

Economic Commentaries

Who switches jobs and is the wage premium for switching jobs cyclically normal?

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A relatively large proportion of the total workforce switch jobs each year. Some people are more inclined to switch jobs than others. For example, it is more common for young people to switch jobs than for older people to do so. There is also greater mobility on the labour market among highly educated people. Previously, mobility was greater among men, but the difference between men and women has decreased and was very small in 2016. The proportion of the workforce who switch jobs correlates with the economic situation. It is more common to switch jobs when the demand for labour is high. People who switch jobs generally have stronger wage growth in the year they switch than those who do not do so. The size of this wage premium for switching jobs also correlates with the economic situation. Currently, the majority of indicators point to high resource utilisation on the labour market. The proportion of the workforce switching jobs is also on a high level, but aggregated wage growth has been subdued despite the strong economic situation. Data indicate, however, that the wage premium for those who switch jobs has not deteriorated over time but is in line with the level it has been on during previous periods of similar resource utilisation.

In traditional cyclical analyses of the labour market, the main focus is on the level and development of the employment rate, labour force participation rate and unemployment rate. However, even when there are minor changes in total employment, the flows on the Swedish labour market are considerable; hundreds of thousands of people move in and out of employment and switch jobs every year. One factor that influences the variation in these flows is the economic situation. For example, in good times, more people switch jobs as the number of vacancies, and hence the chance of getting a new job, is greater. Historically, people who switch jobs have on average had stronger wage growth than those who have not done so.² This means that variations in the proportion who switch jobs can influence total wage and price growth in the economy, making this proportion also interesting to analyse from a monetary policy perspective.

Based on individual data, this economic commentary aims to describe the flows that can be observed on the Swedish labour market and in particular to examine who switches jobs and whether the propensity to switch jobs has changed over time. The commentary also aims to examine whether the wage premium gained by those who switch jobs has changed compared with previous periods of low unemployment and high resource utilisation on the labour market. This is another step in the attempts to shed light on the subdued wage growth in recent years in relation to the economic situation.³

Substantial flows on the labour market

Here, flows are measured using register-based labour market statistics

Cyclical analyses of the labour market often use quarterly time series from, for example, the Labour Force Surveys (LFS). However, these have a relatively short history, are based on samples and lack information on wages. To be able to trace individuals over time and identify who has switched and not switched jobs respectively, and what wage income they have had, this economic commentary uses register-based labour market statistics (RAMS). RAMS is an annual census survey that is mainly based on statements of earnings submitted to the Swedish Tax Agency. The statistics are published after each year-end with a time lag of approximately one year, which means that data are currently available up to the end of 2016. In RAMS, everyone registered as resident in Sweden is given an

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² See Statistics Sweden (2013).

³ For an analysis of wage growth in relation to the economic situation, see Sveriges Riksbank (2017) and Sveriges Riksbank (2018).

employment status either as gainfully or non-gainfully employed. The concept of gainful employment differs from the concept of being employed in that it is based on administrative data instead of on interviews and the frame, i.e. the employment status, is determined according to an estimated limit value. If a person's wage income, i.e. income from employment, exceeds the limit value, the person is considered to be gainfully employed. The model used to estimate the limit value is designed so that it, as far as possible, includes people who are considered to be in employment according to generally accepted definitions from the International Labour Organization (ILO).⁴

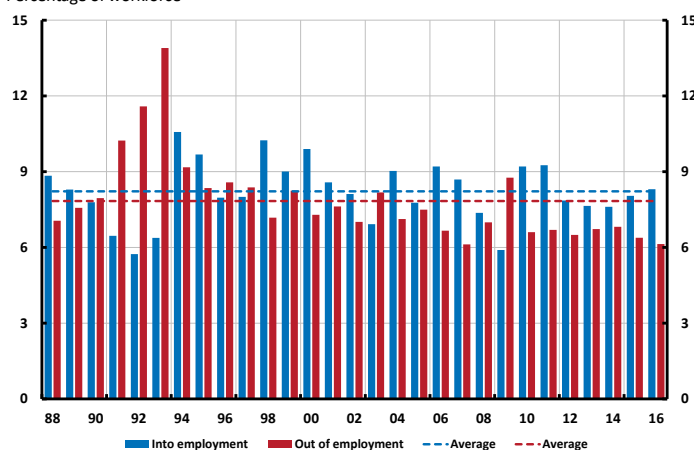
One of the benefits of RAMS is that it is a census survey, which means that the entire population is studied. One of the drawbacks, on the other hand, is that the wage measure, which refers to disbursed wage income during the year, differs from, for example, the hourly or monthly wage that is usually used in conventional cyclical analyses (see further in the section "The wage measure in RAMS compared with other wage measures"). Swedish wage structure statistics (LSS) could also be used for the type of analysis performed in this commentary, but in contrast to RAMS, LSS are compiled from a sample survey and not from a comprehensive survey.⁵ However, the wage measure in LSS tallies more with the wage measures that cyclical analyses normally focus on.

Flows on the labour market are always substantial, regardless of the economic situation.

During the period 1988–2016, around eight per cent of the total workforce have moved out of or into employment every year (see Figure 1).⁶ Here, moving into employment means that the individual has gone from not being employed (either being outside the labour force or unemployed) to being employed from one year to the next. Similarly, moving out of employment means that the individual has gone from being employed to not being employed (either being outside the labour force or unemployed) from one year to the next.

Figure 1. Flows into and out of employment

Percentage of workforce



Source: Statistics Sweden.

Between 2015 and 2016, the in- and outflow amounted to 8.3 and 6.1 per cent respectively. This is equivalent to almost 400,000 and just under 300,000 people and the difference between the two equals the employment growth in the economy. The size of these flows is dependent on the economic situation. When economic activity rises, new jobs are created

⁴The frame in RAMS is the 16–74 age group. All those under 16 and over 74 years of age are hence given the non-gainfully employed status. To be able to consider wage differences due to age, sex and which period in the year the wage income relates to, the population is divided into 24 groups with different estimated limit values. Information from LFS is also used in the estimation and the main reference period is November. For more information on RAMS, see www.scb.se

⁵In light of increased labour force participation among older people, a drawback of LSS is that up to the end of 2013, they only include individuals under the age of 65. Since 2014, individuals up to and including the age of 66 are included.

⁶The concept of employment is used here synonymously with the concept of gainful employment.

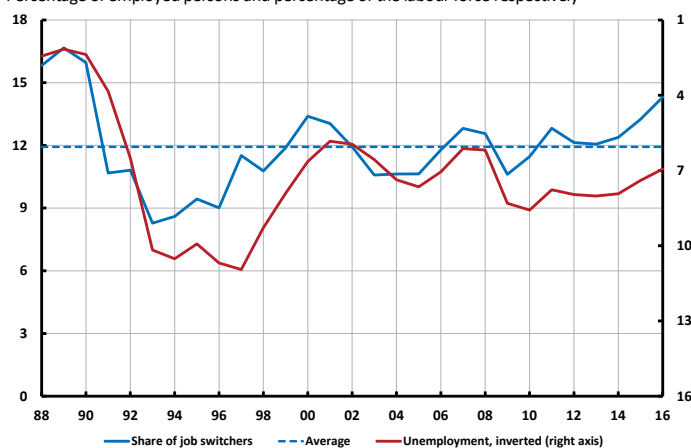
and the inflow increases, and when economic activity declines, jobs disappear and the outflow increases. Clear examples of the correlation with the economic situation are the crisis at the beginning of the 1990s and the financial crisis of 2008–2009. During both these crises, the outflows from employment were relatively large while the inflows were relatively small, particularly during the 1990s crisis. To a certain extent, in- and outflows are also a natural consequence of older people leaving the labour force to retire while young people enter it. Structural changes in the way the labour market works and population growth can also affect the inflows and outflows. Over the last ten years, for example, the population and labour supply have increased significantly and the inflow has therefore been much greater than the outflow.

More people switch jobs when economic activity is high

In addition to those people who flow in and out of employment every year, a large proportion of the workforce also switch jobs. During the period 1988–2016, an average of almost 12 per cent of the workforce switched jobs each year (see Figure 2), which is the equivalent of about half a million people.⁷

Figure 2. The proportion of the workforce who have switched jobs and inverted unemployment

Percentage of employed persons and percentage of the labour force respectively



Sources: Statistics Sweden and the Riksbank.

Switching jobs can either be voluntary or involuntary, but the proportion who switch jobs clearly correlates negatively with unemployment, which indicates that most people who switch jobs do so voluntarily. When economic activity rises, the number of job openings increases and unemployment decreases. *Competition for the job openings* is then reduced, which in turn increases the chances of individuals wanting a new job of actually getting one. At the same time, *competition for employees* increases and employers may be more inclined to offer a higher wage, which may provide added incentive for switching jobs.

The above reasoning along with higher centrally agreed wages and greater allocations to local wage formation provide a key explanation for why aggregate wage growth in the economy normally rises when the economy strengthens.⁸ But despite the strong economic situation, wage growth has been surprisingly subdued in many developed economies in recent years and a number of different explanations have been put forward. In the United States, which is slightly in front of Sweden in its business cycle, low mobility, defined here as

⁷ To be counted as an employed individual who has switched jobs, the individual has to have switched both employer and workplace. Switching jobs or working tasks internally within the same company or organisation does not count. Those who switch jobs several times during the same year are only counted once as the data are only compared at two points in time.

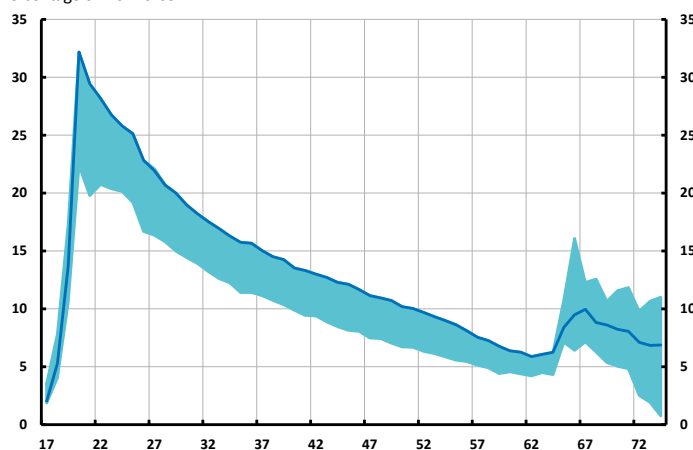
⁸ In Sweden, wage formation normally occurs as the result of new collective agreements being negotiated between various employee and employer organisations. These collective agreements are normally referred to as “centrally agreed wages”. Over and above centrally agreed wages, wage formation also occurs on the local level. Collective agreements may specify that a share of the wage increases is to be allocated on the local level, which is then counted as local wage formation.

an unusually low proportion of the workforce switching jobs, has been cited as one of the explanations.⁹ In Sweden, however, the circumstances are different; as can be seen in Figure 2, the proportion of those switching jobs has increased more than usual and in 2016 just over 14 per cent or almost 700,000 people switched jobs, the highest proportion since the beginning of the 1990s.¹⁰

Young people and the highly educated switch jobs more often than other groups

Some individuals are more inclined to switch jobs than others, which means that the composition of the workforce can affect the proportion of those who switch jobs.¹¹ For example, it is more common for individuals at the start of their working life to switch jobs. Figure 3 shows both the proportion of the workforce that switched jobs between 2015 and 2016 for each age group between 17 and 74 years of age (blue line), and how the proportion has varied for each age group during the period 1998–2016 (blue field).¹² On average, almost one in four 20–30 year-olds in the workforce switched jobs between 2015 and 2016, which can be compared to the average for the total workforce, which amounted to 14 per cent. This pattern has been relatively stable over time. Mobility on the labour market decreases continuously as individuals grow older up to the age of 65, at which point it starts to increase slightly again.

Figure 3. Proportion of the workforce who switched jobs between 2015 and 2016, by age, 17–74 years
Percentage of workforce



Note: The field contains all observations for each age group respectively for the period 1998–2016. Unbroken line refers to data for 2016.

Source: Statistics Sweden.

Over the last ten years, an increasing number of older people have elected to stay in the labour market until a more advanced age. This is probably the result of factors such as improved health, changes in the pensions system and other alterations made to economic policy.¹³ Over time, this has led to the over-65s becoming an increasingly large group on the labour market. Since the beginning of the 2000s, the proportion of older people on the labour market has doubled and now constitutes almost 4 per cent of the total workforce.

⁹ See, for instance, Faberman, R.J. And Justiniano, A. (2015) and Danninger, S. (2016).

¹⁰ Quarterly data for 2017 and 2018 on employment separation, i.e. people who terminate their employment, and new recruitments according to the short-term employment statistics (KS) indicate that the proportion of those switching jobs has remained on a high level.

¹¹ In addition to the factors highlighted in this section, previous analysis has shown that the probability of switching jobs is lower for foreign-born people and for those working in the goods manufacturing sector, see Andersson, F.W. et al. (2014).

¹² From now on, the analysis focuses on the period after 1997, i.e. the period after the advent of the Swedish Industrial Agreement. The Industrial Agreement is a cooperation agreement between employee and employer organisations in the manufacturing sector, in which it is established that the manufacturing sector, exposed as it is to competition, shall set the norm for wages for the rest of the labour market. The agreement involves a structural change in Swedish wage formation.

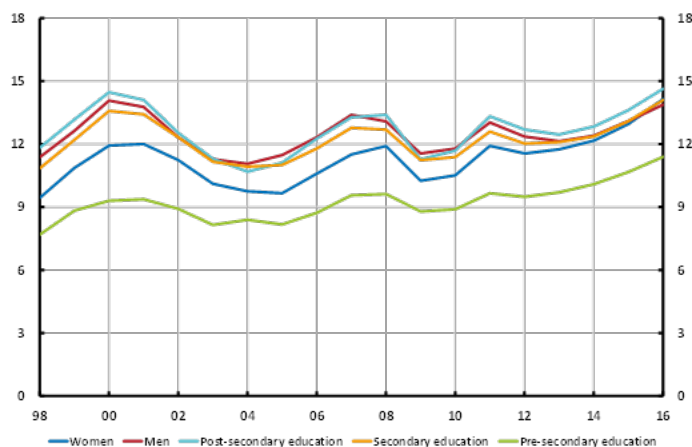
¹³ See Laun, L. and Palme, M (2017) for a review of different factors that may have affected the labour force participation of older people.

There is no statutory retirement age in Sweden, but the norm is for people to leave the labour market around the age of 65.¹⁴ That said, the increase in the proportion of the workforce switching jobs at the age of 65 is not necessarily due to the increase in the probability of the individual switching jobs at that age. Instead, it may be driven by those who de facto choose to remain in the labour market belonging to groups whose labour mobility has been relatively high even prior to the age of 65. The increase in the proportion of the workforce switching jobs around the age of 65 is not a new phenomenon; it has also been a common occurrence previously (see the blue field in Figure 3).¹⁵ However, a certain shift has occurred. At the end of the 1990s and beginning of the 2000s, mobility was at its highest at the age of 66 but in recent years it has been highest at the age of 67. This slight shift has probably been affected by an amendment in the Swedish Employment Protection Act which raised the age at which an employee can be given notice of termination without any objective grounds. Previously, this age limit was 65 years in most agreement areas but was raised to 67 years at the beginning of the 2000s.¹⁶ This change in the age limit has led to an increase in labour market mobility for older people who wish to continue working.

Another factor affecting the proportion of the workforce that switch jobs is level of education (see Figure 4). Mobility on the labour market is generally higher among highly educated people. More detailed data also shows that this difference is particularly significant among the over-65s. During the period 1998–2016, the difference between those with a post-secondary education and those with no secondary education decreased slightly as a result of an increase in labour mobility among those without a secondary education. On average, however, the difference is still relatively large.¹⁷ The overall greater mobility among highly educated people is probably due to employers having to compete more for people with more advanced skill-sets and specialist knowledge. However, mobility on the labour market seems to increase for all education levels when labour demand is high.

Figure 4. Proportion of workforce that has switched jobs, broken down into different groups

Percentage of workforce



Source: Statistics Sweden.

¹⁴ There are, however, different rules in the pension system that affect the retirement age. For example, the individual is entitled to take out an income-based pension from the age of 61 onwards, while the age at which they can take out their guarantee pension is 65 years, see Swedish Pensions Agency (2017).

¹⁵ It should be pointed out that data for groups of fewer individuals are more uncertain and should therefore be interpreted with greater caution. This applies, for example, to old-age pensioners and 16–19 year-olds. At the end of the 1990s, it was also less common for older people to work. For example, the number of people switching jobs at 65 years amounted to just under 2,200 in 1998, which is the year when the blue field in Figure 3 is at its highest point, which can be compared with 2016, when almost 4,000 people over the age of 65 switched jobs.

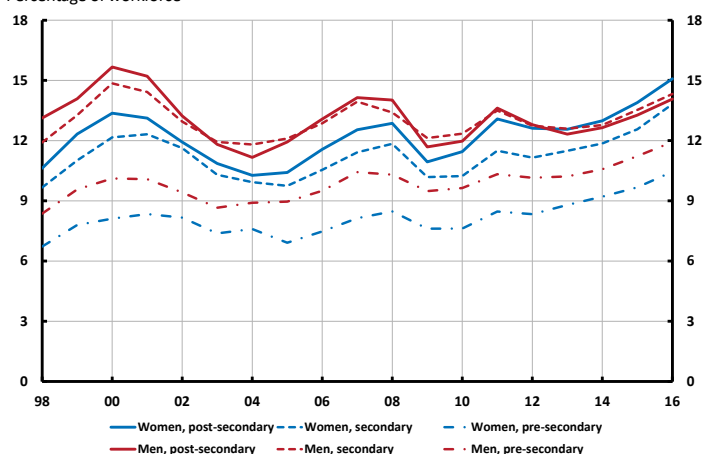
¹⁶ See Swedish Pensions Agency (2016). There is currently a proposal to increase this age to 69 years in two steps.

¹⁷ The increased mobility among those without a secondary education is probably due to a change in the composition of this group from consisting more of older, Swedish-born people to consisting more of younger, foreign-born people.

There are also certain differences between men and women as regards mobility on the labour market (see Figure 4). Between 2015 and 2016, the total difference was very small, but more detailed data, broken down by age, show that women switched jobs to a greater extent than men before the age of 30, while it was more common for men to have switched jobs over the age of 55. As can be seen in Figure 4, the total difference between women and men has decreased over time as a result of an increase in mobility among women. The fact that women switch jobs to an ever-greater extent is probably due to several factors, one such factor perhaps being that the proportion of the female workforce with a higher education has increased substantially in comparison.¹⁸

Broken down by education level, however, the data shows that there are greater differences between women and men (see Figure 5). Women with only a secondary education or without a secondary education are less mobile on the labour market than men with the same level of education, while the proportion of highly educated women switching jobs is now slightly higher than the proportion of highly educated men. A contributory factor to this is probably various lock-in mechanisms, such as when an employer lacks competition for employees, a phenomenon known as monopsony. For example, women who have worked to a greater extent than men in the municipal sector have fewer employers to choose between.¹⁹

Figure 5. Proportion of women and men in the workforce that have switched jobs, broken down by education level
Percentage of workforce



Source: Statistics Sweden.

Composition and form of employment can affect both mobility and wage growth

As the proportion of those switching jobs varies according to individual characteristics, the demographic composition can affect the total proportion that switch jobs. If, for example, the proportion of young people on the labour market is relatively high, this might imply that the proportion of individuals switching jobs is also high even without the economic situation necessarily being strong. Other structural changes to the labour market may also play a part. For example, an increased level of education or greater proportion of employees on fixed-term contracts may lead to a rise in the proportion of the workforce switching jobs.²⁰

Since the beginning of the 2000s, the proportion of young people in the workforce (referring here to 20–39 year-olds) has remained relatively unchanged, which therefore

¹⁸ The proportion of women on fixed-term contracts has not increased more than among men and seems therefore not to be an explanation for why the proportion of women who switch jobs has come closer to the proportion of men.

¹⁹ For example, women comprised 78 per cent of the workforce in primary municipalities and county councils in 2016, see Swedish Agency for Public Management (2018).

²⁰ RAMS does not contain data on form of employment, but in the short-term employment statistics (KS), the proportions of separations (people who have quit) and new recruits are broken down into both forms of employment. The proportions of separations and new recruits for those on fixed-term contracts in the business sector amounted to an average of 23.4 and 32.7 per cent respectively in 2016 and 3.5 and 3.1 per cent respectively for those on permanent contracts.

suggests that changes in the age structure are of only minor significance for mobility. But both the proportion of people on fixed-term contracts and in particular the proportion of the workforce with post-secondary education have increased. This should contribute to put the proportion of the workforce who switch jobs on a high level. However, a simple arithmetic exercise, where the education level, at which the greatest of these changes has occurred, is held constant at its 2005 level, shows that a higher education level only explains a small part of the increase in the total proportion that switch jobs. This indicates that the composition has increased the proportion of those switching jobs to a certain extent, but that it probably only explains a small part of the increase.

In addition to switching jobs relatively frequently, employees on fixed-term contracts generally have a weaker connection to the labour market and thereby also weaker wage-bargaining power. An increased proportion of employees on fixed-term contracts is also an explanation for the subdued wage growth that has been discussed internationally.²¹ The increased proportion of older people employed on the labour market may also be of significance for wage growth as the incentive for this group to negotiate a higher wage can be assumed to be less than for younger individuals.²²

Switching jobs pays off

The wage measure in RAMS compared with other wage measures

RAMS contains data on wage income for individuals. Wage income is not the same as hourly wage or monthly wage as measured in, for example, the short-term wage statistics (KLS) or in the wage structure statistics (LSS), but refers to the wage income actually gained during the year.²³ The concept of wage income includes the actual wage paid by the employer, as well as income compensation in the event of temporary absence due to, for example, illness or temporary child care, as employees who are absent from work temporarily are nevertheless considered to be in employment.

So that the wage income measure resembles a wage to a greater extent, certain delimitations are applied to the statistics. Income compensation from temporary absence has been included. This is done not only so that the loss in wage income which otherwise occurs in the event of a temporary period of absence does not affect the development between two years, but also so as not to exclude too many individuals from the analysis. All individuals who have received the majority of their income from various compensation systems have been excluded, however. The data have also been delimited so that they are only based on gainfully employed individuals who have had a total wage income between the 10th and 99th percentile in RAMS. This has been done so that as many of the individuals included as possible can be considered to be established on the labour market.²⁴ But even when these delimitations have been applied, the wage income measure according to RAMS differs from wage measures from other statistical sources (see Figure 6).

Some of the differences are due to changes in working hours not being controlled for in RAMS. An employed person who goes from part-time to full-time work from one year to the next will therefore have higher wage income growth than in, for example, LSS, which measures full-time wages.²⁵ The wage measure in RAMS also differs from the other measures

²¹ See Haldane, A. (2017).

²² For example, the over-65s have a higher earned income tax credit, which means that they can keep a greater share of their gross income if they continue to work. This can in turn reduce the incentive for negotiating a higher wage.

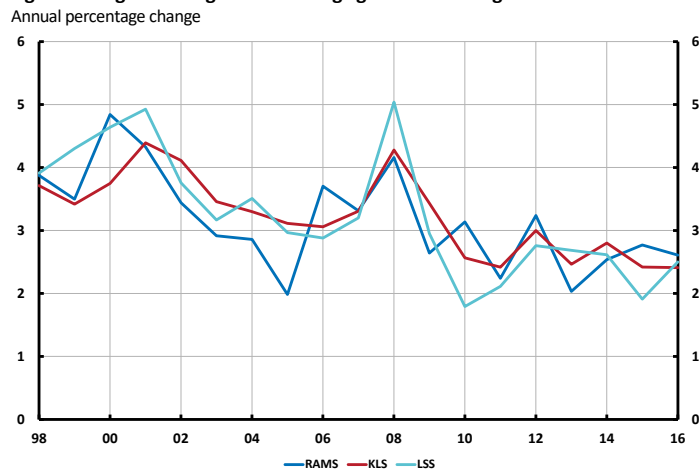
²³ For a description of the wage measures in KLS and LSS, see Chapter 12 in National Mediation Office (2017).

²⁴ The wage income for the bottom 10 percentiles is so low that these people cannot be considered fully established. The top percentile contains people with very high wage income that can be assumed to capture aspects other than those that the analysis was intended to capture.

²⁵ Over the last ten years, however, there is no clear trend in average working time. It is possible, however, that the statistical delimitations have resulted in a trend in average working time for the sample. On the other hand, the development according to RAMS without income percentile delimitations does not provide a significantly different picture of wage income growth.

in that some compensation payments from different compensation systems are included. Over time, however, the development according to RAMS is relatively comparable as all the years are treated in the same way, and the data can therefore be used as an approximation in an analysis of wage premiums for those people who switch jobs.

Figure 6. Wage income growth and wage growth according to various statistical sources²⁶

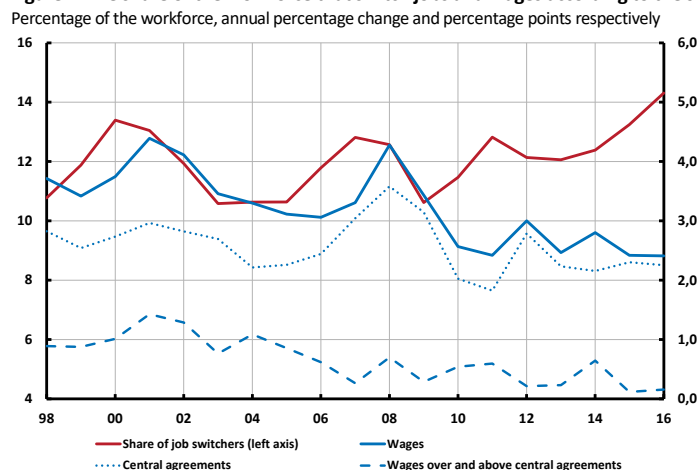


Sources: National Mediation Office, Statistics Sweden and the Riksbank.

Subdued wage growth despite a strong labour market situation

Companies in the business sector are currently reporting major labour shortages while, at the same time, unemployment has fallen to a low level. In addition, recruitment statistics for the business sector show that recruitments now largely take place among people who already have a job, and statistics according to RAMS show that the proportion who switch jobs is on a high level. Overall, this suggests that there is very little spare capacity in the labour market and that employees should therefore be in a strong position in relation to employers in wage negotiations. But in relation to the strong labour market situation, wage growth has been subdued in recent years (see Figure 7).²⁷

Figure 7. The share of the workforce that switch jobs and wages according to the short-term wage statistics



Sources: National Mediation Office and Statistics Sweden

²⁶ Wage income growth in 1998 according to RAMS is calculated with the aid of the development for identical individuals in 1998 and the average difference between the development for identical individuals and total wage income growth during the period 1999-2016.

²⁷ Productivity growth has also been subdued, however, which can be assumed to have contributed to the slowdown in wage growth in relation to the economic situation.

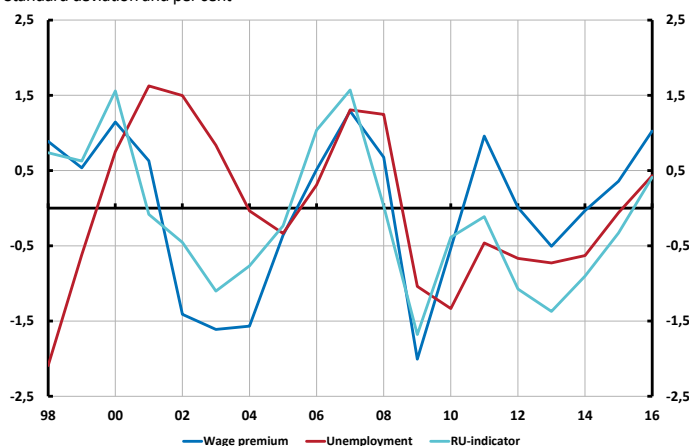
This is primarily due to prolonged weak growth in wages over and above central agreements.²⁸ How wages over and above central agreements develop depends on several factors. Such development is partly affected by local wage formation that takes place via negotiations between the employer and the local union or individual worker. But wages over and above central agreements are also affected by individual agreements with new recruits and when people switch jobs, which is what this economic commentary aims to examine.²⁹ The subdued wage growth in recent years could be due to a deterioration in the bargaining power of employees, as a result of factors such as globalisation. One symptom of this might be that the premium for switching jobs has fallen in relation to the economic situation.

Wage premium for those who switch jobs seems to be cyclically normal

By comparing wage income growth in RAMS for people who have switched jobs one year with those who have not done so, it is possible to derive an approximation of the wage premium that an employee receives by switching jobs. In general, the data from RAMS show that switching jobs is profitable; employed people who switched jobs during the period 1998–2016 have on average had almost 3 percentage point higher wage income growth than those who did not do so. The size of the premium varies, however, depending on the individual characteristics of the person switching jobs; for example, the higher the individual's level of education, the higher the premium. Age also affects the size of the premium as it is more common for young people to receive a larger premium when their careers are just starting off and the individual has a lower wage.³⁰ In Figure 8, the calculated premium for the proportion of the workforce that switch jobs has been normalised together with inverted unemployment and the Riksbank's resource utilisation (RU) indicator.³¹ The premium for switching jobs clearly correlates with these economic indicators and it does not appear to be low in relation to the current economic situation.

Figure 8. Wage premium, inverted unemployment and RU indicator (normalised series)

Standard deviation and per cent



Note: The RU indicator is normalised from 1996. The other series are normalised from 1998.

Sources: Statistics Sweden and the Riksbank.

To the extent that the findings from this study can be applied to the wage measures in the short-term wage statistics, it indicates that it is the local wage formation for those who do not

²⁸ Other common terms for wages over and above central agreements are 'residual items' and 'wage drift'.

²⁹ As total wage increases are measured as the difference in average wages between the dates of the measurements, the measured wages over and above central agreements are also affected by changes in the composition of the employee group. However, results from studies of composition effects in recent years suggest these effects are minor, see Flodberg, C. (2018) and Chapter 13 in National Mediation Office (2017). Temporary statistical effects can also affect wage growth over and above central agreements.

³⁰ As RAMS measure wage income, the development among young people is also affected by the fact that they gradually work more hours as they become more established on the labour market.

³¹ The RU indicator is an aggregate measure of resource utilisation in the entire economy and is compiled from a large volume of information from survey data and labour market data.

change jobs that explains the subdued growth of wages over and above central agreements in Figure 7. This would in turn suggest that centrally agreed wages have become more the norm for local wage formation over time, but this does not say anything about the underlying causes of this development.

References

Andersson, F. W. et al (2014), "Sannolikheten att byta jobb - den kommunala jobbalansens betydelse" [Probability of changing jobs - the significance of work-life balance in local authorities] in *Information om utbildning och arbetsmarknad [Information about education and labour market]*, Report 2014:3, Statistics Sweden. In Swedish only.

Danninger, S. (2016), "What's up with U.S. Wage Growth and Job Mobility?" IMF Working paper, WP/16/122.

Faberman, R. J. och Justiniano, A. (2015), "Job Switching and Wage Growth", Chicago Fed Letter, Number 337, 2015, The Federal Reserve Bank of Chicago.

Flodberg, C. (2018), "Has wage development has been affected by changes in the composition of the group of employees?" Economic Commentaries No 1, 2018, Sveriges Riksbank.

Haldane, A (2017), "Work, Wages and Monetary Policy", Bank of England, 2017.

Laun, L. and Palme, M. "The recent rise of labor force participation of older workers in Sweden," Institute of Evaluation of Labour, Report 2017:18.

National Mediation Office (2017), "Avtalsrörelsen och lönebildningen 2017" [Collective Bargaining and Wage Formation 2017]. In Swedish only.

Swedish Pensions Agency (2016), "Lagen om anställningsskydd (LAS) – rätten att säga upp den anställde vid 67 års ålder" [Swedish Employment Protection Act (LAS) – right to terminate the employment of a 67-year-old employee]. In Swedish only.

Swedish Pensions Agency (2017), "Medelpensioneringsålder och utträdesålder, m.m." [Mean retirement age and labour market exit age, etc.] In Swedish only.

Statistics Sweden (2013), "Byta arbetsgivare en lönsam affär" [Changing employer - a profitable venture], Articles, No 2013:74, Statistics Sweden. In Swedish only.

Swedish Agency for Public Management (2018), "Den offentliga sektorn i korthet 2018" [The public sector in 2018 in brief]. In Swedish only.

Sveriges Riksbank (2017), "Strong economic activity but subdued wage increases", article in *Monetary Policy Report July 2017*.

Sveriges Riksbank (2018), "The Phillips curve and monetary policy", article in *Monetary Policy Report July 2018*.