JORGEN STAMHUS
Changing Labor Market Institutions
- The Case of Decentralization of Wage Setting in Denmark
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Abstract

Wage setting and unemployment are widely discussed in economic literature. According to the idea that unemployment is a function of real wage flexibility, labor market and wage setting institutions become crucial elements in the analysis of unemployment. There is some agreement on the observation that either a highly centralized or a highly decentralized bargaining system can create more real wage flexibility than bargaining systems with both centralized and decentralized elements and thus decreasing unemployment (Calmfors and Driffill, 1988). The development in Denmark towards a decentralized wage setting system can be seen as an employer initialized attempt to create a system with higher real wage flexibility and firm specific wage changes. The problem is, however, that this might be difficult to achieve because of the difficulty of changing existing labor market institutions and the very normative wage setting mechanisms that exist today. The research on the decentralized wage setting and negotiations in the iron and metalworks industry in Denmark presented in this paper documents this problem of trying to change the labor market institutions.

The main results of the aforementioned research show, that bargaining on the decentralized, or firm specific level, is just as much guided by relative wage norms as might be expected from a centralized system. Survey results show, that relative pay is what really calls the price. In fact, firm specific developments in profits and employment play minor roles in wage bargaining on the level of individual firms.

The explanation for this lies very much in the fact that the labor market is just as much a social institution as it is a "market" in the traditional sense. Our evidence proves that the decentralized Danish wage bargaining can be described as a case of efficiency wage bargaining with less direct impact of external factors such as general unemployment. The explanation for this is that wage bargaining is governed by social norms, especially what might be called the norms of 'fair wages'. One main feature regarding the use of the fair wage norm in local bargaining is that the main argument used by the employees at the wage negotiation table is the wage development in other relevant firms in the region. Employers usually have difficulties defeating this argument because they know that if their wages fail to match the fair wage norm, it would most likely result in a severe drop in labor productivity, which might cost them more than complying with the wage demands. This sort of wage bargaining might lead to firms being more flexible in employment rather than in wages, and might even lead to higher wage increases and a loss of competitiveness than in a centralized system.

The analysis of the decentralized wage setting in the Danish iron- and metalworks industry shows, that changing the institutions in the labor market is more difficult than expected. The idea that the implementation of a more market-oriented system can provide more 'marketlike' results is based on a very limited understanding of the workings of the labor market. The dominant
employers association seems now to be aware of these facts, and has made attempts to control wage bargaining to a greater extent. It seems to be the case, that competitiveness considerations have won over the idealistic pursuit of wage bargaining that follows market principles more exactly.
1. Introduction
Labor market institutions in this paper refer to a very broad use of the term. It encompasses both structural change on the organizational level, but also the rules and norms which might be seen as crucial determinants for the functioning of the labor market. In this paper the change of the wage setting system in Denmark exemplifies and explains what causes institutional change. However, this example can also be used to illustrate how difficult it is to manipulate institutional change.

2. Towards a more decentralized wage setting system in Denmark
Even as late as the early eighties Denmark's wage setting system could essentially be characterized as centralized, with bargaining taking place completely between the central Workers' Union and the Employers' Association (LO and DA, respectively). However, this system had already been under considerably pressure for some time. Since the first oil crisis in 1973, much of the material conditions for such a model had vanished, which was caused mainly by increased international competition demanding increased wage competitivenes.

The main conditions for a centralized system are:

* an agreement between the main associations on a central solution on wage and employment problems.
* an agreement from the union side that wage problems should be solved through central negotiations. This also implies support for a "solidaric wage policy" and the suppression of "free rider" problems.
* political support for centralized bargaining system through an adaptive economic policy supplying full employment and welfare benefits.

These conditions were present in the sixties and early seventies but they started to dwindle after the first oil price shock and the following economic crisis. These developments led to a change in the dominant employer coalition's institutional preferences towards a more decentralized bargaining system. The main material conditions for this were:

* an increasingly competitive goods market
* internationalization of capital markets
* the rapid spreading of technology
* rising unemployment weakening union strength against the employers
* changing ideological climate from the liberal/conservative takeover of the government in 1982
All these factors contributed to the demise of the foundation for a centralized bargaining model and started a process of decentralization.¹ I will describe the process on a more general level through the identification of the three characteristic phases, developed from the late eighties to the early nineties.

The first phase involves a decentralization of bargaining competence and the adaption of the related organizational structure. To successfully compete in the world market, firms needed more freedom in their wage policy and, to solve this problem they needed more direct negotiations with the workers and their unions. Because this industry traditionally has the highest degree of foreign trade and therefore the toughest competition conditions, it was primarily in the iron- and metalworks industry this new agenda was set. Hence, in 1987 the employer association of the iron- and metalworks industry (Jernets Arbejdsgiverforening, JA) succeeded in establishing a wholly decentralized firm based wage setting system with the iron- and metalworkers union (Dansk Metal). Furthermore, JA fused with another prominent employer association to encompass Danish industrial business in one association (Industriens Arbejdsgivere, IA).²

At the same time, the industrial workers formed the industry cartel CO-Metal (later CO-Industri) which encompassed all workers in the iron- and metalworks industry. Though the development was initialized from the employer side, IA needed a coalition partner on the union side to further the decentralization process. They found a partnership in the iron- and metalworkers union which traditionally has been a strong union in the Danish labor movement. They no longer supported the idea of centralized bargaining nor solidaric wage policy and wanted to pursue a free rider status.

Thus, the first phase in the decentralization process was characterized by a decentralization of bargaining competence together with a change in organizational structure, which created a new dominant coalition in the organizational structure of the Danish labor market.

The second phase was characterized by the introduction of fewer collective agreements. The six largest agreements were reduced into one general agreement, that represented the main part of Danish industry. Furthermore, this agreement meant that wage bargaining became decentralized to the firm level. Now only minimum wage and more general working conditions are negotiated between organizations. It should be noted that minimum wage encompasses only a negligible fraction of the work force in Denmark, playing a significant role only as a point of reference in local bargaining.

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¹ For a detailed description of this process, please see Due et al. (1993).
² In 1992 this organization changed its name to Dansk Industri.
The third phase which can be identified is a development towards new payment systems on the individual firm level. This development can be seen as a step away from determining pay based on seniority to payment by results and qualifications. This new system has not yet been introduced on a large scale as Table 1 shows, but it is certainly on its way.

Table 1
The use of new payment systems in the Danish iron- and metalworks industry 1991. (Ibsen and Stamhus 1993)

<table>
<thead>
<tr>
<th>Payment system</th>
<th>Pct.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay based on result</td>
<td>20</td>
</tr>
<tr>
<td>Pay based on qualifications</td>
<td>20</td>
</tr>
<tr>
<td>Profit sharing</td>
<td>8</td>
</tr>
</tbody>
</table>

The payment system demonstrated in Table 1 was introduced to the firms as "payment system of the nineties". They are introduced to create a more flexible approach to setting wages. This is also aimed at firm specific conditions such as firm specific human capital and productivity. Payment based on hourly wages and on seniority were not satisfactory in this regard and fail to finetune wage setting to the firm and the labor market.

The introduction of decentralized wage setting in Danish industry was supposed to create a more marketlike manner to set wages for the industry. This should guarantee wage setting which was in accordance with the firm specific development in competition and employment circumstances. But has this happened? Ibsen and Stamhus (1993) investigated this question by a survey of the firms in the Danish iron- and metalworks industry and the main results are presented in the following.

3. Bargaining at the local level
The aforementioned survey covered 600 firms and 309 questionnaires were returned, which is satisfactory for this kind of survey. Part of the questionnaire covered wages and personnel information for the period 1987-91, so that it was possible to couple the more qualitative part of the questionnaire with the important firm specific information regarding wages and employment figures. The main results of the survey regarding which effects dominate local bargaining can be summarized as follows:

3 A translated version of the questionnaire is available by request.
* there is a positive and significant connection between technology utilization and wages.
* there is no connection between firm specific employment fluctuations and bargaining results.
* surprisingly, wage levels and wage rises were largest for producers with a high export orientation.
* in general, the wage differences between firms were smaller than expected.

The survey tested for other firm specific factors but none were found.

There is one major explanation for the overall minor impact from firm specific factors on bargaining results, and this is shown by referring to the bargaining process at the firm level. The firms were asked to indicate the most frequently presented arguments at the negotiating table. Table 2 presents the answers to this question.

**Table 2**

*Which arguments have most often been used by workers during local wage bargaining in the collective agreement periods 1987-89 and 1989-91? (Ibsen and Stamhus 1993)*

<table>
<thead>
<tr>
<th>Argument</th>
<th>1987-89</th>
<th>1989-91</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer price rises</td>
<td>48,1</td>
<td>44,5</td>
</tr>
<tr>
<td>Firm specific profit rises</td>
<td>13,3</td>
<td>15,5</td>
</tr>
<tr>
<td>Increase product demand</td>
<td>6,7</td>
<td>6,7</td>
</tr>
<tr>
<td>Increased product prices</td>
<td>4,6</td>
<td>4,6</td>
</tr>
<tr>
<td>Wage development in other local firms</td>
<td>68,4</td>
<td>68,3</td>
</tr>
<tr>
<td>Wage development in other industries</td>
<td>21,1</td>
<td>21,1</td>
</tr>
<tr>
<td>Changes in the wage structure of the firm</td>
<td>7,4</td>
<td>6,0</td>
</tr>
<tr>
<td>Increased productivity</td>
<td>19,3</td>
<td>25,4</td>
</tr>
<tr>
<td>Increased rates of unemployment insurance</td>
<td>3,2</td>
<td>3,9</td>
</tr>
<tr>
<td>Education</td>
<td>0,7</td>
<td>2,1</td>
</tr>
<tr>
<td>Central determined wage frames</td>
<td>13,0</td>
<td>13,4</td>
</tr>
<tr>
<td>Other arguments</td>
<td>9,1</td>
<td>8,5</td>
</tr>
</tbody>
</table>

As shown, employees' most prevalent argument is the wage development in other local firms. Sixty-eight percent of the firms indicated this as the most commonly used argument and of course, a compliance with this argument will result in very small wage differences between firms. But why should firms agree unanimously to this argument? It is certainly not in accordance with
the objectives behind decentralization. Perhaps this question is best answered by referring to an 'efficiency wage' argument.

The central argument in the theory of efficiency wages is that productivity is a function of wages. Firms choose to pay a wage above the market clearing level because it raises productivity. This is often based on arguments of asymmetric information (see Yellen, 1984) including shirking control, adverse selection and labor turnover. However, the efficiency wage argument has to be considered in connection with what one could call "sociological arguments". The norm of "fair wages" is governing the wage bargain and workers' efforts can therefore be seen as a function of their relative wage. Case studies made in connection with the survey show, that employers are well aware of this and are reluctant to cut wages in fear of the adverse productivity effects.

The adverse productivity effects are foremost due to declining worker morale, but management also mentions labor turnover as a another reason. Management in small to medium sized firms often becomes dependent on key personnel with firm specific human capital to secure the efficient running of some functions in the production, for example, controlling CAD/CAM machines. These workers are often capable of securing positions in other competitive firms which can be a great loss for the management.

The idea that relative wages dictates wage negotiations is far from new. In fact, Dunlop's (1958) key bargaining system is based on this phenomenon and Elster (1989) argues that the widespread use of the fair wage norm can be seen as a result of workers being procedurally rational4 and not fully rational as in basic neoclassical theory. Wage negotiations do not start with a clean slate, but starts from a point of reference from which bargaining results are judged as either fair or unfair. Elster demonstrates how this affects wage bargaining in Sweden and contends that norms can replace rationality, not just supplementing it.

This can be supported by psychological studies like Kahneman et al. (1986), which shows that agents choose to evaluate opportunities by changes in points of reference and not by maximizing utility through evaluating the possible outcomes of different opportunities.

If norms plays such a significant role, what are the implications for the decentralization of the Danish wage setting?

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4 See Simon (1976).
4. Norms and wage setting - further implications

One of the main objectives of the decentralization of the Danish wage setting system was to get away from a centralized bargaining system which may be described in terms of Dunlop's (1958) "key bargaining system". This sort of system tends to "freeze" wage structures in the short run and thus, creating a wage inflexibility that leads to an uneven spread of unemployment. Centralized bargaining might lead to wage flexibility on the macro level as indicated by Calmfors and Driffill (1988), but the firms in the Danish industry needed a more flexible wage setting system to adapt to the competition on the increasingly tough international market. Hence the employer initiated pressure for changing wage setting institutions can overall be seen as a call for a more marketlike wage setting. But can this goal be achieved with a strong normative element in the bargaining process? This is really a question of the scope for changing labor market institutions and labor market behavior, which can be difficult to determine since these might be based on psychology and historic traditions.

The prominent employer association Dansk Industri (Danish Industry, DI) might have foreseen the problems as they introduced the decentralized system, since from 1987 to 1991 they maintained the right to control wage development at the firm level. This means that wage rises at the member firms could only rise to a certain level. A violation would end in penalization by DI. The effect of this wage control may have been a lower wage development but it also lead to a more uniform increase in wages. The predetermined maximum raise became a reference point for bargaining at the firm level, though many firms crossed the line. Ibsen and Stamhus' (1993) research shows that this is a major explanation for the rather uniform raises. Therefore, it is more appropriate to describe the system as centralized decentralization.

A strong normative element in the wage setting process at the firm level seems to raise the problem of how to obtain an exact firm specific and flexible wage setting on the one hand, and generally low wage increases to improve competitiveness on the other. When unemployment is high and rising, this problem might not materialize, but what happens when the business cycle changes and the demand for labor rises?

DI has no longer a right to exercise wage control, and employment in Denmark is rising. Together this could very well lead to higher wages and a drop in competitiveness under a system where bargaining is governed by social norms, rather than market principles. This is very much feared by the government and leading employer representatives. Wage bargaining at the local level takes place in Spring this year, and the results of these negotiations can perhaps give an answer to the question of the success of the newly reformed bargaining system.

What could be done to tackle the problem of obtaining flexibility without loss of wage competitiveness? Well, one answer might be a much broader introduction of new payment systems
where the reference to other firms might be shut out. One such system could be the introduction of some sort of profit sharing. This might not offend the norm for "equal pay for equal work" which also is an apparent norm among workers, and furthermore, this system will make raises dependent on firm specific conditions and not on the conditions in other firms.

One might also expect a more widespread use of different employer/employee contracts, where workers who are essential to the firm become salaried staff. This practice seems already to take on its effects in Danish industries.

In conclusion, labor market institutions might not be easily changed. But as one problem might be solved, others arise. Furthermore, a deeper understanding of the labor market is needed to implement changes. There is certainly no evidence that labor market institutions of one country can be readily imported to another. Danish employers may have found inspiration for the change by looking at labor market institutions in the UK and the US, but there is no reason to expect that these will be effective or efficient in Denmark.

5. Conclusions

It can be observed that there has been a process of change in the institutions surrounding the Danish wage setting. But it is questionable whether this has succeeded in making wage bargaining strictly a firm specific matter. This objective seems yet to be fulfilled.

The reason is social norms governs wage setting at every level of wage bargaining. And changing this type of institution is an entirely different matter than changing the organizational structure of workers' unions and employers' associations.

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5 This argument is also put forward in Freeman (1988).
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