Stylised facts on Norway

NB! Some of these facts are based on cursory reading of the literature. This presentation is intended to mainly give you some broad ideas about relevant facts on Norway.

File name: p:\piep\relevant literature norway.doc

Data sources

Most used:
- ABU Survey of 1000 managers and employees in 1000 establishments, 1989 and 1993. Used in most of Barth’s works
- Living conditions surveys (every fourth year from 1983)
- Statistics Norway wage statistics (structure of earnings)
- Administrative register files from Statistics Norway. Contains yearly information for all employed individuals over the age of 16 and all plants in Norway from 1986 to 1994.

Pay inequality/wage dispersion

- Pay inequality is Norway has been and is among the lowest among the OECD countries (Blau and Kahn 1996; OECD 1996; Wallerstein 1999)
- Decomposing wage dispersion, one finds that there is not pay inequality generally is low: between industry-differentials are small, the gender pay gap is around average in OECD, the return to education is low, and the standard deviation of the residual (after controlling for these other factors) is low (Røed 2000: table 3.1).
- Pay inequality was reduced in the first part of the 1990s, and two explanations are recentralisation of collective bargaining (Kahn 1998a) and wage compression in public sector (Røed 2000).
- Barth (1994) finds that these variables are positively related to establishment wage premia: size, autonomy of employees in daily work, union density (effect on establishment level – unionised workers are not paid more). Same effect of
union (only establishment level, thus pure public good) found in Barth, Raauum and Naylor (Barth, Raauum, and Naylor 2000).

- Salvanes, Burgess and Lane (1999) finds that inequality increases with skill levels.

**Inequality and performance**

- Much focus on centralisation in the “Solidarity alternative” – recentralisation from ca. 1990. Positive employment effects, focus on real wages (Freeman 1997; Holden 1997; Røed 2000)
- Theoretical work on effect of inequality on macro level performance (e.g.: same wage in different sectors -> swifter shift from “old” to “new” sectors) (Agell and Lommerud 1993; Moene and Wallerstein 1997)

**Collective bargaining**

- Trade union density is not very high – collective bargaining coverage is higher (Nergaard 1998; Nergaard 1999; Scheuer 1997; Stokke 2000)
- According to Wallerstein (1999), Norway had the highest “average level” of “centralisation, concentration and coverage” from 1950-1992 among the 15 countries he studies. Also: Flanagan, Moene, and Wallerstein (1993)
- The hypothesis that centralisation leads to less inequality also confirmed in comparison on Austria, Norway and the US (Barth and Zweimüller 1992)
- In Norway, the process of decentralization was to some extent reversed from the late 1980s (Blau and Kahn 1996: 800)
- Effect of CB on wage structure/inequality: Kahn (1998b)

**Gender:**

- Gender wage gaps does not seem to be particularly small in Norway
- Decomposition: Seems to be mixed evidence of importance of different factors (Barth and Mastekaasa 1996; Blau and Kahn 1995; Longva and Strøm 1998; Petersen et al. 1997)
- Nothing on effect of discrimination
• A controversial contribution by Klette and Hægeland (1999) shows (using establishment level analyses) that low pay in establishments with a high share of female employees reflects low productivity in these establishments.

**Training:**

• In a review of Norwegian literature, Raaum (1999) finds that the effect of one extra year of formal education is between 4.5 and 6 per cent. The effect 1) is similar for men and women 2) is higher in the private than in the public sector 3) was fairly stable until the 1990s, but has since increased. See (Barth and Røed 1999; Hægeland, Klette, and Salvanes 1999)
• The return to formal or informal training more uncertain, but some studies have found it to be positive. Poor measures of training in most surveys (Dale-Olsen 1997)

**Payment systems**

• Statistics Norway (Statistics Norway 2000: table 286) shows that only around 1 per cent of wages in manufacturing is bonuses, etc. In financing, it was 2 per cent (this is based on the ESES data).
• to my knowledge, there are no econometric analyses of payment systems -> performance
More on some of the contributions:

(Askildsen et al. (1999))

Abstract: In this paper, we analyse the employment effects of union bargained minimum wages using a large sample of more than 50,000 workers in the Norwegian manufacturing industry. The panel covers the period 1991-1995. The results indicate that increased minimum wages raise the turnover to other sectors while the effects on the transits to unemployment are more marginal. There are significant differences in transition probabilities between firms with union bargained minimum wages and firms without such minimum wages. This latter evidence may suggest that the presence of union agreements drives the results.

(Barth 1994)

Abstract: In a market-clearing view of wage formation it is claimed that only external factors, namely the conditions in the labor market, affect wages for a given type of labor in any one firm. However, there are several non-market-clearing theories in which importance is given also to firm-specific variables. In this article the effects of organizational factors on the wage level of the firm are studied. Using a data set with several observations from each establishment, it is possible to distinguish within-establishment and between-establishment differences. Organizational factors such as establishment size, the presence of a personnel officer and managers' ownership are found to create wage differentials across establishments. The results are consistent with implications from several non-market-clearing theories.

(Barth and Røed 1999)

Barth and Røed goes through the evidence on returns to human capital (the literature is mostly on formal education). The studies indicate that the private return to private education is between 3.5 and 7 per cent.

(Barth, Raaum, and Naylor 2000)
Abstract: Using a matched employer-employee data set for Norway, we exploit rare information on the union status of both individual employees and their workplaces. We establish two key results. First, we find a positive effect of workplace trade union density on the level of the individual's pay in establishments covered by collective agreements. Second, we find that, conditioning on coverage, the individual union membership differential disappears after controlling for establishment-level union density. The union wage effect is therefore a pure public good, with individual membership conveying a positive wage externality.

(Barth and Zweimüller 1992)

The paper compares the industry wage structures of Austria, Norway and the union and non-union sectors of the US. Barth and Zweimüller show that inter-industry wage differentials are considerably lower in Austria and Norway than in the US.

(Barth and Zweimüller 1995)

Abstract: In studying the relationship between wage inequality and centralization in collective bargaining, we distinguish central from local systems of wage determination by assuming that a central union takes the employment effects of negotiated wages into account, whereas unions disregard these effects in decentralized systems. Two different sources of wage differentials are studied separately: (i) heterogeneous workers with different skills and (ii) heterogeneous firms with varying levels of economic rent per employee. With respect to skill levels, the impact of centralization is ambiguous, whereas inter-firm wage differentials are likely to be lower in corporatist systems.

(Dale-Olsen 1997)

Dale-Olsen’s contribution is a very useful starting point for research on wage inequalities in Norway. He sums up the most important empirical research in the last two decades, covering these issues: data sources, effect of human capital variables, institutional factors and wage inequalities, industry and firm level effects, local labour markets, gender and ethnicity.
Dølvik et al. give one of the most updated and condensed presentations of the Norwegian labour market institutions and regulations. Thus, it is good starting point for those who want to gain an understanding of industrial relations in Norway. Dølvik et al’s book also includes several contributions by international researchers on the Norwegian labour market (Richard Freeman, Jill Rubery, Michael Wallerstein, Gerhard Bosch, Berndt Keller, Frieder Nachold).


Freeman considers different explanations of why Norway avoided unemployment or fiscal deficits that forced Sweden to tighten its welfare state. He concludes that “I see no necessary reason for a country that chooses to maintain egalitarian wage-setting and welfare spending to run aground in the modern economic world. In the case of Norway, its solidaristic/welfare system has, in fact, some advantages that may give it a competitive edge in the 21st century.” He does however also see several risks to solidaristic/welfare policies.

Grytli and Stokke’s paper is the only existing attempt to collect and systematise information about the largest collective agreements in Norway. It describes the 56 largest collective agreements, and gives details on wage-setting and working time practices in these agreements. There is, unfortunately, no attempt to link this information to industries/NACE codes.
This paper shows that returns to education have been stable in Norway, contrary to many other countries. Hægeland et al also show that increased educational attainment and the perceived reduction in selectivity into higher education for more recent cohorts do not seem to have reduced the returns to education for these younger cohorts.

Abstract: This paper studies collective bargaining and industry wage levels using microdata and quantile regression techniques for the United States, Britain, West Germany, Austria, Sweden and Norway for the 1980s. The United States has higher industry wage differentials and union wage effects than other countries, with particularly large impacts at the bottom of the distribution. European wage structures are more compressed at the bottom for both nonunion and union workers relative to the United States, with larger differences for nonunion workers. These findings suggest more co-ordination, contract extension and spillover to nonunion workers, and more binding industry wage floors outside the United States.

Abstract: In the late 1980s, Norway's labour market experienced similar supply and demand shifts for skills to other countries', but unlike other OECD nations, Norway's wage setting system became more centralised. The pay distribution in Norway became more compressed at the bottom from 1987 to 1991, while low wage workers in other countries lost ground relatively. Using Norwegian microdata for 1987 and 1991, I found that changing labour market prices helped cause this wage compression. Further, the less educated had declining relative overall employment but increasing relative public sector employment, both possible labour market responses to the wage compression.

Longva and Strøm argue that the greatest part of the male-female wage gap in Norway can be explained by differences in the rate of return on human
capital, while the second largest part is explained by the differences in the
distribution of male and female workers between industries. Other factors, inter-
industry wage differentials, differences in human capital endowments and local
labour market conditions, contribute together to explain around 10 per cent of the
gender wage gap.

(Nergaard 1998)

Nergaard presents survey data, which shows that the coverage rate of
collective agreements is around 76 per cent in 1996, according to the
respondents’ own answers. In the private sector, is it 60 per cent.

(Nergaard 1999)

Based on 1998 Labour force survey data, Nergaard finds that union density
is 57 per cent (43 per cent in the private sector, 83 per cent in the public sector).
The collective bargaining coverage rate is estimated to 63 per cent in the private
sector (the corresponding figure based on the 1996 living conditions survey was
60 per cent). The paper gives estimates of trade union density (from 20-87 per
cent) and collective bargaining coverage rates (from 44 to 100) per cent on the
NACE 1-digit level. The difference between these two measures is largest in retail
trade (23 vs. 63 per cent) and hotels and restaurants (28 vs. 70 per cent).

(Petersen et al. 1997)

Abstract: It has been established for the USA that men and women
working in the same occupation for the same employer receive more or less the
same pay. So-called within-job wage discrimination is hence not a driving force
for the gender wage gap. Below we report the first comparative and the second
comprehensive empirical study of wage differences between men and women in
the same specific occupation within the same establishment for a European
economy: Norway. We report three striking findings. The first is that wage
differences are relatively small when one compares men and women who work in
the same occupation and establishment: women on average earn 2.6 per cent less
per hour than men. The second finding is that it is occupational segregation which
really accounts for the existing wage differences and that establishment
segregation accounts for less. The third finding is that the within-occupation gaps
are relatively small, at less than 10 per cent. We conducted these analyses for two years, 1984 and 1990.

(Røed 2000)

Røed analyses the relationship between the degree of centralisation and employment performance. Among other things, he shows a comparison of degree of co-ordination in wage-setting in Sweden and Norway from 1961 to 1999. The comparison shows that the degree of co-ordination generally has been higher in Norway than in Sweden during the 40 year period. The degree of co-ordination was very high in both countries until the 1980s, and both had some years with less co-ordination in the mid 1980s. While Sweden continued with a low degree of co-ordination during the 1990s, Norway returned to a situation with high co-ordination in the 1990s, according to Røed’s measures.

(Raaum 1999)

Raaum assesses the available evidence on return to schooling in Norway. He finds that the effect of one extra year of formal education is between 4.5 and 6 per cent. The effect 1) is similar for men and women 2) is higher in the private than in the public sector 3) was fairly stable until the 1990s, but has since increased

(Salvanes, Burgess, and Lane 1999)

Salvanes, Burgess and Lane focus on the effect of job and work reallocation on earnings dispersion. Their point is that “simple changes in the size, market share, and degree of competition of plants have the potential for changing the earnings distribution, regardless of the demographic characteristics of the workforce”

(Scheuer 1997)

Scheuer compares collective bargaining in the UK, Denmark and Norway. The most striking finding in the comparison of Norway and Denmark is that despite a much higher union density in Denmark, the Norwegian level of collective bargaining coverage is higher.
(Stokke 2000)

Stokke shows that union density has stayed remarkably stable during the last 30 years, varying between 49.9 per cent (1972) and 56.4 per cent (1990). In 1998 it was 54.4 per cent.

(Stokke 1998)

Stokke gives the most comprehensive, updated account of collective bargaining and strikes in Norway, compared with Denmark and Sweden.

(Zweimüller and Barth 1994)

Abstract: The paper examines the role of collective bargaining systems as a determinant of the inter-industry wage structure. It compares wage patterns of six countries: Austria, Canada, Germany, Norway, Sweden, and the U.S. We use comparable wage regressions from micro cross-sections data to calculate inequality in pay across sectors. Our findings suggest the following: First, high (low) wage sectors in one country tend to be high (low) wage sectors in others, irrespective of die (dis)similarity in labor market institutions. Second, differences in the amount of pay inequality are likely to be the result of differences in collective bargaining: more centralized bargaining structures tend to narrow pay differentials across industries.

Literature


