The Swedish Economy

Summary. August 2013

National Institute of Economic Research

KONJUNKTUR KI INSTITUTET

The Swedish Economy
August 2013

NATIONAL INSTITUTE OF ECONOMIC RESEARCH (NIER)
KUNGSGATAN 12-14, BOX 3116, SE-103 62 STOCKHOLM
TEL: +46 8 453 59 00, FAX: +46 8 453 59 80
KI@KONJ.SE, WWW.KONJ.SE

ISSN 0039-7296, ISBN 978-91-86315-44-3

THE NATIONAL INSTITUTE OF ECONOMIC RESEARCH (NIER) prepares analyses and forecasts of the Swedish and international economy and conducts related research. The NIER is a government agency accountable to the Ministry of Finance and is funded largely by the Swedish government. Like other government agencies, the NIER has an independent status and is responsible for the assessments that it publishes.

The Swedish Economy contains analyses and forecasts of the Swedish and international economy. It is the English summary of the report in Swedish, **Konjunkturläget.**

There are also statistics in the form of outcome and forecast data for the development of the Swedish and international economy. See www.konj.se/statistics.

Contents

Summary

Swedish GDP growth will pick up towards the end of 2013 and economic recovery will begin. Both consumer and business confidence is improving in most OECD countries. More relaxed fiscal policy in the euro area and the US will also contribute to stronger growth. However, resource utilisation is weak, and the Swedish labour market will not return to cyclical balance until 2017. Inflation is low, but the Riksbank will not cut the repo rate because it is also taking account of household debt in its monetary policy deliberations. On the other hand, interest rates will not begin to be raised until 2015. The government is expected to propose unfunded measures of SEK 25 billion in the budget bill for 2014, making fiscal policy neutral. General government net lending is negative, so fiscal policy will need to be tightened in 2015–2017 for the surplus target for general government net lending to be met.

RECOVERY IN SIGHT

As expected, GDP growth was weak in the second quarter (see Diagram 1). Household consumption slowed, and exports fell for the fourth successive quarter. The weak growth in demand resulted in largely unplanned stockbuilding in industry. Firms are expected to begin correcting stock levels in the third quarter, so GDP will grow slowly.

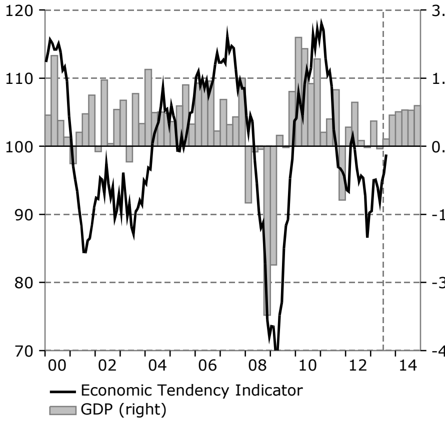
Meanwhile, both consumer and business confidence indicators have continued to climb and are now close to their historic averages (see Diagram 2). This points to higher GDP growth ahead, and economic recovery will begin in the fourth quarter this year. This is essentially the same conclusion as in the NIER's June forecast.

HIGHER GDP GROWTH IN OECD COUNTRIES

In the euro area, GDP grew by 0.3 per cent in the second quarter after six successive quarters in decline (see Diagram 3). Although a number of temporary factors contributed to the rise in GDP, and there are major variations between the euro countries, this is a clear sign that the situation is improving. This picture is confirmed by confidence indicators, which have continued to gain ground over the summer and, in several cases, are now approaching their historical averages. Players in financial markets are also showing a degree of optimism, probably due mainly to the reduced risk of financial collapse in some of the more fiscally frail countries in the euro area. One important explanation for the decline in GDP is the spending cuts and tax increases introduced to shore up government finances in the majority of euro countries. Now that big steps have been taken in this direction,

Diagram 1 Economic Tendency Indicator and GDP

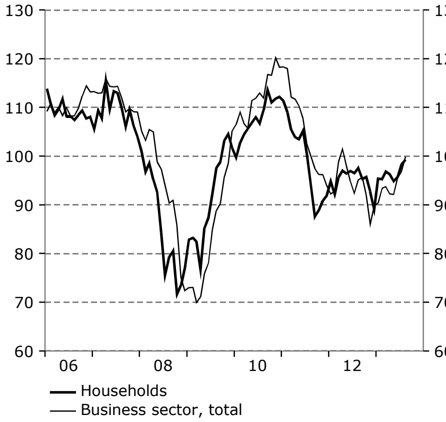
Index mean=100, monthly values and percentage change, seasonally adjusted quarterly values, respectively



Sources: Statistics Sweden and NIER.

Diagram 2 Household and Business Confidence Indicators

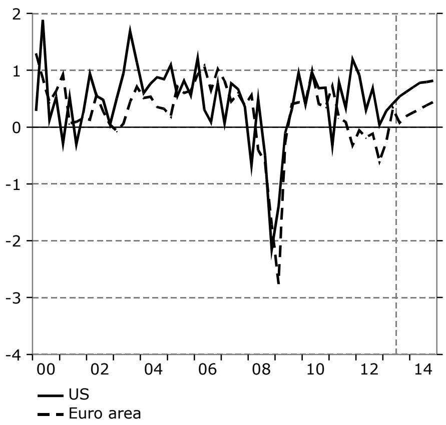
Index mean=100, seasonally adjusted monthly values



Source: NIER.

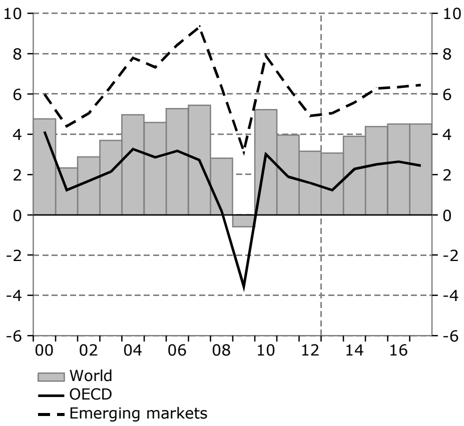
Diagram 3 US and Euro Area GDP

Percentage change, seasonally adjusted quarterly values



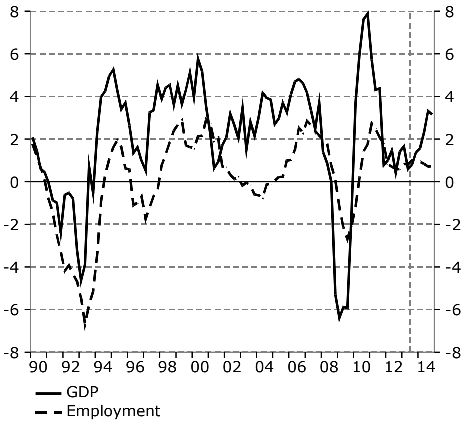
Sources: Bureau of Economic Analysis, Eurostat and NIER.

Diagram 5 GDP World-wide, in OECD Countries and Emerging Markets
Percentage change



Note: Emerging markets here refers to all non-OECD member countries.
Sources: OECD, IMF and NIER.

Diagram 4 GDP and Employment
Annual percentage change, quarterly values



Sources: Statistics Sweden and NIER.

Diagram 6 Unemployment and Employment Rate
Percent of labour force and of population aged 15–74, respectively, seasonally adjusted quarterly values

Sources: Statistics Sweden and NIER.

the extent of these contractionary austerity measures will dwindle.

Growth in the US has also been held back by tight fiscal policy, but GDP still gained 0.4 per cent in the second quarter. Household consumption and housing investment grew strongly despite tax increases. Homebuilders remain optimistic, household wealth has increased, and fiscal policy is set to become less contractionary. The brighter outlook in Europe will contribute to higher exports, which will support recovery in the US even though exports account for only a small part of aggregate demand. Taken together, these factors will contribute to stronger growth going forward.

Growth in emerging markets[1] slowed in 2012 to around 5 per cent and has not shown the same recent signs of picking up as in the OECD countries (see Diagram 4). The main reason for the slowdown is relatively high resource utilisation and so more active stabilisation policies. There are also structural problems in several of the large emerging markets which are holding back growth, such as overinvestment in China and low confidence in monetary policy in India. GDP growth in these markets will accelerate slightly in 2014 before climbing to just over 6 per cent in 2015–2016.

SLOW RECOVERY IN THE LABOUR MARKET

Despite weak GDP growth in Sweden since late 2011, employment has continued to climb. It is unusual for employment to grow at around the same rate as GDP for such a long period (see Diagram 5).

Employment has increased at roughly the same rate as the working-age population, so the employment rate has been largely unchanged, with a marginal increase in recent quarters (see Diagram 6). Viewed in this way, the labour market has been stable in recent years, but labour force participation has also increased, especially among older people[2], with the result that unemployment rose through to the beginning of 2013. The rapid growth in the labour force has meant that there are plenty of unused resources in the labour market despite rising employment.

The increase in the labour force has slowed slightly due to lower growth in the working-age population and the effects of the government's supply-stimulating policy largely having been realised. Unemployment has therefore eased somewhat since peaking in the first quarter this year. It will also fall next year, even though employment growth will be no higher than before.

---

[1] Defined as countries that are not members of the OECD.

[2] See the special analysis "Labour Market Participation among Older People" in the present report.

GDP growth will move up a gear at the end of 2013, but the high level of unused resources at firms means that it will take time for recruitment to pick up. At the end of 2014, unused resources at firms are expected to be down at normal levels, and employment will then grow somewhat faster, with the result that the employment rate will rise and unemployment will fall more quickly. However, the labour market is not expected to return to cyclical balance until 2017.

SLOWER WAGE GROWTH PAVES WAY FOR LOW INFLATION

High unemployment has helped put a damper on wage growth, subject to the usual lag (see Diagram 7). This year's settlements have resulted in new three-year central deals covering the majority of employees in the Swedish labour market, so uncertainty about future wage growth has eased. Wages are forecast to climb by just under 3 per cent per year on average in 2013–2017.

Together with low resource utilisation both in Sweden and abroad, the lower pay increases agreed relative to previous years spell low inflationary pressures ahead. Inflation as measured by the CPIF, which is currently around 1 per cent, will therefore climb only slowly towards 2 per cent at the end of 2016 (see Diagram 7).

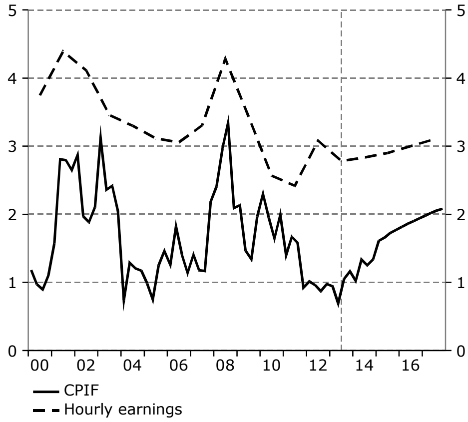
UNCHANGED REPO RATE THROUGHOUT 2014

The Riksbank has clearly communicated that it does not plan to lower the repo rate unless the economic climate deteriorates further, even though inflation is well below target. One important argument for the majority on the Riksbank's executive board is concern about the escalation of household debt. If households borrow too much today based on unrealistic expectations for future interest rates, incomes and/or house prices, this could lead to a sharp fall in household consumption in the future when expectations correct and households start to repay their debts.

The Riksbank is expected to start raising the repo rate in the first quarter of 2015 once the economic recovery has gained momentum and there are clear signs of improvement in the labour market (see Diagram 8). This is later than predicted in the Riksbank's July forecast, where the repo rate begins to rise in mid-2014. The difference is due to the NIER expecting the Riksbank to revise down its forecasts for wage growth and inflation for the years after 2014. The Riksbank will then no longer have any reason to raise the repo rate as early as mid-2014. The central bank's longer-term inflation forecasts have, on average, been too high in recent years (see the special analysis "The Riksbank has Systematically Overestimated Inflation" in the present report).

Diagram 7 Hourly Earnings and Consumer Prices

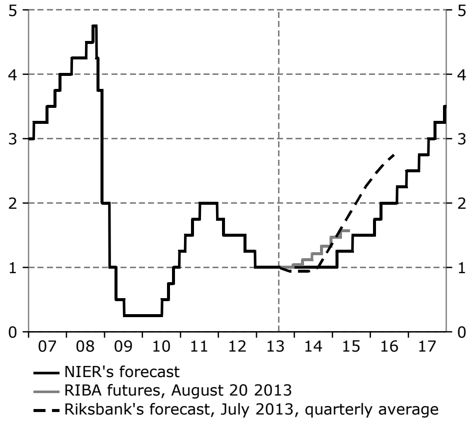
Annual percentage change, quarterly and annual values, respectively



Sources: National Mediation Office, Statistics Sweden and NIER.

Diagram 8 Repo Rate

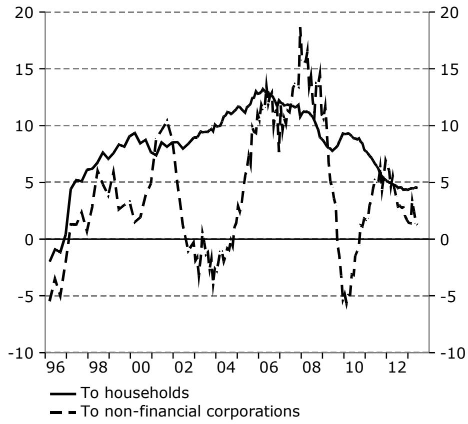
Percent, daily values



Sources: NASDAQOMX, The Riksbank and NIER.

Diagram 9 Lending from Financial Corporations in Sweden

Annual percentage change, monthly values



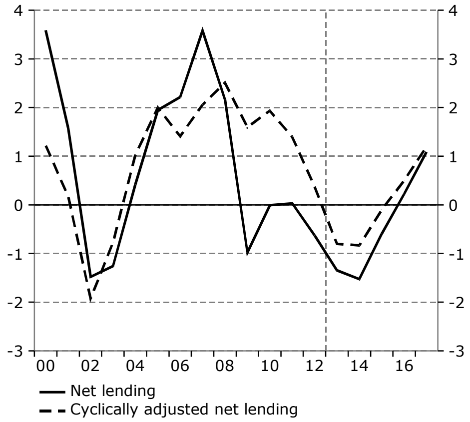
Source: Statistics Sweden.

As things stand, the NIER does not see household debt as a reason not to lower the repo rate. Annual growth in household debt has slowed to just under 5 per cent in recent years (see Diagram 9) and is now on a par with growth in disposable income. At the same time, household saving has risen to high levels. Although these figures are for the average household, and there are certainly some households with dangerously high debts, the NIER does not believe that household debt is growing at an unsustainable rate. There are fundamental factors that can explain much of the build-up of debt. In addition, the central bank policy rate is not an effective instrument for reining in house prices and debt.

Inflation is currently well below target, and resource utilisation is weak. The NIER therefore sees a case for cutting the repo rate now and keeping it lower than in the forecast for at least a year to help accelerate economic recovery and push up inflation. The positive effects of this slightly more expansionary monetary policy would be relatively limited, however, and should not be overestimated.

Diagram 10 Actual and Cyclically Adjusted General Government Net Lending

Percent of GDP and percent of potential GDP, respectively



Sources: Statistics Sweden and NIER.

FISCAL POLICY WILL NEED TIGHTENING AFTER 2014 FOR SURPLUS TARGET TO BE MET

The government has announced unfunded reforms of SEK 25 billion this year, and the NIER estimates further unfunded reforms of SEK 25 billion next year, just over half of this in the form of tax reductions for households and the remainder as increases in expenditure. With these reforms, fiscal policy is considered to have an expansionary effect this year, with cyclically-adjusted general government net lending falling to –0.8 per cent of potential GDP (see Diagram 10). Next year, fiscal policy will be neutral despite the same level of unfunded measures, due partly to the automatic stabilising effect from the downward adjustment of income-based pensions.

The expansionary fiscal policy stance this year and neutral stance next year may be justified by the weak economic climate, but will necessitate tightening further ahead. Although, for example, a fifth earned-income tax credit will encourage a slight permanent increase in employment and so higher potential GDP, this measure will not be self-financing. For the target of a 1 per cent surplus in general government net lending to be met, the NIER estimates that fiscal policy will need to be designed such that cyclically adjusted (and actual) net lending amounts to 1.2 per cent of potential GDP when the economy is in cyclical balance.[3] To achieve this, tightening equivalent to 2 per cent of GDP will be required in 2015–2017. Some of this tightening will come from the automatic budget-strengthening effect of un-

[3] See the special analysis "The Surplus Target for General Government Finances", *The Swedish Economy*, March 2013.

changed rules, but there will also be a need for discretionary budget reinforcements to meet the surplus target. The NIER estimates that the scope for reforms, defined as the margin in the central government budget for new permanent unfunded measures, is close to zero in the period 2014–2017. The tax cuts and spending increases introduced in 2014 need to be offset by tax increases and/or spending cuts of at the least the same size in 2015–2017.

MAINTAINING THE PUBLIC SECTOR COMMITMENT WILL REQUIRE TAX INCREASES

The automatic strengthening of the budget referred to above depends to a large extent on the erosion of the public sector commitment under unchanged fiscal rules. Without new decisions, payments in the various transfer systems will fall, and staff density in health care, education and social services will drop. A growing number of elderly and young people means that expenditure will need to increase to maintain the quality of health care and education, and this will require higher municipal taxes unless central government grants increase.

For the public sector commitment to be maintained at 2013 levels, the NIER estimates that tax increases of around SEK 80 billion will be required in 2014–2017 if the surplus target is to be met (see "Public finances" under "Macroeconomic Developments and Economic Policy 2013–2017" below). The NIER does not advise on whether the public sector commitment should be cut and/or taxes raised – this is a matter for parliament and the municipalities to decide. However, the credibility of the surplus target may be undermined if the government does not present transparent plans for how it intends to meet the target. It may be appropriate to adjust the level of the surplus target, but such a move should be analysed thoroughly so that the credibility of the target is not further eroded.

Table 1 Selected Indicators

Percentage change unless otherwise indicated

	2010	2011	2012	2013	2014	2015	2016	2017
GDP, market price	6.6	3.7	0.7	1.1	2.5			
GDP, calendar-adjusted	6.3	3.7	1.1	1.1	2.6	3.3	2.9	2.6
Current Account[1]	6.9	7.3	6.7	6.0	5.7	5.2	4.7	4.4
Hours worked[2]	2.0	2.4	0.6	0.3	0.7	1.2	1.2	1.1
Employment	0.6	2.3	0.7	0.9	0.8	0.9	1.0	1.1
Unemployment[3]	8.6	7.8	8.0	8.0	7.8	7.5	7.2	6.7
Labour market gap[4]	−2.3	−1.2	−1.3	−1.5	−1.4	−1.0	−0.5	−0.1
Output gap[5]	−3.6	−1.5	−1.9	−2.4	−1.9	−0.8	−0.2	0.1
Hourly earnings[6]	2.6	2.4	3.1	2.8	2.8	2.9	3.0	3.1
Labour cost, business sector[2]	0.1	2.9	3.7	2.6	2.8	3.0	3.1	3.2
Productivity, business sector[2]	5.0	2.4	1.1	1.2	2.2	2.5	2.2	1.9
CPI	1.2	3.0	0.9	0.1	0.8	2.0	2.7	3.0
CPIF	2.0	1.4	1.0	1.0	1.2	1.7	1.9	2.0
Repo rate[7,8]	1.25	1.75	1.00	1.00	1.00	1.50	2.50	3.50
Interest rate, 10-year government bond[7]	2.9	2.6	1.6	2.1	2.7	3.3	3.9	4.4
Index for the Swedish krona (KIX)[9]	114.3	107.6	106.1	102.7	102.0	101.2	101.2	101.3
GDP, world-wide	5.2	4.0	3.2	3.1	3.9	4.4	4.5	4.5
General government net lending[1]	0.0	0.0	−0.6	−1.3	−1.5	−0.6	0.2	1.1
General government consolidated gross debt (Maastricht debt)[1]	39.4	38.4	38.1	41.2	41.2	40.4	39.1	37.2
Cyclically adjusted net lending[10]	1.9	1.4	0.4	−0.8	−0.8	−0.1	0.5	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.

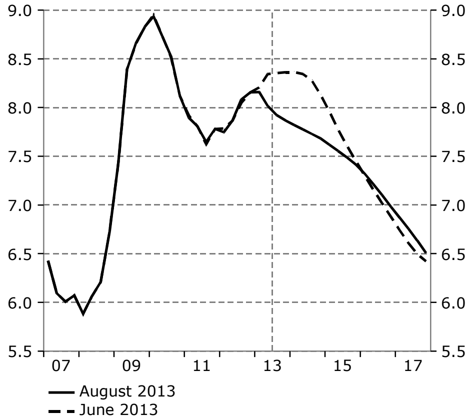
Forecast revisions 2013–14

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

- GDP growth in the OECD countries as a whole was largely as expected during the first half of this year. Growth was slightly weaker in the US and Japan, but slightly stronger in the euro area. Confidence indicators have continued to climb, but no faster than expected. All in all, the GDP forecast for the OECD countries has been revised down marginally to 1.2 per cent this year and is unchanged at 2.3 per cent next year.
- Growth in emerging markets so far this year has slowed somewhat further than anticipated. The forecasts for GDP growth in a number of countries have been lowered for both this year and next year. On balance, this means that the forecast for global GDP has been revised down slightly.
- In Sweden, exports in particular were weaker than expected in the first half of the year, but growth in household consumption also stalled unexpectedly in the second quarter. The forecast for GDP growth in 2013 has been revised down by 0.4 percentage points to 1.1 per cent.
- Employment and hours worked have risen slightly further than anticipated, so the forecasts for this year have been revised up. Meanwhile the labour force has surprised slightly on the downside, so the forecast for unemployment in 2014 has been cut by 0.5 percentage points to 7.8 per cent (see Diagram 11).
- The forecast for unfunded fiscal policy measures in 2014 has been raised from SEK 20 billion to SEK 25 billion. This is an important factor behind the slight downward revision of general government net lending in 2014 to –1.5 per cent of GDP.
- The Riksbank has become clearer about how it is taking account of household debt in its monetary policy deliberations. Together with a slightly stronger labour market and somewhat higher inflation in 2015–2016, this has led to the revision of the NIER's forecast for when the repo rate will begin to be raised. The Riksbank is now predicted to start raising the repo rate in the first quarter of 2015, two quarters earlier than assumed in the June forecast (see Diagram 12).

Diagram 11 Unemployment

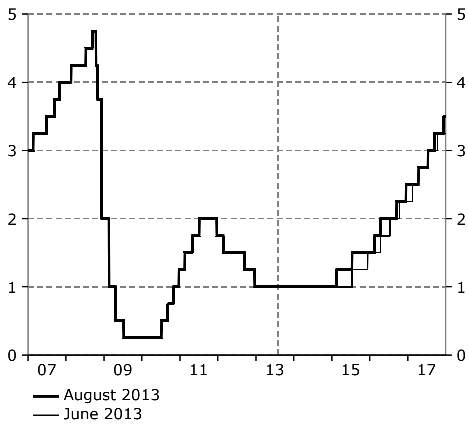
Percent of labour force, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER.

Diagram 12 Repo Rate

Percent, daily values



Sources: The Riksbank and NIER.

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

Percentage change unless otherwise indicated

	2013		2014	
	August 2013	Diff.	August 2013	Diff
International				
GDP, world-wide	3.1	−0.2	3.9	−0.1
GDP, OECD	1.2	−0.1	2.3	0.0
GDP, Euro Area	−0.5	0.2	1.1	−0.2
GDP, United States	1.5	−0.4	2.8	0.0
GDP, China	7.6	−0.3	7.7	−0.3
Federal funds target rate[1,2]	0.25	0.00	0.25	0.00
ECB refi rate[1,2]	0.50	0.00	0.50	0.00
Oil price[3]	108.0	2.4	105.1	1.5
CPI, OECD	1.7	0.0	2.0	0.0
GDP by Expenditure				
GDP, calendar-adjusted	1.1	−0.4	2.6	−0.1
GDP	1.1	−0.4	2.5	−0.1
Household consumption	2.4	−0.4	3.2	0.3
General government consumtion	1.0	0.1	0.6	0.0
Gross fixed capital formation	−2.6	0.5	4.9	0.4
Stockbuilding[4]	0.4	0.0	−0.1	−0.1
Exports	−2.0	−1.5	3.7	−0.7
Imports	−1.8	−0.9	4.4	−0.4
Labour Market, Inflation, Interest Rates etc.				
Hours worked[5]	0.3	0.4	0.7	0.0
Employment	0.9	0.2	0.8	0.3
Unemployment[6]	8.0	−0.3	7.8	−0.5
Labour market gap[7]	−1.5	0.4	−1.4	0.3
Output gap[8]	−2.4	−0.2	−1.9	−0.2
Productivity, business sector[5]	1.2	−1.1	2.2	−0.1
Hourly earnings[9]	2.8	0.0	2.8	0.1
CPI	0.1	0.0	0.8	0.1
CPIF	1.0	0.0	1.2	0.0
Repo rate[1,2]	1.00	0.00	1.00	0.00
Interest rate, 10-year government bond[1]	2.1	0.2	2.7	0.3
Index for the Swedish krona (KIX)[10]	102.7	−0.1	102.0	−0.6
Current account[4]	6.0	−0.3	5.7	−0.5
General government net lending[11]	−1.3	0.2	−1.5	−0.4

[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] Differencen 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 June 2013 forecast. A positive value denotes an upward revision.

Source: NIER.

Macroeconomic Development and Economic Policy 2013–2017

GDP will grow weakly in the third quarter this year, but the economy will pick up at the end of 2013. 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. Fiscal policy will have an expansionary effect in 2013, and the NIER expects it to be neutral next year. As cyclically-adjusted net lending will be negative again in 2014, fiscal tightening will be required in 2015–2017 if the surplus target is to be achieved. Low resource utilisation, low inflation and low interest rates abroad indicate that the Riksbank will not increase the repo rate next year. The repo rate will be raised at the beginning of 2015.

This section begins with an overview of the NIER's forecast for the global and Swedish economies in 2013–2017 before looking in more detail at the forecast for monetary and fiscal policy. A more detailed presentation of economic developments in 2013–2014 can be found in the summary.

International Developments

GLOBAL ECONOMIC RECOVERY CONTINUES

Despite a degree of uncertainty in global financial markets in recent months, most indicators suggest that the global economy has bottomed out. Euro area GDP climbed 0.3 per cent from the first to the second quarter, and purchasing manager indices for the manufacturing sector in both the euro area and the US point to expansion (see Diagram 13). The picture is mixed, however, with higher GDP growth in the US and Japan than in the periphery of the euro area. Emerging markets have continued to grow relatively quickly, although there has been something of a slowdown in some, including China, India and Brazil. Global growth is expected to pick up at the end of 2013 and continue to strengthen in 2014–2017 (see Diagram 14).

This forecast assumes that action is taken to ensure the long-term management of the crisis in the euro area. This means, for example, that euro countries with weak government finances and current account deficits implement further structural reforms to boost their competitiveness. As consolidation towards more stable debt levels in the euro area continues, credit conditions for both households and firms are expected to ease. This will gradually enhance the effect of the region's expansionary

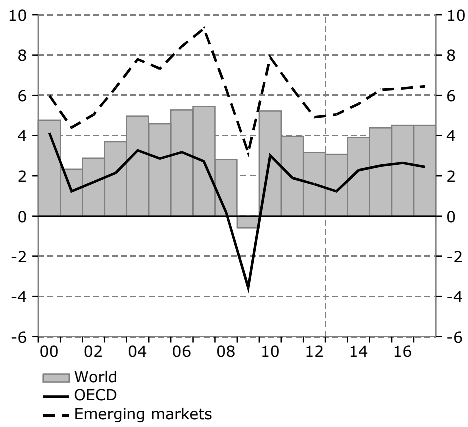
Diagram 13 US and Euro Area Purchasing Manager Index in Manufacturing

Index, monthly values

Sources: Institute for Supply Management and NTC Research Ltd.

Diagram 14 GDP World-wide, in OECD Countries and Emerging Markets

Percentage change



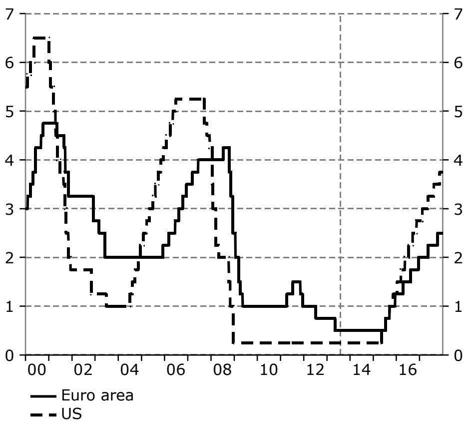
Note: Emerging markets here refer to all non-OECD member countries.

Sources: OECD, IMF and NIER.

Diagram 15 Output Gap in OECD
Percent of potential GDP

Sources: National sources and NIER.

Diagram 16 Policy Rates
Percent, daily values



Sources: ECB, Federal Reserve and NIER.

monetary policy, which will contribute to continued recovery in 2014–2017.

In the US, public debt is still high, but households have come further in repairing their balance sheets than in the euro area. Falling unemployment and rising asset prices have led to greater optimism among households and businesses, which is stimulating growth. Less contractionary fiscal policy after 2013 and continued expansionary monetary policy, normalising as unemployment falls, mean that resource utilisation will gradually increase and return to balance in 2017.

In Japan, the central bank's expansionary monetary policy has led to improved financial conditions, paving the way for higher growth. Together with high resource utilisation and higher import prices, this is expected to bring Japan from deflation to a degree of inflation in the coming years.

Resource utilisation in the OECD as a whole is currently low, which means that the potential for recovery is considerable (see Diagram 15). Households need to increase their consumption of durable goods once they have rebuilt their balance sheets, and firms need to make new investments. The recovery will be supported by global interest rates remaining low in the coming years (see Diagram 16).

All in all, GDP in the OECD countries is forecast to grow by an average of 2.5 per cent per year in 2014–2017 (see Table 3). Low resource utilisation will put a damper on inflation, which means that expansionary monetary policy is not expected to threaten these countries' inflation targets.

Table 3 GDP and CPI World-wide
Percentage change

	2012	2013	2014	2015	2016	2017
GDP, OECD	1.6	1.2	2.3	2.5	2.6	2.4
GDP, emerging markets[1]	4.9	5.0	5.6	6.3	6.3	6.4
GDP, world-wide	3.2	3.1	3.9	4.4	4.5	4.5
CPI, OECD	2.2	1.7	1.9	2.0	2.1	2.2
CPI, world-wide	3.9	3.7	3.7	3.7	3.6	3.6

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

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

Sources: IMF, OECD and NIER.

Activity in emerging markets has slowed since the beginning of the year, due partly to a slight slowdown in the Chinese economy.[4] China is expected to shift gradually to a growth model based on a higher share of private consumption. Given that investment currently accounts for a very high proportion of GDP, this rebalancing is expected to result in lower growth in

[4] Here, emerging markets are defined as countries that are not members of the OECD.

2014–2017 than the average of just over 10 per cent seen in 2000–2012. Emerging markets are nevertheless expected to continue to outgrow the OECD countries, with GDP growth of just over 6 per cent per year in 2014–2017 (see Table 3).

Developments in Sweden

ECONOMY TO PICK UP AT THE END OF THE YEAR

The Swedish economy has long been in the doldrums. The NIER's analysis indicates that the output gap has been negative since 2008 (see Diagram 17). The main reason for this prolonged slump is 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.

GDP grew by 0.6 per cent in the first quarter this year before virtually stagnating in the second quarter. In the current quarter, firms' destocking after undesirably high stockbuilding in recent quarters will limit GDP growth to a modest 0.2 per cent, even though growth in final demand is accelerating.

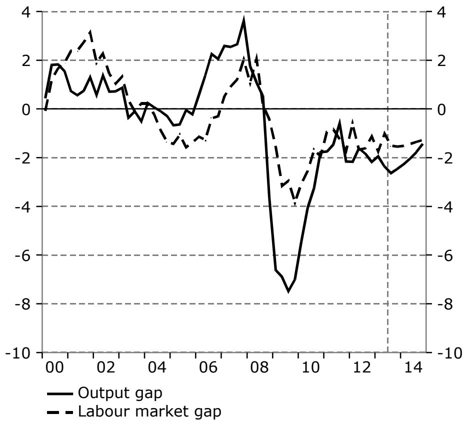
POTENTIAL GDP TO ACCELERATE

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 2.0 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 slightly 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. The long-term slump in the Swedish economy has hampered productivity growth in industry (see Diagram 18). 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 this year as the economic climate has deteriorated and investment has fallen. Growth in potential GDP will accelerate in the period 2014–2017. This is a result of the rate of growth in potential

Diagram 17 Output Gap and Labour Market Gap

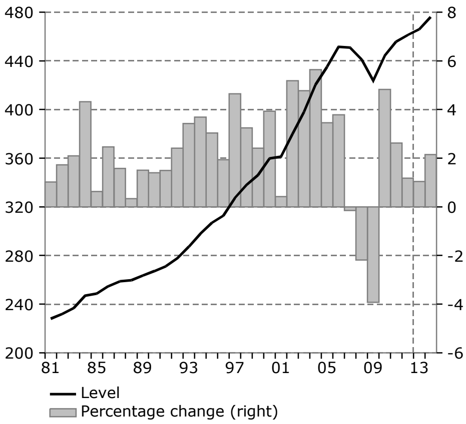
Percent of potential GDP and of potential hours worked, respectively, seasonally adjusted quarterly values



Source: NIER.

Diagram 18 Productivity in Business Sector

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



Sources: Statistics Sweden and NIER.

productivity in industry being expected to increase somewhat, while the potential number of hours worked will also be higher than this year (see Table 4). Relative to the June 2013 forecast, the NIER has revised down its forecast for potential productivity in industry in 2013–2017. Meanwhile, productivity in the public sector has been revised up as a result of slightly stronger growth this year and next year. All in all, this means that potential GDP has been revised down by around 0.2 per cent in 2013–2017.

Table 4 Potential Variables

Percentage change unless otherwise stated

	2012	2013	2014	2015	2016	2017
Potential GDP	1.5	1.5	2.1	2.2	2.3	2.2
Potential hours worked	0.7	0.5	0.7	0.8	0.7	0.6
Potential employment	0.8	0.7	0.7	0.6	0.6	0.6
Of which demographic contribution	0.3	0.3	0.5	0.5	0.4	0.4
Potential productivity	0.9	1.0	1.4	1.4	1.6	1.6
Potential productivity, business sector	1.6	1.5	1.6	1.8	2.1	2.1

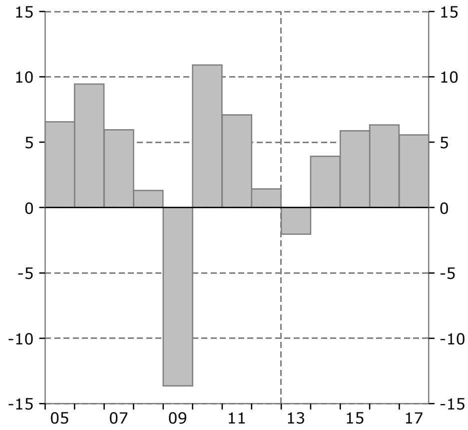
Sources: Statistics Sweden and NIER.

RECOVERY FROM THE END OF THIS YEAR

The low growth in the third quarter is due in part to the global situation. Fiscal tightening in both the euro area and the US and continued uncertainty about developments in the euro area are suppressing Swedish demand, both directly through export demand and indirectly through lower consumption and investment. Recently, however, both confidence indicators and hard data have shown signs of the euro area being on the road to recovery. The NIER expects uncertainty about the outlook to subside during the autumn and winter, which will help domestic demand in Sweden to grow more quickly. Together with gradually stronger demand for Swedish exports, this means that the Swedish economy will begin to recover at the end of this year. Low capacity utilisation at firms means that production can be stepped up quickly without bottlenecks forming. Resource utilisation in the labour market will still be considerably lower than normal at the beginning of 2014, so the recovery will take a long time.

Weak global growth means that domestic demand will drive the recovery to a greater extent than in previous economic recoveries. It is 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 will need to be tightened for the surplus target for general government net lending to be met (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 19 Swedish Exports
Percentage change, calendar-adjusted values



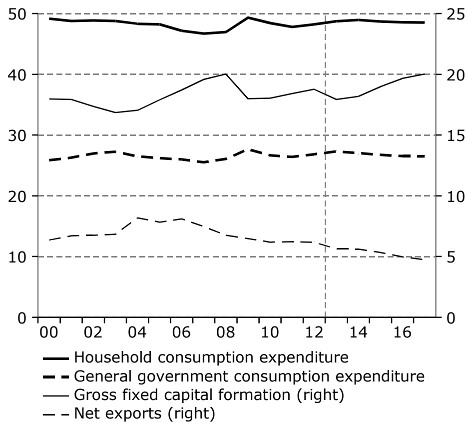
Sources: Statistics Sweden and NIER.

EXTERNAL DEMAND TO GROW FASTER NEXT YEAR

Sluggish global growth means that Swedish exports will fall by 2.0 per cent this year (see Diagram 19 and Table 5).[5] Exports will pick up again next year as external demand firms up, and then accelerate slightly in 2015–2017 as the global economic upswing gains momentum.

Trend growth in net exports has been affected by the fact that, for demographic reasons, Sweden has for several years had a decreasing need for net lending. The reason for this is the growing proportion of the population not of working age. As a whole, this group’s saving is relatively low. At the same time, many fiscally frail countries, primarily in the euro area, have a major need to increase their net lending. A country’s net lending is, by definition, closely linked to the size of its net exports. The higher a country’s net lending, the higher its net exports. Swedish net exports are therefore expected to continue to trend downwards as a proportion of GDP (see Diagram 20). A development of this kind will often go hand in hand with changes in the real exchange rate. The forecast therefore assumes a slight strengthening of the real effective krona exchange rate against Sweden's key trading partners in the period 2013–2017 (see “Monetary Policy and Exchange Rates” below).

Diagram 20 Shares of GDP
Percent of GDP, current prices

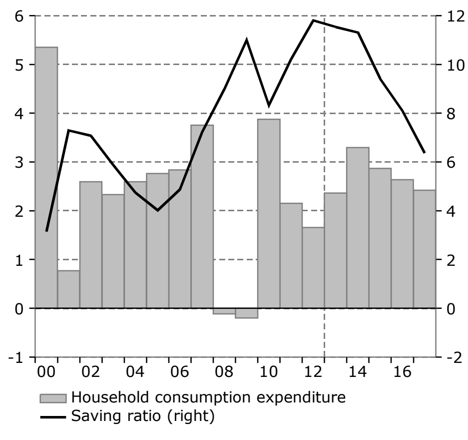


Sources: Statistics Sweden and NIER.

HIGH SAVING RATIO PAVES WAY FOR INCREASED CONSUMPTION

The household saving ratio has risen in recent years and is now high by historical standards (see Diagram 21). Part of the increase is due to general uncertainty resulting from the financial crisis and the euro area crisis. Once uncertainty about the resolution of the euro area crisis subsides, households will have relatively great scope to step up consumption. Household consumption expenditure will grow at a relatively normal rate this year and then by more than 3 per cent in 2014 before slowing again somewhat (see Table 5 and Diagram 21). Household consumption will be stimulated by expansionary monetary policy and, in 2014, by the tax cuts assumed to form part of fiscal policy (see "Monetary Policy and Exchange Rates" and "Fiscal Policy" below). In 2015–2017, fiscal tightening and a gradually less expan-

Diagram 21 Household Consumption and Saving Ratio
Percentage change, calendar-adjusted values and percent of disposable income, respectively



Sources: Statistics Sweden and NIER.

[5] All figures in this section are calendar-adjusted unless otherwise indicated.

sionary monetary stance will put a damper on consumption. Recovery in the labour market and continued growth in real wages will mean that real disposable income nevertheless grows sufficiently strongly for further relatively brisk growth in household consumption.

Growth in public consumption will accelerate during the forecast period, from 1.1 per cent this year to 1.5 per cent in 2017 (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.

Table 5 GDP by Expenditure

Percentage change, constant prices, calendar-adjusted values

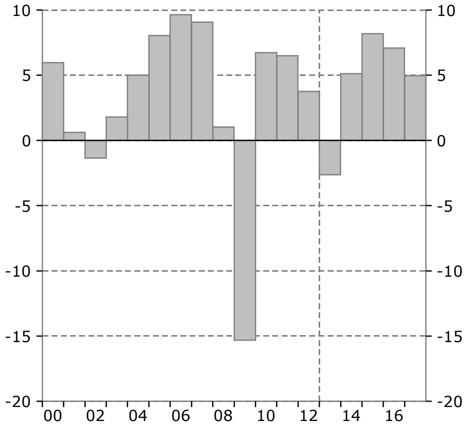
	2012	2013	2014	2015	2016	2017
Household consumption expenditure	1.7	2.4	3.3	2.9	2.6	2.4
General government consumption expenditure	1.2	1.1	0.8	1.2	1.3	1.5
Gross fixed capital formation	3.8	−2.6	5.1	8.2	7.1	5.0
Final domestic demand	2.0	1.0	2.9	3.4	3.2	2.7
Stockbuilding[1]	−1.1	0.4	−0.1	0.0	0.0	0.0
Total domestic demand	0.7	1.4	2.8	3.4	3.2	2.7
Exports	1.4	−2.0	3.9	5.9	6.3	5.6
Total demand	1.0	0.2	3.2	4.3	4.3	3.7
Imports	0.7	−1.8	4.6	6.6	7.3	6.1
Net exports[1]	0.3	−0.2	−0.1	0.0	−0.1	0.0
BNP	**1.1**	**1.1**	**2.6**	**3.3**	**2.9**	**2.6**

[1] Change in per cent of GDP preceding year.

Sources: Statistics Sweden and NIER.

Diagram 22 Gross Fixed Capital Formation

Percentage change, calendar-adjusted values



Sources: Statistics Sweden and NIER.

STRONG INVESTMENT GROWTH TO FUEL THE RECOVERY

Investment generally varies considerably more over a business cycle than does, for example, 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 20) and will fall again this year to 18 per cent of GDP. The NIER estimates that investment will be around 20 per cent of GDP in the long run. Once capacity utilisation in industry begins to rise, there will be a major need to step up investment. There is also a housing backlog, so housing investment will increase relatively quickly. In 2014–2017, total gross fixed capital formation will grow by 5–8 per cent per year (see Diagram 22).

Developments in the real economy mean that resource utilisation will begin to pick up in the fourth quarter this year, but recovery will be slow. This is partly because resource utilisation in the Swedish economy is low this year, and partly because economic policy will shift towards a less expansionary bias from

2015. The output gap will not therefore close until 2017 (see Diagram 23).

UNEMPLOYMENT HAS STARTED TO DECREASE

The number of employed increased in 2012, but unemployment still rose due to comparatively strong expansion of the labour force (see Diagram 24). Unemployment levelled off in the first quarter this year before falling back slightly in the second quarter. This marks a turnaround in the labour market, and unemployment will fall gradually during the forecast period. Unemployment will average 8.1 per cent this year, which is slightly more than 1 percentage point higher than the NIER's estimate of equilibrium unemployment this year. The jobless rate will then fall back slightly to 7.8 per cent next year (see Table 6), which is not that big a decrease given GDP growth of 2.6 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 6.7 per cent, the labour market will almost have returned to cyclical balance, and the labour market gap will close during the second half of that year (see Diagram 23).

Table 6 Labour Market

Percentage change

	2012	2013	2014	2015	2016	2017
Hours worked[1]	0.6	0.3	0.7	1.2	1.2	1.1
Employed	0.7	0.9	0.8	0.9	1.0	1.1
Labour force	0.9	0.9	0.5	0.6	0.6	0.6
Unemployment[2]	8.0	8.0	7.8	7.5	7.2	6.7

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

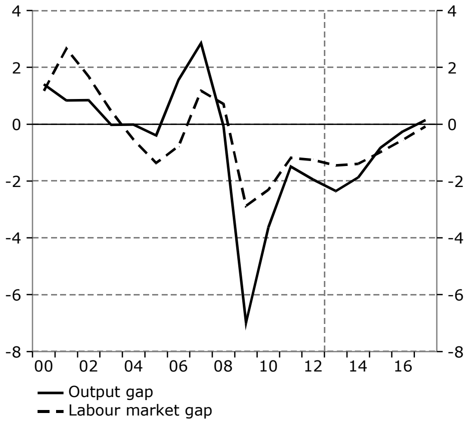
Sources: Statistics Sweden and NIER.

LOWER WAGE GROWTH AHEAD

This year's pay settlements, which run for three years, indicate a moderate rate of wage growth by historical standards. Low resource utilisation in the labour market also points to final pay rises in the coming years turning out somewhat below the 3.1 per cent seen in 2012 (see Table 7). Wages will rise by just under 3 per cent per year on average in 2014–2017, which is below the 3.4 per cent average for the period 2000–2010. This level of wage growth means that the labour cost ratio, defined as the ratio of labour costs to output in industry, will fall from its current relatively high levels (see Diagram 25).

Diagram 23 Output Gap and Labour Market Gap

Percent of potential GDP and of potential hours worked, respectively



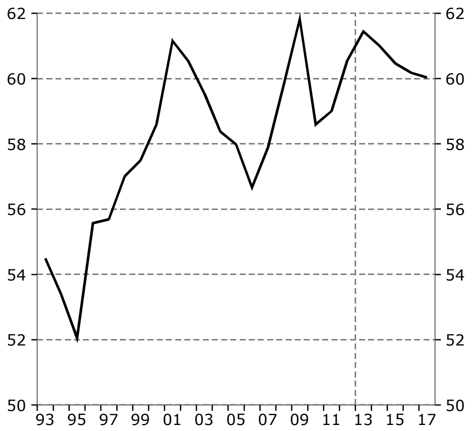
Source: NIER.

Diagram 24 Employment and Unemployment

Percentage change and percent of labour force, respectively

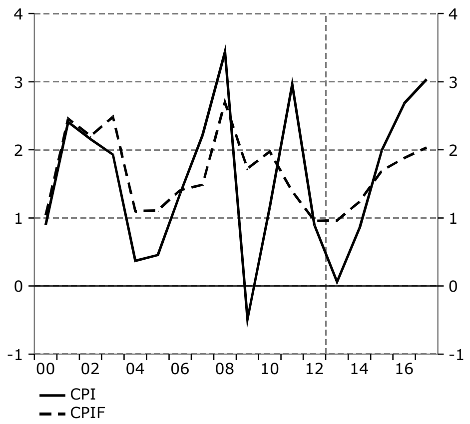
Sources: Statistics Sweden and NIER.

Diagram 25 Labour Cost Share in the Business Sector
Percent



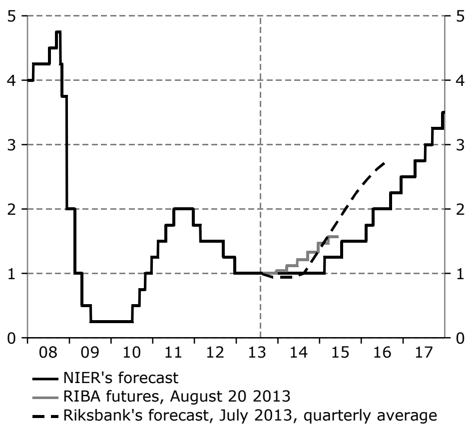
Sources: Statistics Sweden and NIER.

Diagram 26 Consumer Prices
Percentage change



Sources: Statistics Sweden and NIER.

Diagram 27 Repo Rate
Percent, daily values and quarterly values, respectively



Sources: NASDAQOMX, The Riksbank and NIER.

FURTHER LOW INFLATION

Inflation as measured by the CPIF, or the CPI with constant mortgage rates, has been below the Riksbank's 2 per cent target in recent years (see Diagram 26) and will be 1.0 per cent this year. The labour cost ratio in industry is also relatively high. In other words, there has been a certain build-up of cost pressure at firms. However, moderate wage growth and cyclical recovery in productivity will help alleviate this pressure gradually in 2014–2016. Together with the weak demand picture, this means that inflation will remain subdued for a long period. Not until 2017 will CPIF inflation hit 2 per cent. Mortgage rates will rise once the Riksbank starts to raise the repo rate in early 2015 (see "Monetary Policy and Exchange Rates" below). This will not affect CPIF inflation, but CPI inflation will be above 2 per cent in 2016–2017.

Table 7 Earnings and Prices
Percentage change

	2012	2013	2014	2015	2016	2017
Hourly earnings[1]	3.1	2.8	2.8	2.9	3.0	3.1
Hourly earnings, business sector	3.3	2.7	2.8	2.9	3.0	3.1
Unit labour cost, business sector	2.9	1.6	0.6	0.5	0.9	1.2
CPI	0.9	0.1	0.8	2.0	2.7	3.0
CPIF	1.0	1.0	1.2	1.7	1.9	2.0

[1] According to Short-term Earnings Statistics.

Sources: National Mediation Office, Statistics Sweden and NIER.

Monetary Policy and Exchange Rates

RIKSBANK WILL NOT CUT REPO RATE DESPITE LOW INFLATION

Although inflation is expected to remain low in the coming years, the Riksbank decided in July to leave both the repo rate and its forecast for the repo rate unchanged. At the same time, the executive board communicated more clearly than before that this is largely because its monetary policy deliberations are taking account of household debt. Forward prices suggest that the repo rate will remain unchanged at 1 per cent this year, in keeping the Riksbank's forecast, but will go up somewhat earlier in 2014 than predicted by the central bank (see Diagram 27).

In normal circumstances, the Riksbank aims to set the repo rate in such a way that inflation will be close to 2 per cent in two years' time.[6] However, the Riksbank has also argued for some time that there is a risk of overly low interest rates pushing up

[6] See *Monetary policy in Sweden*, Sveriges Riksbank, 2010.

household debt and causing 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.[7]

The NIER believes that household debt will increase somewhat in the coming years, and that this will lead the Riksbank to pursue a slightly less expansionary monetary policy than would otherwise be the case to help curb this accumulation of debt. In the short term, this will come at the cost of slightly lower resource utilisation and of inflation undershooting the inflation target for somewhat longer.

As things stand, the NIER does not see any reason to allow the growth in household debt to play a role in monetary policy. Much of the increase in household debt can be explained by fundamental factors, and there is little evidence to support that the central bank policy rate is an effective instrument for reining in debt and house prices.[8] For these reasons, the NIER sees a case for cutting the repo rate to help accelerate recovery and push up inflation more quickly.

RECOVERY MEANS THE REPO RATE RATE WILL GO UP EARLY IN 2015

Expansionary monetary policy will contribute to economic recovery from the end of this year. The current low levels of resource utilisation mean that recovery will be protracted, however, so monetary policy will 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 first quarter of 2015. As the NIER anticipates lower inflationary pressures in 2015–2016 than projected by the Riksbank, the repo rate will be raised slightly later than indicated in the Riksbank's July forecast. Monetary policy will thus help resource utilisation in the economy as a whole to return to balance early in 2017. The repo rate will then still be at lower levels than have historically been compatible with balanced resource utilisation. With continued 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 3.50 per cent at the end of 2017 (see Diagram 27).

---

[7] See the article "Financial imbalances in the monetary policy assessment" in *Monetary Policy Report*, July 2013, Sveriges Riksbank.

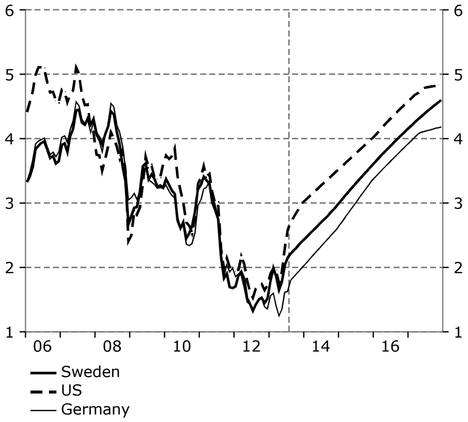
[8] See the special analysis "Lånar hushållen för mycket?" (Are households borrowing too much?) in *The Swedish Economy*, June 2013.

GOVERNMENT BOND YIELDS TO CLIMB FROM VERY LOW LEVELS

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 entailed extensive purchases of bonds by central banks, which have sent yields on government bonds, especially those with long maturities, 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. As confidence in more sustainable public finances returns, demand for riskier assets will pick up, and demand for government bonds in countries with more depressed yields will slacken. As unconventional monetary policy measures will be phased out at the same time and central bank policy rates will start to be raised in many of the larger economies, this will lead to a general upturn in yields. Swedish 10-year government bond yields will follow this normalisation of yields and rise to 2.7 per cent in 2014 and 4.4 per cent in 2017 (see Diagram 28 and Table 8).

Diagram 28 Government Bond Interest Rates

Percent, monthly values



Note: 10-year bonds.
Sources: National sources and NIER.

Table 8 Interest Rates

Per cent

	2012	2013	2014	2015	2016	2017
At year-end						
Repo rate	1.00	1.00	1.00	1.50	2.50	3.50
Annual average						
Repo rate	1.5	1.0	1.0	1.3	2.0	2.9
5-year government bond	1.1	1.6	2.4	3.1	3.7	4.2
10-year government bond	1.6	2.1	2.7	3.3	3.9	4.4

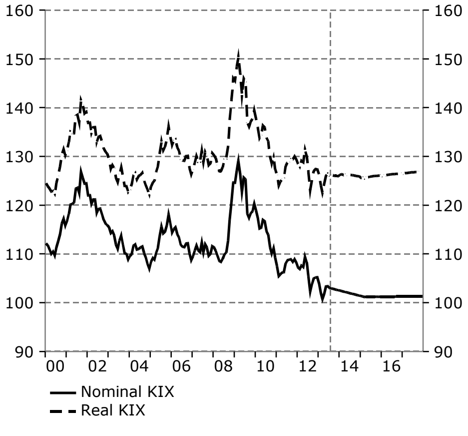
Sources: The Riksbank and NIER.

KRONA LARGELY UNCHANGED IN THE COMING YEARS

Following its steep fall when the financial crisis struck in autumn 2008, the krona as measured by the effective exchange rate index KIX has trended up in real terms and reached levels in August that are almost 5 per cent stronger than those at the outbreak of the crisis (see Diagram 29). From the beginning of the year to late August, the krona has strengthened by just over 1 per cent.[9] 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 curren-

Diagram 29 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.

[9] 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.

cies. All in all, the krona is forecast to be marginally weaker in 2017 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 29and Table 9).

Table 9 Exchange Rates

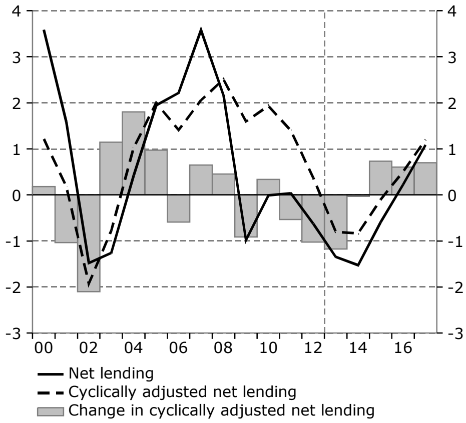
Index 1992–11–18=100 and SEK per currency unit, respectively

	2012	2013	2014	2015	2016	2017
KIX	106.1	102.7	102.0	101.2	101.2	101.3
TCW index	120.9	116.5	115.7	114.6	114.6	114.6
Euro	8.71	8.58	8.51	8.39	8.38	8.38
Dollar	6.78	6.55	6.64	6.67	6.64	6.61

Sources: The Riksbank and NIER.

Diagram 30 Net Lending and Cyclically Adjusted Net Lending, General Government Sector

Percent of GDP and of potential GDP, respectively



Sources: Statistics Sweden and NIER.

Fiscal policy

FISCAL POLICY EXPANSIONARY THIS YEAR, NEUTRAL NEXT YEAR

Fiscal policy will have an expansionary bias this year but is expected to be neutral next year. The budget bill for 2013 contained unfunded measures amounting to SEK 23 billion. In June, parliament approved the government's proposals in the spring fiscal policy bill for further temporary measures in infrastructure and education amounting to around SEK 2 billion in 2013 and SEK 1 billion in 2014. These unfunded measures mean that cyclically-adjusted net lending will decrease by the equivalent of around 1 per cent of potential GDP (see Diagram 30). In other words, fiscal policy will have be expansionary this year.

The government concluded in the spring fiscal policy bill that there is some scope for unfunded measures in the budget bill for 2014 without jeopardising the surplus target for general government net lending or confidence in public finances.[10] The government argued that the need for stimulation is greatest in the near future in order to prevent lasting negative effects on the labour market from persistently high unemployment. In its assessment of the economic situation in July, the government underlined that economic recovery needs support, that public finances have good potential to support the recovery, and that it is a good time to stimulate the economy with what it calls long-term appropriate reforms.[11] The NIER therefore assumes that the government will introduce unfunded measures of SEK 25 billion next year on top of what has been decided and an-

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.

The fiscal multiplier summarizes the effect of fiscal policy variables on, for example, GDP. If a SEK 10 billion increase in government consumption, or decrease in tax income, results in a SEK 7 billion GDP increase, then the multiplier is 0.7.

10 See the 2013 spring fiscal policy bill (prop. 2012/13:100), pp. 103–104.

11 See "Det ekonomiska läget" (The economic situation), presentation, Swedish Ministry of Finance, 4 July 2013, www.regeringen.se.

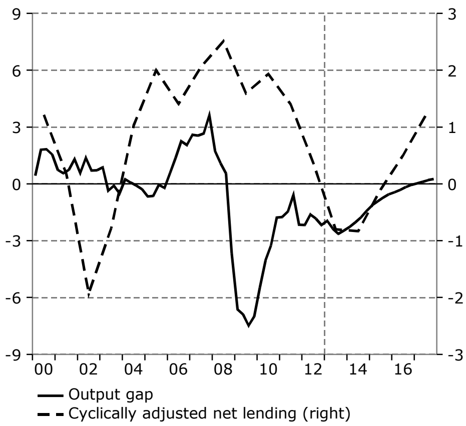
nounced, most recently in this year's spring fiscal policy bill.[12] Cyclically-adjusted net lending will therefore remain negative at an unchanged level in 2014, making for a neutral fiscal policy stance.

The reason why fiscal policy will be neutral next year despite these unfunded measures is that cyclically-adjusted net lending normally increases in the absence of active fiscal policy decisions. Without the unfunded measures forecast for next year, cyclically-adjusted net lending would have increased by 0.6 per cent of potential GDP.[13] As SEK 25 billion corresponds to 0.6 per cent of potential GDP in 2014, the fiscal policy forecast for next year gives cyclically-adjusted net lending at an unchanged level.

SURPLUS TARGET WILL REQUIRE TIGHTENING IN 2015–2017

Diagram 31 Output Gap and Fiscal Policy

Percent of potential GDP



Source: NIER.

In the short term, the fiscal policy forecast is determined by the NIER's assessment of the government's intentions, based on statements, proposals and announcements made. In the longer term, this information is not available and so the fiscal policy forecast 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.[14]

The fiscal policy forecast builds on the assumption that fiscal policy will be conducted in a way that is compatible with the surplus target, and that departures from the target will gradually be corrected, taking due account of economic developments. As the output gap will close in 2017, the forecast therefore means that cyclically-adjusted net lending will increase gradually to 1.2 per cent in 2017 (see Diagram 31). Fiscal policy must therefore be contractionary in 2015–2017. This will bring consolidated gross debt in the general government sector (Maastricht debt) down from 41 per cent of GDP this year to 37 per cent in 2017 (see Diagram 32).

---

[12] This is consistent with statements made by Anders Borg, Minister for Finance, at a press briefing, 23 August.

[13] Of this 0.6 per cent of potential GDP, 0.2 percentage points will come from the downward adjustment of income-based pensions in 2014.

[14] 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", *The Swedish Economy*, March 2013.

NO SCOPE FOR REFORMS IN THE COMING YEARS

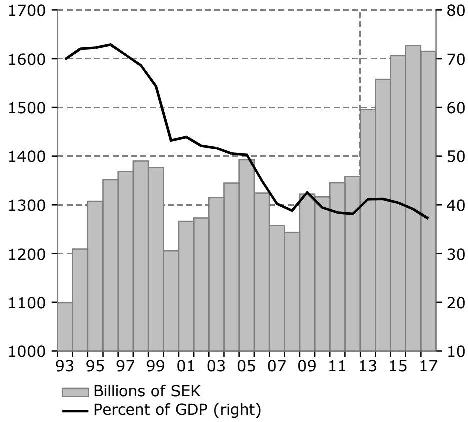
The scope for reforms is defined as the margin for permanent unfunded measures in the central government budget over a period of years compatible with the surplus target. The NIER believes that there is no scope for such measures through to 2017.

The central government budget is automatically reinforced if no new unfunded measures are proposed on either the revenue side or the expenditure side. This is because tax revenue largely follows GDP, while current rules mean that expenditure falls relative to GDP (see Diagram 33). Net lending will therefore increase gradually if no new decisions are taken.[15] However, this automatic stabilising effect due to unchanged rules will not be sufficient in 2014–2017 to provide all of the fiscal tightening needed for cyclically-adjusted net lending to hit 1.2 per cent of potential GDP in 2017. With unchanged rules, cyclically-adjusted net lending is expected to reach SEK 47 billion in 2017, or 1.1 per cent of potential GDP. Net lending of 1.2 per cent of potential GDP is estimated to correspond to SEK 52 billion in 2017. The scope for reforms is therefore slightly negative, which means that there is a need for budgetary reinforcements of SEK 5 billion by 2017.

Given the forecast of unfunded measures of SEK 25 billion in 2014, there will therefore need to be total budgetary reinforcements of SEK 30 billion in 2015–2017 to achieve cyclically-adjusted net lending of 1.2 per cent of potential GDP in 2017. In other words, unfunded measures next year will need to be financed with tax increases or spending cuts in future years if net lending is to meet the surplus target in 2017. This process is illustrated in Table 10, which shows the level of unfunded measures forecast for 2014 and the budget reinforcements required in subsequent years to bring net lending gradually in line with the surplus target in 2017. The sum of these measures during these four years corresponds to the size of the total budget reinforcements required during the period. The size of these reinforcing measures in 2015–2017 is based on the forecast for cyclically-adjusted net lending in each year (see Diagram 30).

Diagram 32 General Government Consolidated Gross Debt (Maastricht Debt)

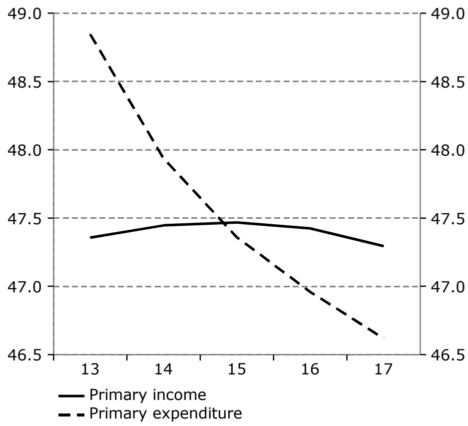
SEK billion and percent of GDP, current prices, respectively



Sources: Statistics Sweden and NIER.

Diagram 33 Primary Cyclically Adjusted Income and Expenditure with Unchanged Rules

Percent of potential GDP



Source: NIER.

[15] See the special analysis "The NIER's Assessment of the Scope for Reforms", *The Swedish Economy*, March 2013, for a detailed analysis of the automatic stabilising effect of unchanged rules.

Table 10 Forecast Fiscal Policy Measures 2014–2017

SEK billion, change from previous year

	2014	2015	2016	2017	2014–2017
Unfunded/budget-strengthening measures	–25	0	8	22	5

Note. The amounts denote the effects on general government net lending.

Source: NIER.

NET LENDING WITH UNCHANGED RULES

The NIER also calculates net lending based on unchanged rules, in other words in the absence of active fiscal policy decisions.[16] This scenario differs from the NIER's fiscal policy forecast, but allows comparison with the government's forecast for developments in public finances in the medium term.

Unchanged rules would mean that cyclically-adjusted net lending is higher in 2014–2016 than in the forecast (see Table 11). In 2017, however, cyclically-adjusted net lending is slightly lower than in the forecast[17] at just 0.6 per cent of GDP. This is because resource utilisation will be lower due to changes in the composition of fiscal policy relative to the fiscal policy on which the forecast is based.

Table 11 General Government Net Lending and Cyclically Adjusted Net Lending

Per cent of GDP and per cent of potential GDP

	2012	2013	2014	2015	2016	2017
Net lending according to forecast	–0.6	–1.3	–1.5	–0.6	0.2	1.1
Net lending given unchanged rules	–0.6	–1.3	–1.0	–0.2	0.3	0.6
Cyclically adjusted net lending according to forecast	0.4	–0.8	–0.8	–0.1	0.5	1.2
Cyclically adjusted net lending given unchanged rules	0.4	–0.8	–0.2	0.5	0.9	1.1

Source: NIER.

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 quality of the public sector commitment will normally

[16] See www.konj.se/alternativfinanspolitik for a model-based macroeconomic forecast for fiscal policy assuming unchanged rules (in Swedish).

[17] The 0.1 percentage point difference in cyclically-adjusted net lending between the forecast and the scenario with unchanged rules is equal to the budget reinforcements needed for net lending to be in line with the surplus target. The difference amounts to around SEK 5 billion and corresponds to the negative scope for reforms discussed above.

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 government 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 expenditure, at both central and local government level. 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 estimated the increase in spending needed to maintain the public sector commitment at 2013 levels. Based on these calculations, decisions need to be taken on expenditure increases totalling SEK 75 billion in the public sector in 2014–2017 if the public sector commitment is to remain at current levels.[18] Of these increases, just over SEK 30 billion are in the local government sector. As the NIER's calculations do not show any scope for reforms through to 2017 (rather that there is a need for budget reinforcements of SEK 5 billion), the increase in expenditure needed to maintain the public sector commitment will need to be financed through higher taxes.

An unchanged public sector commitment and net lending of 1.2 per cent of GDP in 2017 therefore result in a total financing requirement of around SEK 80 billion in 2014–2017. Meeting this financing requirement with higher taxes may prove difficult politically, especially at a time when the economy is still not in balance. The government may possibly then have to choose between maintaining the public sector commitment and saving to reach the surplus target. It is not for the NIER to advise on such matters, but its medium-term forecast assumes fiscal policy compatible with the surplus target and public expenditure largely compatible with an unchanged public sector commitment.

HIGHER PRIMARY EXPENDITURE BEHIND DOWNWARD REVISION OF SCOPE FOR REFORMS

The NIER's June forecast estimated the scope for reforms in the period 2014–2017 at SEK 6 billion. This has now been revised down by SEK 11 billion to SEK –5 billion, due largely to a higher estimate of primary expenditure in 2017. It is primarily spending on ill health (sickness and disability benefits) which has been revised up, but public consumption and transfers to abroad have also been revised up somewhat. Primary revenue in 2017

[18] See the special analysis "The NIER's Assessment of the Scope for Reforms", *The Swedish Economy*, March 2013, for a detailed analysis of the increases in expenditure required to maintain the public sector commitment.

has been lowered by around SEK 1 billion, due partly to a slight downward revision of potential GDP.

There is usually some revision of the scope for reforms in each forecast. The need for revisions may arise as a result of changes to the forecasts for general government primary revenue and expenditure (with unchanged rules and the economy in balance) and general government net capital revenue/expenditure. New political decisions on unfunded measures will also affect estimates of the scope for reforms.

SPECIAL ANALYSIS

The Riksbank has Systematically Overestimated Inflation

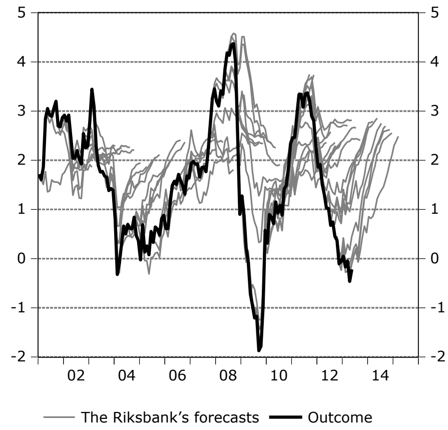
This analysis examines the Riksbank's forecasts of CPI inflation and underlying inflation (UND1X/CPIX and CPIF) for systematic errors at 1- to 24-month horizons, and finds that the central bank's forecasts of both CPI inflation and underlying inflation contain systematic errors. The Riksbank's overestimation of inflation has contributed to overly tight monetary policy with higher unemployment and lower inflation than would have been the case if, on average, its inflation forecasts had been on the mark.

THE RIKSBANK'S INFLATION FORECAST ERRORS

The Riksbank has been criticised in the public debate recently for the low precision of its inflation forecasts.[19] In the government's forecast evaluation, the Riksbank had the worst forecast precision for CPI inflation of the institutions examined in the period 2007–2012.[20] This finding is supported by a study from the Riksbank itself.[21] Diagram 34 and Diagram 35 present actual CPI inflation and underlying inflation together with the central bank's forecasts 1 to 24 months ahead.[22]

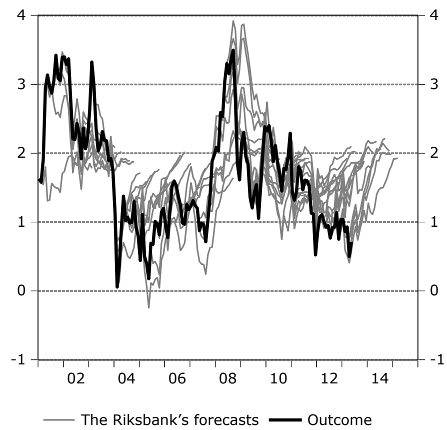
At least as important as forecast errors being small (high precision) is that they are not systematic, in other words the mean error over time should be zero (no bias).[23] The government's forecast evaluation finds that the Riksbank's full-year forecasts for CPI inflation are very close to significantly overestimating

Diagram 34 CPI Inflation, Actual Values and the Riksbank's Forecasts, 1–24 months
Percent



Sources: The Riksbank, Statistics Sweden and NIER.

Diagram 35 Underlying Inflation, Actual Values and the Riksbank's Forecasts, 1–24 months
Percent



Note: In the graph, actuals refer to UND1X/CPIX until February 2008 and to CPIF thereafter. Hence, forecasts made June 2006–March/April 2008 are not exactly comparable to actual values. However, all calculations presented in the text are based on comparing UND1X/CPIX forecasts to UND1X/CPIX actual vaules.

Sources: The Riksbank, Statistics Sweden and NIER.

---

[19] See, for example, IMF Country Report No. 12/155, June 2012; Munkhammar, V., "Riksbankens inflationsprognoser näst sämst" (Riksbank's inflation forecasts second worst), *Dagens industri*, 18 April 2013; and *Dagens industri*'s Shadow Executive Board in Munkhammar, V., "Riksbanken på efterkälken" (Riksbank off the pace), *Dagens industri*, 15 April 2013; all of which are critical of the Riksbank's inflation forecasts.

[20] Measured as mean squared error, adjusted for differences in the forecast horizon. See the 2013 spring fiscal policy bill (prop. 2012/13:100), pp. 83-85.

[21] Andersson, M. and S. Palmqvist, "The Riksbank's forecasts hold up well", *Economic Commentaries* 2013:3, Sveriges Riksbank.

[22] The present analysis takes account of the revision of Statistics Sweden's methodology for calculating inflation in January 2005. This does, however, affect the forecast errors in forecasts made in 2003 and much of 2004 for 2005. Statistics Sweden has since revised inflation ex post for April to July 2008 and for May 2009 to April 2010 due to errors detected, but this has not been taken into account in this analysis for technical reasons. This simplification may have slightly affected the mean forecast error measured in the short term (1–11 months) but not the evaluation over longer horizons (over 11 months). The overall results are therefore unaffected.

[23] Any systematic errors will probably have a greater impact on monetary policy than low forecast precision.

the actual outcome.[24] The annual forecast evaluations by the Riksbank, the government and the NIER look at full-year forecasts for the current year and following year. The present analysis examines instead the Riksbank's *monthly* inflation forecasts for *systematic errors* and with a *fixed* horizon of 1–24 months. Forecast errors at the 24-month horizon are particularly serious, because they have a greater impact on monetary policy. As forecast errors can be due to exceptional circumstances, such as the financial crisis, comparisons are made with the NIER's inflation forecasts. If other forecasters perform better in terms of bias, this provides an indication that the Riksbank could have produced forecasts that, on average, were nearer the mark.

Forecasts for CPI, UND1X, CPIX and CPIF inflation have been evaluated for the period from March 2001 to March/April 2013.[25] The last three of these are measures of underlying inflation and are referred to as such in this analysis. The official inflation target is annual CPI inflation of 2 per cent. For the Riksbank to avoid "chasing its own tail" when changing the repo rate, underlying inflation is also important in the central bank's deliberations, which is why this measure of inflation is also included in the present analysis.[26] The latest data for actual inflation used in this analysis are for May 2013. At the end of the evaluation period, observations are excluded starting from the 24-month horizon. The final observations at the one-month horizon, for example, are the Riksbank and NIER forecasts of April and March 2013 respectively. In autumn 2005 the Riksbank stopped basing the forecasts in its main scenario (which is evaluated here) on an assumption of a constant repo rate.[27] It

---

[24] At a 5 per cent significance level. Only SEB, Handelsbanken and HUI Research have a higher bias. The NIER has the second-lowest bias in its annual forecasts of CPI inflation, and the government has the lowest of all.

[25] This corresponds to 59 forecasts from the Riksbank and 49 from the NIER. The UND1X/CPIX forecasts are from the period from March 2001 to February (Riksbank) and June (NIER) 2008, corresponding to 28 forecasts from the Riksbank and 30 from the NIER. With the CPIF, the evaluation covers forecasts from April (Riksbank) and August (NIER) 2008 to March (NIER) and April (Riksbank) 2013, corresponding to 31 forecasts from the Riksbank and 19 from the NIER. Underlying inflation is a chained series of these two measures (UND1X/CPIX and CPIF) and therefore contains data from 59 forecasting rounds from the Riksbank and 49 from the NIER.

The NIER's March forecasts include monthly inflation forecasts only for the current and following year. It is not therefore possible to evaluate the NIER's bias at the 23- and 24-month horizons for these forecasts. The same applies to the NIER's June 2011 forecast, for which only 1- to 19-month horizons have been evaluated.

[26] As household mortgage interest expenditure is included in the CPI (but not in the CPIF), an interest rate cut will lead to lower CPI inflation in the short term. See, for example, Heikensten, L., "The Riksbank's inflation target – clarifications and evaluation", *Economic Review* 1999:1, Sveriges Riksbank.

[27] The path for the repo rate was now instead to reflect market expectations, as measured by implied forward interest rates. Since February 2007, the Riksbank has used its own endogenous forecast for the repo rate.

will therefore be of interest to look at the period from 2005 to 2013 separately.[28]

THE RIKSBANK'S CPI FORECASTS ARE ON AVERAGE AROUND 1 PERCENTAGE POINT TOO HIGH AT THE 24-MONTH HORIZON

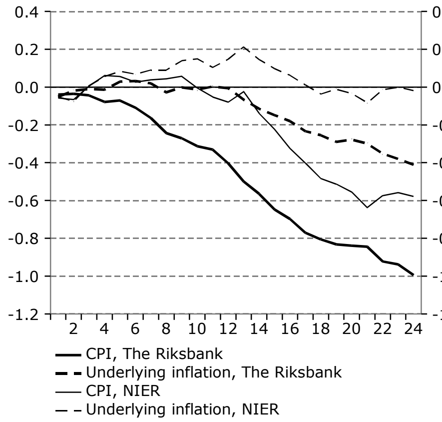
Forecast errors[29] for CPI inflation and underlying inflation have been calculated for both periods and for each forecast horizon (1 to 24 months).[30] The mean forecast errors are presented in Diagram 36 and Diagram 37.[31] For the full evaluation period from 2001 to 2013, the Riksbank's mean forecast error is, with few exceptions, negative at all horizons for both CPI inflation and underlying inflation. In other words, the central bank has overestimated inflation. At the 24-month horizon, the Riksbank has, on average, overestimated CPI inflation by around 1 percentage point and underlying inflation by around 0.4 percentage points over the full evaluation period. By way of comparison, the NIER has overestimated CPI inflation by an average of 0.6 percentage points at the 24-month horizon over the same period, while the mean forecast error in its forecasts of underlying inflation at the same horizon over that period is close to zero.

For the shorter evaluation period from 2005 to 2013, the Riksbank's results are largely unchanged, while the NIER overestimates CPI inflation by an average of around 0.3 percentage points at the 24-month horizon and *underestimates* underlying inflation by an average of around 0.2 percentage points at the same horizon.

To determine whether these average forecast errors are large or small, they can be compared with the standard errors of the forecast errors. This has been done, and p-values have been calculated.[32] The Riksbank's forecasts of CPI inflation and un-

Diagram 36 Mean Forecast Errors for Forecast Horizons 1–24 Months, March 2001-March/April 2013

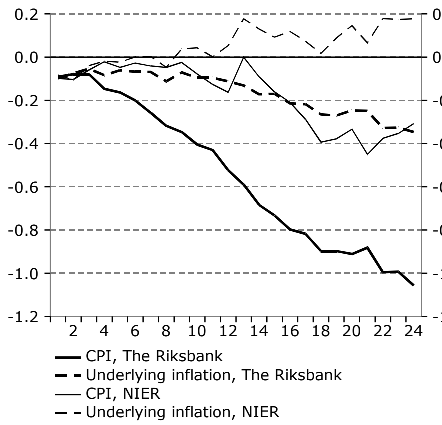
Percentage points



Sources: The Riksbank, Statistics Sweden, NIER.

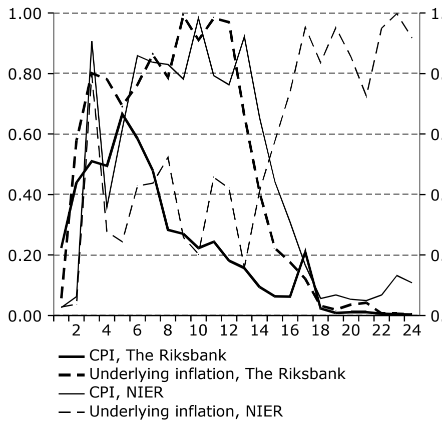
Diagram 37 Mean Forecast Errors for Forecast Horizons 1–24 Months, August/October 2005–March/April 2013

Percentage points



Sources: The Riksbank, Statistics Sweden, NIER.

Diagram 38 p-values for Forecast Horizons 1–24 Months, March 2001-March/April 2013



Sources: The Riksbank, Statistics Sweden, NIER.

---

28 The evaluation of this period starts with the NIER's forecast published in August 2005 and the Riksbank's forecast published in October 2005, giving 31 observations for the NIER and 41 for the Riksbank.

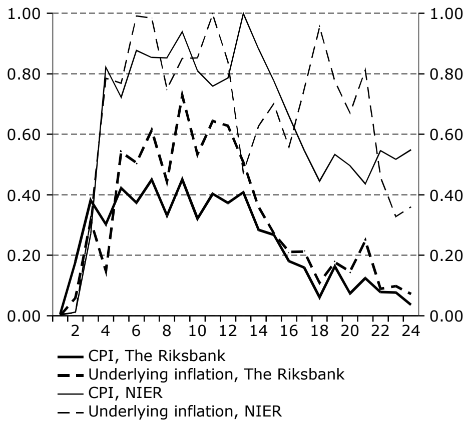
29 Forecast errors are defined as outcome less forecast, $y_{t+h} - \hat{y}_{(t+h|t)}$, where y_{t+h} is actual inflation at time $t+h$ and $\hat{y}_{(t+h|t)}$ is the forecast of the same made h months earlier.

30 The Riksbank used modal value forecasts prior to 2007, and then expected value forecasts (symmetrical confidence intervals). Skewness-adjusted forecasts prior to 2007 would probably have altered the Riksbank's results somewhat (due to skewed distributions around the point forecasts).

31 The mean and variance of forecast errors have been estimated using a regression model with only a constant. The parameter estimates for the constant are then equal to the mean forecast error.

32 The p-value is the probability of a value at least as extreme as the one observed, assuming that the true mean forecast error is zero. Newey-West standard errors have been used to calculate these p-values. The number of lags, L, is based on Newey and West's own rule (in combination with a Bartlett kernel function), $L=n^{0.25}$, rounded to the nearest integer.

Diagram 39 p-values for Forecast Horizons 1–24 Months, August/October 2005–March/April 2013



Sources: The Riksbank, Statistics Sweden and NIER.

derlying inflation in the period from March 2001 to April 2013 have a significant[33] bias (overestimation) at forecast horizons of 18 months or more, see Diagram 38. At the 24-month horizon, the p-values are below 0.01, which means that the bank's overestimation of inflation is highly significant on a two-year view. The equivalent p-value for the NIER's CPI forecasts is 0.11, and the p-value for the NIER's forecasts of underlying inflation is close to 1, which means that there are no signs of bias.

Looking instead at the p-values for the period from August/October 2005 to March/April 2013, a similar picture emerges, see Diagram 39. Due to the smaller number of observations, both standard errors and p-values are higher. Nevertheless, the mean forecast error for the Riksbank's forecasts of CPI inflation is significantly different from zero (inflation overestimated) at the 24-month horizon. There are also indications of overestimation in the Riksbank's forecasts for underlying inflation (p-value around 0.07) during this period. However, there is no statistically significant bias in the NIER's inflation forecasts over this period.

WHY HAS THE RIKSBANK SYSTEMATICALLY OVERESTIMATED INFLATION?

There are a number of possible reasons why the Riksbank has overestimated inflation. One, highlighted by the Riksbank itself as one of the most important, is that the bank has systematically overestimated import prices and underestimated productivity growth, so overestimating inflationary pressures.[34] Systematic overestimation of inflationary pressures has also been cited as a possible explanation by others.[35] One possibility mentioned by the IMF is that the Riksbank may have systematically overestimated potential unemployment. Another is that the repo rate's influence on the economy may have waned in recent times, for example through a weaker pass-through from the repo rate to lending rates.

---

[33] At a 5 per cent significance level.

[34] See Söderström, U. and A. Vredin, "Inflation, unemployment and monetary policy", *Economic Commentaries* 2013:1, Sveriges Riksbank. This has also been cited as an explanation in Jansson, P., "Riksbanken har ingen hemlig agenda" (The Riksbank has no hidden agenda), DN debatt, 9 May 2011, www.dn.se. This reasoning is supported by Assarsson, B., "Riksbank forecasts of import prices and inflation", *Economic Review* 2007:3, Sveriges Riksbank.

[35] See IMF Country Report No. 12/155, June 2012, and Zettergren, G., "Naturligt hög arbetslöshet? – om sambandet mellan politik och jämviktsarbetslöshet" (Naturally high unemployment? On the relationship between policy and equilibrium unemployment), report in the Sysselsättning och tillväxt i Sverige och Europa (Employment and Growth in Sweden and Europe) series, Global utmaning, 2011.

It is, of course, possible that the main reason – as argued by the Riksbank – is that the bank has been surprised by strong productivity and low imported inflation, and that, given the information available at each forecast date, the bank has made the best possible ex ante assessment.

WHAT HAVE BEEN THE CONSEQUENCES OF THE RIKSBANK'S INFLATION FORECAST PERFORMANCE?

The problem with these overly high inflation forecasts is that they have motivated a higher repo rate and repo rate path.[36] The Riksbank has overestimated inflation and so pursued overly tight monetary policy. With more accurate assessments of inflationary pressures, monetary policy would have been more expansionary, with the result that forecasts at the 24-month horizon would have held. The bias in the Riksbank's inflation forecasts has contributed to a higher repo rate, and so higher unemployment, than would have been the case if, on average, its inflation forecasts had been on the mark.[37]

As far back as 2006, two external experts appointed by the Swedish parliament to evaluate the country's monetary policy expressed concern that inflation had undershot the inflation target for long periods.[38] They concluded that this could be a sign that the analytical and forecasting models used by the Riksbank tend to overestimate inflation, and that there was therefore a risk of further low inflation going forward.

CLOSING REMARKS

Both the government and the Riksbank itself have previously shown that the Riksbank has made large forecast errors relative to other forecasters in its assessments of future inflation. Besides weak forecast precision, the present analysis reveals that the central bank's inflation forecasts have been systematically too high. The NIER believes that the large forecast errors, combined with significant overestimation of both CPI inflation and underlying inflation, have influenced monetary policy, resulting in too low inflation and too high unemployment.

---

[36] For example, in its monetary policy update of April 2013, the Riksbank revised down its forecast of CPI inflation and underlying inflation in 2014 by 0.7 and 0.4 percentage points respectively relative to the February 2013 monetary policy report. The bank's forecast for the repo rate in 2014 was lowered by 0.5 percentage points at the same time.

[37] This is supported by Svensson, L.E.O., "The possible employment cost of average inflation below a credible target", manuscript, 2012, www.larseosvensson.net.

[38] Giavazzi, F. and F.S. Mishkin, *En utvärdering av den svenska penningpolitiken 1995–2005* (An evaluation of Swedish monetary policy between 1995 and 2005), Report from the Riksdag 2006/07:RFR1, Sveriges Riksdag, 2006.

SPECIAL ANALYSIS

Labour Market Participation among Older People

The proportion of people aged 55 and over who participate in the labour market has risen markedly over the past decade, and the NIER expects the participation rate in this age group to increase further. The upward trend in labour market participation among older people means that potential employment and potential GDP will be around half a per cent higher in 2025 than would otherwise have been the case.

OLDER PEOPLE IN THE LABOUR MARKET TODAY

Labour market participation varies widely between age groups.[39] The participation rate, or the percentage of the population in the labour force, is highest among those aged 25–54 and then decreases with age (see Table 12). The decline is particularly marked at the ages of 60 and 65 (see Diagram 40).

Table 12 Labour Force Status 2012

Per cent

	Labour force participation[1]	Employment rate[1]	Unemployment[2]
15–24 years	52.4	40.0	23.7
25–54 years	90.6	85.2	5.9
55–64 years	77.1	73.1	5.2
65–74 years	15.3	14.9	2.6
15–74 years	71.1	65.5	8.0

[1] Per cent of population in each age group. [2] Per cent of labour force in each age group.

Source: Statistics Sweden.

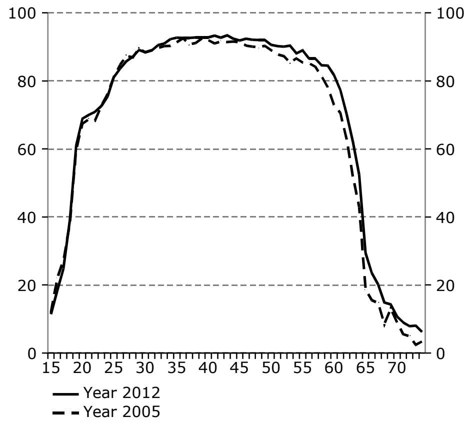
Unemployment is relatively low among older people (see Table 12). However, those older people who are unemployed tend to remain so for a long period. The job-finding rate, or the probability of moving from unemployment to employment, are not as good as for younger people (see Diagram 41).[40] Unemployment is very low among the over-65s. This is because it is generally

[39] For a survey of labour market participation among younger people, see the special analysis "Arbetslöshet bland unga" (Unemployment among the Young) in *The Swedish Economy*, June 2012.

[40] See also *Arbetsmarknadsrapport 2013* (Labour Market Report 2013), Arbetsförmedlingen (the Swedish Public Employment Service).

Diagram 40 Labour Force Participation Rate per Age Group

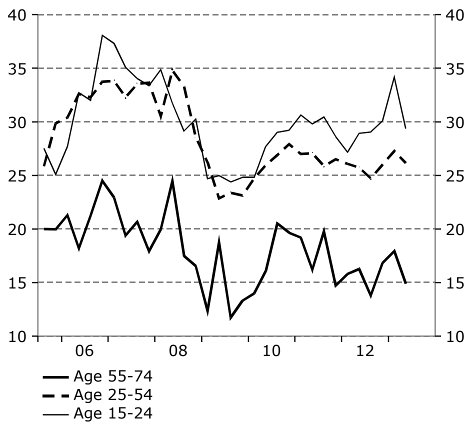
Percent



Source: Statistics Sweden.

Diagram 41 Job-Finding Rate

Percent, seasonally adjusted quarterly values

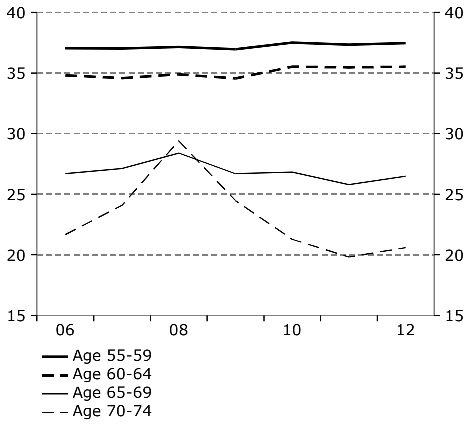


Note: The job-finding rate is the share of unemployed leaving unemployment for employment each quarter.

Sources: Statistics Sweden and NIER.

Diagram 42 Average Hours of Work per Person at Work

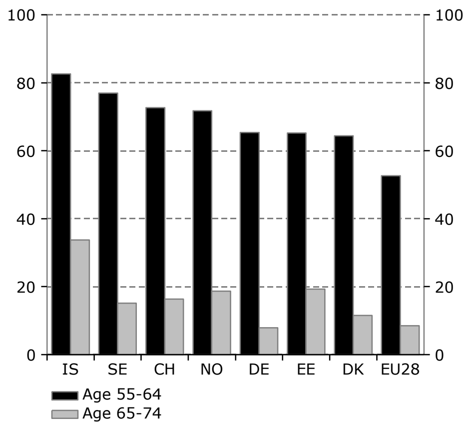
Hours per week



Source: Statistics Sweden.

Diagram 43 Labour Force Participation Rate 2012

Percent



Source: Eurostat.

only those who are in work who remain in the labour market after reaching 65.[41] Approximately 50 per cent of men and 30 per cent of women still working after their 65th birthday are self-employed.[42] As in other age groups, labour force participation and the employment rate are, on average, higher for men than for women (see Table 13).

The average number of hours worked per week by a working person is just under 37 for those aged 55–64. This is not much different to the 25–54 age group, which worked an average of 37.5 hours per week in 2012. However, average hours worked are markedly lower among the over-65s (see Diagram 42).

Table 13 Labour Force Status among Older People 2012

Per cent

	Labour force participation[1]		Employment rate[1]		Unemployment[2]	
	Women	Men	Women	Men	Women	Men
55–59 years	83.3	89.2	79.7	84.3	4.3	5.5
60–64 years	63.3	72.9	60.2	68.6	5.0	6.0
65–69 years	15.4	24.6	14.8	24.2	4.5	1.6
70–74 years	5.8	11.4	5.6	11.1	2.4	2.1

[1] Per cent of population in each age group. [2] Per cent of labour force in each age group.

Source: Statistics Sweden, LFS.

FEW COUNTRIES HAVE HIGHER PARTICIPATION RATES IN THE 55–64 AGE GROUP

By international standards, Sweden has a very high level of labour force participation among those aged 55–64. Of the OECD countries, only Iceland had a higher participation rate in this age group in 2012 (see Diagram 43). There is a clear link between labour force participation in the 55–64 and over-65 age groups in the OECD countries as a whole: if participation is high at 55–64, it is generally also high among those aged 65 and

[41] One contributing factor is that the over-65s are not entitled to unemployment benefits.

[42] The sectors in which the over-65s most commonly run their own businesses are agriculture, forestry and fishing, wholesale and retail, and business services. Around 10 per cent of women in this group operate in the care sector. When it comes to employees, men work most commonly in manufacturing or financial services, while women are most likely to work in the care sector. Many of those over the age of 64 are employed on fixed-term contracts. See chapter 10 of *Längre liv, längre arbetsliv: Förutsättningar och hinder för äldre att arbeta längre* (Longer lives, longer working lives: What older people need and do not need to work longer), preliminary report of Pensionsåldersutredningen (the Swedish Retirement Age Commission), SOU 2012:28.

over.[43] In Sweden, however, participation decreases relatively quickly at the age of 65. This can be interpreted as the norm of retiring around that age being well established in Sweden.

LABOUR FORCE PARTICIPATION AMONG OLDER PEOPLE HAS INCREASED OVER A LONG PERIOD

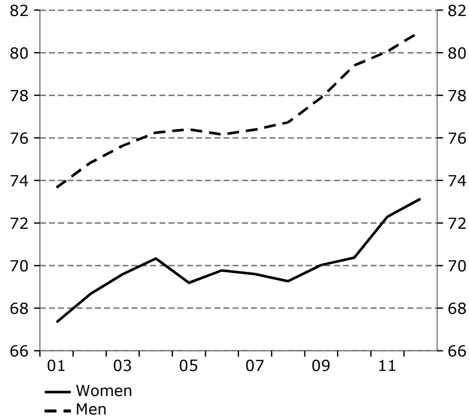
Viewed over a longer period, older people have gradually increased their participation in the labour market.[44] Participation has trended up among both older women and older men since the turn of the millennium (see Diagram 44 and Diagram 45). The increase from 2005 to 2012 was approximately 4 percentage points in the 55–64 age group and 5 percentage points in the 65–74 age group. There were increases in all of the individual age groups (see Diagram 40).[45] Labour force participation among older people appears to have been relatively unaffected by the economic climate.[46]

Many factors are affecting labour force participation, such as better health and higher life expectancy, higher average levels of education, and fewer arduous jobs.[47] Pension reforms have also played a role by increasing the financial incentives for staying in work longer, and recent years' introduction of the earned-income tax credit and reforms of the sickness benefit system have further incentivised participation in the labour market.[48]

DEMOGRAPHIC DEVELOPMENTS AND FUTURE TRENDS

Demographic developments, or how the size and composition of the population vary over time, affect the supply of labour. If

Diagram 44 Labour Force Participation Rate, Age 55–64
Percent



Sources: Statistics Sweden and NIER.

Diagram 45 Labour Force Participation Rate, Age 65–74
Percent

Sources: Statistics Sweden and NIER.

---

[43] See "Utträdesåldern från arbetslivet – ett internationellt perspektiv" (Retirement age – an international perspective), memo from the Swedish Pensions Agency, 2012.

[44] See, for example, Sjögren Lindquist, G. and E. Wadensjö, "Arbetsmarknaden för de äldre" (The labour market for older people), Report to the Swedish Fiscal Policy Council 2009/7.

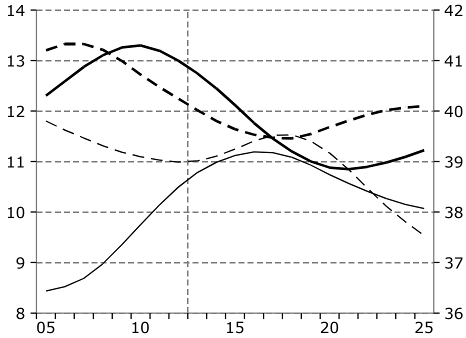
[45] The average increase for single-year cohorts (55-year-olds, 56-year-olds and so on) is actually larger than the aggregated increases for the 55-64 and 65-74 age groups. This is because the composition of the older population has changed since 2005, with more people reaching more advanced ages. As labour force participation decreases with age, this is putting a damper on the increase in participation in the aggregated groups.

[46] This was also observed in other countries during the financial crisis. See *OECD Employment Outlook 2013*, OECD.

[47] See *Längre liv, längre arbetsliv: Förutsättningar och hinder för äldre att arbeta längre* (Longer lives, longer working lives: What older people need and do not need to work longer), preliminary report of Pensionsåldersutredningen (the Swedish Retirement Age Commission), SOU 2012:28.

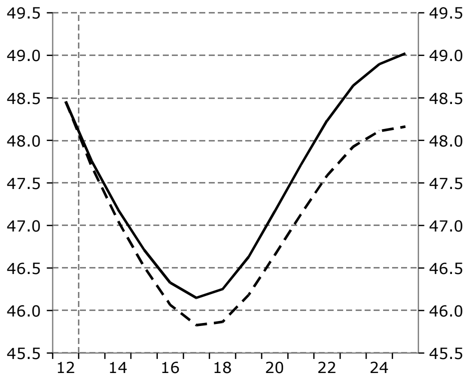
[48] See, for example, Laun, L., "Om förhöjt jobbskatteavdrag och sänkta arbetsgivaravgifter för äldre" (On higher earned-income tax credits and lower employer contributions for older people), Report 2012:16, IFAU, and Glans, E., "Pension reforms and retirement behaviour", Uppsala University Department of Economics, 2009.

Diagram 46 Population Shares
Percent



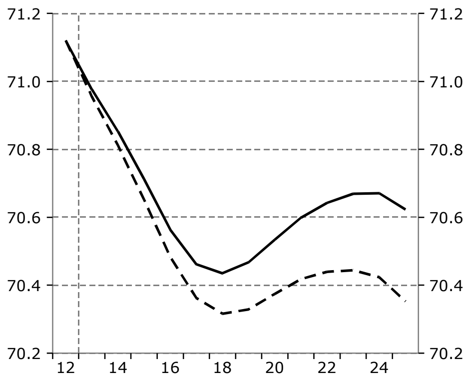
Source: Statistics Sweden.

Diagram 47 Labour force Participation Rate, Age 55–74
Percent



Source: NIER.

Diagram 48 Labour Force Participation Rate, Age 15–74
Percent



Source: NIER.

groups with a lower average participation rate grow as a proportion of the population, this will pull down overall labour force participation, and vice versa. The 65–74 age group has grown and will account for between 10 and 11 per cent of the population in 2015–2025, whereas the proportion of people aged 25–54 will decrease (see Diagram 46).

The NIER uses a demographic model called KAMEL for labour force projections.[49] The model assumes that participation rates in each age group are constant over time and so does not capture any trends in participation in specific groups. The NIER has concluded that these demographic projections needs to be supplemented with a trend that reflects further growth in labour force participation among older people.

The NIER predicts that labour force participation among those aged 55–74 will continue to climb, but that the upward trend will slow as the effects of the earned-income tax credit and reforms of the sickness benefit and pension systems abate. The trend is expected to be strongest in the 65–69 age group.[50] Labour force participation among those aged 55–74 is projected to rise at a rate such that the percentage of the labour force in this age group will be approximately 1.5 per cent higher in 2025 than is projected without this trend. The labour force participation rate in this age group will be approximately 1 percentage point higher (see Diagram 47).

Labour force participation for the full 15–74 age group will decrease from today's levels through to 2025. This is because those with lower average participation rates, such as older people and immigrants, will grow as a proportion of the population (see Diagram 48). However, when the projection includes an upward trend in labour force participation among older people, the decrease is smaller, and the participation rate is approximately 0.3 percentage points higher in 2025 than is projected without this trend (see Diagram 48).

[49] For a more detailed presentation of KAMEL, see Appendix 2 to "Sveriges ekonomi – ett långsiktsscenario fram till år 2035" (The Swedish Economy – a long-term scenario through to 2035), Occasional Study No. 30, NIER.

[50] There is reason to believe that labour force participation will continue to rise fastest among those aged 65-69 because previous pension reforms have impacted most heavily on this age group. See "Hur ska utvecklingen av arbetsmarknadens funktionssätt bedömas?" (How should developments in the functioning of the labour market be interpreted?), Report from the Economics Department of the Ministry of Finance 2011:1, Swedish Ministry of Finance.

CONTINUED RISE IN PARTICIPATION AMONG OLDER PEOPLE TO PUSH UP POTENTIAL GDP

The upward trend in labour force participation among older people will enlarge the overall potential labour force by approximately 20 000 people or half a per cent (see Diagram 49). As unemployment and average hours worked among older people are below average, higher participation rates in this age group will put downward pressure on overall unemployment and average hours worked. However, these effects are expected to be marginal.

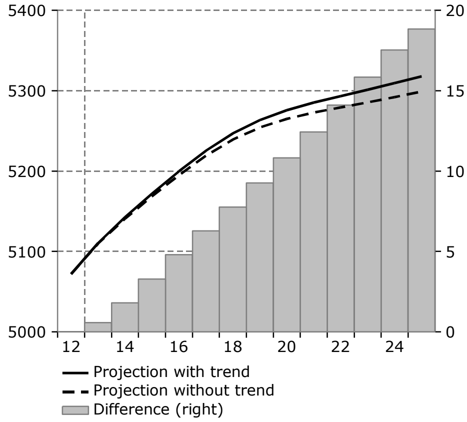
The overall impact on potential GDP will therefore be approximately the same as that on the potential labour force. Potential GDP will be approximately 0.5 per cent higher in 2025 as a result of continued growth in labour force participation among older people.

How public finances are affected by increased labour force participation depends on many different factors.[51] With more people in work, tax revenue will be higher than otherwise. However, the rise in tax revenue will be reduced by more people receiving earned-income tax credits, especially if the increase in participation is among the over-65s, as they are entitled to both a higher earned-income tax credit and lower employer contributions.

The under-65s may be entitled to both unemployment and sickness benefits. If they increase their labour force participation but do not work due to unemployment or ill health, public expenditure will rise. The over-65s are not entitled to these benefits, and so an increase in their participation will bring a more clear-cut improvement in public finances.

The overall effect on public finances of higher labour force participation among older people will be positive, but the size of the effect will depend on the ages at which most of the increase takes place.

Diagram 49 Potential Labour Force
Thousands



Source: NIER.

[51] This refers to current rules. The final report of Pensionsåldersutredningen (the Swedish Retirement Age Commission) presents estimates of what effects its proposals would have on public finances. See *Längre liv, längre arbetsliv: Åtgärder för ett längre arbetsliv* (Longer lives, longer working lives: Actions for a longer working life), final report of Pensionsåldersutredningen, SOU 2013:25.

National Institute of Economic Research, Kungsgatan 12 - 14, Box 3116, SE - 103 62 Stockholm,
Sweden Phone: +46 8 453 59 00, Fax: +46 8 453 59 80, E-mail: ki@konj.se, Website: www.konj.se

ISSN: 0039-7296, ISBN 978-91-86315-44-3