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**Flexibility through working time accounts:  
reconciling economic efficiency and individual time  
requirements**

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# **Flexibility through Working Time Accounts: Reconciling Economic Efficiency and Individual Time Requirements**

## **The Problem**

The traditional working time model is undergoing profound changes. Variable distribution patterns based on working time accounts are taking the place of uniformly distributed working times. Flexible working time schemes can be associated with either shorter or longer working hours. Working time, which for many decades was kept under control by the more or less rigid regulatory straitjacket of normal working time, now has become very heterogeneous. While it is certainly true that the growing flexibility of working time is undoing previously standardised structures, this does not necessarily entail a rejection of collective regulatory procedures, on either an industry- or company level. The key parameters of flexible forms of working time continue to be largely governed by collective agreement, which means we can use the expression 'regulated flexibility'.

Flexible working times offer more organisational leeway than normal working time, which is largely resistant to differentiated or even divergent time requirements. Working time policy becomes caught in the tension between economic, social, and family requirements. The argument made here is that the increased flexibility of working time is primarily determined by considerations of economic efficiency, but that these do not always predominate; employees' time needs can also be taken into account. Breaking up normal working hours smoothes the way for a more efficient use of time without completely blocking the way for flexibility to meet demands on workers' time outside the company. Whether and to what extent competing demands on time can be balanced essentially depends on the contents and structures of arrangements governing its use.

This paper discusses the tension between the demands of economic efficiency, on the one hand, and non-economic ends (leisure, family, etc.) on the other. It starts by outlining the formative characteristics of flexible forms of working time to then investigate the regulatory structures of working time accounts (Part 3). The argument of relative predominance of economic aspects against private time needs is then examined further. Possible conflicts between goals and uses of the flexible organisation of time are then discussed.

## **Working Time Accounts Are Replacing Normal Working Time**

The model of normal working time, which characterized the Fordist era of standardised industrial mass production, is losing its force. For a large proportion of the workforce during the past two decades, working time has grown not only shorter, but also more flexible and more heterogeneous. Variable working times are replacing uniform ones. This process is essentially defined by the rapid spread of working time accounts. Standardised working time provided consistent starting and finishing times, was divided into equal portions, gave workers predictable periods of time-off, and kept work and free time strictly separate. Overtime and short-time work were sole means of variation. Neither companies nor workers had the option of distributing working time variably over the timeline to meet their respective requirements. Regularity and continuity were the defining features of normal working time. Such

standardised patterns of working time correspond to largely standardised mass production.

Working time accounts, on the other hand, make it possible to vary the daily and weekly working time within defined limits (which are regulated differently from one collective bargaining area to another and from one company to another (Bispinck 1998)). Actual working time can sometimes be longer, sometimes shorter. Deviations from the agreed average value must normally be compensated within a defined period of time, which may range from just a few months to an entire working life. Ultimately, normal working time is merely an average value fixed by collective agreement to be achieved within a certain time span.

Variable working times in the form of working time accounts were first used when flextime work was introduced in the 1960s. Numerous new variants have been added to this original model: (1) flextime models; (2) overtime accounts; (3) “savings” models<sup>1</sup>; and (4) “range” models<sup>2</sup> (Seifert 1998). These models differ primarily in the ways they are used and the different time elements that can be entered into them, as well as in their method of organisation.<sup>3</sup> The conditions for managing the accounts are governed differently in both collective bargaining agreements and company-level agreements. Other categorisations of working time accounts are based on the criterion of the length of the compensation periods and make a distinction between short-time, long-time and lifetime accounts.

Various surveys provide information on the spread of time accounts. These include two company surveys (DIHT 2000; Bellmann/ Ludewig 2000), two surveys of individuals (Bundesmann-Jansen et al. 2000; German Federal Statistical Office 2002), and two works council surveys (Seifert 2001; Seifert/Mauer 2004), covering the years between 1999 and 2002.<sup>4</sup> The studies quantify the spread of time accounts differently due to their methodological differences. Depending upon the survey and the definition of working time accounts on which it is based, the proportion of companies or workers with working time accounts varies considerably between some 30% and 70%.

But all studies agree that working time accounts have spread quickly in recent years.

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<sup>1</sup> This type has been introduced in the context of collective working time reductions. Companies can keep working hours on the given level while the difference between collective and actual working time is paid in a time account.

<sup>2</sup> Collective agreements allow weekly working hours to fluctuate between defined limits.

<sup>3</sup> In some places, several accounts exist in parallel with each other, with the possibility of transferring time elements between them under set conditions.

<sup>4</sup> Both company and works council surveys indicate the proportion of companies which have time accounts; surveys of individuals quantify the proportion of workers with individual time accounts. In contrast to the company surveys, those of works councils exclude firms with fewer than 20 workers and those without a works council, so that in these cases it can be assumed that the time account companies are overstated. In addition, the studies define time accounts differently. For example, the ISO survey (Bundesmann-Jansen et al. 2000) does not take into account the savings models mentioned above. The micro census also starts from a narrow concept of the time account and does not, for example, include annual working times. Consequently, these last two surveys may well underestimate the spread of time accounts. The IAB survey (Bellmann/Ludewig 2000) does not use defined guidelines, so it remains uncertain whether all types of accounts are recorded.

Secondly, they all point to a distribution rate that rises sharply with company size, as well as a substantial scattering by sector. A multivariate analysis shows that the spread of working time accounts correlates positively with company size, the human capital intensity of the companies (in-house continuing training and the share of skilled workers), and the existence of a works council (Ludewig 2001).

## **Regulated Flexibility**

### **Regulatory Parameters**

Early suggestions that flexible working times be introduced to lower labour costs and give workers more control over their time (Teriet 1976) were initially met with scepticism (Bäcker/ Seifert 1982), not least because regulation by collective agreement was seen as unsuitable for these new ways of organising working time, so the negotiation of individual rights was favoured instead. However, contrary to all scepticism the dual system of interest representation has proven fully able to incorporate differentiated flexible working time patterns using a mix of regulations by collective agreement and in-company agreement. The depth and differentiation of the arrangements have increased. Their contents concern both the creation and use of working time accounts. On the creation or savings side, definitions are given of the sources, conditions and scope for saving time credits. The 'spending' side defines the conditions, purposes and scope for redeeming time credits. In the overwhelming majority of companies with time accounts, these various time parameters are defined and limited by collective agreement and works council agreement.

A key parameter for the accumulation of time credits are the time elements that can be entered into the accounts.<sup>5</sup> In private companies, overtime is the most frequent source (86%) of time credits, followed by flexitime accounts (70%) and accounts connected with collectively agreed corridor arrangements (35%) (cf. Fig. 2). In 13% of companies with working time accounts, time spent on training can also be entered into the accounts. The clear overall dominance of overtime and flexitime as forms of time accounts can be interpreted as a sign that time accounts have until now been largely short-term in nature. Despite the spread of greater leeway for providing variability in recent years, flexitime work still serves primarily to cover the everyday need for flexibility for both workers and companies (Herrmann et al. 1999: 124 ff.).

The compensation periods constitute a second regulatory parameter. Almost three-quarters of working time accounts prescribe the time period within which the account balances must reach zero. Short-time accounts defined as having a compensation period of up to one year make up 63% of all accounts<sup>6</sup> (Fig. 3). However, the trend is towards long-term accounts: three years previously, such short-term accounts were a

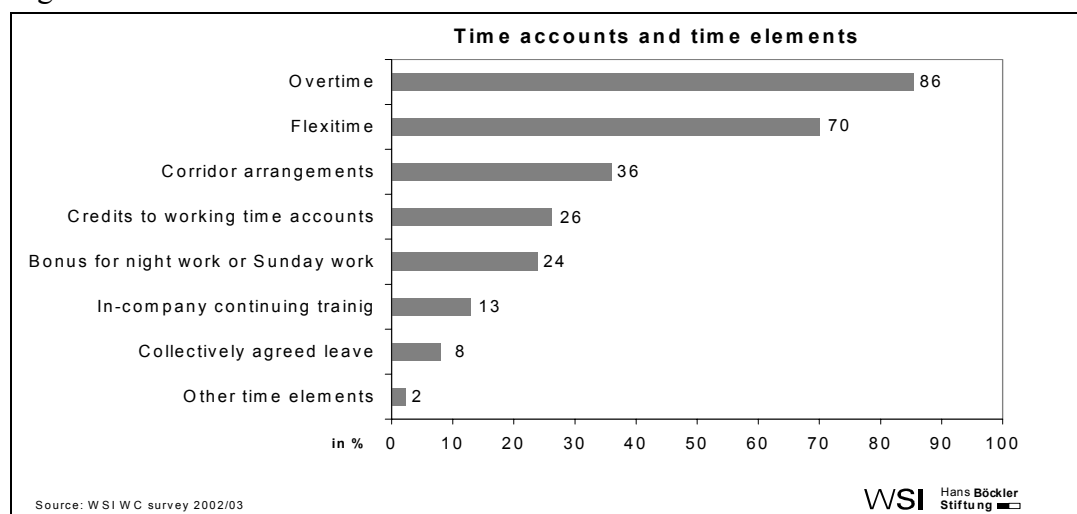
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<sup>5</sup> The following data are based on the WSI works council survey of 2002-2003, conducted at the end of 2002 and beginning of 2003 as part of the project on "Investment working time policy" supported by the Ministry of Economy and Labour of the state of North Rhine-Westphalia. A standardised questionnaire was used to poll works councils in companies with at least 20 workers. The analyses are based on 1,885 analysable questionnaires, corresponding to a return rate of 16%.

<sup>6</sup> The analyses based on the IAB works panel arrive at somewhat higher values, but these are based on a 1999 survey period and cover firms with one or more workers obliged to contribute to social insurance (Ludewig 2001, p. 307).

good three-quarters of all working time accounts.<sup>7</sup> Long-time accounts will inevitably grow in importance, among other factors due to the collective bargaining agreement for the chemical industry concluded in May 2003.<sup>8</sup>

Figure 1

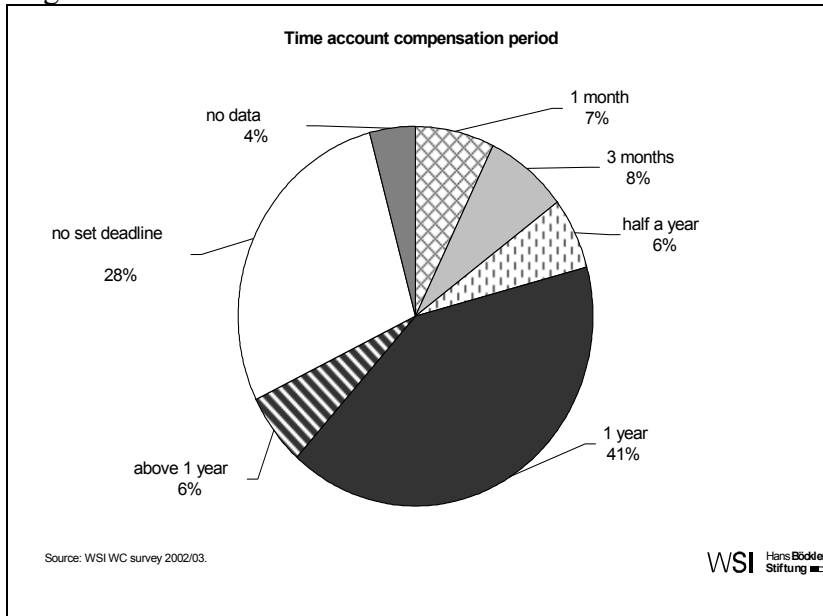


The limits for the account balances are a third regulatory parameter. Just under four-fifths of all time accounts limit the number of credits that can be saved up and even more (84%) set upper limits on time deficits. This asymmetry in the rules continues in the average limit values. On average, up to a full 90 hours in time credits may be saved while the average time deficit may not exceed 60 hours. The median value for time saved is 75 hours, while the median for deficits is 40 hours.

<sup>7</sup> The data are based on the WSI works council surveys from 1999/2000 and 2002/2003 with identical questions about the compensation periods.

<sup>8</sup> The collective agreement that entered into force on 1 January 2004 offers companies the option of introducing long-term accounts through a works agreement in which time credits can be saved consisting of age-related reductions of working time, supplementary work, bonuses for supplementary work, bonuses and awards, and holiday entitlements greater than those stipulated by law.

Figure 2



The use of time credits is also subject to extensive regulation, in terms of both their purpose and the procedural method. The regulations defining the options for using time credits can be considered a fourth parameter. Besides individual days off, the predominant option is taking a longer period of time off from work for no particular purpose (63% of companies with working time accounts). Only around one company in seven (15%) with a works council and working time accounts offers possibilities for also using time credits for occupational and vocational continuing training. Roughly the same proportion allows early retirement.

The fifth regulatory parameter concerns the procedure for making use of time credits. As shown by the findings of the 1999-2000 WSI works council survey (Seifert 2001a), in the vast majority of companies with a works council, time credits are deducted from working time accounts in agreement with the worker's superior (67%) or work colleagues (30%). In relatively few cases (4%) can the superiors decide on their own how the time is used; instead, this decision tends to lie more with the workers themselves (20%).

Given these findings, with the overwhelming majority of working time accounts it still seems justified thus far to speak of regulated flexibility. Upper and lower limits for time credits or deficits are defined as well as the compensation periods or the conditions for saving up and liquidating time credits or deficits. This picture only partially applies to the areas of the economy without works councils (Munz et al. 2002). A rising number of accounts do not to set compensation periods and upper limits for the accumulation of time credits. The regulatory framework of time accounts is starting to disintegrate. The development of working time is moving to the next stage: trust based working times. This form of flexible organisation of working time dispenses with any form of limiting regulation within the rules defined by law. The organisation of working time is based primarily on efficiency considerations, more specifically on the principle of performance enhancement (Hoff 2002).

### Regulatory Deficiencies

Although the central parameters of working time accounts are relatively closely regulated, serious gaps and inadequacies remain in the view of workers. First of all, time credits are only partly protected against expiration. A monetary reimbursement or compensation with free time for the work performed and credited to an account is not always guaranteed. According to works councils, in one out of five (21%) private-sector companies time credits expire if the limits for compensation periods are exceeded, and this is even true of 38% of establishments in the public sector. With flextime models, the share of "capped" time credits (Herrmann et al. 1999) is significantly higher (30%) than for other time account models (7%). Short-time accounts, especially flexitime ones, have a particularly high risk of expiry. This situation seems to be the price paid because flexitime accounts give workers more freedom in determining their own time than other working time accounts.

A second unresolved aspect of regulation is protection of working time accounts against insolvency. Only a minority of companies (19%) has thus far taken appropriate precautions. Whilst the share of protected accounts increases in line with the size of the company, even in large firms it does not exceed 25%.

### **Efficient Use of Working Time**

The changes in working time outlined essentially reflect a trend towards a more efficient use of working time. Business discussions were slow to focus on the time factor but have now taken off with much more systematic cost/benefit considerations of the use of time than in the past (Marr 2001). In the utilisation of production factors, thoughts on time are no longer primarily one-dimensional, focusing on quantity, but now also include the quality dimension (Hamermesh 1996). As normal working time is replaced, economic analysis is looking at the entire profile of working time resulting from the combination of the three dimensions of duration, location and distribution (Joachim/Seifert 1991). For neither companies nor workers is the value of time "'homogeneous' in the sense that the chronological value is always the same" (Hinrichs 1989, p. 36).

The introduction of variable working times based on time accounts has a great deal to do with their cost advantages. When demand is variable, variable working times offer tangible advantages over uniform normal working time. They allow the operational employment of labour to be quickly and cost-effectively adapted to the current order-book situation.

Where the employment of labour can be synchronised with the demand curves, costs for holding inventory and idle time can be reduced whilst costs for overtime bonuses can be lowered or avoided altogether. Where demand for goods or services is subject to seasonal fluctuations, employment of labour managed with the help of time accounts can reduce fixed-term contracts, lower the costs for recruiting and training seasonal workers, and convert fixed-term work to permanent employment. It can also cushion cyclical weak phases and replace or at least reduce short-time work, thereby saving the companies their contributions to social insurance for the time not worked. When there are cyclical fluctuations in demand, time accounts can even be used to prevent or reduce dismissals, and avoid dismissal costs and later recruitment costs when the economy picks up again. These cost advantages must be balanced against costs for establishing, managing and monitoring time accounts, although these are



unlikely to be substantial (Autorengemeinschaft 2000). There can also be added costs created by a change in the organisation of work due to flexible working times, which generate additional training expenses. The more autonomous the system of work organisation, the flatter the company hierarchies, and the broader the qualifications of employees (enabling them to stand in for each other when there are time bottlenecks) – the more likely this difficult tightrope act is to succeed (Seifert 1991). Flexibility has its price.

## **Time Sovereignty**

### **From the ‘Golden Cage’ to Hazardous Freedom**

From the perspective of employees, working time accounts are double-edged. Their greater openness and scope for manoeuvre on the one hand presents the danger that the distribution of daily or weekly working time will become a dependent variable of firms’ efficiency goals. On the other hand, time accounts can open up favourable conditions for autonomous time use not available with standardized normal working time. As a result, the traditional working time model appears as a golden cage, which on the one hand protects employees from an arbitrary disposition of time, but on the other leaves them with no option for spontaneity or to adjust the length of their working time according to non-economic familial or social demands. Standard normal working time is largely indifferent towards the spontaneous time requirements of everyday life as well as towards the time needs- and -desires which change over the course of a lifetime, as well as towards the changing dispositions, value-orientations, and time-needs of differing employee constituencies.

While normal working time is suboptimal in many respects for employees, its replacement by time accounts by no means guarantees an increase in time utility. Time accounts also carry considerable risks of declining time sovereignty. This new constellation can be described with the term ‘hazardous freedom.’ To a greater extent than normal working time, employees can be in danger of becoming subservient to firms’ time use needs. In the traditional model firms have limited opportunities to vary firm-level time use according to extra-firm demands, such as orders or sales.

The introduction of time accounts partially dispenses with the protective function of normal working time and brings the danger of an increasing temporal heteronomy. This danger increases as the time demands of employees drift apart and as the right of disposal over working time moves to firms.

The lynchpin for the degree of time sovereignty is the right to ‘spend’ accumulated time credits. To the extent that employees have real choices to pursue different courses of action regarding time, the utility of their free time or non-working time can be increased.

In its ideal form, ‘time sovereignty’ can be understood as the possibility to organise working time unrestricted by requirements of other people or institutions. Under conditions of dependent employment, this freedom only ever exists in a limited form. Laws, collective bargaining agreements and works agreements define a framework for action which the actors at company level have to fill in. These rules are themselves the result of negotiation processes. Depending on the relative power structure, they

give the actors at company level different room for manoeuvre when deciding which of them can dispose of the working time on the basis of which criteria. In theory, the rights of disposal move along a continuum, with the employers having the sole right to organise the time at one pole and the workers and their representatives having it at the other. Within this spectrum of formally or informally regulated scheduling rights, any type of gradation is conceivable (Harden 1989, pp. 262 ff.) with only different degrees of partial sovereignty granted. In practice, the catch-all provision on business matters usually provided in works agreements a priori restricts the leeway for time sovereignty of workers.

### **Some Empirical Findings**

Empirically based statements about the degree of time sovereignty are still incomplete. Initial evidence reveals discrepancies between desired and actual working times. For example, a full one-half of workers do not like working overtime (Bundesmann-Jansen et al. 2000), the wishes of many full-time workers for part-time work remain unfulfilled (Bielenski 2000; Holst/ Schupp 2000), and the majority of workers with night and weekend work would like to cut back or completely give up these atypical working times (Bundesmann-Jansen et al. 2000). These findings indicate that time sovereignty is missing or restricted.<sup>9</sup> Large segments of workers see the existing working times as suboptimal. On the other hand, it cannot be readily concluded that wherever actual and desired working times are congruent there is a high degree of time sovereignty. It is conceivable that due to lack of alternatives the workers have more or less come to terms with the given time conditions, in effect adjusting their preferences to realities, and that given the existing constraints, such as technically necessary continuous production or round-the-clock services in the health or security fields, they realistically see no possibilities for change and therefore do not demand any.

Is the picture similar for variable working times? Is there still leeway for demands on time outside the job given the efficient use of working time? The WSI works council survey of 1999/2000 (Seifert 2001) provides some clues. The majority of those questioned (74%) feel that the introduction of working time accounts has expanded the leeway for individual organisation of time compared with the normal working time. Only a minority (6%) of the works councils feels differently. The workers themselves give a more critical assessment of working time accounts. In the ISO working time survey, which makes a rough distinction between the two categories of self- and non-self-determined working time (Bundesmann-Jansen et al. 2000), only 17% of the workers rate themselves as 'time-sovereign'. The gender-specific differences are only slight; employment status and organisation of work are more essential to the degree of time sovereignty. Male salaried employees in more senior positions particularly saw others as having a relatively small influence on their own working time, even though they work much longer than the average for workers. At the other end of the "sovereignty scale" are shift workers, who assess their leeway for self-determined working time as low.

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<sup>9</sup> To avoid possible semantic confusion, time sovereignty is always viewed from the worker's perspective.

Although the overwhelming majority of the workers questioned said that they could not determine their own working time, this finding cannot be readily interpreted as meaning that working time is completely determined by others. The picture is more qualified since 71% say they can change their working time at short notice if there are "unforeseen events" in their personal or professional lives. It therefore seems more appropriate to speak of a relative determination of working time by others that grants the workers a limited leeway for organising their time.

A recent survey of employees with children and care duties shows that these appreciate the additional flexibility provided by working time accounts, but in general firms' time needs tend to predominate (Bundesministerium 2004). In general, one can talk of a quid pro quo: in certain periods, employees can gain some time sovereignty; while at other times they have to fulfil the requirements of firms.

These empirical findings allow no uniform assessment of the connection between time accounts and time sovereignty. They can both verify the frequently-expressed fear that time accounts make workers' time more dependent on company requirements and support the opposite thesis. Obviously, there are groups of workers that can gain time sovereignty through time accounts under legal and organisational conditions that so far have not been precisely defined empirically, and conversely, compared with standardised normal working time, the time of other workers becomes more dependent on company requirements.

## **Conclusion**

Regulated flexibility based on working time accounts is replacing the model of uniform normal working time. However, this does not also imply that collective agreements will no longer regulate the organisation of working time. The central parameters of working time accounts are overwhelmingly regulated both by collective agreement and at company level. The change in working time policy has far-reaching consequences in another respect. The introduction of working time accounts has allowed the organisation of working time to be more open. Economic cost/benefit calculations in particular become more important, but not without qualifications. To some extent, both sides, companies as well as workers, can benefit from the introduction of variable working time models and gain advantages in relation to normal working time. But this positive picture does not apply universally, and should not lead to the assessment that workers feel that flexible forms of working time are completely problem-free and automatically create a win-win situation. Whether workers can better meet their time requirements outside of work through time accounts depends on how the accounts' key organisational parameters are regulated, among other factors. And conversely, the finding that workers become more dependent on company time requirements through flexible working time models based on time accounts points to regulatory shortcomings. Consequently, a task of future collective bargaining policy is to stipulate minimum conditions for company regulation of working time accounts; for example, in terms of rights for workers to veto on-call times ordered at short notice, or time or monetary bonuses for such working times that restrict time utilisation.

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