

Long-Term Trends of Labour Market Dynamics at the Dawn of the Knowledge Society

Labour Market Mobility, Job Stability and Flexibility in West Germany

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by Marcel Erlinghagen and Matthias Knuth

Institut Arbeit und Technik

Munscheidstraße 14

D-45886 Gelsenkirchen

Germany

erlinghagen@iatge.de

knuth@iatge.de

Abstract

In the course of the transition from an industrial to a service economy, fundamental changes in the functioning of the labour market are expected to occur. A number of authors assert that these changes will result in an increasing external-numerical flexibility of firms which is assumed to affect labour market processes in terms of a generally higher labour market mobility and a decreasing employment stability ('high-velocity-labour-market').

This paper examines the hypothesis of a growing importance of numeric-external flexibility, applying simple descriptive statistical methods to the event-history data of the IAB Employment Subsample for the West German labour market covering the years 1976 to 1995. There is no evidence for an acceleration of labour market 'churning', but rather for a stagnation or even slight decline of labour market mobility since the 1970s. Furthermore, job stability has not decreased over time, as one might have expected, but rather increased.

In spite of these general results it might be conceivable that service-sector jobs have become more unstable but that this effect is cancelled out by a considerable stabilisation of jobs in manufacturing. It turns out, however, that there is no evidence for developments in the 'old' and 'new' labour markets to contrast in such a simple way. Services display divergent trends when broken down by sub-sectors; jobs in some of them have stabilised while there is no or an opposite change in others.

Introduction

Since the heyday of industrialism, the German employment system, and that of many other countries as well, has undergone some fundamental changes. Thus the importance of skills and of 'lifelong' learning has certainly increased, as have women's labour market participation and the diversity of new and more flexible working-time forms (cf. Mayer and Müller 1994: 265). There has been no shortage of attempts to characterise this change by locating it within major trends whose effects are said to be all-embracing and which, denoted by such terms as 'globalisation' and 'individualisation' (cf. for example Rogowski and Schmid 1997) or 'tertiarisation' (cf. for example Häußermann and Siebel 1995), are the object of much debate. These trends not only affect society as a whole but are also the cause of changes in social subsystems such as the labour market. There has also been much discussion in Germany of various mutually complementary and, in part, overlapping developments, which fit into the international debate on the 'end of work' (Rifkin 1996; Giarini and Liedtke 1998; for a critical perspective see Wagner 2000; Knuth 2000).

A particular focus of the debate on the 'future of work' is the evolution of labour mobility. Labour turnover and job stability are key issues in both the German and the international debates on the functioning and future of the labour market. It has emerged from these debates that the general findings on labour market mobility and job stability reported in the literature are not wholly unambiguous. Some authors claim to have observed increased labour market mobility and job instability in Great Britain (Booth *et al.* 1999), the U.S. (Swinnerton and Wial 1995; Valetta 1999) or Germany (Mertens 1999), while others refute these findings and suggest that, despite the alleged (and ongoing) increase in flexibility and deregulation, there is little evidence of any (unambiguous) effects on mobility and job duration (cf., for example, on Great Britain, Burgess and Hedley 1998, and on the U.S., Diebold *et al.* 1996; Neumark *et al.* 1999; Gottschalk and Moffitt 1999, on Germany Winkelmann and Zimmermann 1998, on Japan Chuma 1998).

As far as external flexibility in the German labour market is concerned, many commentators start from the assumption of a long-established but now strengthening general trend towards a 'high-velocity labour market' that is increasingly shaping the 'future of work'. In such a turbulent labour market, individual employment histories will, over time, 'become increasingly unpredictable and chaotic compared with those of the past' (Rogowski and Schmid 1997: 577; own translation). Labour markets in the 'risk society' are said to be characterised by a constantly advancing, all-embracing process of 'destructuring': 'In this way a new division of the labor market is created between a uniform standard industrial society labor market and a flexible, plural risk society market for underemployment, where the second market is quantitatively expanding and increasingly dominating the first' (Beck 1992: 144-145; cf. also for example Mutz *et al.* 1995). This view is by no means confined to Germany. Doogan (2001) shows that a very similar debate to the German one on the alleged decline in job stability is being conducted in Great Britain (see also Gregg and Wadsworth 1995). The same can be said of a number of other industrialised countries (for a short selection of sources see OECD

1997: 137; Auer and Cazes 2000). The consequence of this increased external labour market flexibility is said to be a levelling out of employment opportunities and risks; uncertainties that in industrial societies were unevenly distributed along clearly defined socio-economic demarcation lines are said to be becoming increasingly generalised. The old division between ‘core’ and ‘peripheral’ workforces is said to be dissolving into general employment instability.

Any attempt to ascertain whether increasing external flexibility in the German labour market of recent decades, during the transition from the industrial to the service and the knowledge economy, has actually led to the emergence of an increasingly ‘high-velocity labour market’ with a growing risk of unemployment must begin with an empirical analysis of (a) labour market mobility, (b) job stability and (c) the incidence of unemployment. This analysis is conducted in Section 1, as part of a descriptive analysis of the West German labour market as a whole. The labour market for service workers is examined in greater detail in Section 2, since it is in this segment that a high-velocity labour market is most likely to emerge. The main question addressed in this section is how job stability in the service sector has changed in the course of the period investigated. Breaking the analysis of job stability further down by establishment size and occupational level clarifies the mechanisms of change and compensation that have been operating during the period observed. In Section 3, finally, an overall assessment of the results of our investigation will be presented. Our main contention is, here, that flexibilisation tends to take effect rather ‘inside’ the employment relationship than on its ‘outside’ of job duration and job mobility.

1 The evolution of the west German labour market between 1976 and 1995: general results

1.1 Hypotheses and data set

The following three hypotheses provide the starting point for our analysis:

Hypothesis 1: Employee mobility in the “external” labour market has generally increased since the 1970s.

Hypothesis 2: Job stability has declined since the 1970s.

Hypothesis 3: Individual experience of unemployment has become increasingly normalised since the 1970s.

If turbulence really is becoming an established feature of the West German labour market, then these hypotheses should be confirmed in the course of the following empirical analysis.

In order to be able to test these hypotheses, we require data capable of depicting dynamic processes. So-called ‘event history data’ are best suited to this task. Such data capture changes in the phenomena under investigation on a continuous basis. The so-called IAB employment subsample (IABES) is particularly well suited for this purpose. The IABES contains exact daily data on the employment careers of some 560,000 indi-

viduals over the period between 1975 and 1995 (for details about the raw data and the construction of our analysis data set see the technical appendix).

Even though data on jobs in East Germany were included in the data set from 1991 on we will restrict our analysis to West Germany and exclude individuals for whom employment episodes in both parts of the country have been reported. In this way a sufficient length of the period to be analysed is ensured.¹ Furthermore, second and further jobs worked simultaneously with the main job are not taken into account, and individuals are also excluded from the analysis while in apprenticeship training (and treated as new job entrants after completion).

The data set imposes four specific restrictions on our analysis.

- (1) The data set is not derived from a panel survey but from a legally regulated procedure within the social security system. Therefore, the data cover only *insurable* employment. This excludes the self-employed, civil servants² and those in marginal part-time employment³. However, since at the end of the investigation period about 80 per cent of the economically active population were still in insurable employment, making it by far the most widespread employment form in the German labour market (Hoffmann and Walwei 1998), this data set captures the overwhelming share of labour market participants.⁴
- (2) Reception of unemployment-related transfer payments must be taken as a proxy of unemployment although the statutory definition of unemployment is somewhat wider in Germany. On the other hand, benefit claimants of 58 or older may get dispense from job search and are then excluded from unemployment statistics (cf. Knuth and Kalina 2002). In our analysis, however, they will figure as ‘unemployed’.
- (3) The version of the IAB employment subsample presently (since 2000) available provides data only up to 1995⁵; consequently, more recent developments in the labour market cannot be depicted by means of this data set. Problems of left or right censoring of observations (cf. Blossfeld and Rohwer 1995: 34ff.) further restrict the analysis so that time series presented here do not begin before 1976 and some have to end earlier than 1995, depending on the nature of the problem investigated. How-

¹ On the development of the East German labour market after 1990, see for example Solga and Diewald (2001).

² Excluded are only those public employees with the special loyalty status of *Beamte* such as policemen, the majority of teachers and high-ranking administrators. By contrast, public sector wage and salary earners are represented in the data set.

³ Less than 15 hours per week or less than a monthly earnings threshold, which used to be dynamic, was fixed at 630 DEM in 1999 and, starting from 2002, was rounded up to 325 Euros.

⁴ It should also be noted that large categories of employment relationships usually attributed as “non-standard” are included in the data set. While part-time is included as a variable, temporary work cannot be identified as such. However, its effect on job stability should show up in the overall results

⁵ The consolidation of social security registers accounts for a considerable time-lag before the construction of the sample can be started – which in turn requires so large an effort that it has been done only in five-year-intervals so far. More up-to-date versions of the data set will become available in the future but the time lag will remain roughly the same.

ever, before calling the relevance of the data into question it should be noted that the contentions which will be tested in this article were already well established in periods which the data do in fact cover.⁶

- (4) The data set provides evidence only on objective job stability; in other words, the data can be used only to ascertain how long a particular employment spell has actually lasted. Employees' subjective perceptions of job security may be different and are not the object of the present investigation. The same applies to contractual aspects: fixed-term contracts with the same employer and succeeding one another without interruption will appear as one ongoing employment relationship. As for the nature of separations, the data set makes no difference between dismissals, expiring of fixed-term contract, quits and voluntary annulments.

1.2 Labour market mobility between 1976 and 1995

The evolution of labour market mobility can be reproduced with the aid of suitable flow values. The IAB employment subsample can be used to calculate entry and exit rates by dividing the number of job entries and exits occurring in a particular calendar year by the stock of jobs during that year.⁷ The mean value of the entry and exit rates, the so-called labour turnover rate (LTR), is calculated as described by Cramer and Koller (1988) by dividing the total number of movements (entries plus exits) by twice the stock of jobs during the respective year. Thus the LTR is an indicator of total labour market mobility.

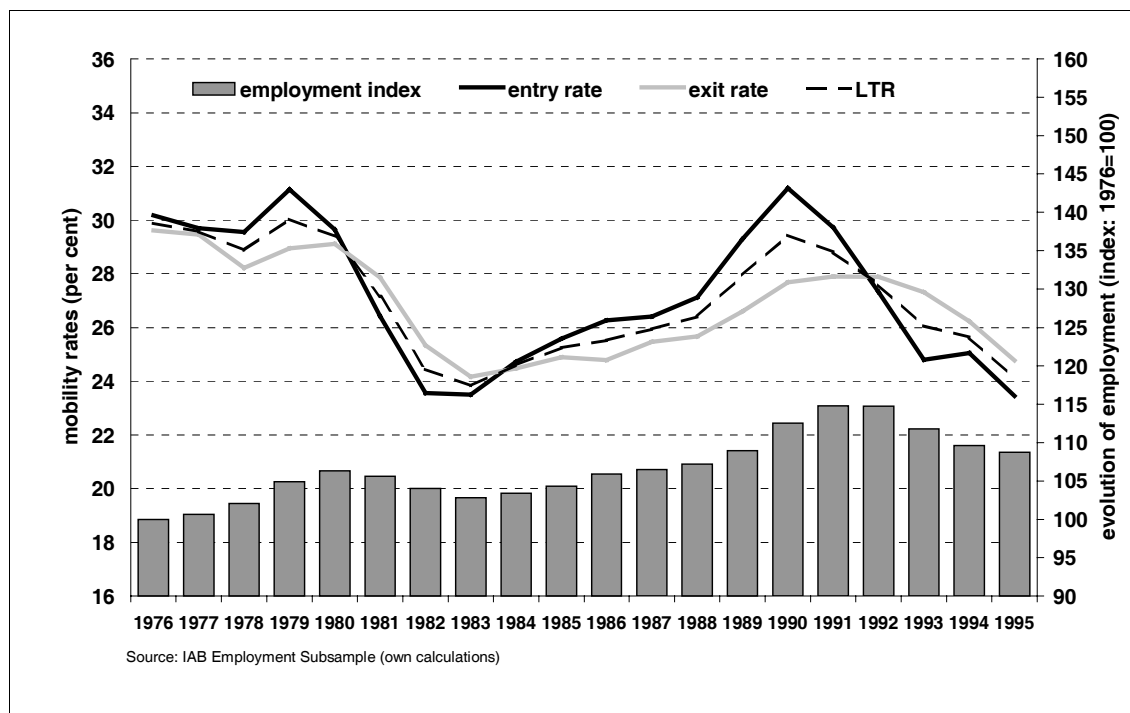
Figure 1 shows the evolution of entry, exit and labour turnover rates in the West German labour market, together with the indexed evolution of the stock of jobs between 1976 and 1995. Both entries into and exits out of jobs show a procyclical pattern. Thus overall mobility is greater during upturns than during downturns. This effect can be explained by the fact that the replacement chains become longer in upturns and act as a multiplier on mobility (cf. Schettkat 1996).

In order to test hypothesis 1, which posits a general increase in mobility, we must try to eliminate these cyclical influences and compare the LTR only between years with a similar cyclical situation. During the employment boom of the 1990s, when the LTR was around 30 per cent, mobility in the West German labour market was lower (albeit only slightly) than in the weaker employment boom of the late 1970s. On the other hand, it is also notable that, despite the dramatic collapse in employment in the mid-1990s, the labour market at this point was *not* any less 'mobile' than during the employment downturn of the first half of the 1980s, which was less extensive in both absolute and relative terms (LTR 1983: 24 per cent; LTR 1995: 24 per cent).

⁶ Ulrich Beck published the first German edition of "Risk Society" in 1986, and as early as 1983 Dahrendorf had sketched quite similar arguments.

⁷ On the definition of 'entries' and 'exits' see the technical appendix.

Figure 1: Entry, exit and labour turnover (LTR) rates, against the evolution of employment (index: 1976=100), West Germany, 1976-1995



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Thus the labour turnover rates do not provide any evidence of a general increase in the labour market mobility of workers in insurable employment during the observation period. In fact, labour mobility in West Germany is astonishingly little influenced by supposed or actual economic and social changes. Indeed, the trend in labour mobility even seems to point downwards. Thus the first hypothesis must be unequivocally rejected.

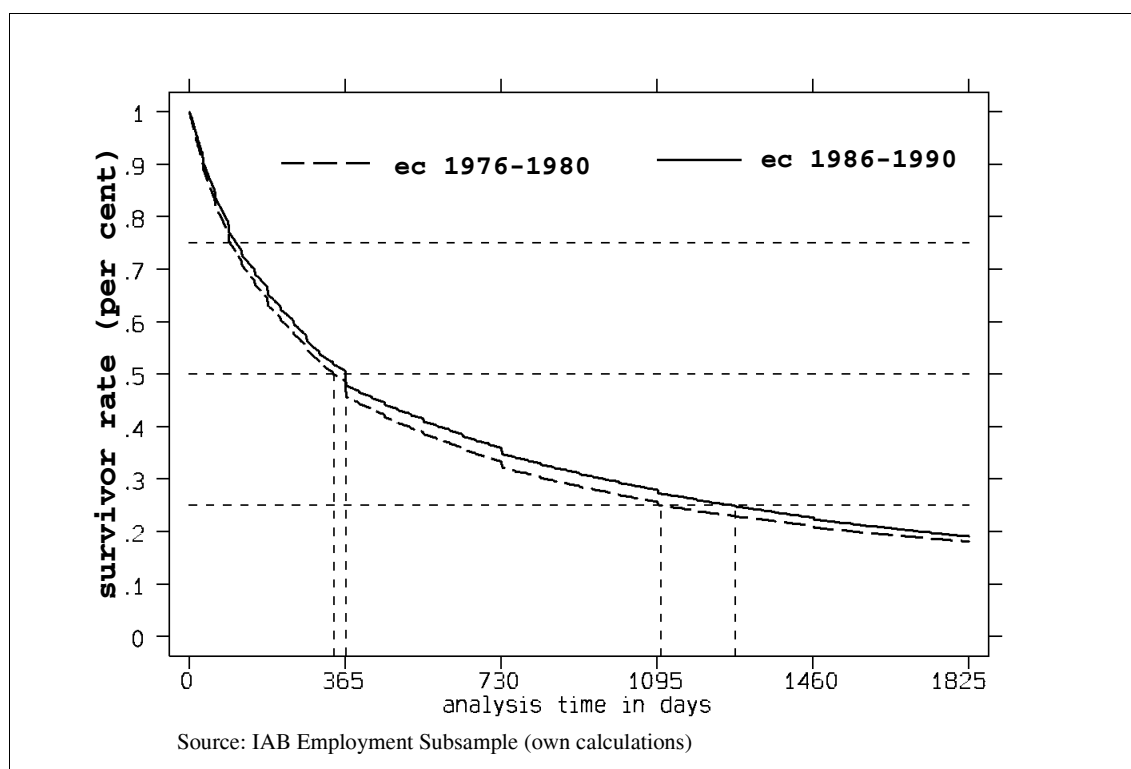
1.3 Job stability

The data derived from the IAB employment subsample are daily event history data that make it possible to ascertain the exact duration of job spells. With the aid of so-called survivor rates, the stability of jobs can be calculated and also represented graphically through time-dependent survivor probabilities (on the calculation of survivor rates cf. Blossfeld and Rohwer 1995). In this way, we can superimpose job spells that began at different points of calendar time on an observation period axis and pool them at will, which allows us to compare, for example, the stability of jobs that began between 1976 and 1980 with the stability of those that began between 1986 and 1990.⁸

⁸ The reference here is to employment relationships not to individuals. In other words, in calculating the survivor rate, we take into account all changes of employer during the observation period, and hence all new employment relationships entered into, rather than the number of individuals making such transitions. In the case of 'job hoppers', therefore, each new employment relationship entered into will be taken into account. This is more precise than cross-sectional surveys of tenure, such as the European Labour Force Survey, which can capture only a single change of employment relationship within a 12-month period.

Figure 2 shows the survivor rates for *job spells that began* in these two periods. If a job began between 1976 and 1980, it is included here in the 1976-1980 entry cohort (EC 1976-1980); if it began at any time between 1986 and 1990, it is included in the 1986-1990 entry cohort (EC 1986-1990).⁹ The survivor rate measures the probability of a job spell that began in a particular entry cohort to continue beyond the observation periods plotted on the time axis. The maximum period of time observed here is five years (1,825 days). Looking at these diagrams the other way round, we can ask how long it takes in each instance until only a certain percentage (e.g. 50 or 25 per cent) of the jobs that began in the observation period remain.

Figure 2: Survivor rates in newly entered jobs, West Germany, 1976-1980 and 1986-1990 entry cohorts (ECs)



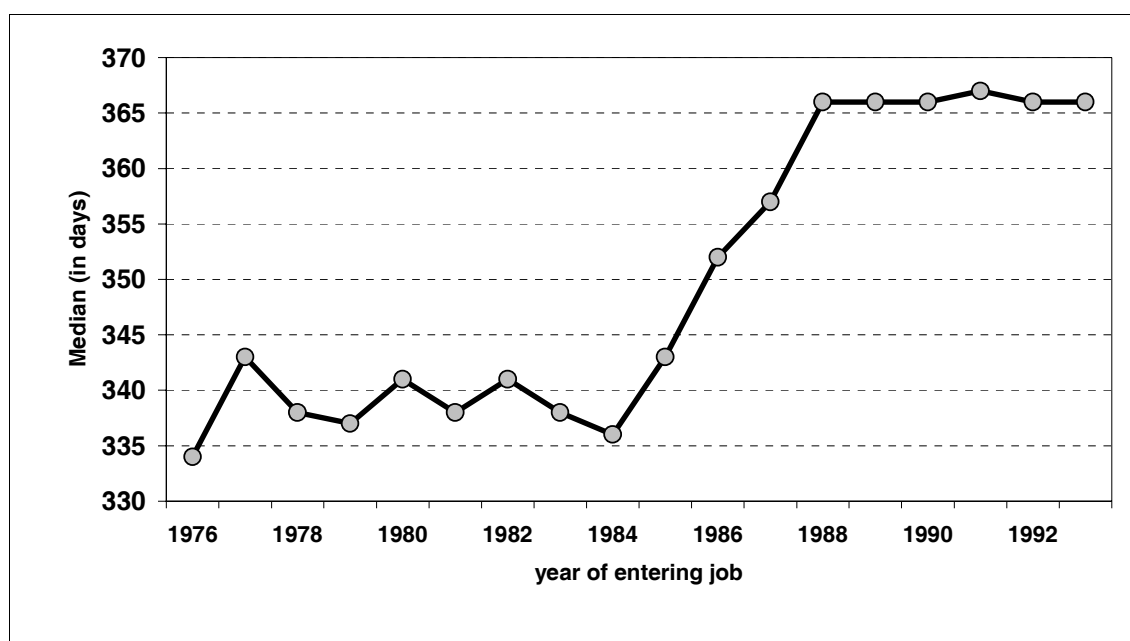
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The downward slope of the curves in Figure 2 represents the general fact that the longer the time that has elapsed since the entry date, the less likely it is that a person will still hold this job. The sagging shape of the curves mirrors the fact that the probability to stay in a job increases with tenure. The relative paths of curves representing different historical periods is of decisive importance in testing the hypothesis of declining job stability. A group of jobs – in this case five-year entry cohorts – is shown to be all the more stable the higher the path of the corresponding survivor rate is positioned in the coordinate system.

⁹ These two entry cohorts were selected in order to avoid a cyclical bias: The two periods in question, 1976-80 and 1986-90, were both periods of employment growth.

In Figure 2, the path of the curve for the later entry cohort is higher than the curve for the earlier cohort. This implies – contrary to hypothesis 2 – that employment spells that began at the end of the 1980s were more stable than those that began at the end of the 1970s. Thus survivor analysis reveals that *one in two new jobs is relinquished within approximately one year*, making Farber’s conclusion that ‘most jobs end early’ (Farber 1999: 2453) applicable to the German labour market as well. However, comparison of the two entry cohorts does not reveal any destabilisation over time. On the contrary: *over the course of the observation period the stability of new jobs increases rather than declines.*¹⁰ Consequently, the second hypothesis must also be rejected.

Figure 3: Duration of median survival in days by year of job entry



Source: IAB Employment Subsample (own calculations)

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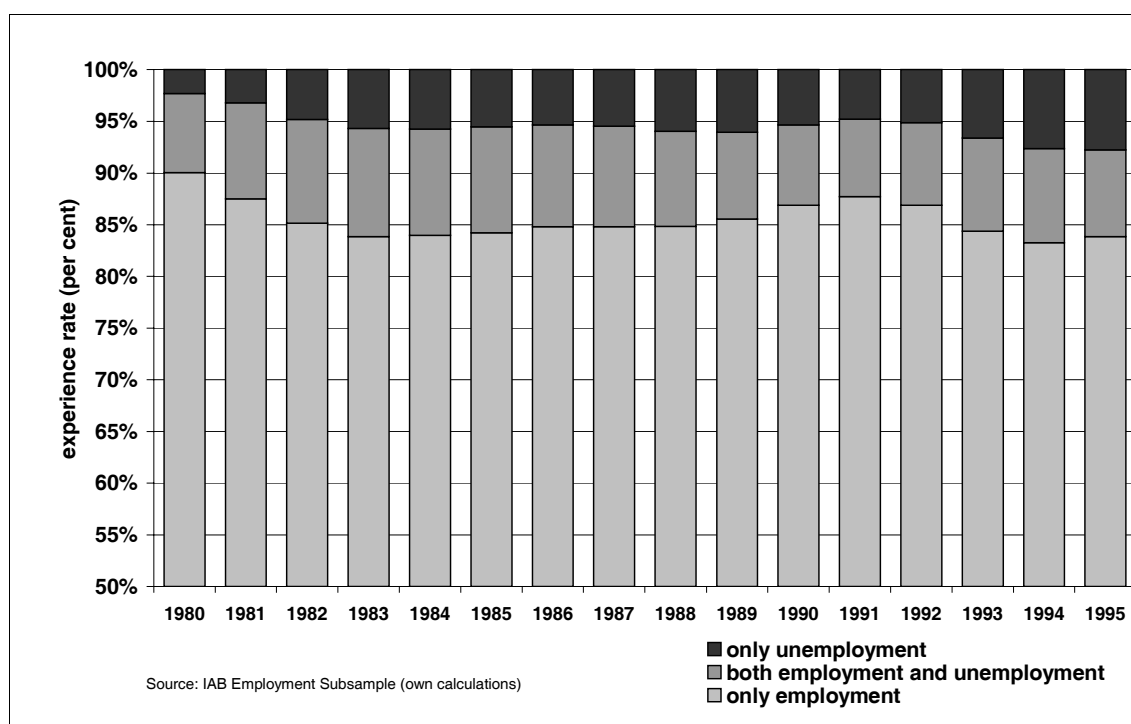
Fig. 3 clarifies when exactly this change in job stability occurred: It was mainly the entry cohorts 1984 to 1988 who experienced a secular upward shift in median job duration of roughly 9 per cent. There is no sign of subsequent decline in job stability in following years, as far as our data set allows us to observe it.

¹⁰ Another possible way of examining job stability appears to be the calculation of the average actual job tenure (cf. Hall 1982; Ureta 1992). It transpires that in the period in question here average actual job tenures in Germany in fact increased, too (ILO 1996; OECD 1997). But the calculation of average or median job tenure is no optimal way for investigations into job stability because uncompleted employment spells are analysed. If new hires increase because of employment growth average tenure will inevitably decline because there will be more newcomers who could not possibly accumulate any considerable tenure. Identifications of such findings with “job stability” can be very misleading indeed. By contrast, analysis of completed employment spells through the calculation of survivor rates is more suitable for investigations into the problem (see Erlinghagen and Mühge 2002). For this reason the statements on job stability by Gregg and Wadsworth (1995) based on median job tenure should be noted with caution, among similar approaches – which, of course, still deserve merit if only cross-sectional survey data on actual tenure are available.

1.4 Experience of unemployment: increasingly the norm?

In order finally to ascertain whether experiences of unemployment are becoming more frequent, we compared the number of persons experiencing at least one day's unemployment in a calendar year with the number of persons active in the labour market (unemployed plus those in insurable employment). The 'unemployment experience rate' thus obtained indicates the share of labour market participants who experienced unemployment in any one year during the observation period.

Figure 4: Annual unemployment and employment experience rates, West Germany 1980-1995



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Figure 4 shows the shares of labour market participants in each year who (a) experienced only employment (not a single day of receiving unemployment compensation; at least one day's insurable employment), (b) experienced only unemployment (not a single day's insurable employment, at least one day of unemployment compensation) and (c) were in insurable employment some time during the year in question but also received unemployment compensation during some other time (at least one day in each case).

In 1980, more than 90 per cent of labour market participants experienced only employment, while the unemployment experience rate for the same year was just under 10 per cent (the two upper sections of the bars in Figure 4 taken together). Although this value rises to a peak of around 16 per cent in 1994, any attempt to interpret these figures must take account of fluctuations in the economic situation. It turns out that the unemployment experience rate was not significantly higher during the employment downturn during the first half of the 1990s than in the less pronounced downturn of the early 1980s.

Thus the experience of unemployment has not become much more frequent and as a result the third hypothesis must also be rejected.

Figure 3 reveals something else as well. There is obviously an expanding category of unemployed individuals who do not make the transition out of unemployment back into employment or who, for whatever reasons, do not attempt to do so. In 1980, only 2.5 per cent of labour market participants experienced only unemployment; by 1995, the percentage had increased to around 7.5 per cent. This increase went hand in hand with an increasingly unequal distribution of the total volume of unemployment (Karr 1997; Kurtz 2000). Examination of which groups are particularly badly affected by this 'hardened' form of unemployment falls outside the scope of this paper. We will merely note that, for example, a considerable share of workers have been effecting the transition from employment to retirement by taking unemployment benefits as a pathway (cf. Knuth and Kalina 2002).

2 Labour market dynamics in the knowledge-based economy

The findings presented up to this point show that a high-velocity labour market has by no means become established in Germany (see also for example the results by Kurz *et al* 2002). However, there might be specific segments within the labour market for which assumptions of destabilisation do hold true but have been offset by contrary developments in other segments. Notably service-sector jobs which are generally believed to be less stable have undoubtedly gained a higher share in the labour market and thus a higher impact on the overall dynamics of the labour market but this effect might have been cancelled out by a considerable stabilisation of jobs in manufacturing. Such contrasting developments in the 'old' and 'new' labour markets would force us into a differentiated assessment of the general findings presented in Section 1.

2.1 How do we identify services?

When 'tertiarisation' is investigated from an industry perspective, the German service sector, thus composed of enterprises statistically labelled as 'services', appears to be underdeveloped in comparison with other countries like the USA or the UK. Consequently, many of the problems of the German labour market were attributed to this alleged 'service gap' (Klös 1997). In the course of the critical debate that ensued, however, the focus shifted from categorising firms by industry towards the occupations and/or actual activities of individual employees. The justification for this different perspective is that in Germany service activities have been less extensively outsourced by manufacturing firms (cf. Lay and Rainfurth 2002). Consequently, the industry-based approach underestimates the extent of tertiarisation (cf., for example, Haisken-DeNew *et al* 1998; Wagner 1999; Bosch 2001).

If an activity-based is superior to an industry-based approach in capturing the true extent of tertiarisation, it should also be more appropriate for comparing job stabilities

in services with those in manufacturing.¹¹ The IAB employment subsample contains data on the occupational activity of employees based on the Federal Labour Office's three-digit occupational code. These codes refer to the *job or activity actually being performed* rather than the occupation or trade for which individuals might have originally been trained. In order to be able to group activities into (a) agriculture and mining (b) manufacturing and (c) services, the 275 occupations/groups of occupations available in the IABES data set were allocated to one of the three categories. The allocation is based essentially on the frequency distribution of the characteristics and/or principal tasks involved in the various activities, as listed by Parmentier *et al.* (1993) for all occupations and groups of occupations. Group (a) (agriculture and mining), being very small, is excluded from the following presentations.

2.2 The rise of service activities in the German employment system

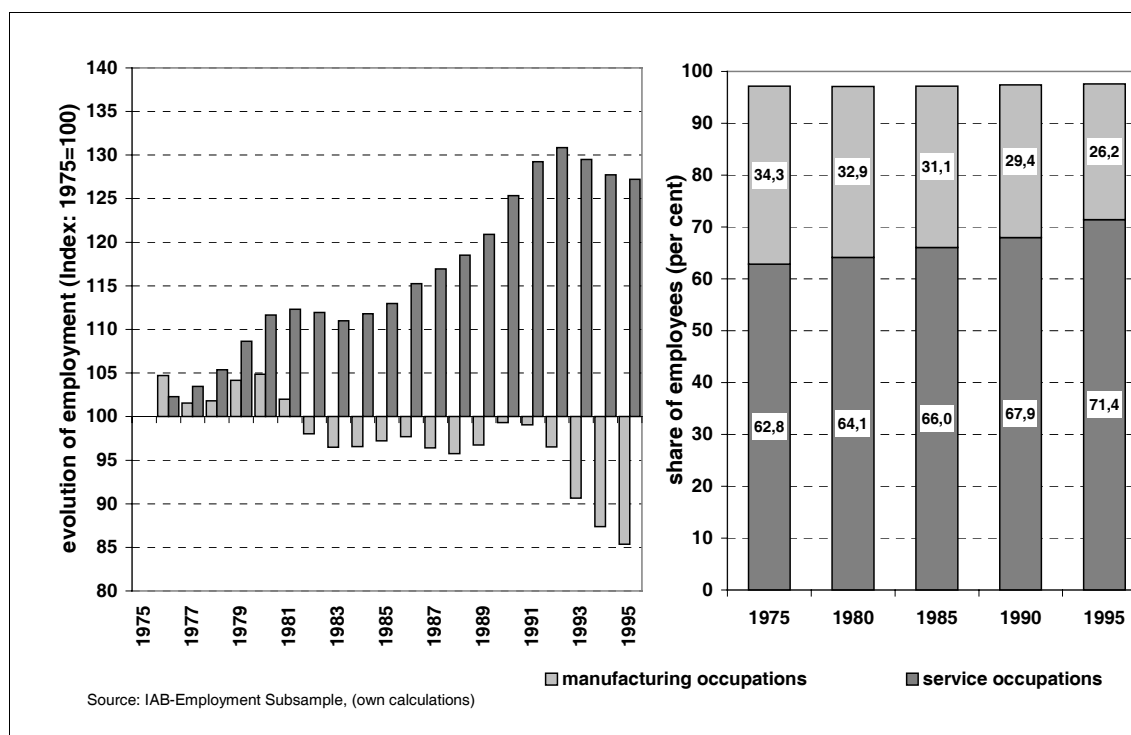
The data from the IAB employment subsample on occupational activity confirm findings on the share of service-sector employees in Germany based on other data sources (cf., for example, Haisken-DeNew *et al.* 1998). As Figure 5 shows, the number of employees in service activities has been rising throughout most of the observation period, particularly since the beginning of the 1980ies. Whereas the number of employees in manufacturing was still rising slightly during the second half of the 1970ies, there were job losses in this sector in every year since, even during the upturn of the late 1980ies. In 1975, when jobs in service sector enterprises equalled those in the manufacturing sector for the first time according to the sectoral approach, the contrasting activity approach yields already a share of service occupations of about 63 per cent. By 1995, this share had risen to around 71 per cent. The share of manufacturing workers had fallen accordingly from 34 per cent in 1975 to 26 per cent by the end of the investigation period.¹²

For obvious reasons, it can be very misleading to treat a category of activities which has so clearly dominated the employment system for quite a long time as a lump called 'services' – as is so often done when discussing the alleged impact of tertiarisation on job stability. In what follows, service activities are divided into five subgroups. In addition to 'production services', on the one hand, and 'household and personal services', on the other, which are unambiguously characterised by their principal customers (enterprises vs. consumers), three further groups of service activities are identified, each of which provides social intermediation of various kinds: 'infrastructure and transport services', 'economic transaction services' and 'administrative, organisational and communication services' (Table 1 in the appendix).

¹¹ An industry-based analysis of job stability will be found in Knuth *et al.* (2001). The results do not contradict the ones presented here.

¹² The two percentages do not sum to 100 because of the exclusion of those employed in agricultural and mining occupations.

Figure 5: Evolution of employment (Index 1975=100) and of employment structure by type of activity, West Germany 1975-1995



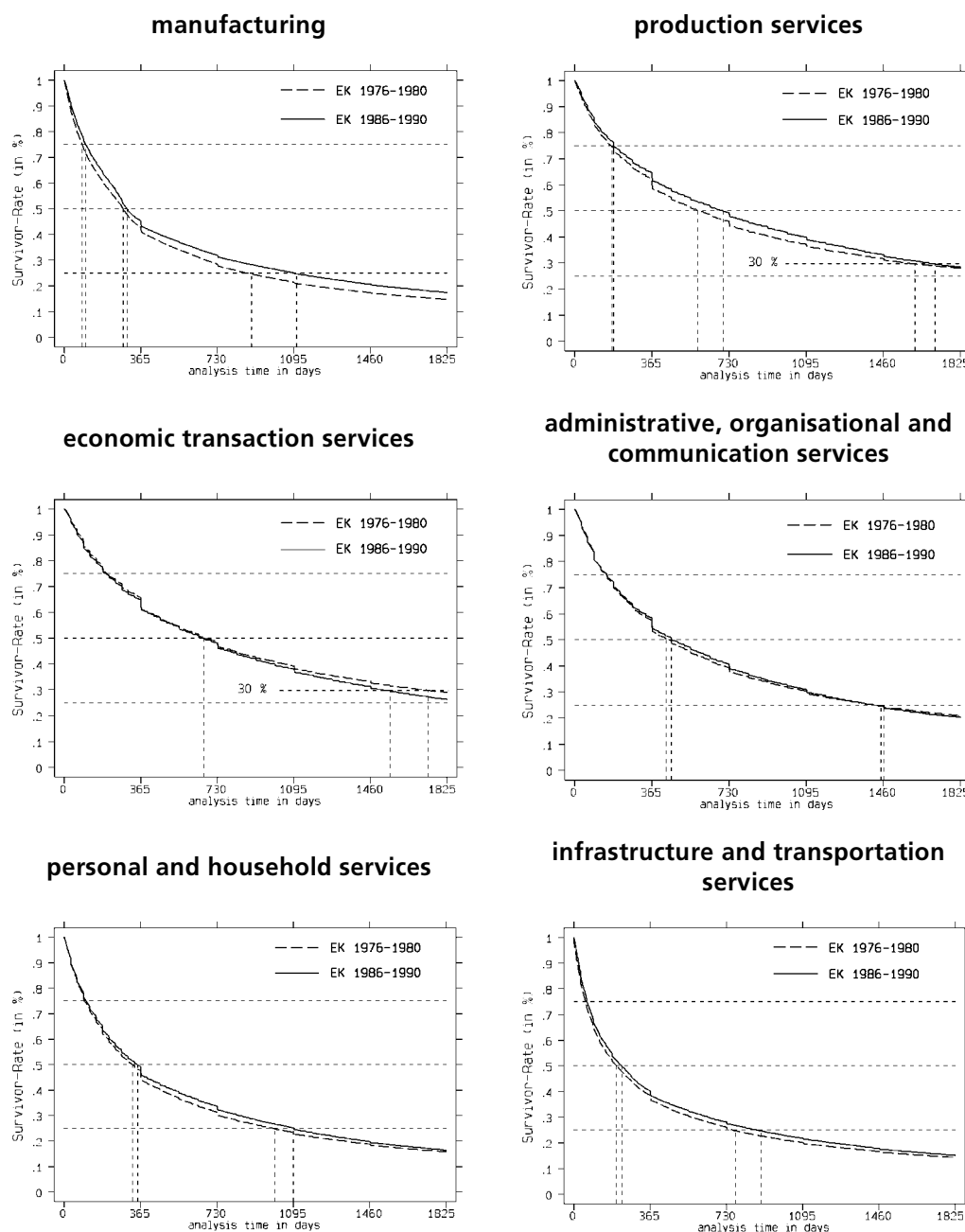
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2.3 The evolution of job stability in service activities

Drawing on the IABES data, Figure 6 shows the survivor rates for newly entered jobs in the various service and manufacturing activities for the 1976–1980 and 1986–1990 entry cohorts. It is evident from the vertical position of the graphs that there are considerable differences in job stability between these categories of activity. The most stable jobs are those in economic transaction and in production services, followed by those in administrative, organisational and communication services. Jobs in household and personal services are less stable, and their survivor rates are roughly comparable with the values for manufacturing activities. The most unstable jobs are those in infrastructure and transport services. In this sector, 50 per cent of new employment relationships come to an end after about eight months, whereas it takes around two years for half of new jobs in production services, for example, to finish.

Comparison of the two entry cohorts' survivor rates in the individual areas shows that – with the exception of economic transaction services – new jobs in all the other areas have not destabilised over time, at least within the period of five years after commencement that we are dealing with here. As for the exception of economic transaction services, it should be noted that there is no difference in the median for the two entry cohorts, but more jobs end after a 'run' of about two years in the later entry cohort. Even with this relative destabilisation over time, jobs in economic transaction services are still more stable, even in the later entry cohort, than those in three out of four other categories of service activity.

Figure 6: Survivor rates in newly entered jobs for the 1976–1980 and 1986–1990 entry cohorts (ECs), West Germany (by occupational groups)



Source: IAB Employment Subsample (own calculations)

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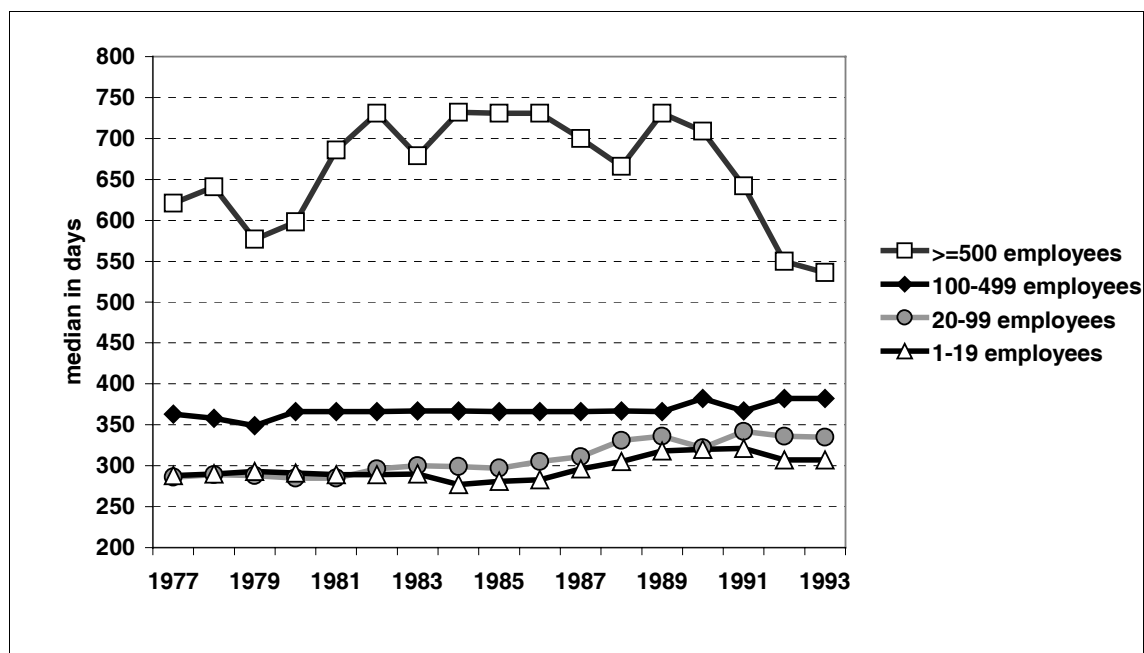
Comparison of manufacturing and service activities shows, firstly, that employment levels and job stability as measured by survivor rates are evolving independently of each other. While the number of employees engaged in manufacturing occupations declined significantly, the stability of jobs newly entered into increased at the same time. The downsizing of manufacturing firms was effected, as far as possible, through ‘early retirement’ (cf. Knuth and Kalina 2002), replacements of older by younger workers were handled with restraint, low demand resulted in less poaching, and consequently the fewer new hires were more likely to stay, despite restructuring and decline. On the other

hand, not only is the number of employees engaged in service activities growing massively but *at the same time* jobs in most segments of this growth sector are stabilising.¹³ As a result, the employment system as a whole has become more stable, not merely despite but actually because of its increasing tertiarisation. Service-sector employment is changing, not only quantitatively but also qualitatively.

2.4 Job stability under the impact of establishment downsizing

Associated with tertiarisation and the decline of industrial mass production is a trend towards smaller units of work. In the IABES, this trend is well reflected in the distribution of employees over establishment sizes.¹⁴ It is well known that jobs are less stable in smaller establishments (as is also shown in figure 7). So how can overall job stability increase when smaller establishments offering less job stability are capturing a higher share of total employment?

Figure 7: Duration of median survival in days by year of job entry and establishment size



Source: IAB Employment Subsample (own calculations)

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Figure 7 helps to decipher this riddle. Job stability has markedly increased in smaller and in very small establishments, mainly in the second half of the 1980ies, whereas it has substantially decreased in the largest establishments, mainly in the early 1990ies (and since possibly even more).¹⁵ Stabilisation in the small units which were increasing

¹³ Higher job stability in services as compared to manufacturing was also confirmed by multivariate analysis, controlling for other variables like establishment size or characteristics of the work force.

¹⁴ The IABES contains a variable for the number of employees in the employing organisational unit, not for the numbers of employees in the firm as an economic or legal unit.

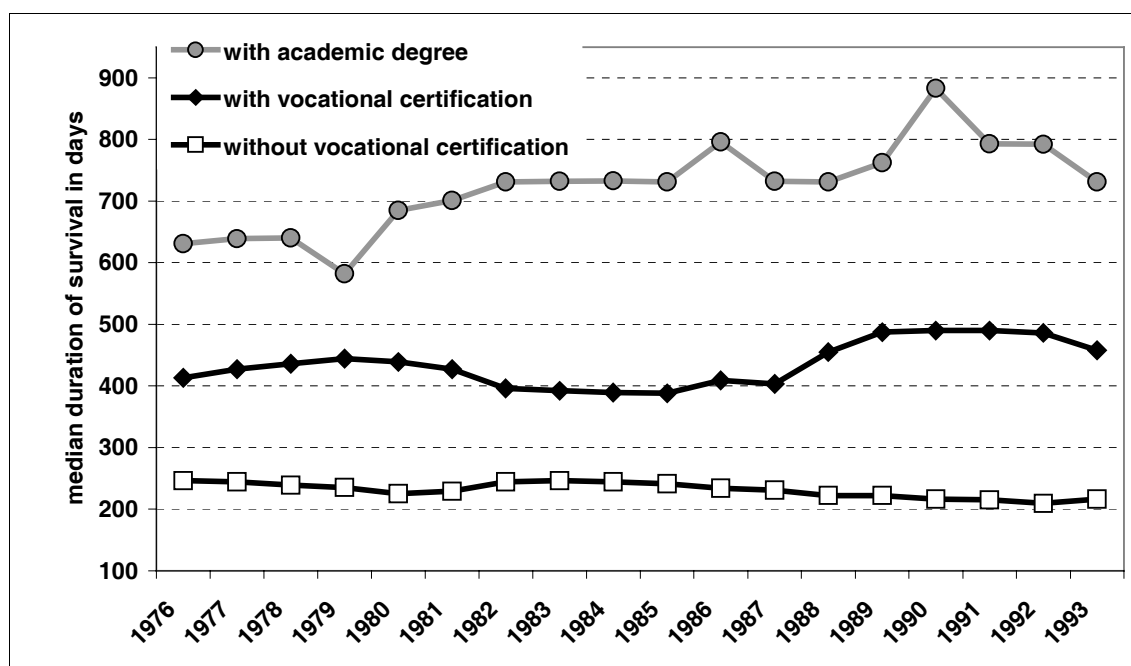
¹⁵ Multivariate analyses not to be presented here confirm a decreasing effect of establishment size over time, other factors being controlled for.

their share has more than compensated for the destabilisation in the largest units which became less prominent as employers. The observation that public perception is still dominated by what happens in large enterprises gives some clue as to why the feeling of instability in society should be growing in a time when statistical indicators tell us the opposite.

2.5 Job stability by occupational level

The data set used for these analyses does not easily lend itself to contribute to debates about the effects of allegedly increasing knowledge intensity in the economic activities of developed societies on job stability. One distinction it does allow, however, is a distinction into three occupational or, respectively, professional levels which are measured as requirements of the job performed (which is not in all cases identical with the individual background of the jobholder).

Figure 8: Duration of median survival in days by year of job entry and level of vocational or professional training required for the job



Source: IAB Employment Subsample (own calculations)

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Again applying the method of survivor analysis and representing the resulting functions as a time series of their medians, we arrive at a very clear picture which is presented in figure 8: The job stability of employees with academic degrees has markedly increased (although with a reversed tendency in the early 1990ies), jobs of worker with vocational certification have moderately stabilised over time, and only those working in jobs that do not require a formally recognised vocational qualification (completed apprenticeship or equivalent) have almost continuously decreased in stability. Multivariate analysis has shown an increasing skills divide against job stability. Since the share of the unqualified

jobs which got less stable has been considerably decreasing the overall result of the employment system becoming more stable again becomes comprehensible.

3 Conclusions and discussion

The descriptive analyses conducted on the basis of the IAB employment subsample provide no evidence of any increase in general turbulence in the West German labour market between 1976 and 1995. *None* of the three hypotheses formulated at the outset has been confirmed: *general labour market mobility is not increasing, the stability of new employment relationships is not declining, and the experience of unemployment cannot be said to be becoming increasingly 'normalised'*. These findings are in line with others on Germany (Winkelmann and Zimmermann 1998; Kurz et al 2002), on the UK (Doogan 2001), on Japan (Chuma 1998) and on a variety of countries (Auer and Cazes 2000).

It should be borne in mind that this stabilisation of employment relationships took place during a period in which dismissal protection for employees on open-ended contracts remained largely unchanged to all intents and purposes, while the use of fixed-term contracts and the operations of temping agencies were made considerably easier from 1985 onwards, and the influence of trade unions and works councils was waning because of falling union density and the increasing share of employment in small firms. Against this backdrop, any explanation of the findings in terms of a more restrictive regulation of employment relationships is out of question.

Our findings might be challenged on the grounds that the data set excludes important categories of so-called 'non-standard' employment relationships and that the development of the new turbulent labour market has actually occurred there. In discussing this argument, it should first of all be recalled that essential 'non-standard' employment categories are indeed represented in our analysis even though some of them cannot be identified as such:

- (1) Fixed-term contracts are insurable on the same grounds as any other job, and if a job ends because the term has expired this will be recorded in our data set like any other separation.
- (2) Jobs with temporary work agencies (which in Germany are obliged to act as employers for the workers whom they then assign to their customers) are recorded in the data set just like any other job (even though temping agencies do not have an industry code of their own and thus cannot be identified as such). If an agency worker is later hired by the client firm this will be recorded as a change of employer and therefore as an exit from one and entry into another employment relationship.
- (3) Part-time jobs are insurable and thus included in both the data set and our analysis if monthly earnings exceed a frequently elevated threshold which was recently set at 400 € but was lower during the period investigated. There is also a variable in the data set distinguishing part-time and full-time though not containing information on the exact hours worked. Analyses not presented here have revealed that, in striking contrast to common wisdom, female part-time jobs (not however the much fewer

part-time jobs of men) are actually a little more stable than full-time jobs in a five-year survivor analysis.¹⁶

Discussing, on the other hand, the categories of jobs which are missing in our analysis, the following remarks are called for:

- (1) Lifetime civil servants (*Beamte*) are not known as suffering from job instability or contributing very much to labour turnover.
- (2) Self-employment and especially the new emerging forms of one-person subcontractors certainly are a precarious though still not very numerous form. Adequate measures of stability and means to apply them empirically still need to be developed.
- (3) The stability of *marginal* part-time jobs (below the threshold of full insurability) has been analysed by Jungbauer-Gans and Hönisch using data from the German Socio-Economic Panel (waves 1984 to 1995) and the same methodology of survivor rates that was employed in our analysis. It was found that the median survival period of female¹⁷ marginal part-time jobs was 8.7 months as compared to about 12 months for female *insurable* jobs in our analysis. It is not surprising that marginal part-time jobs should be less stable but it is all the more striking that the difference should not be greater.

So if there is any truth in the almost universally shared assumption that, in a globalised economy, demands on firms for flexibility in its many facets (cf. Atkinson 1990; Allen and Henry 1997: 182f.) have grown, some explanation is wanted how West German enterprises have met these demands without resorting to a 'hire and fire' policy. There is considerable evidence that this was achieved by developing *internal* labour deployment strategies designed to produce the required flexibility in both its quantitative (flexible and variable working times – cf. Lehndorff 2001) and in its qualitative dimension. Between external and internal flexibility there is an obvious trade-off (cf. Walwei 1997). The more advanced and broad-based training required to implement strategies of internal flexibility (multi-skilling for multi-tasking) would not be worthwhile for employers or employees if employment relationships were less long-lived. In a decentralised production regime increasingly reliant on knowledge, flat hierarchies and workers' autonomy, the importance of reliable and enduring cooperation between management and workforce is undoubtedly growing. At the downside of this development are the increasing complexity and intensity of work, growing stress and 'burn-out', in all a use of human potential by firms which tends to be not sustainable over the life-course.

Far from contesting the idea that employment relationships are changing, we recommend to devote more attention to the positive as well as negative effects that evolve

¹⁶ On the other hand, part-time jobs have not participated in the general tendency towards higher stability, but even with a slight decline in a stability they are still more stable than full-time – cf. Erlinghagen and Knuth 2002: 38ff.

¹⁷ We disregard male marginal employment here because it much less frequent and concerns mostly students and pensioners which would necessitate a more in-depth discussion.

from their 'inside' rather than to continue cultivating the wide-spread preoccupation with their 'outside' of contract, security, stability and mobility. The entire debate on the changing nature of the employment relationship would greatly profit from more rigour in differentiating the various aspects of change and in designing adequate measures for as many as possible of them.

Technical appendix

The IAB Employment Subsample (IABES)

Employers in Germany are legally obliged to register their employees with the various social security agencies (pension, health and unemployment insurance). These agencies include the Federal Labour Office in Nuremberg, which is responsible for unemployment insurance. Relevant data on each employee taken from the employer declarations is held there electronically in individual 'insurance accounts'. The IAB Employment Subsample (IABES) is based on a one per cent sample of these accounts. These data contain exact daily information on the employment careers of some 560,000 individuals over the period between 1975 and 1995. It should be noted that the IABES is not a survey but derived from 'process-produced data' emerging from administrative procedures. This origin implies advantages in terms of coverage and reliability but also drawbacks in terms of content relevant in a social science perspective.

In the course of producing the sample from the insurance accounts these are supplemented by data on periods of unemployment during which a claimant received unemployment compensation from the Federal Labour Office. Periods of unemployment without entitlement to benefits are not recorded. The 'benefit recipient rate', that is the share of those entering unemployment who receive benefits, declined from an average of 76.8 per cent in the 1980s to an average of 69.4 per cent in the 1990s (cf. IAB 2000: 62f.). Moreover, the IABES does not record all types of compensation. The relevant IABES variable has three categories: 'unemployment benefit', 'unemployment assistance' (paid to workers who have exhausted their entitlement to unemployment benefit) and 'training allowance'. In addition to this, the data set is also supplemented by information on certain characteristics of the establishments (primarily size and sector) that employed individuals in the subsample during the period of observation. Overall this corresponds to about 7.8 million employment or benefit payment notifications, with each individual record containing 35 variables (cf. Bender *et al* 1996; Bender *et al* 2000).

The definition of the beginning and ending of employment spells (job 'entries' and 'exits')

The beginning of a new employment spell ('entry') is defined as the start of a new insurable job. The ending of an employment spell ('exit') is defined as the ending of an existing insurable job, with periods during which the employment relationship is merely suspended (because of extended periods of illness or maternity/paternity leave, for example) being considered to be part of an ongoing employment spell. Transitions from

full-time to part-time employment and vice versa within the same establishment are regarded as a continuation of the existing job.

Table 1: Five groups of service activities

Activity group	Nature of activity	Spheres of activity
<i>Production services</i>	Control, supervision and support of production processes	Research and development Physical protection and maintenance Production control
<i>Household and personal services</i>	Control, supervision and support of private household production	Health and care services Education and training Catering and tourism Media, culture, leisure, sport Personal finance
<i>Infrastructure and transport services</i>	Management of material flows between firms and/or private households	Supply and disposal Logistics and transport Transmission of information
<i>Economic transaction services</i>	Management of financial flows between firms and/or private households	Trade/commerce Banking and insurance Real estate business
<i>Administrative, organisational and communication services</i>	Management of information flows between firms and/or private households	Administering and checking Data processing Security and justice Advertising

Source: own representation

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