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Flexibility, performance and perceptions of job security: a comparison of East and West German employees in standard employment relationships

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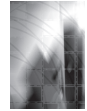
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Flexibility, performance and perceptions of job security: a comparison of East and West German employees in standard employment relationships

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Abstract

This article examines the determinants of perceived job security in German standard employment relationships (SER). Although SERs still dominate and shape the labour market, they have undergone several modifications in the recent past. Using survey data from 2006, the article examines how work organizations and particularly multiple workplace demands influence the perceived job security of employees in SERs. The article also asks whether – 20 years after reunification – structural and cultural differences still exist between East and West Germany. The results show that employees in East German SERs are more willing to accept flexibility and performance requirements. The article suggests that a new psychological contract has emerged, which promises long-term employment only if employees eventually meet the new workplace demands. Yet the overall lower job security of East Germans, fuelled by lower trust in their employers' information policies, indicates the fragile nature of this arrangement.

Keywords

East Germany, flexibility, job security, performance requirements, standard employment relationships, West Germany

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Introduction

In Germany, subjective job security has declined in the recent past (Lengfeld and Hirschle, 2009) and consistently ranks below average in cross-country comparisons (Anderson and Pontusson, 2007; Erlinghagen, 2008; Green, 2009). The share of non-standard forms of employment increased from 19 per cent in 1996 to 28 per cent in 2009, with part-time work being the dominant form (Schmeißer et al., 2012). Since part-time work is not necessarily associated with higher insecurity compared to full-time work (see Green, 2009), the erosion of perceived job security can only partly be attributed to contractual flexibility. It might therefore be instructive to shift the focus of analysis to the determinants of job security in standard employment relationships (SERs), which are typically characterized by full-time (or substantial part-time) employment, job stability and a minimum of institutional regulation (Bosch, 2004; Statistisches Bundesamt, 2012).

Recent research on the determinants of subjective job security generally provides ambiguous evidence. At the macro-level, perceived job security appears to correlate positively with unemployment insurance generosity and negatively with the unemployment rate (Anderson and Pontusson, 2007; Erlinghagen, 2008; Green, 2009). At the micro level, several studies found a positive association of job security with education and job tenure and a negative though slightly u-shaped association with age (Clark and Postel-Vinay, 2009; Erlinghagen, 2008). The meso-level of the firm has received little attention in previous research. Considering the impact of firms on job stability, a more thorough consideration of the meso-level might help to bring more clarity into the debate.

Work organizations can implement a variety of employment policies (Atkinson, 1984; Grimshaw et al., 2001). Many studies provide evidence of the impact of external flexibility measures, particularly of temporary employment, on labour market risks and perceptions thereof (see e.g. Giesecke, 2009; Ortiz, 2010). Yet several studies also reveal that employment stability and security have not generally been eroding in Europe (Erlinghagen and Knuth, 2004; see also Fevre, 2007). SERs can still be considered predominant (Statistisches Bundesamt, 2012), even during the recent crisis, notably because employers use internal flexibility measures more extensively than instruments of external flexibility (Hohendanner and Bellmann, 2006; Lallement, 2011; Reisenbichler and Morgan, 2012). This also implies that job tenure still ranks highly in Germany relative to other European countries (Rhein, 2010).

Against this background, the purpose of this article is to complement previous research on subjective job security in several ways. First, the article focuses on job security perceptions in SERs.¹ Although male, skilled and middle-aged employees generally tend to be over-represented in SERs (see e.g. Kahn, 2007), a fact which in part also applies to Germany, SERs still cover a high proportion of the workforce. Second, the article examines the impact of flexibility and performance requirements in the workplace on perceptions of job security. Representative German data from 2006 are used that allow for the study of organizational and workplace characteristics as reported by employees. Third, the article takes into account prevailing structural and cultural differences between East and West Germany. After reunification, West German institutional structures were largely transferred to the East. Yet the East German labour market turned out to be an opportunity for policy-makers and employers to test new forms of

employment (Lutz et al., 2007). The article therefore compares the determinants of job security perceptions between East and West German SERs.

Theoretical considerations

During the decades-long period of economic prosperity characterized by labour shortages and strong union power after World War II, many large corporations in the West German public and private sector developed internal labour markets (Lutz et al., 2007). High legal protection against dismissals based on seniority and social rights complemented the employment model. Beginning in the 1980s, the West German economy experienced slow growth, which was accompanied by a modernization process of the production model. Firms introduced a 'German variant of lean production' (Lehndorff et al., 2009: 119) by intensively implementing internal flexibility measures. In consequence, employment relationships have remained remarkably stable in the core segments of the West German labour market (Erlinghagen and Knuth, 2004).

The East German transformation process that followed reunification evolved much more comprehensively and significantly faster than in other transitional economies due to the immediate introduction of free markets and the comprehensive transfer of West German institutions. With regard to the labour market, this strategy led to massive job cuts. Even today, unemployment is considerably higher than in the West, while wages have remained at a significantly lower level. By contrast, job tenure has risen in East Germany. Whereas newly created jobs still show lower survival rates (Ludewig and Weyh, 2011), job stability in the core segments has converged with that in West Germany (Grotheer, 2008). And although a high share of both East and West German employers are now using fixed-term contracts as a means of screening newly hired employees for a maximum of two years (Hohendanner, 2010), tenure still protects employees from job loss. It is therefore expected that job tenure has a positive impact on perceived job security in both East and West German SERs.

According to human capital theory, firm-specific skills can be regarded as an additional indicator of job stability and seniority. For employers, comprehensive firm-specific skill investments require a job duration that is long enough for investments to pay off. For employees, it is also risky to invest in firm-specific skills unless employers offer a long-term employment perspective (Hashimoto, 1981). As a consequence, firm-specific skills are more likely to be embedded in a promise of long-term employment compared to jobs that require only basic or general qualifications. Even though human capital in Germany has generally been characterized as highly transferable between employers due to the key role of the dual training system and the role of formal occupational certificates in the process of labour market allocation (Bosch, 2010; Lutz et al., 2007), it is expected that firm-specific skill investments have a positive impact on perceived job security in East and West German SERs.

The extent to which employees can move cross-functionally between tasks and workplaces due to polyvalent skills is usually regarded as a quality of skilled work in the German labour market. Particularly in the industrial sector, measures of functional flexibility have frequently been implemented to increase labour productivity and innovation potential over the past decades (Lehndorff et al., 2009). In addition, temporal flexibility

measures, particularly working time accounts, have been widely implemented by employers to avoid layoffs (Reisenbichler and Morgan, 2012; Wotschack and Hildebrandt, 2008). During the recent financial crisis, German firms mainly used flexible working time measures to adjust personnel capacities (Lallement, 2011). Moreover, despite strong opposition from trade unions and works councils, employers have introduced management by objectives more extensively, as reflected in the Collective Remuneration Agreement (ERA) for the metal and electronics industries in 2003.² The use of unpaid overtime has also been on the rise in the German labour market (Anger, 2006).

In consequence, both internal flexibility and work effort have gained in importance. Although the prospect of long-term employment has remained fundamental to German SERs, it has become more dependent on whether employees eventually meet employers' new demands at the workplace. On the one hand, the German case demonstrates that temporal and functional flexibility measures are likely to reduce employees' actual lay-off risk in the core segments of the labour market. Moreover, employees whose work tasks are characterized by a high degree of functional flexibility are generally more difficult to replace. Accordingly, new workplace demands should be perceived as a gain in job security by employees. On the other hand, several studies have revealed that downsizing and internal firm reorganization correlate negatively with subjective job security (e.g. Østhus, 2007; Sparks et al., 2001). Moreover, new workplace demands have clearly increased work pressure and work-related stress in Germany (DGB, 2011; Green, 2006). According to these findings, new workplace demands may be perceived as a threat to job security by employees.

In East Germany, perceptions of job insecurity generally increased throughout the 1990s and have only slightly approached the West German level ever since (Huebler and Huebler, 2006). Considering the structural differences between the two regions, one could argue that employees in East German SERs are likely to experience any de-standardization of their insider position as more threatening than employees in West German SERs because of the tighter and more polarized East German labour market. However, trade union bargaining power has been much lower in East Germany since the early transformation process (Artus, 2001). Employers have taken advantage of the favourable environment and tested new management strategies more extensively than in the West (Lutz et al., 2007), while high performance has been vital to the economic survival of small and medium-sized East German firms. Employees in East German SERs may therefore accept new workplace demands as requirements that safeguard their job.

Considering cultural differences between formerly state-socialist and established market economies, studies suggest that market elements are still less accepted in the transition economies (Andreß and Heien, 2001; Lippl, 2008). Accordingly, employees of East German origin may be less likely to accept flexible employment arrangements than West German employees. However, psychological studies of social change have shown that the experience of high labour market uncertainty together with high work-related learning opportunities is likely to foster active coping strategies (Obschonka et al., 2012). As a result, new workplace demands may positively influence job security perceptions of East German employees compared to West Germans due to different socialization processes in East and West Germany after reunification.

Altogether, it is expected that how workplace demands affect perceived job security differs depending on where the SER is located and where employees have been socialized – in East or in West Germany.

Data, variables and methods

The study used the representative 2006 Employee Survey from the Federal Institute for Vocational Education and Training (BIBB) and the Federal Institute for Occupational Safety and Health (BAuA), which included 20,000 employees. Following the German Federal Statistical Office (Statistisches Bundesamt, 2012), an SER was only considered such if it (1) was permanent; (2) amounted to at least 21 working hours per week; (3) was based on a direct contract with the employer; and (4) paid above the minimum income level (see Schank et al., 2008).³ German employees in SERs aged 15–65 years were analysed and an employment relationship was defined as non-standard if it did not meet all four criteria.

The dependent variable was an ordinal indicator of subjective job security. Respondents were asked, 'What is the risk that you will be dismissed in the near future?' and were offered four possible answers: (1) 'very high', (2) 'high', (3) 'rather low' and (4) 'no risk at all'. To increase the number of observations in each category, the first two categories were merged.

The first block of independent variables included several indicators of the employment relationship. Job tenure in years and further skill investments were used as indicators of seniority. To measure firm-specific skill investments, a dummy variable was included for whether or not the current job required both comprehensive on-the-job training and further formal training. An additive index of functional flexibility was constructed from the following six items: respondents were asked whether their job often required them to perform: (1) diverse tasks; (2) several tasks at the same time; (3) novel tasks; to undertake (4) unforeseen problem solving; to accept (5) decisional responsibility; and (6) personal responsibility for knowledge acquisition. Cronbach's alpha was 0.69 for the West German and 0.67 for the East German sample, which seems acceptable given that secondary data were utilized. Two indicators of employers' performance demands were also included: a dummy variable for whether management by objectives applied to the job or not; and (un)compensated overtime hours during the previous week, thereby accounting for paid overtime as a control. Unfortunately, the data did not provide further information about temporal flexibility. Finally, three indicators of social support were used to account for social influences in the workplace. First, perceived information transparency was considered, which appears to be a strong indicator of positive reciprocity in the workplace (Greenberg, 1993); even for survivors of downsizing processes, it positively correlates with trust in management (Kernan and Hanges, 2002). Second, a supportive workplace environment was found to mitigate the negative consequences of insecurity, such as reduced work effort and turnover intention (Sverke and Hellgren, 2002). Therefore an indicator of workplace cohesion was included, measured as the perceived general support by co-workers and supervisors. Third, a dummy variable was used for whether working time could be arranged according to private needs or not, because employers

might be more responsive to the needs of employees with high collective bargaining power (Heywood and Jirjahn, 2009).

The second block of variables included relevant firm characteristics as reported by respondents.⁴ These were: (1) the economic situation of the firm by distinguishing public-sector work organizations (whose financing follows a different logic) and private-sector firms that were performing well from poorly performing private firms; (2) firm size, since internal labour markets and strong collective bargaining power are more likely to exist in medium-sized or large firms (Frerichs and Pohl, 2004); (3) recent downsizing to indicate employers' willingness to lay off employees; (4) dummy variables for the largest German industrial sectors; (5) regional unemployment rates measured at the level of the federate state; (6) a regional dummy variable for East Germany.

The third block of variables accounted for socio-demographic characteristics: (1) age and age squared to control for labour market opportunities that vary with age; dummy variables for (2) occupational position, (3) higher education and (4) gender; and (5) the logarithm of individual gross income. To analyse prevailing cultural differences between East and West Germany, (6) a dummy variable is included for whether the respondent's highest educational qualification had been received in West or East Germany. More than 80 per cent of the younger employees in the sample aged 20 years or less in 1990 and more than 95 per cent of the elder cohorts received their secondary school qualification and their first vocational qualification in the same federate state.

The final estimation sample consisted of 8675 valid cases of which 1668 were in East German SERs and 1985 were of East German social origin. Table 1 provides descriptions and variable means. The summary statistics indicate that the middle-aged groups and skilled occupations are more strongly represented in SERs than in the total employed workforce. In West (but not East) German SERs, the proportion of male employees and of secondary-sector workers is also higher.

The empirical analysis proceeded in two steps. First, descriptive evidence was provided of the job security expectations of employees in East and West German SERs by their place of social origin. Second, ordered logistic regression models of job security perceptions were estimated.⁵ To account for intra-class correlation of job security perceptions within regional labour markets, cluster robust standard errors were estimated by using federate states as the clustering variable.⁶

Results

Perceptions of job security in East and West German SERs: descriptive results

Figure 1 shows that employees in West German SERs generally felt more secure about their job than those in East German SERs. Considering the structural differences between East and West, this finding is plausible and confirms previous studies. In addition, no matter where the employing firm was located, employees of West German origin tended to feel more secure than employees of East German origin. This may be due partly to differences in workplace and worker characteristics and partly also to

Table 1. Sample statistics.

Variable	Description	Mean		
		Full sample (N=8675)	SER in East Germany (N=1668)	East German origin (N=1985)
<i>Dependent Variable</i>				
Perceived job security	Perceived risk of job loss, 1=(very) high, 2=low, 3=no risk	2.26	2.15	2.15
<i>Work Characteristics</i>				
Tenure	Years with current employer	13.18	13.66	12.39
Required firm-specific human capital investment	Job typically requires on-the-job training and further formal training courses (1=yes)	0.62	0.62	0.62
Functional flexibility	Additive index, ranging from 0=low to 6=high degree of functional flexibility at the workplace	3.28	3.16	3.13
Management by objectives	Respondent frequently has to meet set targets (1=yes)	0.32	0.33	0.35
Uncompensated overtime	Number of overtime hours last week that are not compensated in terms of money or time	1.36	1.44	1.26
Compensated overtime	Number of overtime hours last week that are compensated in terms of money or time	3.26	2.92	3.21
Information transparency	Feels informed about changes at the workplace (1=yes)	0.14	0.15	0.15
Workplace cohesion	Feels part of a community at the workplace (1=yes)	0.81	0.81	0.81
Individual working time flexibility	Working time can be arranged according to private needs (1=yes)	0.61	0.56	0.55
<i>Firm Characteristics</i>				
Economic situation	Economic situation of the firm (1=(very)good)	0.61	0.51	0.55
Public sector	Respondent is working in the public sector (1=yes)	0.25	0.34	0.31
Layoffs	Co-workers had been laid off during past two years (1=yes)	0.47	0.46	0.45
Firm size	Large: 250 and more employees	0.37	0.28	0.29
Industry	Manufacturing	0.33	0.22	0.25

(Continued)

Table 1. (Continued)

Variable	Description	Mean		
		Full sample (N=8675)	SER in East Germany (N=1668)	East German origin (N=1985)
SER in East Germany <i>Worker Characteristics</i>	Construction	0.06	0.08	0.10
	Health	0.11	0.13	0.12
	Finance	0.06	0.04	0.04
	Education	0.04	0.09	0.07
	Industry related services	0.08	0.06	0.07
	Other sectors	0.25	0.28	0.27
	Location of employer firm (1=yes)	0.19	1	0.73
	Low skilled blue collar	0.06	0.05	0.06
	Skilled blue collar	0.15	0.16	0.19
	Foreman/Master craftsman	0.06	0.06	0.08
Occupational status	Low skilled service	0.03	0.06	0.05
	Skilled service	0.48	0.48	0.46
	Skilled service with managerial functions	0.20	0.18	0.16
	University degree (1=yes)	0.25	0.31	0.28
	Logarithm of monthly gross income	7.98	7.78	7.80
	In years	41.44	43.00	41.90
	0=male, 1=female	0.38	0.49	0.46
	First educational degree received in East Germany (1=yes)	0.23	0.87	1
Higher education				
Income				
Age				
Sex				
East German origin				

Source: BIBB/BAuA 2006, authors' calculations

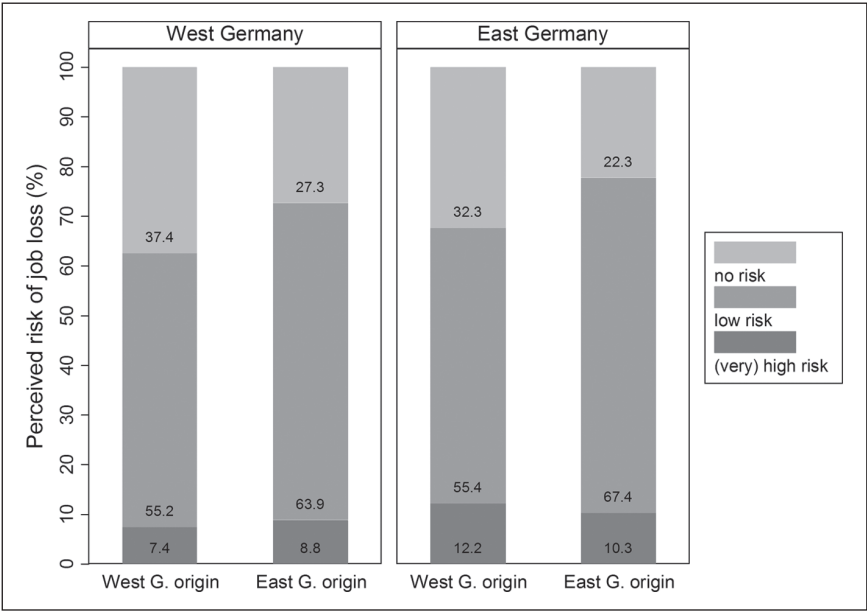


Figure 1. Perceived job security in East and West German SERs, by social origin (socialization in West or East Germany).

Source: BIBB/BAuA 2006, weighted data, authors' calculation (N=9029).

prevailing cultural differences (see also Table 1). The share of East and West German employees who felt highly insecure was similarly low in both parts of the country, confirming that the majority of employees in SERs still expected job security. The key difference occurred in the proportion of employees who felt relatively secure and those who felt completely secure. The gap in perceived job security between employees of East and West German origin – even within the institutionally protected insider segment of West German SERs – indicates that structural explanations fall short of fully explaining subjective security. To examine these results in a more controlled setting, we now turn to the multivariate analysis.

The impact of the employment relationship on perceptions of job security: multivariate results

Table 2 shows the results of the multivariate analysis. Models (1) to (3) include the three variable blocks stepwise and (4) and (5) are interaction models, which indicate structural (location of SER) and cultural (social origin) differences in the employment relationship between West and East Germany, respectively.⁷

To begin with, most of the indicators of the employment relationship do matter in explaining feelings of job security. Regarding the two indicators of seniority, job tenure correlated positively with job security in East and West Germany alike and thus appeared

Table 2. Ordered logistic regression of perceived job security in German SERs (N=8675).

	(1)	(2)	(3)	(4)	(5)
<i>Work Characteristics</i>					
Tenure	1.02***	1.02***	1.02***	1.02***	1.02***
Firm-specific human capital	1.08	1.04	1.02	1.06	1.07
Functional flexibility	1.04***	1.03***	1.01	1.00	1.00
Management by objectives	0.78***	0.83***	0.85***	0.82***	0.85***
Uncompensated overtime	1.00	1.01	1.00	1.00	1.00
Compensated overtime	1.02***	1.02***	1.02***	1.02***	1.02***
Information transparency	2.05***	1.88***	1.87***	2.00***	2.01***
Workplace cohesion	1.51***	1.39***	1.32***	1.33***	1.34***
Individual working time flexibility	1.61***	1.51***	1.51***	1.55***	1.51***
<i>Firm Characteristics</i>					
(Very) good econ. situation		3.33***	3.32***	3.33***	3.34***
Public sector		4.46***	4.52***	4.55***	4.58***
Layoffs		0.48***	0.48***	0.48***	0.48***
Firm size: 250+		0.94	0.96	0.96	0.95
Construction ^a		0.66***	0.66***	0.66***	0.66***
Health ^a		1.02	0.96	0.95	0.96
Finance ^a		0.88	0.85	0.84	0.84
Education ^a		0.85*	0.86*	0.84*	0.86*
Industry related services ^a		1.04	1.04	1.04	1.05
Other sectors ^a		0.95	0.94	0.94	0.95
SER in East Germany		0.69***	0.92	0.85	0.98
<i>Worker Characteristics</i>					
Low skilled blue collar ^b			0.88	0.87	0.87
Foreman/ Master craftsman ^b			1.24**	1.24**	1.24**
Low skilled service ^b			0.86	0.85	0.85

(Continued)

Table 2. (Continued)

(1)	(2)	(3)	(4)	(5)
Skilled service ^b		0.95	(0.06)	0.95 (0.05)
Managerial functions ^b		1.41***	(0.14)	1.40*** (0.13)
Higher education		0.85***	(0.03)	0.85*** (0.04)
Income		1.23***	(0.10)	1.26*** (0.10)
Age		0.79***	(0.02)	0.79*** (0.02)
Age ²		1.00***	(0.00)	1.00*** (0.00)
Female		1.12*	(0.07)	1.12** (0.06)
Socialization in East Germany		0.71***	(0.06)	0.76 (0.13)
Unemployment Rate	0.98***	0.99**	(0.01)	0.98*** (0.01)
Interaction: SER in East Germany				
x Tenure			1.00	(0.01)
x Firm-specific human capital			0.83*	(0.08)
x Functional flexibility			1.08***	(0.03)
x Management by objectives			1.17**	(0.09)
x Unpaid overtime			1.03***	(0.01)
x Paid overtime			1.00	(0.01)
x Information transparency			0.74***	(0.08)
x Workplace cohesion			0.98	(0.21)
x Working time flexibility			0.87**	(0.06)
Interaction: Socialization in East Germany				
x Tenure				0.99 (0.01)
x Firm-specific human capital				0.83** (0.07)
x Functional flexibility				1.07*** (0.03)
x Management by objectives				1.01 (0.09)
x Unpaid overtime				1.02*** (0.01)
x Paid overtime				1.01 (0.01)

(Continued)

Table 2. (Continued)

	(1)	(2)	(3)	(4)	(5)
x Information transparency					0.75 ^{***} (0.05)
x Workplace cohesion					0.95 (0.13)
x Working time flexibility				0.10	0.99 (0.12)
Mcfadden's adj. R ²	0.03	0.08	0.10		0.10
AIC	14,915	14,076	13,842	13,815	13,819

Notes: Odds Ratios, cluster robust standard errors in parentheses, ^{***} $p < 0.01$, ^{**} $p < 0.05$, ^{*} $p < 0.1$, reference categories: ^aManufacturing, ^bSkilled blue collar.

to have preserved its capacity to generate expectations of a long-term relationship with the firm.⁸ By contrast, skill requirements showed a positive but insignificant effect on job security. As documented in models (4) and (5), the relationship was even weaker for East German employees in SERs. There are two possible explanations for this unexpected finding. First, considering the key role of general human capital in the German employment system, the skills acquired through internal training might be highly transferable to other firms as well. Even though the indicator has been defined rather rigorously, further differentiation between firm-specific and general internal training would be desirable. Second, firms have increasingly established repayment agreements to bind employees to the firm as long as comprehensive training investments pay off, which has generally rendered decisions on further training more transactional than before. The fact that comprehensive skill requirements even reduce perceived job security in East German SERs might be explained by generally higher perceptions of labour market uncertainty: in East Germany, employees face an unfavourable labour market situation, which makes it difficult to find a comparable job when being laid off, even for employees in SERs.

The indicators of flexibility and performance requirements in the workplace presented a mixed picture. The positive effect of functional flexibility became insignificant when worker characteristics were taken into account. Employees in SERs did not generally experience functional flexibility as increasing job security, though it was not perceived as a threat to job security either. As models (4) and (5) indicate, its positive effect was mainly experienced by East German employees. This finding possibly reflects the more segmented labour market structure in East Germany. Accordingly, accepting functional flexibility might be understood as a means of acquiring or maintaining a secure insider position to a greater degree by East German than by West German employees.

Management by objectives instead showed a robust negative impact on job security. However, as model (4) documents, the effect was significantly less strong in East German SERs. Employees in East Germany indeed interpreted performance requirements differently to those in West Germany but only as less of a threat to achieved status rights and not as being an opportunity to gain job security. As model (4) shows, this effect was of a structural nature, whereas social origin did not have any effect. In addition, employees in the East – unlike the West – were also more likely to perceive their job as being secure by working uncompensated overtime – model (4). Again, this effect appeared to be driven by East German respondents, as model (5) shows. Thus, although all of the three indicators of flexibility and performance demands suggested structural East/West differences, indications of cultural differences in employees' normative expectations were also found.

Finally, all indicators of social support were positively associated with perceived job security, indicating the relevance of the normative level of the employment relationship for explaining feelings of job security. Information transparency, workplace cohesion and employers' willingness to consider individual working time preferences significantly increased perceived job security. However, the effects of information transparency and temporal compatibility were significantly lower in East German SERs. With regard to information transparency, the East/West difference might reflect generally lower trust in employers. The weaker effect of employers' willingness to meet individual working time preferences on job security may be explained by more fluctuating workload demands

and the lower collective bargaining power of trade unions and works councils. Agreements on working time flexibility were thus likely to be less stable in East German SERs.

As documented in model (3), the dummy variable for East German socialization showed a significantly negative impact on job security, indicating a cultural East/West difference: employees in SERs who grew up in the former East Germany were less likely than those of West German origin to experience their job as being secure. This effect turned out to be even stronger than the negative structural effect of being employed in an East German SER. The latter was significant only in model (2), while the former remained significant even when accounting for structural East/West differences in model (4). Both interaction models yielded very similar results. Hence, given the homogeneous sample of employees in SERs and the various intrinsic and extrinsic aspects of the employment relationship controlled for, evidence was found for cultural East/West differences in both the level of job security and the impact of relevant characteristics of the employment relationship on job security.

Regarding the controls introduced in models (2) and (3), most of the results are in line with expectations and with previous research on job stability and self-perceived job security. Job security strongly depends on the current economic condition of the firm and past experience with layoffs. Also, due to seasonal fluctuation in construction and the often project-based work in education outside the public sector, it seems plausible that employees in these sectors feel significantly less secure than those in manufacturing. Employees in large firms did not feel more secure, which reflects the ongoing erosion of internal labour markets (Giesecke and Heisig, 2010). Further, master craftsmen and white-collar workers with managerial functions expected higher security than skilled blue-collar workers. A positive effect was also found for high earners and females, whereas age had the expected u-shaped effect, meaning that younger and older workers in SERs felt more secure than did middle-aged employees.

In contrast to previous studies, employees who held a university degree expected lower job security than vocationally trained and unqualified workers when occupational position was controlled for.⁹ This unexpected finding might partly be explained by higher job mobility rates for higher than lower educated employees (Boockmann and Steffes, 2010), lower job stability in the service sector than the industrial sector and a decreasing trend in firms' internal and upward mobility (Giesecke and Heisig, 2010), all of which might have been exacerbated in the short run due to high unemployment in 2005. At the same time, the realization that the formerly legitimate expectation of job security and upward mobility for a graduate in an SER has become more uncertain than it used to be in the German employment model might also reflect the higher insecurity of this group.

Conclusions

The German employment model has undergone fundamental changes since the early 1990s. Along with those changes, feelings of job security have declined significantly. Whereas previous studies concentrated on individual and institutional differences to understand the development and causes of job insecurity, this article has focused on the meso-level of the firm and has analysed the role of flexibility measures and performance demands. The results reveal that the large majority of employees in SERs experienced

high or rather high job security. Seniority still appeared to provide job security for both West and East German employees. Yet employers' demands on individual performance were perceived as a threat to job security in West German SERs. By contrast, employees in East German SERs were more likely to accept flexibility and performance demands than those in West Germany. On the one hand, this finding reflects the tighter labour market situation, which renders job loss more risky and may make employees more willing to accept high workplace demands. On the other hand, the overall lower job security of East Germans fuelled by lower trust in employers' information policies indicates the fragile nature of this arrangement. In-depth comparisons of psychological contracts between East and West German SERs could prove insightful regarding the role of implicit normative promises between employers and employees in determining and changing job security expectations (Rousseau, 1995).

Two ideal types of the psychological contract related to SERs have been distinguished in previous studies (Rousseau, 1996). Within the framework of the traditional *relational contract*, employees expect long-term employment in exchange for loyalty to the employer. Being a member of the work organization constitutes the normative basis of this contract type. However, along with the growing re-commodification of labour (Breen, 1997), contract violations and contract breaches have become more likely. As a result, Rousseau defines a *balanced contract* as a relationship that employees also perceive as being secure. However, within this normative framework, the implicit promise of job security depends on how well employees are able to meet the employer's changing performance requirements. Thus, from the perspective of the firm, it is an essential and distinctive feature of the balanced contract to be continually adjustable to a changing business environment without breaking the promise of stable employment. However, a detailed analysis of the relevant conditions and contents of the emerging balanced contract has yet to be done.

The results strongly suggest that employees in West and East German SERs hold different types of contracts. The higher acceptance of flexibility and performance measures in East Germany indicates that a new balanced contract has emerged. From the employees' perspective, this new contract generates feelings of *relative* security. On the one hand, it is accepted that the promise of job security is contingent on the fulfilment of performance goals. On the other hand, with this type of implicit contract, job security becomes subject to renegotiation time and again. Fragile security agreements and resonant post-reunification experiences of tremendous uncertainty might both have given rise to an East German culture of latent anxiety and mistrust. The study offers evidence for this in the specific context of job security. Tracing the different transformation paths of employee expectations in West and East Germany over the past two decades empirically would require longitudinal data that allow for the study of how different cohorts of employees have experienced changing flexibility demands.

Future research would also benefit from examining more thoroughly the specific conditions under which employees perceive employers' demands as threatening, rather than strengthening, their job security. In particular, the role of working time flexibility should be analysed in more detail, which has not been possible in the present study. Further evidence is also needed on the relationship between skill investments as part of functional flexibilization and employees' security expectations. Moreover, studies on skill-biased

technological change point to the impact of task-specific technological innovation on the skill level and skill requirements of occupational positions, which in turn affects job stability (Autor et al., 2003; Bauer and Bender, 2004). Therefore, it may be fruitful to pay greater attention to the role of skill-biased technological change relative to mechanisms of social closure on the basis of occupational certificates in order to explain job security and perceptions thereof in the German working population.

Recent work has pointed to the potential of internal flexibility instruments for employment stability in times of economic uncertainty. The dominant view of flexicurity is closely connected with external flexibility, which leads to stronger employment adjustments over the business cycle, such as in Denmark (see also Heyes, 2011; Muffels and Luijkx, 2008). By contrast, the combination of moderate job protection with internal flexibility in some coordinated market economies, such as Germany, has been found to be crucial to the safeguarding of long-term employment relationships while demanding that employees be ready to adapt within the organization; this internal flexicurity pathway has tended to be overlooked in recent debates (Lallement, 2011; Reisenbichler and Morgan, 2012; Rubery et al., 2008). Examining the role of short-run changes in flexibility demands and job security perceptions over the course of the current crisis may also help to better explain country patterns of job security perceptions.

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Notes

1. In the following, whenever 'job security' is mentioned it refers to subjective perceptions. Objective job risks will be identified otherwise.
2. Available at: <http://www.bw.igm.de/tarife/tarifvertrag.html?id=696> (consulted 20 September 2011).
3. Two thirds of median gross earnings for full-time workers are applied as a threshold for low pay (Niedriglohnschwelle). For 2005, Schank et al. (2008) calculate a monthly threshold of €1779 for West Germany and of €1323 for East Germany. With this definition instead of an hourly threshold, there is a risk of excluding part-timers who earn hourly wages above the threshold but work few hours (Kalina and Weinkopf, 2008). However, by setting the threshold higher it is more likely that the share of SERs is understated than overstated and therefore a valid sample of SERs is obtained.
4. Although linked employer/employee data sets provide more valid information about the firm, it was assumed that respondents' information on their employer was more relevant than objective indicators in predicting self-perceived job security.
5. Alternatively, partial proportional odds models (Williams, 2006) were also estimated, as the Brant test of the parallel regression assumption indicated a violation for some variables of the West German models. Since the results remained essentially stable, the more parsimonious ordered logit model was adhered to.

6. As a check of robustness, a multilevel framework was additionally applied by estimating random intercept models (Rabe-Hesketh and Skrondal, 2008). The results were very similar to those of ordinary logistic regression and the initially significant but small residual intra-class correlation tended to zero as soon as unemployment was controlled for. The single-level ordinal model with cluster corrected standard errors was therefore considered sufficient here.
7. The following variables are not included in the final models as they neither directly affect job security nor have any impact on the other effects in the models: increase of atypical employees, internal restructuring, occupational mobility, employment discontinuity and partner and/or children in the household. Please contact the authors for further information.
8. A non-linear relationship (Erlinghagen, 2008) was also tested for, which was non-significant.
9. The effect is not driven by multi-collinearity.

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