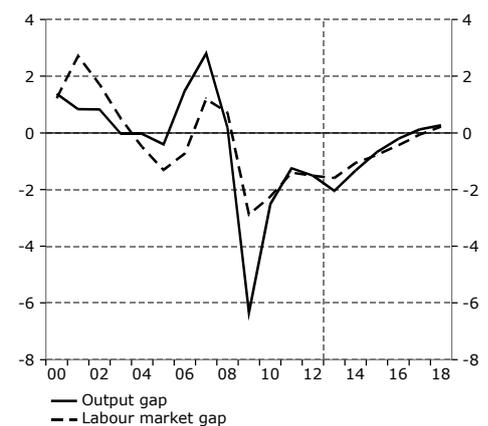
The Swedish economy has long been in the doldrums. The NIER's analysis indicates that the output gap has been negative since the end of 2008 (see Diagram 20), and it will average –2.0 per cent in 2013. Resource utilisation in the economy as a whole is therefore much lower than normal. This prolonged slump is a result of the weak global economic climate in the wake of the financial crisis and the euro area debt crisis. Since 2008, these crises have not only hit demand for Swedish exports but also brought general uncertainty, causing households and firms to postpone consumption and investment.

WEAK PRODUCTIVITY GROWTH

NIER calculations suggest that potential GDP, or the level of output that would be achieved with normal utilisation of labour and capital, grew by an average of 1.8 per cent per year in the period 2007–2012. This is lower than in the period 1980–2006, when potential GDP growth averaged 2.3 per cent per year. The slower growth in potential GDP in recent years is due to weak growth in potential productivity, while the potential number of hours worked has risen fast. This latter factor is due partly to demographic developments, with a relatively rapid increase in the working-age population. It is also a result of economic policy, primarily the earned-income tax credit and tougher qualifying criteria for unemployment and sickness benefits, which have led to more people entering the labour force.

Diagram 20 Output Gap and Labour Market Gap

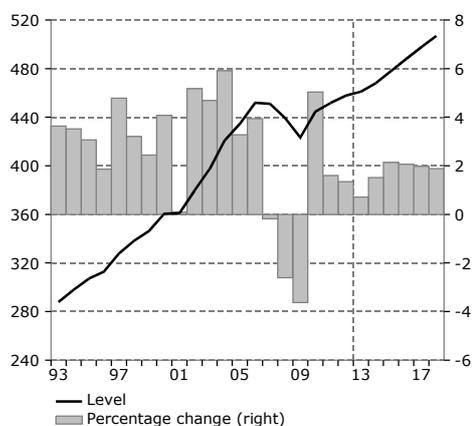
Per cent of potential GDP and of potential hours worked, respectively



Source: NIER.

Diagram 21 Productivity in the Business Sector

Value added per hour, constant prices, calendar-adjusted values. Level and percentage change, respectively



Sources: Statistics Sweden and NIER.

The protracted downturn in the Swedish economy has hampered productivity growth in industry (see Diagram 21). Low resource utilisation has led partly to low investment, which has held back capital formation. The uncertainty resulting from the financial crisis and the euro area debt crisis may also have contributed to slower development and introduction of new technology. A similar trend has been in evidence in many other OECD countries.

The weak growth in potential GDP has continued in 2013 as the economic climate has deteriorated and investment has fallen. The Swedish economy will recover in 2014–2018, and investment will increase relatively quickly. Potential productivity in industry is then expected to accelerate gradually. The potential number of hours worked will also grow relatively strongly (see Table 4). All in all, this means that growth in potential GDP will gradually recover in the coming years.

Relative to the August 2013 forecast, the NIER has revised down its estimate of potential productivity in industry in 2013–2018.⁷ Meanwhile, the potential number of hours worked has been revised up somewhat. Taken together, this means that potential GDP has been revised down by around 1 per cent each year from 2013 to 2018.

Table 4 Potential GDP, Employment and Productivity

Percentage change unless otherwise stated

	2013	2014	2015	2016	2017	2018
Potential GDP	1.4	1.8	2.2	2.4	2.4	2.2
Potential hours worked	0.6	0.7	0.9	0.9	0.7	0.5
Potential employment	0.9	0.8	0.7	0.6	0.6	0.5
Of which demographic contribution ¹	0.3	0.5	0.5	0.4	0.4	0.3
Potential productivity	0.9	1.1	1.4	1.5	1.6	1.6
Potential productivity, business sector	1.4	1.4	1.7	1.9	2.1	2.1

¹ Contribution to potential employment due to population growth, percentage points. In addition, the development of potential employment is also affected by the business cycle and by economic policy.

Sources: Statistics Sweden and NIER.

RECOVERY UNDER WAY

GDP growth largely stagnated in the second and third quarters of 2013. The weak growth in the third quarter was due partly to firms sharply drawing down stocks. Indicators suggest that GDP growth will pick up in the current quarter. GDP is forecast to rise by 0.5 per cent in the fourth quarter, with resource utilisation in the economy as a whole bottoming out. This marks a turning point for economic activity, which will strengthen grad-

⁷ The main reason for this revision is Statistics Sweden's downward revision of actual productivity levels in the National Accounts.

ually in 2014–2018, but the low starting point means that recovery will take a long time. Resource utilisation will not return to normal levels in either the labour market or the economy as a whole until 2017 (see Diagram 20).

One important explanation for the Swedish economy beginning to recover is that activity abroad is picking up, albeit slowly. Fiscal tightening in both the euro area and the US, together with uncertainty about developments in the euro area, has put a damper on Swedish demand both directly through demand for exports and indirectly through effects on domestic demand in Sweden. Recently, however, both confidence indicators and hard data have shown signs of the euro area being on the road to recovery, which has helped reduce uncertainty about future developments.

The global economy is forecast to grow by around 4 per cent per year in 2014–2018. External demand for goods and services produced in Sweden is expected to grow by an average of just over 5 per cent per year in 2014–2018, which is marginally below the average since 1997 (see Diagram 22). Swedish exports have fallen in 2013. As export demand improves in 2014–2018, exports will grow by an average of just under 5 per cent per year (see Table 5 and Diagram 23), which is slightly below the average for 1997–2012.

This means that the recovery in the Swedish economy depends to a great extent on an increase in domestic demand. It is therefore important for economic policy to be expansionary so that it supports the recovery. Monetary policy has the lead role here and is expected to remain expansionary for a long time to come. However, the Riksbank is concerned about high household debt, so the repo rate will be slightly higher than would be motivated solely by levels of economic activity, which will delay recovery slightly (see “Monetary Policy and Exchange Rates” below). At the same time, fiscal policy needs to be tightened so that general government net lending returns to the target level in the longer term (see “Fiscal Policy” below). From 2015 onwards, the underlying strength of the recovery is expected to be such that fiscal policy can be tightened without endangering the upswing.

Diagram 22 Market for Swedish Exports

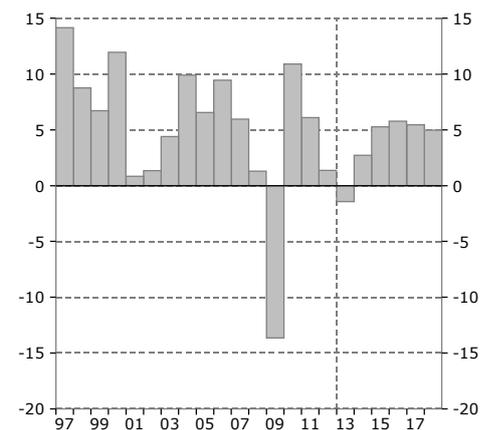
Percentage change



Sources: National sources, IMF and NIER.

Diagram 23 Swedish Exports

Percentage change, calendar-adjusted values



Sources: Statistics Sweden and NIER.

Table 5 GDP by Expenditure

Percentage change, constant prices, calendar-adjusted values

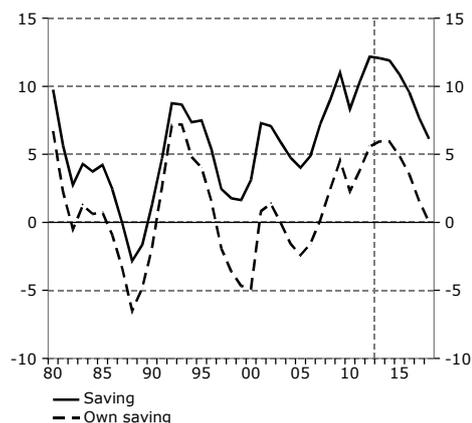
	2013	2014	2015	2016	2017	2018
Household consumption expenditure	1.9	3.0	2.2	2.9	3.0	2.6
General government consumption expenditure	1.2	0.9	0.8	1.0	1.5	1.6
Gross fixed capital formation	-0.9	5.4	7.4	6.5	4.3	3.1
Final domestic demand	1.1	2.9	2.9	3.1	2.9	2.4
Stockbuilding ¹	-0.2	0.4	0.1	0.0	0.0	0.0
<i>Total domestic demand</i>	<i>0.9</i>	<i>3.3</i>	<i>3.0</i>	<i>3.1</i>	<i>2.9</i>	<i>2.4</i>
Exports	-1.4	2.7	5.3	5.8	5.4	5.0
<i>Total demand</i>	<i>0.1</i>	<i>3.1</i>	<i>3.7</i>	<i>4.0</i>	<i>3.8</i>	<i>3.3</i>
Imports	-1.8	4.6	5.8	6.6	6.1	5.5
<i>Net exports¹</i>	<i>0.1</i>	<i>-0.6</i>	<i>0.1</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
GDP	1.0	2.5	2.9	2.9	2.7	2.3

¹ Change in per cent of GDP preceding year.

Sources: Statistics Sweden and NIER.

Diagram 24 Household Saving

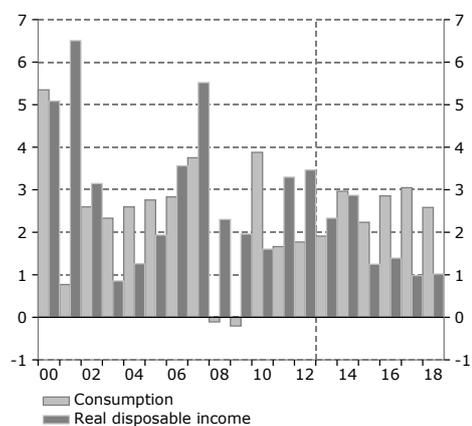
Per cent of disposable income, current prices



Sources: Statistics Sweden and NIER.

Diagram 25 Household Consumption and Real Disposable Income

Percentage change



Sources: Statistics Sweden and NIER.

HOUSEHOLDS UPBEAT

Households have become more optimistic about the future over the past year. The Economic Tendency Survey's consumer confidence indicator rose rapidly during the autumn and is now above the historical average.

At the same time, households are continuing to save a substantial share of their income, and the saving ratio is high by historical standards (see Diagram 24). The ratio is also high in terms of personal saving, which excludes saving in collectively-agreed occupational pensions and premium pensions. The high level of saving can be explained partly by the general uncertainty resulting from the financial crisis and the euro area debt crisis. This uncertainty is now expected to subside, and households will have considerable scope to step up consumption. Combined with growing optimism, continued growth in employment and expansionary economic policy, this means that households will increase their consumption expenditure by 3 per cent in 2014 (see Table 5 and Diagram 25).

The tightening of fiscal policy and the Riksbank's interest rate hikes in 2015–2018 will hold back real disposable income. Further growth in employment and real wages means that real disposable income will nevertheless rise by an average of slightly more than 1 per cent per year during the period (see Diagram 25). Meanwhile, monetary policy will gradually have a less expansionary bias as resource utilisation and inflation rise. Taken together, this will put something of a damper on growth in household consumption in 2015–2018, but the saving ratio will still fall rapidly during this period towards normal levels.

Public consumption will grow moderately in 2013 and 2014 (see Table 5). The faster growth towards the end of the forecast period is due to demographic developments, as the growing

proportion of the population not of working age increases the need for public services.

INVESTMENT A KEY DRIVER

Investment generally varies considerably more over a business cycle than does, for example, household consumption. Despite relatively high investment growth in 2010 and 2011 in particular, investment has still not recovered from the sharp slide in 2009. Investment amounted to 19 per cent of GDP in 2012 (see Diagram 26) and will fall again in 2013 to 18.5 per cent of GDP. The NIER estimates that investment will be around 20 per cent of GDP in the long run.

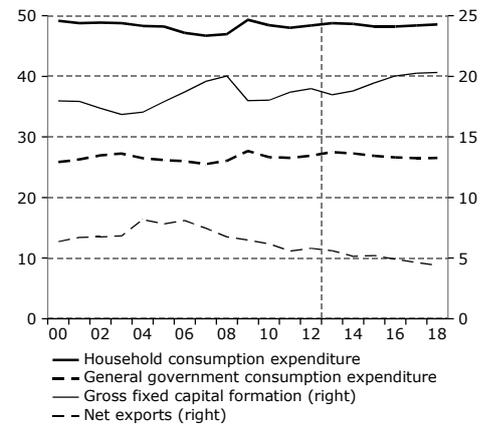
Capacity utilisation in industry has improved in 2013 but is still lower than normal. As demand and output grow more quickly in the time ahead, capacity utilisation will continue to rise, bringing a major need for increased investment. There is also a housing backlog, so housing investment will increase comparatively quickly. In 2014–2018, total gross fixed capital formation will grow relatively rapidly (see Diagram 27), and investment will exceed 20 per cent of GDP in 2018.

LABOUR MARKET RECOVERY CONTINUES

The number of employed increased in 2012, but unemployment still rose due to comparatively strong expansion of the labour force (see Diagram 28). Unemployment levelled off in the first quarter of 2013 and has since fallen back somewhat. This marks a turnaround in the labour market, and unemployment will fall gradually during the forecast period. Unemployment will average 8.0 per cent in 2013, which is 1.3 percentage points higher than the NIER’s estimate of equilibrium unemployment for 2013. The unemployment rate will fall back to 7.7 per cent in 2014, which is not that big a decrease given GDP growth of 2.5 per cent. The reason for this is that firms will initially be able to step up production mainly by using existing personnel more efficiently. Recruitment will pick up somewhat as resource utilisation at firms normalises, with the result that unemployment will fall slightly more quickly in 2015–2017. The labour market will nevertheless take a long time to recover. In 2017, with unemployment down to 6.6 per cent, the labour market will have largely returned to cyclical balance, and the labour market gap will close (see Table 6 and Diagram 29).

Diagram 26 Shares of GDP

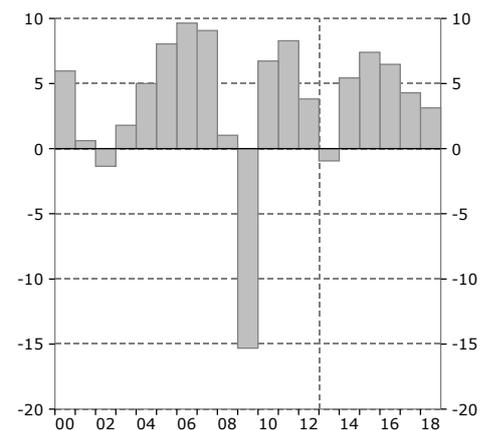
Per cent of GDP, current prices



Sources: Statistics Sweden and NIER.

Diagram 27 Gross Fixed Capital Formation

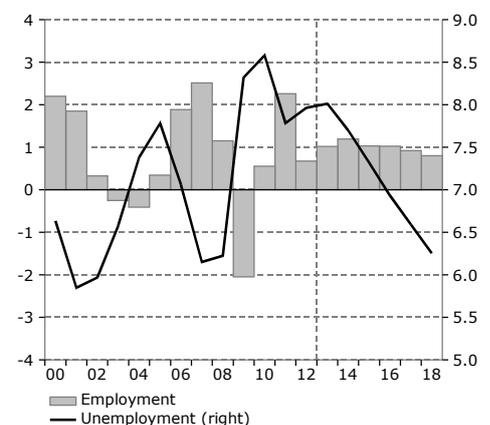
Percentage change, calendar-adjusted values



Sources: Statistics Sweden and NIER.

Diagram 28 Employment and Unemployment

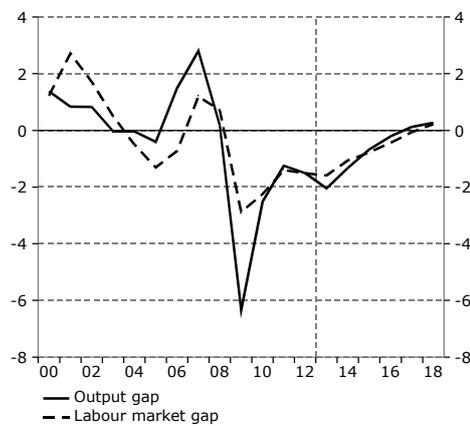
Percentage change and percent of labour force, respectively



Sources: Statistics Sweden and NIER.

Diagram 29 Output Gap and Labour Market Gap

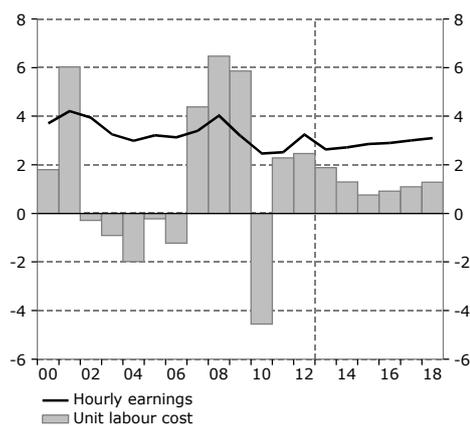
Per cent of potential GDP and of potential hours worked, respectively



Source: NIER.

Diagram 30 Hourly Earnings and Unit Labour Cost in the Business Sector

Percentage change, calendar-adjusted values



Sources: National Mediation Office, Statistics Sweden and NIER.

Diagram 31 Labour Cost Share in the Business Sector

Per cent of value added



Sources: Statistics Sweden and NIER.

Table 6 Labour Market

Percentage change

	2013	2014	2015	2016	2017	2018
Hours worked ¹	0.5	1.2	1.1	1.3	1.1	0.8
Employed	1.0	1.2	1.0	1.0	0.9	0.8
Labour force	1.1	0.9	0.6	0.6	0.6	0.4
Unemployment ²	8.0	7.7	7.3	6.9	6.6	6.3

¹ Calendar-adjusted. ² Per cent of labour force.

Sources: Statistics Sweden and NIER.

UNIT LABOUR COSTS RISING RAPIDLY

Pay settlements of 2013, which mostly run for three years, mean somewhat lower collectively agreed pay rises than the average since 1997.⁸ Low resource utilisation in the labour market is also limiting wage drift over and above this, which suggests that final wage growth in 2013 and the next couple of years will be below the 3.2 per cent seen in 2012. Wage growth will gradually accelerate somewhat from 2014 to 2018 as unemployment falls (see Table 7 and Diagram 30) but will still be moderate relative to the average for 1997–2012 of 3.4 per cent.

The weak productivity growth in 2013 means that unit labour costs in industry are rising rapidly (see Table 7 and Diagram 30). This is the third year in a row that unit labour costs have grown more quickly than the NIER believes to be compatible with inflation of 2 per cent in the longer term (see Diagram 30). Unit labour costs in industry will rise by 1.3 per cent in 2014, which is more in line with a long-term sustainable rate. This means that unit labour costs' share of value added in industry will climb further in 2013 to a relatively high level and then hold there in 2014 (see Diagram 31).

FURTHER LOW INFLATION

The high and rising labour cost ratio in 2013 can be seen as an indication of cost pressures building up at firms. Firms have reported slightly greater dissatisfaction with profitability than normal in the Economic Tendency Survey, but this weak profitability is at least partly cyclical. The high level of unit labour costs is to some extent cyclical, and the weak demand picture is limiting firms' opportunities to raise prices.

On the other hand, low interest rates mean that firms' financing costs are low, and that the required rate of return on real capital may be somewhat lower than normal. The reduction in corporate income tax in 2013 will also boost firms' earnings after tax. In the short term, these factors will reduce their need to put up prices.

⁸ See *Wage Formation in Sweden, 2013*, National Institute of Economic Research.

Inflation as measured by the CPIF, or the CPI with constant mortgage rates, will be just 0.8 per cent in 2013 (see Table 7 and Diagram 32). In other words, the high labour cost ratio has not been inflationary to date. Cost pressures at firms will ease in 2014–2018 as unit labour costs grow more slowly. Together with the weak demand picture, this means that inflation will remain subdued for a long period. Not until early 2017 will CPIF inflation hit 2 per cent. Mortgage rates will rise as the Riksbank raises the repo rate during the forecast period (see “Monetary Policy and Exchange Rates” below). This will not affect CPIF inflation, but CPI inflation will be above 2 per cent in 2016–2018.

Table 7 Earnings and Prices

Percentage change

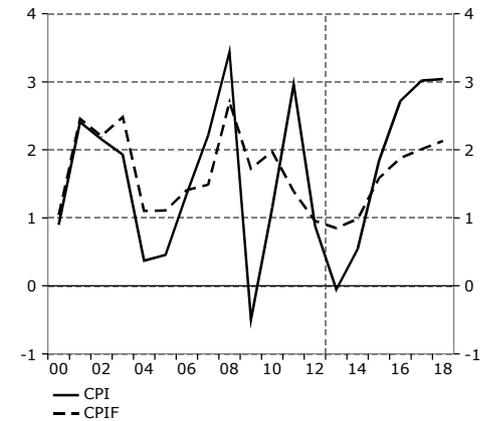
	2013	2014	2015	2016	2017	2018
Hourly earnings ¹	2.7	2.8	2.9	2.9	3.0	3.1
Hourly earnings, business sector	2.6	2.7	2.9	2.9	3.0	3.1
Unit labour cost, business sector	1.9	1.3	0.8	0.9	1.1	1.3
CPI	-0.1	0.5	1.8	2.7	3.0	3.0
CPIF	0.8	1.0	1.6	1.9	2.0	2.1

¹ According to Short-term Earnings Statistics.

Sources: National Mediation Office, Statistics Sweden and NIER.

Diagram 32 Consumer Prices

Percentage change



Sources: Statistics Sweden and NIER.

Monetary Policy and Exchange Rates

UNCERTAINTY AHEAD OF DECEMBER MONETARY POLICY DECISION

The Riksbank decided to leave the repo rate alone in October, and its forecast for the repo rate was also largely unchanged. The central bank’s main arguments for keeping the key policy rate down have long been low expected inflation and low resource utilisation. The chief reason why the repo rate has not been lowered further is the risk of overly low interest rates pushing up household debt and causing a build-up of financial imbalances. These imbalances could then lead to unfavourable real economic developments which jeopardise the achievement of monetary policy goals beyond the bank’s forecast horizon.⁹

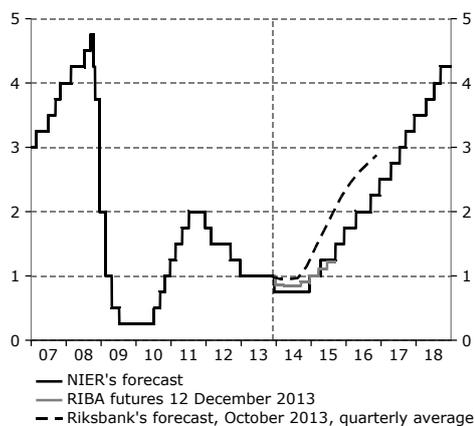
At the time of writing in mid-December 2013, there is uncertainty in financial markets about what the monetary policy decision in December¹⁰ will be, but forward pricing suggests that the most likely scenario is a decrease in the repo rate to 0.75 per cent (see Diagram 33). The reasons for this uncertainty include

⁹ See the article “Financial imbalances in the monetary policy assessment” in *Monetary Policy Report*, July 2013, Sveriges Riksbank.

¹⁰ The calculations underlying this forecast were finalised on 12 December; the Riksbank publishes its monetary policy decision on 17 December.

Diagram 33 Repo Rate

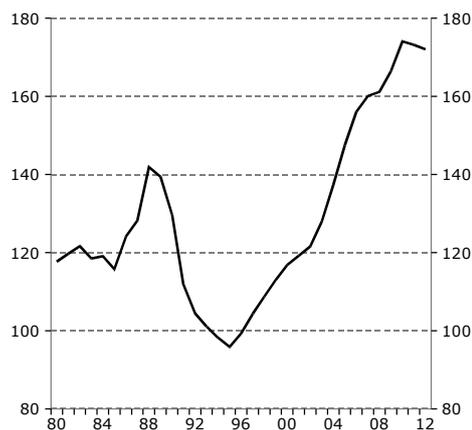
Per cent, daily values



Sources: NASDAQOMX, The Riksbank and NIER.

Diagram 34 Household Debt Ratio

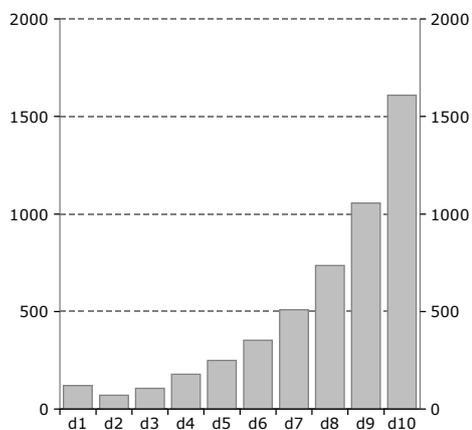
Debts/disposable income, percent



Source: Statistics Sweden.

Diagram 35 Debts for Household Income Categories

Average, SEK thousand



Note. Bars represent income decile groups. Decile 1 (d1) includes households with negative income (due to, e.g., capital losses or negative business income).

Source: SOU 2013:78.

low inflation, mixed signals from the real economy and some members of the Riksbank’s executive board failing to rule out a rate cut despite developments in household debt in recent communications.

NEW STATISTICS PAINT CLEARER PICTURE OF HOUSEHOLD DEBT

The ratio of household debt to household disposable income climbed strongly through to 2010 before levelling off at just over 170 per cent (see Diagram 34). Even though the Swedish Financial Supervisory Authority, Finansinspektionen, has proposed new requirements for banks to set up repayment schedules for mortgage borrowers and has announced an increase in the risk weight floor¹¹ for mortgages from 15 to 25 per cent, household debt is set to grow somewhat more than disposable income in the coming years. The NIER expects that this will continue to lead the Riksbank to pursue a slightly less expansionary monetary policy than would otherwise be the case, in order to curb the accumulation of debt. In the short term, this will come at the cost of slightly lower resource utilisation and of inflation under-shooting the inflation target for somewhat longer.

As part of the public inquiry into over-indebtedness, more detailed statistics on household debt have now been produced. These confirm the general pattern from Finansinspektionen’s latest surveys, namely that the households that are most heavily indebted are those with higher incomes and a stronger position in the labour market than the average (see Diagram 35).¹² In isolation, this composition of household debt suggests that the risks associated with a high aggregate debt-to-income ratio by both international and historical standards may be smaller than the Riksbank has previously indicated. In turn, this may mean that debt will be given slightly less emphasis in the Riksbank’s monetary policy deliberations going forward.

Although there may be risks associated with further increases in the debt-to-income ratio, the NIER does not at present see any reason to allow household debt to play a significant role in monetary policy. Much of the increase can currently be explained by fundamental factors, and it is hard to see the central bank policy rate having any major impact on debt levels and house prices.¹³

All in all, the Riksbank is expected to reduce the repo rate by a further 25 basis points in December to 0.75 per cent and then

¹¹ See the special analysis “Higher Risk Weight Floor for Mortgages”.

¹² See *Överskuldssättning i kreditsamhället?* [Over-indebtedness in the credit society?], SOU 2013:78, and *The Swedish Mortgage Market 2013*, Finansinspektionen.

¹³ See the special analysis “Lånar hushållen för mycket?” [Are Households Borrowing Too Much?] in *Konjunkturläget*, June 2013.

leave it unchanged until late 2014, when it will embark on a period of rate increases (see Diagram 33).

RECOVERY MEANS THE REPO RATE WILL GO UP FROM LATE 2014

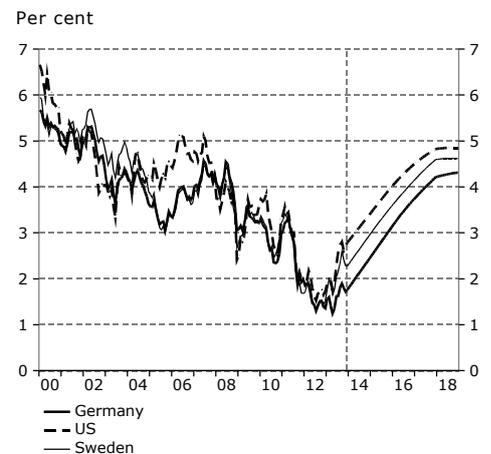
Expansionary monetary policy will contribute to economic recovery from the end of 2013. The prolonged downturn in many of Sweden's export markets means that economic recovery in Sweden will be slow, however, and monetary policy will therefore remain expansionary for a long time. Household debt will also increase slightly relative to disposable income. To put a damper on growth in household debt and avoid excessively high resource utilisation further ahead, with inflation overshooting the target, the Riksbank will begin to raise the repo rate gradually from the end of 2014. Monetary policy will thus help resource utilisation in the economy as a whole to return to balance in the first quarter of 2017. The repo rate will then still be at lower levels than have historically been compatible with balanced resource utilisation. With continued unusually low interest rates abroad, however, a higher repo rate could cause the krona to appreciate, which would slow recovery and excessively dampen inflation. A return to more balanced resource utilisation outside Sweden, with rising interest rates, will then see the Riksbank raise the repo rate to 4.25 per cent at the end of 2018 (see Diagram 33 and Table 8).

LESS EXPANSIONARY MONETARY POLICY IN MANY COUNTRIES SPELLS HIGHER GOVERNMENT BOND YIELDS

Tight government finances and a deep and long economic slump in many countries have led to highly expansionary, and in some cases unconventional, monetary policy. In many cases, unconventional measures have included extensive purchases of bonds by central banks, which have sent yields on government bonds to very low levels. Considerable uncertainty about the economic outlook has also caused many investors to move into low-risk assets, which has further eroded yields.

The gradual return of confidence in more sustainable public finances has probably helped boost demand for riskier assets, as reflected in the rise in share prices in many markets over the past year. It has also meant that demand for safe government bonds in countries with stable government finances is waning. As unconventional monetary policy measures start to be phased out, and central bank policy rates begin to be raised in many of the larger economies, yields will rise further. Swedish 10-year government bond yields will follow the international pattern and climb to 3.3 per cent in 2015 and 4.6 per cent in 2018 (see Diagram 36).

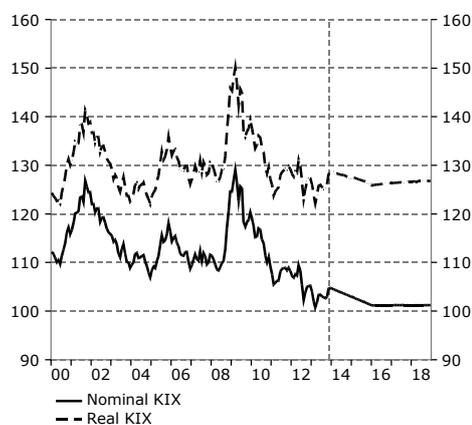
Diagram 36 Government Bond Interest Rates



Note: 10-year bonds.
Sources: Macrobond and NIER.

Diagram 37 Effective Exchange Rate of the Swedish Krona – KIX

Index 1992-11-18=100, monthly values



Note. A higher index implies a weaker krona.
Sources: The Riksbank and NIER.

Table 8 Interest Rates

Per cent

	2013	2014	2015	2016	2017	2018
At year-end						
Repo rate	0.75	1.00	1.75	2.50	3.50	4.25
Annual average						
Repo rate	1.0	0.8	1.3	2.0	2.9	3.9
5-year government bond	1.6	2.1	2.9	3.6	4.2	4.4
10-year government bond	2.1	2.6	3.3	3.9	4.4	4.6

Sources: The Riksbank and NIER.

STRONGER KRONA IN REAL TERMS IN THE COMING YEARS

Although the krona weakened somewhat during the autumn, the effective exchange rate index KIX has largely retained its value viewed over the past year.¹⁴ This means that the krona is approximately 5 per cent stronger than at the outbreak of the financial crisis (see Diagram 37). In real terms, the KIX index was around 3 per cent stronger in October than before the crisis. Smaller trade surpluses are expected to coincide with a strengthening of the real exchange rate against several trading partner currencies. The KIX index also includes several emerging market currencies. In the slightly longer term, these countries are expected to have higher productivity growth than Sweden, which suggests that the krona will weaken against their currencies. All in all, the krona is forecast to be largely unchanged in 2014–2018 in real terms. In nominal terms, however, it will strengthen somewhat over the same period, as inflation is expected to be higher abroad than in Sweden (see Diagram 37 and Table 9).

Table 9 Exchange Rates

Index 1992–11–18=100 and SEK per currency unit, respectively

	2013	2014	2015	2016	2017	2018
KIX	103.0	103.8	102.1	101.2	101.2	101.2
Euro	8.65	8.79	8.56	8.44	8.43	8.43
Dollar	6.52	6.60	6.63	6.65	6.65	6.64

Sources: The Riksbank and NIER.

Fiscal Policy

FISCAL POLICY ALMOST NEUTRAL IN 2014

Fiscal policy has been expansionary in 2013, with unfunded measures of around SEK 25 billion. The largest of these is the reduction in the rate of corporate income tax, which is expected to reduce net lending by SEK 8 billion. Cyclically-adjusted net

¹⁴ Exchange rates are known for considerable short-term variation. The NIER analyses exchange rates on the basis of monthly data or equivalent rolling averages to eliminate part of this short-term variation.

lending will fall by 1.1 per cent of potential GDP to -0.9 per cent in 2013.

The budget bill for 2014 contains unfunded measures totaling SEK 24 billion.¹⁵ The Riksdag has rejected the proposed increase in the threshold for state income tax, leaving measures amounting to SEK 21 billion. The largest of these is an increase in the earned-income tax credit, which is expected to reduce tax revenue by SEK 12 billion. Fiscal policy will contribute to further negative cyclically-adjusted net lending, which will fall to -1.2 per cent in 2014. The main reason for the deterioration in net lending relative to 2013, however, is a substantial decrease in capital income in 2014. Allowing for this, cyclically-adjusted net lending will be practically unchanged from 2013, which indicates that fiscal policy will be neutral in 2014 (see explanation in the margin).¹⁶

TIGHTENING AWAITS IN 2015–2018

The forecast for fiscal policy after 2014 is based on an assessment of how the fiscal policy framework will be applied. The cornerstone in this assessment is the surplus target for net lending, but the expenditure ceiling and the balanced budget requirement for the local government sector are also taken into account. The surplus target means that net lending in the general government sector is to average 1 per cent of GDP over the business cycle. For net lending to reach this level on average, the NIER believes that cyclically-adjusted net lending needs to be 1.2 per cent of GDP when resource utilisation in the economy is in balance.¹⁷

The fiscal policy forecast assumes that fiscal policy in the longer term will be steered towards the surplus target, and that departures from the target will gradually be corrected, taking due account of economic developments and other factors. The present forecast assumes that the output gap will close in 2017, which means that the economy will then feature normal levels of resource utilisation (see Diagram 38). Since the surplus target requires savings of 2.4 per cent of potential GDP, from the cyclically-adjusted level of -1.2 per cent in 2014 to the target level of 1.2 per cent, it is likely that a return to the surplus target will take somewhat longer than the period to 2017. Reaching the target in 2017 would require relatively far-reaching discretionary savings measures over a three-year period. The forecast there-

¹⁵ See the special analysis "The Budget Bill for 2014".

¹⁶ Cyclically-adjusted primary net lending, or cyclically-adjusted net lending excluding capital income and expenditure, is expected to be -1.7 per cent of potential GDP in 2013 and -1.6 per cent in 2014.

¹⁷ The conclusion that cyclically-adjusted net lending needs to be 1.2 per cent of GDP when resource utilisation is in balance (rather than 1 per cent) for the surplus target to be met is based on an assumption that the business cycle will continue to be asymmetrical with more lows than highs. See the special analysis "The Surplus Target for General Government Finances" in *The Swedish Economy*, March 2013.

Fiscal Policy Concepts

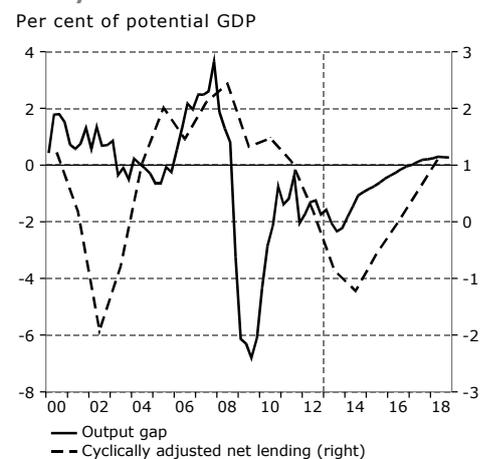
Cyclically adjusted net lending is a calculation of what the net lending of the general government sector would be with balanced resource utilization (a cyclically neutral state) and a normal composition of major tax bases. It is usually presented as a share of potential GDP.

The fiscal policy stance in a particular year is derived from the change in cyclically adjusted net lending in relation to potential GDP. If cyclically adjusted net lending is decreasing as a share of potential GDP, this indicates that the fiscal policy stance is *expansionary* in regard to resource utilization (the output gap) in the economy. The reason may be that cyclically adjusted tax revenue is not keeping up with the increase in potential GDP, that potential general government expenditure is rising faster than potential GDP, or a combination of both. Correspondingly, if cyclically adjusted net lending is increasing relative to potential GDP, this indicates that the fiscal policy stance is *contractionary*. Finally, fiscal policy is *neutral* when cyclically adjusted net lending is unchanged in relation to potential GDP.

The term **unfunded measures** refers to fiscal policy decisions on increasing expenditure and/or reducing taxes, when such decisions are not funded by equally large decreases in expenditure and/or higher taxes in some other area. Thus, these measures in themselves constitute a deterioration in the net lending of the general government sector and, in addition, normally have a positive effect (multiplier) on GDP.

In the area of fiscal policy, the term **unchanged rules** refers to the development of fiscal policy variables when no further fiscal policy decisions are taken by the Riksdag and the Government. In practice, however, there are significant problems in drawing boundaries.

Diagram 38 Output Gap and Fiscal Policy



Source: NIER.

fore assumes savings measures at a rate that brings cyclically-adjusted net lending back to 1.2 per cent only in 2018 (see Diagram 38). Fiscal policy will therefore be contractionary in 2015–2018.

FURTHER NEGATIVE NET LENDING WITH UNCHANGED RULES

The NIER also estimates net lending based on unchanged rules, in other words in the absence of active fiscal policy decisions beyond those proposed in the budget bill. This scenario differs from the NIER’s fiscal policy forecast, but enables comparison with the government’s forecast for public finances in the medium term.¹⁸

Unchanged rules would mean that cyclically-adjusted net lending rises much more slowly than in the forecast, reaching a level of around 0 per cent in 2018 rather than 1.2 per cent (see Table 10). In other words, in the absence of active decisions on budget reinforcements, net lending would be substantially weaker than is compatible with the surplus target.

As the economy returns to normal resource utilisation in 2017, the cyclical effect on net lending will subside. In the calculations with unchanged rules, this means actual net lending marginally below zero in 2018 (see Table 10).

Table 10 General Government Net Lending and Cyclically Adjusted Net Lending

Per cent of GDP and per cent of potential GDP

	2013	2014	2015	2016	2017	2018
Net lending	-1.2	-1.6	-1.0	-0.3	0.5	1.2
Net lending excl. fiscal policy 2015–2018	-1.2	-1.6	-1.0	-0.6	-0.4	-0.1
Cyclically adjusted net lending	-0.9	-1.2	-0.5	0.0	0.6	1.2
Cyclically adjusted net lending excl. fiscal policy 2015–2018	-0.9	-1.2	-0.5	-0.2	-0.3	-0.1

Source: NIER.

NO FISCAL SPACE IN THE COMING YEARS

The estimates of cyclically-adjusted net lending with unchanged rules form the basis for the calculation of fiscal space (previously referred to as the scope for reforms). The NIER assesses fiscal space on a five-year horizon. Fiscal space is defined here as the scope for unfunded measures that have an enduring impact on the budget, which is why fiscal space is not assessed for individual years.

¹⁸ Unchanged rules from 2014 means the rules after the implementation of the measures proposed in the budget bill, excluding the increase in the threshold for state income tax. See www.konj.se/alternativfinanspolitik for a model-based macroeconomic forecast assuming unchanged fiscal policy (in Swedish).

Fiscal space can be seen as the potential surplus over and above the surplus target that arises in public finances with unchanged rules. The reason why such a surplus can arise is that net lending is normally automatically boosted by tax revenue largely following GDP growth while expenditure tends to fall as a proportion of GDP.¹⁹

The NIER assumes that 1.2 per cent of GDP is the level of net lending compatible with the surplus target with normal resource utilisation in the economy. As resource utilisation is expected to return to normal within a five-year period, net lending of 1.2 per cent in 2018 is the starting point for the calculation of fiscal space. The calculation of fiscal space in 2018 is therefore based on the following principle:

$$\text{Fiscal space (2018)} = \text{Cyclically-adjusted net lending with unchanged rules (2018)} - 1.2 \text{ per cent}$$

With unchanged rules, cyclically-adjusted net lending will improve from –1.2 per cent in 2014 to –0.1 per cent in 2018 (see Table 10). Fiscal space is therefore negative at –1.3 per cent of potential GDP. Negative fiscal space should be interpreted as the size of the budget reinforcements required to meet the surplus target. These measures might be increases in taxes, decreases in expenditure or a combination of the two.

The fact that fiscal policy needs to have a budget-reinforcing effect for the surplus target to be reached does not rule out the possibility of measures that increase central government expenditure. In the absence of fiscal space, however, these measures must be fully funded by corresponding tax increases or cuts in other areas of expenditure. With negative fiscal space, it is therefore essential, but not sufficient, for any increases in expenditure to be funded through higher taxes. For the surplus target to be reached, tax increases need to exceed expenditure increases by SEK 56 billion, or 1.3 per cent of GDP, in 2015–2018.

This calculation is based on the NIER's forecast for cyclically-adjusted net lending with unchanged rules. If the government's forecast for cyclically-adjusted net lending in the budget bill for 2014 is used instead, the need for budget reinforcements is more or less zero, because cyclically-adjusted net lending in the government forecast hits 1.2 per cent in 2017 with unchanged rules.²⁰ The main reason why the government's forecast for net lending is so much higher is that the government and the

¹⁹ For an analysis of the determinants of the automatic stabilisers, see the Swedish National Financial Management Authority's report *Automatisk diskretionär finanspolitik – ADF: Förklaringar till förändringen av det konjunkturjusterade sparandet* [Automatic discretionary fiscal policy – ADF: Explaining changes in cyclically-adjusted net lending], ESV 2013:58. See also the special analysis "The NIER's Assessment of the Scope for Reforms", *The Swedish Economy*, March 2013.

²⁰ The government uses the term "structural net lending" rather than "cyclically-adjusted net lending".

NIER estimate different starting levels of cyclically-adjusted net lending in 2013/2014. This difference in turn is explained mainly by the government reaching a different assessment of the current level of resource utilisation in the economy.²¹

TAX INCREASES NEEDED TO MAINTAIN PUBLIC SECTOR COMMITMENT

The public sector commitment consists mainly of publicly funded services such as health care, education and social services, public investment in infrastructure and utilities, and transfer payments to households and firms. With unchanged rules, the size and standard of this commitment will normally decrease. This happens partly because central government grants to municipalities remain the same in nominal terms, which could lead to larger classes in schools or fewer hours of care for the elderly. It also happens through reduced central government consumption expenditure per inhabitant due to the methods for calculating grants for central authorities, and through payments in a number of transfer systems falling relative to nominal wages. An unchanged public sector commitment will therefore require active political decisions to increase public expenditure.²²

The public sector commitment has declined to some extent over the past decade, and it is, of course, uncertain to what degree political decisions will be taken to maintain it going forward. The NIER has nevertheless estimated the increase in spending needed to maintain the public sector commitment at 2014 levels. Based on these calculations, decisions need to be taken on expenditure increases totalling SEK 57 billion in the public sector in 2015–2018 if the commitment is to be maintained. Of these increases, just over SEK 30 billion are in the local government sector. As the NIER anticipates negative fiscal space in the coming years, the increase in expenditure needed to maintain the public sector commitment will need to be financed through higher taxes.

CONTENT OF FISCAL POLICY IN 2015–2018

Based on the above calculations of the budget reinforcements needed to return gradually to the surplus target, and of the increases in expenditure required to maintain the public sector commitment, the NIER has made an assessment of the content of fiscal policy in 2015–2018.²³

²¹ The government's forecast for the output gap in 2014 is –3.0 per cent, compared with the NIER's –1.3 per cent. A more negative output gap means higher cyclically-adjusted (structural) net lending.

²² See the special analysis "The NIER's Assessment of the Scope for Reforms", *The Swedish Economy*, March 2013, for a more detailed analysis of the increases in expenditure associated with maintaining the public sector commitment.

²³ This forecast, which is associated with considerable uncertainty, does not necessarily reflect what the NIER considers to be the most appropriate fiscal policy.

In 2015, no measures impacting the central government budget on either the revenue side or the expenditure side are assumed. In 2016–2018, the measures projected on the expenditure side correspond to a largely maintained public sector commitment. This means active decisions on expenditure increases of around SEK 35 billion during the period (see Table 11). On the revenue side, tax increases totalling SEK 91 billion are assumed during the period²⁴ in order to finance the measures on the expenditure side and the net lending required to reach the surplus target in 2018. The aggregated net effect of these measures in 2015–2018 on cyclically-adjusted net lending is SEK 56 billion and corresponds to the amount that, together with the automatic stabilisers, will produce net lending of 1.2 per cent in 2018.

Table 11 Forecast Fiscal Policy and Automatic Budget Strengthening, 2015–2018

SEK billion, current prices, and per cent of potential GDP, respectively

	2015	2016	2017	2018	2015– 2018
Income policy measures	0	23	35	33	91
Expenditure policy measures	0	13	7	15	35
Fiscal policy effect on cyclically adjusted net lending	0	10	28	17	56
<i>Per cent of potential GDP</i>	<i>0.0</i>	<i>0.2</i>	<i>0.7</i>	<i>0.4</i>	<i>1.3</i>
Automatic budget strengthening ¹	0.7	0.3	–0.1	0.2	1.1
Change in cyclically adjusted net lending ^{1,2}	0.7	0.5	0.6	0.6	2.4
Cyclically adjusted net lending ¹	–0.5	0.0	0.6	1.2	

¹ Per cent of potential GDP. ² The change in cyclically adjusted net lending consists of the sum of the fiscal policy effect and the automatic budget strengthening.

Note. Components do not add up due to rounding.

Source: NIER.

REVISED ASSESSMENT OF FISCAL SPACE

There is usually some revision of fiscal space in each forecast. The need for revisions may arise as a result of changes to the forecasts for general government revenue and expenditure with unchanged rules and with the economy in balance. These forecasts are affected in turn by new political decisions on unfunded measures and the assessment of the outlook for potential GDP.

²⁴ The main reason why the measures on the expenditure side total just SEK 35 billion for the period, rather than the SEK 57 billion given by the calculation for maintaining the public sector commitment at 2014 levels, is the assumption that the government will introduce no new measures in 2015. Fully maintaining the public sector commitment at 2014 levels would require total tax increases of SEK 113 billion in 2015–2018. This corresponds to the sum of the expenditure increases needed to maintain the public sector commitment (SEK 57 billion) and the budget-strengthening measures needed to reach the surplus target (SEK 56 billion).

The change from the previous forecast is considerable, however, with fiscal space (previously referred to as scope for reforms) revised down from SEK –5 billion to SEK –56 billion. In other words, the need for budget reinforcements in the coming years has been revised up from SEK 5 billion to SEK 56 billion. The change is due to updated forecasts for both revenue and expenditure in the public sector, and to the forecast period advancing from 2013–2017 to 2014–2018.

A downward revision of potential productivity means that potential GDP in 2018 has been revised down by just over SEK 20 billion (see “Developments in Sweden” above). Combined with the spending proposals in the budget bill for 2014, this means that general government revenue in 2018 will be SEK 33 billion lower than in the previous forecast for that year.

At the same time, expenditure in 2018 with unchanged rules (from those expected in 2014) has been revised up by SEK 25 billion. These revisions are due partly to a higher level of expenditure in the base year 2014, and partly to technical adjustments to the price and earnings indexation factor (PLO), which affects the calculation of central government consumption expenditure with unchanged rules. Public investment is also higher than in the previous forecast as a result of the changes in the investment plan for the coming years announced in the budget bill for 2014.

Taken together, these revisions mean that cyclically-adjusted net lending with unchanged rules will be SEK 60 billion lower in 2018 than in the previous forecast. Combined with the final year of the forecast period moving forward from 2017 to 2018, this means that fiscal space has been revised down (and the need for savings has been revised up) by SEK 51 billion.

SPECIAL ANALYSIS

Higher Risk Weight Floor for Mortgages

Concern about the historically high level of household debt in Sweden has prompted the Swedish Financial Supervisory Authority, Finansinspektionen (FI), to announce an increase in the risk weight floor for mortgages from 15 to 25 per cent, probably in 2014. The move is intended primarily to enhance banks' resilience to systemic risks in the financial system. It may also have repercussions on demand, as banks may pass on the costs associated with the rule change to mortgage borrowers. Such a scenario would normally trigger a monetary policy response to counter the dip in demand, and the net effects are expected to be limited. FI's announcement of higher risk weights for mortgages nevertheless raises interesting questions about the scope of its mandate for macroprudential supervision.

NEW RISK WEIGHTS FOR MORTGAGES REFLECT MORE THAN JUST THE CREDIT RISKS IN INDIVIDUAL BANK EXPOSURES

Banks' capital adequacy is based on the capital requirements for different assets being allowed to vary according to an asset's inherent risk. This differentiation of capital requirements is achieved through risk weights, such as those for mortgages. The risk weight for mortgages is therefore intended to reflect the risk in banks' lending against residential property and so ensure an appropriate capital base for this class of asset.

The idea behind different capital requirements for different asset classes is to limit risk-taking at individual financial institutions. The risk weight floor introduced by FI in May 2013 was duly motivated by higher risk weights better reflecting the credit risks in banks' own mortgage exposures and took account of the upcoming Swedish implementation of the international Basel III rules. Previously, the risk weights were based on historical credit losses and averaged around 5 per cent for several of the largest players.

The recently announced increase in the risk weight floor for mortgages from 15 to 25 per cent, on the other hand, comes under FI's mandate for macroprudential supervision, as the move is motivated more by higher systemic risks than by increased credit risks in individual institutions' mortgage expo-

asures.²⁵ This means that the measure has been weighed against other available macroprudential tools, such as higher countercyclical capital buffers. One key argument for raising the risk weights rather than introducing larger countercyclical capital buffers is that the latter would impact more widely on banks' lending and could be expected to put an unwanted damper on lending to firms.²⁶

EFFECTS ON MORTGAGE RATES DEPEND ON SEVERAL FACTORS

Higher risk weights mean that banks' financing of a given loan will require more equity. Adapting to the new rules will therefore mean that banks' capital costs will increase, as loan financing is cheaper than equity financing in practice.²⁷ This applies even though the reduction in loan financing can be expected to lead to greater creditworthiness and somewhat lower funding costs. The cost of adjusting to the higher risk weights for mortgages will be distributed between banks' owners and mortgage borrowers according to how the rule change impacts on banks' required rates of return. A lower required rate of return due to lower risk for shareholders should mean that banks' owners bear part of the cost.

In the shorter term, it is perhaps more likely that the required rate of return will not change, and that the entire cost will instead be passed on to mortgage borrowers. A simple calculation indicates that this would push up the total interest cost for mortgage borrowers after tax allowances by almost 0.2 percentage points.²⁸ In practice, however, it is very difficult to predict how banks will adjust lending rates to the announcement of higher risk weights for mortgages, partly because this will also depend on the extent to which banks currently fulfil upcoming capital requirements.

²⁵ This means that the risk weights cannot formally be increased until the rules on macroprudential supervision are in place, which is expected to be in spring 2014, but banks' adjustment to the new rules will probably begin before that.

²⁶ For a discussion of tools for macroprudential supervision, see "Creating a Swedish toolkit for macroprudential policy", *Riksbank Studies*, November 2012, Sveriges Riksbank.

²⁷ The state subsidises loan financing through deposit guarantees, tax-deductible interest, etc.

²⁸ The calculation assumes an unchanged required rate of return of 15 per cent after tax and an unchanged funding cost of 3 per cent.

PREVIOUS STUDIES SUGGEST HIGHER CAPITAL REQUIREMENTS HAVE MINOR CONSEQUENCES FOR THE REAL ECONOMY

Previous studies by the likes of the Bank for International Settlements (BIS) suggest that higher capital requirements have a certain negative impact on GDP in the short term.²⁹ In autumn 2010, the Riksbank estimated that a 1 percentage point increase in banks' capital over a four-year period would cause interest margins on lending to rise gradually by around 0.1 percentage points.³⁰ The estimation of how higher lending rates then impact on the real economy is based partly on the Riksbank's general equilibrium model RAMSES. Higher lending rates put a damper on demand growth and elicit a monetary policy response such that the repo rate is around 0.05 percentage points lower after 18 quarters. Overall, however, GDP at this point is still around 0.1 per cent lower than in a base scenario with unchanged capital requirements.³¹ In the absence of any monetary policy response, GDP will instead be 0.2 per cent lower.

The recently announced increase in risk weights entails a targeted increase in capital requirements for residential mortgages in the region of 1.5 percentage points.³² Since mortgages account for less than a third of banks' total lending,³³ this suggests that the overall effects on lending rates and the real economy can be expected to be limited. This applies even though the implementation period will probably be shorter than in the calculations above.

²⁹ See "Assessing the macroeconomic impact of the transition to stronger capital and liquidity requirements", BIS, December 2010. Another working group under the Basel Committee studied the long-term consequences for the real economy of capital requirements being raised by 1 percentage point and estimated the net effect in the long term to be an increase in GDP of 0-2 per cent – see "An assessment of the long-term economic impact of stronger capital and liquidity requirements", BIS, August 2010.

³⁰ This assumes that banks pass on the cost to households and firms in line with historical pricing behaviour. See also the article "The effects of Basel III on macroeconomic development" in *Monetary Policy Report 2011:1*, Sveriges Riksbank.

³¹ The estimated effect on GDP is in line with the estimates presented in the BIS study. The Riksbank's time-series model results in a slightly greater effect, as do the time-series models used in the BIS study. See also the article "The effects of Basel III on macroeconomic development" in *Monetary Policy Report 2011:1*, Sveriges Riksbank.

³² This calculation assumes that the minimum requirement for the capital base ratio is 15.5 per cent. See also *Risk weight floor for mortgages*, Finansinspektionen, November 2012, and the box "Minimum requirement for the banks' capital if risk weights for Swedish mortgages are raised" in *Financial Stability Report 2013:2*, Sveriges Riksbank. The higher risk weights for mortgages mean that the capital requirement for mortgages rises by $((0.25 \times 0.155) - (0.15 \times 0.155)) \times 100 = 1.55$ per cent.

³³ See *Bank Interest Rates and Lending 2013:2*, Finansinspektionen.

HOW FAR DOES THE MANDATE FOR MACROPRUDENTIAL SUPERVISION EXTEND?

FI's decision to increase the risk weight floor for mortgages under its mandate for macroprudential supervision raises some interesting questions concerning the interpretation of the mandate for macroprudential supervision and the implications this may have for other authorities.

FI's *microprudential* supervision aims to ensure individual financial institutions' resilience to credit losses. Its *macroprudential* supervision is intended to play a complementary role and strengthen banks' resilience to systemic risks. These risks can be seen as the negative externalities for the financial system that result from various events in the macroeconomy, such as a fall in house prices, and ultimately threaten financial stability. To identify appropriate instruments to counter systemic risks, FI therefore needs to take a position on the origins of systemic risks.

FI takes the view that, while the risk of banks suffering heavy credit losses on mortgages is currently small, it is impossible to rule out the possibility of, for example, a fall in house prices increasing the risk of credit losses on banks' lending to non-financial firms, with this impacting in turn on financial stability.³⁴ From this angle, the principal origin of systemic risk is not so much in the credit risks associated with mortgages as in the credit risks associated with lending to non-financial firms. If FI's primary concern is financial stability, this scenario would actually therefore motivate higher risk weights for business lending. High risk weights for mortgages imply instead that lending to non-financial firms is relatively cheaper for banks to finance, and the risk weights therefore no longer reflect the overall credit and systemic risk associated with the specific asset class.

In choosing higher risk weights ahead of higher countercyclical capital buffers, FI states that the latter would impact more widely on lending and risk pushing up interest rates on business lending.³⁵ To the extent that this reflects a stabilisation policy

³⁴ This is because, in this scenario, households may repair their balance sheets by making larger repayments and reducing their demand, which could lead to increased credit losses at non-financial firms and so impact on financial stability. See also *The Swedish Mortgage Market 2013*, Finansinspektionen, July 2013.

³⁵ See *How FI can decrease the risks inherent in household debt*, Finansinspektionen, November 2013.

agenda, this can be seen as a broadening of the mandate for macroprudential supervision.³⁶

³⁶ A decision to increase the risk weights for lending to non-financial firms could put a damper on lending to these firms in the short term and so have undesirable effects on macroeconomic development in an economic climate where resource utilisation in Sweden is low.

SPECIAL ANALYSIS

House Prices and Home-building – an International Perspective

House prices are influenced by many different, and often country-specific, factors. This analysis explores developments in the supply of housing in the form of housing investment in a number of countries. The analysis concentrates on the recent financial crisis but also looks at other serious crises with falling house prices. More specifically, it studies the extent to which large drops in house prices have been preceded by a period of high home-building activity. In theory, housing investment will increase when house prices are climbing and the production of new housing is considered a good investment. This rise in investment will then be an important part of the process of reining in prices through an increase in the supply of housing. If, for some reason, housing investment has been excessively high, there is a risk of the increase in supply leading to sharp price drops, with serious consequences for the economy.

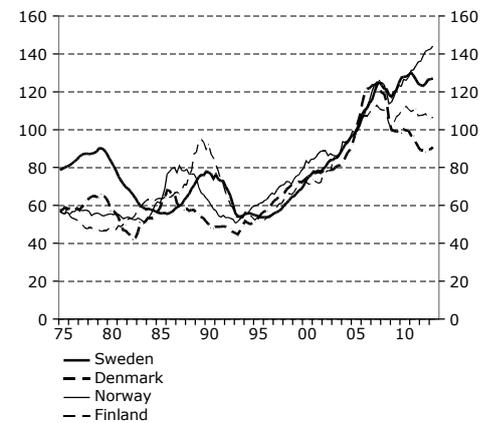
INTERNATIONAL HOUSE PRICE DEVELOPMENTS³⁷

In the decade preceding the financial crisis, from 1997 to 2007, house prices rose rapidly in many OECD countries. Two exceptions were Germany and Japan, where real house prices instead fell continuously (see Diagrams 40 and 41). After the financial crisis erupted, many countries saw a sharp decrease in house prices. Real house prices in the US fell around 25 per cent before bottoming out in 2012 (see Diagram 41). Prices also dropped just over 25 per cent in real terms in Denmark and the Netherlands, and tumbled even further in Ireland and Spain. In the UK, real house prices declined just over 15 per cent from their peak (see Diagram 40). In other countries, prices fell relatively little and then recovered. These include Sweden, Norway, Australia and Canada. Real house prices in Canada and Norway are now 20 per cent higher than at the beginning of 2007, while Swedish and Australian real house prices have increased around 10 per cent over the same period (see Diagrams 39 and 41).

³⁷ The house prices used here are from the Federal Reserve Bank of Dallas. A representative house price index, generally for single-family dwellings, was chosen for each country and deflated by the consumption deflator for that country to obtain a real price index. See Mack, A. and E. Martínez-García (2011), "A Cross-Country Quarterly Database of Real House Prices: A Methodological Note", Working Paper No. 99, Federal Reserve Bank of Dallas, 2011.

Diagram 39 Real House Prices

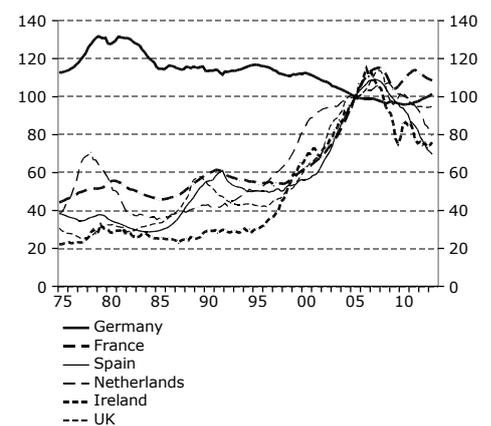
Index 2005=100, quarterly values



Source: Federal Reserve Bank of Dallas.

Diagram 40 Real House Prices

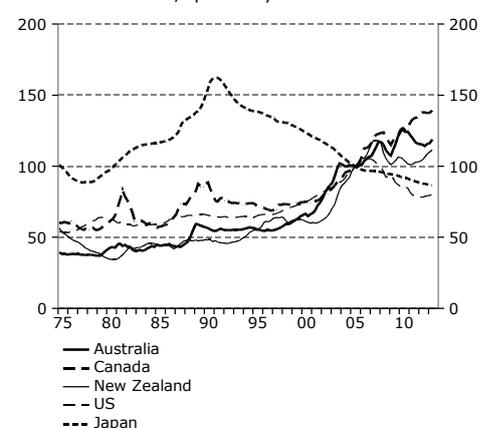
Index 2005=100, quarterly values



Source: Federal Reserve Bank of Dallas.

Diagram 41 Real House Prices

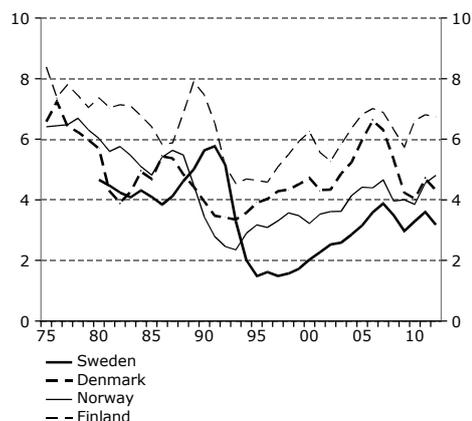
Index 2005=100, quarterly values



Source: Federal Reserve Bank of Dallas.

Diagram 42 Housing Investment

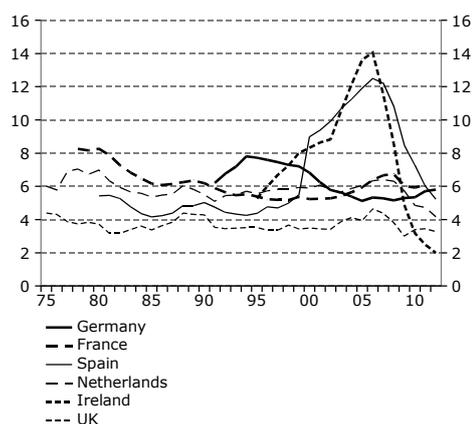
Per cent of GDP, annual values



Sources: Eurostat and NIER.

Diagram 43 Housing Investment

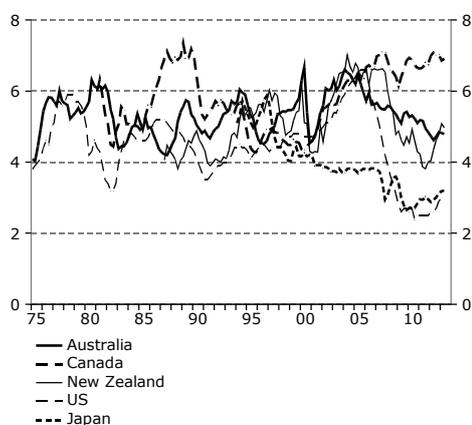
Per cent of GDP, annual values



Sources: Eurostat and NIER.

Diagram 44 Housing Investment

Per cent of GDP, quarterly values



Sources: OECD, Bureau of Economic Analysis and NIER.

DEVELOPMENTS IN HOUSING INVESTMENT

Housing investment is needed to address demographic needs and the deterioration of older housing. Demand for housing can also rise with household income. The average level of housing investment as a share of GDP varies considerably between countries. This may, for example, be due to differences in demographics and household formation, but also to differences in construction costs, taxes, subsidies and rent regulation.

Diagrams 42 to 44 show how housing investment as a share of GDP has developed in the countries above. In the US, housing investment climbed from 4.7 per cent in 1999 to a historically high 6.6 per cent of GDP at the beginning of 2006 before falling back to 2.5 per cent in 2010 (see Diagram 42). In Spain, developments have been more dramatic, with investment soaring from 5.5 per cent of GDP in 1999 to more than 12 per cent in 2006, and then dropping back to 5 per cent in 2012 (see Diagram 43). In Ireland too, there was a big increase before the crisis, from 8 per cent of GDP in 1999 to 14 per cent in 2006, followed by a dive to 2 per cent in 2012 (see Diagram 43).

In Denmark, housing investment's share of GDP climbed continuously in the years before the crisis but then dropped back again (see Diagram 42). In Norway and Sweden, too, housing investment increased in the decade before the crisis, but here this was from historically low levels, and investment does not seem to have been especially high when the crisis struck (see Diagram 42). Housing investment also rose in some other European countries prior to the crisis, albeit not as far. It did not increase notably in the Netherlands, however.

In Japan and Germany, where real house prices fell during the decade before the crisis, housing investment continued to decline as a share of GDP.

INCREASE IN HOUSING INVESTMENT PRECEDED PRICE FALLS IN MANY COUNTRIES

Diagram 45 illustrates the relationship between rising housing investment in the years before the financial crisis and how house prices fared after the crisis. The horizontal axis shows the difference between average housing investment as a percentage of GDP in 2005–2007 and 1980–2004, while the vertical axis shows average real price developments in 2008–2012. Home-building activity in the pre-crisis years was well above the average for 1980–2004 in some countries, most notably Spain and Ireland. It also seems to have been above the historical average in the US, New Zealand, Canada and Denmark, all of which,

with the exception of Canada, were then hit hard by falling house prices. In Canada, real house prices rose on average in 2008–2012. In the Netherlands and the UK, meanwhile, real house prices fell significantly without housing investment having been especially high even before the crisis.

In the majority of countries that saw a sharp decline in house prices after the financial crisis, this was preceded by several years of high housing investment. Statistically, it is difficult to say anything general about the role of housing investment in price movements following the financial crisis, although the relationship is strong in some countries.³⁸

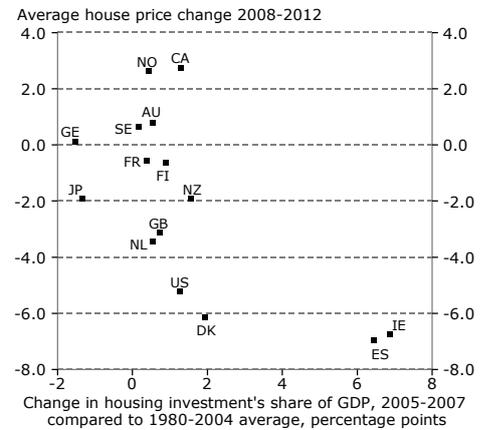
SOME HISTORICAL COMPARISONS

To compare developments in real house prices following the recent financial crisis, Reinhart and Rogoff have documented house price movements in connection with banking crises in developed countries since the Second World War with a special focus on five main crises, namely Spain 1977, Norway 1987, Finland 1991, Sweden 1991 and Japan 1992.³⁹ Laeven and Valencia (2012)⁴⁰ identify systemic banking crises occurring between 1970 and 2011. They too use these five crises, as well as the recent financial crisis, as their selection for developed countries.⁴¹ The present analysis looks at how home-building activity and house prices developed at these times.

Finland was hit hard by the crisis at the beginning of the 1990s, with real house prices plummeting 45 per cent from the end of 1989 to the end of 1995 (see Diagram 39). In the years before the crash, housing investment climbed 2 percentage points to around 8 per cent of GDP (see Diagram 46).

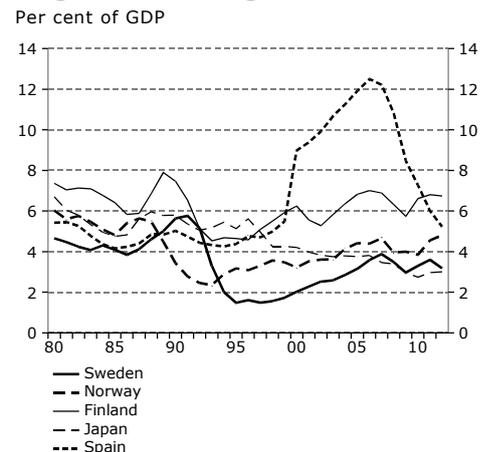
In Sweden, real house prices dropped around 30 per cent from the beginning of 1990 to the end of 1995 (see Diagram 39). Housing investment rose from around 4 per cent of GDP in 1986 to 6 per cent in 1991 (see Diagram 46).

Diagram 45 Real House Prices and Housing Investment



Note. The first observations in the data set are 1992 for Germany and 1987 for New Zealand. Sources: European Commission, Eurostat, Federal Reserve Bank of Dallas, OECD, World Bank and NIER.

Diagram 46 Housing Investment



Sources: European Commission, Eurostat, OECD, Central Statistics Office Ireland and NIER.

³⁸ There seems to be a negative relationship when comparing the countries considered here, but the results are heavily influenced by developments in Ireland and Spain. The explanatory power as measured by R-squared is in this case 0.4 per cent. The relationship has also been tested for other time intervals and seems to hold, although the explanatory power does generally decrease somewhat.

³⁹ See Reinhart, C. and K. Rogoff, "Is the 2007 U.S. Sub-Prime Financial Crisis So Different? An International Historical Comparison", *American Economic Review* 98(2) 339-344, and *This Time is Different*, Princeton University Press, 2009.

⁴⁰ See Laeven, L. and F. Valencia, "Systemic Banking Crises Database: An Update", IMF Working Paper No. 12/163.

⁴¹ They do, however, date the crises differently in Norway (1991) and Japan (1997). Those who date the Japanese crisis to 1997 probably do so because it escalated at this time with the failure of a major bank.

Norwegian real house prices plunged almost 40 per cent from mid-1987 to the beginning of 1993 (see Diagram 39). Housing investment climbed from 4.8 per cent of GDP in 1985 to 5.6 per cent in 1987, before falling dramatically to just under 2.5 per cent in 1993 (see Diagram 46).

In Spain, the crisis is dated to 1977. Real house prices did not fall at all in the first years after the crisis, but dropped almost 25 per cent from mid-1979 to 1984 (see Diagram 40). Data for housing investment as a share of GDP are available only from 1980 onwards; it fell from 5.5 per cent in 1980 to just over 4 per cent in 1985 (see Diagram 46).

Japanese real house prices peaked at the beginning of 1991 and have fallen more or less continuously since (see Diagram 41). Housing investment as a share of GDP was, on average, 0.7 percentage points higher in 1988–1991 than in 1984–1987 (see Diagram 46).

All in all, housing investment as a share of GDP seems to have risen to varying degrees ahead of the aforementioned serious crises. In Sweden and Finland, the crises were preceded by accelerated home-building activity, as measured by the ratio of housing investment to GDP.

CONCLUSION

The survey above reveals that increased housing investment preceded the sharp drop in house prices in many countries following the recent financial crisis. Housing investment was historically high in the US, Spain, Denmark and Ireland, which all saw steep falls in house prices. This does not apply to all countries, however, and so it is difficult to draw any general conclusions. A strong rise in housing investment can, however, be interpreted as a symptom of unsustainable developments and therefore serve as a warning sign of an increased risk of house prices collapsing. Housing investment in Sweden has been low for a long period, unlike in many of the countries where house prices tumbled in the wake of the financial crisis. When housing investment is low, this may, other things being equal, indicate that the risk of a substantial downturn in house prices is reduced.

SPECIAL ANALYSIS

The Budget Bill for 2014

The government proposes unfunded measures totalling SEK 24 billion in its budget bill for 2014. The bulk of these measures, or SEK 21 billion, are on the revenue side. The proposals include increasing the earned-income tax allowance and the threshold for state income tax, and reducing the taxation of those aged 65 and over. The Riksdag has decided that the threshold for state income tax will not, however, be lowered. The NIER therefore estimates that measures totalling SEK 21 billion will be implemented in 2014.

Measures Proposed in the Budget Bill for 2014

General government net lending is influenced partly by macroeconomic developments and partly by fiscal policy measures. Table 12 presents the NIER's interpretation of the direct effects on general government net lending of the proposals in the budget bill for 2014, broken down in line with the National Accounts.

LOWER TAXATION OF WORKERS AND PENSIONERS

The government proposes an increase in the earned-income tax allowance, which will reduce net lending by SEK 12 billion in 2014. Those on incomes around the average will pay SEK 200–300 less tax each month, while the biggest decrease in absolute terms will be SEK 337 for those with monthly earnings above SEK 30,000.

The taxation of those aged 65 and over is also being reduced by raising the basic allowance for a tax saving of around SEK 100 per month. This will reduce net lending by SEK 2.5 billion.

In addition, the tax rate for foreign residents working in Sweden will be lowered from 25 to 20 per cent, reducing net lending by SEK 0.3 billion.

Table 12 The Composition of Fiscal Policy 2014

SEK billion, current prices

	Budget Bill	Forecast
Households' direct taxes ¹	-17.8	-14.8
Earned income tax credit, fifth step	-12	-12
Reduced income tax for elderly	-2.5	-2.5
Raised lower threshold for state income tax	-3	0
Reduced tax for foreign residents (SINK)	-0.3	-0.3
Other taxes	-0.4	-0.4
Reduced social security contributions	-1.8	-1.8
Taxes on capital	0.4	0.4
Raised excise taxes	1.1	1.1
Other income	-2.8	-2.8
Income	-21.0	-18.0
General government consumption	3.3	3.3
Central government consumption	1.0	1.0
Central government grants to local government	2.3	2.3
Transfers to households	0.4	0.4
Transfers to business	-0.7	-0.7
Expenditure	3.1	3.1
Total effect on general government net lending	-24.1	-21.1

¹The increase in the threshold for state income tax proposed in the budget bill for 2014 will not go ahead following a decision in the Riksdag. This equates to an increase in net lending of SEK 3 billion in 2014 relative to the proposals in the budget bill.

Note. The table presents the direct effect of a measure. The direct effect does not take account of whether the measure might lead to behavioural changes which, in turn, might lead to changes in tax revenue or transfer costs.

Source: Budget bill for 2014, NIER.

PROPOSED INCREASE IN THRESHOLD FOR STATE INCOME TAX BLOCKED BY RIKSDAG

Besides raising the earned-income tax credit and lowering the taxation of the elderly, the government proposed raising the threshold for state income tax from SEK 36,150 per month to SEK 37,400, resulting in a monthly tax saving of up to SEK 250 and reducing net lending in 2014 by SEK 3 billion. However, the Riksdag has decided that this change will not be made. Household direct taxes are therefore reduced by SEK 3 billion less in the NIER's forecast than proposed in the budget bill.

All in all, the NIER estimates that household direct taxes will decrease by SEK 14.8 billion in 2014 (see Table 12).

DIFFERENTIATED UNEMPLOYMENT CONTRIBUTIONS TO BE DISCONTINUED

Differentiated unemployment insurance contributions were introduced on 1 January 2007 in the form of employee contributions varying with the level of unemployment in each fund. One of the aims of this policy was to encourage wage restraint: the cost of higher unemployment resulting from large pay rises would to some extent be borne by employees, so giving them less of an incentive to push for such rises.

This policy has attracted criticism from several quarters.⁴² The government notes that the social parties have been keen to abolish differentiated unemployment contributions, and this is now proposed in the budget bill for 2014. More than 2.2 million employees will see an average decrease of around SEK 90 in their monthly unemployment contributions, which will reduce net lending by an estimated SEK 2.8 billion.

LOWER SOCIAL SECURITY CONTRIBUTIONS

The budget bill proposes a number of changes to social security contributions. To stimulate research and development, the government proposes lowering social security contributions for R&D personnel by 10 percentage points up to a ceiling of SEK 230,000 per group of companies per month.⁴³ This will reduce net lending by SEK 0.8 billion.

The government also proposes a further reduction of 2.5 percentage points in social security contributions for small businesses to 7.5 per cent, which will reduce net lending by an estimated SEK 0.5 billion in 2014.

Social security contributions for young people below the age of 23 are to be lowered from 15.49 to 10.21 per cent. Contributions for those aged 23 and 24 will be unchanged, while those aged 25 will no longer benefit from a reduced rate. This redistribution of social security contributions between age groups will reduce net lending by SEK 0.1 billion.

⁴² See, for example, chapter 7 of *Swedish Fiscal Policy 2011*, Swedish Fiscal Policy Council.

⁴³ See Svensson, R. "Effekter av ökade offentliga satsningar på FoU" [Effects of increased public investment in R&D] in "Tillväxt- och sysselsättningseffekter av infrastrukturinvesteringar, FoU och utbildning – en litteraturöversikt" [Growth and employment effects of infrastructure investment, R&D and education – A literature survey], *Specialstudier*, 37, December 2013, NIER, for an analysis of the growth effects of tax reliefs for R&D.

SLIGHT INCREASE IN EXCISE AND CAPITAL TAXES

The purpose of excise taxes is not only to generate tax revenue but also to reduce the consumption of certain goods and services. In the budget bill for 2014, the government focuses on alcohol and energy. Altogether, excise taxes on these goods will increase by SEK 1.1 billion in 2014.

The government also proposes several minor measures relating to capital taxes, including certain changes to the so-called 3:12 rules on income-shifting. Taken together, these will increase net lending by SEK 0.4 billion in 2014.

LIMITED MEASURES ON THE EXPENDITURE SIDE

Measures on the expenditure side total just SEK 3 billion. Much of this, SEK 2 billion, consists of higher central government payments to municipalities, primarily for initiatives in education such as career services for teachers, increased instruction in Swedish and mathematics, summer schools, help with homework, and the cancellation of the previously announced reduction in central government payments for upper secondary schools. Higher central government consumption will reduce net lending by SEK 1 billion, of which SEK 0.2 billion is an increase in defence expenditure.

On the transfer side, housing allowance will increase and the student allowance for the unemployed will be extended. Altogether, transfer payments to households will rise by SEK 0.4 billion. Transfers to firms will fall, meanwhile, due to reduced rural area support.

FISCAL POLICY ROUGHLY NEUTRAL IN 2014

All in all, the NIER estimates that general government net lending will be SEK 21 billion lower with the proposed measures than without (see Table 12). The tax reductions for households in particular will serve to stimulate demand. Household consumption would be lower in 2014 without these measures.

Cyclically-adjusted net lending will fall somewhat in 2014. However, the decrease is due largely to capital items, including Vattenfall not paying any dividends to central government in 2014. Excluding capital items, the change in cyclically-adjusted net lending is marginal (see “Fiscal Policy” in the chapter “Macroeconomic Development and Economic Policy 2013–2018”).