### SPECIAL ANALYSIS

### Long-term unemployment in the Swedish labour market

Rising unemployment brings an increased risk of more people becoming long-term unemployed. Compared with the short-term jobless, it is harder for the long-term jobless to find work again once the economy picks up, which can result in persistently higher unemployment levels. Given that unemployment has been high since the financial crisis struck in 2008, there is therefore reason to look at developments in long-term unemployment. The analysis reveals that the number of long-term jobless as a share of the total number of jobless has fallen since 2009 despite high unemployment. It also shows that the rise in long-term unemployment has been relatively limited, and that it is only just above the historical average.

Long-term unemployment has great social and economic costs for both the individual and society. An extensive body of economic research has documented the negative consequences of an extended period of unemployment for a person's chances of finding work again. The long-term jobless struggle in the labour market because they lose contacts and skills and seek work less intensively.<sup>60</sup> Research also shows that, when recruiting, employers tend to overlook the long-term jobless in favour of those who are in work and the short-term unemployed, based on an expectation that the long-term jobless will be less productive.<sup>61</sup> The long-term jobless therefore have greater problems finding work when the economy normalises, and high levels of longterm unemployment make it harder to bring down unemployment as a whole.

Unemployment in Sweden has risen over the past five years. There are several reasons for this. The financial crisis and ensuing economic downturn have reduced demand for labour. The labour force has grown since 2007 as a result of economic policy initiatives to increase the income differential between workers and non-workers, and to integrate those on disability benefits and newly arrived refugees into the labour force. These initia-

#### Short-term and long-term unemployment

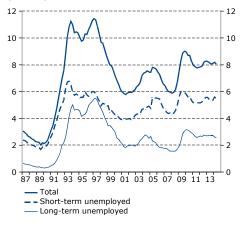
In Statistics Sweden's official labour market statistics, the Labour Force Survey (LFS), a person is classified as unemployed if he or she is without work but is applying actively for work and is able to work. The concept of applying actively here comprises widely different levels of activity, ranging from browsing job advertisements on the internet to attending job interviews. The unemployed and the employed together make up the labour force. Those who are without work but are not actively seeking work or not able to take up an employment are outside the labour force and not counted as unemployed. This official unemployment definition based on the LFS is the focus of this special analysis. In the Swedish Public Employment Service's statistics, other definitions are applied.

Long-term unemployment is defined as unemployment in excess of 26 weeks (without interruptions for, e.g., temporary work). Short-term unemployment, on the other hand, is defined as unemployment for at most 26 weeks.

<sup>&</sup>lt;sup>60</sup> Hensvik, L. and O. Nordström-Skans, "Networks and youth labor market entry", Working Paper 2013:20, Swedish Institute for Evaluation of Labour Market and Education Policy, and Edin, P.A. and M. Gustavsson, "Time out of work and skill depreciation", *Industrial & Labor Relations Review* 61, 2008, pp. 163-180.

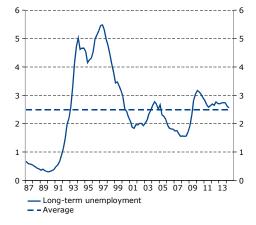
<sup>&</sup>lt;sup>61</sup> Kroft, K., F. Lange and M.J. Notowidigdo, "Duration dependence and labor market conditions: Evidence from a field experiment", *Quarterly Journal of Economics* 128, 2013, pp. 1123-1167, and Eriksson, S. and D-O. Rooth, "Do employers use unemployment as a sorting criterion when hiring? Evidence from a field experiment", *American Economic Review* 104, 2014, pp. 1014-1039.

Diagram 133 Unemployment and longterm unemployment, 16–64 years Per cent of labour force, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER.

Diagram 134 Long-term unemployment, 16–64 years Per cent of labour force, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER.

tives and demographic developments have served to increase the supply of labour, while at the same time the slump in the economy has eroded demand for labour.<sup>62</sup> Taken together, the outcome has been higher unemployment and so an increased risk of more people being out of work for more than six months.

The present analysis examines long-term unemployment in Sweden between 1987 and the first half of 2014. It looks first at long-term unemployment as a share of the labour force, both as a whole and broken down by age, origin, education and gender.

This is followed by an exploration of long-term unemployment as a share of total unemployment to shed light on whether the duration of unemployment has changed over time in the various groups analysed. The analysis is based on the official labour market statistics from Statistics Sweden published in the Labour Force Survey (LFS), and focuses chiefly on the 16–64 age group.<sup>63</sup>

#### **MOVEMENTS IN LONG-TERM UNEMPLOYMENT OVER TIME**

Since the financial crisis erupted in autumn 2008, unemployment has risen by 2.2 percentage points, from 5.9 per cent of the labour force in the second quarter of 2008 to 8.1 per cent in the second quarter of 2014 (see Diagram 133). Over the same period, long-term unemployment has increased by 1 percentage point, from 1.6 per cent to 2.6 per cent of the labour force. The present rate of long-term unemployment is therefore close to the historical average since 1987 of 2.5 per cent (see Diagram 134).<sup>64</sup>

Although the levels measured historically are associated with some uncertainty,<sup>65</sup> the number of long-term jobless as a per-

 $<sup>^{62}</sup>$  See also the special analysis "Labour market participation has increased" in The Swedish Economy, March 2014.

<sup>&</sup>lt;sup>63</sup> Since 2001, statistics have been reported for the population aged 15-74. Before that, information was collected only for those aged 16-64. To follow trends over time, therefore, the main focus of the present analysis is on unemployment among those aged 16-64. Some breakdowns of the statistics are only available for the 15-74 age group, however. As a rule, the different age ranges do not affect the description of unemployment, as the contribution from those aged 15 and 65-74 is only marginal.

 $<sup>^{64}</sup>$  The 1980s and 1990s can be excluded so that average unemployment is measured since 1999 instead. This reduces the average level of long-term unemployment only slightly from 2.5 to 2.4 per cent of the labour force, and means that the level of long-term unemployment in the second quarter of 2014 was still close to the average for the period since 1999.

<sup>&</sup>lt;sup>65</sup> Major changes were made to the LFS in 2005, but the previous data have been adjusted by Statistics Sweden to allow comparison. Adjustments of this kind introduce more uncertainty than standard statistical uncertainty – see the special analysis "Changeover in LFS Complicates Interpretation of the Labour Market Situation" in *The Swedish Economy*, August 2005. In addition, there is particular uncertainty about the length of periods of unemployment, as information is unavailable for the period from April 2005 to January 2006 due to collection problems, which has been addressed by means of imputation.

centage of the labour force is currently only slightly above the historical average whether measured since 1987 or since 1999.

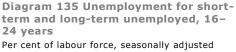
#### DIFFERENCES IN LONG-TERM UNEMPLOYMENT BETWEEN GROUPS

The following breaks down unemployment of different durations by age, origin, education and gender. Unemployment in each group has been calculated as the number of jobless in that group as a percentage of the labour force in that group, and then divided into short-term and long-term.

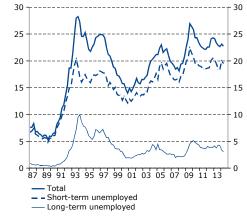
#### Young people out of work for relatively short periods

In 2013, average long-term unemployment was highest in the youngest age group (16-24), where 23.3 per cent of the labour force was out of work (see Table 17). This breaks down into long-term unemployment of 4.1 per cent and short-term unemployment of 19.2 per cent, which means that short-term unemployment was by far the more common category of unemployment in this age group.

Youth unemployment has been on the increase for a long time (see Diagram 135). One contributing factor is an increase in the proportion of full-time students among the jobless in this age group.<sup>66</sup> This has coincided with the expansion of further and higher education. Entry into the labour market may also have become more difficult in recent years. Studying is a way for full-time students to support themselves, giving them a reason to remain students while seeking work.67 The growing share of students among the young unemployed should also mean that fewer go on to become long-term jobless, because they can abandon the hunt for work and return to full-time studies. Despite the relatively high overall level of youth unemployment, long-term unemployment in this age group is well below the levels of the 1990s (see Diagram 3). This means that the increase in youth unemployment is due mainly to an increase in short spells without work.



quarterly values



Sources: Statistics Sweden and NIER.

<sup>&</sup>lt;sup>66</sup> See the special analysis "Arbetslöshet bland unga" [Youth Unemployment] in *The Swedish Economy*, June 2012.

<sup>&</sup>lt;sup>67</sup> One further explanation may be that the definition of unemployment means that "looking at vacancies" is sufficient to count as actively seeking work. Now that the availability of job advertisements has increased, the level of unemployment recorded may therefore also have increased.

#### Table 17 Unemployment 2013

Per cent of labour force, 16-64 years

Group	Unemployed <sup>1</sup>		Unemployed 27– weeks <sup>1</sup>
16–24 years <sup>2</sup>	23.3	19.2	4.1
25-54 years	6.1	3.6	2.5
55–64 years	5.1	2.4	2.7
Born in Sweden	6.2	4.5	1.7
Men	6.3	4.4	1.8
Women	6.0	4.5	1.5
Born abroad	16.0	8.9	7.1
Men	16.5	8.8	7.8
Women	15.5	9.0	6.4
Women	7.7	5.3	2.4
Men	8.1	5.2	2.9
Total 16–64 years <sup>2</sup>	7.9	5.2	2.6

 $^1$  Per cent of labour force, adjusted for partial non-response regarding unemployment duration.  $^2$  Data for the age groups 15–24 and 15–74 are almost identical to those for age groups 16–24 and 16–64 respectively, since relatively few aged 15 and 65–74 are defined as unemployed. See also note 63 on page 78.

Sources: Statistics Sweden and NIER.

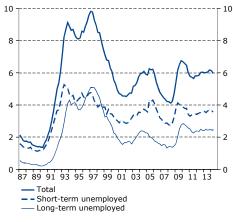
In the 25–54 age group, long-term and short-term unemployment have moved together (see Diagram 136). Increases in unemployment as a whole have brought increases in both shortterm and long-term unemployment, which means that a larger number of short-term jobless in this group leads to more people becoming long-term jobless. There is thus a risk of the newly unemployed squeezing out those who have been out of work for longer when vacancies are filled.<sup>68</sup>

In the oldest age group (55–64), the situation is largely the reverse of that in the youngest group. Here, long-term unemployment has largely followed overall unemployment, while short-term joblessness has held around 2 per cent since the early 1990s (see Diagram 137). This means that an increase in overall unemployment in this group largely translates into a corresponding increase in long-term joblessness. Those aged 55–64 therefore have a smaller chance of finding work within six months than the younger age groups.

<sup>68</sup> See footnote 61 on page 77.

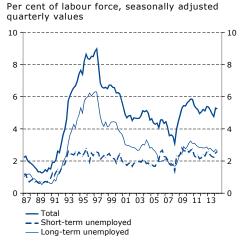
Diagram 136 Unemployment for shortterm and long-term unemployed, 25– 54 years

Per cent of labour force, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER.

Diagram 137 Unemployment for shortterm and long-term unemployed, 55– 64 years



Sources: Statistics Sweden and NIER.

## Those with further/higher education least affected by the financial crisis

There are also major variations between groups with different levels of education. Long-term unemployment is most common among those with only compulsory education, and lower for those with further and higher education (see Table 18).

#### Table 18 Unemployment and level of education 2013

Per cent of labour force, 15-74 years

Highest level of education attained	Unemployed <sup>1</sup>	Unemployed 1–26 weeks <sup>1</sup>	
Compulsory education	20.0	14.2	5.8
Secondary education	7.7	5.0	2.8
Post-secondary educat	ion 4.9	3.3	1.6
Total 15-74 years <sup>2</sup>	8.0	5.4	2.6

 $^1$  Per cent of labour force, adjusted for partial non-response regarding unemployment duration.  $^2$  Data for the age groups 15–24 and 15–74 are almost identical to those for age groups 16–24 and 16–64 respectively, since relatively few aged 15 and 65–74 are defined as unemployed. Se även not 63 på sidan 78.

Sources: Statistics Sweden and NIER.

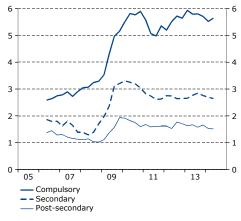
Long-term unemployment among those with only compulsory education increased sharply in early 2009 (see Diagram 138).<sup>69</sup> In this group, long-term unemployment has levelled off since the financial crisis rather than decreased, and it is now significantly higher than in the groups with further and higher education, where it has fallen since the financial crisis. Long-term unemployment among those with further and higher education also rose as a result of the financial crisis, but to a much lesser extent. The number of long-term jobless climbed from around 1 to almost 2 per cent of the labour force in these groups in 2009 before falling back to around 1.5 per cent, which is almost the same level as in 2006.

#### Higher long-term unemployment among those born abroad

Long-term unemployment among those born abroad has been measured since 2005.<sup>70</sup> In this group, the financial crisis led to an increase in long-term unemployment from just over 4 per cent of the labour force to around 7 per cent (see Diagram 139).

Diagram 138 Long-term uemployment for different educational levels, 15–74 years

Per cent of labour force, seasonally adjusted quarterly values



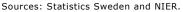
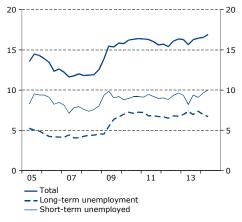


Diagram 139 Unemployment for persons born abroad, 15–74 years Per cent of labour force, seasonally adjusted quarterly values

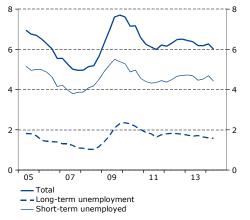


Sources: Statistics Sweden and NIER.

 $<sup>^{69}</sup>$  The long-term unemployed as a percentage of the labour force can only be broken down by education from 2006 onwards.

 $<sup>^{70}</sup>$  Before 2005, foreign origin was recorded only for the unemployed, and not for the population as a whole, the labour force or the employed. This means that unemployment as a percentage of the population or the labour force cannot be calculated using the data available from Statistics Sweden.

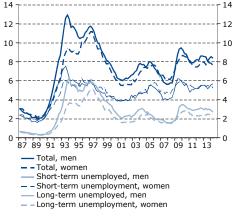
Diagram 140 Unemployment for persons born in Sweden, 15–74 years Per cent of labour force, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER.

Diagram 141 Unemployment for men and women

Per cent of labour force, age 16–64, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER.

Among those born in Sweden, both short-term and long-term unemployment have fallen back to levels close to those before the financial crisis (see Diagram 140). One reason why long-term unemployment has persisted among those born abroad is that the chances of finding work as an immigrant are lower than for native Swedes.<sup>71</sup> This means that those born abroad remain out of work for longer after an economic downturn than those born in Sweden.

Besides these more structural explanations for higher longterm unemployment in the foreign-born population, cyclical factors and economic policy initiatives have widened the gap between the two groups over the past five years. Despite weak demand in the economy, the supply of labour has increased in both groups as a result of various policy initiatives. The supply of foreign-born labour has risen following the introduction of the Integration Initiative in December 2010. As a result of this change, refugees, other persons in need of protection and family members coming to Sweden are registered with the employment service as jobless as soon as they receive a residence permit. The labour supply has also increased in the population in general, partly because income from employment has risen faster than social insurance replacement rates, and those on disability benefits who are deemed fit to work are being referred back to the employment service. An increase in the labour supply provides a basis for higher employment in the longer term.<sup>72</sup> In the short term, however, growth in the labour force may lead to more people competing for the same jobs. As those born abroad initially find life harder in the labour market, the combination of these reforms and the economic downturn may have contributed to a temporary increase in long-term unemployment in this group.

#### More men than women long-term unemployed

There are also some differences, albeit small ones, between men and women in terms of both overall and long-term unemployment (see Diagram 141). Joblessness is higher among men than among women, especially long-term joblessness. The lower overall level of unemployment among women in the current economic downturn can be explained by more women working

<sup>&</sup>lt;sup>71</sup> An Arab name on an otherwise identical job application reduces the chances of being called to interview by almost 80 per cent compared with an ethnic Swedish name. See Carlsson, M. and D-O. Rooth, "Evidence of ethnic discrimination in the Swedish labor market using experimental data", *Labour Economics* 14, 2007, pp. 716-729.

<sup>&</sup>lt;sup>72</sup> See chapter 5, "Equilibrium unemployment and its explanatory factors" in *Report on Wage Formation in Sweden*, Swedish National Institute of Economic Research, 2013.

in the public sector where the risk of losing one's job is lower than in the private sector. Given that long-term unemployment is more prevalent among those born abroad than among those born in Sweden, it will also be more common among men, as labour market participation rates are higher among foreign-born men than among foreign-born women. The gender differences in long-term unemployment may also be due to women exiting the labour force earlier on average than men – for example, women are more likely to study than men.

# LONG-TERM UNEMPLOYMENT'S SHARE OF TOTAL UNEMPLOYMENT

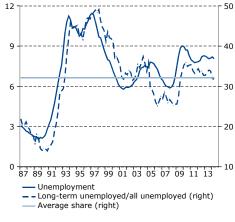
Given that long-term unemployment is harder to escape than short-term unemployment, it is important to investigate how the risk of becoming long-term jobless has changed over time. This is particularly relevant given the high levels of unemployment since 2008. Unemployment is broken down here by age and origin.<sup>73</sup>

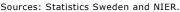
High unemployment has historically coincided with the longterm jobless accounting for a large proportion of the total number out of work (see Diagram 142). Over the past decade, however, this relationship has weakened. The change has become more marked since the financial crisis, with the long-term unemployed's share of the total number of unemployed falling despite high unemployment. In the first two quarters of 2014, long-term unemployment as a share of total unemployment was around the historical average, which means that recent years' high unemployment has featured a higher proportion of people out of work for short periods than is normal for that level of unemployment.

#### Age differences in long-term unemployment share

As mentioned earlier, both long-term and short-term unemployment as a percentage of the labour force is higher among young people than among older people (see Table 17). The risk of short-term joblessness becoming long-term joblessness, however, is lower among the young than in the other age groups (see Diagram 143). The fact that the under-25s now account for a larger share of unemployment than before may be one reason for recent years' decline in the long-term unemployed's share of overall unemployment. In the period since the financial crisis, Diagram 142 Long-ter unemployment share, 16–64 years

Per cent of labour force and per cent of all unemployed, respsctively, seasonally adjusted quarterly values





**Diagram 143 Long-term unemployment share for different age groups** Per cent of all unemployed in the relevant age group, seasonally adjusted quarterly values



Sources: Statistics Sweden and NIER.

<sup>&</sup>lt;sup>73</sup> No breakdown by education or gender is performed here. The diagrams above show that the differences in the risk of unemployment becoming long-term associated with education and gender are relatively limited and have not changed notably during the period studied.

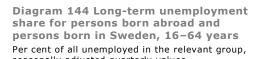
just under 20 per cent of young people out of work have been long-term jobless, which is lower than in the economic downturns of the 1990s and early 2000s. During the sharp recession of the 1990s crisis, the risk of unemployment turning into longterm unemployment was much higher than it is today, with more than 30 per cent of the jobless in this age group becoming long-term jobless. Even during the milder economic downturn at the start of the new millennium, the risk of young people becoming long-term unemployed was somewhat higher than it is today.

In the 25–54 age group, 40 per cent of the jobless are currently long-term jobless. Comparing the situation over the past five years with the economic downturns of the 1990s and the early 2000s indicates that the financial crisis hit this group harder in terms of long periods of unemployment.

In the 55–64 age group, almost half of the unemployed in recent years have been out of work for more than six months. However, the risk of long-term unemployment among the jobless in this group is lower than it was a decade ago, and lower than it was in the 1990s, and has only been lower during the economic boom of 2005-2007 and the years around 1990 (see Diagram 143). It should be noted, however, that this does not necessarily mean that the over-55s are returning to work more quickly today than before. A decrease in long-term unemployment's share of total unemployment means only that more of these people stop seeking work within 27 weeks. This may be because they have left the labour force. At the same time, it should be stressed that the number of people transferring from unemployment to early retirement and disability pensions has decreased. There is therefore reason to believe that people in this age group are indeed finding work again more quickly than 5-10 years ago.

## Differences in long-term unemployment between those born in Sweden and abroad

The risk of unemployment becoming long-term has been greater among the foreign-born population than among the Swedishborn population more or less throughout the period from 1987 to 2014 (see Diagram 144). The long-term unemployed's share of total unemployment has followed the same trend in both groups, both before and after the financial crisis. The long-term jobless accounted for 42 per cent of unemployment among those born abroad on average from the second quarter of 2008 to the second quarter of 2014, while the equivalent figure for those born in Sweden was 28 per cent.





Sources: Statistics Sweden and NIER.

#### **CLOSING REMARKS**

Long-term joblessness in Sweden has been relatively stable around 2.5 per cent of the labour force since the late 1990s. The relatively high overall level of unemployment currently seen in Sweden is due largely to an increase in short periods without work, especially among the young.

Long-term unemployment has been slightly above the historical average since the financial crisis, but the increase has not been dramatic. Despite the persistent economic slump since the financial crisis began in 2008, the number of long-term jobless as a percentage of the total number of jobless has fallen since 2009 and is currently lower than during the economic downturns of the 1990s and the early 2000s. This means that fewer people have become long-term unemployed in the recent recession than during the two previous ones.

The breakdown by demographics and education reveals other patterns. Long-term unemployment as a percentage of the labour force among those with only compulsory education and those born abroad has increased since the mid-2000s.