

Flexible Forms of Employment: Boon and Bane

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In recent decades, economic policy makers across Europe have sought to increase labour market flexibility by promoting the use of temporary employment. The articles in this Feature provide new results on how fixed-term and agency work contracts affect firm productivity and how the segments of two-tier labour markets interact. This paper points to a possible trade-off between efficiency and equity when deregulating labour markets. Taken together, the evidence presented in this Feature suggests that flexible forms of employment can be both a boon and a bane for labour markets and for society as a whole.

Keywords: flexible employment forms, temporary contracts, temporary agency employment, regulation, equality, productivity

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1. Introduction

The use of flexible forms of employment such as fixed-term and temporary agency work contracts has increased substantially over the last three decades and throughout much of Europe. This development has been driven by government efforts to ease restrictions on temporary employment. In contrast, the regulation of permanent contracts has been left essentially unaltered. The reforms of temporary employment intended to increase overall employment by lowering the dismissal and adjustment costs for flexible jobs and thereby to provide firms with new opportunities; firms may, e.g., observe the productivity of temporary workers and then decide whether to convert temporary contracts to permanent positions. Generally, two-tier labour markets can increase labour market flexibility when it is politically infeasible to reduce employment protection for workers with permanent contracts. Moreover, a considerable share of flexible jobs might ultimately be transformed into regular jobs and aggregate unemployment might decline as a result.

There is no doubt that higher labour market flexibility appears advantageous to employers at first glance. Flexible jobs are not only useful for screening worker productivity; they also enable firms to find substitutes for permanent staff members who are on sick leave or maternity leave, to avoid firing costs in countries with strict employment protection legislation, and to reduce wage costs, as flexible workers are generally paid less than permanent employees. Firms also gain the flexibility to adjust the size of their workforce to business cycle fluctuations. Consequently, increasing labour market flexibility is widely expected to increase firms' productivity and competitiveness (e.g., Houseman *et al.*, 2003; Boeri, 2011).

Theoretically, employees stand to benefit from flexible work arrangements as well: additional job opportunities could make it easier for workers to enter the labour market or to escape unemployment, they generate the possibility to accumulate human capital on the job, and may enable workers to balance career and family life. Consequently, temporary jobs may improve job satisfaction and the work-life balance for at least some groups in the labour market.

A growing number of empirical studies have indeed shown that increased labour market flexibility creates job opportunities for young workers, less-skilled workers, women, and immigrants. These groups are all disproportionately represented in the flexible workforce (e.g., Booth *et al.*, 2002; Kahn, 2007). In addition, temporary agency jobs seem to be a common pathway for the unemployed to re-enter the labour market. However, increased labour market flexibility comes at a price: as flexible workers are less protected against job

loss than workers with permanent jobs, they face higher unemployment risks and lower job tenure on average. Their lower attachment to the firm may in turn reduce workers' incentives to invest in firm-specific human capital, which reduces worker and firm productivity.

Moreover, working conditions in flexible jobs are often poor: workers have less access to social benefits and training and receive considerably lower remuneration than workers in permanent posts (Segal and Sullivan, 1997). In light of the relatively poor working conditions in most flexible jobs and the disproportionate concentration of workers at risk of marginalisation in this sector, it is important to know whether flexible jobs at least function as stepping-stones to permanent jobs for some of the workers. This question cannot be answered conclusively yet: while some studies find that flexible employment forms do improve subsequent employment outcomes, others provide no evidence of a stepping-stone function of flexible jobs (e.g., Autor and Houseman, 2010; Jahn and Rosholm, 2010; De Graaf-Zijl *et al.*, 2011).

Consequently, one might expect that flexible workers would be less satisfied with their jobs than permanent workers. A growing body of recent literature has investigated the job satisfaction of workers on fixed-term contracts. The evidence is mixed. While some studies show insignificant differences in job satisfaction between workers on open-ended and those on fixed-term contracts (e.g., D'Addio *et al.* 2007), others find significantly lower job satisfaction among fixed-term workers (e.g., Clark and Oswald 1996). Origo and Pagani (2009) show that what matters for job satisfaction is perceived job security, which does not necessarily depend on the contract type. Interestingly, in countries with more generous unemployment insurance systems, fixed-term workers are as satisfied with their jobs as permanent workers, indicating that the worker's outside option matters when evaluating flexible employment forms.

The findings to date indicate that reforms which create or modify two-tier labour markets might be second-best compared to modifications of regular contracts or reforms introducing a single labour contract (cf. Bentolila *et al.* in this Feature). In any case, it remains questionable whether the gains from enhanced labour market flexibility outweigh the costs, in particular in European countries with relatively strict dismissal protection legislation. This Feature takes stock of the current situation and provides new evidence on flexible employment in Europe. In this introduction, we first survey the institutional developments in Europe and specifically in the four major continental European countries covered by the subsequent contributions—Germany, France, Spain, and Italy. A key question in our investigation is whether these European countries have all moved in the same direction in implementing more flexible

employment protection regulations and in increasing the use of fixed-term and agency work contracts. Taking a macroeconomic perspective, we examine how deregulation and the incidence of flexible employment forms relate to overall employment, productivity, and the income distribution. The micro perspective is then provided by the four articles in this Feature, which are briefly summarised in Sections 5 and 6 of this introduction.

2. Is there convergence in European employment protection regulation?

In Europe and other advanced countries, most labour market institutions, including employment protection and flexible employment forms such as fixed-term contracts or temporary agency work, have been subject to frequent policy changes over the last 25 years. This is crudely reflected in the widely used OECD indices that provide cardinal indicators of institutional settings and reforms.¹ Two indicators that are highly relevant to the issues discussed in this Feature are the indicator of employment protection for regular employment and the indicator of the regulation of temporary employment forms. The former describes legal regulations applying to the dismissal of workers with regular contracts, while the latter describes regulations applying to fixed-term and temporary agency work contracts. These indicators, which are reported in Table 1, can take values from 0 to 6, with higher scores representing stricter regulation (for details, see Venn, 2009).

(Table 1 about here)

Table 1 shows that the intensity of employment protection regulation varied considerably in Europe over the period 1985 to 2008, both across countries and over time. Starting with the protection of regular employment, the mean of this indicator for the EU15 countries has fallen from 2.55 in 1985 to 2.34 in 2008.² What is more, the coefficient of variation of the index has become smaller over time, suggesting that there has been some (sigma) convergence among EU15 countries concerning the protection of regular employment. The picture is slightly different for the four largest continental European countries—France, Germany, Italy, and Spain—where we find heterogeneous developments. Whereas Italy has shown no change in the OECD indicator, Spain has substantially loosened its regular employment regulations since 1985, Germany has tightened them, and France has shown changes in both directions.

Concerning the regulation of temporary employment, the picture is somewhat different. The mean of the indicator for the EU15 countries declined substantially from 3.01 in 1985 to

¹ A widespread critique of the OECD indicators is that they are based on a classification of legal restrictions that does not take into account red tape costs and actual legal enforcement (see, e.g., Venn, 2009; Bentolila *et al.* in this issue, Capellari *et al.* in this issue).

² The information on the EU21 provided in the table shows that the mean is slightly higher when taking into account those new EU members for which 2008 data are available.

1.98 in 2008. This reflects that the main policy response to high and increasing unemployment in Europe has been the liberalisation of temporary contracts. Interestingly, however, the coefficient of variation has not changed much, which implies that the EU15 countries have not converged to the same (low) level of regulation. This also becomes evident when looking at the four large countries on the continent, where the OECD indicator for 2008 ranges from 1.25 in Germany to 3.63 in France. While France has not changed its relatively strict temporary employment legislation since 1990, and Spain has made only modest changes (in both directions), Italy and Germany substantially loosened temporary employment regulations, for instance by making it easier for employers to hire temporary agency employees and to use fixed-term contracts. In both countries governments reverted to reforms that focus solely on the temporary segment of the labour market as political barriers prevented major changes to the regulations governing regular employment.

The reduction in employment protection regulation for temporary employment forms shown in Table 1 may indeed have enhanced labour market flexibility, as can be seen from the shares of fixed-term contracts and agency work contracts in total employment reported in Table 2.³ While the share of fixed-term contracts has not changed much on average in the EU15 between 1996 and 2008, it has increased substantially in Italy and Germany, the two countries that drastically eased the regulation of temporary employment. In 2008, about 13 % of employment contracts in the EU15 and EU21 were on a fixed-term basis, with even higher shares in Spain, France, and Germany. The average share of agency work contracts has risen in the EU15 from 0.9 in 1996 to 1.7 in 2008. Substantial increases occurred in France and Germany, which both clearly exceed the EU15 and EU21 averages for 2008. Italy, which introduced temporary agency employment as late as 1998, has also seen a considerable rise in both forms of temporary employment. Nevertheless, there is substantial variation in the shares of fixed-term and agency work contracts in the four large continental European countries, again underscoring that temporary employment and the respective employment regulations have apparently not converged across countries.

(Table 2 about here)

3. Flexible employment and macroeconomic outcomes: empirical patterns

A crucial question for both academics and politicians is how the deregulation of employment protection legislation affected the labour market and society as a whole, i.e., whether flexible

³ In Table 2 we separately present fixed-term and agency work contracts. Fixed-term contracts are defined by the existence of a termination date, while temporary agency contracts may be either permanent or fixed-term. Consequently, the two shares should not be added up.

forms of employment are indeed a boon or actually a bane to national labour markets. While a number of articles have addressed the effects of such reforms on labour market outcomes and have surveyed the extant evidence (e.g., Boeri, 2011; Martin and Scarpetta, 2011, and the studies cited therein), we know relatively little about the connections between employment protection regulation and aggregate efficiency and equity.

In order to obtain a broad picture of these patterns, we study the correlation between labour market regulation and the incidence of flexible employment on the one hand, and overall employment, productivity, and inequality of the income distribution on the other for the EU15 countries in the period 1985-2008. We use the indicators of employment protection for regular and temporary employment as discussed in Section 2 as well as shares of flexible employment (fixed-term and temporary agency work). Note that these four indicators are not independent, and that in particular there is a negative correlation between the level of employment protection of temporary jobs and the shares of fixed-term and agency work contracts. This confirms earlier findings that labour market policies facilitating the use of flexible employment forms are associated with a higher incidence of temporary employment (e.g., Kahn, 2010).

Using these four indicators and aggregate data from OECD statistics (OECD, 2011), we estimate pooled least squares regression models with controls for country fixed effects. We analyse the contemporary correlation between employment protection legislation (EPL) and the share of employment in fixed-term and temporary agency contracts each with aggregate, macroeconomic outcomes. The coefficient estimates and their standard errors are shown in Table 3. Each entry is based on a separate regression model.⁴

(Table 3 about here)

Looking at overall employment first, our results yield broadly intuitive patterns: deregulation (i.e., lower values for the EPL regular and temporary indicators) is associated with higher employment, which confirms the overall thrust of the policy initiative. This negative correlation also holds when time trends are included in the analysis (results not shown). Higher shares of fixed-term contracts and temporary agency employment are correlated with higher employment levels. The latter correlation loses statistical significance once time trends are controlled for.

In the next column of Table 3, we measure the association of labour market regulations and the share of temporary employment with productivity, i.e., GDP per employed person in a given country and year. The results confirm expectations and show that productivity is

⁴ The number of observations varies across cells as not all indicators are available for every country and year.

negatively associated with higher levels of labour market regulation, even conditional on country fixed effects. The relationship between productivity and regular employment regulation is robust to various additional time trend controls. In contrast, the correlation of temporary employment regulation and productivity turns insignificant once time trends are controlled for. The same applies to the positive correlation of high shares of temporary employment with productivity (results not shown). Although not all results are robust, they suggest that lower regulation is associated with higher employment and productivity. Thus, by and large, our descriptive evidence seems to support deregulation from an efficiency point of view.

As efficiency is not all that counts from a wider societal perspective, the last columns of Table 3 describe the association of regulation and the incidence of flexible employment with the equality of the income distribution. In particular, we consider Gini coefficients of the distribution of equivalised household incomes, both before and after government intervention, i.e., before and after taxes and transfers. The results are startling and fairly unambiguous: in countries with strictly regulated labour markets, the distribution of household incomes is significantly more equal than in countries with flexible labour markets. These outcomes are robust to controls for time trends and to alternative indicators of inequality, such as the mean log deviation of incomes. We find no strong connection between the shares of temporary employment and inequality, but the associations reported suggest that equality is higher where temporary employment shares are lower.

Although our descriptive analysis at the macroeconomic level needs to be taken with a grain of salt, it points to some relationships that have not been given proper attention in prior research. Overall, there appears to be a trade-off between equity and efficiency with respect to labour market deregulation at the aggregate level. Our analysis points to the need for more detailed studies—also at the micro level—on the relationship between labour market regulation and temporary and agency employment. In the next two sections, we summarize the key insights and contributions of the four papers in this Feature.

4. Interactions between the segments of two-tier labour markets

An early strand of the literature investigating the impact of two-tier labour market reforms has focused on how such reforms affect the volatility of labour demand over the business cycle (e.g., Saint-Paul, 1996). This literature agrees that allowing firms to conclude flexible employment contracts increases both job creation and job destruction. As a consequence, the volatility of labour demand over the business cycle rises. However, despite the considerable

economic importance of temporary employment forms, surprisingly little is known theoretically and empirically about the substitution effects of temporary jobs, or about how two-tier labour markets respond to profound macroeconomic shocks.

In this Feature, Berton and Garibaldi shed light on the interaction between the segments of two-tier labour markets. Their search and matching model allows firms to adjust their workforce to the volatility of demand by offering both temporary and permanent posts. While firms cannot dissolve permanent contracts, they can terminate temporary contracts at no cost. They find that as long as firms are able to fill their permanent posts faster than temporary ones, in equilibrium, temporary and permanent jobs coexist. In addition, the model predicts that the job-finding rate for temporary jobs is higher than that for permanent jobs, thus creating incentives for workers to accept a temporary job. Hence, particularly workers with limited outside options sort into temporary jobs. The prediction that the job offer arrival rate for temporary workers is higher is supported empirically using administrative data for Italy. The authors find faster transitions from unemployment to temporary than to regular employment.

As long as two-tier labour markets do not lower employment overall, one might argue that flexible labour markets may enhance an economy's ability to respond to economic shocks. However, the recent financial crisis has shown that countries with two-tier labour markets respond in different ways to shocks. Bentolila, Cahuc, Dolado, and Le Barbanchon in this Feature attempt to solve this puzzle by comparing how labour markets in Spain and France—countries with high employment protection for regular jobs—reacted to the recent crisis. Despite similar labour market institutions, unemployment rates rose considerably in Spain but only moderately in France. The authors' search and matching model shows that a country's adjustment capabilities may depend crucially not only on the relative magnitude of dismissal costs for flexible and permanent employment contracts but also on the implementation of regulations that prevent firms from laying off workers when a shock occurs. The authors estimate that Spain could have avoided almost half of the actual increase in unemployment under the French institutional framework of employment protection.

5. Flexible employment, productivity, and turnover

Although the productivity effects of lowering the restrictions on temporary contracts may be as important as employment effects when assessing the costs and benefits of deregulation, the former have received substantially less attention in the literature. Theoretically, one would predict that productivity should increase when firms are allowed to use flexible employment

forms. Our macroeconomic analysis in Section 3 produced mixed results with respect to productivity effects; the following two studies take a closer look at productivity at the establishment level.

Exploiting time variation in legislation, Cappellari, Dell’Aringa, and Leonardi empirically investigate the effect of changes in regulations for fixed-term and apprenticeship contracts on productivity and job flows in Italy. Their findings reveal the two faces of flexible employment: the reform of apprenticeship contracts has increased labour turnover, provided more job opportunities for apprentices, and may even have increased firms’ productivity. At the same time, the deregulation of fixed-term contracts has not only reduced overall job turnover and lowered productivity but also decreased incentives for firms to conclude fixed-term contracts. The unintended effects of the latter reform are a good example of how collective bargaining can affect the implementation of labour market reforms: while the legislation was passed by the federal government, the implementation of fixed-term contracts was negotiated at the sectoral level through collective bargaining. The resulting diversity increased procedural and legal uncertainties. This made the use of fixed-term contracts more costly and ultimately led firms to avoid this contract type. In line with the results reported by Bentolila *et al.* in this Feature, the findings of Cappellari *et al.* stress that it is not so much the actual firing costs but procedural uncertainties and red tape costs that prevent firms from operating efficiently.

An alternative flexible employment form that is being used increasingly in many countries is temporary agency work. Using a large panel data set for Germany, where the share of temporary agency workers is high by European standards, Hirsch and Müller investigate how temporary agency work affects the productivity of the user firm. Their findings again highlight the two contrasting sides of flexible employment: on the one hand, temporary agency work may increase productivity by enabling firms to shift towards a numerically more flexible workforce and to screen candidates for permanent jobs. On the other hand, the lower (firm-specific) human capital of temporary workers and the spillover effects on the user firm’s permanent workforce may adversely affect productivity. Controlling for both, time-invariant and time-varying unobserved heterogeneity, Hirsch and Müller find a robust hump-shaped effect of the share of temporary agency workers in the user firm’s workforce on firm productivity. Both, firms that do not employ temporary agency workers and firms that rely heavily on temporary agency work are significantly less productive than those using temporary agency work to a moderate extent. This underscores that finding the right dose of flexible employment is as important for managers at the firm level as it is for policy makers at

the national level, particularly when it comes to designing policies to deregulate labour markets.

6. Conclusion

This Feature provides new results on the effects of lowering employment protection for temporary contracts in European countries. They show that flexible forms of employment can be both a boon and a bane to the labour market and to society as a whole. Lowering dismissal costs for a subset of the labour force may increase employment. However, workers with limited outside options such as immigrants, as well as low skilled and young workers who are rarely eligible for unemployment benefits tend to sort into temporary jobs. These workers also suffer the disadvantage if there is a sizeable gap in firing costs between temporary and permanent jobs. Moreover, the evidence suggests that firms only achieve productivity gains if they do not face procedural uncertainties regarding the use of temporary employment and if they can employ an optimal share of flexible workers.

While the literature and the four studies presented here focus primarily on the efficiency effects of flexible employment forms—i.e., their effects on employment and productivity—the question remains how increasing labour market flexibility affects the income distribution. The cross-country analysis presented in Section 3 indicates that in countries with strictly regulated labour markets, the distribution of household incomes is significantly more equal than in countries with flexible labour markets. These results, combined with the findings of the articles in this Feature, suggest that there seems to be a trade-off between equity and efficiency when dual labour markets are supported—a topic that will require thorough investigation in future research.

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Table 1: Mean and coefficient of variation (varc) of employment protection legislation indicators

		Regular			Temporary		
		1985	1996	2008	1985	1996	2008
France	mean	2.51	2.34	2.47	3.06	3.63	3.63
Germany	mean	2.58	2.68	3.00	3.75	3.50	1.25
Italy	mean	1.77	1.77	1.77	5.38	5.38	2.00
Spain	mean	3.88	2.77	2.46	3.75	3.25	3.50
EU4	mean	2.69	2.39	2.43	3.99	3.94	2.60
	varc	0.33	0.19	0.21	0.25	0.25	0.45
EU15	mean	2.55	2.37	2.34	3.01	2.70	1.98
	varc	0.41	0.35	0.32	0.53	0.59	0.56
EU21	mean	—	—	2.39	—	—	1.80
	varc	—	—	0.28	—	—	0.57

Source: OECD (2011); EU4 represent France, Germany, Italy, Spain; EU15 represent EU4 plus Austria, Belgium, Denmark, Finland, Greece, Ireland, Luxembourg, Netherlands, Portugal, Sweden, UK; EU21 represent EU15 plus Czech Republic, Estonia, Hungary, Poland, Slovenia, Slovakia. Indicators for Luxembourg are only available for 2008.

Table 2: Incidence of fixed-term and agency work contracts

	Share of fixed-term contracts (%)		Share of agency work contracts (%)	
	1996	2008	1996	2008
France	12.6	14.7	1.3	2.3
Germany	11.1	15.0	0.4	2.0
Italy	7.5	13.3	—	0.9
Spain	33.6	29.3	0.5	0.6
EU4	16.2	18.1	0.7 ^{b)}	1.5
EU15	11.5 ^{a)}	13.4	0.9 ^{b)}	1.7
EU21	—	12.8	—	1.4 ^{c)}

Share of fixed-term contracts: Number of workers on fixed-term contracts divided by total employment, source: OECD (2011); Share of agency work contracts: Number of agency workers divided by total employment in full-time equivalents, source: CIETT database; ^{a)} no information available for Finland, Sweden and Luxembourg; ^{b)} no information available for Luxembourg; temporary agency employment in Greece and Italy was not allowed in 1996; ^{c)} no information available for Estonia.

Table 3: Linear regression results of macroeconomic outcomes on the strictness of employment protection legislation and the incidence of flexible employment forms, 1985-2008

	Employment	GDP per employed	Gini (before)	Gini (after)
EPL regular	- 1,821.9** (261.5)	- 58.99** (12.15)	- 0.027* (0.011)	- 0.023** (0.004)
EPL temporary	- 444.5** (77.9)	- 13.17** (3.62)	- 0.010** (0.001)	- 0.007** (0.001)
Share of fixed-term contracts	162.7** (23.6)	0.508** (0.190)	0.002** (0.001)	0.001** (0.000)
Share of agency work contracts	1,039.3** (160.6)	6.847** (2.127)	0.002 (0.003)	0.005* (0.002)

Source: OECD (2011); estimations refer to EU15 countries; each cell represents the results of one OLS regression with country fixed effects; the Gini coefficient is based on equivalised household disposable income, before and after taxes and transfers, respectively (5 years averages); the GDP is measured in US \$, constant prices, constant PPPs, OECD base year and divided by the total number of employed; the share of agency work contracts is taken from CIETT (2011) and refers to the period 1996-2008. Standard errors in parentheses, ** p<0.01, * p<0.05.