
The political economy of flexible employment: Risk, income prospects and inequality

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Summary

Over the past decades, many Western democracies have deregulated flexible employment. At the same time, income inequality has increased. This dissertation explores the association between these two trends. It focuses on two types of wage-related risks that regular workers are exposed to: low-wage competition and adverse income prospects. I argue that flexibilization spreads risk disproportionately towards workers in the middle of the earnings distribution. These workers then face pressure to defend their wage levels against low-wage competition from the cheaper alternative of temporary workers. They also frequently lack the mobile, high-skilled profiles conducive to secure career advancement and long-term wage growth in flexible work environments.

This argument departs from several influential accounts in the literature. First, it disputes a core premise of the dualization literature: that “insiders” employed in secure jobs are insulated against adverse labor market changes. Because labor market policies “at the margins” have repercussions on insiders, it is important to consider the heterogeneity of wage prospects among workers in regular employment. Second, the policy changes towards flexible employment provide an explanation of the widespread rise of inequality in coordinated market economies in Europe. Third, it introduces a new aspect to the debate about the “declining middle class”: the focus on wage-related risks. These risk types encompass developments such as long-term wage stagnation, which arguably are crucial to understanding contemporary electoral shifts. Wage-related risks are mostly omitted from theories on the welfare state that focus exclusively on employment-related risks.

Comparing 25 OECD countries between 1985 and 2015, I find that flexible employment policies affect earnings inequality among regular workers as well as subjective perceptions of labor market risks. The macro-level analysis based on LIS data shows that flexibilization is associated with earnings losses for middle-income workers, while it has neutral effects on low-wage earners and positive effects on top earners. The micro-level analysis based on ISSP data shows that flexibilization increases middle-income workers’ levels of subjective job insecurity relative to low-income workers. In deregulated contexts, risk spreads towards middle-income workers. Finally, the in-depth analysis of the crucial case of Germany, where major flexibilization reforms took place, reveals that flexibilization results in long-term wage stagnation for middle-income workers.

This dissertation provides multi-faceted data on the position of workers in the middle of the earnings distribution over the past three decades. Aside from “objective” developments of earnings inequality, it provides detailed data on workers’ subjective perception of economic risks. The findings contribute to understanding the various consequences of flexible employment for income inequality. The trajectories of pivotal middle-class voters suggest that political support for flexible employment is built up on shaky ground.

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1 Introduction

Flexible employment has been on the rise in Western democracies. Many European countries have relaxed the regulation of flexible contracts since the 1980s; rising shares of employees now work in fixed-term positions or for temporary work agencies. Other forms of flexibilization related to what has been termed the “gig economy” include the expansion of freelance contracts, very short part-time contracts (mini jobs) or zero-hour contracts with on-call work (Broughton et al. 2010; Friedman 2014). The defining feature of the policies regulating these flexible contractual arrangements is that they do not target existing employees with permanent, full-time contracts. Hence, they are “marginal” forms of flexibilization (Saint-Paul 1996: 280; Eichhorst and Marx 2011). Governments of both the left and the right have used marginal flexibilization to promote low-cost work and as a response to chronically high unemployment, while leaving the protected position of core workers unaffected (Rueda 2007; King and Rueda 2008).

As far as politics are concerned, flexible employment policies can be an attractive reform option for governments. Such reforms are not upfront attempts at full-scale deregulation and do not seem to affect the position of “insiders,” i.e. the majority of workers in regular jobs. Hence, it is not surprising that governments that had restricted flexible employment in the past introduced more relaxed regulations over the 1990s and the 2000s (Beramendi et al. 2015: 11). The reforms can be attributed to the political clout of insiders, their ability to forge cross-class coalitions with employers, and the political weakness of outsiders targeted by the reforms (Rueda 2005, 2007; Palier and Thelen 2010; Emmenegger et al. 2012b; Thelen 2014). Although the reforms have reinforced the divide between insiders and outsiders, the widespread turn towards flexible employment can be explained with the fact that the losers were concentrated among minorities of workers, such as those on temporary contracts, the long-term unemployed, the young, the low-skilled, migrants – in short, those deprived of the secure employment conditions in regular jobs.

Table 1.1: Major flexibilization reforms in OECD countries

Country	Year implemented	Fixed-term contracts	Temp. work agencies	Ideology of government responsible for reform	Unemployment ^a		Post-reform election ^b		
					Unemp-loyment rate t-1	Unemp-loyment trend	Seat change left	Seat change center	Seat change right
Belgium	1998	x	x	Center-left	9.2	+12%	-6.7	-6.0	
Denmark	1991		x	Right	7.2	+5%			-0.6
Germany	1986	x		Center-right	7.2	+68%		-4.1	+2.5
Germany	1997	x		Center-right	8.9	+34%		-7.1	-0.6
Germany	1998		x	Center-right	9.6	+39%		-7.1	-0.6
Germany	2003		x	Left	8.6	+1%	-0.8		
Germany	2004	x	x	Left	9.7	+13%	-6.2		
Greece	2004		x	Left	9.7	-6%	-13.7		
Greece	2011		x	Left	12.7	+33%	-42.3		
Italy	1998		x	Center-left	11.2	+14%	-7.5	-16.2	
Italy	2002	x		Center-right	9.0	-15%		-0.3	-12.3
Netherlands	1999	x	x	Left-cent-right	5.1	-24%	-14.7	-4.6	-9.3
Portugal	1997		x	Left	8.0	+24%	+1.3		
Portugal	2008		x	Left	9.1	+34%	-10.4		
Slovakia	2004	x		Center-right	17.7	+17%		+1.3	-10.0
Spain	2011	x	x	Left	19.9	+80%	-16.9		
Sweden	1992		x	Left	3.1	+20%	-5.2		
Sweden	1994		x	Center-right	9.1	+229%		-4.3	-2.0
Sweden	1997	x		Left	9.6	+100%	-8.6		
Sweden	2008	x		Center-right	6.1	-10%		-3.2	+1.8

Notes: The table displays major flexibilization reforms in the area of fixed-term contracts and/or temporary work agencies implemented between 1985 and 2013. Sample and case selection: see Chapter 3.

Sources: OECD (2017a), Fondazione Rodolfo De Benedetti (2010), Armingeon et al. (2017a), Armingeon et al. (2017b).

^a The column on the left shows unemployment rates (in percent) the year before reform implementation. The column on the right shows the trend in unemployment rates, calculated as the unemployment rate t-1 relative to average unemployment over the nine previous years.

^b Numbers indicate the change in parliamentary seat share (in percentage points) of governing parties in the next election following reforms (in bold: ideology of the prime minister/strongest party in the coalition).

These accounts offer helpful explanations of the “dualizing” character of policy change in the labor market. But they face a major puzzle. Flexible employment appears much more politically *contested* than we would expect from the limited share of workers directly affected. Table 1.1 lists major reforms in OECD¹ countries that have deregulated the use of fixed-term contracts and temporary work agencies. The table reveals that both left- and right-leaning governments have pursued flexibilization reforms, and that high unemployment appears to explain the timing of the reforms. Strikingly, almost all flexibilization reforms were met with fierce electoral punishment of the responsible government in the subsequent elections: the major governing parties suffered seat losses in 17

¹ Organisation for Economic Co-operation and Development.

of all 20 elections following large deregulations, and the government coalitions as a whole suffered defeats in 19 of 20 cases. Flexible employment does not exactly appear to be a winning strategy for vote-seeking governments.

How controversial even seemingly “marginal” labor market reforms can become is evident in Germany. The “Hartz I” and “Hartz II” reform packages² mandated in late 2002 culminated a series of efforts to deregulate temporary employment. The reforms constituted a turning point. Core workers and their union representatives seemed to realize that marginal flexibilization had increased low-wage competition from outsiders and put their secure position under pressure (Eichhorst and Marx 2011; Benassi and Dorigatti 2015; Benassi 2016). Public opinion reacted negatively and, eventually, there were some policy reversals such as the 2014 minimum wage act (Marx and Starke 2017; Bosch 2018). Flexibilization seems to pose a concern for a surprisingly large share of workers – not only atypical workers directly affected by flexible employment but also many regular workers worrying about indirect competition from low-paid outsiders.

Against this background, this dissertation re-examines in what ways – if any – marginal flexibilization affects the position of regular workers in the labor market. The contested politics of flexible employment reforms casts some doubt on the common assumption that most regular workers (insiders) are insulated against labor market changes “at the margins” targeted at atypical workers (outsiders). Instead, it seems plausible that at least some regular workers feel threatened by the expansion of flexible employment. To understand why workers would worry about the indirect effects of flexible employment, it is useful to take a step back and note that the trend towards flexible employment coincides with another major trend in Western democracies: *rising income inequality*. Income inequality has been increasing in most OECD countries since the 1980s (OECD 2008, 2011, 2015b), sometimes reaching levels not seen since the late nineteenth century (Piketty 2014; Piketty and Saez 2014). Part of the rise in inequality has had to do with welfare state reforms and declining redistribution through taxes and transfers (Korpi and Palme 2003; Rueda 2015; Pontusson and Weisstanner 2018). Yet the larger contribution to increasing

² Not to be confused with the reform of unemployment and social assistance benefits (the so-called “Hartz IV”) passed a year later in December 2003. Chapter 6 will provide further details on the case of Germany.

inequality stems from the more unequal distribution of “market incomes” (pre-tax earnings) (OECD 2008: 30-34). The temporal overlap of the two trends – the expansion of flexible employment and rising earnings inequality – naturally raises the question of whether the two phenomena are related to one another. This study centers on the possible connection between flexibilization and earnings inequality.

The *research question* of this dissertation explores a particular aspect of the distributional effects of flexible employment: How does the regulation of flexible employment affect regular workers in the *middle* of the earnings distribution? Do average workers in standard employment gain or lose from flexibilization? The focus on middle-income workers surely matters because of political parties’ efforts to cater to the interests of the median voter or the “middle class”³ more broadly (Downs 1957; Meltzer and Richard 1981; Rothstein 1998; cf. Kevins et al. 2018b). However, the motivation to focus on middle-income earners also has to do with the nature of how inequality has evolved over the past few decades. There has been a long-standing debate about the “declining middle,” where one primary concern is that the income and living standard of the middle class are stagnating (for an overview, see Atkinson and Brandolini 2013). If flexibilization indeed puts regular workers under pressure, incrementally changing outcomes such as earnings stagnation are precisely the type of consequences most likely to emerge. As I will argue in this study, marginal flexibilization, for better or worse, affects some workers’ prospects of securing decent wage growth and long-term career advancement. Such patterns of relative decline and stagnation feature prominently in contemporary debates about right-wing populism (Gidron and Hall 2017; Inglehart and Norris 2017; Rooduijn and Burgoon 2017; Kurer 2018). Unfortunately, existing research provides only limited guidance to understanding how the middle class’s income prospects depend on the policy context of flexible employment. In comparative inequality research, the focus on middle incomes is only just beginning to emerge and leaves open many questions related to the identification

³ Unless indicated otherwise, my use of the term “*middle class*” is purely based on earnings and refers to workers in the middle third of the earnings distribution. I use the term synonymously with “middle-income workers.” For an overview on alternative denotations of the term “middle-class”, see e.g. Mau (2012). For sake of simplicity, I also use the terms “*worker*” and “*employee*” interchangeably.

of the middle (Atkinson and Brandolini 2013; Dallinger 2013; Gornick and Jäntti 2013; Thewissen et al. 2015; Nolan et al. 2016).

This dissertation contributes to these debates by providing fresh data on the position of middle-income workers in 25 OECD countries since the mid-1980s. It sets out to provide a comprehensive account of how middle-income workers have fared in different labor market contexts and how flexibilization has affected their position. In doing so, I take up a key insight in the ongoing debate on the “declining middle” and the electoral consequences of rising inequality: the need to bridge both objective and subjective economic outcomes. On the one hand, the question of whether the trend of flexibilization contributes to rising inequality by affecting middle-income workers calls for a vigorous analysis of the changes in these workers’ *objective* position in the earnings distribution. This study approaches this task by focusing on the evolution of the share of total earnings going to lower-middle, middle and upper-middle income workers. On the other hand, the consequences of the move towards flexible employment may be felt on a *subjective* dimension, with middle-income workers feeling increased risk levels and higher labor market insecurity. The subjective perceptions of changes in individuals’ relative position – for example, fear to be “left behind” – seem particularly relevant to explain the success of right-populist parties (Gidron and Hall 2017; Kurer 2018). How strongly the objective and subjective distributional consequences of labor market changes overlap is an open question. But to connect both the objective and the subjective dimensions is imperative for a more accurate understanding of the political consequences of the trend towards flexible employment.

To engage in a distributional analysis of flexible employment policies means that, to some extent, I will leave aside the question about the political determinants of these policies. Nevertheless, the *politics* of flexibilization are at the heart of this study. As I discuss in due course, the existing literature on comparative welfare state and labor market politics often relies on implicit assumptions about the distributional effects of different policies. Several of these assumptions are questionable. Suffice it to mention two problematic assumptions at this point. First, most research relies on welfare state regime typologies developed based on the realities of the post-war industrial era. However, flexible employment reforms have been ubiquitous in Europe (with the notable exception of France, see

Vlandas 2013). In countries like Germany or Sweden, for all we know, these reforms have contributed to making societies more unequal. This casts doubt on the focus on institutional equilibria present in much of the comparative political economy literature (Baccaro and Pontusson 2016). Second, in an effort to explain cross-class coalitions (going beyond traditional frameworks based on the democratic class struggle), recent literature highlights a critical political role for labor market “insiders.” These are conceptualized as people in secure regular jobs. However, there is much less effort to distinguish changes in their relative position, such as the possibility of income stagnation, subjective insecurity or adverse career prospects. As soon as we look at the different fates of ordinary workers in these relative terms, the notion of a homogeneous insider group – in economic and political terms – becomes difficult to defend. Even in countries with strong insider-outsider divides, nothing guarantees that core workers reproduce political support for changes such as the trend towards flexibilization. Thus, understanding the distributional variation in the position of different workers is crucial. Has flexibilization affected ordinary workers in the middle in ways not anticipated by the existing literature? What distinguishes the individuals that worry about flexibilization? The answers to these questions will help to refine existing accounts of the politics of labor market changes and the politics of inequality.

1.1. Outline of the argument

This dissertation presents a novel theoretical framework through which we can explain how flexible employment policies affect the position of regular workers. It builds on the premise that the context of flexible employment shapes workers’ exposure to labor market risks – not only of those workers directly targeted by marginal flexibilization but also of those workers that have secure standard jobs. The argument then distinguishes two distinct types of wage-related risks: one related to low-wage competition and another concerning income prospects. Building on literature in labor sociology and labor economics, I argue that both risk types vary with income and vary with the context of flexible employment. This leads to the expectation that flexible employment policies have very different implications for the position of middle-income regular workers compared to low-earners or high-earners. I expect that deregulated flexible employment negatively affects

the position of middle-income workers more than that of other groups due to an adverse risk constellation. First, flexible employment spurs low-wage competition because of the large wage gaps between regular and atypical workers. Second, flexible employment helps the career prospects of high-skilled workers with “mobile skills” (such as, a university degree) which are far less common among middle-income workers than among high-income workers.

In more detail, the first risk dimension presumes that flexible employment creates a large low-wage outsider workforce in non-standard employment. This results in large income differentials between regular and atypical workers (OECD 2015b: 135-198). These large wage gaps expose better-off regular workers to low-wage competition from atypical workers. Pressure is building up due to the threat that employers could replace regular workers with cheaper temporary workers, which creates incentives for wage moderation among better-off regular workers (Eichhorst and Marx 2011; Rebien and Kettner 2011). Large wage gaps mainly expose better-off workers to low-wage competition. For low-income workers, flexibilization does not necessarily make a large difference because they are already at the bottom of the earnings hierarchy and typically have high levels of insecurity irrespective of the regulatory context. But for middle-income and high-income workers, low-wage competition can be a significant threat given the large wage differentials with atypical workers. In subjective terms, these wage gaps expose middle-income workers to the risk of substantial wage losses if their jobs were substituted or outsourced. Hence, if flexible employment expands, low-wage competition becomes a salient and visible issue for better-off regular workers.

The second risk dimension focuses on the skill profiles that help workers’ career prospects in a context of flexible employment. On the one hand, the skill profiles obtained through education and training affect the likelihood that regular workers will be replaced by temporary workers. Replacement risks are highest for low-skilled workers without any further education or job-specific training (Goldthorpe 2000; Emmenegger 2009b). In contrast, having advanced qualifications such as a university degree increases the incentives for employers to retain these employees. On the other hand, skill profiles do not just determine replacement risks; they also affect how workers are able to advance their careers in a flexible work environment. Again, having higher education is crucial because of the

“signaling value” of education (Spence 1973). A tertiary degree signals the ability to adapt to changing work contexts and shows that a worker is mobile. Flexible employment implies that regular workers face the additional competition of a large outsider workforce. This uncertainty (the constant option of substitution or of the outsourcing of job tasks) privileges workers with general and transferable skill profiles over workers with very fixed and specific skills (Iversen and Soskice 2001). This confers an advantage not only to highly educated workers, but also for younger workers in professional service occupations that demand a broader range of general skills. This type of “mobile” skill profile occurs very rarely among middle-income workers, where the incidence of tertiary education is substantially lower than among high-income workers. Hence, if flexible employment expands, the prospects for career advancement and wage growth depend to a greater extent on a skill profile based on high education and general skills.

In combination, a move towards deregulated flexible employment policy disproportionately affects the risks of middle-income workers. First, it enhances low-wage competition based on large wage gaps to non-standard employment. Second, it undermines the position of workers without higher education and without the mobility to switch jobs or industries in flexible work environments. Together, we should expect that this risk context puts the middle in a weak wage bargaining position to secure continuous earnings growth. The main assumption is that risk effectively translates into observable changes in the earnings position of regular workers. Flexibilization can imply, on the one hand, that middle-income workers react with *wage moderation* to their higher risk levels in competition with outsiders (Eichhorst and Marx 2011). On the other hand, their likelihood for wage concessions will also depend on the way that competition affects their perceptions of *job insecurity* (Rebien and Kettner 2011). Hence, workers’ risk constellations can translate into distinct – both “objective” and “subjective” – distributional outcomes. The former channel implies that middle-income workers have declining earning shares under deregulated flexible employment. The latter channel implies that flexibilization increases their perception of economic insecurity. The two channels are likely to be closely related but not necessarily identical. Both of them indicate distinct aspects of how the policy context affects the relative position of regular workers.

This argument comes with some scope conditions. A main qualification is that the effect of flexible employment should depend on the structure of trade union representation. It is well established that union density and centralized wage bargaining are strongly associated with lower earnings inequality (Wallerstein 1999; Pontusson et al. 2002; Pontusson 2013; Kristal and Cohen 2017). In addition, recent research shows that not only does the strength of unions matter but so does the degree to which they represent lower- and middle-income workers (Thelen 2014; Mosimann and Pontusson 2017; Vlandas 2018). I expect that where unions are encompassing, they can limit the negative externalities of low-wage competition for individual workers under deregulated flexible employment. To the extent that wages are negotiated at the industry level, wage concessions can be shared evenly among all income groups and unions will try to extend wage agreements to also cover non-standard workers (Benassi and Vlandas 2016). In addition, at the individual level, union representation can reduce the requirements for mobile skill profiles based on high education to secure wage increases in flexible work environments. Union members can benefit from collective bargaining agreements with less differentiated wages between different workers. Hence, high unionization rates among low- and middle-income workers limit both the inequality-increasing effects of deregulation at the macro-level and the insecurity-increasing effects at the micro-level – by protecting existing wage levels and limiting the room for wage differentiation.

Finally, I discuss two further scope conditions. The first is the idea that the effects of marginal flexibilization depend on how strongly regular workers are protected against job dismissal. This sort of *employment protection* for insiders is a core policy focus in the dualization literature (Rueda 2005, 2007). However, there are contradicting expectations. On the one hand, strong dismissal protection for regular workers may reassure the latter's perception of job security and reduce the saliency of low-wage competition because the threat of substitution is not credible. In this view, flexibilization by itself would not affect the position of insiders (Emmenegger et al. 2012a). On the other hand, stringent rules on permanent jobs may lead employers to create new jobs mainly in the secondary labor market. The larger outsider force then increases the risks of low-wage competition and the likelihood for substituting jobs (Polavieja 2003).

The second scope condition concerns the role of *unemployment*. Not only are distributional outcomes strongly shaped by macroeconomic conditions (Pontusson and Weisstanner 2018), but flexibilization reforms have often been introduced in times of high unemployment (see Table 1.1). While the theoretical implications are not unambiguously clear, it is plausible that the coincidence of unemployment and flexible employment reforms leads to particularly strong increases in inequality during downturns. Unemployment is a major determinant of job insecurity and renders workers more likely to make wage concessions (Rebien and Kettner 2011). At the same time, however, unemployment is a bigger concern to low-income workers who tend to be laid off more often during recessions. For middle-income workers, much less affected by cyclical unemployment, it is less clear how unemployment should moderate the effect of flexibilization on their earnings position.

1.2. Relevance and contribution

One key goal of this study is to arrive at a more nuanced understanding of workers' risks and opportunities in changing labor markets. The turn towards flexible employment is just one of the ways through which labor markets evolve; more far-reaching changes lie ahead, with further steps towards the gig economy and digitalization. My argument builds on the idea that some people are indirectly affected by these structural and political changes. Flexible employment is an opportunity for some workers, but it creates new wage-related risks – mainly, the risk of earnings stagnation and adverse career prospects – for other workers. Taking this new perspective, this dissertation sets out to contribute to the existing literature on labor market reforms, income inequality, subjective insecurity, and the political consequences of labor market developments. The focus on a specific type of labor market policy (flexibilization) and a specific type of inequality (the position of middle-income workers) promises to address several gaps in existing research at both the theoretical and the empirical level. More specifically, I point out two close connections to the literature in comparative political economy: How to think about wage-related risks in the labor market; and how to conceptualize the relationship between public policy and income inequality.

Labor market risks

My risk-based theoretical framework shares common traits with a rich body of research that explains how exposure to labor market risks drives political preferences. Rehm (2009, 2011, 2016) synthesizes earlier work from the social insurance tradition (Iversen and Soskice 2001; Moene and Wallerstein 2001). He argues that both current income and uncertainty about future income shape demand for social policy and redistribution at the individual level. Risk exposure is measured by occupational unemployment rates: “Because wages are the primary source of income for most people, the biggest threat of losing income is to become unemployed” (Rehm 2009: 863). The reason to focus on the occupational level is because occupations are defined by different skill requirements and work logics (see Oesch 2006). Workers’ skills are tied to their occupation and switching between occupations is costly (Rehm 2009: 861). Therefore, risk exposure is a function of unemployment rates across occupations.⁴ Occupational unemployment risk increases support for redistribution (Rehm 2009) and social policy (Rehm 2011, 2016), as well as voting for the radical right and vote abstention (Rovny and Rovny 2017).

An obvious limitation of this perspective is that it exclusively focuses on unemployment and disregards other labor market risks. Schwander and Häusermann (2013) propose a broader concept of labor market vulnerability based on the risk of becoming unemployed or atypically employed (see also Häusermann et al. 2015, 2016). The risk of atypical employment takes into account the inferior employment conditions of temporary workers and involuntary part-time workers that are central to the distinction between labor market insiders and outsiders in the dualization literature (see Chapter 2). Like Rehm (2009), Schwander and Häusermann (2013) measure risk exposure at the occupational level, but they additionally separate occupational classes by age and gender. Their risk measure also correlates strongly with labor market preferences. Overall, these authors provide strong

⁴ Rehm (2009: fn. 17) acknowledges that there are other forms of risk exposure beyond unemployment risks. Future income may also decline when “the wage in the same job decreases.” (*ibid.*) He dismisses this possibility “due to various labor market rigidities that prevent nominal wage decreases”. However, relative wages have of course changed on a major scale as part of the trend of rising income inequality.

evidence that employment-related risks – unemployment or atypical employment, tied to specific occupations – shape social policy, labor market policy and electoral behavior.

However, as closely as these risks may overlap with policy preferences, it is not clear whether they are the only – or even the most relevant – types of risks to understand the impact of labor market changes in the era of rising income inequality. First, it is paradoxical that the main underlying motive that drives demand for insurance (uncertainty about future income) is not directly measured by *income*. Risk exposure is supposed to capture the probability of future loss of income, but its operationalization ignores the actual extent of income losses if risk events actually occur. Instead, labor market risk is only approximated with measures of employment status (unemployment or atypical employment). Unemployment and atypical employment strongly correlate with income and career prospects (Schwander and Häusermann 2013: 257-259). Nevertheless, this setup still assumes a homogeneous depiction of labor market advantages among all workers in occupations not affected by high unemployment or atypical employment rates. This assigns an advantageous position in the labor market to all workers with low employment risks – irrespective of their income, their skill background or their career histories.

Second, the consensus on occupation as the main locus of labor market risk (Beramendi et al. 2015: 21-24) blends out the large heterogeneity of earnings between and within occupations. To recap briefly, the prominent focus on occupation in recent political science research builds on the idea that work experiences shape political behavior in important ways (Kitschelt and Rehm 2014). Occupations generate different experiences of authority and task structures, and these, in turn, allow for a horizontal classification of workers into groups by their occupational task logics (for example, “socio-cultural professionals”) (Kriesi 1989; Kitschelt 1994; Oesch 2006; Kitschelt and Rehm 2014: 1679). Arguably, this leads to more accurate depictions of multidimensional political preference formation than purely vertically defined notions of the “lower class,” the “middle class” or the “upper class.” The occupational approach is also used to explain which workers are most directly at risk of non-standard employment (Eichhorst and Marx 2015). However, all of these approaches view occupations as stable categories and assume that workers within a given occupation share similar labor market risks. The trend of rising inequality casts doubt on this assumption. On the one hand, not only are there large wage

differentials *between* occupations (see Oesch 2006: 275), wage inequality between occupations has also been increasing (Mouw and Kalleberg 2010). The relative position of professionals (socio-cultural or technical-administrative), for example, is much better today than it used to be in the 1980s. On the other hand, there also is significant earnings inequality *within* occupations, which has grown over time and has made an important contribution to rising inequality (VanHeuvelen 2018). Hence, it is not sufficient to rely on static occupational characteristics without considering the material position of individual workers across given occupations. If flexibilization really affects earnings inequality, distributional changes in the position of workers both between and within occupations need to be taken into account.

The third and perhaps most problematic omission in the literature on risk is that it devotes very little attention to the origins of labor market risk and on how these risks evolve over time. In seeking to explain political preferences, risk is treated as an exogenous condition unaffected by previous policy choices. However, the distribution of risk across individuals might change not only in response to extraordinary events or shocks (Rehm 2016: 24–25) but also as a result of earlier policy decisions or policy reforms. Policy changes are a key theme of the liberalization literature (e.g. Höpner et al. 2014) and the dualization literature (Emmenegger et al. 2012b). As I will show in the theoretical section in Chapter 2, what is missing is how exactly these policy changes feed back on the distribution of labor market risks. Using the example of flexible employment regulation, this study presents a new framework to link policy choices and risk, with the goal to understand the sources of distributional outcomes for different groups of workers. The turn towards flexible employment indeed affects the risk structure among workers, but it does so for a wider range of risks omitted in the existing literature – risks related to income, such as low-wage competition, career prospects and the prospects for continuous wage increases.

Policy and inequality

This dissertation also seeks to contribute to the comparative literature on inequality, the welfare state and redistribution. In theoretical terms, this dissertation addresses some issues left unexplored despite a vast amount of recent research on the connection between

public policy and inequality. First, most inequality research only considers a limited set of policies. The bulk of research in comparative political economy focuses on “ex post” redistribution through taxes and transfers. Policies that “pre-distribute”, i.e. shape the market distribution of incomes before taking into account public redistribution, have received less attention (Hacker and Pierson 2010; Hacker 2011), and mostly concentrate on wage-setting institutions and the role of unions or employers. This dissertation is one of the first attempts to look at the role of flexible employment policies.⁵ As I have indicated in the summary of the argument above, the effects of such policies require a somewhat different theoretical framework that takes into account indirect effects on workers’ risk and income prospects. However, this framework is not necessarily limited to flexible employment policies; it will allow disentangling the effects of other labor market policies.

Second, I argue that my risk-based theoretical framework allows for a better differentiation between policy and inequality outcomes because it explicitly considers *subjective* perceptions of risk at the individual level. The micro-foundations of comparative political economy theories are replete with assumptions about the behavior of individuals. For example, studies on redistribution preferences building on the Meltzer-Richard (1981) model assume that individuals are self-interested and well-informed about their relative income position. Such assumptions only receive mixed support.⁶ This requires analysts to be explicit about their proposed theoretical mechanisms at the micro-level and test the proposed associations at the individual level. This is what I strive to do by focusing not only on (objective) income shares at the macro-level, but also on (subjective) labor market insecurity measured at the individual level through survey data.

Third, the focus on workers in the middle of the earnings distribution goes beyond existing studies that focus on overall income inequality. Focusing on middle-income workers is possible thanks to improved data availability and a renewed interest in the fate of the

⁵ An exception is the OECD (2015b: ch. 4), which provides detailed analysis on the composition between standard and non-standard workers and how the latter entails distributional shifts. However, it does not consider the indirect effects of flexibilization on insiders. Vlandas (2018) finds a negative association between temporary employment regulation and wage inequality, but regulation is only a control variable in his analysis and he does not theorize this effect.

⁶ A nascent experimental literature shows how substantial shares of citizens inaccurately perceive their position in the income distribution (Gimpelson and Treisman 2015; Engelhardt and Wagener 2017; Armingeon and Weisstanner 2018; Fernández-Albertos and Kuo 2018).

middle class. The latter relates to the debate about “inclusive growth” and the question whether excessive inequality impairs the pursuit of economic prosperity.⁷ This research also speaks to the debate on the “declining middle class,” which has mostly focused on the United States (Horrigan and Haugen 1988) and is often explained by the hollowing out of jobs in the middle of the earnings distribution (Bluestone and Harrison 1988; Autor et al. 2003). In international comparison, evidence for job polarization is mixed at best (Goos et al. 2009; Oesch 2013). While interest in the patterns of occupational change has grown (Oesch 2013, 2015; Kurer 2018), there are very few comparative studies connecting it to the trend of income inequality and the relative position of the middle.⁸ Providing detailed data on the relative position of the lower-middle, middle and upper-middle income groups, this study both contributes empirically to these debates and derives theoretical expectations on how the middle is affected by specific labor market policies. It will also address the widespread idea that the “declining middle thesis” has more to do with subjective fears of income and status decline and less to do with objective income changes.

Empirically, this dissertation presents state-of-the-art data on the relative position of middle-income workers. First, I make the case for *income shares* as a useful indicator of the position of the middle class in the earnings distribution. Income shares arguably allow for more precise inferences about specific groups of workers than indicators of overall income inequality (e.g. the Gini index) or wage decile ratios.⁹ Second, I collect survey data on different dimensions of subjective economic insecurity. On the one hand, I can track how insecurity changes over time. On the other hand, the combination with income share data serves as a close match between micro- and macro-level data on risk and income outcomes. Finally, this analysis is complemented by an in-depth case study based on panel

⁷ See, for example, the debate in international organizations (OECD 2015b; IMF 2017).

⁸ One exception is Dallinger (2013) studying the relative position of middle-income groups. She focuses on redistribution through taxes and transfers (and disposable income inequality). Her approach is thus of only limited value for the role of labor market policies. Thewissen et al. (2015) and Nolan et al. (2016) compare real growth rates of median incomes, but they only focus on median earnings and do not differentiate between the size and the structure of the middle class. See also Grabka et al. (2016) for in-depth comparisons between Germany and the US.

⁹ Income shares have become popular in work on top incomes (e.g. Atkinson et al. 2011), but they remain scarcely used in the comparative political economy and welfare state literature (for an exception, see Dallinger 2013).

data from Germany. Not only is Germany a crucial case for this dissertation due to its far-reaching flexibilization reforms, it also has high-quality data (the German SOEP) that allow me to examine several of the mechanisms at the heart of my theoretical framework.

1.3. Plan of the thesis

The next chapter develops my theoretical framework in more depth. I briefly survey the two existing literature strands that are best suited to explain the connection between labor market policy, policy change and income inequality: the liberalization and the dualization perspectives. I then derive my own risk-based framework on flexible employment. The main tenets of the argument are that flexible employment exposes regular workers to the risk of low-wage competition and affects their career prospects by demanding mobile skill profiles based on high educational attainment. In Chapter 3, I describe the research design, data sources, measurement choices and statistical methods employed in the analysis. The empirical analysis encompasses a sample of 25 advanced capitalist democracies in Europe, North America and Oceania. The time period covered ranges from 1985 to 2015.

The empirical evidence builds on a mixed-methods approach with three distinct analyses. Chapter 4 explores the effects of flexible employment policies at the macro level, using data from Luxembourg Income Study (LIS). I show that the deregulation of fixed-term employment and temporary work agencies reduces the income shares of workers in the middle of the earnings distribution. The impact of deregulation is neutral for low-income workers and beneficial for high-income workers. This association holds across a variety of contexts. Only in countries with strong inclusive trade unions does deregulated flexible employment not undermine the position of middle-income workers. Chapter 5 focuses on subjective job insecurity at the individual level, using data from the International Social Survey Programme (ISSP). In deregulated contexts, middle-income workers have higher levels of relative insecurity. Put differently, marginal flexibilization draws the middle closer towards the higher insecurity levels of the poor. Chapter 6 is a case study on Germany, where important flexibilization reforms took place. Using data from the German Socio-Economic Panel (SOEP), it explores several of the micro-level mechanisms and

assumptions put forth in previous chapters. The findings show that middle-income workers indeed suffer relative earnings losses in the aftermath of flexibilization. Long-term wage stagnation has particularly affected middle-income workers with less mobile skill profiles, that is, older workers in low-skilled occupations. This chapter also provides an exploratory analysis on the political consequences of flexibilization. Middle-income workers appear more likely than other income groups to withdraw support for the governments responsible for the reforms.

Finally, Chapter 7 summarizes the main findings and concludes by pointing out the implications of this study for the politics of flexible employment. At first glance, the adverse distributional implications of flexibilization on electorally pivotal middle-class voters bode ill for the political support of the project of flexible employment. The risks of wage stagnation and the spread of subjective economic insecurity towards the middle class suggest some scope for political counter-reactions against liberalization and flexibilization in the labor market. However, contemporary electoral politics are complicated by the requirements to form viable coalitions in a multidimensional policy space. While a reversal of the trend of flexible employment is not (yet) in sight, a closer focus on wage-related risks among middle-class voters remains key to understand the electoral consequences of income inequality.

2 A risk-based framework on flexible employment

This chapter seeks to develop a novel theoretical framework to assess how labor market changes affect regular workers' position in the income distribution. It builds on the premise that the trend towards deregulated flexible employment is a pervasive feature of post-industrial labor markets, and its distributional effects cut across the long-established regime typologies from the “golden age” of the welfare state. I review two dynamic perspectives explaining labor market policy change: the liberalization and the dualization frameworks. Although these are not theories of income inequality, they rely on important – though questionable – assumptions about the distributional impact of policy changes. Neither the dualization nor the liberalization framework offer very specific predictions about how labor market reforms affect different groups of regular workers. Focusing explicitly on income, however, we can expect that flexibilization affects middle-income workers differently than it affects low- or high-income workers. Middle-income earners differ from other income groups because they are vulnerable to low-wage competition and often lack the mobile high-skilled qualification profiles conducive to success in post-industrial labor markets. These middle-income workers' characteristics explain how flexible employment policy affects the distribution of labor market risk and, by extension, their wage bargaining power and position in the earnings distribution.

2.1. Labor market policy and income inequality

Comparative political economists have highlighted the systematic variation in distributional outcomes across countries at least since Gøsta Esping-Andersen (1990) developed his seminal typology of welfare regimes. This variation can be traced back to political power constellations and policy choices in the Fordist industrial era before and after the Second World War. Country differences go hand in hand with distinct welfare state regimes (Esping-Andersen 1990), institutions that coordinate firm behavior (Hall and

Soskice 2001) or electoral institutions (Iversen and Soskice 2006), to name a few. Unsurprisingly, many studies confirm the nexus between these policy regimes and levels of income inequality (Estevez-Abe et al. 2001; Bradley et al. 2003; Pontusson 2005; Huber and Stephens 2014; Thelen 2014). In short, policy configurations in the realm of the welfare state have structured long-term distributional outcomes, setting apart egalitarian Scandinavia from the more stratified continental Europe and the highly unequal Anglo-Saxon countries.

Starting in the 1980s, the trend towards rising income inequality began to spread across Western democracies (OECD 2008). Wealth inequality has reached levels not seen since the late 19th century (Piketty 2014; Piketty and Saez 2014). Economists tend to perceive rising inequality primarily as the result of structural changes in the global economy. Globalization and technological change have put low-skilled workers in routine occupations under pressure from automation and international competition from low-income countries (Tinbergen 1975; Katz and Murphy 1992; Autor et al. 2003; Goldin and Katz 2008; Freeman 2009; Acemoglu and Autor 2011). However, few would argue that globalization and technological change have eroded the long-standing differences in inequality levels across countries. On the contrary, there is abundant evidence that domestic policy configurations mitigate the impact of structural economic changes on distributional outcomes (Iversen and Wren 1998; Brady et al. 2005; Swank 2010).¹⁰ Supply and demand factors alone fail to account for the variation in income inequality across countries (Freeman and Katz 1995). As Anthony Atkinson (2015) highlights, there certainly is nothing automatic about the way structural economic changes translate into inequality dynamics.

Consequently, comparative political economists have shifted their attention to *policy changes* as an alternative explanation for the dynamics of rising inequality. Two policy fields are relevant to this discussion. Welfare state policies focus on changes in redistribution accomplished through the tax-transfer system. The field encompasses both the large literature on welfare state retrenchment (e.g. Pierson 1996; Pierson 2001) and that on the evolution of compensatory redistribution over time (Kenworthy and Pontusson

¹⁰ In a recent study, Weisstanner and Armingeon (2018) show how redistributive policies limit the wage spread between low- and high-skilled workers.

2005; Pontusson and Weisstanner 2018). It is also worth mentioning the burgeoning literature on individual preferences for redistribution that has been building on – and challenging – the seminal Meltzer and Richard (1981) model. The defining feature of these studies is that welfare states and redistributive policies are concerned with the “*ex post*” redistribution of income at any *given* level of market income. In contrast, the field of labor market policy focuses on regulations and policies that have no direct *ex post* redistributive effects. Rather, labor market policies influence the distribution of income “*ex ante*” by setting the rules for entry and exit from the labor market and the procedures for wage bargaining. In other words, the focus is on “pre-distribution” rather than redistribution (Hacker 2011).

This dissertation examines specific labor market policies and their impact on pre-tax/pre-transfer inequality, not differences in ex-post redistribution across countries. The “pre-distributive” effects that labor market policies exert on levels of inequality has largely remained unexplored, with the bulk of existing comparative research focusing on redistributive welfare policies. Jacob Hacker and Paul Pierson aptly summarize this “thin conception of policy”:

“The third hallmark of existing political accounts is that they consider a very narrow range of policies—taxes, the minimum wage, perhaps fiscal and monetary policy—and make limited effort to assess the relative significance of particular policy instruments in generating distributional outcomes.” (Hacker and Pierson 2010: 165)

The lack of research on the distributional effects of labor market policy is not surprising, given that many of these policies have themselves been subject to change in the past decades (as the overview on flexibilization reforms in Chapter 1 has shown, for example).¹¹ Consider two of the most influential perspectives on labor market policy change: liberalization and dualization. As I will argue in a brief review below, these accounts are plagued by a discrepancy: while they have not been conceptualized as explicit theories of inequality, they make implicit (and questionable) assumptions on the distributional implications of labor market policy. These deficiencies invite us to rethinking how changes in labor market policy affect the risks that different workers face and the relative position that

¹¹ As an exception, a few comparative studies have explored the distributional consequences of temporary employment regulation. Vlandas (2018) finds that deregulation increases wage inequality, while Damiani et al. (2018) find an adverse effect of deregulation on the labor share. Neither provides a theoretical conceptualization about how flexible employment regulation affects different groups of workers.

different workers come to occupy in the earnings distribution. Such modifications result in a more explicit and differentiated model of the general connection between labor market policy and earnings inequality.

Liberalization

Liberalization, defined as the “expansion of market relations in areas that under the post-war settlement of democratic capitalism were reserved to collective political decisionmaking.” (Streeck and Thelen 2005: 30), has been the subject of a rich literature. The core question liberalization scholars have sought to answer is whether policy reforms have undermined traditional institutions of social solidarity, such as wage-setting coordination and the role of unions in collective bargaining, which have contributed to compressed earnings distributions (Wallerstein 1999; Rueda and Pontusson 2000; Pontusson et al. 2002; Rueda 2008; Pontusson 2013). The empirical evidence suggests that several policy areas have been liberalized extensively since the 1980s, with the process affecting regulative labor market policy more than redistributive policies (Höpner et al. 2009, 2014). Baccaro and Howell (2011) argue that not only does liberalization involve formal institutional deregulation but also a conversion of the functions that institutions perform (see Streeck and Thelen 2005; Streeck 2009).

The distributional implications of far-reaching labor market policy liberalization are straightforward: more dispersed earnings inequality and higher market inequality (Schäfer 2015: ch. 3). The main mechanism behind this association has to do with the strong individualization of risk that market expansion usually entails (Hacker 2008). In principle, liberalization reverses the role that coordinated bargaining institutions have historically played in contributing to compressed earnings distributions. Thus, liberalization adversely affects the earnings position of the vast majority of workers, all the while only benefiting high-income workers with exceptional market power. Liberalization contributes to politically entrench “winner-take-all” market arrangements with rising income shares of individuals at the top of the income hierarchy (Hacker and Pierson 2010).

Nevertheless, the claim that liberalization has been on the rise in all countries has been challenged (e.g. Hall and Gingerich 2009; Martin and Swank 2012). In an important contribution to this debate, Thelen (2014) shows how liberalization has followed different trajectories in different contexts. The type of liberalization any given economy embarks on and its distributional implications depend on underlying cross-class coalitions. Thelen argues that only in liberal market economies do we observe deregulatory liberalization in the sense of a full dismantling of the institutions of social solidarity (Thelen 2014: 13). In contrast, the Nordic countries have introduced new elements of flexibility while maintaining the inclusive character of coordinating institutions. Finally, in many continental European countries, coordinating institutions remain in place, but are characterized by ever-lower direct coverage and instead promote insider-outsider divides (Palier and Thelen 2010). A key insight from Thelen's reformulation of the liberalization perspective is the need to differentiate between the degree of coordination of labor market policies and their ability to guarantee equal access and coverage (inclusiveness) to all. The tension between coordination and equality is also a theme of the *dualization* approach, which has been influential in explaining the direction of labor market change in coordinated market economies and the rise of inequality between insiders and outsiders.

Dualization

Dualization refers to a process of policy change that creates or deepens institutional divides among working-age individuals (Emmenegger et al. 2012a: 12). While its origins date a while back,¹² it was the seminal works of Rueda (2005, 2007, 2014) and Emmenegger et al. (2012b) that brought dualization to the attention of comparative welfare state research. Rueda (2005, 2007) argues that the increasingly salient divide between insiders and outsiders observable over the past several decades has compelled social democratic parties to represent the interests of insiders. While this claim has generated heated

¹² The conceptual origins of dualization can be traced back to the dual labor market hypothesis (Doeringer and Piore 1971; Berger and Piore 1980) and the insider-outsider theory of employment and unemployment (Lindbeck and Snower 1988; Saint-Paul 1996).

controversy, other aspects of the dualization perspective have remained unexplored. Although it is not a theory of income inequality, the dualization perspective relies on implicit assumptions about the distributional effects of labor market policies.

The implications of dualization for inequality are inherent to the definition of insiders and outsiders. According to Rueda (2005: 62), insiders are workers in secure standard employment, while outsiders are “either unemployed or hold jobs characterized by low salaries and low levels of protection, employment rights, benefits, and social security privileges.” This fundamental distinction in employment security creates distinct labor market policy interests (Rueda 2005, 2007). Insiders will resist attempts to dismantle policies that underpin their secure position, such as employment protection regulation (Emmenegger 2014). Outsiders, on the other hand, would benefit from generous unemployment benefits and activating labor market policies. In contexts where cross-class coalitions between insiders and core employers are feasible, such as much of continental Europe, these alliances have prevented full-scale deregulatory liberalization of labor market institutions and have introduced elements of “flexibilization at the margins” at the cost of outsiders (Palier and Thelen 2010; Hassel 2014; Thelen 2014). There has been very little change in the pro-insider policy of employment protection, but significant liberalization in the policies targeting outsiders, such as the regulation of fixed-term employment or agency work, has taken place (Eichhorst and Marx 2011; Emmenegger et al. 2012b; Vlandas 2013).

This literature explicitly assumes that dualization leaves the position of insiders “more or less constant, while only the position of outsiders deteriorates” (Emmenegger et al. 2012a: 10). However, there are major debates on the appropriate operationalization of insiders and outsiders (see Rovny and Rovny 2017). One approach relies on static insider-outsider measures based on employment status (Rueda 2005, 2007; Emmenegger 2009a). With the exception of “upscale groups,”¹³ all full-time workers with permanent contracts count as insiders. Outsiders are unemployed or atypically employed workers who either hold

¹³ The definition of upscale groups is vague and differs across authors. For Rueda (2007: 39), upscales include “those not employed by someone else or who define themselves as managers.” For Emmenegger (2009a: 137), upscales are insiders who “occupy a higher-grade professional, administrative or managerial position.”

fixed-term contracts or work part-time against their preferences. More recent approaches go beyond the simple dichotomy based on employment status. Häusermann and Schwander (2012) measure outsidership as the risk of unemployment, temporary employment or involuntary part-time employment among workers with similar occupations, age and gender (Schwander and Häusermann 2013). Other approaches further emphasize the variation among different types of outsiders (Emmenegger 2009a; Fervers and Schwander 2015; Häusermann et al. 2015; Marx 2015).

Apart from these operationalization issues, the dualization perspective generates a powerful theoretical conceptualization of labor market policy changes. It points to different policy areas that affect different groups of workers in a non-uniform way. In sum, both the liberalization and the dualization perspectives explicitly deal with policy changes and predict how the trend towards flexible employment might affect different workers. An advantage of both perspectives is that they overcome the widespread notion of institutional equilibria in welfare state regime typologies. They provide evidence that labor market policies in advanced capitalist democracies have changed over the past several decades. Hence, both perspectives are potentially well suited to explain rising market inequality in different welfare regimes. As we have seen, both the liberalization and the dualization perspective generate clear (although implicit) expectations about the effect that a change in labor market policy might exert on income inequality. According to the liberalization approach, the deregulation of flexible employment adversely affects the positions of most workers (except those at the top of the income distribution). According to the dualization approach, marginal flexibilization leaves the position of most workers (except those in non-standard jobs) unaffected.

Shortcomings of the existing literature

The clear expectations with respect to distributional outcomes that the two approaches generate are also their main weakness. In both perspectives, the assumptions about the

winners and losers of policy change are introduced *ex ante*, but not empirically examined.¹⁴ The core of these theories seek to answer two very different questions: that of institutional convergence in the case of the liberalization approach, and that of partisan strategies in the case of the dualization approach. However, as I argue in the rest of this chapter, the underlying assumptions that these frameworks make about the distributional effects of labor market policy are flawed. Unlike what the liberalization literature would have us believe, the risks inherent to flexible employment deregulation are likely to vary between workers with different material circumstances. And in contrast to the expectations of the dualization literature, insiders are not necessarily well suited to cope with an expansion of flexible employment.

First, both the liberalization and the dualization approaches tend to neglect *heterogeneity among regular workers*. As Thelen (2014: 3) points out, some strands of the liberalization literature take the clash between employers' and employees' interests for granted: "[f]or these authors, globalization and the attendant decline in organized labor's power, as well as the resurgence of neoliberal ideology, bode very ill for the future of coordinated, egalitarian capitalism." This perspective, engrained in some version of power resource theory, depicts labor as a unitary actor. The dualization framework, in contrast, explicitly seeks to disentangle different segments of labor from one another. Nevertheless, the group of "insiders" comprises the large majority of the workforce in regular employment, and workers are assumed to share similar risks and political preferences. With respect to flexible employment, these frameworks expect that flexibilization affects all regular workers in the same way regardless of whether they are rich or poor, low-skilled or high-skilled, young or old. However, insiders' policy preferences clearly vary with skills (Emmenegger 2009b). The trend of rising inequality also casts doubt on this assumption. Inequality implies that the position of low-paid workers has deteriorated relative to the position of better-off workers. Rising earnings disparities might be the result of policy

¹⁴ "Dualization describes the widening, deepening, or creation of new institutional dualisms (*output*). Whether political change leads to new inequalities (*outcome*) is an empirical question, which has to be addressed separately. In general, we expect dualization processes to lead to greater divides (i.e., dualization may lead to the marginalization of outsiders or may lead to a polarization between insiders and outsiders), but we acknowledge that dualization without increasing divides is possible if outsider policies are generous." (Emmenegger et al. 2012a: 12)

affecting different workers in a non-uniform way. To understand how workers with diverse socio-economic characteristics are affected by flexible employment policy, it is important to distinguish these groups at the theoretical level. In this dissertation, I will differentiate insiders by their income level. This approach makes it possible to assess which groups of workers are most affected by flexible employment policies and policy changes, and to draw a close connection to changes in income inequality.

The assumption that insiders are insulated from labor market policy targeted at outsiders in “marginal” employment is the second major gap in the literature. The dualization literature – often implicitly – presumes that *insiders and outsiders do not compete with one another*. Palier and Thelen (2010: 122) argue that governments set up different rules for marginal employment, so that atypical workers do not directly compete with core workers:

“The term *atypical jobs* implies that different rules apply. To the extent that such employment is considered “exceptional,” even as it grows, it is also not allowed to compete with the core sector (i.e., putting so much pressure on it as to compromise wages and security there).” (Palier and Thelen 2010: 122)

However, there is growing evidence that the rules for marginal employment may very well have repercussions for workers in core regular employment. First, most temporary workers prefer to have a permanent job (OECD 2014: 151). Job transitions create direct or indirect competition for regular workers, because both regular and temporary workers compete for new jobs. The evidence on whether temporary jobs are indeed “stepping stones” into permanent positions is mixed (Booth et al. 2002; Muffels and Luijkx 2008; Kahn 2010; Cahuc et al. 2016), but the fact that outsiders also compete for new permanent jobs (just like insiders) is problematic to ignore. Second, insiders may feel threatened by low-wage competition from temporary workers. As I discuss below, wages and employment conditions in flexible employment are well below those that regular workers enjoy, and it is very possible that they generate downward pressure on insiders. Evidence from Germany, a prototypical case of extensive dualization, shows that core workers and unions at first supported marginal flexibilization (Palier and Thelen 2010; Hassel 2014). However, core sectors were soon forced to make wage concessions as a result of the low-wage competition, the threat of outsourcing and the increasing requirements for flexibility

that the change in regulations brought about (Eichhorst and Marx 2011; Bosch 2018). Union strategies moved towards more inclusive stances in view of the adverse repercussions that low-wage competition bore on their core workers (Benassi and Dorigatti 2015; Benassi 2016; Marx and Starke 2017). In light of this evidence, this dissertation will explore the indirect channels through which marginal flexibilization may generate pressure on regular workers, and will examine which groups of regular workers will be affected more strongly.

2.2. Income and the asymmetrical risks of flexible employment

In the following, I derive theoretical expectations about how flexible employment policy affects two broad dimensions of wage-related risk: low-wage competition and income prospects. The framework seeks to address the distributional outcomes of these risk constellations under different regimes of flexible employment and to draw inferences about the trend of rising income inequality. Therefore, distinguishing how these risks vary across different income groups is a natural analytical starting point. However, the analysis suggests that income is not the only factor that matters. The risk dimensions of low-wage competition and income prospects cannot be properly understood without accounting for workers' skill profiles and some additional context factors, such as the type of union representation, the degree of dualization and the levels unemployment.

Some definitions of the main concepts are in order if we are to assess the consequences of flexible employment on the position of regular workers. First, my understanding of "flexible employment" closely follows the dualization literature. It encompasses all forms of employment with contractual arrangements that deviate from "regular employment" with unlimited contract duration, obligations for social security contributions and the legal protections that typically come with this form of employment (e.g. dismissal protection). The main type of flexible employment concerns temporary workers: employees with fixed-term contracts or employed on fixed-term job assignments through temporary work agencies (see Venn 2009). The concept of flexible employment can easily be extended to "very atypical" forms of employment, such as freelance work (work without fixed time schedules), very short part-time contracts (mini jobs) or zero-hour contracts

(on-call work) (Broughton et al. 2010). However, these are not the focus of this study because currently there is no consensus on the proper conceptualization of these categories. Some analysts count involuntary part-time workers into the category of atypical work (Schwander and Häusermann 2013; Thelen 2014: 16). However, the majority of part-time workers prefer full-time jobs (Rueda 2007: 15; King and Rueda 2008: 284). Because part-time workers are strongly segregated by gender and welfare state regime (Emmenegger et al. 2012a: 6), I argue that they should be treated as analytically distinct from temporary workers.

The second clarification concerns the distinction between policy output and outcomes. My main interest builds on the variation in the *regulation* of flexible employment through various labor market policies. Of course, policy output influences outcomes such as the incidence of flexible employment among the labor force. However, it is necessary to analytically differentiate regulation from the outcomes of flexible employment. As I will show in the empirical analysis, part of the effect of flexible employment regulation on middle-income workers' position in the earnings distribution has to do with changes in the incidence of flexible employment. However, the latter is endogenous to political and economic conditions and is thus not a sufficient condition for a direct impact on the middle's position. In sum, I use regulations on the use of fixed-term contracts, the duration of fixed-term contracts, the operation of temporary work agencies and the hiring of agency workers (Venn, 2009) to operationalize flexible employment policy, the main explanatory variable in this study.

Low-wage competition

The first tenet of the argument is that low-wage competition from temporary workers will foster wage moderation among regular workers. I argue that middle-income workers face considerable incentives to moderate their wages because they have to defend their higher earnings levels against substantially cheaper alternatives supplied by atypical workers. Such low-wage competition goes against the assumption that insiders and outsiders do not compete with one another, which is prevalent in much of the dualization literature. Palier and Thelen (2010: 122) explicitly state that governments promote marginal flexibilization

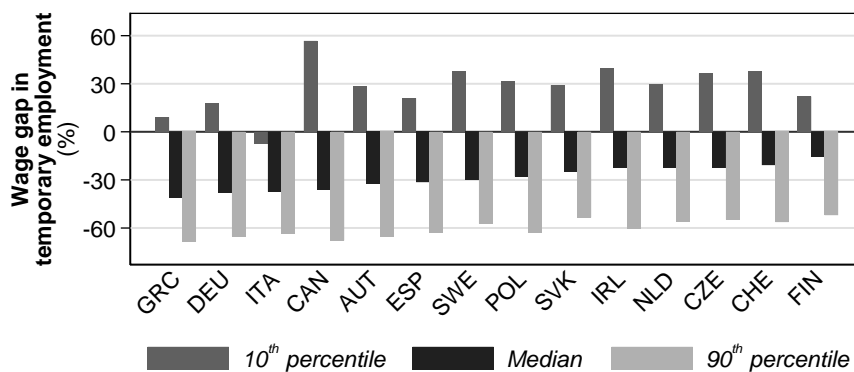
because atypical workers are “not allowed to compete with the core sector (i.e., putting so much pressure on it as to compromise wages and security there).” However, as Eichhorst and Marx (2011) show, expanding flexible employment at the margins always entails the possibility that employers substitute temporary workers for permanent workers. In addition, employers may outsource specific job tasks (Goldschmidt and Schmieder 2017). Because of the lower wage levels in temporary employment, marginal flexibilization “creates downward pressure by threatening to crowd out permanent jobs” (Eichhorst and Marx 2011: 75). Hence, large wage differentials between standard and flexible employment make it possible for low-wage competition to emerge and thus increase the likelihood that regular workers will make wage concessions (Rebien and Kettner 2011).

It is well established that wage levels under temporary contracts are significantly inferior to wages in permanent employment (OECD 2015b: 135-198). Lower wages in temporary employment are related, among other reasons, to incentives for temporary employees to avoid unemployment (Polavieja 2003). Empirical estimates, net of educational attainment and experience, show that the wage premium concomitant to permanent employment in Western Europe ranges from 7% in the UK to 45% in Sweden (Boeri 2011: 1202). These large wage differentials are consistent with the reasoning that regular workers may come under pressure from low-wage competition with outsiders (Eichhorst and Marx 2011). However, it is less clear which groups of regular workers will be most at risk of low-wage competition from the cheaper alternative of temporary workers. I argue that the threat of low-wage competition increases as earnings rise. Even if all workers were to face a wage loss from temporary employment, middle- and high-income workers are at risk of higher earnings losses in absolute terms, while the earnings losses of low-income workers are smaller. In subjective terms, the middle stands to perceive the threat posed by low-wage competition more acutely, because in absolute terms it has more to lose than low-income workers. This interpretation of loss aversion is consistent with prospect theory (Kahneman and Tversky 1979, 1984).

To illustrate the non-uniform impact of low-wage competition for regular workers, Figure 2.1 displays the wage differentials between temporary workers and regular workers using data from the Luxembourg Income Study around the year 2007 (for details on the sources and operationalization, see Chapter 3.1). In all 14 OECD countries for which data on

fixed-term contracts are available, there is a large wage gap between median wages in permanent employment and median wages in temporary employment. On average, the wage penalty associated with temporary employment is around 29% for middle-income workers (black bars). Middle-income workers face a clear and noticeable risk of earnings losses from temporary employment. Flexible employment conditions indeed imply that middle-income workers face low-wage competition from temporary workers, who only earn about a third of their wages.

Figure 2.1: Earnings in temporary employment relative to permanent employees with low, middle and high incomes



Note: Estimated from LIS microdata for the year of 2007 (except Italy 2008, Sweden 2005). Countries sorted by the size of wage gap between median wages in temporary and permanent employment. See Chapter 3 for details on the sample and operationalization.

Source: LIS (2017), figure taken from Weisstanner (2017).

For low-income permanent workers (dark grey bars), the case is much more ambiguous. The typical (median) wages of their temporary counterparts are plainly *above* their wages in all countries except Italy. In subjective terms, then, it is far from certain whether flexible employment entails an obvious wage loss for low-income workers. Of course, low-income permanent workers are also exposed to competition with low-income temporary workers, and they might face a wage penalty of similar dimensions in relative terms. However, it is difficult to perceive how much exactly their wages would decline by, both in relative and in absolute terms. It is likely that in many countries, the wage gaps between the majority of temporary workers and low-income regular workers are rather small, which reduces the pressure of low-wage competition and the incentives for employers to substitute regular jobs for cheaper workers with non-standard contracts. This is clearly

not the case for middle- and higher-income workers, where low-wage competition naturally provides employers with a significant chance to save labor costs. Middle-income workers have to defend their wages from competition with the noticeably lower-paid non-standard workers. These wage differentials are the source of low-wage competition among better-off regular workers. Inferior wage conditions are highly visible and likely to become a salient issue for regular workers as they undermine the latter's wage bargaining position and generate pressure for wage moderation (Eichhorst and Marx 2011; Rebien and Kettner 2011).

Income prospects

In addition to the risk of low-wage competition, a second risk dimension of flexible employment concerns regular workers' long-term career prospects. Low-wage competition stems from static wage gaps between permanent and temporary workers. However, it is clear that the threat of low-wage competition is not equally credible for all workers. Better-off workers often acquire valuable skills and employers are unlikely to replace them and fill their positions with cheap temporary workers. Building on a large literature in labor sociology and labor economics, I argue that flexible employment increases the risk of adverse career prospects only for low-skilled workers. Middle-income workers are often at risk of adverse long-term income prospects, mainly because very few of them have a higher education degree. In what follows, I will focus on two facets of income prospects that workers typically face over the course of their careers: the risks of job replacement and the ability to secure continuous wage increases.

The risk of job replacement is intimately linked to the regulation of flexible employment. Where it is easy to create temporary jobs, permanent workers are at risk of being replaced by temporary workers. A large literature has identified workers' skill profiles as the main determinant of "replaceability" (Goldthorpe 2000: 206-229; Emmenegger 2009b; Eichhorst and Marx 2015). Low-skilled workers typically perform tasks that require little investment in training or education. Hence, they are fairly easy to substitute and have little certainty that they will remain in a long-term employment relationship in their cur-

rent position. The case is more complicated for high-skilled workers. In the original formulation by Goldthorpe (2000: 206-229), *firm-specific* skills are most useful to employers. In contrast, workers with *general skills* (transferable across firms, e.g. many academic skills) are highly replaceable in theory because such skills are not tied to one firm or a specific industry; employers can easily find other highly qualified workers to perform general tasks in the firm (Eichhorst and Marx 2015: 6).

However, there are reasons to doubt the intuition that workers with general skills are at a high risk of job replacement. First, focusing solely on skill specificity may obscure the more important distinction between high- and low-skilled workers. As Streeck (2011) discusses, the value of general and specific skills for workers and employers is not always clear and is likely to differ by country.¹⁵ Second, recent evidence suggests that firms invest substantial resources in the general skills training of their employees (Acemoglu and Pischke 2001; Kessler and Lülfesmann 2006; Lazear 2009).¹⁶ Some of these authors even question the basic existence of firm-specific skills that are only valuable in the firm where the training takes place (Lazear 2009). These doubts imply that the distinction between general and specific skills matters less for job replacement risks than the recent literature on non-standard employment has assumed (Eichhorst and Marx 2015). Focusing exclusively on relative skill specificity is misleading for low-skilled workers with neither general nor specific skills (Emmenegger 2009b: 412). When tackling the question of whether regular workers are at risk of being replaced by temporary employees, recent empirical work instead focuses more on the role of cognitive skills. As the OECD (2014: 155-157) documents, fixed-term jobs come with substantially lower literacy and numeracy skills.

Against this background, this dissertation focuses on *tertiary education* as a proxy for workers' job replacement risks under flexible employment conditions. Tertiary-educated workers are likely to have obtained combinations of high general or specific skills that

¹⁵ In his own words: "[...] general skills need not always be high, and high skills not always broad or portable; that specific skills are not necessarily low, and low skills not always immobile; and that occupational skills in some countries may be as high and broad as academic skills in others, and far from firm or even industry-specific." (Streeck 2011: 27)

¹⁶ This finding fits uneasily with the expectations put forth by the original formulation of human capital theory (Becker 1962) and, also, the literature on varieties of capitalism (Estevez-Abe et al. 2001; Iversen and Soskice 2001).

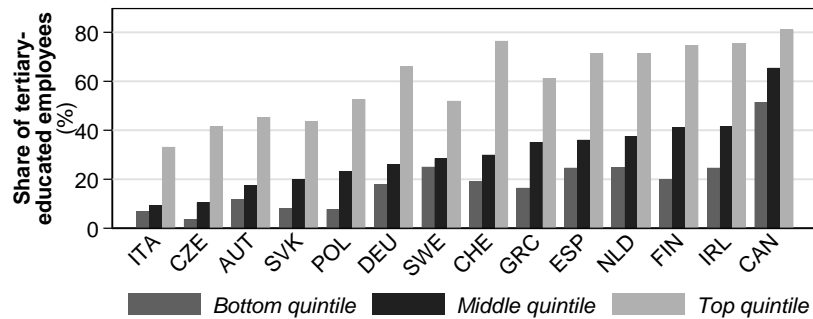
make them valuable enough to retain in a long-term employment relationship. I do not claim that tertiary educational attainment is a complete explanation of job replacement risks; rather, I maintain that it is a meaningful proxy and aligns with the empirical finding that education is a major determinant of non-standard employment (OECD 2014: 155-157).

The role of skills – based on tertiary educational attainment – becomes more apparent if we consider a second aspect of income prospects over the long-term of workers' careers: the ability to secure wage increases. A large empirical literature demonstrates the close nexus between education and wage development (Goldin and Katz 2008; Hanushek et al. 2015; OECD 2015a: ch. 4; Weisstanner and Armingeon 2018). In the context of flexible employment, the role of education gains importance. A university degree does not only serve as an insurance against job replacement, the qualification also has a broader “signaling” value (Spence 1973). It signals the ability to adapt to flexible work environments, transition between jobs and pursue careers that do not depend on having a single job over one's lifetime (see e.g. Scherer 2004; Morel et al. 2012). The signaling value of education also shows why the strict separation of insiders and outsiders can be misleading. Even if some highly educated workers do end up in non-standard employment (Marx 2015: 25), they may use these posts voluntarily to advance their own career prospects. Hence, tertiary education has the double advantage of reducing job replacement risks and improving workers' prospects for long-term wage growth. In contrast, the lower workers' skill levels are, “[...] the higher the incentive to offer (and the pressure to accept) atypical contracts or low wages.” (Eichhorst and Marx 2015: 6)

To sum up, this logic leads to the expectation that a deregulated regime of flexible employment enhances the beneficial role that skill profiles play in reducing replacement risks and improving career prospects. Much like the risks associated with low-wage competition, the risks for future income prospects are unevenly distributed across different workers. The close correlation between education and wages implies that the risks for future income prospects differ across income groups. Few low-income workers are tertiary-educated, but many of their high-income counterparts are. The share of tertiary education among middle-income workers is more varied. Using the same data for 14 OECD countries that Figure 2.1 employs, Figure 2.2 shows that tertiary educational attainment

is not very common among middle-income regular workers (black bars). In most countries, the share of tertiary-educated workers is quite similar among middle-income workers and low-income workers. The liberal Anglo-Saxon countries, as illustrated by the case of Canada, are an exception with high rates of tertiary education among all income groups. However, the general pattern is that the share of tertiary-educated workers is substantially lower among middle-income employees compared to high-income workers. This large gap in skills paves the road for substantial risk adversely affecting the long-term income prospects of middle-income workers in contexts of flexible employment.

Figure 2.2: Share of tertiary education among low/middle/high-income workers



Note: Estimated from LIS microdata for the year of 2007 (except Italy 2008, Sweden 2005). Countries sorted by the share of tertiary-educated middle-income employees. See Chapter 3 for details on the sample and operationalization.

Source: LIS (2017), figure taken from Weisstanner (2017).

Hence, tertiary education helps to explain the way that flexibilization affects workers' wage-related risks. However, other socio-economic characteristics may also matter and may complement the role of skills. First, flexibilization implies that wage-related risks vary with *age*. Wages typically rise with age and decline somewhat as workers approach their retirement age (OECD 2006: 66ff.). Yet, the main source of income risk for older workers is job replacement. This can lead to severe income losses because employers are cautious of hiring older workers (OECD 2006: 35). Flexibilization increases replacement risks by allowing competition with cheaper atypical workers, which puts older workers in a difficult wage bargaining position.¹⁷ Second, *occupational* characteristics also shape

¹⁷ Paradoxically, the dualization literature sometimes portrays young workers as outsiders in post-industrial labor markets, while older workers are said to enjoy the privileges of job protection (Schwander and Häusermann 2013: 253). This one-sided view tends to ignore that income prospects of older workers can be precarious, since the latter are at risk of job replacement and have little scope for wage increases.

both replacement risks and future wage prospects (Eichhorst and Marx 2015). Perhaps the most widely-accepted distinction is that routine occupations are at risk to be substituted because of advances in technology (Autor et al. 2003; Goos et al. 2014). Due to the risk of automation, routine workers face long-term insecurity about their future income prospects (Thewissen and Rueda 2017; Kurer 2018).

Age and occupation can be seen as complementary to the role of skills in my theoretical framework. I do not intend to elaborate on how labor market risks differ by age and occupation in detail. Rather, I aim to present two general types of workers' skill profiles in a highly stylized way. The first skill profile is based on "mobile assets" (borrowing the term from Hooghe and Marks 2018), and is composed of younger workers with tertiary education degrees who are employed in occupations that do not rely on specific job tasks at risk of automation. The second skill profile is built upon "immobile assets," and is typical of older workers without tertiary education in routine occupations.¹⁸ According to the framework discussed above, high-skilled workers with mobile skill profiles have favorable prospects for career advancement in environments with deregulated flexible employment. They are less bound to jobs requiring specific skills, can switch easily across firms and industries, and their educational attainment signals an ability to adapt to changing labor market conditions. In contrast, low-skilled workers with immobile skills are far more exposed to the risks concomitant to loose flexible employment regimes. They are often bound to a specific job, lack skills valuable to other firms or industries, and are likely to experience substantial earnings losses in the event of job loss. To reiterate, this type of immobile skill profile is quite common among middle-income employees – far more common than among high-income employees.

Summary and observable implications

To sum up, flexible employment increases regular workers' exposure to two types of wage-related risks: low-wage competition and adverse income prospects. I have argued

¹⁸ Of course, this highly stylized account of skill profiles resembles the distinction between general and specific skills. In line with Iversen and Soskice (2001), I conceive the general/mobile skills profile to be advantageous in deregulated labor markets, but in contrast to these authors, I take into account that the likelihood for workers to obtain mobile or immobile skill profiles varies strongly by income.

that middle-income workers are in the unfortunate position of being vulnerable to both risks. In contrast to low-income workers, low-wage competition is a severe issue for middle-income workers because they have to defend their higher wage levels compared to the cheaper alternative of atypical workers. In contrast to their high-income counterparts, middle-income workers are characterized by lower educational attainment and less mobile skill profiles, and these traits render them vulnerable to the risk of job replacement and the prospect of lower wage increases. The combination of the two risk types implies that the wage bargaining position of middle-income workers visibly deteriorates in an environment of deregulated flexible employment.

The testable implications of this argument concern outcomes on two dimensions. First, the adverse impact of flexibilization on middle-income workers' wage bargaining position entails a noticeable deterioration of their relative position in the earnings distribution. This is the "objective" distributional outcome of flexibilization. It reflects middle-income workers' incentives to react with wage moderation in the face of their higher risk levels associated with competition from outsiders (Eichhorst and Marx 2011). Therefore, my first hypothesis is as follows: *In contexts of deregulated flexible employment and following major deregulation reforms, the relative position of middle-income workers in the earnings distribution declines* (hypothesis 1).

Second, flexibilization affects wage-related risks in another, more "subjective" way. Low-wage competition and adverse income prospects should change the way different income groups perceive labor market risks. It is very hard to demonstrate that the policy context that individuals work in affects their incentives for wage concessions (Eichhorst and Marx 2011; Rebien and Kettner 2011) without finding evidence for an association between policy context and the subjective perception of job risks, wage pressure and income prospects. Accordingly, this leads to my second hypothesis: *In contexts of deregulated flexible employment and following major deregulation reforms, middle-income workers express higher levels of subjective job insecurity relative to other income groups* (hypothesis 2).

Of course, the objective and subjective dimensions overlap in the sense that they originate from the same sources of wage-related risk (low-wage competition and income prospects), which in turn erode the wage bargaining position of middle-income workers. Therefore, the two outcomes are likely to be closely correlated. However, the dynamics explained above leave room for considerable ambiguity and even divergence between objective and subjective outcomes. For example, it is not clear whether workers (or unions) always consciously choose to make wage concessions. Another possibility is that risk perceptions originate at the subjective level and only incrementally translate into losses of wage bargaining power. Precisely because of this ambiguity, and given the lack of data to trace every facet of workers' and collective actors' behavior in wage negotiations, it is important to study both objective distributional outcomes (different groups' relative earnings position) and subjective perceptions of risk (insecurity).

2.3. Scope conditions of the argument

So far, the argument rests on a risk-based framework at the individual level. However, the way in which flexible employment policies affect individual workers' risk is likely to depend upon contextual factors as well. Obviously, this is the case because wage setting rarely takes place in purely individualized settings where all workers negotiate wages on their own and in line with their own wage bargaining power. Therefore, I will discuss three scope conditions of the argument which are derived from different strands of the literature on labor market policy: the inclusiveness of trade union representation, the effects of dualization (the degree of insider protection and the actual incidence of flexible employment), and the role of unemployment. There are good reasons to expect that all three of them influence the way flexible employment affects the distribution of risk across individual workers. However, as I argue below, these context factors are more likely to condition (or moderate) the strength of the distributional effects rather than to question the basic risk mechanisms altogether.

Unions

It is well established that strong trade unions and centralized wage bargaining contribute to lower earnings inequality (Wallerstein 1999; Rueda and Pontusson 2000; Pontusson et al. 2002; Pontusson 2013; Kristal and Cohen 2017). In line with this thinking, the collective organization of workers in trade unions might also moderate the distributional effects that flexible employment policy has on different income groups. Unions differ in their degree of “inclusiveness,” since low-income workers are often less organized in comparison to their high-income counterparts (Thelen 2014; Mosimann and Pontusson 2017; Vlandas 2018). The unequal organization of lower-income workers has implications for the extent to which the exposure of risk from flexible employment policies is shared uniformly across different income groups.

In countries with non-inclusive unions, the less encompassing organization of low-income workers is an obstacle to the pursuit of solidaristic wage policies and is associated with higher earnings inequality (Mosimann and Pontusson 2017: 450-454). Higher earnings inequality also implies larger (absolute) wage gaps among different income groups and in relation to non-standard employment. The absence of encompassing unions enables middle-income workers to bargain for wages that are significantly higher than those of low-income workers. These higher wage differentials in turn increase the scope of low-wage competition, one of the risk channels of deregulated flexible employment. Given the more dispersed earnings distribution, middle-income workers will be more exposed to competition from cheap atypical workers in deregulated environments and will face potentially large earnings losses if they become replaced. Non-inclusive unions could still take their core workers’ worries about low-wage competition with outsiders into account (Eichhorst and Marx 2011; Benassi and Dorigatti 2015). However, non-encompassing unions lack the tools necessary to prevent the large wage differentials (both among the regular workers and relative to atypical workers) that give rise to low-wage competition, as better-off workers face competition from cheaper atypical workers.

Different dynamics are observable in contexts where unions are inclusive and represent large shares of workers across all income groups. In such settings, solidaristic wage policies result in compressed earnings distributions (Mosimann and Pontusson 2017: 450-

454). These lower wage differentials reduce the exposure of better-off workers to low-wage competition, because wages are more closely aligned among all income groups and the risk of low-wage competition is spread more evenly across income groups. Perhaps more importantly, inclusive unions are able to coordinate their wage demands across different sectors and better accommodate the externalities of their wage demands (Calmfors and Driffill 1988; Wallerstein 1990). On the one hand, this implies that more productive (high-income) workers would make concessions in their wage demands in favor of higher wage increases for less productive (low-income) workers. On the other hand, as Benassi and Vlandas (2016) show, countries with encompassing unions also take a highly inclusive stance towards temporary workers. In these settings, outsiders are likely to be covered by the same collective wage agreements as regular workers, a provision that reduces the scope for low-wage competition even when flexible employment is deregulated. This leads to the expectation that deregulated flexible employment only leads to higher risk exposure for middle-income workers where unions are non-encompassing.

Dualization

The dualization literature highlights a second scope condition that might influence the distributional effects of flexible employment: the interplay of different dualizing policies and the actual manifestation of insider-outsider divides in the labor market. A question that has so far remained unexplored in this dissertation is whether flexible employment policies actually result in high shares of non-standard employment. The answer is likely to depend not only on flexible employment policy, but also on employment protection for regular workers (Rueda 2007; Emmenegger et al. 2012a). In prototypical cases of dualization, such as Germany, deregulation at the margins coexists with high levels of employment protection for insiders (Beramendi et al. 2015: 11). Stringent rules regulating dismissals might incentivize employers to create new jobs in the realm of flexible employment rather than supply additional regular contracts. According to this perspective, then, low wage inequality among insiders may come at the cost of less secure jobs and a higher number of outsiders (Polavieja 2003; Maurin and Postel-Vinay 2005; DiPrete et al. 2006; Barbieri 2009; Barbieri and Cutuli 2016).

However, the effects that employment protection and the incidence of non-standard employment exert on the wage-related risks of flexible employment are not unambiguous. First, strong employment protection for regular workers also reduces their risk of job replacement, because terminating unlimited contracts is costly, and thus complicates the procedures for employers to fill regular positions with temporary workers. These dynamics work to contain the risk-enhancing effects of marginal flexibilization. Workers in regular employment could thus be reasonably expected to harbor more positive subjective perceptions and to worry less about losing their jobs. Second, even where the actual share of non-standard workers is low, the risks of low-wage competition and job replacement might still apply. Even if temporary workers pose no immediate threat today, regular workers might well be (made) aware that some of their job tasks could be outsourced to temporary workers at some point in the future. Such a low incidence of flexible employment despite deregulated labor markets is observed in the liberal regimes of the Anglo-Saxon countries. Notwithstanding the low prevalence of dualization outcomes, these settings are prone to labor market adjustments based on high wage inequality and rising wage differentials (Barbieri 2009). In sum, the empirical question of whether the risk effects of flexible employment regulation should or should not be amplified in contexts with strong employment protection or a high incidence of flexible employment remains open.

Unemployment

As we have seen in Chapter 1 (Table 1.1), flexibilization reforms have often been introduced during periods of high unemployment. This poses the question of whether the risks from flexible employment that different income groups experience depend on macroeconomic conditions in general and unemployment trends in economic downturns in particular. There is some theoretical ambiguity about the direction, if any, in which unemployment is supposed to mitigate the distributional effects of flexible employment. At first glance, it seems likely that unemployment reinforces the adverse effects that flexible employment exerts upon the position of middle-income workers. Unemployment often causes “inequality shocks” because low-skilled workers are disproportionately affected by

economic downturns (Pontusson and Weisstanner 2018). The correlation between flexibilization and adverse distributional outcomes for low-skilled workers might be spurious if flexibilization reforms are introduced during periods of high unemployment and the latter drives inequality up.

However, how unemployment affects the risks of workers in the middle of the income distribution is not entirely clear. First, all the evidence points to a strong concentration of unemployment risks among low-income (Schwander and Häusermann 2013: 257-259) and low-educated workers (Oesch 2010; Pontusson and Weisstanner 2018). As a result, unemployment should affect low-income workers more than their middle-income counterparts. Second, although unemployment helps explain the timing of flexibilization reforms, the effects of flexibilization are not limited to economic downturns but continue taking place during economic recoveries. Flexible employment regulation is likely to influence the type of jobs created after downturns, that is, whether new workers are hired for a fixed term or under unlimited contracts. Overall, it seems likely that unemployment affects low-income workers more directly than it influences their middle-income peers and that the effects of flexibilization are not limited to economic downturns alone. The question of whether unemployment moderates the risk that flexible employment imposes on regular workers in the middle of the earnings distribution also remains open to empirical scrutiny.

2.4. Summary

This dissertation theorizes the relationship between flexible employment policy and earnings inequality by differentiating between two types of wage-related risks common among regular workers: low-wage competition and long-term income prospects. My framework departs from the questionable assumption in the dualization literature that regular workers (insiders) are insulated from marginal flexibilization. I argue that the very particular risk constellation that middle-income workers face adversely affects their position in the earnings distribution (hypothesis 1) and their perceptions of subjective job insecurity (hypothesis 2). The risk-based framework takes into account the heterogeneity of regular workers and sheds light on the risks and income prospects that workers in the

middle of the earnings distribution experience under flexible employment conditions. Moreover, the framework contributes to the better understanding of the dynamics behind recent the trends of rising inequality – trends which increasingly cut across welfare state regimes – by focusing on the policy domain of flexible employment, which has been marked by major deregulation over the past decades.

3 Data and methods

To compare the effects of flexible employment policies on the position of middle-income workers, I rely on a mixed-methods approach split into three parts. The first part (Chapter 4) studies the effects of flexible employment regulation on income inequality at the macro level. The main question of interest is whether deregulated flexible employment leads to a decline in middle-income workers' income shares due to the latter's unique risk exposure to low-wage competition and adverse income prospects. The second part (Chapter 5) examines the individual-level implications of the theoretical argument by exploring how regulation affects subjective labor market insecurity. The third empirical chapter (Chapter 6) focuses on the underlying causal mechanisms at work in the example of Germany using high-quality panel data and carries out an exploratory analysis to address the political implications of flexible employment policies.

The sample consists of 25 advanced capitalist democracies and member states of the Organisation for Economic Co-operation and Development (OECD). The country selection criteria were informed by data availability of the two main sources of survey data. Table 3.1 groups the 25 countries based on five conventional welfare state regimes (Esping-Andersen 1990) and geographic proximity. The sample consists of six countries each from conservative continental European and liberal Anglo-Saxon welfare states. It also includes four Nordic and four Mediterranean countries. In an effort to extend the analysis beyond the scope of many studies in comparative political economy, the sample further includes several post-communist EU member states: the four Visegrád countries and Slovenia. As Table 3.1 indicates, the samples of the analysis based on Luxembourg Income Study (LIS) data in Chapter 4 and the analysis based on International Social Survey Programme (ISSP) data in Chapter 5 are slightly different from one another.

Table 3.1: The sample of 25 OECD countries

Country	LIS	ISSP	Country	LIS	ISSP	Country	LIS	ISSP
Austria	x		Australia	x	x	Czech Republic	x	x
Belgium	x	x	Canada	x	x	Hungary	x	x
France	x	x	Ireland	x		Poland	x	
Germany	x	x	New Zealand		x	Slovak Republic	x	
Netherlands	x	x	United Kingdom	x	x	Slovenia		x
Switzerland	x	x	United States	x	x			
Denmark	x	x	Greece	x				
Finland	x	x	Italy	x				
Norway	x	x	Portugal		x			
Sweden	x	x	Spain	x	x			

Notes: LIS=Luxembourg Income Study data available (Chapter 4); ISSP=International Social Survey Programme data available (Chapter 5).

Source: Own elaboration.

The analysis seeks to cover the entire period stretching from the early 1980s – the years that mark the onset of rising inequality in the 20th century (Piketty 2014) – to the present. However, data availability imposes some constraints. Detailed data on flexible employment regulation are not available until 1985; I have thus restricted the analysis of earnings inequality to start in 1985. For the analysis of subjective insecurity, a coarse first survey is available in 1989, yet the main variables of interest only become available in 1997. Finally, I use panel data starting in 1984 for the in-depth study of the German case.

3.1. Earnings inequality (Chapter 4)

The first component of the empirical analysis assesses the impact that flexible employment policy exerts on the position of middle-income workers in the earnings distribution.¹⁹ It relies on a time-series cross-sectional analysis (TSCS) at the macro level for 22 OECD countries between 1985 and 2014.

¹⁹ This sub-chapter draws closely on a journal article currently under review and previously published in the LIS Working Paper series (Weisstanner 2017).

Data

Income shares

To capture the expected asymmetrical shifts in earnings associated with deregulated flexible employment, I rely on the *income shares* of each income quintile as dependent variables – i.e. the percentage of total income going to the bottom, lower-middle, middle, upper-middle and top quintiles. Most studies use wage decile ratios to measure earnings inequality, but these ratios fail to differentiate trends in the middle of the distribution (Dallinger 2013) and to detect synchronous trends. For example, a simultaneous decline in the earnings of bottom- and middle-income groups leaves the ratio between median and bottom incomes (the 50-10 wage decile ratio) unchanged. Income shares are able to capture this sort of trends. Nevertheless, despite their straightforward interpretation, income shares are rarely used in research on inequality, apart from the notable exception of works on top incomes (Atkinson et al. 2011).

Aggregated income shares are calculated using Luxembourg Income Study (LIS 2017) microdata from harmonized income surveys. In order to examine the distributional shifts taking place specifically among labor market insiders, I restrict each LIS sample to full-time dependent employees aged 25-59. Unfortunately, information about the type of job contract is missing for more than half of the individuals in the final sample; the samples therefore include both permanent and temporary employees. However, results remain essentially the same when part-time employees and/or the unemployed are added to the sample as a robustness check. The earnings used to calculate income shares comprise income from paid employment before taxes and exclude capital income. Following standard LIS practices, incomes are equivalized using the square root of household size, bottom-coded at 1% the equivalized mean and top-coded at 10 times the non-equivalized median. Although the unit of observation is the person level, incomes refer to equivalized household-level earnings due to better data availability. Results with income shares based on person-level earnings are substantially similar despite reduced sample size (see Appendix 4.1). After the missing values in the explanatory variables are accounted for, the

final aggregated sample consists of an unbalanced panel of 22 countries, each covering between 4 and 10 time points (N=144).²⁰

Explanatory variables

The main independent variable in this study is the *regulation of temporary employment* as an indicator of flexible employment policy. To operationalize it, I rely on the OECD Employment Protection Legislation indicators (Venn 2009; OECD 2017a). The latter distinguish three sub-items for both fixed-term contracts [FTC] (valid cases for FTC, number of successive FTC and maximum cumulated duration of FTC) and temporary work agencies [TWA] (types of TWA work allowed, number of TWA renewals and maximum cumulated duration of TWA assignments). The composite indicator for temporary employment regulation, averaged across LIS survey observations, varies between 0.25 (most deregulated) and 4.88 (most regulated) in my sample. Because the distribution of the indicator is clearly right-skewed, I use its logarithm in the multivariate analyses.²¹

The first scope condition in the theoretical argument expects that encompassing unions moderate the asymmetrical effects of deregulated flexible employment. Following Vlandas (2018), I use *union density* to measure the degree to which unions cover workers across the income distribution (union inclusiveness), which is the pre-condition for solidaristic wage policies that reduce the differential impact of temporary employment on different income groups. As Mosimann and Pontusson (2017: 454) demonstrate, countries with high union density have a relatively equal organization of low-income workers compared to high-income workers. I use data on union density from Visser (2015). The indicator ranges from 8% to 87% in my sample.

The second scope condition is operationalized by a variety of dualization indicators. First, the number of temporary workers as a proportion of all employees is an indicator of dualization outcomes. This variable, obtained from the OECD (2017b), is right-skewed just like the EPL indicator of temporary employment regulation. Therefore, I use its logarithm to measure the incidence of temporary employment. It is only available for a total of 128

²⁰ I did not include countries where only one or two time points are available (Estonia, Iceland, Japan, Luxembourg and Slovenia), but the results are robust to the inclusion of these countries.

²¹ Substantially similar results are obtained without the log transformation.

country-years out of all 144 country-years in the main models. The second indicator concerns an alternative policy that also matters for dualization processes, namely the employment protection of workers with permanent contracts. This variable is based on items from the same EPL indicator compiled by the OECD (2017a). Third, I check whether the effects of temporary employment regulation are conditional on the divergence in the regulation levels between regular and temporary workers (EPL for regular workers minus EPL for temporary workers).²² Finally, I include unemployment rates (from Armingeon et al. 2016) both as an explanatory variable and as a moderator variable for the argument's third scope condition.

The analysis relies on a battery of control variables that are standard and widely used in studies on earnings inequality. The *centralization of wage bargaining* is expected to be negatively related to earnings inequality (Wallerstein 1999). *Service employment* as a share of total employment relies on low-skilled labor with limited scope for productivity growth and thus contributes to higher inequality (Pontusson et al. 2002). *Technological change*, measured as total factor productivity, and *trade openness*, operationalized as the sum of all exports and imports in proportion to GDP, increase the demand for high-skilled workers and earnings differentials (Goldin and Katz 2008). All control variables are obtained from Armingeon et al. (2016), with the exception of wage bargaining centralization (Visser 2015) and technological change (European Commission 2016). Given that the LIS data are available in waves every few years, all annual explanatory variables are averaged across the period between a given LIS survey year back to one year after the previous LIS survey was fielded (Lupu and Pontusson 2011: 324).

Methods

I use error correction models (ECM) to model the relationship between temporary employment regulation and income shares. ECMs are appropriate for both stationary and

²² All three dualization indicators are not included as explanatory variables in the main regression models, due to missing data for the incidence of temporary employment (N=128 compared to N=144) and due to high multicollinearity between employment protection for regular workers and logged temporary employment regulation ($r=0.72$, $N=144$). The three variables are included, however, in interaction models with temporary employment regulation and dualization indicators.

cointegrated data, and have become increasingly popular in comparative political economy (De Boef and Keele 2008; Beck and Katz 2011). Here, the main reason why I choose the ECM has to do with the fact that it does not rely on the restrictive assumption that the effects of my independent variables immediately fade away after a single time period. Instead, the ECM allows to model long-term associations, which is more suitable given the non-uniform time periods between consecutive LIS observations. Following De Boef and Keele (2008), I start with the general ECM:

$$\Delta Y_{it} = \alpha_0 + \alpha_1 Y_{it-1} + \beta_0 \Delta X_{it} + \beta_1 X_{it-1} + \varepsilon_{it} \quad (1)$$

Tests for simplifying the general model reveal that the short-run and long-run coefficients (β_0 and β_1) are not significantly distinct from each other for my main explanatory variables. These results imply that the dynamic effects of the explanatory variables can be accurately captured by a single parameter for each variable. Imposing the restriction that $\beta_0 = \beta_1$ results in the “partial adjustment” ECM model (De Boef and Keele 2008: 190):

$$\Delta Y_{it} = \alpha_0 + \alpha_1 Y_{it-1} + \beta_0 X_{it} + \varepsilon_{it} \quad (2)$$

This ECM variant is functionally equivalent to a lagged dependent variable (LDV) model (Beck and Katz 2011). The coefficient β_0 captures the short-run effects of independent variables on income share equilibria over one period.²³ The ECM is estimated using OLS with panel-corrected heteroskedastic standard errors. Even after the inclusion of lagged Y-levels, some autocorrelation remains in the error term. All models therefore include AR(1) error processes (country-specific, due to the unbalanced dataset), estimated through Prais-Winsten transformation (Beck and Katz 1995).

The models do not include country fixed effects (FE) due to both theoretical and methodological considerations. First, my theoretical argument predicts an effect of deregulated flexible employment not only due to changes within countries, but expects a perpetuated equilibrium relationship between flexible employment regulation and income shares. FE-regressions are hardly suited to distinguish the direction of changes (the theory is unclear

²³ For ECMs based on stationary data, a necessary condition is that α_1 lies between -1 and 0 (De Boef and Keele 2008: 193). This is always the case in the models below. I also find no evidence of unit roots.

whether increasing regulation should lead to higher middle-income shares) and the magnitude of changes (minor deregulations in one country have the same weights as major reforms in another). Second, FE-models risk yielding biased estimates in dynamic specifications because the centered lagged dependent variable and the error terms are correlated (“Nickell bias”). This is especially likely in settings with a small number of time periods (Nickell 1981), which is the case in this dissertation. Third, the indicator of temporary employment regulation is time-invariant for several countries. These countries, among them all Anglo-Saxon countries, *de facto* drop out of an FE-analysis, leading to selection bias in the remaining sample. A sounder approach to isolating the effects of deregulation reforms would have to use longitudinal panel data within countries, which I do for the case study of Germany in Chapter 6. As an approximation, Chapter 4 descriptively discusses the trajectories of the countries undergoing major deregulations.

3.2. Subjective insecurity (Chapter 5)

The second empirical analysis presented in Chapter 5 explores the subjective outcome of risk perceptions.²⁴ It explores how subjective job insecurity differs across income groups and how it varies with flexible employment regulation.

Data

The analysis compares 19 OECD countries,²⁵ using pooled survey data from the International Social Survey Programme (ISSP) modules on “Work Orientations” carried out in three waves in 1997, 2005 and 2015; and in 1989 for a subset of the analysis (ISSP Research Group 1991, 1999, 2013, 2017). In comparison to alternatives such as the European Social Survey, the ISSP provides the largest source of survey data available to

²⁴ This sub-chapter draws closely on a working paper presented at the DaWS Early Career Workshop (University of Southern Denmark, Odense) on 22 March 2018 and at the Labour Market Colloquium at University of Lausanne on 22 May 2018.

²⁵ The 19 countries in the sample and the available ISSP time periods are: Australia (05/15), Belgium (05/15), Canada (97/05), Czech Republic (97/05/15), Denmark (97/05/15), Finland (05/15), France (97/05/15), Germany (all waves), Hungary (all waves), Netherlands (89/97/05), New Zealand (97/05/15), Norway (all waves), Portugal (97/05), Slovenia (97/05/15), Spain (97/05/15), Sweden (97/05/15), Switzerland (97/05/15), United Kingdom (all waves) and USA (all waves).

assess variation in subjective insecurity over a long period of time. In order to allow meaningful comparisons over time, all OECD countries where data for at least two consecutive ISSP waves are available are included in the sample. Each sample is restricted to individuals between 18 and 64 years in paid employment, as the theory on labor market insecurity is only relevant to employed workers. The subsequent analyses all apply sample weights.²⁶

Chapter 5 provides a brief conceptual overview on different dimensions of subjective job insecurity. The main dependent variable is the individual perception of affective job insecurity, operationalized with the question: *“To what extent, if at all, do you worry about the possibility of losing your job?”* The reversed answer scale ranges from 1 *“I don’t worry at all,”* 2 *“I worry a little,”* 3 *“I worry to some extent”* to 4 *“I worry a great deal.”* The variable is missing in the first round of the “Work Orientations” module in 1989. Pooled across all respondents in the sample, the distribution of affective job insecurity is right-skewed: 8% worry a great deal, 16% to some extent, 31% a little, and 44% do not worry at all (N=38,497). The analysis will use both a binary measure (worry a great deal/to some extent) and a measure with the original categorical scale.

The concept of affective job insecurity captures a wide range of negative emotions and fears associated with employment loss. To disentangle more specific subaspects of labor market insecurity, I use two additional measures of subjective perceptions. The first, cognitive job insecurity, reverses the original scale of the question whether the respondent’s job is secure, from 1 *“strongly agree”* to 5 *“strongly disagree.”*²⁷ The second measure has to do with employment insecurity and measures the difficulty of finding a job at least as good as the current one on a scale from 1 *“very easy,”* 2 *“fairly easy,”* 3 *“neither easy nor difficult,”* 4 *“fairly difficult”* to 5 *“very difficult.”*²⁸

²⁶ The ISSP only provides one weighting item for each survey and weights differ across countries. Usually, the ISSP provides design weights, non-response adjustments or a combination of the two. I do not apply any country weights; I run all individual-level analyses with country fixed effects and country-clustered standard errors.

²⁷ The exact wording is: *“For each of these statements about your (main) job, please tick one box to show how much you agree or disagree that it applies to your job. ... My job is secure”*.

²⁸ The exact wording is: *“How difficult or easy do you think it would be for you to find a job at least as good as your current one?”*. In the first two rounds, the wording was slightly different: *“If you lost your job for any reason, and were looking actively for another one, how easy or difficult do you think it would*

The main explanatory variable at the individual level is *relative income*. For each survey year, I recoded respondents' earnings from paid employment into three income tertiles. Incomes in the ISSP are recorded in more or less detailed intervals (depending on the country), as a result of which the size of the three categories can only approximate an equal distribution among the bottom third, middle third and upper third. Other control variables at the individual level include *age* (in years), *gender* (male dummy), *education* (tertiary education dummy), *occupation* (based on the 8-class scheme developed by Oesch (2006)), *union membership* (dummy for union members) and *working-time* (part-time dummy). I keep part-time workers in the sample because part-time employment should only be considered an indicator of outsidership if it is involuntary (Rueda 2005: 63). Nevertheless, the results are similar when the sample includes full-time workers only.

The central variable at the country level is the *regulation of temporary employment*, which is my indicator of flexible employment policy. As in the previous chapter, I rely on the OECD Employment Protection Legislation indicators that measure the rules and duration of fixed-term contracts and temporary agency work (OECD 2017a). Following the literature on subjective insecurity, I include several control variables at the context level. *Unemployment rates* capture the impact of macroeconomic conditions on subjective insecurity (Lübke and Erlinghagen 2014). For the impact of other public policies, I follow Anderson and Pontusson (2007) and include total *social expenditure*, spending on *active labor market policy* (ALMP), spending on *unemployment benefits* (PLMP) (in percentage of GDP) and the OECD indicator of *employment protection* for regular workers (EPL). All context-level variables are taken from Armingeon et al. (2016).

Methods

The empirical analysis relies on a combination of macro- and micro-level evidence. Because differences in insecurity levels across different income groups can only be summarized at the aggregate level, the first part of the analysis presents descriptive evidence on aggregated levels of insecurity. The micro-level analysis, in turn, represents the more

be for you to find an acceptable job?" (1989) and *"If you were looking actively, how easy or difficult do you think it would be for you to find an acceptable job?"* (1997).

formalized test of the impact of income and temporary employment regulation on subjective insecurity. In principle, the expectation of both individual-level and context-level effects on insecurity across countries and years singles multi-level analysis with “crossed random effects” (Rabe-Hesketh and Skrondal 2012: ch. 9) out as the most appropriate modeling technique, because it takes the nested structure of the data (individuals nested in both countries and years) into account. However, it is well-known that multi-level analyses can be biased when the number of context units is low (Stegmueller 2013). I will show the results of the multi-level analysis as a robustness test; but the results produced by pooled regressions prove more conservative, and thus a more reliable test. I use ordered logistic regression analysis due to the categorical nature of the dependent variables. The models include fixed effects for countries and survey years, and use standard errors clustered by country.

3.3. Flexibilization reforms (Chapter 6)

The third empirical chapter is based on a case study of Germany, a crucial case where major flexibilization reforms were mandated in 1985, 1995-97 and 2002.

Data

The main source of data is the German Socio-Economic Panel Study (SOEP), covering the time period between 1984 and 2015.²⁹ I restrict the sample to full-time employees aged between 18 and 65. An important advantage that the SOEP surveys have over the LIS and ISSP data is that I am able to restrict the sample to employees under *permanent* contracts. In addition, the sample excludes all individuals in self-employment, education or training. Finally, the sample considers only individuals living in private households in the old German Länder; the motivation behind this choice is to avoid distorting results

²⁹ I used version 32.1 of the SOEPlong (doi:10.5684/soep.v32.1).

from the thorny effects of reunification. Sample observations are weighted using cross-sectional weights.³⁰

Incomes are measured as gross monthly labor earnings before taxes and transfers. They are expressed in 2010 prices (in euros), deflated by the consumer price index. Data on *subjective insecurity* is also available from two items that tap into the dimension of affective job insecurity. The first item concerns worry about job security and is measured on a scale from 1 “Very concerned,” 2 “Somewhat concerned” to 3 “Not concerned at all.”³¹ The second item asks how much individuals worry about their personal economic situation, using the same scale from 1 to 3.³² Finally, *socio-economic control variables* include dummies for educational attainment (1=tertiary degree), age (1=below 42 years old, i.e. below the median), occupation (1=production or low service workers, based on the 8-class scheme developed by Oesch (2006)) and union membership³³ (1=union member).

The final part of the German case study is an explorative analysis of the political consequences of flexibilization related to the reforms by the red-green coalition government in 2002. I use data on the 2002 and 2005 German elections from the Comparative Study of Electoral Systems (CSES 2015b, 2015a) to investigate whether middle-income workers withdrew support from the incumbent government coalition in the aftermath of flexibilization reforms.³⁴ The samples are restricted to employed respondents between 18 and 64.³⁵ Incomes are recorded by the CSES in quintiles (of total household income). Sample observations are weighted with demographic and sample weight variables provided by the CSES.

³⁰ Variable w11105 is provided in the “pequiv” file. According to the SOEP documentation, these weights “compensate for unequal probabilities of selection and sample attrition are necessary to obtain populations based statistics. The individual weights also encompass population weights.”

³¹ The specific question asked is (official translation in the SOEP documentation): “How concerned are you about the following issues? Your job security”

³² The specific question asked is (official translation in the SOEP documentation): “How concerned are you about the following issues? Your own economic situation”

³³ Since this question is not asked every year, I use the lag of union membership where current values are missing.

³⁴ The 2002 survey was fielded after the elections between Oct 31 and Nov 13, 2002 (CSES Module 2). The 2005 survey was fielded after the elections between Sep 21 and Oct 5, 2005 (CSES Module 3).

³⁵ Results are similar when part-time respondents are excluded.

Methods

The causal effect of flexibilization reforms should ideally be studied in an experimental setting. However, it is not possible to define treatment and control groups without additional assumptions because, according to my theoretical reasoning, flexibilization may indirectly affect all regular workers. No subset of regular workers is *a priori* immune to the indirect risks of flexibilization reforms.³⁶ As a result, I mainly rely on a descriptive depiction of the trends in income shares, earnings growth and subjective insecurity. Rather than aiming to estimate the causal reform effects, I aim to situate the German case study in the context of the preceding comparative analyses and findings.

Additionally, I will also rely on simple multivariate analyses of long-term wage growth among middle-income workers. For each survey year, long-term wage growth is measured as the percentage change between the average wages of the three years preceding the fielding of the survey ($t-3$ to $t-1$) to the three years following it ($t+1$ to $t+3$). This measure captures wage developments over a period of seven years ($t-3$ to $t+3$). I then regress wage growth on a parsimonious set of explanatory variables: period dummies (three-year SOEP periods) and the socio-economic characteristics of education, age, occupation and union membership. The latter are crudely measured as dummy variables (see above), which allows me to estimate the full interactions between all four variables and the period dummies. The purpose of these interaction models is to account for any group-specific non-linearities and predict the long-term wage growth of each subgroup of middle-income workers in each time period.

Lastly, the analysis of the political consequences of flexibilization uses CSES data and relies on purely descriptive evidence. The scope of this analysis is exploratory. According to my theory, as flexibilization leads middle-income workers to experience adverse earnings trajectories and risk spreads towards the middle, it is natural to expect political opposition against flexible employment policies to arise among those most vulnerable to

³⁶ In many other experimental studies, treatment and control groups are easily identifiable. This allows for the estimation of counterfactual effects. For example, Goerke and Pannenberg (2015) used SOEP data to study the effects of statutory sick pay reform, which affected private sector workers but did not affect public sector employees.

them. However, the theoretical framework neither details the mechanisms of political preference formation nor details the political and electoral alternatives available to the losers in the flexibilization process. In an exploratory sense, the most obvious issue to examine is whether the losers of flexibilization turned away from supporting the governments responsible for the implementation of these policies. Hence, I analyze the share and composition of those “switch voters” who had previously voted for the government in charge of the flexibilization reforms and afterwards turned to electoral alternatives or decided not to cast a vote anymore.

3.4. Summary

To sum up, the empirical analysis in the next three chapters relies on a combination of macro- and micro-level approaches and data sources. Chapter 4 explores the distributional consequences of flexible employment policies at the macro level in 22 OECD countries between 1985 and 2014. The key dependent variable is the share of earnings going to middle-income workers, which I construct from Luxembourg Income Study (LIS) micro-data. Chapter 5 draws on data from the International Social Survey Programme (ISSP) and explores the variation in subjective job insecurity at the individual level in 19 OECD countries. Finally, Chapter 6 uses data from the German Socio-Economic Panel (SOEP) between 1984 and 2015 to assess the effects of flexibilization reforms over time. This last empirical chapter then proceeds with an exploratory analysis of the political consequences of flexibilization in Germany, based on data from the Comparative Study of Electoral Systems (CSES).

4 Flexible employment policy and earnings inequality

This chapter explores the effects of flexible employment policy on the “objective” outcome of earnings inequality.³⁷ Building on my risk-based theoretical framework, I expect that flexibilization adversely affects the position of middle-income workers in the earnings distribution. The analysis relies on a time-series cross-sectional (TSCS) analysis at the aggregate level; comprising 22 OECD countries between 1985 and 2014 (see Chapter 3.1). The goal of this chapter is to provide refined data on the position of middle-income workers relative to low-income and high-income workers. Accordingly, section 4.1 starts with descriptive evidence on the cross-national patterns of income shares and their correlation with flexible employment policies. Section 4.2 presents the main results of the statistical analysis; and section 4.3 addresses the effects of flexible employment regulation conditional on union inclusiveness, dualization and unemployment. Section 4.4 addresses changes over time in more detail, focusing primarily on the relationship between flexibilization reforms and changes in income shares.

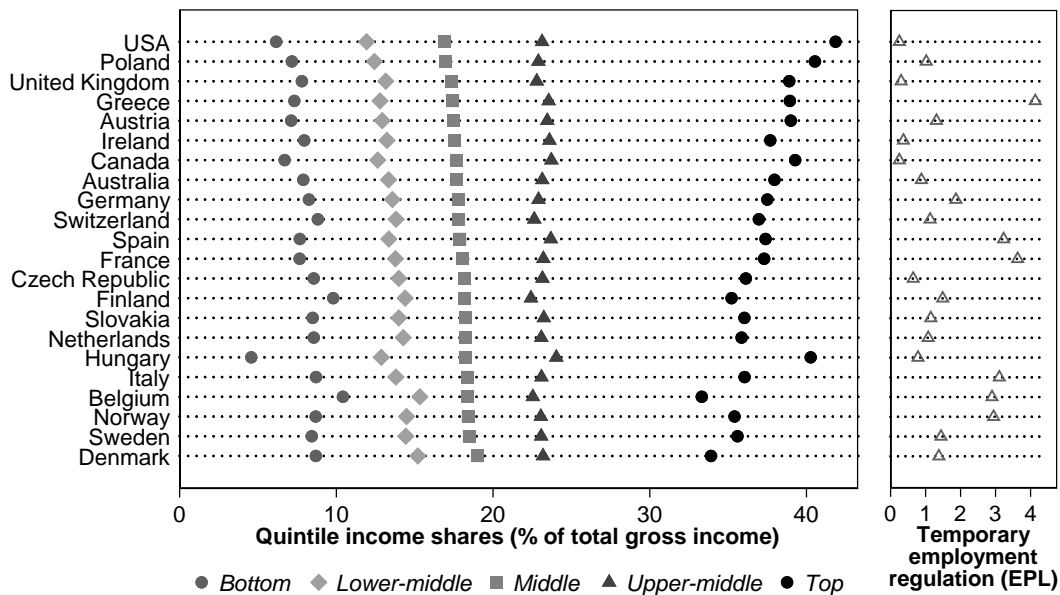
4.1. Cross-national patterns of income shares

Inequality research typically relies on indicators for overall earnings inequality, such as the Gini index or wage decile ratios. In contrast, the choice of *income shares*, i.e. the share of earnings going to different income groups, allows a more fine-grained differentiation among the earnings position of workers in the lower-middle, middle and upper-middle parts of the distribution. This chapter relies on income shares for five income quintiles, each quintile encompassing one fifth of full-time workers in the distribution. Figure 4.1 presents an overview of income shares around 2007, based on microdata from the Luxembourg Income Study. The 22 countries in the sample are sorted by the income shares

³⁷ This chapter builds on a journal article currently under review and previously published in the LIS Working Paper series (Weisstanner 2017).

of workers in the middle fifth of the earnings distribution. The income shares data reveal a systematic variation in the share of wage earnings going to middle-income workers. Anglo-Saxon countries are at the top, with lower relative earnings in the middle and at the lower end of the distribution. Middle-income workers in Denmark, Sweden and Norway enjoy the largest income shares in comparison to their counterparts in all other countries. On average, the countries at the bottom of Figure 4.1 have more compressed distributions of income (i.e. a smaller spread in income shares between different quintiles).

Figure 4.1: Income shares (2007) and temporary employment regulation (1995-2007) in 22 OECD countries



Notes: Countries arranged by the size of middle income shares. Income shares estimated from LIS micro-data for 2007 (except Australia/Italy 2008, Belgium 2000, France/Sweden 2005). Temporary employment regulation based on the OECD Employment Protection Legislation (EPL) indicator (average 1995-2007). *Sources:* LIS (2017) and OECD (2017a).

The right-hand panel of Figure 4.1 plots the average values of the OECD indicator of temporary employment regulation for the period between 1995 and 2007. This is my main operationalization of flexible employment policies; lower values indicate fewer restrictions on the use and duration of fixed-term contracts and the operation of temporary agency workers. Not surprisingly, the Anglo-Saxon countries exhibit low levels of regulation, whereas temporary employment is most strictly regulated in Southern Europe. The

remaining countries display moderate levels of regulation, albeit with substantial variation and, frequently, trends toward more deregulated temporary employment in the 1990s and 2000s (see also Table 1.1).

Figure 1 reveals no straightforward associations between temporary employment regulation and income shares. The cross-sectional correlations are +0.27 for bottom income shares, +0.28 for lower-middle incomes, +0.22 for middle incomes, -0.04 for upper-middle incomes, and -0.32 for top income shares ($p > 0.10$ for all quintiles). As expected, the direction of the coefficients suggests that regulations correlate with higher income shares for lower and middle-income groups, and with lower income shares for upper earners. However, this association is made less clear cut by the four Mediterranean countries characterized by high levels of regulation and medium-to-high inequality. Excluding France, Greece, Italy and Spain evidently reveals stronger cross-sectional correlations between regulation and income shares in the remaining 18 countries: +0.58 ($p = 0.01$) for bottom incomes, +0.67 ($p = 0.00$) for lower-middle incomes, +0.46 ($p = 0.05$) for middle incomes, -0.47 ($p = 0.05$) for upper-middle incomes and -0.62 ($p = 0.01$) for top incomes. The next section further examines these findings using multivariate regression analysis.

4.2. Main statistical analysis

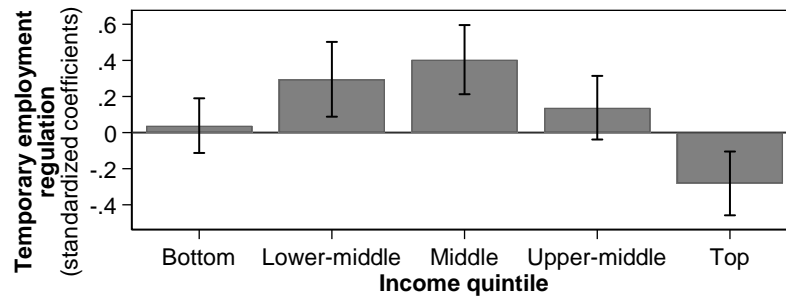
Table 4.1 presents the results of the error correction model (ECM) regression results for quintile income shares. The main independent variable of interest is the regulation of temporary employment (which is logged to account for its right-skewed distribution). The results show a positive and statistically significant effect of temporary employment regulation on the income shares of the lower-middle and the middle quintiles. In other words, more deregulated flexible employment policies are associated with lower income shares for the lower-middle and middle income groups. The opposite holds for the top quintile: regulation significantly decreases the income shares of top earners. The effect of regulation on bottom and upper-middle income shares is not statistically significant. These results support the first hypothesis: deregulated flexible employment adversely affects the position of middle-income workers in the earnings distribution.

Table 4.1: ECM regressions of income shares, 1985-2014

	Bottom	Δ Quintile income shares			
		Lower-middle	Middle	Upper-middle	Top
Y_{t-1} (lagged income share levels)	-0.29*** (0.07)	-0.39*** (0.06)	-0.49*** (0.06)	-0.37*** (0.06)	-0.39*** (0.06)
Temporary employment regulation (log)	0.03 (0.05)	0.13*** (0.05)	0.15*** (0.04)	0.05 (0.03)	-0.36*** (0.12)
Unemployment rate	-0.02 (0.01)	-0.03*** (0.01)	-0.01* (0.01)	0.01 (0.01)	0.07** (0.03)
Union density	0.40** (0.21)	0.75*** (0.18)	0.56*** (0.15)	-0.06 (0.11)	-1.73*** (0.53)
Wage bargaining centralization	0.15*** (0.05)	0.04 (0.04)	0.00 (0.03)	-0.04 (0.03)	-0.20* (0.10)
Service employment	0.12 (0.65)	-0.07 (0.46)	-0.35 (0.45)	-0.26 (0.34)	1.58 (1.35)
Trade openness	-0.16 (0.14)	0.09 (0.09)	0.10 (0.07)	-0.06 (0.06)	-0.06 (0.23)
Technological change (factor productivity)	-0.38 (0.49)	-0.36 (0.36)	-0.53* (0.29)	-0.21 (0.24)	1.36 (1.08)
Constant	2.31*** (0.97)	5.45*** (0.95)	9.30*** (1.23)	9.12*** (1.51)	12.79*** (2.41)
R^2	0.21	0.30	0.41	0.27	0.32
N	144 (22 countries)				

Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. OLS estimates with panel-heteroskedastic standard errors in parentheses, panel-specific AR(1) processes estimated with Prais-Winsten transformation.

The standardized beta coefficients of temporary employment regulation in Figure 4.2 unveil that the effects of regulation are larger for the middle-income quintile than for the other quintiles. A one-standard-deviation decrease in regulation is expected to reduce middle income shares by more than 40% of a standard deviation and lower-middle income shares by almost 30% of a standard deviation. Comparing the substantive magnitude of standardized coefficients, regulation affects middle income shares more strongly than any other variable in the models presented in Table 4.1. For lower-middle income shares, only union density has a stronger standardized effect than that of regulation (36% vs. 30%), and the effect of unemployment is of comparable magnitude (-28%). Consistent with the argument that low-wage competition and the risk of wage losses in temporary employment poses less of a threat for low-income workers, the results in Table 4.1 and Figure 4.2 reveal no significant association between regulation and bottom income shares.

Figure 4.2: Standardized effects of temporary employment regulation

Notes: Standardized beta coefficients and 95% confidence intervals from ECM regressions in Table 4.1.

The results from Table 4.1 show that the variables measuring structural economic changes (service employment, trade openness, technological change) are not statistically significant at the 95% level for any income group. However, union density is strongly associated with increasing income shares for lower-income and middle-income workers to the detriment of high-income workers. The centralization of wage bargaining has comparable but more statistically uncertain effects. Similar to temporary employment regulation, unemployment adversely affects lower-middle income shares and benefits top income shares. However, the effect of unemployment is clearly stronger for the lower-middle quintile than for the middle quintile. In contrast to regulation, unemployment also has a similar effect on the bottom quintile (narrowly failing to reach statistical significance at $p=0.12$), with almost the same standardized magnitude as in the case of the middle quintile.

The results in Table 4.1 hold up to a variety of robustness tests, reported in Appendix 4.1. Most importantly, the results obtained using gross earnings at the person-level – the income concept most accurate to the theoretical framework in this study – remain substantively similar (however, much more data are missing compared to the measure at the household level). Results with disposable household income for the full working-age population are also comparable to the main results. The inclusion of additional control variables (the share of part-time employment, minimum wage generosity, benefit replacement rates, LIS survey wave dummies) leads to substantially similar results. Finally, the findings are robust to alternative methodological specifications, such as employing random effects estimators and omitting the AR(1) error processes.

4.3. The conditional effects of regulation

The following discussion clarifies if the effects of regulation are moderated by union inclusiveness, dualization policies, dualization outcomes, and unemployment. Table 4.2 shows that the effects of temporary employment regulation are highly conditional on the levels of union inclusiveness in place in each country. High union density not only increases the income shares of lower- and middle-income workers (Table 4.1 above), it also reduces the adverse effect of deregulated temporary employment on middle-income workers. The interaction between regulation and union density (added to the models in Table 4.1) is significant at the 99% level for lower-middle, middle and top income shares. As Table 4.2 shows, the marginal effects of regulation are statistically insignificant in contexts of encompassing unionism with high levels of union density. Where unions are inclusive, temporary employment regulation is not associated with distributional shifts for any income group. This conditional result is driven, as expected, by the countries with the highest levels of union density. When Sweden, Finland and Denmark are excluded, the effect of temporary employment regulation on middle income shares is significant at any level of union density in the remaining sample. This result aligns with recent arguments about the role of union inclusiveness moderating the distributive outcomes of labor market institutions (Mosimann and Pontusson 2017; Vlandas 2018).³⁸

Table 4.2: Marginal effects of temporary employment regulation, conditional on union inclusiveness

Marginal effects of temporary employment regulation:	Δ Quintile income shares				
	Bottom	Lower-middle	Middle	Upper-middle	Top
Low union density (−1sd.)	0.08 (0.06)	0.30*** (0.05)	0.23*** (0.04)	0.06 (0.05)	−0.72*** (0.15)
Medium union density (mean)	0.03 (0.05)	0.16*** (0.04)	0.14*** (0.04)	0.05 (0.03)	−0.39*** (0.11)
High union density (+1sd.)	−0.02 (0.08)	0.02 (0.06)	0.05 (0.05)	0.04 (0.04)	−0.06 (0.15)

Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Panel-heteroskedastic standard errors in parentheses. Estimates based on regression models in Table 4.1 with interaction terms added.

³⁸ Similar conditional effects are obtained with interactions of wage bargaining centralization instead of union density. Given the negative association between centralization and earnings inequality (Wallerstein 1999), centralization reduces the asymmetrical risks of temporary employment because it constrains the scope for low-wage competition under more compressed earnings distributions.

The second scope condition to be tested concerns dualization policies and outcomes. Expectations about this relationship are not unambiguous. On the one hand, a high share of outsiders might be a precondition for low-wage competition with insiders. On the other hand, dualization also implies a strong protection of regular workers, which should reduce replacement risks. Because these arguments involve different concepts of dualization policies and outcomes, I use three different indicators to operationalize the latter. First, the share of temporary workers (logged), as an indicator of dualization outcomes. Second, employment protection for regular workers (operationalized through the OECD EPL index), as an indicator of insider-friendly policy.³⁹ Third, the difference between EPL for regular workers and the regulation of temporary employment, as an indicator for the divergence between insider and outsider-related policies.

Table 4.3 shows the results of several models interacting these dualization indicators with temporary employment regulations. As the top panel shows, the effect of temporary employment regulation weakens where the share of temporary workers is high. At low and medium levels of dualization, regulation retains its strong effect on lower-middle and middle income shares. Hence, deregulated temporary employment can have adverse effects on the position of middle-income workers even where the actual incidence of flexible employment remains low. The second panel in Table 4.3 finds a similar result as far as employment protection for regular workers is concerned. Under high EPL, temporary employment regulation is not significantly associated with middle income shares. Deregulation adversely affects middle-income workers mostly where EPL is at lower levels. Almost the same conclusions apply to the divergence between EPL and temporary employment regulation. Where insider and outsider policies diverge (for example, where strongly protected insiders coexist with deregulated outsider sectors), the effect of temporary employment regulation attenuates slightly. Overall, deregulation's adverse effect on middle income shares is quite independent from dualization outcomes and other dualizing policies. Only at high levels of dualization does the association between temporary employment regulation and income shares disappear.

³⁹ As noted above, I did not include the EPL indicator in the main models in Table 4.1 because of multicollinearity issues; the correlation with logged temporary employment regulation is 0.72 (N=144).

Table 4.3: Marginal effects of temporary employment regulation, conditional on dualization indicators

Marginal effects of temporary employment regulation:	Bottom	Δ Quintile income shares			
		Lower-middle	Middle	Upper-middle	Top
Low incidence of temporary employment (log) (–1sd.)	0.07 (0.07)	0.17*** (0.05)	0.21*** (0.04)	0.06 (0.04)	-0.51*** (0.13)
Medium incidence of temporary employment (log) (mean)	-0.01 (0.06)	0.11** (0.05)	0.11*** (0.04)	0.04 (0.04)	-0.24** (0.11)
High incidence of temporary employment (log) (+1sd.)	-0.09 (0.09)	0.06 (0.07)	0.02 (0.05)	0.01 (0.06)	0.03 (0.17)
Low EPL regular contracts (–1sd.)	0.12 (0.09)	0.18*** (0.07)	0.23*** (0.06)	0.01 (0.05)	-0.55*** (0.18)
Medium EPL regular contracts (mean)	-0.04 (0.07)	0.08* (0.05)	0.13*** (0.05)	0.06* (0.03)	-0.22* (0.13)
High EPL regular contracts (+1sd.)	-0.20* (0.11)	-0.01 (0.06)	0.04 (0.06)	0.12** (0.05)	-0.11 (0.19)
Low Δ EPL (regular minus temporary) (–1sd.)	0.24** (0.11)	0.28*** (0.08)	0.22*** (0.06)	0.04 (0.05)	-0.79*** (0.21)
Medium Δ EPL (regular minus temporary) (mean)	0.11* (0.06)	0.21*** (0.06)	0.17*** (0.05)	-0.01 (0.04)	-0.56*** (0.16)
High Δ EPL (regular minus temporary) (+1sd.)	-0.03 (0.09)	0.15* (0.08)	0.13* (0.06)	-0.05 (0.05)	-0.32 (0.20)

Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Panel-heteroskedastic standard errors in parentheses. Estimates based on the regression models in Table 4.1, with interaction terms added.

The last scope condition to be tested concerns unemployment. Existing theories lead us to expect that unemployment is more consequential for the earnings position of low-income workers, who are most likely to get laid off during economic downturns, than for middle-income workers. However, Table 4.4 shows that the effect of temporary employment regulation on lower-middle, middle and top income shares is attenuated at high levels of unemployment. Regulation makes a difference to income shares at low and medium levels of unemployment, but not at very high levels of unemployment. Chapter 5 provides a possible explanation for this result. In crisis conditions with high unemployment levels, most workers share similarly high levels of insecurity. As a result, risk differences between income groups shrink and the impact of the policy context on the relative position of different income groups diminishes.

Table 4.4: Marginal effects of temporary employment regulation, conditional on unemployment

Marginal effects of temporary employment regulation:	Δ Quintile income shares				
	Bottom	Lower-middle	Middle	Upper-middle	Top
Low unemployment (-1sd.)	0.10 (0.08)	0.33*** (0.07)	0.29*** (0.05)	0.06 (0.05)	-0.82*** (0.20)
Medium unemployment (mean)	0.04 (0.05)	0.17*** (0.04)	0.17*** (0.03)	0.05 (0.03)	-0.46*** (0.11)
High unemployment (+1sd.)	-0.02 (0.07)	0.02 (0.05)	0.05 (0.04)	0.04 (0.04)	-0.10 (0.14)

Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Panel-heteroskedastic standard errors in parentheses. Estimates based on regression models in Table 4.1 with interaction terms added.

4.4. Flexibilization reforms and changes in income shares

This last empirical section takes a closer look at changes in both income share dynamics and flexibilization reforms over time. The statistical evidence presented in this chapter has so far relied on dynamic time-series models that estimate the parameters of the long-term relationship between flexible employment policy and income shares. However, models employing pooled data are designed to account for both differences in levels (across countries) and changes over time (temporal variation within the same country). Heterogeneity across countries could potentially obscure some of the trends observable within each country. Indeed, the income shares of the lower-middle and middle quintiles have changed substantially over the past three decades. Table 4.5 displays the broad trends in middle and lower-middle income shares from the mid-1980s (for the countries where data are available) to the time immediately preceding the 2008-09 financial crisis. The full data set of lower-middle and middle income shares is provided in Appendix 4.2.

Table 4.5: Trends in middle and lower-middle income shares, ca. mid-1980s to 2007

Country	$\Delta Q2+Q3$	Years	Country	$\Delta Q2+Q3$	Years
Australia	-1.9	1985-2008	Canada	-1.6	1987-2007
Ireland	-1.5	1995-2007	United Kingdom	-0.9	1986-2007
USA	-1.3	1986-2007			
Austria	-1.9	1994-2007	Belgium	-0.6	1985-2000
France	+2.0	1984-2005	Germany	-1.0	1984-2007
Netherlands	+1.0	1987-2007	Switzerland	-2.3	1982-2007
Denmark	-0.7	1987-2007	Finland	-1.5	1987-2007
Norway	-1.5	1986-2007	Sweden	-0.9	1987-2005
Greece	-0.8	1995-2007	Italy	-0.1	1989-2008
Spain	+1.8	1985-2007			
Czech Republic	-1.1	1992-2007	Hungary	+0.5	1991-2007
Poland	-0.6	1999-2007	Slovakia	-1.1	1992-2007

Notes: Trends refer to percentage point changes in income shares of the lower-middle quintile (Q2, 20-40%) and the middle quintile (Q3, 40-60%). See Appendix 4.2 for the full dataset on lower-middle and middle income shares.

Source: LIS (2017).

Table 4.5 reveals that middle income shares have been declining over the 1990s and 2000s in a majority of OECD countries. This is not only true for all Anglo-Saxon countries, but for all of the Nordic countries as well. In continental Western Europe, income shares have progressively declined in Austria, Belgium, Germany and Switzerland. France stands out as the country where income shares increased in the late 1980s and have remained steady since. In the Netherlands, middle income shares increased in the 1990s and declined in the 2000s. Finally, patterns have been rather volatile in the Mediterranean countries and the Eastern European EU member states. None of the countries' middle income shares have been marked by a clear downward trajectory.

Can we relate these trends within countries to changes in the regulation of flexible employment? In principle, the variation within countries could be assessed using fixed effects (FE) models, which eliminate cross-sectional heterogeneity. However, both theoretical and methodological considerations speak against FE regressions in this case. Theoretically, it is not clear whether only changes, rather than levels, should have an impact on income share trajectories. For example, when flexible employment is highly deregulated,

lated (that is, at low levels of regulation), middle income shares are likely to lie at a persistently lower equilibrium level, even in the absence of policy change. The risks of flexible employment for middle-income workers are certainly expected to be reinforced by deregulation reforms, but a low level of regulation may itself be sufficient for these risks to materialize. Methodologically, the problem with FE regressions is that countries where temporary employment regulation is time-invariant – for example, all the Anglo-Saxon countries – drop out of the analysis. This raises the issue of selection bias in the remaining sample.⁴⁰ In addition, fixed effects in dynamic specifications yield biased estimates due to a correlation between the centered lagged dependent variable and the error terms, especially in TSCS settings with a low number of time series observations per unit (Nickell 1981), as in the context of this analysis. For these reasons – and given the absence of longitudinal panel data for most countries (except Germany, the focus of Chapter 6) – I will discuss descriptive evidence on the trajectories of countries with major deregulations as an alternative to providing FE regression results.

Table 4.6 lists all cases in the sample with major deregulation reforms (coded here as a decline in the EPL indicator for temporary employment regulation by more than 0.5 points) for which data on income shares is available. Of the 11 cases in the sample with the largest decline in flexible employment regulation, income shares of the second and the third quintiles declined in 8 out of 11 instances in the short-term, i.e. the LIS observation immediately following the reform. In the long-run, lower-middle and middle income shares declined in 9 out of 10 instances. Only the reforms in Belgium (1997) and Slovakia (2003) did not appear to go hand in hand with declining middle income shares. In all remaining cases, particularly the much-discussed cases of Denmark, Germany or Sweden, lower-middle income shares evidently were on the decline following the flexibilization reforms.

⁴⁰ Relatedly, some countries had very minor changes in the indicator during the sample period. In a FE regression, however, countries with small (idiosyncratic) changes carry the same weight as countries with major flexibilization reforms.

Table 4.6: Income share changes after major flexibilization reforms

Country	Pre-reform (LIS survey year)	Post-reform t+1 (LIS survey year)	Post-reform t+2 (LIS survey year)	Δ t+1	Δ t+2
Belgium	32.5 (1997)	33.7 (2000)	-	+1.25	-
Denmark	34.9 (1987)	34.7 (1992)	34.3 (1995)	-0.22	-0.64
Denmark	34.7 (1992)	34.3 (1995)	34.2 (2000)	-0.42	-0.55
Germany	32.2 (1994)	31.8 (2000)	31.4 (2004)	-0.44	-0.80
Germany	31.8 (2000)	31.4 (2004)	31.4 (2007)	-0.36	-0.40
Germany	31.4 (2004)	31.4 (2007)	31.2 (2010)	-0.04	-0.22
Greece	31.5 (2004)	30.2 (2007)	30.7 (2010)	-1.27	-0.74
Italy	32.3 (1998)	32.3 (2000)	31.7 (2004)	+0.04	-0.56
Italy	32.3 (2000)	31.7 (2004)	32.2 (2008)	-0.60	-0.15
Slovakia	31.5 (2004)	32.2 (2007)	31.7 (2010)	+0.72	+0.17
Sweden	33.2 (1992)	33.0 (1995)	32.1 (2000)	-0.29	-1.14

Notes: Income shares (%) for the lower-middle quintile (Q2) and the middle quintile (Q3) combined. Major deregulations coded as those country-years in the sample where temporary employment regulation (averages between LIS survey observations) decreased by more than 0.5 points.

Sources: LIS (2017) and OECD (2017a).

4.5. Summary

This chapter has explored the distributional consequences of flexible employment policies at the macro level. The findings show that flexibilization is associated with major income shifts among regular workers. Middle-income workers are the losers of marginal flexibilization. Deregulation is associated with lower income shares for middle-income workers, while it has neutral effects on the position of workers at the bottom of the earnings distribution and positive effects on the position of workers at the top. The adverse effects of flexible employment deregulation on middle-income workers are mitigated under high levels of union inclusiveness, since the latter limits the scope for low-wage competition and contributes to lower overall earnings inequality. Furthermore, the effects of regulation are attenuated under high levels of dualization and unemployment, yet flexible employment policies asymmetrically affect insiders even where the share of outsiders is low. In strong contradiction to the dualization literature, flexibilization at the margins affects regular workers (insiders) in very heterogeneous ways. The trend towards a declining relative position of middle-income workers cuts across different welfare state regimes and across many of the coordinated market economies, several of which have experienced major flexibilization reforms.

The next chapter presents an individual-level analysis of the subjective risk perception of workers in different contexts of flexible employment. In contrast to the aggregate-level analysis in this chapter, the following analysis allows us to examine whether flexible employment policy indeed affects workers' perception of labor market risks, such as low-wage competition and income prospects, as the theoretical framework assumes.

Appendix 4.1: Robustness checks for the effects of temporary employment regulation on income shares (standardized beta coefficients)

Robustness checks:	Δ Quintile income shares					N
	Bottom	Lower-middle	Middle	Upper-middle	Top	
Income: gross household labor earnings						
<i>Baseline results from Table 4.1 & Figure 4.2</i>	0.04 (0.08)	0.30*** (0.11)	0.40*** (0.10)	0.14 (0.09)	-0.28*** (0.09)	144
Controlling for the incidence of part-time employment	0.17* (0.09)	0.39*** (0.12)	0.53*** (0.10)	0.13 (0.09)	-0.42*** (0.11)	141
Controlling for minimum wage generosity (relative to median wages)	0.04 (0.08)	0.33*** (0.10)	0.42*** (0.10)	0.14 (0.09)	-0.32*** (0.09)	144
Controlling for benefit replacement rates (5 year, single, 67% of avg. earnings)	0.12 (0.14)	0.65*** (0.17)	0.70*** (0.15)	-0.08 (0.13)	-0.49*** (0.15)	80
Controlling for LIS survey waves (dummies)	-0.01 (0.07)	0.21** (0.11)	0.31*** (0.10)	0.07 (0.09)	-0.19*** (0.09)	144
Random-effects regressions with country-clustered standard errors	0.08 (0.10)	0.32*** (0.12)	0.31** (0.12)	0.10 (0.13)	-0.27** (0.11)	144
No AR(1) error processes	0.08 (0.11)	0.32** (0.13)	0.31*** (0.10)	0.10 (0.10)	-0.27** (0.11)	144
Income: gross person-level labor earnings						
<i>Replication of Table 4.1 & Figure 4.2 using person-level earnings</i>	-0.15 (0.12)	0.49*** (0.13)	0.39*** (0.10)	0.18 (0.12)	-0.25** (0.11)	107
Controlling for the incidence of part-time employment	-0.14 (0.12)	0.53*** (0.14)	0.36*** (0.11)	0.21* (0.11)	-0.33** (0.13)	104
Controlling for minimum wage generosity (relative to median wages)	-0.14 (0.12)	0.49*** (0.13)	0.37*** (0.09)	0.16 (0.12)	-0.26** (0.12)	107
Controlling for benefit replacement rates (5 year, single, 67% of avg. earnings)	-0.09 (0.18)	0.82*** (0.26)	0.44*** (0.17)	-0.03 (0.16)	-0.66*** (0.20)	64
Controlling for LIS survey waves (dummies)	-0.18 (0.12)	0.51*** (0.13)	0.45*** (0.11)	0.16 (0.11)	-0.27** (0.12)	107
Random-effects regressions with country-clustered standard errors	-0.01 (0.13)	0.65*** (0.18)	0.39*** (0.11)	0.01 (0.12)	-0.32*** (0.12)	107
No AR(1) error processes	-0.10 (0.15)	0.56*** (0.14)	0.39*** (0.14)	0.10 (0.15)	-0.29** (0.13)	107
Income: disposable household income						
<i>Replication of Table 4.1 & Figure 4.2 using disposable household income</i>	0.53*** (0.11)	0.47*** (0.11)	0.34*** (0.08)	-0.03 (0.10)	-0.40*** (0.09)	144

Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Coefficients show the standardized effects of temporary employment (log) replicating the models in Table 4.1.

As an additional robustness test, the coefficients for temporary employment regulation remain unaffected by excluding single countries. The effects remain significant at the 99% level excluding each country at a time.

Appendix 4.2: Earnings shares of middle and lower-middle income quintiles

Country	Earnings shares of middle income quintile (40-60%)										
Australia	18.6	18.7	18.5	18.2	18.3	18.0	17.7	18.1			
	[1981]	[1985]	[1989]	[1995]	[2001]	[2003]	[2008]	[2010]			
Canada	18.7	18.3	18.3	18.5	18.3	18.1	18.0	17.9	17.7	17.8	17.7
	[1981]	[1987]	[1991]	[1994]	[1997]	[1998]	[2000]	[2004]	[2007]	[2010]	[2013]
Ireland	18.5	18.9	19.0	18.3	17.8	17.5	17.8				
	[1994]	[1995]	[1996]	[2000]	[2004]	[2007]	[2010]				
United Kingdom	18.0	18.1	17.7	17.8	17.5	17.2	17.4	17.0	17.2		
	[1986]	[1991]	[1994]	[1995]	[1999]	[2004]	[2007]	[2010]	[2013]		
United States	17.5	17.8	17.1	17.1	16.8	16.8	16.9	16.9	16.6		
	[1986]	[1991]	[1994]	[1997]	[2000]	[2004]	[2007]	[2010]	[2013]		
Austria	18.4	18.3	18.5	18.0	17.5	17.7	17.6				
	[1994]	[1997]	[2000]	[2004]	[2007]	[2010]	[2013]				
Belgium	19.3	19.5	18.9	19.0	18.3	18.4					
	[1985]	[1988]	[1992]	[1995]	[1997]	[2000]					
France	17.0	17.9	17.8	17.7	18.1	17.9					
	[1984]	[1989]	[1994]	[2000]	[2005]	[2010]					
Germany	17.9	18.2	18.3	18.3	18.0	17.8	17.8	17.8	18.0		
	[1981]	[1984]	[1989]	[1994]	[2000]	[2004]	[2007]	[2010]	[2013]		
Netherlands	17.7	18.0	18.5	18.8	18.6	18.2	18.2	18.0	18.1		
	[1983]	[1987]	[1990]	[1993]	[1999]	[2004]	[2007]	[2010]	[2013]		
Switzerland	18.7	18.5	18.1	18.5	18.5	17.8	18.2	17.5			
	[1982]	[1992]	[2000]	[2002]	[2004]	[2007]	[2010]	[2013]			
Denmark	19.2	19.2	19.0	19.0	19.0	19.0	18.7	18.7			
	[1987]	[1992]	[1995]	[2000]	[2004]	[2007]	[2010]	[2013]			
Finland	18.8	18.7	18.6	18.4	18.4	18.2	18.5	18.5			
	[1987]	[1991]	[1995]	[2000]	[2004]	[2007]	[2010]	[2013]			
Norway	19.0	18.8	19.0	18.7	18.6	18.4	18.4	18.4			
	[1986]	[1991]	[1995]	[2000]	[2004]	[2007]	[2010]	[2013]			
Sweden	19.1	18.8	18.6	18.6	18.2	18.5					
	[1981]	[1987]	[1992]	[1995]	[2000]	[2005]					
Greece	17.7	17.9	18.1	17.4	17.6	17.7					
	[1995]	[2000]	[2004]	[2007]	[2010]	[2013]					
Italy	17.6	18.5	18.8	18.6	18.6	18.5	18.4	18.3	18.4	18.7	18.9
	[1987]	[1989]	[1991]	[1993]	[1995]	[1998]	[2000]	[2004]	[2008]	[2010]	[2014]
Spain	16.8	17.0	17.2	18.3	17.9	18.0	17.5				
	[1985]	[1995]	[2000]	[2004]	[2007]	[2010]	[2013]				
Czech Republic	18.5	18.0	17.6	18.0	18.2	18.2	17.9				
	[1992]	[1996]	[2002]	[2004]	[2007]	[2010]	[2013]				
Hungary	17.4	16.5	17.4	18.0	18.3	17.2	18.0				
	[1991]	[1994]	[1999]	[2005]	[2007]	[2009]	[2012]				
Poland	17.2	17.2	17.0	17.0	17.3						
	[1999]	[2004]	[2007]	[2010]	[2013]						
Slovakia	18.7	17.8	18.2	17.9	17.8						
	[1992]	[2004]	[2007]	[2010]	[2013]						

Country	Earnings shares of lower-middle income quintile (20-40%)										
Australia	13.7 [1981]	14.2 [1985]	13.9 [1989]	13.6 [1995]	13.9 [2001]	13.7 [2003]	13.3 [2008]	13.5 [2010]			
Canada	14.4 [1981]	13.7 [1987]	13.6 [1991]	13.8 [1994]	13.6 [1997]	13.3 [1998]	13.3 [2000]	13.2 [2004]	12.6 [2007]	12.8 [2010]	12.9 [2013]
Ireland	14.3 [1994]	14.3 [1995]	14.2 [1996]	14.7 [2000]	13.1 [2004]	13.2 [2007]	12.8 [2010]				
United Kingdom	13.4 [1986]	13.6 [1991]	13.2 [1994]	13.6 [1995]	13.2 [1999]	12.9 [2004]	13.1 [2007]	12.8 [2010]	12.8 [2013]		
United States	12.6 [1986]	12.7 [1991]	12.1 [1994]	12.1 [1997]	11.9 [2000]	11.8 [2004]	11.9 [2007]	11.6 [2010]	11.4 [2013]		
Austria	13.9 [1994]	14.2 [1997]	13.9 [2000]	13.5 [2004]	12.9 [2007]	13.1 [2010]	13.1 [2013]				
Belgium	14.9 [1985]	15.2 [1988]	14.3 [1992]	14.8 [1995]	14.2 [1997]	15.3 [2000]					
France	12.8 [1984]	13.6 [1989]	13.3 [1994]	13.5 [2000]	13.8 [2005]	13.7 [2010]					
Germany	13.7 [1981]	14.2 [1984]	14.4 [1989]	13.9 [1994]	13.8 [2000]	13.6 [2004]	13.6 [2007]	13.4 [2010]	13.5 [2013]		
Netherlands	13.4 [1983]	13.6 [1987]	14.1 [1990]	14.4 [1993]	14.6 [1999]	14.3 [2004]	14.3 [2007]	14.2 [2010]	14.1 [2013]		
Switzerland	15.2 [1982]	14.9 [1992]	14.2 [2000]	14.4 [2002]	14.5 [2004]	13.8 [2007]	14.1 [2010]	13.7 [2013]			
Denmark	15.8 [1987]	15.6 [1992]	15.3 [1995]	15.2 [2000]	15.1 [2004]	15.2 [2007]	14.9 [2010]	14.7 [2013]			
Finland	15.3 [1987]	15.3 [1991]	14.6 [1995]	14.8 [2000]	14.6 [2004]	14.4 [2007]	14.7 [2010]	14.6 [2013]			
Norway	15.4 [1986]	15.1 [1991]	15.3 [1995]	15.0 [2000]	14.6 [2004]	14.5 [2007]	14.4 [2010]	14.1 [2013]			
Sweden	15.2 [1981]	15.0 [1987]	14.7 [1992]	14.4 [1995]	13.9 [2000]	14.4 [2005]					
Greece	13.4 [1995]	13.5 [2000]	13.4 [2004]	12.8 [2007]	13.1 [2010]	12.7 [2013]					
Italy	12.8 [1987]	13.9 [1989]	14.0 [1991]	13.3 [1993]	13.3 [1995]	13.8 [1998]	13.9 [2000]	13.4 [2004]	13.8 [2008]	13.9 [2010]	14.0 [2014]
Spain	12.6 [1985]	12.1 [1995]	12.4 [2000]	13.3 [2004]	13.4 [2007]	13.2 [2010]	12.1 [2013]				
Czech Republic	14.8 [1992]	13.9 [1996]	13.4 [2002]	13.5 [2004]	14.0 [2007]	13.7 [2010]	13.8 [2013]				
Hungary	13.2 [1991]	12.1 [1994]	12.6 [1999]	13.1 [2005]	12.9 [2007]	13.0 [2009]	11.9 [2012]				
Poland	12.8 [1999]	12.8 [2004]	12.4 [2007]	12.2 [2010]	12.8 [2013]						
Slovakia	14.7 [1992]	13.7 [2004]	14.0 [2007]	13.8 [2010]	13.9 [2013]						

Source: LIS (2017).

5 The spread of subjective insecurity

The previous chapter has shown that deregulated temporary employment is associated with distributional losses for middle-income workers in full-time jobs. This challenges a basic tenet of the insider-outsider literature, according to which marginal flexibilization should exert adverse effects on the material position of outsiders but should not affect insiders. However, the macro-level analysis in the previous chapter does little to inform about the individual-level mechanisms at work. In keeping with the risk-based theoretical framework, flexible employment deregulation should lead to an increasing exposure to economic risk among middle-income workers relative to other income groups (hypothesis 2). To assess this claim, I draw on International Social Survey Programme (ISSP) survey data on subjective job insecurity.⁴¹ Employing several different dimensions of insecurity, I explore whether workers worry about losing their job, how secure they think their job is, and whether anticipate facing difficulties about finding another, similar job. After a brief overview of different dimensions of subjective job insecurity, I present descriptive and regression-based evidence of the effect flexible employment policies exert on subjective insecurity as perceived by individuals pertaining to different income groups. The core finding is that in contexts of deregulated flexible employment, risk indeed spreads towards the middle. The insecurity felt by middle-income workers reaches the proportions of the high insecurity experienced by those poorer than them.

5.1. Dimensions of subjective job insecurity

This dissertation argues that flexible employment heightens two types of risk for middle-income workers: low-wage competition and income prospects. Exposure to these risks can be modeled using objective measures, such as changes in relative earnings, as the

⁴¹ This chapter builds on a working paper presented at the DaWS Early Career Workshop (University of Southern Denmark, Odense) on 22 March 2018 and at the Labour Market Colloquium at University of Lausanne on 22 May 2018.

previous chapter did. However, objective exposure to risk does not necessarily match subjective perceptions of risk (see Rehm 2016: ch. 3). Subjective perceptions of risk are formed by individual judgements about the probability of an uncertain event and the severity of its consequences (Rehm et al. 2012: 399-400). Workers exposed to the risks of flexible employment are expected to perceive more insecurity in their jobs. This underlies the concept of “subjective job insecurity.”⁴²

A large literature has emphasized the multidimensionality of subjective job insecurity (see Anderson and Pontusson 2007; Chung and Mau 2014). This research distinguishes among “affective job insecurity,” “cognitive job insecurity” and “employment insecurity.” *Affective job insecurity* captures the worries, negative emotions and fears that workers associate with the possibility of losing their job. *Cognitive job insecurity* more abstractly captures the probability that workers lose their job or an estimate of how secure they think their job is. *Employment insecurity* (or labor market insecurity) taps into the prospects of finding another job (re-employment) in the event of job loss. Following Anderson and Pontusson (2007), these different concepts can be related to one another in a unified model whereby affective job insecurity ensues from a combination of cognitive job insecurity and employment insecurity. Hence, the main advantage of focusing on affective job insecurity is that it can be theoretically decomposed into several sub-aspects of labor market risk perceptions. This is useful for my own theoretical argument below, which draws on mechanisms related to a combination of job insecurity, (re-)employment insecurity and income insecurity. The following empirical analysis first presents the aggregate-level distribution of subjective job insecurity across income groups (section 5.2), and then proceeds to explain insecurity at the individual level (section 5.3).

5.2. Job insecurity in 19 OECD countries

The International Social Survey Programme (ISSP) provides data on subjective job insecurity for 19 OECD countries (see chapter 3.2). Table 5.1 displays the percentage of workers that worry “a great deal” or “to some extent” about losing their job. Because the

⁴² This study focuses entirely on economic insecurity related to labor market risks among the active labor force population. I leave other aspects of insecurity, such as old-age risks or family-related risks, aside.

ISSP includes an imprecise measure of income, only three income groups (low, middle and high) can be distinguished. The countries are sorted in geographical clusters that broadly represent different welfare regimes. Table 5.1 confirms two well-known findings in the literature: the existence of a large cross-national variation in insecurity levels (in 2015, 72% of middle-income workers in Spain worried about losing their job, compared to just around 11% in Sweden) and the large fluctuations in insecurity levels over time. For example, in the case of Spain, these levels have ranged from a country low of 39% in 2005 to a high of 72% in 2015. However, Table 5.1 also sheds light on the less well-known variation in insecurity levels across different income groups.

Table 5.1: Affective job insecurity in 19 OECD countries

Income:	1997					2005					2015				
	Low	Mid	High	Mid vs. low	Mid vs. high	Low	Mid	High	Mid vs. low	Mid vs. high	Low	Mid	High	Mid vs. low	Mid vs. high
Belgium						11	10	7	-2	+3	25	20	16	-5	+3
France	41	31	18	-11	+12	34	26	19	-8	+7	35	32	22	-3	+10
Germany	45	45	29	-0	+16	47	39	23	-8	+16	20	22	13	+2	+9
Netherlands	14	13	10	-1	+3	13	19	12	+5	+7					
Switzerland	23	24	23	+1	+1	23	25	15	+2	+9	18	21	17	+2	+3
Denmark	8	12	11	+4	+1	13	9	11	-4	-2	30	18	14	-12	+4
Finland						12	12	6	-0	+6	16	13	8	-3	+4
Norway	16	13	6	-3	+7	22	16	11	-6	+5	19	18	16	-1	+2
Sweden	31	22	13	-9	+9	25	15	13	-10	+2	19	11	10	-8	+1
Portugal	46	47	35	+1	+12	44	24	35	-20	-10					
Spain	69	47	41	-22	+6	61	39	44	-22	-5	78	72	61	-7	+11
Australia						24	20	15	-4	+6	31	26	21	-5	+5
Canada	31	21	10	-10	+10	17	21	15	+4	+6					
New Zealand	23	27	17	+4	+10	16	15	10	-1	+5	30	23	16	-7	+7
UK	26	32	25	+6	+7	22	23	17	+1	+6	28	24	26	-4	-2
USA	21	14	16	-6	-1	27	19	11	-8	+7	18	16	15	-2	+1
Czech Republic	42	37	26	-5	+11	48	33	29	-15	+4	55	52	42	-4	+10
Hungary	14	22	15	+8	+7	27	21	21	-5	+1	40	20	12	-20	+8
Slovenia	63	53	40	-10	+13	49	47	39	-2	+8	51	40	27	-11	+13
Average	31	28	20	-3	+8	27	23	18	-4	+5	32	26	21	-5	+6
<i>High regulation</i>	36	31	22	-5	+8	30	23	21	-7	+3	39	33	26	-6	+7
<i>Low regulation</i>	26	25	18	-1	+7	22	22	15	+0	+7	25	21	16	-4	+4

Notes: Percentage of workers declaring that they worry “a great deal” or “to some extent” about losing their job (as opposed to “a little” or “not at all”). High [low] regulation = greater or equal to [below] the median, calculated separately for the three ISSP waves.

Source: ISSP Research Group (1999, 2013, 2017).

In many cases, insecurity levels differ substantially across low-, middle- and high-income workers. On average, middle-income workers experience lower levels of subjective insecurity compared to low-income workers and higher levels in comparison to their high-income counterparts (columns in italics). However, in twelve of the 51 country-years, middle-income workers report *higher* shares of insecurity compared to workers in the bottom third of the earnings distribution. In six country-years, those situated in the middle indicate *lower* insecurity levels than those in the top third of the earnings distribution. Hence, there is a substantial variation of subjective job insecurity across different income groups.

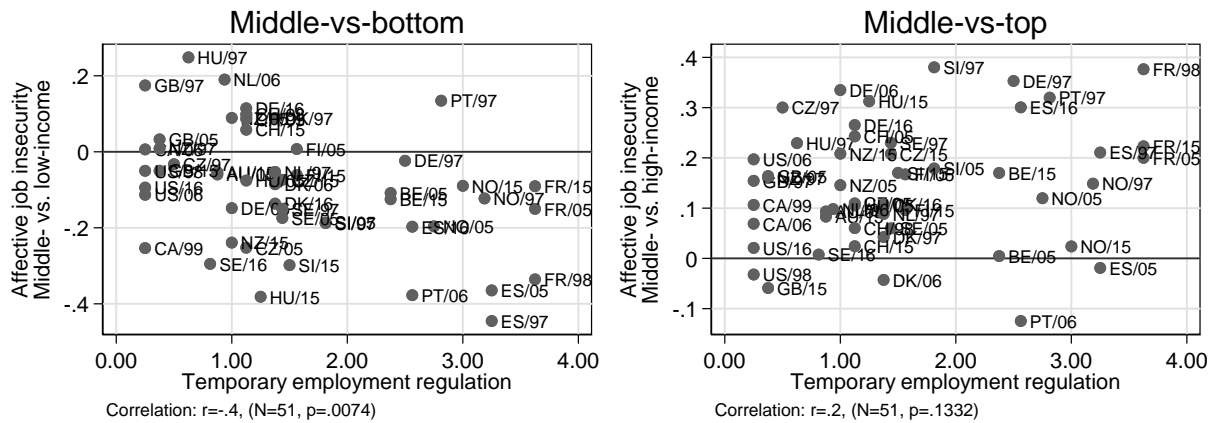
Does the regulation of flexible employment explain this variation? The bottom lines in Table 5.1 hint that part of the divergence in insecurity levels across income groups can be accounted for by cross-national differences in flexible employment policies. In particular, the difference in perceptions between middle- and low-income workers appears larger in countries with above-average regulation. The gap is most apparent in 2005. Where flexible employment is more regulated, the middle expresses levels of insecurity similar to those of rich workers and feels much less insecure than poor workers (the difference with the latter amounts to -7 points). In contrast, where flexible employment is less regulated, middle- and low-income workers report the same aggregate levels of insecurity. Both the middle and the poor express higher insecurity compared to rich workers. In relative terms then,⁴³ it appears that risk affects middle-income and low-income workers to a similarly high degree in deregulated contexts.

Figure 5.1 reaffirms this pattern. The scatterplots are based on country-year averages for affective job insecurity on the categorical answer scale from 1 to 4. Pooling all 51 country-year observations, there is a moderately strong correlation between the regulation of temporary employment and the subjective insecurity of middle-income workers relative to low-income workers ($r=-0.4$). On average, middle-income and low-income workers share similarly high levels of insecurity in deregulated contexts. Eleven of the twelve

⁴³ In absolute terms, average insecurity levels (across all workers) appear higher under high regulation. The regression analyses below address this point, among others, with country fixed effects. However, it is important to note that throughout this study, my argument applies to *relative* differences between income groups.

instances whereby the middle worries *more* than low-income workers about losing their job are in settings marked by deregulated temporary employment (Portugal 1997 is the only exception). The high levels of regulation in countries like Belgium, France, Norway, Portugal or Spain are all associated with lower relative insecurity levels for the middle. While this says nothing about absolute insecurity levels, it may indicate that middle-income workers feel better protected against labor market risks in comparison to their low-income counterparts. In contrast, the right-hand panel of Figure 5.1 reveals no clear correlation between temporary employment regulation and middle-income workers' insecurity relative to workers in the top third of the earnings distribution.

Figure 5.1: Temporary employment regulation and the relative insecurity of the middle



Notes: The vertical axis shows the difference between the average insecurity of middle-income workers and the average insecurity of low-income (left panel) and high-income (right panel) workers. Marker labels indicate the exact year the survey was fielded. Affective job insecurity measured on a scale from 1 to 4.
Source: ISSP Research Group (1999, 2013, 2017) and OECD (2017a).

The pooled OLS regressions in Table 5.2 further probe into the determinants of middle-income workers' relative insecurity at the aggregate level. Models 1 to 4 employ the affective job insecurity of middle-income relative to low-income workers as the dependent variable, while Models 5 to 8 repeat the analysis for insecurity relative to high-income workers. These models confirm that more stringent temporary employment regulation is associated with larger (negative) differences in perceived insecurity between middle- and low-income workers. These differences are not simply an artifact of higher overall insecurity levels (as, for example, in the case of Spain). Furthermore, Models 3 and 4 show

that there remains an association significant at the 95% level after controlling for unemployment and various social and labor market policies. Apart from temporary employment regulation, only unemployment benefit spending has a consistently significant effect (at the 90% level), increasing the middle's insecurity relative to the poor. Table 5.2 also reiterates the finding that temporary employment regulation is not associated with the difference in insecurity between middle- and high-income workers.

Table 5.2: Macro-level determinants of affective job insecurity

	Difference between middle- and low-income workers				Difference between middle- and high-income workers			
	1	2	3	4	5	6	7	8
Temporary employment regulation	-0.06*** (0.02)	-0.05*** (0.02)	-0.06** (0.03)	-0.07** (0.03)	0.02 (0.01)	0.01 (0.02)	0.00 (0.02)	-0.01 (0.02)
Average insecurity level (across all individuals)		-0.11** (0.04)	-0.06 (0.11)	-0.08 (0.10)		0.16*** (0.04)	0.17* (0.09)	0.15** (0.07)
Unemployment rate			-0.02 (0.01)	-0.02* (0.01)			0.00 (0.01)	0.00 (0.01)
Total social expenditure			0.00 (0.01)	0.01 (0.01)			0.00 (0.01)	0.01 (0.01)
ALMP expenditure			-0.08 (0.08)	-0.15 (0.10)			0.04 (0.06)	-0.02 (0.06)
PLMP expenditure			0.06** (0.03)	0.06* (0.03)			-0.03 (0.02)	-0.04* (0.02)
EPL regular contracts			0.03 (0.03)	0.03 (0.03)			-0.00 (0.03)	-0.00 (0.03)
2005 wave dummy (ref: 1997)				-0.08 (0.06)				-0.09* (0.04)
2015 wave dummy (ref: 1997)				-0.11 (0.08)				-0.12** (0.04)
Constant	0.00 (0.04)	0.20** (0.09)	0.10 (0.17)	0.06 (0.19)	0.11*** (0.03)	-0.17** (0.08)	-0.27* (0.14)	-0.31** (0.14)
R^2	0.16	0.21	0.31	0.37	0.04	0.20	0.24	0.35
N	51	51	51	51	51	51	51	51

Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$ (country-clustered standard errors). Based on pooled OLS regressions in 19 countries (from ISSP surveys in 1997, 2005, 2015). Dependent variable: worries about losing job (1-4 scale), difference in average levels between middle- and low/high-income workers.

5.3. Individual-level regression analysis

The second part of the empirical analysis turns to explaining subjective labor market insecurity at the individual level. Table 5.3 reports the main results based on ordered logistic regressions of subjective job insecurity. I report two models each for the three dimensions

of job insecurity and for the “unified” model of affective job insecurity (controlling for cognitive job and employment insecurity). For each insecurity measure, the first model focuses on the baseline effects of income and the second model adds an interaction term between income and temporary employment regulation. The baseline effects of income are strongly significant for all measures of insecurity. As income increases, subjective insecurity decreases. This association indicates that there is a fair overlap between objective material conditions (i.e. income) and subjective risk perceptions. The substantive magnitude of the income effect is quite large. Model 1 estimates the predicted probability that a worker worry about losing his/her job (either “a great deal” or “to some extent”) at 28% for low-income workers, 24% for the middle and 20% for high-income workers. In comparison, workers with tertiary education (23%) differ very little from workers without tertiary education (24%). Income differences also seem more pronounced than differences between occupation-based social class groups.⁴⁴ Predicted probabilities range between 23% (service workers and managers) and 27% (production workers) – with the notable exception of socio-cultural professionals who indicate extraordinarily low levels of insecurity (19%).

The baseline models in Table 5.3 also reveal that temporary employment regulation does not affect subjective insecurity across all workers in a straightforward way. The direction of the coefficients indicates that regulation tends to increase the levels of affective job insecurity and employment insecurity, but it decreases cognitive job insecurity. However, none of the associations is significant at the 95% level. Of the macro-level explanatory variables in Table 5.3, only unemployment is consistently associated with higher levels of job insecurity on all three dimensions of insecurity. Of the micro-level explanatory variables, education, age, occupation and union membership have significant and, partly, contradictory effects. Because these variables are crucial for my theoretical argument based on skill profiles, I discuss them in more detail below.

⁴⁴ Based on the 8-class scheme from Oesch (2006).

Table 5.3: Ordered logistic regressions of subjective job insecurity

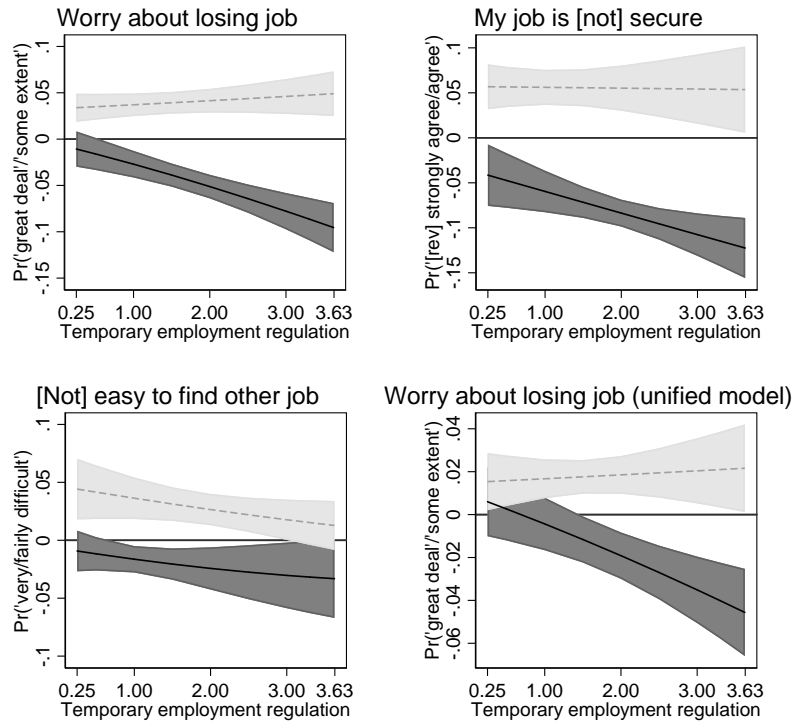
	Affective job insecurity		Cognitive job insecurity		Employment insecurity		Affective job insecurity (unified model)	
	1	2	3	4	5	6	7	8
Low income (ref: middle)	0.23*** (0.04)	0.04 (0.07)	0.32*** (0.05)	0.16* (0.09)	0.12*** (0.04)	0.03 (0.06)	0.09** (0.04)	-0.07 (0.07)
High income (ref: middle)	-0.25*** (0.04)	-0.22*** (0.05)	-0.27*** (0.05)	-0.27*** (0.06)	-0.17*** (0.04)	-0.23*** (0.08)	-0.13*** (0.03)	-0.11* (0.06)
Temporary employment regulation	0.11 (0.09)	0.09 (0.10)	-0.03 (0.09)	-0.06 (0.09)	0.21* (0.12)	0.18 (0.12)	0.09 (0.07)	0.06 (0.07)
Low-income*temp. empl. regulation (ref: middle)		0.12*** (0.03)		0.11*** (0.04)		0.06 (0.05)		0.10*** (0.03)
High-income*temp. empl. regulation (ref: middle)		-0.02 (0.03)		-0.00 (0.04)		0.04 (0.03)		-0.01 (0.03)
Unemployment rate	0.08*** (0.03)	0.08*** (0.03)	0.08*** (0.03)	0.07*** (0.03)	0.17*** (0.04)	0.17*** (0.04)	0.04 (0.02)	0.03 (0.02)
Total social expenditure	0.06 (0.04)	0.06 (0.04)	0.07** (0.04)	0.07** (0.03)	-0.07 (0.05)	-0.07 (0.05)	0.05* (0.03)	0.05* (0.03)
ALMP expenditure	0.08 (0.19)	0.09 (0.20)	0.10 (0.18)	0.11 (0.18)	-0.07 (0.29)	-0.07 (0.29)	0.09 (0.14)	0.09 (0.14)
PLMP expenditure	-0.03 (0.17)	-0.03 (0.17)	-0.27 (0.18)	-0.27 (0.18)	-0.11 (0.15)	-0.11 (0.15)	0.07 (0.14)	0.07 (0.14)
EPL regular contracts	0.19 (0.35)	0.20 (0.35)	-0.04 (0.33)	-0.04 (0.33)	1.10** (0.43)	1.11** (0.43)	0.04 (0.33)	0.05 (0.33)
Tertiary education degree	-0.06* (0.03)	-0.06* (0.03)	0.02 (0.03)	0.02 (0.03)	-0.14*** (0.04)	-0.14*** (0.04)	-0.07** (0.03)	-0.07** (0.03)
Age	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.04*** (0.00)	0.04*** (0.00)	-0.01*** (0.00)	-0.01*** (0.00)
Union membership	0.17*** (0.05)	0.17*** (0.04)	-0.15*** (0.05)	-0.15*** (0.05)	0.20*** (0.04)	0.20*** (0.04)	0.24*** (0.04)	0.23*** (0.04)
Technical professionals (ref: socio-cultural prof.)	0.46*** (0.05)	0.45*** (0.05)	0.46*** (0.08)	0.46*** (0.08)	0.18*** (0.07)	0.17*** (0.07)	0.32*** (0.05)	0.31*** (0.05)
Production workers (ref: socio-cultural prof.)	0.47*** (0.05)	0.46*** (0.05)	0.47*** (0.06)	0.46*** (0.06)	0.10 (0.06)	0.10 (0.06)	0.32*** (0.05)	0.31*** (0.05)
Managers (ref: socio-cultural prof.)	0.28*** (0.04)	0.28*** (0.04)	0.32*** (0.07)	0.31*** (0.07)	0.13** (0.06)	0.13** (0.06)	0.19*** (0.04)	0.18*** (0.04)
Clerks (ref: socio-cultural prof.)	0.42*** (0.04)	0.41*** (0.04)	0.29*** (0.05)	0.29*** (0.05)	0.38*** (0.07)	0.38*** (0.06)	0.34*** (0.04)	0.33*** (0.04)
Service workers (ref: socio-cultural prof.)	0.24*** (0.05)	0.23*** (0.04)	0.17*** (0.05)	0.17*** (0.05)	-0.01 (0.05)	-0.01 (0.05)	0.21*** (0.04)	0.21*** (0.04)
Male (ref: female)	0.01 (0.04)	0.02 (0.04)	0.15*** (0.04)	0.15*** (0.04)	-0.09 (0.06)	-0.08 (0.06)	-0.03 (0.02)	-0.02 (0.02)
Part-time (ref: full-time)	-0.22*** (0.05)	-0.21*** (0.05)	0.07 (0.05)	0.08 (0.05)	0.02 (0.05)	0.02 (0.05)	-0.28*** (0.06)	-0.28*** (0.05)
Cognitive job insecurity							0.81*** (0.06)	0.81*** (0.06)
Employment insecurity							0.29*** (0.02)	0.29*** (0.02)
Pseudo R ²	0.05	0.05	0.02	0.02	0.04	0.04	0.14	0.14
N	31,766	31,766	31,540	31,540	31,122	31,122	30,356	30,356

Notes: * p<0.1; ** p<0.05; *** p<0.01 (country-clustered standard errors). Based on ordered logistic regressions in 19 countries. Country dummies, survey year dummies and constant included (not shown). Years available: 1997, 2005, 2015 (Models 1-2, 7-8); 1989, 1997, 2005, 2015 (Models 3-6).

The core finding of this chapter concerns the relative insecurity of middle-income workers, captured by the interaction terms between income and temporary employment regulation in Table 5.3. The interactions for insecurity relative to low-income workers are statistically significant at the 99% level for affective job insecurity, cognitive job insecurity and the unified model. In the case of employment insecurity, the coefficient estimate is larger than its standard error, but not significant at conventional levels. Figure 5.2 visualizes the marginal effects of temporary employment regulation on middle-income workers' relative insecurity to facilitate the interpretation of the interactions. The dark grey areas represent the confidence intervals for the predicted probabilities in insecurity relative to low-income workers, while the light grey areas delineate those for insecurity relative to high-income workers. The graphs confirm that the difference in insecurity between middle- and low-income workers is lower under flexible employment conditions with low regulation of temporary employment than it is in context market by high regulation. In the latter case, the middle are substantially less insecure than their low-income counterparts. Hence, regulation helps middle-income workers to be more isolated from the higher insecurity levels routinely experienced by poorer workers.

The association between flexible employment policy and a lower divergence in the insecurity levels perceived by middle- and low-income workers is present when affective job insecurity and cognitive job insecurity are used as dependent variables. The interaction term for employment insecurity points in the same direction but is statistically insignificant. The unified model is perhaps best suited to estimate the extent of labor market worries at given levels of replacement risk (cognitive job insecurity) and re-employment risk (employment insecurity) perceptions of workers. In this model (represented in the bottom-right panel of Figure 2), middle-income workers express levels of insecurity that are indistinguishable from those experienced by low-income workers when the OECD indicator of temporary employment regulation is below 1.5, which comprises more than half of the country-years in the sample. The marginal effects in Figure 5.2 also reaffirm that flexible employment regulation does not condition the gap in the levels of insecurity perceived by the middle and the top. At almost any level of regulation, high-income workers are significantly less worried about job loss than their middle-income counterparts.

Figure 5.2: Insecurity of the middle relative to low-income workers (dark grey) and to high-income workers (light grey)



Note: Marginal effect of temporary employment regulation with 95% confidence interval. Based on Models 2, 4, 6 and 8 in Table 5.3.

The finding that deregulation makes the difference in the levels of insecurity perceived by low- and middle-income workers narrower is somewhat open to interpretation. It could be the case that middle-income workers become more insecure due to deregulation. However, the results in Table 5.3 could also point to a strong marginal effect of temporary employment regulation on low-income workers and a weaker effect on the perceptions of middle- and high-income workers. In terms of absolute levels, regulation is associated with significantly higher insecurity levels among the poor but does not significantly affect the insecurity levels of middle- and high-income workers.⁴⁵ Does this mean that temporary employment regulation primarily affects the poor rather than the middle? The fact that absolute levels of insecurity are conceptually different from the relative differences in insecurity across income groups speaks against this interpretation. Absolute insecurity

⁴⁵ The marginal logit coefficients of temporary employment regulation produced by Model 2, are 0.21 ($p=0.02$) for low-income workers, 0.09 ($p=0.36$) for middle-income workers, and 0.07 ($p=0.47$) for high-income workers.

levels and trends are determined by country-specific factors such as the rate of unemployment (more on that below). However, workers seem more likely to compare themselves to other workers within the same context. From the perspective of coalition-building theories (e.g. Iversen and Soskice 2006; Lupu and Pontusson 2011), the relative distance between groups within the same context, rather than comparisons of absolute levels across countries, is what matters. The key point then is that in contexts marked by low regulation, middle-income and low-income workers share the same level of subjective insecurity. They are significantly set apart from high-income workers, who have lower levels of insecurity.

The results for affective job insecurity are robust to a variety of alternative specifications, as documented in Appendix 5.1. First, the findings remain substantially unchanged when the sample is restricted to full-time workers only. Second, separate regressions for the three survey rounds of 1997, 2005 and 2015 yield substantially similar results. In the models employing the most recent wave of data (2015), the interaction term between income and temporary employment regulation loses statistical significance. This could be interpreted as a cumulative result of the convergence in flexible employment conditions observable across OECD countries. However, separate regressions for each survey round are fully restricted to cross-national differences in regulation levels and, unlike the pooled models with country fixed effects, ignore any changes in regulation over time. Lastly, alternative methodological specifications with binary logistic regressions and linear OLS regressions yield similar results. The estimates of multilevel linear regressions with crossed random effects (modeling individuals nested in countries and years) produce largely the same results and turn out to be less conservative (in terms of standard error magnitude) than the ordered logistic regressions described above.

The income differences found in subjective insecurity are consistent with the argument that better-off workers face the risk of low-wage competition under deregulated flexible employment, which is why they feel relatively more insecure. Nonetheless, further tests on the variation in subjective insecurity across more distinct worker subgroups are required to determine whether risk perceptions align with the theoretical framework put forth in this study. In the following sub-sections, I show how risk perceptions differ across

employees with different skill profiles and union membership, as well as across different macro-level conditions of dualization and unemployment.

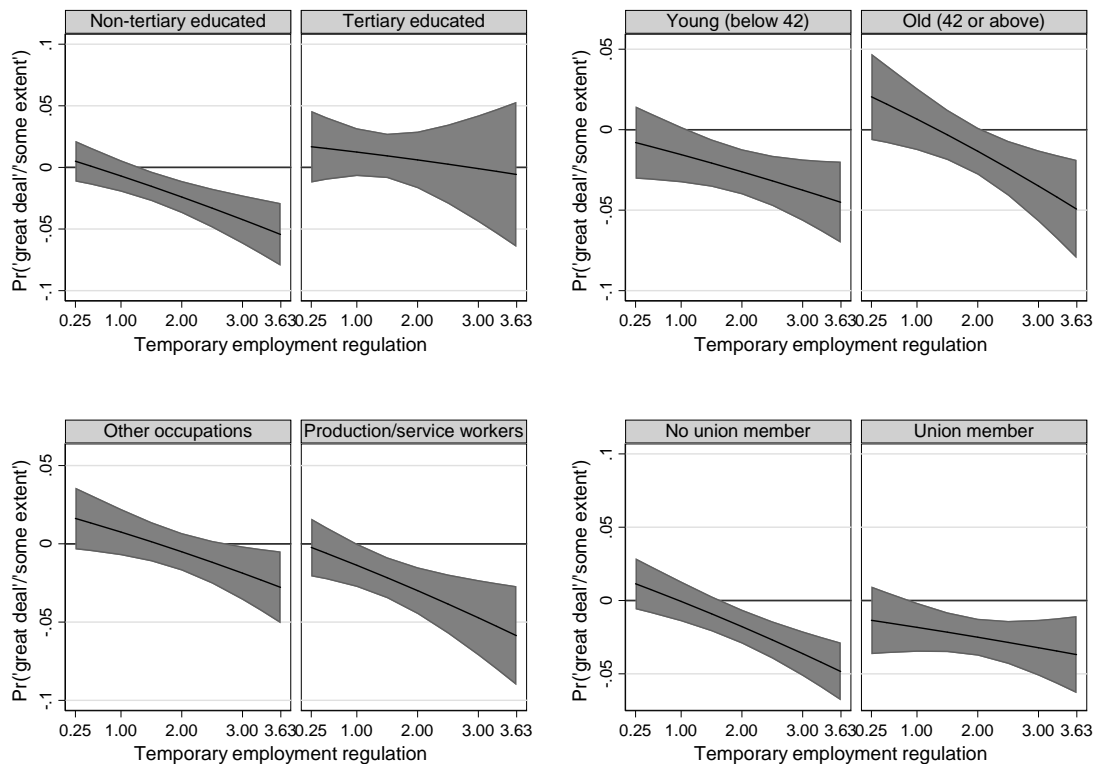
Skill profiles and union membership

This study has argued that workers' risks and income prospects are shaped by their skill profiles. The low prevalence of tertiary education and "mobile" skill profiles among middle-income workers adversely affects their risk position when they face competition with low-paid outsiders. In a similar vein, I have argued that union membership and the inclusiveness of union organization moderate the risk-enhancing effects of flexible employment. These individual-level characteristics indeed affect subjective insecurity, as the regression results in Table 5.3 show. Tertiary-educated workers generally perceive lower levels of insecurity. Older workers tend to feel more insecure, and insecurity levels differ across occupational classes. The effects of union membership are not unambiguous. Union members are significantly more worried about job loss and about finding new employment, but they are also more likely to think that their job is secure (see Tepe and Vanhuysse 2012). However, these effects are averages across all workers. They do not reveal whether skill profiles and union membership have differential effects across different regulatory contexts and different income groups.

To address this question, Figure 5.3 presents the results from several expanded versions of the unified model of affective job insecurity (based on Model 8 in Table 5.3). I have added an additional interaction term and generated three-way interactions among income, regulation, and workers' skill profiles or union membership. The key outcome of interest in these models is whether the marginal effect of temporary employment on the relative insecurity of the middle differs by skill profile and union membership. Based on my theoretical framework, I hypothesize that regulation has a stronger effect on middle-income workers endowed with less mobile skill profiles (low-educated, older workers in production or low service occupations) and not organized by trade unions. Figure 5.3 shows support for these expectations. In the case of the middle's relative insecurity vis-à-vis their low-income counterparts, the marginal effect of temporary employment regulation is stronger for non-tertiary educated workers, older workers, production and low-service

workers, as well as for non-union members. The graphs visualize this by assigning steeper slopes to workers with less mobile skill profiles and to non-union members. In contrast, the effect of regulation on the middle's insecurity relative to the poor is statistically insignificant for highly educated workers and union members, and weaker for younger workers and for professionals, managers or clerks.

Figure 5.3: Insecurity of middle-income workers by skill profile and union membership (relative to low-income workers)



Note: Marginal effect of temporary employment regulation with 95% confidence intervals. Results based on the unified model of affective job insecurity (Model 8 in Table 5.3), with an additional interaction term added for education, age, occupation and union membership (three-way interactions with income and temporary employment regulation).

According to these results, flexible employment policies make a large difference for middle-income workers with lower-skilled, less mobile profiles. This is not surprising. Flexible employment provides few opportunities for workers who are unable to use temporary jobs for their career advancement. Even after controlling for the dimension directly related to replacement risk (cognitive job insecurity), skill profiles remain an important determinant of affective job insecurity. This implies that skill profiles affect workers'

income prospects not only through replaceability calculations, but also through more long-term career prospects. Workers unable to easily switch between jobs and lacking the skills to signal their ability to adapt to a changing work environment find themselves in a difficult bargaining position when competition from outsiders increases.

Employment protection and dualization

Similar to other previously discussed individual-level factors, such as workers' skill profiles and union membership, dualization policies and outcomes are also expected to moderate the effect of flexible employment policies on workers' perceptions of insecurity. Workers are likely to feel more secure when they are legally protected against job dismissal, because stringent employment protection by definition reduces the possibility of job replacement. The top panel of Table 5.4 displays the results of three-way interactions of income (low vs. middle) with temporary employment regulation and the EPL indicator for regular contracts. The results demonstrate clearly that the marginal effects of temporary employment regulation are almost the same at any level of employment protection. Hence, employment protection does not affect the relationship between flexible employment policies and middle-income workers' relative insecurity. This is not surprising, since the anticipated effects of EPL on middle-income workers' risk position are not unambiguous. Employment protection offers some protection against job dismissal, but a more negative (subjective) outlook on re-employment opportunities could counterbalance its effects on risk perceptions.

Table 5.4 Marginal effects of regulation conditional on employment protection, dualization and unemployment

Employment protection for regular workers (EPL)					
<i>Dependent variable</i>	0.26 (Min)	1.57 (25%)	2.17 (50%)	2.63 (75%)	4.58 (Max)
<i>Affective job insecurity</i>	0.14** (0.06)	0.14*** (0.04)	0.14*** (0.04)	0.13*** (0.05)	0.12 (0.10)
<i>Cognitive job insecurity</i>	0.06 (0.08)	0.09* (0.05)	0.10** (0.04)	0.11** (0.04)	0.15* (0.09)
<i>Employment insecurity</i>	0.00 (0.07)	0.02 (0.05)	0.03 (0.05)	0.03 (0.06)	0.06 (0.10)
<i>Affective job insecurity (unified model)</i>	0.12** (0.06)	0.12*** (0.04)	0.12*** (0.04)	0.12*** (0.04)	0.13 (0.09)
Share of temporary workers (log)					
<i>Dependent variable</i>	-3.17 (Min)	-2.45 (25%)	-2.12 (50%)	-1.97 (75%)	-1.09 (Max)
<i>Affective job insecurity</i>	-0.05 (0.08)	0.05 (0.05)	0.09* (0.05)	0.12** (0.05)	0.23** (0.10)
<i>Cognitive job insecurity</i>	0.08 (0.07)	0.09** (0.04)	0.09** (0.05)	0.09* (0.05)	0.11 (0.10)
<i>Employment insecurity</i>	0.18*** (0.07)	0.08** (0.04)	0.04 (0.05)	0.02 (0.05)	-0.10 (0.10)
<i>Affective job insecurity (unified model)</i>	-0.12 (0.09)	0.01 (0.05)	0.07 (0.05)	0.10** (0.05)	0.26*** (0.08)
Unemployment rate (%)					
<i>Dependent variable</i>	3.32 (Min)	4.90 (25%)	6.32 (50%)	8.40 (75%)	22.10 (Max)
<i>Affective job insecurity</i>	0.12** (0.05)	0.11*** (0.04)	0.10*** (0.03)	0.08 (0.05)	-0.04 (0.25)
<i>Cognitive job insecurity</i>	0.13** (0.05)	0.11*** (0.04)	0.10** (0.04)	0.08 (0.06)	-0.03 (0.24)
<i>Employment insecurity</i>	0.13** (0.06)	0.10** (0.05)	0.08** (0.04)	0.04 (0.04)	-0.20 (0.18)
<i>Affective job insecurity (unified model)</i>	0.07 (0.06)	0.07 (0.04)	0.07* (0.04)	0.06 (0.04)	0.05 (0.22)

Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$ (country-clustered standard errors). The table shows the marginal estimations of the interaction term between low-income (reference: middle) and temporary employment regulation. The underlying model adds a three-way interaction of low-income with temporary employment regulation and EPL/the incidence of temporary employment/unemployment to the interaction models in Table 5.3.

High employment protection in turn might shift the creation of new jobs towards non-standard employment. Therefore, the second panel in Table 5.4 tests whether the effect of regulation differs across different shares of temporary workers in the labor force.⁴⁶ The

⁴⁶ I log this variable, because the distribution of temporary employment incidence is right-skewed. The results for the non-logged indicator are similar.

results show ambiguous effects. The proportion of temporary workers does not change the marginal effect of temporary employment regulation on cognitive job insecurity. However, higher shares of temporary workers lead to a stronger effect of regulation on affective job insecurity. The opposite holds for employment insecurity, where higher shares of temporary workers dampen the effect of regulation. In sum, regulation's effect on the middle's insecurity relative to the poor holds for any level of dualization outcomes, but does not affect the different dimensions of insecurity in a uniform way. An additional caveat to bear in mind is the strong correlation between temporary employment regulation and the share of temporary workers.⁴⁷ This might imply that regulation and the incidence of temporary employment act as substitutes for the broader risk effects of flexible employment to some extent. Overall, taking into account the share of temporary workers does not turn the relationship between flexible employment policies and the risk perceptions of middle-income workers relative to poorer workers upon its head.

Unemployment

Finally, the bottom panel of Table 5.4 tests the effects of temporary employment regulation conditional on unemployment levels. The three-way interactions for unemployment are not statistically significant for any of the three dimensions of insecurity. However, the marginal effects of regulation tend to become less statistically significant at very high levels of unemployment. At low-to-medium levels of unemployment, the effects of regulation are statistically significant. A natural explanation for this result is that in contexts of high unemployment, both low- and middle-income workers feel insecure irrespective of the flexible employment regime in place. During economic downturns, short-term unemployment risks would outweigh the more long-term risk perceptions related to income prospects.

While unemployment only has a modest impact on the middle's relative insecurity, it has notably strong effects on absolute levels and trends in perceptions of insecurity. Going back to the main regression results in Table 5.3, unemployment is a strong and consistent predictor of each of the three dimensions of insecurity. At the aggregate level with 51

⁴⁷ $r=0.52$ ($N=51$, $p<0.001$), and $r=0.55$ ($N=51$, $p<0.001$) for the logged share of temporary workers.

country-years, the correlation between unemployment and average affective job insecurity is 0.65. An increase in unemployment by one percentage point is associated with a 2.4-percentage-point increase in the share of workers worrying a great deal or to some extent about losing their job. Unemployment also strongly correlates with cognitive job insecurity ($r=0.33$) and employment insecurity ($r=0.49$). More importantly, unemployment explains much of the fluctuations in levels of insecurity over time. Differences in unemployment rates explain more than half of the variation in affective job insecurity from one survey year to the next ($r=0.72$, $R^2=0.52$, $N=32$). Differences in unemployment are also significantly associated with differences in insecurity as far as the other two dimensions of insecurity are concerned ($r=0.47$ for cognitive job insecurity and $r=0.65$ for employment insecurity, $N=32$).⁴⁸ Hence, unemployment plays a major role in explaining the observable trends in overall insecurity levels. In terms of the relative insecurity of middle-income workers, unemployment only moderates the effect of flexible employment policies in a limited way.

5.4. Summary

The main finding of this chapter is that flexible employment policies affect middle-income workers' perceptions of risk. Regulation affects different dimensions of middle-income workers' subjective job insecurity relative to low-income workers. In deregulated contexts, risk spreads towards middle-income workers, who feel as insecure as their low-income counterparts. In contrast, the middle feels more insulated from the high employment-related risks experienced by poor workers where flexible employment is restricted. Regulation makes a stronger difference for workers with less mobile skill profiles, i.e. non-tertiary educated, older workers in production or low service occupations, much as my theoretical argument would lead us to expect. Similarly, regulation is more consequential for workers that are not union members. The survey analyses have also brought forth the strong effect that unemployment exerts on absolute levels and trends in insecurity. So far, the analyses provided in Chapter 4 and in this chapter have focused on the variation in earnings inequality and subjective insecurity, both across countries and over

⁴⁸ Similarly strong significant effects are found in regressions with country fixed effects.

time. The following final empirical chapter will instead focus exclusively on a single case, that of Germany, in an effort to explore the impact of flexibilization reforms over time.

Appendix 5.1: Robustness checks for affective job insecurity

	Interaction term	Marginal effect of insecurity of middle-income relative to low-income workers (at different levels of temporary employment regulation)				
		0.25 (Min)	0.88 (25%)	1.38 (50%)	2.34 (75%)	3.63 (Max)
<i>Original model (Table 5.3)</i>	-0.12*** (0.03)	-0.07 (0.06)	-0.14*** (0.04)	-0.20*** (0.04)	-0.33*** (0.04)	-0.48*** (0.06)
Only full-time workers	-0.09*** (0.03)	-0.15*** (0.06)	-0.21*** (0.04)	-0.25*** (0.03)	-0.34*** (0.03)	-0.44*** (0.06)
Only 1997 survey (16 countries)	-0.17** (0.07)	0.11 (0.13)	0.00 (0.10)	-0.08 (0.09)	-0.25** (0.10)	-0.46*** (0.17)
Only 2005 survey (19 countries)	-0.15** (0.06)	-0.07 (0.09)	-0.17*** (0.06)	-0.25*** (0.05)	-0.40*** (0.08)	-0.59*** (0.15)
Only 2015 survey (16 countries)	-0.02 (0.03)	-0.24*** (0.07)	-0.25*** (0.06)	-0.26*** (0.05)	-0.28*** (0.05)	-0.31*** (0.07)
Ordinary least squares regression	-0.05*** (0.01)	-0.05* (0.03)	-0.09*** (0.02)	-0.11*** (0.02)	-0.16*** (0.02)	-0.23*** (0.03)
Binary logistic regression (1=worry a great deal/some extent)	-0.08** (0.04)	-0.19*** (0.07)	-0.24*** (0.05)	-0.28*** (0.04)	-0.37*** (0.04)	-0.47*** (0.08)
Multilevel regression (with crossed random effects for country/years)	-0.05*** (0.01)	-0.05** (0.02)	-0.09*** (0.02)	-0.11*** (0.01)	-0.17*** (0.02)	-0.24*** (0.03)

Notes: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$ (country-clustered standard errors). Based on adaptations of Model 2 in Table 5.3.

6 The political economy of flexibilization reforms

In this final empirical chapter, I explore how flexibilization reforms affect the position of middle-income workers. The analysis builds on panel survey data from Germany between 1984 and 2015. Unlike previous chapters, the data from the German Socio-Economic Panel (SOEP) allow us to assess the consequences that changes in the regulatory setting bear on individual wage trajectories. Findings show that lower-middle and middle-income shares decreased significantly in the aftermath of flexibilization reforms, as risk spread towards middle-income workers. Significant shares of middle-income workers have experienced stagnant wage growth, especially older workers in production or low service occupations. Based on these adverse trajectories, I explore the political reactions of the losers in the flexibilization process. Data from the Comparative Study of Electoral Systems (CSES) show that middle-income workers significantly withdrew their support from the incumbent red-green coalition government in 2002 and 2005. These events suggest that flexibilization is likely to trigger some form of political backlash among those regular workers most exposed to the wage-related risks of flexible employment.

6.1. Flexibilization reforms in Germany

Germany is a crucial case to study the impact of marginal flexibilization on the position of regular workers. In the past several decades, both right- and left-leaning governments have implemented labor market reforms that have dismantled restrictions on atypical employment. Table 6.1 describes the content of major flexibilization reforms of the use of fixed-term contracts and temporary work agencies. The reforms were introduced in three sequences. In 1985, the center-right coalition government in power (Kohl II) facilitated the use of temporary contracts without the need for employers to specify “objective reasons” (*Sachgrund*). However, the allowed maximum duration of fixed-term contracts was

kept within narrow limits. A decade later, between 1995 and 1997, the center-right coalition (Kohl V) introduced a series of reforms which substantially increased the possible duration and the allowed number of renewals of fixed-term contracts and agency work. In late 2002, the re-elected red-green coalition government led by Gerhard Schröder introduced several deregulatory measures as part of the so-called “Hartz reforms.”⁴⁹ These measures abolished any remaining limits on the maximum duration of agency work and allowed the unlimited renewal of fixed-term contracts for older workers through consecutive contracts.

The comparative literature portrays marginal flexibilization as beneficial for the German export-led growth model, whose viability depends on cost competitiveness and the wage restraint of peripheral sectors (Palier and Thelen 2010; Hassel 2014; Baccaro and Pontusson 2016; Baccaro and Benassi 2017). However, distributional outcomes have not been exclusively limited to pronounced dualization and rising insider-outsider divides; Germany has also experienced a pervasive increase in income inequality and poverty (Grabka et al. 2016; Grabka and Goebel 2017; Bartels 2018). How much has marginal flexibilization contributed to these developments? Qualitative evidence suggests that liberalization at the margins has enhanced the wage pressures befalling regular workers (Eichhorst and Marx 2011; Rebien and Kettner 2011; Benassi and Dorigatti 2015; Benassi 2016). Complementing these findings, the following longitudinal analyses explore how the timing of the aforementioned flexibilization reforms affected the position of regular workers with middle earnings.

⁴⁹ The most controversial and widely discussed reform issue has been the so-called “Hartz IV,” which entailed the merger of unemployment assistance with social assistance, and was mandated a year later, in December 2003. This issue has been explored in more detail elsewhere (Seeleib-Kaiser and Fleckenstein 2007; Davidsson and Marx 2012; Rehm 2016: 130-135; Fervers 2018).

Table 6.1: Major flexibilization reforms in Germany

1985 (center-right government, Kohl II)
« <i>Beschäftigungsförderungsgesetz</i> », 26. April 1985
<ul style="list-style-type: none"> ▪ Allows fixed-term contracts without factual reasons, for a cumulated duration of up to one year ▪ Allowed maximum duration of agency work increases from three to six months ▪ Measures supposed to be in place until 1990, but renewed for the period beyond
1995-97 (center-right government, Kohl V)
« <i>Neufassung des Arbeitnehmerüberlassungsgesetzes (AÜG)</i> », 3. February 1995
<ul style="list-style-type: none"> ▪ Allowed maximum duration of agency work increases from six months to nine months ▪ Renewals of agency work made possible (after an interruption)
« <i>Arbeitsrechtliches Beschäftigungsförderungsgesetz</i> », 25. September 1996
<ul style="list-style-type: none"> ▪ Allowed maximum duration of fixed-term increases from one year to two years ▪ Number of renewals of fixed-term contracts increases to three times
« <i>Arbeitsförderungs-Reformgesetz</i> », 24. March 1997
<ul style="list-style-type: none"> ▪ Allowed maximum duration of agency work increases from nine months to twelve months ▪ Agency work for firms with up to 50 employees (previously: 20) does not require official authorization for a duration of up to twelve months (previously: three) ▪ Conditions for renewals of agency work relaxed
2002 (left government, Schröder II)
« <i>Erstes Gesetz für moderne Dienstleistungen am Arbeitsmarkt [Hartz I]</i> », 23. December 2002
<ul style="list-style-type: none"> ▪ Abolishes the maximum duration of agency work ▪ Principle of equal treatment between agency workers and regular workers, unless the temporary work agency is part of a collective bargaining agreement (effective 1. January 2004) ▪ Installment of “personal service agencies” (PSA). Employment offices order PSAs to hire unemployed workers and re-employ them as agency workers ▪ Fixed-term contracts without factual reasons relaxed for workers aged above 52 years; unlimited renewals possible through consecutive contracts (<i>Kettenvertrag</i>)
« <i>Zweites Gesetz für moderne Dienstleistungen am Arbeitsmarkt [Hartz II]</i> », 23. December 2002
<ul style="list-style-type: none"> ▪ Promotion of “mini jobs” with reduced obligations on social security contributions ▪ Promotion of self-employment (“<i>Ich-AG</i>”)

Sources: Own elaboration based on Zohlnhöfer (2001); Höland et al. (2004); Bundesministerium für Arbeit und Soziales (2006); Bellmann and Kühl (2008); Eichhorst and Marx (2011).

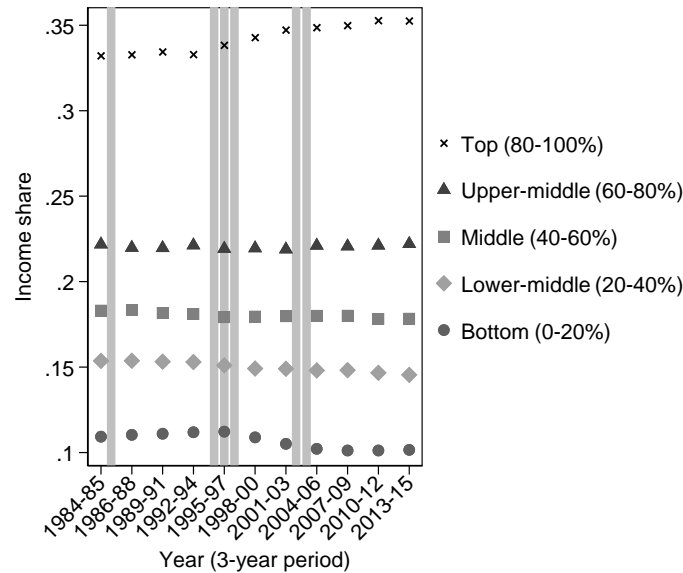
6.2. Distributional effects of flexibilization

Income shares

Based on gross earnings data from the German SOEP, Figure 6.1 documents that income polarization in Germany has been on the rise at least since the mid-1990s. The income shares of the top quintile have increased visibly, while the income shares of the bottom quintile have declined over the past two decades. The changes experienced by the middle quintiles appear to be smaller in magnitude. These findings resonate with earlier research

on the rise of bottom-end inequality (Vlandas 2018) and top-end inequality (Bartels 2018). Unlike the earlier chapters of this dissertation, the SOEP data presented in this chapter only includes full-time workers under permanent contracts.

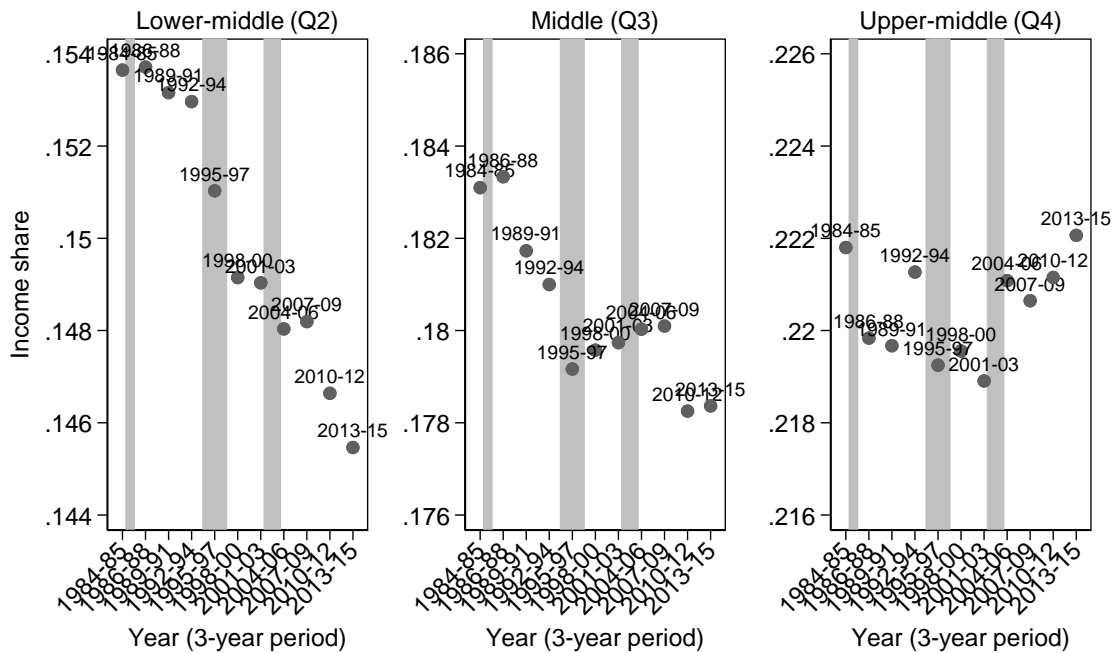
Figure 6.1: Income shares in Germany, 1984-2015 (3-year averages)



Note: Values indicate 3-year averages of incomes shares. Grey areas indicate the years in which each flexibilization reforms was first put in place.

Source: German Socio-Economic Panel Study (SOEP), SOEPlong, doi:10.5684/soep.v32.1.

The changes that the workers in the middle of the earnings distribution experienced during this period in Germany have attracted less attention. Figure 6.2 zooms in on the trends in the income shares of the three middle quintiles. The results clearly demonstrate that workers in the middle quintile, and especially those in the lower-middle quintile, have seen their income shares shrink. The income shares of lower-middle income workers start plummeting since about 1995. The middle quintile goes through two strong declines, one from the late 1980s to the mid-1990s and another in the late-2000s, and experiences a slight recovery in the period in between. There is no clear trend in the fluctuations of the upper-middle quintile's income shares, though the pattern resembles a u-shaped curve.

Figure 6.2: Income shares of middle quintiles

Note: Grey areas indicate years of flexibilization reforms.

Source: German SOEP.

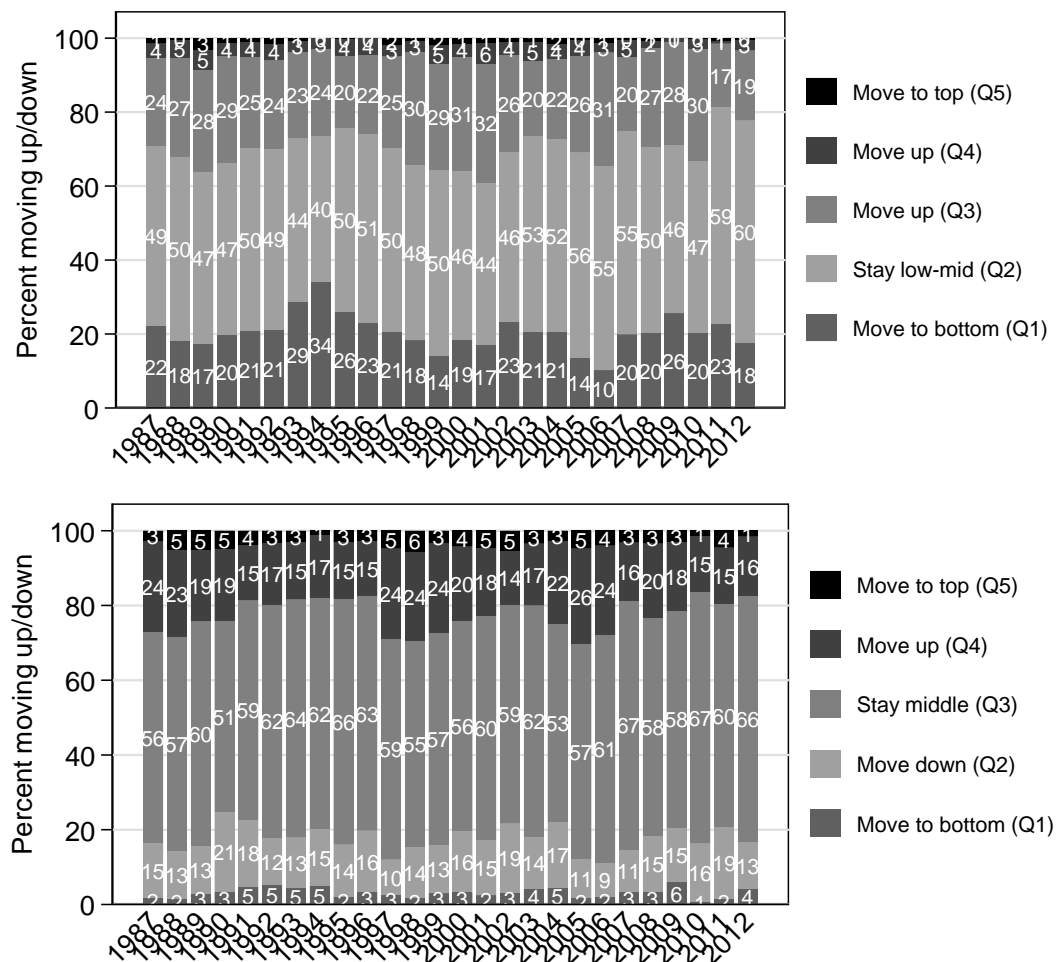
Overall, these descriptive observations are in line with the expected effects of flexibilization and the results from the previous comparative chapters. In particular, the lower-middle income quintile's income shares have declined during and after the periods of flexibilization reforms (the latter are marked by the grey bars in Figure 6.2). However, the main advantage of using the SOEP data has to do with the opportunity to exploit individuals' earnings trajectories and to identify the long-term effects of flexibilization. Accordingly, the next section examines whether middle-income workers indeed experienced an adverse wage trajectory in the aftermath of flexibilization periods.

Wage growth

Figure 6.3 plots the patterns of future earnings mobility of workers in the lower-middle quintile (upper panel) and the middle quintile (lower panel). The numbers reflect the quintile location of current middle-income workers over the following next three years. It is apparent that a majority of workers does not experience large-scale shifts in their relative earnings position. Notwithstanding the pattern of relative stability characterizing most

workers, some trends are apparent. Lower-middle income workers experience a peak in downward earnings mobility around 1994, which indicates a deterioration in their earnings position between 1995 and 1997. These years mark a period of major flexibilization reform. However, there is just a minor peak of downward mobility in 2002. Middle-income workers go through small peaks of downward mobility in 1990, as well as in 2002 and 2004; but it appears far-fetched to attribute the latter to the Hartz reforms of flexibilization. Overall, there is little change in the earnings position of middle-income employees. About 60% remain in the middle quintile over the following three-year period.

Figure 6.3: Earnings mobility of workers in the lower-middle (top) and middle quintile (bottom)

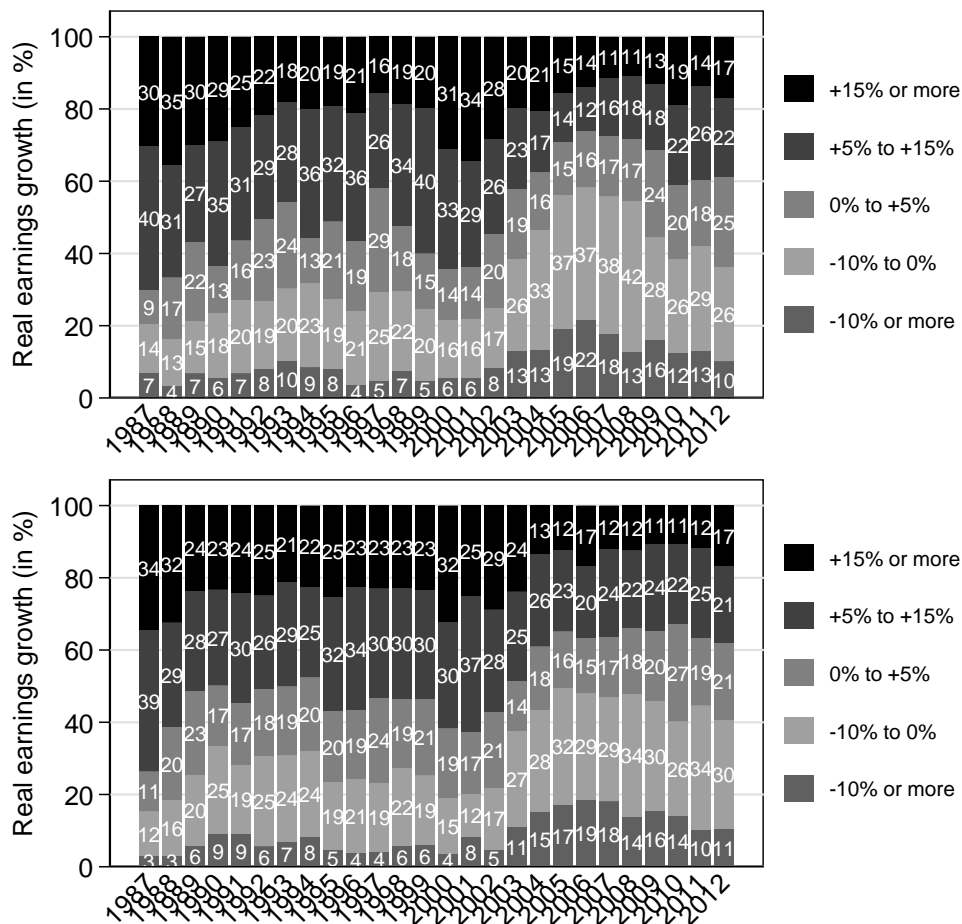


Notes: Future quintile position calculated as the average quintile position for the future three years (1 to 1.9=Q1; 1.9 to 2.6=Q2; 2.6 to 3.4=Q3; 3.4 to 4.1=Q4; 4.1 to 5=Q5). The sample in each year is comprised of full-time permanent employees who were in the lower-middle (Q2, top panel) or the middle quintile (Q3, bottom panel) in that year and remained in full-time permanent employment during the following three years.

Source: German SOEP.

The trends in earnings mobility suggest that flexibilization did not cause many middle-income workers to lose their position in the “middle class.” However, rather than anticipating that workers would experience a dramatic extent of status decline, the argument expects that flexibilization puts their wages under pressure from both competition from low-paid outsiders and adverse income prospects. Above all else, this effect should manifest in weak wage growth and wage stagnation over the long term.

Figure 6.4: Earnings growth of workers in the lower-middle (top) and middle quintiles (bottom)



Notes: Future earnings growth calculated as percentage change from current earnings to average earnings over the following three years. The sample in each year is comprised of full-time permanent employees who were in the lower-middle (Q2, top panel) or the middle quintile (Q3, bottom panel) in that year and remained in full-time permanent employment over the following three years. Earnings are CPI-adjusted to 2010 prices (in Euros).

Source: German SOEP.

Figure 6.4 assesses the prospects of future wage growth over a three-year period for workers in the lower-middle and middle income quintiles. It is obvious that earnings growth is

subject to greater fluctuations over time than earnings mobility. Low wage growth peaked in the mid-1990s and again in the mid-2000s and substantial shares of middle-income workers faced stagnating or negative real earnings growth during these years. Although flexibilization can hardly be considered the main determinant of wage growth, the temporal overlap between major flexibilization reforms and middle-income workers' wage stagnation is quite striking. Moreover, wage stagnation is not limited to the aftermath of the Hartz reforms; a clear peak of wage stagnation is already observable in the mid-1990s.

In order to assess more precisely whether the patterns of wage growth can be attributed to the aforementioned flexibilization reforms, it is necessary to test whether specific subgroups of middle-income workers are affected as our hypotheses on wage-related risks would lead us to believe. To this end, I pooled lower-middle and middle income workers and ran OLS regressions of the long-term wage growth of these groups on a set of socio-economic variables and period dummies. I operationalize wage growth as the percentage change from average wage levels over the past three years ($t-3$ to $t-1$) to average wage levels over the future three years ($t+1$ to $t+3$). The baseline results, which are listed in Appendix 6.1, show that age and occupation exert a strong effect on the dependent variable. Wage growth of older middle-income workers (those above the age of 41) is on average 6 percentage points lower than the wage growth of their younger counterparts. Wage growth of production and low service workers is estimated to be 3 percentage points below that of workers employed in other occupations. The baseline effects of union membership and tertiary education are not significant.

Table 6.2 presents the predicted estimates of middle-income workers' wage growth based on models that interact all socio-economic characteristics (age, occupation, tertiary education and union membership) and period dummies with each other. These models are meant to account for any non-linearities in wage dynamics across all possible types of middle-income workers. The results show that age is the main determinant of middle-income workers' future wage growth. Averaged across the whole time period, younger workers' predicted wage growth ranges between 7% and 13%, compared to the much narrower spread of 3% to 5% for older workers. Occupation is the second major determinant of future wage growth. Among younger workers, production and low service workers' wages grew by 7% compared to more than 10% for other occupations. In a similar

fashion, wage growth was the lowest among older workers in production and low services. The effect of tertiary education should be treated with caution, since only about 5% of middle-income workers in the regression sample had obtained a tertiary degree. Nevertheless, young university-educated workers were witnessing the highest wage growth among all middle-income workers in the 2000s. Finally, union members were experiencing a slightly higher wage growth than their non-unionized counterparts, except for young union members in non-production or low service occupations.

Table 6.2: Predicted wage growth of lower-middle and middle-income workers

		Real wage growth (% change t-3 to t+3)									
	Group size	Ø All years	1986	1989	1992	1995	1998	2001	2004	2007	2010
Young (aged 41 or below)											
---Manager/professional/clerks											
---Non-tertiary, non-union	15%	+13	+18	+14	+14	+14	+16	+14	+7	+7	+15
---Tertiary, non-union	2%	+13	+9	+8	+10	+16	+24	+20	+13	+10	+13
---Non-tertiary, union	5%	+10	+15	+12	+11	+13	+11	+14	+5	+6	+6
---Production/low service workers											
---Non-tertiary, union	10%	+7	+14	+9	+7	+8	+9	+8	+2	+1	+6
---Non-tertiary, non-union	15%	+7	+14	+9	+8	+7	+9	+7	+4	-1	+3
Old (aged 42 or above)											
---Manager/professional/clerks											
---Non-tertiary, union	8%	+5	+9	+5	+6	+6	+5	+3	-0	+1	+5
---Tertiary, non-union	1%	+4	+10	+14	-2	+3	+8	+7	-4	+1	+2
---Non-tertiary, non-union	14%	+3	+6	+5	+4	+4	+3	+6	-1	+0	+3
---Production/low service workers											
---Non-tertiary, union	12%	+3	+8	+5	+1	+4	+5	+6	-0	+3	-1
---Non-tertiary, non-union	16%	+3	+8	+6	+3	+3	+5	+5	-1	-2	-2

Notes: Predicted values from OLS regression models of long-term earnings growth (percentage change from average wages over the past 3 years to average wages over the following 3 years). All dummy variables are interacted with one another (age, occupation, education, union membership and period dummies). Earnings are CPI-adjusted to 2010 prices (in Euros). The sample consists of all individuals in the lower-middle (Q2) or middle (Q3) quintiles and in full-time permanent employment both over the past 3 years and over the following 3 years. Only groups with a size larger than 1% of the sample of lower-middle and middle-income workers are considered in this table.

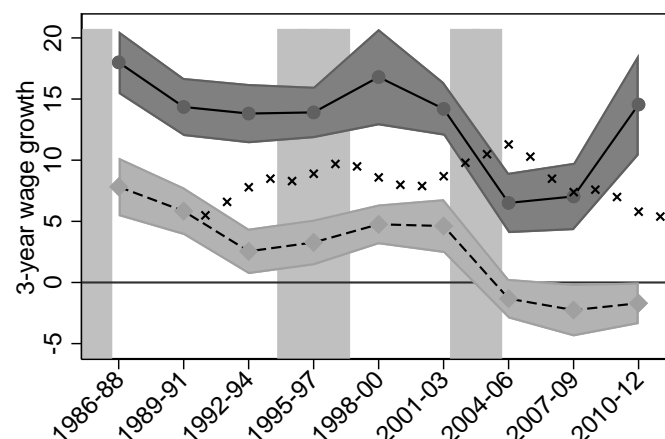
Source: German SOEP. For the results of the baseline model without interactions, see Appendix 6.1.

The interaction of socio-economic characteristics with period dummies also bears out the trends of wage growth over time. The peak of low wage growth in the mid-1990s did not affect all middle-income workers equally. The wage growth experienced by younger workers solidly exceeded 7% throughout the whole decade in the 1990s. However, low-skilled older workers in production or low service occupations saw very little wage

growth in the 1990s. The differences are even starker in the periods after the flexibilization reforms of late 2002. Older middle-income workers' estimated average wage growth between 2004 and 2006 was actually negative. Meanwhile, younger workers in managerial, professional or clerical occupations were able to secure solid rates of long-term wage growth (between 5% and 7%).

In sum, there are stark differences in the wage trajectories of middle-income workers with different profiles, which, by and large, are in keeping with the theoretical expectations about the risks of flexible employment. Figure 6.5 visualizes these diverging wage trends for workers with the best and the worst wage performance. Young, non-tertiary educated, non-unionized middle-income workers in managerial, professional or clerical occupations (who comprise 15% of the sample) achieved the highest growth rates. Their long-term wage growth exceeded 7% across all periods. In contrast, older, non-tertiary educated non-unionized workers in production or low service occupations (a total of 16% of the sample) make up the worst-performing group. With their wages already stagnating in the mid-1990s, these workers experienced negative wage growth in the aftermath of the Hartz flexibilization reforms, from 2004 onwards. Strikingly, while the wage growth of the best-performing group of younger workers plainly recovered during the 2010-12 period, the real wages of the worst-performing group continued to decline.

Figure 6.5: Best- and worst-case scenarios of wage growth among lower-middle and middle-income workers

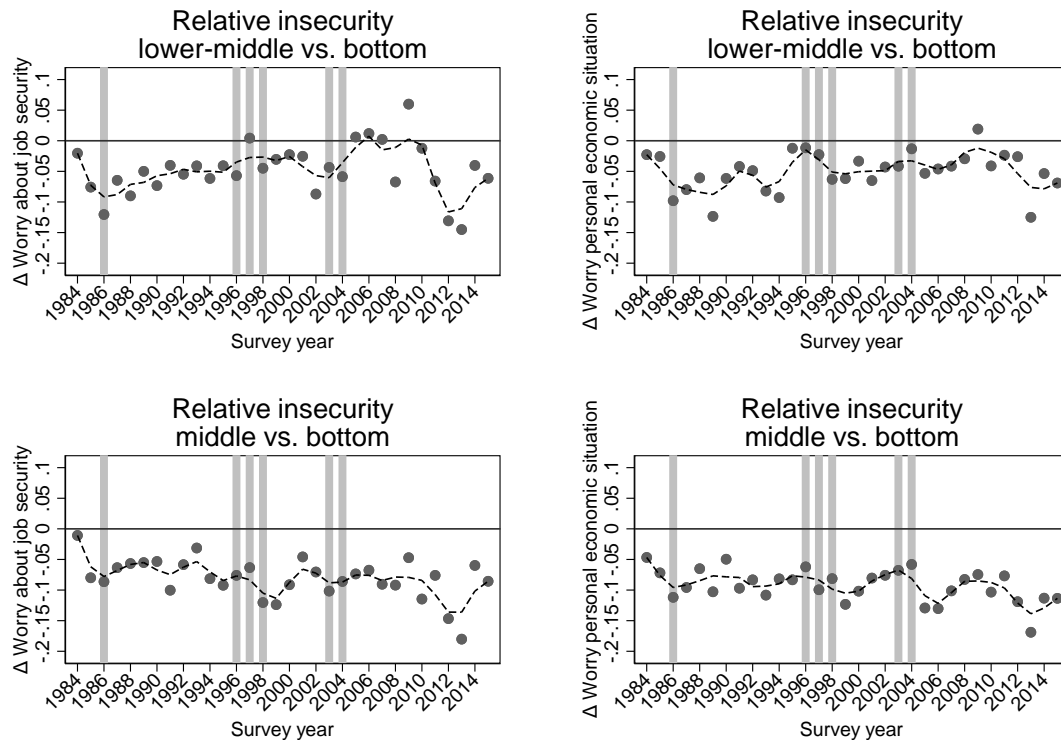


Notes: "Best-case" (dark grey 95% confidence interval): young, managers/professionals/clerks, non-tertiary educated, non-unionized. "Worst-case" (light grey 95% confidence interval): old, production/low services, non-tertiary educated, non-unionized. Vertical light grey bars indicate flexibilization reforms. Black crosses indicate yearly unemployment rates. Earnings are CPI-adjusted to 2010 prices (in Euros). Based on the values listed in Table 6.2.

The black crosses in Figure 6.5 delineate annual unemployment rates. There is an obvious pattern of lower wage growth in periods with high unemployment levels (such as the mid-1990s and especially the mid-2000s). With the available data, it is difficult to adjudicate whether flexibilization reforms, unemployment or other unobserved factors were behind the wage stagnation experienced by certain middle-income workers. The fact that older workers with less mobile skill profiles (based on higher education and non-routine occupations based on general skills) suffer the most pronounced wage stagnation makes it likely that flexible employment has contributed to these workers' adverse earnings outcomes. The next section turns to the subjective perception of risks in order to further test these propositions.

Subjective insecurity

The German SOEP data contains two items of affective job insecurity: the extent to which workers worry about the security of their jobs and the degree to which they are concerned about their personal economic situation. The full dataset on insecurity across all income groups is available in Appendix 6.2. Following the analysis in Chapter 5, Figure 6.6 displays the difference in the relative insecurity levels between middle-income and low-income workers. The expectation (based on hypothesis 2) is that as risk spreads towards the middle in the aftermath of flexibilization reforms, middle-income workers become as insecure as their low-income counterparts. Figure 6.6 traces the trajectory of the middle's subjective insecurity relative to that of low-income workers. The upper panels compare the lower-middle quintile to the bottom quintile, and the bottom panels compare middle quintile to the bottom quintile.

Figure 6.6: Subjective insecurity of middle- relative to low-income workers

Notes: Percentage point difference between the shares of lower-middle/middle-income workers and low-income workers worrying “somewhat” or “very much” about their job security (left panels) or their personal economic situation (right panels). The dashed line displays a lowess smoother (bandwidth 0.2). The grey areas indicate the implementation of flexibilization reforms (1986, 1996-98, 2003/04).

Source: German SOEP. For the full dataset on subjective insecurity across all income quintiles, see Appendix 6.2.

The results in Figure 6.6 partly confirm that risk has spread towards middle-income workers. Lower-middle income workers’ subjective insecurity (upper panels) has approached the higher insecurity levels observed among bottom earners. This convergence is especially pronounced during and after the execution of flexibilization reforms towards the mid- and late-1990s and the mid-2000s. Only in the period after the financial crisis, from 2011 onwards, have workers in the lower-middle quintile started to feel more secure relative to their low-income counterparts again. The results are less conclusive for workers in the middle income quintile (bottom panels). There is no clear trend in their insecurity levels relative to low-income workers’ perceptions. The only hint of a spread of risk towards the middle is the relative convergence of middle- and low-income workers’ worries about their personal economic situation. This similarity is manifest in the early 2000s, but disappears after 2004. The difference between middle- and low-income workers was

again relatively large in the period after the financial crisis of 2008/09, when the economy was performing well and no further flexibilization reforms took place.

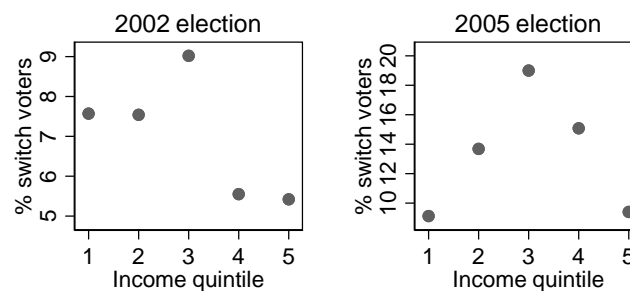
On balance, these findings are in line with the expectation that flexibilization increases middle-income workers' exposure to risk, with the middle not only facing adverse income prospects and low wage growth but also perceiving a threat clearly visible in their subjective job insecurity levels. Workers in the lower-middle quintile and, to a smaller degree, in the middle quintile have expressed insecurity on a scale similar to the higher levels of insecurity among the poor. Yet, these findings present no proof that middle-income workers indeed identified flexibilization as the cause of their adverse earnings trajectories and insecurity perceptions. To this end, the next section provides an exploratory analysis of the political consequences of flexibilization reforms. It tests the expectation that those middle-income workers most affected by adverse wage growth withdrew their support from the governments responsible for the implementation of the flexibilization reforms.

6.3. Political consequences of flexibilization

Flexibilization has been a salient political issue in Germany. The early deregulation of atypical employment carried out by the Kohl cabinets in the mid-1980s and especially the reforms of the mid-1990s prompted opposition from social democrats and trade unions alike, and contributed to the election of a red-green government in 1998 (Picot 2009; Eichhorst and Marx 2011). In the face of rising unemployment after 2001, the SPD-led coalition under Chancellor Schröder campaigned on controversial pledges for welfare and labor market reform (the "Agenda 2010"). The campaign promises were brought to fruition in the Hartz reform package implemented after the government narrowly won re-election in 2002. Data from the Comparative Study of Electoral Systems (CSES) allow us to explore the political consequences of these reforms in general and their impact on regular workers' vote choice in particular. For the elections of 2002 and 2005, it is possible to identify voters who had lent their support to the incumbent coalition in the previous election (1998 and 2002) only to defect from casting their ballots for it again. Unfortunately, the CSES data do not contain information on previous vote choice for the elections

of 1998. The goal of this section is not to provide a complete explanation of electoral choices, but to identify “switch voters” who stopped voting for the governing coalition in charge of the flexibilization reforms. Of course, the flexibilization of temporary contracts and agency work constituted but one part of these reforms; yet, it is instructive to see whether middle-income voters – the losers of flexibilization reforms – indeed reacted by withdrawing their support from the incumbent governing coalition.

Figure 6.7: Electoral punishment of the government by income group



Note: Share of workers aged 18-64 who had voted for the incumbent SPD/Greens in the previous elections and voted for alternative parties or abstained in the current elections.

Source: CSES (2015b, 2015a).

Figure 6.7 shows that workers in the middle quintile were more likely to withdraw their support from the Schröder-led coalition government, for which they had voted in the previous elections. The results apply to the elections in 2002, in which Chancellor Schröder had campaigned with promises for labor market reform. They also apply to the elections in 2005, after which some of the flexibilization reforms discussed above were implemented. Middle-income workers thus make up an important part of the switch voters who punished the government. In 2002, 9% of middle-income workers withdrew their electoral support from the red-green coalition, compared to 5% of top income workers who did so. In 2005, the gap increased to 19% of middle-income workers against only 9% of top income workers. While I do not claim that flexibilization reforms caused these electoral outcomes, these comparisons suggest that, relative to other income groups, more middle-income workers were dissatisfied with the government’s performance and policies.

Pooling workers in the lower-middle, middle and upper-middle quintile, Table 6.3 provides more differentiated socio-economic profiles of the middle-income workers who

punished the government. In line with the distributional effects of flexibilization outlined above, we would expect workers with less mobile skill profiles to withdraw their support from the incumbent coalition, since these workers were affected by stagnating wage growth in the aftermath of flexibilization reforms. The statistics displayed in Table 6.3 indeed suggest that the likelihood of punishing the government is higher among middle-income workers without a tertiary degree and among those working in production or low service occupations. Age does not yield the expected results in 2002: older workers continued voting for the red-green coalition. However, in 2005 older workers were more likely to defect than younger workers. Finally, there is no clear difference between union members and workers without union membership. In both elections, the shares of switch voters among left-wing and center-right voters were similar, although voters leaning to the left were more likely to defect or abstain in 2005 than center-right voters.

Table 6.3: Socio-economic composition of middle-income switch voters

	Election 2002 <i>Percentage voting SPD or Greens in 1998, now voting for different party or abstain</i>	Election 2005 <i>Percentage voting SPD or Greens in 2002, now voting for different party or abstain</i>
Non-tertiary educated	8% (1%)	17% (2%)
Tertiary educated	2% (1%)	10% (3%)
Young (below 45)	9% (2%)	15% (2%)
Old (45 or above)	4% (1%)	17% (2%)
Production or low service workers	9% (2%)	19% (2%)
Professionals/managers/clerks	4% (1%)	13% (2%)
Union member	8% (2%)	15% (3%)
Non-union member	7% (1%)	16% (2%)
Left ideology (0-4)	7% (1%)	18% (2%)
Center-right ideology (5-10)	8% (2%)	14% (2%)

Notes: Middle-income workers' (second, third and fourth quintile) likelihood of switching. Standard errors in parentheses.

Source: CSES (2015b, 2015a).

Finally, Table 6.4 shows the electoral alternatives of voters moving away from the incumbent coalition. In both elections, a majority of switch voters turned to center-right parties (CDU-CSU and FDP). In 2002, 25% of the voters who had cast a ballot for the red-green coalition in the previous elections abstained, but very few voters switched to

radical left or right parties. In 2005, the radical left (*Linke*) proved a more popular alternative, garnering the support of 31% of all switch voters. Nevertheless, the majority of switch voters turned to the major right parties (52%) and a minority abstained (14%). The differences between income groups are not clear cut. Workers in the middle quintile are more likely to defect to the major center-right parties and less likely to abstain than other income groups. Only about a quarter of middle-income workers turned to the protest vote for the radical left in 2005, compared to 58% of workers in the bottom quintile. In sum, although middle-income workers disproportionately withdrew support from the Schröder cabinet, they mostly turned to alternatives in the political mainstream.

Table 6.4: Electoral alternatives of switch voters

	Election 2002				Election 2005			
	Major right	Radical left	Radical right	Abstain	Major right	Radical left	Radical right	Abstain
Income quintile								
Bottom	57%	10%	0%	33%	35%	58%	0%	7%
Lower-middle	48%	11%	0%	42%	41%	33%	0%	26%
Middle	95%	1%	0%	5%	71%	25%	0%	4%
Upper-middle	23%	1%	6%	71%	44%	31%	11%	15%
Top	99%	1%	0%	0%	58%	25%	0%	17%
<i>Overall</i>	<i>71%</i>	<i>3%</i>	<i>1%</i>	<i>25%</i>	<i>52%</i>	<i>31%</i>	<i>3%</i>	<i>14%</i>

Notes: Sample consists of workers who had voted SPD/Greens in the previous election. Major right: CDU/CSU, FDP. Radical left: PDS/Linke. Radical right: Rep/NPD.

Source: CSES (2015b, 2015a).

The analysis of the political consequences of flexibilization is clearly preliminary and may be hard to generalize to other electoral contexts. However, the findings in this chapter hold up to the conjecture that middle-income workers are not politically supportive of governments pursuing a deregulatory stance towards flexible employment. The German case is no exception to the general patterns which saw the vast majority of governments across Western democracies suffer electoral losses in the wake of major flexibilization reforms (see Table 1.1). In the concluding chapter, I discuss the broader theoretical implications of the politics of flexible employment that we can derive from this dissertation. The findings in this chapter can help articulate new hypotheses on the mechanisms of preference formation and on the electoral outcomes observable among middle-income workers facing adverse labor market risks in different policy contexts.

6.4. Summary

The purpose of this chapter has been threefold. First, it has re-examined the key findings of the previous empirical chapters with more fine-grained annual data on the crucial case of Germany. The analysis corroborates the finding that the income shares of middle-income workers under permanent full-time contracts have been on the decline after reforms towards flexible employment and provides some evidence for the spread of subjective insecurity among these workers. Second, the German SOEP data allows for the analysis of long-term earnings trajectories and thus makes it possible to put the assumed mechanisms behind wage-related risks and income prospects to a test. The patterns in long-term wage growth are in line with the expectation of adverse income prospects for older, low-skilled middle-income workers in production or low service occupations. Third, this chapter provides evidence of middle-income workers' electoral reactions against the governments responsible for the implementation of flexibilization reforms. This exploratory analysis should be read in conjunction with the following, concluding chapter. The latter will address the key question of what the distributional effects of marginal flexibilization imply for the politics of flexible employment.

Appendix 6.1: Linear regression of long-term wage growth among lower-middle and middle-income workers, 1987-2012

Explanatory variables	Coefficient	Robust standard error	p-value	Beta coefficient (standardized)
Age (1=below 42 years old)	6.310	0.297	0.000	0.201
Education (1=tertiary)	0.683	0.728	0.348	0.009
Occupation (1=production/low service)	-3.158	0.305	0.000	-0.100
Union (1=member)	-0.035	0.305	0.907	-0.001
Period dummies (reference: 1987/88)				
1989-1991	-3.363	0.613	0.000	-0.078
1992-1994	-5.127	0.580	0.000	-0.116
1995-1997	-4.557	0.565	0.000	-0.095
1998-2000	-3.469	0.633	0.000	-0.063
2001-2003	-3.758	0.657	0.000	-0.065
2004-2006	-9.557	0.618	0.000	-0.198
2007-2009	-9.218	0.696	0.000	-0.181
2010-2012	-7.205	0.675	0.000	-0.128
Constant	10.187	0.501	0.000	-
N=18,409; R ² =0.091				

Notes: OLS regression models of long-term earnings growth (percentage change from average wages in the past 3 years to average future 3 years) with robust standard errors. Earnings are CPI-adjusted to 2010 prices (in Euros). The sample consists of all individuals that were in the lower-middle (Q2) or middle (Q3) quintile and that were in full-time permanent employment both during the past three years and the future three years. *Source:* German Socio-Economic Panel Study (SOEP), SOEPLong, doi:10.5684/soep.v32.1.

Appendix 6.2: Subjective insecurity in Germany, 1984-2015

Year	Worry about job security (share saying "very concerned" or "somewhat concerned")					Worry about own economic situation (share saying "very concerned" or "somewhat concerned")				
	Income quintile					Income quintile				
	Bottom	Lower- middle	Middle	Upper- middle	Top	Bottom	Lower- middle	Middle	Upper- middle	Top
1984	0.55	0.53	0.54	0.45	0.35	0.71	0.68	0.66	0.63	0.44
1985	0.51	0.43	0.43	0.33	0.32	0.71	0.68	0.64	0.54	0.48
1986	0.52	0.40	0.43	0.37	0.33	0.70	0.60	0.58	0.53	0.42
1987	0.49	0.42	0.42	0.36	0.32	0.73	0.65	0.64	0.54	0.47
1988	0.54	0.45	0.48	0.42	0.35	0.71	0.65	0.64	0.58	0.48
1989	0.42	0.37	0.37	0.32	0.27	0.70	0.58	0.60	0.50	0.38
1990	0.43	0.36	0.38	0.33	0.29	0.66	0.60	0.61	0.47	0.38
1991	0.37	0.33	0.27	0.27	0.24	0.65	0.61	0.56	0.50	0.38
1992	0.46	0.40	0.40	0.36	0.31	0.73	0.69	0.65	0.56	0.44
1993	0.45	0.41	0.41	0.39	0.32	0.78	0.70	0.67	0.61	0.50
1994	0.55	0.49	0.47	0.40	0.38	0.78	0.69	0.70	0.62	0.52
1995	0.52	0.48	0.43	0.42	0.35	0.73	0.72	0.65	0.59	0.49
1996	0.52	0.47	0.45	0.41	0.37	0.76	0.75	0.70	0.61	0.52
1997	0.60	0.60	0.53	0.51	0.47	0.83	0.81	0.73	0.70	0.61
1998	0.62	0.57	0.50	0.43	0.38	0.85	0.79	0.77	0.70	0.58
1999	0.59	0.56	0.47	0.44	0.36	0.79	0.73	0.66	0.63	0.49
2000	0.57	0.55	0.48	0.46	0.39	0.73	0.70	0.63	0.62	0.47
2001	0.48	0.45	0.43	0.41	0.37	0.74	0.68	0.66	0.60	0.45
2002	0.62	0.53	0.55	0.50	0.45	0.79	0.75	0.72	0.65	0.55
2003	0.64	0.60	0.54	0.52	0.52	0.85	0.80	0.78	0.71	0.65
2004	0.71	0.65	0.62	0.60	0.53	0.85	0.83	0.79	0.69	0.67
2005	0.68	0.68	0.60	0.54	0.54	0.88	0.83	0.75	0.74	0.67
2006	0.63	0.64	0.56	0.51	0.50	0.88	0.83	0.75	0.66	0.62
2007	0.63	0.64	0.54	0.49	0.44	0.85	0.81	0.75	0.64	0.59
2008	0.63	0.56	0.53	0.49	0.41	0.84	0.81	0.76	0.67	0.52
2009	0.59	0.65	0.55	0.52	0.50	0.85	0.87	0.78	0.71	0.65
2010	0.61	0.60	0.49	0.46	0.44	0.82	0.78	0.72	0.67	0.57
2011	0.47	0.41	0.40	0.30	0.28	0.75	0.73	0.67	0.56	0.49
2012	0.54	0.41	0.39	0.36	0.36	0.76	0.73	0.64	0.54	0.49
2013	0.52	0.38	0.34	0.32	0.31	0.76	0.64	0.59	0.56	0.44
2014	0.44	0.40	0.38	0.35	0.32	0.72	0.66	0.60	0.49	0.38
2015	0.46	0.39	0.37	0.34	0.31	0.74	0.67	0.62	0.51	0.40

Note: Sample consists of full-time permanent employees aged 18-65 in West Germany.

Source: German Socio-Economic Panel Study (SOEP), SOEPlong, doi:10.5684/soep.v32.1.

7 Conclusion

This dissertation aims to reconcile attempts to understand two major trends in advanced capitalist democracies: the spread of flexible employment and rising income inequality. I have argued that these two trends are more intimately linked than is often assumed. Flexibilization not only matters for workers in atypical jobs at the margins of the labor market. It has severe repercussions on regular workers, because it creates new wage-related risks. Workers under flexible contracts can be a source of low-wage competition for regular workers. Flexible work environments also expose workers with less mobile skill profiles to the risk of wage stagnation over the course of their careers. This concluding chapter first summarizes the main arguments and findings of my study and highlights some implications for the related literature. The second part proceeds to discuss the implications of this analysis for the politics of flexible employment and the consequences that the declining position of middle-income workers bears on the formation of political preferences.

7.1. Policy, risk and income

This dissertation is based on the proposition that flexibilization exposes regular workers to certain wage-related risks even if these workers are “insiders” holding secure jobs. The main types of risks are low-wage competition and income prospects. Flexible employment deregulation threatens to increase the pool of cheap atypical workers that compete with better-off regular workers. At the same time, the competition with outsiders raises concerns about job replacement and the outsourcing of jobs to atypical workers. These risks are asymmetrically distributed across different workers. Low-wage competition is more of a concern for higher-income groups, which have to defend their high wage levels against the cheaper alternatives with flexible contracts. Income prospects depend on skill characteristics; the threat of outsourcing is not credible for highly skilled workers, whom employers hesitate to replace with temporary workers. As a result, regular workers in the

middle of the earnings distribution face an unusually large share of the risks of flexibilization, being vulnerable to low-wage competition and lacking the mobile high-skilled profiles advantageous to career prospects in flexible work environments.

This study's focus on wage-related risks (structured by the policy regime of flexible employment) is distinct from influential theories of the welfare state and labor market policy. First and foremost, it disputes a core conjecture in the dualization literature: that the position of insiders remains unaffected by labor market changes targeted at outsiders (Palier and Thelen 2010; Emmenegger et al. 2012b). The assumption that insiders and outsiders do not compete with one another is difficult to defend both on a theoretical level, unless low-wage competition and replacement risks are assumed to be irrelevant, and empirically in light of the evidence of major shifts in earnings inequality. Second, the focus on wage-related risks addresses a severe limitation that recent accounts on risk and the welfare state share (e.g. Rehm 2009, 2011; Schwander and Häusermann 2013). The latter focus on employment-related risks, such as the risk of becoming unemployed or atypically employed. Yet they ignore that even workers with little risk of losing their job may face wage stagnation and may be unable to secure wage increases in the midst of increased competition with low-paid outsiders.

For the claim that these risks disproportionally affect middle-income workers to make sense, it is necessary to identify the traits that distinguish the middle from other income groups. As far as low-wage competition is concerned, Chapter 2 shows that there exist large wage gaps between middle-income workers and temporary workers. In contrast, the gap between low-income and temporary workers is smaller in absolute terms and far from evident to perceive. Hence, low-wage competition is an important issue for middle-income workers who face clearly recognizable earnings losses in flexible employment. The second dimension of wage-related risks, income prospects, crucially depends on skills. Middle-income workers with tertiary education are not very common – the share of university-educated middle-income workers is more similar to that among low-income workers than to that among high-income workers. The prevalence of employees with less mobile skill profiles, such as older workers in routine jobs in production and low service occupations, in this group further enhances the middle's adverse income prospects. Throughout the dissertation, I have provided evidence that middle-income workers are

distinct not only in terms of their objective distributional outcomes, but also in terms of their subjective perceptions of job insecurity and their prospects for long-term wage growth.

Developments in the earnings position of middle-income workers have arguably not received sufficient attention in existing attempts to understand the dynamics of income inequality over the past decades. A first reason behind this omission has to do with the legacy of theories based on institutional equilibria, such as welfare state regimes or varieties of capitalism. These accounts are difficult to reconcile with the rising inequality in the “market” distribution of income, which cuts across regimes. Another rationale is that even those accounts that do acknowledge the importance of policy change, such as the liberalization and the dualization frameworks, neglect to factor in the diversity that characterizes regular workers. These perspectives generally portray full-time workers in permanent jobs as the winners of structural labor market transformations. A third reason is that existing accounts rarely attempt to combine both objective and subjective outcomes. This dissertation has thus sought to collect multi-faceted data on the position of middle-income workers in different policy regimes of flexible employment: their position in the earnings distribution, their perception of risks and their prospects of securing wage growth and career advancement.

Chapter 4’s main finding is that deregulated flexible employment is associated with relative earnings losses for middle-income workers. Its impact on earnings is neutral for low-income workers and positive for high-income workers. In other words, flexibilization contributes to rising earnings inequality in OECD countries by increasing the spread of earnings among regular workers. These aggregate-level findings echo other analyses on the position of the middle which employ different measures for middle-income groups (e.g. Grabka et al. 2016). Put into context, the decline of the middle also aligns with the idea that workers in the middle of the earnings and skills distributions bear the costs of structural technological change, which puts routine occupations at risk of automation and outsourcing (Autor et al. 2003; Goos et al. 2014). However, while middle-income shares have declined in many countries (including many coordinated market economies in continental Europe or Scandinavia), there are notable exemptions from this trend. In France,

where flexible employment has been restricted, middle-income shares have held remarkably steady. In Denmark and Sweden, middle-income shares remain at high levels despite incisive flexibilization reforms – a pattern that I have argued has to do with the counterbalancing role of encompassing unions. Explanations based on structural economic and occupational change struggle to make sense of this variation in the position of middle-income workers.

The recent debate on populism has argued that perceptions of status decline and subjective insecurity matter at least as much for long-term electoral shifts as the “objective” experience of decline (Gidron and Hall 2017; Inglehart and Norris 2017; Kurer 2018). With this debate in mind, Chapter 5 highlights the consequences of flexible employment policy on workers’ perceptions of labor market risks at the individual level. The findings show that in deregulated settings, risk spreads towards middle-income workers who end up feeling just as insecure as their low-income counterparts. These patterns contrast with the patterns observable in countries with stricter regulation of flexible employment, where middle-income workers are much less worried about their job security than low-income earners. These findings indicate a fair overlap between the objective trends in the earnings position of middle-income workers (Chapter 4) and the subjective risk perceptions (Chapter 5) prevalent in different regimes of flexible employment regulation.

Chapters 4 and 5 also consider the circumstances moderating the distributional effects of deregulation, since flexible employment policies do not operate in a vacuum and are subject to the surrounding political and economic conditions. First, encompassing unions that organize workers from all income groups prevent the emergence of large wage differentials conducive to low-wage competition. In addition, Benassi and Vlandas (2016) provide compelling evidence that encompassing unions take an inclusive stance towards temporary workers. At the individual-level, the impact of deregulation on subjective insecurity is much more pronounced for non-unionized workers than for union members. Hence, not only does union inclusiveness emerge as a relevant condition for social solidarity (Thelen 2014; Mosimann and Pontusson 2017), it also mitigates the impact of labor market policies on distributional outcomes. More generally, inclusive unions should be seen as a precondition for the path of “flexicurity,” which combines flexible labor market with generous social protection arrangements (Wilthagen and Tros 2004; Thelen 2014). The

majority of countries may fall short of adopting this policy configuration of flexicurity because non-encompassing unions fail to organize outsiders and lower-middle income workers.

The role of flexible employment relative to other facets of dualization is more ambiguous. High levels of employment protection for insiders attenuate the effects of flexibilization on the position of middle-income workers in the earnings distribution. A high share of temporary workers (outsiders) has a similar influence. These results clearly suggest that the distributional effects of flexibilization do not need a large outsider workforce to kick in; the mere possibility of expanding flexible employment appears sufficient to generate new wage-related risks for middle-income workers. It is also important to keep in mind the high correlation between flexible employment regulation, employment protection for regular contracts and the incidence of flexible employment.⁵⁰ With the exception of a few countries with exceptionally high levels of regulation and shares of outsiders (such as Spain), this dissertation gathers evidence for an adverse impact of flexibilization on the position of middle-income workers at various levels of dualization.

The third scope condition concerns unemployment. At high levels of unemployment, the regulation of flexible employment affects different income groups in a more uniform way and does not adversely affect middle-income workers alone. There are two reasons for this moderating effect of macroeconomic conditions. First, economic downturns cause “inequality shocks” that primarily affect low-skilled workers at the bottom of the earnings distribution – more so than workers in the middle (Pontusson and Weisstanner 2018). Second, economic downturns are exceptional events where insecurity tends to spread among all workers. As a result, crises do not radically transform the relative position of workers in the middle of the earnings distribution. After the financial crisis of 2008-09, the income shares of the lower-middle and middle quintiles developed in line with their pre-crisis trajectories in most countries (see Appendix 4.2). As shown in Chapter 5, unemployment exerts a crucial effect on the absolute level of average subjective insecurity across all income groups and on the trends observable in its dynamics over time.

⁵⁰ However, employment protection for regular contracts remained much more stable between the mid-1980s and the mid-2000s than the regulation of temporary employment (Beramendi et al. 2015: 10-12).

The comparative analyses in Chapters 4 and 5 are unable to directly test all causal mechanisms posited in the theoretical framework, mainly because it is difficult to obtain reliable measures of the perceptions of low-wage competition and income prospects and the question whether these wage-related risks induce wage concessions. In an effort to shed more light on the causal mechanisms, Chapter 6 examines the case of Germany, where major flexibilization reforms were introduced in the mid-1990s and again in 2002. The temporal patterns lend support to the claim that flexibilization is associated with wage-related risks for middle-income workers. Large shares of these workers, especially middle-income workers without mobile skill profiles (older workers in production and low service occupations), have experienced long-term wage stagnation in the aftermath of flexibilization reforms. The exploratory analysis of the political consequences of flexibilization reforms further shows that these middle-income workers were more likely to withdraw their support from the (center-left) government responsible for flexibilization. Despite the detailed evidence from the crucial case of Germany, it would be desirable to obtain more fine-grained survey data on wage-related risks. Considering the evidence presented in this dissertation, some critical questions should be explored further: Do flexible employment policies affect how individuals perceive the issue of low-wage competition? In which settings do workers and unions feel pressured into reacting with wage restraint? Do they expect to be at risk of wage stagnation in the long-term under looser flexibilization regimes? Gathering data and examining this type of wage-related risks is key to understanding the trend of rising inequality in the middle of societies.

7.2. The politics of flexible employment

Flexibilization has become a pervasive trend since the 1980s and its distinct distributional effects have created winners and losers. From the analysis in this study, it may be self-evident that the losers of flexibilization will, for better or for worse, withdraw support from these policies and the political actors responsible for their implementation. Indeed, the vast majority of the large flexibilization reforms carried out in the OECD resulted in electoral losses for the incumbent governments (Chapter 1) and, at least in Germany, middle-income workers have played a central role in these electoral reactions (Chapter 6). However, the mechanisms behind voters' preference formation in the broader areas of

welfare state policy and redistribution, and the way in which these preferences are aggregated in the political process, are more complex than these outcomes suggest. By way of conclusion, this last section discusses the political implications of the turn towards flexible employment and outlines avenues for further research on the politics of flexible employment.

The way in which flexibilization has affected the position of middle-income workers carries important implications for how voters form their preferences on redistribution.⁵¹ In the Meltzer and Richard (1981) model, support for redistribution is driven by self-interest and voters seeking to maximize current income. The decline in the middle's position (relative to top earners) associated with flexibilization should lead those workers to demand more redistribution. Similar expectations follow from theories focusing on insurance against income loss (Moene and Wallerstein 2001, 2003). Where risk spreads towards middle-income workers, their demand for redistribution should rise (Rehm et al. 2012). The Meltzer-Richard model focuses on inequality between the middle and the top (mean vs. median), while insurance-based models focus on differences in economic insecurity between the middle and the bottom. However, the finding in this dissertation that flexibilization affects the middle in a way that is different from low- and high-income groups raises the question whether the unique situation of middle-income workers receives enough attention in these models. As Kevins et al. (2018a) show, the preferences of citizens with middle incomes react most sensitively to levels of inequality. Their findings suggest that low- and high-income groups have more stable baseline preferences for redistribution, while the preferences of the middle are more amendable and responsive to the structure of inequality.

Criticizing these models for their emphasis on income and vertical class distinctions is commonplace (Oesch 2006; Kitschelt and Rehm 2014; Beramendi et al. 2015; Oesch 2015). These authors point to the importance of cross-class coalitions and suggest that

⁵¹ This dissertation has not considered policy areas beyond that of flexible employment. However, the role of the state in the economy, including labor market regulation, taxation and welfare state spending, has been the dominant political cleavage in Western democracies after the Second World War (Lipset and Rokkan 1967). The literature on preferences for redistribution aims to encompass this broad range of policy areas.

horizontal occupational differences and work experiences matter for the formation of political preferences (see Kevins et al. 2018b). However, the nuanced developments of earnings inequality that different classes experience, most notably the distinct trends in the middle of the distribution, are strong arguments against discarding the role of income. Instead of omitting income altogether, a more fruitful approach is to combine income and risk perspectives and to examine how the distribution of risk, varying across different income groups, shapes preferences on redistribution and social insurance (Rehm et al. 2012). At the same time, the emphasis on wage-related risks in this study also points to the need to go beyond the risk perspective proposed by Rehm (2009, 2011, 2016), which is almost entirely limited to employment-related risks. The focus on low-wage competition and income prospects is closer in spirit to existing frameworks of social mobility, where individuals are concerned about the income they can expect in the future and their prospects of climbing up or down the income ladder (Piketty 1995; Bénabou and Ok 2001).

The wage-related risk approach is able to account for incremental trends in economic insecurity, such as the worry about prolonged income stagnation and the gradual loss of social status associated with adverse career prospects. These incremental prospects have arguably been an important factor behind the “status anxiety” producing rising support for right populist platforms (Gidron and Hall 2017; see also Inglehart and Norris 2017). As Kurer (2018) shows, this type of support has little to do with individuals who have actually become unemployed and is concentrated among workers employed in routine occupations in the middle of the skills and earnings distributions. It is likely that this finding precisely reflects the gradual erosion of middle-income workers’ wage bargaining power, driven by the increasing difficulties they face in defending their wage levels from low-wage competition and in securing continuous wage growth. Therefore, one of the main lessons of the findings in this study is that adverse wage-related risks are plausible explanations of why some employed workers with average earnings become concerned about their economic situation and withdraw their support from mainstream parties, which have failed to halt the erosion of their earnings position. This does not mean that cultural explanations are irrelevant for right populist support; rather, it points to wage-

related risks as a fruitful avenue for research on the political consequences of rising insecurity among better-off workers.

The picture of these political consequences is incomplete without taking into account the supply side of electoral politics and the alternatives that political parties have to offer. In the median-voter frameworks addressed above (Meltzer-Richard and Moene-Wallerstein), parties react to rising inequality by considering the income of the median voter relative to the mean income in the national economy. Parties are therefore expected to be responsive to the declining earning shares of middle-income workers, which include the median voter, and to increasingly support redistribution and social insurance. However, a number of possible obstacles emerge to prevent this from happening. One line of research addresses the criticism that median-voter frameworks rely on a purely majoritarian model of the political process. These majoritarian frameworks fail to capture that electoral systems of proportional representation tend to produce multi-party coalition governments (Iversen and Soskice 2006, 2015). The key point is that the preferences of middle-income voters (represented by the income of the median voter) will not be implemented without the support of coalition partners from low-income or high-income groups. Another line of research highlights a further complication: the multidimensional policy space (see Iversen and Goplerud 2018). There is little doubt that the traditional left-right conflict over economic issues is increasingly complemented by an orthogonal dimension of conflict over cultural issues (Kitschelt 1994; Hooghe et al. 2002; Kriesi et al. 2008; Beramendi et al. 2015). As Häusermann and Kriesi (2015) argue, the distinction between distributive (economic) and identity-based (cultural) conflict becomes increasingly blurred. In sum, the likelihood for any political response to the declining position of middle-income workers depends on a complex set of institutional and electoral constraints.

Given these constraints, what are the prospects that flexibilization policies – put forth as core cause for the declining position of middle-income earners by this study – might be reversed? In Rueda's (2005, 2007) model of insider-outsider politics, the division of labor into secure and insecure workers prevents social democratic governments from pursuing outsider-friendly policies. Alt and Iversen (2017) find support for these propositions at the individual level, showing that support for redistribution is lower in countries with

segmented labor markets. However, as we have shown throughout this study, a large variation in the way insiders are affected by flexibilization and in the way they perceive subjective insecurities exists among regular workers. Insiders in the middle of the earnings distribution belong to the losers of marginal flexibilization. Hence, if rising inequality undermines the position of insiders, it is unlikely that the division between insiders and outsiders reproduces support for the political arrangements of dualization in the long run. In Germany, there is evidence for such a shift in opinion taking place among core workers, and it has opened the door to outsider-friendly measures such as the 2014 minimum wage act (Marx and Starke 2017; Bosch 2018).

Because insiders are more heterogeneous than assumed by the dualization literature and because those insiders adversely affected by flexibilization constitute important voter segments in the middle of the earnings distribution, a reversal of dualization policies is quite possible. The commitment to deregulated flexible employment is not carved in stone. For instance, recent reform endeavors at the level of the European Union (EU) propose to expand social security access for atypical and self-employed workers in “Uber-style jobs”⁵² (European Commission 2018a). In 2018, the EU reached a compromise on reforming the directive on posted workers, setting up wage guidelines for temporary workers in other member states (European Commission 2018b). Finally, for the first time since the beginning of flexibilization reforms in the 1980s, the German grand coalition government, formed in 2018, intends to tighten the rules on fixed-term contracts (CDU et al. 2018).

These limited attempts at re-regulation hardly imply a paradigm change on flexible employment in advanced capitalist democracies. Even as distributive conflict over these policies increases and pivotal middle-income voter groups express rising concerns about economic insecurity, no country has so far severely constrained flexible contracts and atypical forms of employment related to the “gig economy.” As argued above, part of the explanation surely has to do with the difficulties of coalition formation in a multidimensional policy space. However, part of the inertia in the trajectory of flexible employment may also have to do with perceptions of income inequality that explanations based on

⁵² Reuters, “EU seeks more protection for Uber-style jobs,” 24. September 2017.

material self-interest fail to capture. Many individuals have biased perceptions about income inequality (Norton and Ariely 2011; Gimpelson and Treisman 2015; Engelhardt and Wagener 2017) and these biases correlate with political beliefs (Armingeon and Weisstanner 2018). In addition, individuals tend to adjust their perceptions about legitimate levels of inequality (Kelly and Enns 2010; Mau 2015; Trump 2017). These issues on the subjective perception of distributive outcomes will remain key questions for research in the next years. The distributional losses for large shares of middle-class voters prepare the ground for political controversy over flexible employment – but the political outcomes of the project of flexible employment are yet to be seen.

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Declaration of Authorship

I hereby declare that I have written this thesis without any help from others and without the use of documents and aids other than those stated above. I have mentioned all used sources and cited them correctly according to established academic citation rules. I am aware that otherwise the Senat is entitled to revoke the degree awarded on the basis of this thesis, according to article 36 paragraph 1 letter o of the University Act from 5 September 1996.

Bern, 26 June 2018

David Weisstanner
