

WAGE STATISTICS AND THE STATUS OF AGREEMENTS IN SPRING 2002³³

A picture of some of the available statistics on wages and labour costs is presented here, together with a description of the revisions to some wage data: how large have the revisions in recent years actually been and can a pattern be discerned? Finally, the status of wage agreements is reviewed.

WAGE STATISTICS

Data on wages and labour costs in Sweden are produced by various parties, for instance trade unions, employer organisations, Statistics Sweden and the OECD. It is, however, Statistics Sweden that produces the official statistics in this field, in the form of monthly (conjunctural) wage statistics, a labour cost index (referred to here with the Swedish acronym: AKI) based on the monthly statistics, and annual (structural) wage statistics. Moreover, AKI is incorporated in a European Labour Cost Index (LCI) that also counts as a part of the official wage statistics. Since the beginning of 2001 the authority responsible for the official wage statistics is the National Mediation Office. Statistics Sweden also produces wage bill statistics, based on income statements and tax returns.

Wage developments in Sweden are usually forecast with the monthly (conjunctural) wage statistics. Two reasons for using these statistics are the frequency with which they are published and the quality in general. They are based on aggregated data from a sample of firms together with a total survey of the public sector (see Table B5). However, they miss some components, for instance irregular disbursements, often based on performance, such as bonus wages and a thirteenth monthly wage. The concept of wages in AKI and LCI is somewhat broader than in the monthly statistics; the additional items include statutory and negotiated employer contributions, wage taxes and certain cash disbursements and benefits in kind. AKI is published monthly, LCI quarterly.

The annual (structural) wage statistics are obtained in a total survey, performed once a year, and – unlike the statistics mentioned above – they are based on individual

³³ Some of the data presented here come from the National Mediation Institute's annual report (*Avtalsrörelsen och lönebildningen 2001*, February 2002, with a summary in English), which includes more detailed accounts of certain topics that are considered here. The Institute has also permitted the use of other data from its unpublished material.

data. This means that the annual statistics can be broken down by region, sex, age, education and occupation. Among other things, this makes it possible to analyse wage distributions and relative wage developments for different groups in the Swedish labour market. Here, too, the wage concept is broader than for the monthly statistics; additional items includes bonus wages, performance-related wages and taxable benefits.

Statistics on wage bills paid out, derived from income statements and/or tax returns, are also produced by Statistics Sweden. Like the annual wage statistics, they are obtained with a total survey but of firms instead of individuals. The wage bill data are published quarterly and, like the annual wage statistics, they include bonus wages, performance-related wages and taxable benefits, for example. Together with data on employment (number of persons or hours worked), the wage bill series can be used to calculate wage developments in the economy. The OECD and other international forecasters use the wage bill divided by the number in employment as a measure of wage development in various OECD countries.

The monthly (conjunctural) wage statistics are available for virtually the whole of the labour market

Table B5. Summary of wage statistics

	Published	Revisions	Population/coverage	Wage concept
Conjunctural wage statistics	Monthly	12 months	Firms and public sector/total and sample survey, respectively	Wage for hours worked, certain fixed and variable supplements, etc.
Labour cost index for Sweden (AKI)	Monthly	6 months	Firm/sample survey	Wage for hours worked, cash reimbursements, benefits in kind, employers' contributions, etc.
Labour cost index for Europe (AKI)	Quarterly	2 quarters	Firm/sample survey	Wage for hours worked, cash reimbursements, benefits in kind, employers' contributions, etc.
Wage bills	Quarterly	1 quarter, final as of 2001/up to 10 quarters*	Firms and public sector/total survey	Wage for hours worked, variable supplements, bonus & performance wages, taxable benefits, etc.
Structural wage bills	Annually	Final	Individuals/total survey public sector, sample survey private sector	Wage for hours worked, variable supplements, bonus & performance wages, taxable benefits, etc.

Note. *)Wage bill statistics are published in Statistics Sweden's series *Lönesummor, arbetsgivaravgifter och preliminär A-skatt from skattekäklarationer* (Wage bills, employer contributions and preliminary A-tax from tax returns) and the outcomes are final as of 2001. This and some other statistical sources are used as a basis for the wage bill calculations for the National Accounts; for those calculations, moreover, some adjustments are made, for example to incorporate assumptions about the "black" economy. Up to 10 quarters may pass before the wage bill statistics in the National Accounts are finalised.

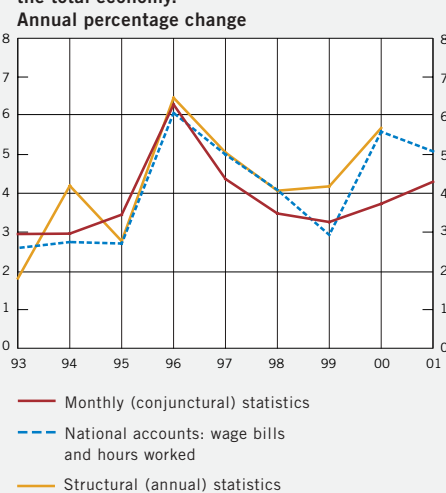
from 1990 onwards. The statistics distinguish between blue-collar workers and salaried employees in the private sector and employees in the central government, county council and municipal sectors. However, the sector data on hourly and monthly wages, including various forms of supplementary wages, are not fully comparable. In the private sector, they show the average hourly wage including overtime pay for blue-collar workers as opposed to the average monthly wage including variable supplements for salaried employees. In the public sector, they show the average of agreed fixed monthly wages for county council and municipal employees, while for central government employees they show the average monthly wage including fixed and variable supplements.

Since January 2000, average wages according to the monthly statistics are finalised after one year, that is, after twelve monthly reports; previously they were finalised after six months. Revisions are occasioned mainly by retroactive wage payments, for instance as a consequence of local agreements. An analysis by the Riksbank of the revisions to wage statistics in recent years shows that in the period 1997–2001 the magnitude of the revisions varied from year to year (Table B6). In 2000 and 2001 the average rate of wage increases in the total economy was adjusted upwards from the first preliminary outcome to the final outcome (for 2001 the most recent preliminary outcome) by an average of about 0.8 percentage points. However, the period studied is short. The results may have been affected by changes in the structure of agreements in recent years and the fact that the economy was in a strong upward phase. Table B6 presents the first published outcome of the preliminary rate of wage increases (time t) and the final revised outcome twelve reports later (time $t+12$). It follows that the period during which revisions are made for a particular year, that is, from the first preliminary outcome for January to the final outcome for December, is about two years.

The revisions are made mainly in the early part of the period; in the period January 2000 up to March 2001 at least 90 per cent occurred in the first six months. This is also evident from Figure B18, though as the period for revisions to 2001 lasts until the end of 2002, final data are not yet available for all the months.

Patterns showing that the magnitude of revisions deviates in certain months have not been found for the total economy in this period. Unusually large revisions occur randomly and are therefore difficult to foresee. As noted in the March Inflation Report, wage increases during 2001 were unexpectedly large. The revisions were sizeable above all in November and December (Figs. B19 and 20).

Figure B18. Three measurements of wages in the total economy.



Sources: Statistics Sweden and the Riksbank.

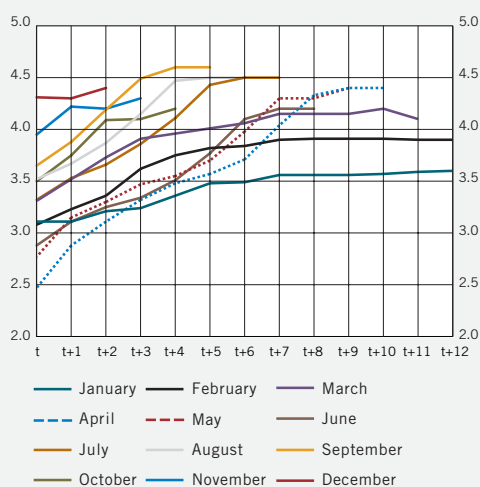
Table B6. Magnitude of wage revisions for 1997–2001.
Change between the annual average of the first preliminary and the final or the latest preliminary monthly outcomes.

Sektor	1997			1998			1999			2000			2001		
	1st prel. (%)	Final (%)	Diff. (p.p.)	1st prel. (%)	Final (%)	Diff. (p.p.)	1st prel. (%)	Final (%)	Diff. (p.p.)	1st prel. (%)	Final (%)	Diff. (p.p.)	1st prel. (%)	Latest prel. (%)	Diff. (p.p.)
Central govt.	–	–	–	1.15	2.53	1.38	3.58	4.70	1.12	3.70	4.74	1.04	1.99	3.97	1.98
County councils	5.34	5.95	0.61	1.81	2.40	0.59	–	–	–	3.16	4.19	1.03	3.42	4.91	1.49
Municipalities	3.34	4.36	0.89	1.30	2.15	0.85	–	–	–	2.54	3.33	0.76	2.88	4.71	1.83
Public sector	–	–	–	1.36	2.29	0.93	–	–	–	2.94	3.88	0.94	2.76	4.56	1.80
Private sec. workers	4.14	4.52	0.38	2.69	3.17	0.48	2.16	2.31	0.26	2.83	3.00	0.17	3.28	3.72	0.44
Private sec. salaries	3.40	3.99	0.59	4.16	4.80	0.64	3.18	3.52	0.34	3.44	4.00	0.56	3.61	4.31	0.70
Total economy	–	–	–	2.81	3.48	0.67	–	–	–	3.16	3.74	0.58	3.28	4.25	0.97

Note. Prior to 1999, local government wage statistics were produced by the respective central associations. When production was taken over by Statistics Sweden the method of measuring the rate of wage increases was changed, which for the time being rules out an evaluation of wage revisions for these sectors. For the period 1997–98 the size of the revisions for county councils and municipalities has been calculated as retroactive disbursements expressed as a percentage of the total paid-out wage bill (adjusted for retroactive disbursements) in each sector. Prior to 1999, moreover, the wage statistics for the central government sector were published quarterly, which may have affected the result for 2000. Statistics Sweden lacks documents on preliminary and final central government wages for 1997. For 2001 the central government sector does not include either the Riksbank or central government agencies. For 2001 the magnitude of the revisions is calculated as the difference between the annual averages of the first preliminary monthly outcomes in 2001 and the preliminary outcomes from February 2002.

Sources: Swedish Association of local Authorities, The Swedish Federation of County Council, Statistics Sweden and the Riksbank.

Figure B19. Preliminary and final rates of wage increases in 2001.
Per cent



Note. Time t is the first preliminary outcome for each month and is followed by $t+1$, $t+2$, $t+3$ and so on up to the final outcome at $t+12$.

Sources: Statistics Sweden and the Riksbank.

THE STATUS OF AGREEMENTS IN SPRING 2002

The average rate of wage increases as measured by the monthly statistics covaries to a large extent with the average rate of negotiated wage increases in the total economy (Fig. B21). The residual (the gap between the two curves in Fig. B21) is usually referred to as wage drift. During 2001 wage drift increased from the previous year by 0.3 percentage points. The size of wage drift is dependent in part on the situation in the labour market. It is also affected by structural factors such as changes in the composition of work forces.³⁴

Calculations of negotiated wage increases are published by, among others, the National Mediation Office, the National Institute of Economic Research and the Riksbank. Wage agreements for a large part of the labour market were concluded in the course of last year. For 2001 the average negotiated wage rise was estimated to be about 3 per cent. The aggregate figure for 2002 is still preliminary because new agreements are pending for about half a million (annual) employees (Table B7). In 2003 there is the prospect of new agreements for fewer (annual) employees but another major round of wage negotiations is due in 2004.

The number of employees who may be involved in new agreements is liable to change because most settlements have cancellation clauses. Of the private sector employees with three-year agreements, about 80 per cent have the

³⁴ For a fuller account of some of the determinants on wage drift, see e.g. Friberg K. & Uddén Sonnégård, E. (2001), Changed wage formation in a changing world?, *Sveriges Riksbank Economic Review* 1, pp. 42–69.

possibility of cancelling the final period.³⁵ Most agreements include a right for either party to cancel the agreement not later than 31 October 2002. High inflation expectations among employer organisations increases the risk of agreements being cancelled. Moreover, relative wage shifts that are perceived as unfavourable for one or more groups in the labour market can give rise to demands for compensation and cancelled agreements.

Table B7. Some existing and expected wage agreements for 2002–05.

Year	Sector	Expiry date	No. of full-time employees
2002	<i>Corporate sector</i>		287,000
	- Transport	end 2001	34,000
	- Banking	end 2001	40,000
	- Telecom	31 October	37,000
	- IT	31 October	28,000
	<i>Central government</i>	31 March	203,000
	<i>Total</i>		490,000
2003	<i>Corporate sector</i>		75,000
	- Banking	31 December	40,000
	<i>Total</i>		75,000
2004	<i>Corporate sector</i>		1,600,000*
	- Engineering:		300,000
	white- and blue-collar	31 March	
	- Trade:		
	white-collar	31 March	50,000
	blue-collar	30 April	80,000
	- Construction:		
	blue-collar	31 March	40,000
	- Chemical industry:		
	white-collar	30 April	50,000
	- Services industry,		
	white-collar		50,000
	<i>Central Government</i>	30 Sept.	25,000
<i>Local government</i>		45,000	
- Municipal blue-collar	31 March	45,000	
<i>Total</i>		2,075,000	
2005	<i>Corporate sector</i>		3,000
	<i>Local government</i>		495,000
	- Doctors	31 March	23,000
	- White-collar		
	(Academic Alliance)	31 March	45,000
	- White-collar		
	(SKTF, SSR, Ledarna)**	31 March	137,000
	- Teachers	31 March	200,000
- Nurses	31 March	90,000	
<i>Total</i>		498,000	

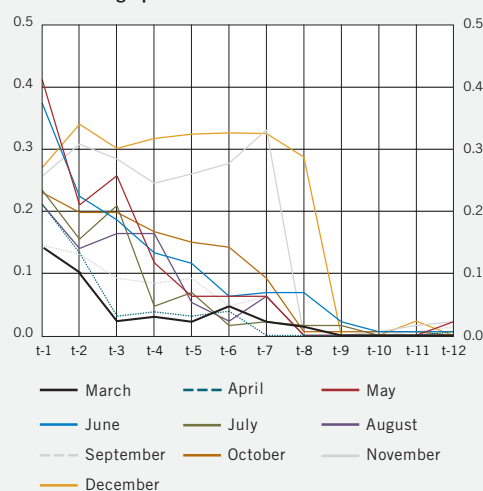
*This figure is a rough approximation.

**SKTF is the trade union federation for civil servants and clerical staff in local government or the church, SSR is the association for social workers and related groups, and "Ledarna" is the association for managerial and professional staff.

Sources: National Mediation Office and the Riksbank.

35 Not quite 85 per cent of all private sector employees have three-year agreements (36–39 months).

Figure B20. Size of wage revisions for the period March–December 2001. Percentage points



Note. For each month, t denotes the final outcome and $t-12$ the first preliminary revision. The line labelled November, for example, depicts the size of that month's revisions to the preliminary figures for October ($t-1$), September ($t-2$) and so on back to the first preliminary figure for November a year earlier ($t-12$).

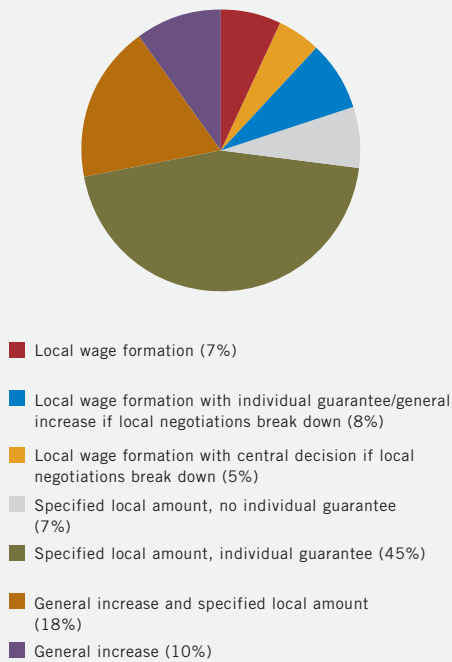
Sources: Statistics Sweden and the Riksbank.

Figure B21. Nominal wage rise and negotiated wage increases for the total economy. Percentage annual figures



Sources: National Institute of Economic Research, Statistics Sweden, labour market organisations and the Riksbank.

Figure B22. Structure of corporate sector wage agreements from 2001.



Note: *Local wage formation* = wages set locally without a centrally fixed frame and no individual guarantee. *Central decision* = frame (amount/percentage increase) fixed centrally, to apply if local negotiators fail to reach an agreement. *Individual guarantee* = a share, guaranteed to each individual, of a centrally fixed frame (amount/percentage increase). *Specified local amount* = wage bill for local distribution. *General increase* = centrally fixed frame (amount/percentage increase) guaranteed to each individual.

Source: National Mediation Office (2001 annual report) February 2002.

As the proportion of agreements with an element of local wage formation has risen in the past decade, in future the centrally agreed wage increases may function less well as an indicator of wage developments.³⁶ In the 2001 round of wage negotiations the construction of corporate sector agreements was such that a relatively high proportion provided for local wage formation (Fig. B22). Such agreements, with various forms of local wage formation and centrally agreed sums for local distribution, mean that wage formation can be arranged entirely or partly at the local level for up to 70 per cent of private sector employees. Local wage formation in the public sector has also become more prevalent in the past decade.

To sum up, wage developments in Sweden are presented in a number of statistical sources. For forecasting, however, the monthly (conjunctural) wage statistics are used, partly because they are published frequently and are of high quality. In a survey of earlier revisions of the monthly statistics, a regular pattern of revisions could not be discerned, though it should be noted that the period covered is short. The analysis of revisions also indicates that wage drift picked up during 2001. The preliminary wage outcomes and the calculations of wage settlements for 2001 give a similar picture. A survey of wage agreements shows that settlements for a large segment of the labour market are due in the coming years. Agreements for about half a million employees are expected this year. As most of the existing agreements include cancellation clauses, however, the picture may change.

36 For the corporate sector, a compilation in Swedish will be found in *Fakta om löner och arbetstider 2002* (Facts about wages and working hours 2002), published by Svenskt Näringsliv (Swedish Business Corporation) in March 2002.