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Strategic Human Resource Management and the Employment of the Severely Disabled: The Case of the Federal Republic of Germany

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Content

Abstract

If strategic human resource management intends to maximize the performance of a given workforce, long-term employment relations and a low turnover rate are indispensable for the accumulation of social capital which, in turn, facilitates productive activities. Therefore, a moderate use of the scarce resource "labor" requires a personnel policy which commits the workforce to the firm. Since the overwhelming majority of the severely disabled have already been working with their present employer before their disability occured, the employment of these persons can be seen as a critical test for the former propositions. The following paper presents theoretical and empirical evidence which supports these hypotheses.

1. The Employment of the Severely Disabled in Germany

According to the Handicapped Act of 1974, public and private employers offering more than fifteen jobs must employ a certain number of severely disabled persons (6% of the total staff), otherwise they have to pay a monthly compensation of DM 150 for each quota position the have failed to fill with a severely disabled person. In 1987, the average quota was 5.0%, because only 22% of the 110.399 public and private employers fulfilled their legal obligation. 44% of the enterprises did employ severely disabled persons, although the percentage was lower than the one required by the Handicapped Act and the remaining 34% did not at all employ disabled persons (see Table 1).

Table 1
Number of Enterprises Obliged to Employ Severely Disabled Persons

Year	Employers with more than fifteen jobs	Among them employers which					
		fulfill		partly fulfill		do not fulfill	
		their legal obligations					
		total	in %	total	in %	total	in %
1982	117.570	30.857	26.2	49.413	42.0	37.300	31.7
1983	111.287	27.405	24.6	47.732	42.9	36.150	32.5
1984	117.813	26.469	22.5	51.124	43.3	40.220	34.1
1985	117.123	24.042	20.5	51.494	44.0	41.587	35.5
1986	110.161	25.169	22.8	48.129	43.7	36.863	33.5
1987	110.399	24.013	21.8	48.802	44.2	37.584	34.0

Source: Federal Labor Office, IIb3

Especially employers in agriculture and forestry, in the construction industry, in transport and communication and in retail business and wholesale trade are often below the 6%. On the other hand, employers in energy and mining and in the public sector usually fulfill their legal obligation. Furthermore, the majority of small- and medium-sized firms with less than 300 employees often offend against this legal regulation (see Table 2). Because of this differing adherence to the legal regulations, the coefficient of variation in the period under investigation amounts to 16-20 (firm size) and 30-35 (economic sector). This is surprising insofar as all public and private enterprises irrespective of their size and economic sector have to fill 6% of their jobs with disabled wage and salary earners.

Table 2
Percentage of Disabled Employees According to Economic Sector and Firm Size

Economic Sector	Year					
	1982	1983	1984	1985	1986	1987
Agriculture and Forestry	3.9	4.0	3.5	3.5	3.7	3.4
Energy and Mining	11.0	10.7	9.4	9.0	9.1	8.3
Manufacturing Industry	6.3	6.0	5.5	5.2	5.3	5.1
Construction Industry	3.5	3.4	3.2	3.0	3.2	3.2
Retail and Wholesale Trade	4.2	4.1	3.8	3.6	3.8	3.5
Transport and Communication	5.4	5.3	5.2	5.0	5.0	5.1
Banking and Insurances	4.8	4.5	4.3	4.0	4.3	4.1
Private Services	4.9	4.9	4.6	4.3	4.6	4.5
Non-profit Organizations	6.3	6.2	5.8	5.4	5.4	5.4
Public Sector	7.3	7.2	6.8	6.5	6.7	6.3
Firm Size						
16 - 29 employees	3.5	3.3	3.1	3.0	3.4	3.3
30 - 99 employees	4.3	4.1	3.9	3.7	4.0	3.9
100 - 299 employees	5.4	5.2	4.8	4.5	4.8	4.6
300 - 499 employees	5.8	5.6	5.2	4.9	5.2	5.0
500 - 999 employees	6.3	6.2	5.7	5.3	5.4	5.2
1.000 - 9.999 employees	6.8	6.5	6.1	5.6	5.8	5.7
10.000 - 49.999 employees	6.9	6.6	5.8	5.7	5.6	5.4
50.000 - 99.999 employees	4.9	5.6	5.7	5.1	5.6	5.4
100.000 employees and more	7.0	6.6	6.3	5.9	6.0	5.7
Total	5.9	5.7	5.3	5.0	5.2	5.0

Source: Federal Labor Office, IIb3

In the years 1982-1987 this structure remained nearly stable, although the overall quota decreased from 5.9% to 5.0%.

2. Theory and Available Empirical Evidence

Contrary to the orthodox theory of the firm, which grants no autonomy to firms as decision-making units, firms should be viewed as economic actors which organize and direct the use of resources in a variety of ways that collectively determine economic outcomes.This means that firms should be conceived as quasi-autonomous economic agents which allocate, use, and transform sets of resources with imperfect knowledge in idiosyncratic ways. Firms, then, differ in the nature of the productive resources they combine, in the ways they coordinate and use these resources, and in the purposes for which they use them (Whitley 1987: 125-147).

According to Osterman (1987: 58) "firms have several options regarding the organization of work. In making choices among alternative employment systems, firms weigh three objectives: cost minimization, predictability, and flexibility. ... each of these three objectives can have different, and conflicting, implications for the particular employment system that is chosen. There are trade-offs among the goals, and it is these trade-offs that introduce variety and dynamism into the process we are describing."

The user costs of labor, that is "the full cost to the firm of employing labor as a factor of production" (Antos 1983: 154) can be minimized in the short as well as in the long run. Whereas short run cost minimization requires a high degree of numerical flexibility (OECD 1986: 109-132) long run minimization requires a qualified, loyal, and flexible work force with a high commitment to the firm. This means that, depending on the length of the planning period and the risk aversion of personnel policy, the goal "cost minimization" is compatible with the goal of predictability as well as with the goal of flexibility. Whereas firms with a rather short planning period and/or a high risk aversion try to minimize the user costs of labor in the short run, firms with a long planning horizon and/or a low risk aversion try to minimize these costs in the long run. The length of the planning horizon and the degree of risk aversion depend on factors such as firm size, cyclical sensitivity, and capital intensity (Lutz 1987: 85-94).

Depending on the specific conditions of the product market, the labor market and the available technology firms employ different strategies to maximize the performance of their respective labor force by maximizing the length of the usefulness of labor on the one hand and work effort and productivity on the other hand. From a strategic point of view this requires a moderate use of the scarce resource "labor" as well as a policy which commits the employees to the firm, so that the dependence on the external market is reduced. Given the fact that certain qualifications can be replaced from the external market only at (prohibitively) high costs, firms must combine appropriate performance requirements with a strategy aimed at maximizing the time of usefulness and the commitment to the firm.

Such a commitment is achieved by pursuing a policy of social integration which prevents the open discussion of the question of power in the firm and fulfills the reciprocity expectations of the employees. Kohli et al. (1983: 29)

define the reciprocity norm as "the basic concept of justice and equity under which individuals organize their social actions. ... On the one hand, this involves the expectation that the utilization of labor in the firm does not endanger the lifetime protection of the capacity for work. On the other hand it is felt that the employees furnish the firm with an investment, based on their continuous performance, their willingness to accept responsibility, their reliability, etc. - i.e. especially the non-contractual elements of their work - for which the firm will reward them with special benefits if their performance capacity should diminish some day". Disregarding the reciprocity norm can result in social disintegration, various forms of withdrawing performance and negative effects on the workforces' motivation in general. Therefore, economic rationality always includes guaranteeing the social integration in the firm.

"In the chronological context of the work biography, the firm can allow for these reciprocity concepts by interpreting the performance of the employees as investments which are not immediately rewarded but honoured ... in the course of the working life. Hence, if the investment pays off only with the length of employment in the firm, remaining in the firm becomes a motivating rationale" (Kohli et al. 1983: 31). Since the firm as an actor is forced to protect its autonomy by creating loyalty and motivation to work, its treatment of disabled employees attains special importance for the process of socialization in the firm. If this treatment conflicts with with the reciprocity concepts of the workforce, this sets an example for the healthy employees how the firm will some day "honor" their present performance. This is detrimental to the development of a close identification with the firm and of social skills relevant to the firm. In order to avoid these negative effects especially large firms tend to resort to formal and informal agreements concerning the integration of disabled members of its workforce. According to the OECD (1986: 128) firms usually receive some important returns for these employment protection provisions they provide, which can be in terms of lower wages, higher productivity or both. Since the relationships in a work organization always influence their members' behavior and thus exert a significant independent influence on the productivity of an organization, economic theory has to incorporate an appreciation of how organizational features determine productivity (Tomer 1986: 252).

In this context, the concept of "social capital" (Coleman 1988: 95-120) is quite useful. Social capital, like physical capital and human capital, facilitates productive activities. Unlike other forms of capital, it inheres in the structure

of relations between actors and among actors. Since business organizations can be actors just as persons can, relations among organizations or between organizations and individuals can constitute social capital for them as well. The most important form of social capital are mutual expectations and obligations which, in turn, depends on two elements: trustworthiness of the social environment, which means that obligations will be repaid, and the actual extent of obligations held. Although all social relations and social structures facilitate some form of social capital, closure of the social structure is an important prerequisite of trustworthiness that allows the proliferation of obligations and expectations. Defection of an obligation is a form of imposing a negative externality on another, which in an open structure can be effectively sanctioned only by the party to whom the obligation is owed. Reputation cannot arise in an open structure, and collective sanctions that would ensure trustworthiness cannot be applied. Thus, closure is a necessary prerequisite for trustworthiness (Coleman 1988: 108-108). If this concept is applied to the employment of the disabled especially in large enterprises, it can be used to explain why, apart from legal regulations, informal agreements and moral considerations alike influence the (internal) recruitment and deployment of the severely disabled. Only in relatively closed organizations with a low turnover rate and a long average tenure, a considerable amount of social capital will be accumulated. This means that "to the extent trust does occur in economic life, it results not from optimally designed institutional arrangements such as implicit contracts, but from the embeddedness of economic action in social relations" (Granovetter 1986: 16). The returns from this social capital can be much higher than the costs of social considerateness resulting from additional holidays and/or sickness periods of disabled employees.

Although the available empirical evidence is scarce, it seems perfectly consistent with the theoretical approach developed here. In a representative study of more than two thousand public and private enterprises, 75% of the employers said that they have a moral commitment towards and social responsibility for their employees who, during the period they have been employed by the respective enterprise, have become disabled. This attitude is absolutely dominant in medium and large firms and serves the purpose to create loyalty and long-term commitment to the firm in order to reduce turnover on the one hand and to increase productivity on the other hand (Brandt 1984: 371). Therefore, a large majority of all employers does not recruit disabled wage and salary earners from the external labor market but exclusively from within the firm by supporting health impaired employees

who apply for an official recognition of their impairment. During the period 1978-1982 only about a third of all public and private employers recruited disabled personnel from the external labor market. Contrary to this rather modest readiness to recruit disabled personnel from outside the firm, nearly 80% of the employers support health impaired employees applying for an official recognition of their disability (Brandt 1984: 91). Furthermore, nearly half of the employers explicitely declare that physically and/or psychically less demanding jobs are unaccessible for external job applicants because these jobs are reserved for persons already employed and with a reduced performance capacity (Brandt 1984: 315). Since more than 70% of the severely disabled are more than 45 years old and have been working with their present employer for at least ten years (Frick/Sadowski 1988: 25, 31) nearly 50% of all employers think that most disabled employees are indispensable because of the human capital and the social skills they have acquired (Brandt 1984: 375).

Based on a small and non-representative sample of thirty-three large manufacturing firms, Kotthoff and Ochs (1986) argue, that about 45% of the private enterprises pursue an integrative personnel policy towards the disabled whereas the remaining 55% discriminate against these persons. In firms pursuing an integrative personnel policy, the workload of severly disabled employees is either reduced or the disabled are promoted to physically less strenuous jobs. In many of these firms, disabled blue-collar workers are retrained and promoted to white-collar jobs. In firms which discriminate against the disabled, no such measures are taken. Usually these firms try to dismiss disabled employees either with or without a compensation payment as soon as the disabled have above average periods of sickness. Whether firms pursue an integrative or a discriminating personnel policy depends mainly on the status and the influence of the works council, the labor relations within the firm, and the size of the establishment. However, since the sample consisted only of manufacturing firms with more than one hundred employees and since the probability of an integrative personnel policy increases with the size of the firm, these results are not representative for the private sector in general.

In a pilot study of sixteen large enterprises with ar least 150 employees, Semlinger and Schmid (1985: 91-120) found out, that the perception of the severely disabled, that most employers have, is prejudiced and stigmatizing. Although most employers think that their disabled employees are as capable

and productive as their healthy collegues, the severely disabled status of an unknown job applicant from the external labor market gives reason for strong reservations. Often it is interpreted as an indicator of a reduced performance potential which usually leads to an exclusion of the disabled applicant. Furthermore, in many large enterprises, which employ the majority of the disabled, vacancies are usually published internally before being advertised externally. At the same time jobs with a reduced work load are often reserved for employees with health impairments. Accordingly, the so-called "ports of entry" are unsuitable for disabled workers from the external labor market, whereas the suitable jobs are unaccessible for them.

Kotthoff and Ochs (1986) argue that personnel policies towards the disabled are quite similar to those towards healthy employees. If a firm pursues an integrative personnel policy, it is likely to have a low turnover rate and a high percentage of elderly employees. If, on the other hand, a firm pursues a discriminating personnel policy, it is likely to have a high turnover rate and a low percentage of elderly employees. Similarly, Pfeffer (1983: 299-320) argues that organizations can be described in terms of their age composition and their length of service distribution which, in turn, both reflect a firms personnel policies and practices. Although age is negatively correlated with turnover, there is enough variance not in common among the two concepts to argue that they are conceptually distinct and should be kept so in theoretical and empirical anlysis. Since more than 80% of the severely disabled are handicapped due to an acquired damage to health which in most cases appeared after the age of 45 (Ritz 1988: 77), firms with a low turnover rate and/or a high percentage of elderly employees are likely to have a high percentage of disabled employees.

3. Data Problems and Data Avalilability

Reviewing the literature on the employment relationship, Parsons (1986: 796) has recently criticized the poor quality of firm data by arguing that "empirical work has lagged behind theoretical developments. Unfortunately, given the scarcity and general primitiveness of existing employer data sets and the relative sublety of many of the theoretical implications, this imbalance is likely to remain for some time". Similarly Stafford (1986: 420) has argued that the lack of microdata on firms and organizations has so far severly limited demand side research in labor market theory. "Research on labor market supply and demand synthesis models is limited by the absence of good de-

mand side information on firms. As a result many of our stylized facts have a supply side bias. ... Clearly our knowledge would be greatly improved by additional, microlevel demand side work which would fit into the substantial knowledge which has been gained on the supply side". Taking up these arguments, Hamermesh (1988) argues that empirical work in labor supply has made the greatest strides because of the appropriateness of the available data. Studies in labor demand have not made such progress and will not until the same resources are devoted to collecting longitudinal microeconomic data on firms as have been spent on collecting longitudinal data on households.

Since no firm data exists for an empirical investigation of the questions adressed above, it is necessary to rely on industry data kindly provided by the Federal Labor Office in Nürnberg. The use of this data can be justified with three distinct, but interrelated arguments. First, most of the empirical literature on labor demand assumes indutries to be relatively homogeneous with regard to technological and administrative arrangements. Because of the lack of firm data, most researchers have relied on industry data and have argued that these are acceptable proxies for the "average firm" of an industry (Baron/Bielby 1980: 739). Second, the results of this research provide support for the use of industry-level data. Many of the industry variables have larger and more consistent effects on wages, promotions, and lay-offs than their company-level analogues. Apparently, industries define important workplace atmospheres and standards that have not been rendered irrelevant by the continuing movement toward conglomerate forms of capital opwnership (Hodson 1984: 345-346). Third, the intercorrelations between analogous company and industry variables are usually large enough to suggest that these measures are tapping similar aspects of economic structure at each level. Baron and Bielby (1984: 462-468) for example report correlations of .63 and .41 between organizational and industrial measures of economic segmentation. Since the bivariate correlation between their organizational measures of segmentation is .67 only, the former correlations can be said to be surprisingly high.

4. Data, Methods, and Results

The lack of data at the firm level and the availability of detailed industry-level data dictate the unit of analysis. The data analyzed in the following section was collected and kindly provided by the Federal Labor Office and

includes eighty-five of the ninety-five two-digit industries from 1982 to 1986. Non-profit organizations, private households and the public sector were excluded from the analysis. Furthermore, only private enterprises with more than fifteen employees were included in the analysis. Therefore, the analysis covers about 65% of all wage and salary earners in the Federal Republic of Germany.

The variables are operationalized as follows:

(1) The precentage of disabled employees (PDE) is the number of disabled employees in private enterprises with more than fifteen employees divided by the total number of employees in these establishments.

(2) The percentage of old workers (POW) is the number of employees aged fifty years and more divided by the total number of employees. This variable serves as a proxy for average length of tenure, because age and length of tenure are positivelly correlated.

(3) The turnover rate (TOR) is defined as the quotient of either entries or exits and the number of employees at the beginning of the respective year. This variable is usually called "net replacement rate", because the nominator consists of the lower figure of either entries or exits.

Whereas PDE and POW are available for the years 1982-1986, TOR covers the years 1980-1984. Table 3 shows means and standard deviations of the variables for each year of the period under investigation as well as for the pooled sample.

Table 3
Means and Standard Deviations of Dependent and Independent Variables

Year	Percentage of disabled employees		Percentage of elderly employees		Turnover Rate	
	Mean	Std Dev	Mean	Std Dev	Mean	Dtd Dev
1982	4.7	1.3	17.3	4.5	37.9	20.0
1983	4.6	1.3	17.3	4.6	34.6	20.6
1984	4.2	1.2	17.2	4.7	31.7	19.3
1985	4.0	1.1	17.5	4.8	31.3	18.1
1986	4.2	1.0	17.7	4.7	32.0	17.4
1982-1986	4.3	1.2	17.4	4.7	33.5	19.2

Prior to the multivariate analysis, the variables were all transformed by the natural logarithmic function to reduce statistical problems associated with

large positive outliers. Furthermore, they were weighted by the number of establishments in each sector to allow a statistical influence in the analysis that is proportional to the relevance of each sector in the economy[1)].

The following hypotheses can be derived from the theoretical approach developed above:

(1) On the one hand, the accumulation of social capital requires long-term employment relations in order to facilitate productive activities. On the other hand, the probability of becoming disabled increases with age. Therefore, we expect a strong positive correlation between POW and PDE.

(2) High turnover rates indicate, among other things, the existence of an open social structure which inhibits long-term employment relations. Therefore, we expect an equally strong negative correlation between TOR and PDE.

(3) Since POW and TOR are assumed to measure interrelated though conceptually different aspects of a firms personnel policy, we do not expect any significant relationship between the two variables.

Table 4
Correlation Coefficients

Year	Variables	PDE	POW
1982	POW TOR	.760* -.524*	- -.159ns
1983	POW TOR	.747* -.552*	- -.197ns
1984	POW TOR	.751* -.613*	- -.251ns
1985	POW TOR	.733* -.589*	- -.168ns
1986	POW TOR	.663* -.573*	- -.160ns
1982-1986	POW TOR	.715* -.520*	- -.186*

* p < .001
ns not significant

1) Alternatively the variables were weighted by the number of employees in each sector. This had virtually no effect on the correlation coefficients and the regression results.

Table 4 shows that the correlation between POW and PDE is stronger than the correlation between TOR and PDE, although the latter correlation coefficients are highly significant too. As predicted, the correlation coefficients mesuring the relationship between POW and TOR are not significant except the one for the pooled sample. Therefore, both variables can be used simultaneously as independent variables in a linear regression model.

Table 5
Results of OLS-Estimates

Year	Variable	B	SE B	T
1982	POW	.68711	.05599	12.273*
	TOR	-.28400	.03880	-7.320*
	Constant	.57742	.22521	2.564***
	R Square	.744		
1983	POW	.61795	.05454	11.329*
	TOR	-.25985	.03621	-7.175*
	Constant	.63213	.21606	2.926**
	R Square	.729		
1984	POW	.60505	.05352	11.306*
	TOR	-.26377	.03276	-8.052*
	Constant	.58692	.20685	2.837**
	R Square	.756		
1985	POW	.61661	.05201	11.856*
	TOR	-.27918	.03222	-8.664*
	Constant	.53153	.19596	2.712**
	R Square	.759		
1986	POW	.49532	.05483	9.034*
	TOR	-.27184	.03678	-7.391*
	Constant	.91934	.21386	4.299*
	R Square	.663		
1982-1986	POW	.60972	.02726	22.369*
	TOR	-.24337	.01742	-13.969*
	Constant	.53759	.10552	5.095*
	R Square	.666		

* p < .0001
** p < .001
*** p < .05

As Table 5 shows, the independent variables POW and TOR are always highly significant and they usually explain about 75% of the variance of the dependent variable PDE. Only in 1986 and in the pooled sample the amount

of variance explained drops to 66%, which is still unusually high because only two independent variables have been included in the regression equation. Since the natural logarithm of the variables has been used to estimate the regression equations, the coefficients can be interpreted as elasticities. In 1982 for example, a one percent increase of POW leads to an increase of PDE of 0.69% while a one percent decrease of TOR leads to an increase of PDE of 0.28%. In the years 1983-1985 a one percent increase of POW leads to an increase of PDE of only 0.61-0.62%, while a one percent decrease of TOR leads to a similar increase of PDE as in 1982. In 1986 the influence of TOR remained virtually unchanged, while that of POW decreases markedly. With the exception of 1986, the constant term remained stable at about 0.53-0.63.

5. Summary and Conclusion

As the empirical evidence shows, firms with a high percentage of old workers and a low turnover rate usually have a high percentage of severely disabled wage and salary earners in their workforce. Since a high percentage of old workers and a low turnover rate are, among other things, indicative of an "integrative" personnel policy, a high percentage of disabled employees is apparently part of the costs firms have to pay when pursuing a considerate personnel policy. On the other hand, firms with a low percentage of old workers and a high turnover rate usually have a low percentage of disabled employees. This does not mean, however, that these firms have lower user costs of labor. The employment of the disabled for example might be cheaper than paying the DM 150 per month and post reserved for a disabled, if their employment elicits a high degree of support and loyalty from the healthy as well as from the disabled employees. This will be more likely, if not only the health impaired but also the healthy employees can assume that in the case of disability they will not be laid off, but either promoted to another less strenuous job or that their workload will be reduced. As for example Akerlof (1984: 79-83) has shown, workers' perception of their firms personnel policy, i.e. whether they perceive ist as being "just" and "fair", has an enduring effect on their productivity. If the employment of the disabled, especially if they had already been employed by the firm before the disability occured, meets the workforces'conceptions of equity and fairness, the user costs of labor can be much lower in a firm with a high percentage of disabled employees than in a comparable with a low percentage of disabled wage and salary earners. Because of a lack of adequate firm data, this and other related questions have not yet been answered. First of all, additional efforts are necessary to collect

the data which is necessary to test competing hypotheses.

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