Sven Hauff, Stefan Kirchner*

Changes in workplace situation and work values. Relations and dynamics within different employment regimes**

Workplace situation as well as work values have apparently changed in the last decades. However, up to now we do not know how these changes are related. This article considers both, workplace situation and work values, together and analyses theoretically and empirically how different developments can either lead to match or mismatch between workplace situation and work values. It refers to the employment regime approach to analyse the potential influence of different institutional frameworks. Findings have revealed various change patterns where developments regarding different dimensions of work life follow different logics: If employment becomes less secure, job security becomes more important. With respect to other dimensions (income, career opportunities, interesting job, and independence at work), an adaptation can be observed. The existing employment regime theory helps little in explaining the dynamics between workplace situation and work values.

Key words: employment regimes, mismatch, organisational change,
work value change
(JEL: J50, J81, O15, P50)

* Dr. Sven Hauff, University of Hamburg, Department of Business Administration, Von-Melle-Park 5, 20146 Hamburg, Germany. E-mail: sven.hauff@uni-hamburg.de.

Dr. Stefan Kirchner, University of Hamburg, Faculty of Economics and Social Sciences, Welckerstr. 8, 20354 Hamburg, Germany. E-mail: stefan.kirchner@uni-hamburg.de.

** Article received: August 28, 2013

Revised version accepted after double blind review: March 12, 2014.

Introduction

In recent years, there have been intense debates on changing work and employment conditions, on the one hand, and on the change in work values, on the other. As for workplace situation, particularly the development toward high performance work practices and the related improvements toward more independent work and more interesting jobs have been topics of these debates (see, e.g., Appelbaum et al., 2000; Kalleberg, 2001). At the same time, tendencies of erosion and decline, specifically with regard to job security or income, have been found (Kalleberg, 2001, 2009, 2011; Ashford et al., 2007; Osterman & Shulman, 2011). Another strain of literature discusses the changes in work values. Earlier studies assumed a growing emphasis on intrinsic work values (e.g., interesting job, independent work) (Ester et al., 1994; Harding & Hikspoors, 1995; Yankelovich et al., 1985), but more recent research indicates that the importance of extrinsic values (e.g., income) has also been increasing (Cozma, 2011; Ester et al., 2006).

Since up to now these two discussion strands have not been integrated systematically, we do not know how changes in workplace situation and in work values are related (but see Kalleberg, 2007, 2008; Reynolds & Aletraris, 2010). However, this issue is highly relevant because a match or mismatch between workplace situation and work values is crucial for job quality and job satisfaction of employees (Kalleberg, 2007). It further impacts on organisational commitment, job performance, and employee turnover (e.g., Hoffman & Woehr, 2006; Kristof-Brown et al., 2005; Verquer et al., 2003) and is thus relevant also from an economic and societal perspective.

The main objective of this article is, therefore, to analyse the interrelations between changes in workplace situation and work values. Of special significance is the question of match or mismatch between workplace situation and work values. Within this perspective, work values (resp. desirable job characteristics or job orientations) are understood as a point of reference to assess a workplace situation because they signify what people expect from work (e.g., Dose, 1997; Ros et al., 1999; Bu & Mckeen, 2001). “Work values are beliefs pertaining to desirable end-states (e.g., high pay) or behaviour (e.g., working with people) [...]; they refer to what a person wants out of work in general, rather than to the narrowly defined outcomes of particular jobs” (Ros et al., 1999, p. 54). As values generally serve to assess the social world, work values are important for the evaluation of the workplace, the attitudes to specific workplace situations, and the respective behavioural response (Ros et al., 1999; Gahan & Abeysekera, 2009).

The research question will be addressed from a macro-level perspective. The potential influence of different employment regimes is analysed and discussed (Gallie, 2007, 2009; Korpi, 1978, 2006) because it can be assumed that the institutional framework influences the relations and dynamics between changes in workplace situation and work values. Theoretical assumptions are tested using cross-sectional data of the International Social Survey Program (ISSP) for three time periods (1989, 1997, and 2005), covering five countries (USA, Great Britain, West Germany, Norway, and Hungary).

Findings reveal various change patterns which can be related to different theoretical assumptions. With regard to job security, an opposing dynamic of workplace situation and work values can be observed. Regarding other extrinsic (income, career opportunities) and intrinsic dimensions (interesting job, independence at work) of work life, results point to an adaptation of work values to the experienced workplace situation. In addition, there are also situations in which workplace situation is adapted or readapted to work values of employees. Assumptions made within the employment regime approach cannot be verified.

Relations between workplace situation and work values over time

The question of match or mismatch between workplace situation and individual work values has been addressed especially in the extensive literature on person-organisation (P-O) fit (Cennamo & Gardner, 2008; Edwards, 2008; Kristof, 1996). However, these studies are more micro oriented and do not account for macro-level developments and the dynamics between organisational change and work value change. Up to now, there have been only a few studies dealing with historical developments and changes in match and mismatch between workplace situation and work values. Some research has been carried out on work hour mismatch (for an overview, see Golden, 2006). For example, Reynolds and Aletraris (2010) have recently analysed changes in the mismatches between actual and preferred work hours of paid work in the USA. Using a longitudinal design, they show that the gap between actual and preferred work hours grew in the early 1990s and that the population of employees affected by work hour mismatch was in flux.

More comprehensive insights can be drawn from the works of Kalleberg (2007, 2008) who investigated how the match between people's jobs and their needs, preferences, and abilities has changed in recent years in the USA. The author analysed mismatch developments along seven dimensions: skills and qualifications (over- and underqualification), geographical or spatial location, temporality and time preferences (overworking and underworking), inadequate earnings and conflicts between work and family life. He reports that in recent years, mismatches in most of these dimensions have become more common in the USA, especially with regard to overworking and work-family conflict.

Theoretically, there are a number of different ways how changes in workplace situation and work values in a given time frame can be related (see Reynolds & Aletraris, 2010). Basically, there are three types of change: (1) situational change only, (2) work value change only, and (3) change in both (1) and (2). In every one of these basic types, different hypothetical scenarios are conceivable, leading either to a match or mismatch between workplace situation and work values. Further, looking at different points in time, temporary developments and realignments are possible (see Figure 1).

Figure 1: Main analytical types of change

Legend: —→ : Workplace situation; - - - → : Work values;

Source: Own depiction. See a similar approach by Reynolds and Aletraris (2010).

Situation-driven change I: Organisational ignorance scenario

This scenario accounts for changes in workplace situation, whereas work values remain stable. Thereby an increasing mismatch between workplace situation and work values occurs because organisational practices diverge from work values. For example, it has often been stated that organisations have moved toward more flexible forms of employment (Burchell et al., 2002; Gallie et al., 1998; Kalleberg, 2009; Neumark, 2000), which have significantly eroded job security in several countries (see Olsen et

al., 2010). If work values tied up with job security remain the same, this will lead to a higher mismatch level.

Situation-driven change II: Seeking to match scenario

Changes in workplace situation can also reduce mismatch. Organisations may try to avoid a mismatch with work values because they do not want its negative consequences. The literature on P-O fit has highlighted that match or mismatch between workplace situation and work values is related to important work outcomes such as intent to turnover, job satisfaction, organisational commitment, and task performance (Verquer et al., 2003; Kristof-Brown et al., 2005; Hoffman & Woehr, 2006). Indeed, especially in the 1990s, new organisational practices likely to change the workplace situation for the better were widely introduced in several countries (Fröhlich & Pekruhl, 1996; EPOC Research Team, 1998; Nordhause-Janz & Pekruhl, 2000; Lorenz & Valeyre, 2005; Osterman, 2006). So-called high commitment and high performance work practices or systems were adopted, aiming at increased performance by shifting responsibilities to employees (see Appelbaum et al., 2000, 2002; Boxall & Macky, 2009; Giles et al., 2002; Kalleberg, 2001, 2003, 2011). While employees' discretion in the labour process was expected to increase, work was also expected to become more interesting for employees. This development could have reduced a former mismatch where the respective intrinsic work values were not fulfilled.

Value-driven change I: Modernisation scenario

Value-driven changes describe situations where work values are shifting while the workplace situation remains unchanged. As a result, mismatch occurs if work values diverge from the actual workplace situation. This may occur if employees become more demanding toward their work. Ever since Inglehart (1971) claimed a "silent revolution in Europe", there has been an intensive debate about the change in values and the increasing post-materialistic demands of the younger generations (see also, e.g., Inglehart, 1990). Inglehart's studies are not directly related to work life. However, in the context of this debate, a change in values and attitudes regarding occupation and work has also been stated. Yankelovic (1985), for example, assumes a shift from materialism toward expressive work orientations. Beathge (1991) established his thesis of the "normative subjectification of labor", postulating that a general change in work values takes place so that individual claims and ideas of work become strengthened. Likewise, Ester et al. (Ester et al., 1994) assume that modernisation and individualisation can lead to a growing importance of work values stressing self-determination, self-development, and self-realisation.

Value-driven change II: Adaptation scenario

It is also possible that work values are adapted to the actual workplace situation and thus reduce former mismatch. For example, Johnson et al. (2012) argue that work values change regarding experienced workplace conditions. They assume that individuals are motivated to protect and enhance their self-esteem. This would include an increase in work values related to the experienced workplace conditions and a reduction in of work values if they are not fulfilled (see also Mortimer & Lorence, 1979).

Simultaneous changes I: Amplification scenario

Simultaneous changes in workplace situation and work values can lead to an amplification effect when both change in opposing directions. In particular, this may be the case for extrinsic aspects of work life. Building on the work of Maslow (1954), it can be hypothesised that material and safety needs become strengthened if extrinsic workplace conditions are worsening. Accordingly, intrinsic work values become less important (Johnson et al., 2012).

Simultaneous changes II: Aligned change scenario

In contrast, an aligned change trajectory of workplace situation and work values is also conceivable. Such a trajectory would either imply a response in terms of organisational practices to changing work values in order to prevent mismatch and the accompanying consequences (seeking to match) or an adjustment of work values to changing workplace situations (adaptation).

Temporary change I: Simple temporary mismatch

Finally, when investigating different points in time, downstream developments and re-adjustments are thinkable. A simple temporary mismatch can be observed if one or both aspects (workplace situation and work values) change in one period and return to previous levels in the following. For example, job security largely depends on the business cycle. Thus in weak economic situations job security declines but improves once the business cycle picks up.

Temporary change II:

Temporary mismatch with realignment on a different level

A temporary mismatch can also be resolved through adaptation processes resulting in an equilibrium on a different level, which is either higher or lower than the starting level. For example, it is possible that modernisation and generational change lead to higher intrinsic values (Ester et al., 1994; Yankelovich et al., 1985), causing temporary mismatch. After some time, organisations may become aware of the conflict between workplace situation and work values and adapt their organisational practices. The resulting match would be on a higher level.

The influence of the institutional context

In addition to the possible relations between changes in workplace situation and work values, there is the potential influence of the institutional context on match or mismatch between workplace situation and work values. The literature contains several indications that the institutional context is decisive for job quality in a country (Gallie, 2007, 2009; Holman, 2012; Olsen et al., 2010). Correspondingly, we assume that the relations and dynamics between workplace situation and work values are influenced by the institutional framework. In particular, we are referring to the employment regime approach which emphasises the institutionalised role of organised labour (Gallie, 2007, 2009; Korpi, 1978, 2006). The main assumption of this approach is that the interaction between employers and employees is determined by the distribution of power between both parties. This should also impact on the extent to which employees are able to assert their interests, wishes, and values.

Depending on employment policies, industrial relations, and the relative influence of organised labour, social democratic (e.g., Scandinavian countries), continental (e.g., Germany, France), liberal (e.g., Great Britain), southern European (e.g., Spain, Greece), and transitional regimes (e.g., Hungary) can be distinguished (Gallie, 2007; Holman, 2012; Olsen et al., 2010). In social democratic (resp. inclusive) employment regimes, work and employment rights are strong and extend throughout the entire workforce. In continental (resp. dualistic) regimes, strong rights are also guaranteed but only for the core of skilled and long-term employees at the cost of outsiders. In liberal regimes, employment regulation is minimised as is the capacity of organised labour to influence workplace conditions. Moreover, southern European and transitional regimes are also characterised as having relatively little state intervention and a weak influence of organised labour.

Based on these distinctions, assumptions can be made on how relations and dynamics between workplace situation and work values differ in the various employment regimes (without considering the southern European regimes because they are not captured within the following empirical analysis). In social democratic regimes, employees have extensive rights, and the capacity of organised labour to secure good work and employment conditions is high. Thus changes in workplace situation should either adhere to work values or at least not be so dramatic that mismatch occurs between workplace situation and work values. The same should apply to continental regimes because they also have strong employee representatives. However, the focus on core employees leaves unprotected areas especially among employees in atypical forms of employment (e.g., temporary agency work, part-time and minor employment). In these areas, work and employment conditions may change regardless of work values because of the lacking influence of organised labour. This could affect the overall change patterns within continental regimes. As regards liberal and transitional regimes, it can be assumed that workplace situation changes independently of work values because of the low influence of organised labour. An adaptation of work values to the experienced workplace situation is thus more conceivable.

Empirical analysis

Data, measures, and method

The following analysis is based on data contained in the Work Orientation Modules from the International Social Survey Program (ISSP) from 1989, 1997, and 2005. The ISSP represents an international cooperation project whose aim was to conduct attitude surveys on different topics. The international comparability of attitudes is both a vital benefit of this programme and a weak point at the same time because attitudes are always context dependent. Thus possible differences in values and attitudes could be the result of different meanings and connotations of a respective concept but not due to national differences (Hult, 2005; for problems related to cross-national research on values, see Halman & De Moor, 1994). To minimise potential biases and increase the validity of the questionnaires, careful procedures have been implemented such as independent translation and thorough discussion of the questionnaires (Scholz & Faaß, 2007).

For our analysis we included only countries which took part in all three waves. These are the USA, Great Britain (GB), West Germany (W-GER), Norway (NO), and Hungary (HU).¹ The sample includes all dependent employees (full-time, part-time, less than part-time, and helping family members) aged between 18 and 75 years. These amount to a total N of 10,460 cases (1989: 3,842; 1997: 3,710; 2005: 2,908).

All three ISSP data sets contain five comparable items for work values as well as five items for the workplace situation. In particular, work values are measured by the following items: importance of job security, high income, good opportunities for advancement (extrinsic); an interesting job, and a job allowing for independent work (intrinsic) (Scholz & Faaß, 2007). These items closely resemble those used by Kraut and Ronen (Kraut & Ronen, 1975) and Hofstede (Hofstede, 1980) (see also Hattrup et al., 2007). To estimate the importance of these work values, respondents used a five-point Likert scale anchored from 1 for ‘not important at all’ to 5 for ‘very important.’

The importance of these work values can be related to the workplace situation because employees were asked to evaluate the respective job dimensions in their everyday work. Interviewees were asked to indicate their agreement with statements such as ‘My job is secure.’ Response categories ranged from 1 ‘Strongly disagree’ to 5 ‘Strongly agree.’

To account for the interaction of work values and workplace situation, several mismatch indices were computed as the difference between work values and workplace situation (for similar approaches, see Cennamo & Gardner, 2008; Kristof, 1996; also Hult, 2005). In order to provide a consistent interpretation, we limit our analysis to mismatch due to undersupply – e.g., the high importance of a work value is not met by low workplace situation standards. A match of workplace situation and work values as well as the relatively few oversupply cases (values -1 and below) were coded as zero. The final mismatch indicator thus ranges from “0” to “4” and accounts for the level of undersupply in a given dimension.

To show changes across time, pooled regressions for the workplace situation and work values variables as well as the matching indicators were computed. Considering the ordinal scale of all included variables, a series of Ordinal Logit regression models for each variable and country was conducted. In all analyses, several control variables were included to capture the socioeconomic and demographic effects in the observed time period. The respective variables were: work status (full-time, part-time, other work status), age, gender, and number of years of formal education. The coding of variables was harmonised between waves. Weighting factors were used where this procedure is advised for the ISSP dataset (see Scholz & Faaß, 2007). To analyse the transformation of workplace situation, work values, and mismatch over time, dummy variables for the years 1997 and 2005 were included in the regression analysis. Using 1989 as reference category, this reveals the relative differences over time.

¹ Israel also took part in all three waves. However, we excluded it from the analysis because it is not captured within the current employment regime theory framework.

Trends of workplace situation, work values, and mismatch

In a first step, the development of the workplace situation was investigated. The regression results are depicted in Table 1. The perceived job security decreased between 1989 and 1997, except in Norway. This trend continued until 2005 only in West Germany and Hungary. In Norway, job security decreased in 2005. In contrast, in Great Britain and the USA the situation improved again until 2005, even surpassing the 1989 level in Great Britain. For income significant and continuously negative changes can be found in West Germany and Norway. Career opportunities improved in Great Britain in 2005, and temporarily decreased in West Germany in 1997. Regarding the remaining two variables for workplace situation, a positive trend toward more interesting job can be found in the USA in 2005 that absorbed a negative development in 1997. In contrast, a steady decline can be seen in Great Britain and in Norway as well as a decline in 2005 in Hungary. A continuous improvement toward more independent work can be reported for West Germany, while again the results reveal a steady decline in Norway.

Table 1: Workplace situation by country over time

	1989 vs.	USA	GB	W-GER	NO	HU
Job security	1997	-0.27**	-0.36**	-0.64***		-0.97***
	2005		0.36**	-0.58***	-0.62***	-0.64***
High income	1997			-0.61***	-0.31***	
	2005			-0.76***	-0.30**	
Career opportunities	1997			-0.61***		
	2005		0.49***			
Interesting job	1997	-0.29**	-0.58***		-0.55***	
	2005	0.37***	-0.42**		-0.76***	-0.46***
Independent work	1997			0.35**	-0.33***	
	2005			0.52***	-0.50***	

Note: Levels of significance** $p < 0.01$; *** $p < 0.001$. Depicted numbers are regression coefficients for the ISSP years 1997 and 2005 only if p-value levels at ** and ***. Reference category is the ISSP year 1989 – indicating relative change between years. Dependent variables are all five variables for work values, workplace situation, and mismatch. Control variables are included – respective coefficients are not displayed. Source: ISSP data set; own depiction

In a second step, the transformation of work values was considered (Table 2). Employees' expectations toward high job security temporarily increased in Great Britain in 1997. For the USA and West Germany, a lasting increase until 2005 was found. In Hungary, the importance of job security rose in 2005 while there was no significant change in Norway. Income became continuously less important in West Germany and temporarily more important in Hungary in 1997. The relevance of career opportunities steadily decreased in Norway. At the same time, we see a temporary decline in their importance in West Germany in 1997 as well as a temporary increase in Hungary. Both interesting job and independent work gained more importance in the USA

until 2005. In contrast, Norwegian employees showed a steadily lowered level of expectations toward independent work and interesting job.

In a third step, the interaction of workplace situation and work values was analysed based on the mismatch indexes (Table 3). For job security mismatch, a temporary increase in mismatch was found in 1997 in the USA and Great Britain. The findings

Table 2: Work values by country over time

	1989 vs.	USA	GB	W-GER	NO	HU
Job security	1997	0.36***	0.51***	0.45***		
	2005	0.43***		0.42**		0.77***
High income	1997			-0.65***		0.52***
	2005			-0.51***		
Career opportunities	1997			-0.43***	-0.32***	0.45***
	2005				-0.44***	
Interesting job	1997	0.30**			-0.52***	
	2005	0.52***			-0.63***	
Independent work	1997				-0.26**	
	2005	0.31**			-0.51***	

Note: Levels of significance** p<0.01; *** p<0.001. Depicted numbers are regression coefficients for the ISSP years 1997 and 2005 only if p-value levels at ** and ***. Reference category is the ISSP year 1989 – indicating relative change between years. Dependent variables are all five variables for work values, workplace situation, and mismatch. Control variables are included – respective coefficients are not displayed. Source: ISSP data set; own depiction

Table 3: Mismatch by country over time

	1989 vs.	USA	GB	W-GER	NO	HU
Job security	1997	0.41***	0.57***	0.91***		0.94***
	2005			0.84***	0.48***	0.86***
High income	1997					
	2005			0.39**		
Career opportunities	1997			0.31**	-0.36***	
	2005		-0.56***		-0.51***	
Interesting job	1997	0.48***	0.43**			0.33**
	2005					
Independent work	1997					
	2005	0.41***		-0.53***		

Note: Levels of significance** p<0.01; *** p<0.001. Depicted numbers are regression coefficients for the ISSP years 1997 and 2005 only if p-value levels at ** and ***. Reference category is the ISSP year 1989 – indicating relative change between years. Dependent variables are all five variables for work values, workplace situation, and mismatch. Control variables are included – the respective coefficients are not displayed. Source: ISSP data set; own depiction

also revealed a lasting increased mismatch level in West Germany and Hungary, and for Norway an increased mismatch in job security in 2005. For the mismatch in high income an increase in West Germany in 2005 can be observed. Concerning career mismatch, a temporary increase was found in West Germany. Findings also show a steady decline in Norway and a decreasing mismatch level for Great Britain. The interesting job mismatch temporarily increased in 1997 in the USA, in Great Britain, and in Hungary. As for independent work, the results reveal a decrease in mismatch in 2005 for West Germany. For the USA, the analysis shows an increased mismatch in 2005. Overall, a number of significant differences were found, yet in several countries a considerable number of mismatch dimensions did not change at all.

The observed changes in mismatch can be explained by the analytical types of change introduced above. An overview of our interpretation results is depicted in Table 4. We find situation-driven changes leading either to an increasing or a decreasing mismatch. Thus both hypothetical scenarios can be observed empirically. Job security declined in Norway, whereas the respective values did not change, causing higher mismatch. As for career opportunities in Great Britain and for independent work in Germany, a decrease in mismatch was discernible due to an improved workplace situation while work values did not change.

Table 4: Underlying change patterns of the mismatch development

Mismatch	USA	GB	W-GER	NO	HU
Job security	Amplification effect (+)(ST)	Amplification effect (+)(TH)	Amplification effect (+)	Situation driven (+)	Amplification effect (+)
High income			Partial aligned change ↓ (+)		
Career opportunities		Situation driven (-)	Partial aligned change → (+)(ST)	Value driven (-)	
Interesting job	Amplification effect (+)(TH)	Situation driven (+)(ST)		Aligned change ↓ (n.e.)	Value driven (+)(ST)
Independent work	Value driven (+)		Situation driven (-)	Aligned change ↓ (n.e.)	

Note: Direction of mismatch change in brackets: (+) increase; (-) decrease; (n.e.) no mismatch effect, but significant effects for workplace situation and work values; (ST) simple temporary mismatch; (TH) temporary mismatch with higher level afterwards. Source: ISSP data set; own depiction

As for *work-value-driven* changes both hypothetical scenarios are also reflected in the data. In the case of Norway, a decrease in career mismatch was found which was exclusively due to an adaptation of work values. For the USA it can be observed that increased expectations of independent work led to growing mismatch.

Simultaneous changes can lead to an amplification effect or to an aligned change trajectory. An amplification effect, which is caused by the opposing dynamics of workplace situation and work values, is found especially for job security in most of the countries surveyed (West Germany, Hungary and temporarily in the USA and Great Britain) but also for interesting job in the USA. An aligned change trajectory is found in Norway where we note a decline regarding interesting job and independent work, but the potential effect on mismatch levels was absorbed by an equally lowered level of expectation. In the case of Germany, there is a partially aligned change trajectory regarding income and career mismatch.

Besides these basic types of change, also *temporary developments* can be observed, where a shift in one or both aspects (workplace situation or work values) changes the mismatch level in the first period. In the following period, this shift effect on mismatch level is neutralised. A simple temporary mismatch thereby implies a return to the previous level. This is the case for job security in the USA, career opportunities in Germany as well as interesting job in Hungary. Furthermore, temporary mismatch can be resolved on a higher or lower level. This can be observed for job security mismatch in Great Britain and interesting job mismatch in the USA.

Finally, looking at these findings from the perspective of the employment regime approach, the results are rather disappointing (Table 5). With regard to social democratic and continental regimes, it was assumed that workplace situation would either adhere to work values or at least not change so dramatically as to cause mismatch. Yet the opposite is true. In Norway and Germany, an increased mismatch regarding job security is found, in Germany also regarding income. Indeed, in Norway there is an improved match regarding career opportunities and a lasting match regarding interesting job and independent work. However, these developments have always been a result of adapted work values, that is, workers adapted their aspirations to lower standards. The only positive development is the improved match through an improved situation regarding independent work in Germany.

Table 5: Positive and negative developments

Mismatch	USA	GB	W-GER	NO	HU
Job security		Match on a higher level	Increased mis-match (amplification)	Situation driven increase in mis-match	Increased mis-match (amplification)
High income			Increased mis-match on a lower level		
Career opportunities		Improved match through improved situation		Improved match through adapted values	
Interesting job	Match on a higher level			Match, but on a lower level	
Independent work	Value driven increase in mismatch		Improved match through improved situation	Match, but on a lower level	

ISSP data set; own depiction

On the contrary, in liberal regimes we see more positive developments. Regarding job security in Great Britain and independent work in the USA, a temporary mismatch can be observed which was reduced on a higher level. Further, there is an improved match regarding career opportunities in Great Britain, which is the result of an improved situation. The only increase in mismatch concerns independent work in the USA, but this is value instead of situation driven. All in all, we have to conclude that the assumptions made on the basis of the employment regime approach are not supported.

Discussion and conclusion

Summarising the findings on the dynamics of workplace situation, work values, and mismatch, it can be stated that there is no universal or transnational development trajectory. Indeed, various patterns can be found which can be linked to several, even contradicting theoretical assumptions. One pattern that comes close to showing a general trend is the amplification effect regarding job security. Perceived job security declined in most of the observed countries, especially between 1989 and 1997. In the same period, the respective work values increased. Such a development can be explained through the assumptions made by Maslow (1954): If fundamental work values like job security are not fulfilled, they become strengthened. This result contradicts the assumption of an adaptation of work values to a given workplace context (Johnson et al., 2012; Mortimer & Lorence, 1979). However, there are other findings that support the adaptation hypothesis as stated by Johnson and colleagues (2012) as well as by Mortimer and Lorenz (1979). For example, perceived income and career opportunities declined in Germany, but at the same time the respective work values declined as well. Further, there is an aligned decline in workplace situation and work values regarding interesting job and independent work in Norway, which also supports the adaptation hypothesis. A possible explanation of these seemingly conflicting results is that job security is a more important work value than even income and career opportunities and thus follows a different logic. In other words, high income, good career opportunities, interesting job, or independent work have little value if the respective job is not secure.

Besides, these findings also question some of the assumptions made in work values literature. Based on Inglehard's work (1971, 1990) it is often assumed that work values shift from extrinsic (e.g., income, security) to intrinsic values (e.g., interesting job, independent work) (Ester et al., 1994; Harding & Hikspoors, 1995; Yankelovich et al., 1985). Our results indeed show that the importance of income and advancement opportunities is declining in some countries (Germany, Norway), whereas the importance of an interesting job and to work independently partially increases (USA). However, these tendencies are by no means general trends. There are also counter-movements especially regarding job security. These counter-movements derive from the above described amplification mechanisms. Our results therefore underline that work value change needs to be analysed in conjunction with changes in workplace situation.

Furthermore, our findings also show that workplace situation can be adapted or readapted to work values of employees. For example, for the USA and Great Britain

only a temporary amplification effect regarding job security could be found, where an increasing mismatch in the first period was resolved in the second period through an improvement of workplace situation. This may be an effect of the business cycle, but there are other findings which indicate an actual improvement of workplace situation: In the USA, a prior amplification effect regarding interesting work was resolved through an improvement in workplace situation. Further, in Germany work became more independent, which significantly reduced the related mismatch between workplace situation and work values. Thus employees do not always have to adapt their work values to changed work and employment conditions; workplace situation can also be adapted to work values. This may be either because employers wanted to avoid mismatch and the possible negative consequences as suggested in the literature on person-organisation fit (Cennamo & Gardner, 2008; Edwards, 2008; Kristof, 1996) or because employees could push through their interests. The latter concerns the assumptions made based on the employment regime approach.

The employment regime approach was introduced in order to analyse the potential influence of different institutional frameworks. Within the employment regime framework, it was assumed that employees in social democratic and continental regimes have more possibilities to influence workplace situation. Thus the development of the workplace situation should adhere to work values. On the contrary, in liberal and transitional regimes the influence of organised labour is less strong and changes in organisational practices tend to be the employers' choice. Even if these are plausible assumptions, there is no strong empirical evidence to support them.

In Norway and Germany, which represent social democratic and continental regimes respectively, aligned change trajectories can be observed (interesting job and independent work in Norway; income and career opportunities in Germany). However, the underlying developments generally show a decline. This indicates that work values adapted to a worsening workplace situation rather than vice versa. Moreover, an amplification effect regarding job security can be found in both countries. This also indicates that theoretically expected stronger employment regimes cannot protect employees from increasing flexibilisation and liberalisation of labour markets. Accordingly, our findings provide further evidence for the assumption of a “move to the market” trend and a substantial impact of the liberalisation of institutional contexts (Hall & Thelen, 2009) whereby especially for the “German Model” some convergence tendencies with the liberal model have been assumed (Streeck, 2010). There is only one instance in our findings that strong employee rights and powerful employee representatives can contribute to improved work and employment conditions. This instance is the decreasing mismatch regarding independent work in Germany. Apparently, the increasing mismatch regarding extrinsic aspects like security and income were compensated through more independence and influence at work. From an employment regime perspective it is not very surprising that this can be found in a continental regime like Germany. Gallie (2007) has characterised continental regimes also as dualistic regimes because organised labour within these regimes is normally concerned to guarantee strong rights for core employees at the expense of worse work and employment conditions for the periphery.

As for liberal regimes, we do not find an independent shift of workplace situation leading to an increased mismatch. On the contrary, in the USA and Great Britain situational changes often reduce a prior mismatch. There are some indications that liberal regimes are more likely to enable a match between workplace situation and work values. However, as here the influence of organized labour is rather weak, these situational improvements are largely attributable to management initiatives. Initiatives for workplace reorganisation, especially the introduction of high performance work practices (Appelbaum et al., 2000; Kalleberg, 2001), have been particular discussed in the UK and the USA. In the light of our results it seems as if employees in these regimes benefit from workplace reorganisation and that work and employment conditions better match their work values.

Regarding transitional regimes, in Hungary we found an increased mismatch for job security due to an amplification effect. This generally supports our assumption. However, the mismatch developments of the remaining job characteristics are stable, thus the overall evidence is rather weak.

Altogether, it has to be concluded that the existing employment regime approach helps little in explaining the dynamics of workplace situation and work values. Moreover, this brings into question the distinctions made within the employment regime approach. It is plausible that liberalisation processes put pressure especially on social democratic and continental regimes. These regimes may have lost their ability to match workplace situation to the work values of employees. But up to now, such a dynamic perspective has not been considered within the approach.

Besides the research implications our findings also point to several management implications: Our results show that work values and workplace situation can develop in different directions causing an increased mismatch. This can have major effects on work related outcomes like commitment, job performance, and employee turnover (e.g., Hoffman & Woehr, 2006; Kristof-Brown et al., 2005; Verquer et al., 2003). Therefore management should try to counteract such developments. The results also show that work values of employees are not necessarily enduring manifestations of individual preferences. Accordingly there is a chance of a proactive influence and moderating of employees' expectations and behaviour. Thus, if firms, for example, are not able to fulfil the job security expectations of their employees, they should communicate this and compensate it, e.g., assistance in securing employability. Furthermore, organisational change should be developed and implemented together with the employees considering the expectations of employees and the perspectives of organisations. Thereby, organisations can prevent possible negative effects of a mismatch between work values and work situation. A precondition to such activities is an awareness about employees' expectations and their perceived workplace situation. Thus a continuous monitoring to prevent a potential mismatch between work values and workplace situation is crucial.

The ISSP data allows a comprehensive analysis with representative data from many countries, but there are limitations. The data consists of self-reported measures so that the results may suffer from common method bias. The analysis is further based on cross-sectional data which does not account for changes in workplace situation and work values across the life course. Thus a causal analysis of the possible ad-

adaptation of an individual's expectations to changed work and employment conditions cannot be conducted. However, insights into the underlying changes in the development and resolution of mismatches may also be gained by the cross-sectional design (Reynolds & Aletraris, 2010). Furthermore, the included working conditions represent perceived working conditions of the surveyed employees. There might be a difference between the seemingly objective conditions and the subjective perception of these conditions (e.g., objective vs. subjective job insecurity). However, it is the subjective experience that is decisive for an individual evaluation of job quality and related aspects like job satisfaction or commitment. Finally, it should be mentioned that only a narrow set of work aspects has been surveyed within the ISSP Work Orientation Module. It remains an open question whether other workplace situations and work values are changing as well, including the importance of both qualification opportunities and balancing work and life (Kalleberg, 2007, 2008).

In this article, the relations between changes in workplace situation and work values were analysed. Special emphasis was put on the question why and how match or mismatch between workplace situation and work values may change because this is highly relevant for job quality and job satisfaction as well as the performance of organisations. The analysis provides valuable insights into the relations between changes in workplace situation and work values and contributes to the literature on mismatch between workplace situation and work values. However, many unanswered questions remain. Future research needs to concentrate on longitudinal analyses in order to better understand shifts in the development and resolution of mismatches. By the same token, it is important to better understand which people are more affected by mismatches, how people deal with mismatches, and what the possible consequences are for organisational performance.

References

- Appelbaum, E. (2002). The impact of new forms of work organization on workers. In G. Murray, J. Bélanger, A. Giles, & P. Lapointe (Eds.), *Work and employment relations in the high-performance workplace* (pp. 120-149). London: Continuum.
- Appelbaum, E., Bailey, T., & Berg, P. (2000). *Manufacturing advantage: Why high-performance work systems pay off*. Ithaca, N.Y.: Cornell Univ. Press.
- Ashford, S. J., George, E., & Blatt, R. (2007). Chapter 2: Old assumptions, new work – The opportunities and challenges of research on nonstandard employment. *The Academy of Management Annals*, 1, 65-117.
- Baethge, M. (1991). Arbeit, Vergesellschaftung, Identität: Zur zunehmenden normativen Subjektivierung der Arbeit. *Soziale Welt*, 43, 6-19.
- Boxall, P., & Macky, K. (2009). Research and theory on high-performance work systems: progressing the high-involvement stream. *Human Resource Management Journal*, 19(1), 3-23.
- Bu, N., & McKeen, C. A. (2001). Work goals among male and female business students in Canada and China: the effects of culture and gender. *International Journal of Human Resource Management*, 12(2), 166-183.
- Burchell, B., Ladipo, D., & Wilkinson, F. (2002). *Job insecurity and work intensification*. London: Routledge.
- Cennamo, L., & Gardner, D. (2008). Generational differences in work values, outcomes and person-organisation values fit. *Journal of Managerial Psychology*, 23(8), 891-906.
- Cozma, I. F. (2011). The relation between globalization and personal values across 53 countries and 28 years: PhD diss. Retrieved 22.02.2012, from http://trace.tennessee.edu/utk_graddiss/1175

- Dose, J. J. (1997). Work values: An integrative framework and illustrative application to organizational socialization. *Journal of Occupational & Organizational Psychology*, 70, 219-240.
- Edwards, J. R. (2008). Person-environment fit in organizations: An assessment of theoretical progress. *The Academy of Management Annals*, 2(1), 167-230.
- EPOC Research Team. (1998). *New forms of work organisation. Can Europe realise its potential?* Dublin: European Foundation.
- Ester, P., Braun, M., & Vinken, H. (2006). Eroding Work Values? In P. Ester, M. Braun, & P. P. Mohler (Eds.), *Globalization, value change, and generations* (pp. 89-113). Leiden ; Boston, Mass: Brill.
- Ester, P., Halman, L., & De Moor, R. A. (Eds.). (1994). *The individualizing society: Value change in Europe and North America* (2. ed.). Tilburg: Tilburg University Press.
- Fröhlich, D., & Pekruhl, U. (1996). *Direct participation and organisational change, fashionable but misunderstood? An analysis of recent research in Europe, Japan and the U.S.A.* Dublin/Luxembourg: European Foundation for the Improvement of Living and Working Conditions.
- Gahan, P., & Abeysekera, L. (2009). What shapes an individual's work values? An integrated model of the relationship between work values, national culture and self-construal. *International Journal of Human Resource Management*, 20(1), 126-147.
- Gallie, D. (2007). Production regimes, employment regimes, and the quality of work. In D. Gallie (Ed.), *Employment regimes and the quality of work* (pp. 1-33). Oxford: Oxford University Press.
- Gallie, D. (2009). Institutional regimes and employee influence at work: A European comparison. *Cambridge Journal of Regions, Economy and Society*, 2(3), 379-393.
- Gallie, D., White, M., Cheng, Y., & Tomlinson, M. (1998). *Restructuring The employment relationship*. Oxford: Oxford University Press.
- Giles, A., Murray, G., & Bélanger, J. (2002). Introduction: assessing the prospects for the high performance workplace. In G. Murray, J. Bélanger, A. Giles & P. Lapointe (Eds.), *Work and Employment Relations in the High-Performance Workplace* (pp. 15-71). London: Continuum.
- Golden, L. (2006). Overemployment in the United States: Which workers are willing to reduce their work-hours and income? In J. Y. Boulou, M. Lallemand, J. C. Messenger, & F. Michon (Eds.), *Decent working time : new trends, new issues* (pp. 209-261). Geneva: Intern. Labour Office.
- Hall, P. A., & Thelen, K. (2009). Institutional change in varieties of capitalism. *Socio-Economic Review*, 7(1), 7-34.
- Halman, L., & De Moor, R. A. (1994). Comparative research on values. In P. Ester, L. Halman, & R. A. De Moor (Eds.), *The individualizing society* (2. ed., pp. 21-36). Tilburg: Tilburg University Press.
- Harding, S. D., & Hikspoors, F. J. (1995). New work values: In theory and in practice. *International Social Science Journal*, 47, 441-455.
- Hatrup, K., Mueller, K., & Aguirre, P. (2007). Operationalizing value importance in cross-cultural research: Comparing direct and indirect measures. *Journal of Occupational & Organizational Psychology*, 80(3), 499-513.
- Hoffman, B. J., & Woehr, D. J. (2006). A quantitative review of the relationship between person-organization fit and behavioral outcomes. *Journal of Vocational Behavior*, 68(3), 389-399.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, Calif: Sage Publications.
- Holman, D. (2012). Job types and job quality in Europe. *Human Relations*.
- Hult, C. (2005). Organizational commitment and person-environment fit in six western countries. *Organization Studies*, 26(2), 249-270.
- Inglehart, R. (1971). The silent revolution in Europe: Intergenerational change in post-industrial societies. *American Political Science Review*, 65(4), 991-1017.
- Inglehart, R. (1990). *Culture shift in advanced industrial society*. Princeton, NJ: Princeton Univ. Press.
- Johnson, M. K., Sage, R. A., & Mortimer, J. T. (2012). Work values, early career difficulties, and the U.S. economic recession. *Social Psychology Quarterly*, 75(3), 242-267.
- Kalleberg, A. L. (2001). Organizing flexibility: The flexible firm in a new century. *British Journal of Industrial Relations*, 39(4), 479-504.

- Kalleberg, A. L. (2003). Flexible firms and labor market segmentation. *Work and Occupations*, 30(2), 154-175.
- Kalleberg, A. L. (2007). *The mismatched worker*. New York: Norton.
- Kalleberg, A. L. (2008). The mismatched worker: When people don't fit their jobs. *Academy of Management Perspectives*, 22(1), 24-40.
- Kalleberg, A. L. (2009). Precarious work, insecure workers: Employment relations in transition. *American Sociological Review*, 74(1), 1-22.
- Kalleberg, A. L. (2011). *Good jobs, bad jobs: The rise of polarized and precarious employment systems in the United States, 1970s to 2000s*. New York: Russell Sage Foundation Publications.
- Korpi, W. (1978). Workplace bargaining, the law and unofficial strikes: The case of Sweden. *British Journal of Industrial Relations*, 16(3), 355-368.
- Korpi, W. (2006). Power resources and employer-centered approaches in explanations of welfare states and varieties of capitalism: Protagonists, consenters, and antagonists. *World Politics*, 58(4), 167-206.
- Kraut, A. I., & Ronen, S. (1975). Validity of job facet importance: A multinational, multicriteria study. *Journal of Applied Psychology*, 60(6), 671-677.
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology*, 58(2), 281-342.
- Kristof, A. L. (1996). Person-organization fit: An integrative review of its conceptualizations, measurements, and implications. *Personnel Psychology*, 49(1), 1-49.
- Lorenz, E., & Valeyre, A. (2005). Organisational innovation, human resource management and labour market structure: A comparison of the EU-15. *Journal of Industrial Relations*, 47(4), 424-442.
- Mortimer, J. T., & Lorence, J. (1979). Work experience and occupational value socialization: A longitudinal study. *American Journal of Sociology*, 84(6), 1361-1385.
- Neumark, D. (Ed.). (2000). *Changes in job stability and job security: A collective effort to untangle, reconcile, and interpret the evidence*. New York: Russell Sage Foundation.
- Nordhause-Janz, J., & Pekruhl, U. (2000). Managementmoden oder Zukunftskonzepte? Zur Entwicklung von Arbeitsstrukturen und von Gruppenarbeit in Deutschland. In J. Nordhause-Janz & U. Pekruhl (Eds.), *Arbeiten in neuen Strukturen? Partizipation, Kooperation, Autonomie und Gruppenarbeit in Deutschland* (pp. 13-68). München, Mering: Rainer Hampp Verlag.
- Olsen, K. M., Kalleberg, A. L., & Nesheim, T. (2010). Perceived job quality in the United States, Great Britain, Norway and West Germany, 1989-2005. *European Journal of Industrial Relations*, 16(3), 221-240.
- Osterman, P. (2006). The wage effects of high performance work organization in manufacturing. *Industrial and Labor Relations Review*, 59(2), 187-204.
- Osterman, P., & Shulman, B. (2011). *Good jobs America: Making work better for everyone*. New York: Russell Sage Foundation Publications.
- Reynolds, J., & Aletraris, L. (2010). Mostly mismatched with a chance of settling: Tracking work hour mismatches in the United States. *Work and Occupations*, 37(4), 476-511.
- Ros, M., Schwartz, S. H., & Surkiss, S. (1999). Basic individual values, work values, and the meaning of work. *Applied Psychology: An International Review*, 48(1), 49-71.
- Scholz, E., & Faaß, T. (2007). *ISSP 2005 Germany work orientations III ZUMA report on the German study*. ZUMA-Methodenbericht. Mannheim.
- Streeck, W. (2010). *Re-forming capitalism: Institutional change in the German political economy*. Oxford.
- Verquer, M. L., Beehr, T. A., & Wagner, S. H. (2003). A meta-analysis of relations between person-organization fit and work attitudes. *Journal of Vocational Behavior*, 63(3), 473-489.
- Yankelovich, D., Zetterberg, H., Strümpel, B., & Shanks, M. (1985). *The world at work: An international report on jobs, productivity, and human values*. New York: Octagon Books.

Appendix

A1: Distribution of cases by year and country

	USA	GB	W-GER	NO	HU	Total
Year: 1989	785	632	598	1238	589	3842
Year: 1997	727	463	646	1282	592	3710
Year: 2005	839	413	477	770	409	2908
Total	2351	1508	1721	3290	1590	10460

Note: ISSP data set; own depiction

A2: Description of variables

Variables	Obs	Mean	Std. Dev.	Min	Max
Situation: Job security	9827	3.74	1.05	1	5
Situation: High income	9888	2.60	1.01	1	5
Situation: Career opportunities	9780	2.60	1.03	1	5
Situation: Interesting job	9931	3.85	0.91	1	5
Situation: Independent job	9918	3.93	0.89	1	5
Value: Job security	10356	4.55	0.62	1	5
Value: High income	10296	3.98	0.75	1	5
Value: Career opportunities	10240	3.83	0.89	1	5
Value: Interesting job	10329	4.41	0.64	1	5
Value: Independent job	10306	4.06	0.80	1	5
Mismatch: Job security	9757	0.91	1.05	0	4
Mismatch: High income	9781	1.44	1.12	0	4
Mismatch: Career opportunities	9640	1.30	1.08	0	4
Mismatch: Interesting job	9842	0.64	0.85	0	4
Mismatch: Independent job	9819	0.39	0.72	0	4
Year: 1989	10460	0.37	0.48	0	1
Year: 1997	10460	0.35	0.48	0	1
Year: 2005	10460	0.28	0.45	0	1
Age	10460	39.86	11.76	19	75
Sex: male	10459	0.51	0.50	0	1
Work status: full-time	10460	0.82	0.38	0	1
Work status: part-time	10460	0.15	0.35	0	1
Work status: other	10460	0.03	0.17	0	1
Years of Education	10094	12.29	2.92	1	22

Note: ISSP data set; own depiction

A3: Measures for work value and workplace situation

	Values	Situation
Question	"For each of the following, please tick one box to show how important you personally think it is in a job. How important is ..."	"For each of these statements about your (main) job, please tell me how much you agree or disagree with it as it applies to your job."
Dimension		
Job security	... job security	... My job is secure
High income	... high income	... My income is high
Career opportunities	... good opportunities for advancement	... My opportunities for advancement are high
Interesting job	... an interesting job	... My job is interesting
Independent work	... a job that allows someone to work independently	... I can work independently
Scale	1 Very important; 2 Important; 3 Neither important nor unimportant; 4 Not important, or; 5 Not at all important	1 Strongly agree; 2 Agree; 3 Neither agree nor disagree; 4 Disagree, or; 5 Strongly disagree

Source: ISSP questionnaire, own depiction

A4: Situation by country over time (full models)

Job security	USA	GB	W-GER	NO	HU
Year: 1997 (Ref. 1989)	0.41***	0.57***	0.91***	0.03	0.94***
Year: 2005 (Ref. 1989)	0.23*	-0.31*	0.84***	0.48***	0.86***
Age	0.01***	0.01*	-0.02***	0.00	0.01
Sex: male	0.01	0.23	-0.05	0.03	-0.10
Work status: full-time	-0.07	-0.17	-0.47	-0.62*	0.17
Work status: part-time	-0.12	-0.40	-0.60	-0.62*	0.92
Years of Education	-0.12***	-0.04	-0.13***	-0.14***	-0.05**
Constant cut 1	-1.08**	-0.57	-1.93***	-2.45***	-0.38
Constant cut 2	0.47	0.90	-0.38	-1.01**	1.11
Constant cut 3	1.35***	1.80***	0.50	0.00	2.39
Constant cut 4	2.94***	3.50***	1.96***	1.69***	3.82**
N	2210	1420	1557	2821	1446
F	10.05	8.50	15.67	16.07	12.95
p	0.00	0.00	0.00	0.00	0.00
High income	USA	GB	W-GER	NO	HU
Year: 1997 (Ref. 1989)	-0.05	0.23	0.15	0.09	0.21
Year: 2005 (Ref. 1989)	0.10	0.09	0.39**	0.14	0.01
Age	0.00	-0.01*	-0.02***	-0.01***	0.00
Sex: male	-0.35***	-0.15	-0.24*	-0.64***	-0.23*
Work status: full-time	-0.19	0.22	-0.76**	0.48	-0.98
Work status: part-time	0.07	0.23	-0.41	0.52	-0.24
Years of Education	-0.13***	-0.12***	-0.18***	-0.08***	-0.13***
Constant cut 1	-3.10***	-2.82***	-4.36***	-2.33***	-5.04***
Constant cut 2	-1.89***	-1.56**	-2.97***	-1.01**	-3.66***
Constant cut 3	-0.51	0.06	-1.39***	0.56	-2.20**
Constant cut 4	1.37***	2.05***	0.33	2.70***	-0.33
N	2208	1413	1563	2847	1442
F	13.66	4.35	23.31	22.06	9.89
p	0.00	0.00	0.00	0.00	0.00
Career opportunities	USA	GB	W-GER	NO	HU
Year: 1997 (Ref. 1989)	-0.02	0.01	0.31**	-0.36***	0.27*
Year: 2005 (Ref. 1989)	-0.12	-0.56***	-0.02	-0.51***	0.01
Age	0.02***	0.02***	0.01***	0.01	0.00
Sex: male	-0.20*	-0.10	-0.27*	-0.42***	-0.18
Work status: full-time	0.08	-0.27	-0.32	0.05	-1.78
Work status: part-time	0.30	-0.25	-0.11	-0.01	-1.54
Years of Education	-0.09***	0.00	-0.04**	-0.05***	-0.09***
Constant cut 1	-1.44***	-0.80	-1.15***	-1.60***	-4.05
Constant cut 2	-0.17	0.53	0.37	-0.10	-2.77
Constant cut 3	1.12**	2.12***	1.77***	1.50***	-1.30
Constant cut 4	2.84***	4.11***	3.66***	3.42***	0.43
N	2210	1395	1542	2766	1436
F	10.61	5.29	5.63	13.43	5.32
p	0.00	0.00	0.00	0.00	0.00
Interesting job	USA	GB	W-GER	NO	HU
Year: 1997 (Ref. 1989)	0.48***	0.43**	-0.01	0.13	0.33**
Year: 2005 (Ref. 1989)	0.08	0.32*	-0.26*	0.18	0.32*
Age	-0.01**	-0.02***	-0.01	-0.01***	0.00
Sex: male	0.05	0.21	-0.03	-0.04	0.18
Work status: full-time	-0.12	-0.20	-0.29	-0.26	-1.65
Work status: part-time	0.22	0.06	-0.38	-0.16	-0.76
Years of Education	-0.07***	-0.06*	-0.06***	-0.05**	-0.03
Constant cut 1	-1.15**	-1.16*	-0.99**	-1.18**	-1.75
Constant cut 2	0.47	0.53	0.86*	0.80*	-0.18
Constant cut 3	1.43***	1.69***	2.09***	2.12***	1.43
Constant cut 4	2.57***	3.47***	3.39***	3.56***	2.76
N	2214	1425	1587	2865	1444
F	7.64	3.42	3.44	4.21	3.00
p	0.00	0.00	0.00	0.00	0.00

Table continued					
Independent job	USA	GB	W-GER	NO	HU
Year: 1997 (Ref. 1989)	0.14	0.09	-0.25*	0.07	0.29*
Year: 2005 (Ref. 1989)	0.41***	0.06	-0.53***	-0.08	0.12
Age	0.00	0.00	-0.01	-0.01*	0.00
Sex: male	-0.06	-0.50***	-0.08	-0.36***	0.22*
Work status: full-time	-0.38	0.10	0.02	0.48	0.07
Work status: part-time	-0.18	-0.10	-0.08	0.51	0.47
Years of Education	-0.05**	0.01	-0.02	-0.03	-0.02
Constant cut 1	-0.28	1.09	-0.04	0.86	0.70
Constant cut 2	1.00*	2.59***	1.68***	2.74***	2.19
Constant cut 3	2.02***	4.12***	3.00***	4.35***	3.78*
Constant cut 4	3.53***	5.42***	3.94***	6.89***	5.62**
N	2209	1410	1586	2862	1445
F	2.71	1.88	2.99	3.86	1.53
p	0.01	0.07	0.00	0.00	0.15

Note: Levels of significance * p<0.05; ** p<0.01; *** p<0.001; ISSP data set; own depiction

A5: Values by country over time (full models)

Job security	USA	GB	W-GER	NO	HU
Year: 1997 (Ref. 1989)	0.36***	0.51***	0.45***	-0.02	0.20
Year: 2005 (Ref. 1989)	0.43***	0.04	0.42**	0.02	0.77***
Age	0.01*	-0.01	0.00	0.01**	0.00
Sex: male	-0.28**	-0.01	-0.14	-0.46***	-0.19
Work status: full-time	-0.37	-0.21	0.61**	0.41	-0.23
Work status: part-time	-0.91**	-0.58	0.31	0.23	1.19
Years of Education	-0.16***	-0.10***	-0.08***	-0.20***	-0.05*
Constant cut 1	-8.58***	-9.53***	-6.90***	-8.29***	-5.38***
Constant cut 2	-6.39***	-6.88***	-5.19***	-6.21***	-4.12***
Constant cut 3	-5.23***	-4.90***	-3.90***	-5.07***	-1.22**
Constant cut 4	-2.62***	-1.90***	-0.73*	-2.27***	
N	2303	1479	1634	2995	1583
F	19.22	4.64	5.93	29.34	5.30
p	0.00	0.00	0.00	0.00	0.00
High income	USA	GB	W-GER	NO	HU
Year: 1997 (Ref. 1989)	-0.05	-0.06	-0.65***	-0.21*	0.52***
Year: 2005 (Ref. 1989)	0.05	0.05	-0.51***	-0.09	0.21
Age	0.00	-0.04***	-0.01*	0.00	-0.01**
Sex: male	0.06	0.19	0.24*	0.10	0.16
Work status: full-time	-0.33	0.05	0.18	0.68*	0.04
Work status: part-time	-0.72**	-0.23	-0.06	0.26	0.10
Years of Education	-0.12***	-0.10***	-0.07***	-0.02	-0.10***
Constant cut 1	-7.88***	-8.12***	-7.26***	-5.90***	-8.81***
Constant cut 2	-5.28***	-5.63***	-4.52***	-2.74***	-6.05***
Constant cut 3	-3.64***	-3.86***	-3.02***	-0.82*	-4.21***
Constant cut 4	-1.03**	-0.84	0.12	2.40***	-1.36***
N	2298	1463	1626	2969	1582
F	9.70	9.52	11.18	5.00	8.84
p	0.00	0.00	0.00	0.00	0.00
Career opportunities	USA	GB	W-GER	NO	HU
Year: 1997 (Ref. 1989)	-0.12	-0.21	-0.43***	-0.32***	0.45***
Year: 2005 (Ref. 1989)	-0.03	-0.22	-0.27*	-0.44***	0.20
Age	-0.02***	-0.02***	-0.02***	-0.01***	-0.01**
Sex: male	-0.09	0.03	0.13	-0.03	-0.07
Work status: full-time	-0.46	0.19	-0.08	0.23	0.12
Work status: part-time	-0.86**	-0.09	-0.36	-0.20	-0.31
Years of Education	-0.09***	0.04	-0.02	0.02	-0.02
Constant cut 1	-8.21***	-5.65***	-5.84***	-4.84***	-4.65***
Constant cut 2	-6.02***	-3.27***	-3.43***	-2.15***	-2.60***
Constant cut 3	-4.71***	-1.70***	-2.16***	-0.64	-1.28**
Constant cut 4	-2.07***	0.88	0.41	1.93***	0.84*
N	2295	1458	1614	2945	1580
F	9.14	5.23	5.13	8.56	3.43
p	0.00	0.00	0.00	0.00	0.00

Table continued					
Interesting job	USA	GB	W-GER	NO	HU
Year: 1997 (Ref. 1989)	0.30**	-0.09	-0.15	-0.52***	0.30*
Year: 2005 (Ref. 1989)	0.52***	-0.16	-0.21	-0.63***	-0.15
Age	0.00	0.00	-0.01*	-0.01*	0.00
Sex: male	-0.16	-0.13	-0.15	-0.35***	0.20
Work status: full-time	0.12	0.04	0.18	-0.38	0.03
Work status: part-time	0.24	-0.09	-0.11	-0.51	0.95
Years of Education	0.08***	0.14***	0.11***	0.14***	0.16***
Constant cut 1	-4.45***	-3.87***	-4.48***	-7.54***	-3.56***
Constant cut 2	-2.96***	-1.74***	-2.41***	-5.24***	-1.09*
Constant cut 3	-1.64***	1.53**	0.77*	-3.37***	0.29
Constant cut 4	1.34***			0.54	2.91***
N	2294	1472	1632	2990	1582
F	7.14	4.71	7.69	16.09	11.86
p	0.00	0.00	0.00	0.00	0.00
Independent job	USA	GB	W-GER	NO	HU
Year: 1997 (Ref. 1989)	0.16	0.02	-0.05	-0.26**	0.22
Year: 2005 (Ref. 1989)	0.31**	0.09	-0.15	-0.51***	0.03
Age	0.01	0.02***	-0.01	0.01**	0.02***
Sex: male	-0.12	-0.12	0.01	-0.15	0.10
Work status: full-time	-0.26	-0.46	0.32	0.70	0.20
Work status: part-time	-0.39	-0.49	0.10	0.31	0.23
Years of Education	0.05***	0.06*	0.07***	0.04**	0.13***
Constant cut 1	-4.95***	-4.75***	-6.00***	-4.41***	-2.26***
Constant cut 2	-2.34***	-1.85***	-2.83***	-2.06***	0.13
Constant cut 3	-0.50	0.00	-1.62***	-0.48	1.38***
Constant cut 4	1.66***	2.30***	1.07***	2.26***	3.56***
N	2297	1459	1630	2981	1581
F	3.99	3.04	3.86	5.86	11.40
p	0.00	0.00	0.00	0.00	0.00

Note: Levels of significance * p<0.05; ** p<0.01; *** p<0.001; ISSP data set; own depiction

A6: Mismatch by country over time (full models)

Job security	USA	GB	W-GER	NO	HU
Year: 1997 (Ref. 1989)	0.41***	0.57***	0.91***	0.03	0.94***
Year: 2005 (Ref. 1989)	0.23*	-0.31*	0.84***	0.48***	0.86***
Age	0.01***	0.01*	-0.02***	0.00	0.01
Sex: male	0.01	0.23	-0.05	0.03	-0.10
Work status: full-time	-0.07	-0.17	-0.47	-0.62*	0.17
Work status: part-time	-0.12	-0.40	-0.60	-0.62*	0.92
Years of Education	-0.12***	-0.04	-0.13***	-0.14***	-0.05**
Constant cut 1	-1.08**	-0.57	-1.93***	-2.45***	-0.38
Constant cut 2	0.47	0.90	-0.38	-1.01**	1.11
Constant cut 3	1.35***	1.80***	0.50	0.00	2.39
Constant cut 4	2.94***	3.50***	1.96***	1.69***	3.82**
N	2210	1420	1557	2821	1446
F	10.05	8.50	15.67	16.07	12.95
p	0.00	0.00	0.00	0.00	0.00
High income	USA	GB	W-GER	NO	HU
Year: 1997 (Ref. 1989)	-0.05	0.23	0.15	0.09	0.21
Year: 2005 (Ref. 1989)	0.10	0.09	0.39**	0.14	0.01
Age	0.00	-0.01*	-0.02***	-0.01***	0.00
Sex: male	-0.35***	-0.15	-0.24*	-0.64***	-0.23*
Work status: full-time	-0.19	0.22	-0.76**	0.48	-0.98
Work status: part-time	0.07	0.23	-0.41	0.52	-0.24
Years of Education	-0.13***	-0.12***	-0.18***	-0.08***	-0.13***
Constant cut 1	-3.10***	-2.82***	-4.36***	-2.33***	-5.04***
Constant cut 2	-1.89***	-1.56**	-2.97***	-1.01**	-3.66***
Constant cut 3	-0.51	0.06	-1.39***	0.56	-2.20**
Constant cut 4	1.37***	2.05***	0.33	2.70***	-0.33
N	2208	1413	1563	2847	1442
F	13.66	4.35	23.31	22.06	9.89
p	0.00	0.00	0.00	0.00	0.00

Table continued					
Career opportunities	USA	GB	W-GER	NO	HU
Year: 1997 (Ref. 1989)	-0.02	0.01	0.31**	-0.36***	0.27*
Year: 2005 (Ref. 1989)	-0.12	-0.56***	-0.02	-0.51***	0.01
Age	0.02***	0.02***	0.01***	0.01	0.00
Sex: male	-0.20*	-0.10	-0.27*	-0.42***	-0.18
Work status: full-time	0.08	-0.27	-0.32	0.05	-1.78
Work status: part-time	0.30	-0.25	-0.11	-0.01	-1.54
Years of Education	-0.09***	0.00	-0.04**	-0.05***	-0.09***
Constant cut 1	-1.44***	-0.80	-1.15***	-1.60***	-4.05
Constant cut 2	-0.17	0.53	0.37	-0.10	-2.77
Constant cut 3	1.12**	2.12***	1.77***	1.50***	-1.30
Constant cut 4	2.84***	4.11***	3.66***	3.42***	0.43
N	2210	1395	1542	2766	1436
F	10.61	5.29	5.63	13.43	5.32
p	0.00	0.00	0.00	0.00	0.00
Interesting job	USA	GB	W-GER	NO	HU
Year: 1997 (Ref. 1989)	0.48***	0.43**	-0.01	0.13	0.33**
Year: 2005 (Ref. 1989)	0.08	0.32*	-0.26*	0.18	0.32*
Age	-0.01**	-0.02***	-0.01	-0.01***	0.00
Sex: male	0.05	0.21	-0.03	-0.04	0.18
Work status: full-time	-0.12	-0.20	-0.29	-0.26	-1.65
Work status: part-time	0.22	0.06	-0.38	-0.16	-0.76
Years of Education	-0.07***	-0.06*	-0.06***	-0.05**	-0.03
Constant cut 1	-1.15**	-1.16*	-0.99**	-1.18**	-1.75
Constant cut 2	0.47	0.53	0.86*	0.80*	-0.18
Constant cut 3	1.43***	1.69***	2.09***	2.12***	1.43
Constant cut 4	2.57***	3.47***	3.39***	3.56***	2.76
N	2214	1425	1587	2865	1444
F	7.64	3.42	3.44	4.21	3.00
p	0.00	0.00	0.00	0.00	0.00
Independent job	USA	GB	W-GER	NO	HU
Year: 1997 (Ref. 1989)	0.14	0.09	-0.25*	0.07	0.29*
Year: 2005 (Ref. 1989)	0.41***	0.06	-0.53***	-0.08	0.12
Age	0.00	0.00	-0.01	-0.01*	0.00
Sex: male	-0.06	-0.50***	-0.08	-0.36***	0.22*
Work status: full-time	-0.38	0.10	0.02	0.48	0.07
Work status: part-time	-0.18	-0.10	-0.08	0.51	0.47
Years of Education	-0.05**	0.01	-0.02	-0.03	-0.02
Constant cut 1	-0.28	1.09	-0.04	0.86	0.70
Constant cut 2	1.00*	2.59***	1.68***	2.74***	2.19
Constant cut 3	2.02***	4.12***	3.00***	4.35***	3.78*
Constant cut 4	3.53***	5.42***	3.94***	6.89***	5.62**
N	2209	1410	1586	2862	1445
F	2.71	1.88	2.99	3.86	1.53
p	0.01	0.07	0.00	0.00	0.15

Note: Levels of significance * p<0.05; ** p<0.01;