Temporary Employment Boom in Poland – a Job Quality-Quantity Trade-off?

Extended Abstract

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Abstract

In this paper we study the rise of temporary employment in Poland from the multidimensional job quality perspective and ask whether rise in temporary employment involved a trade-off between job quality and job quantity. The share of temporary contracts in dependent employment of 15-64 year olds in Poland rose from 11.0% in 2001 to 28.3% in 2014, the highest share in the EU country. It coincided with unemployment decrease from 20.2% in 2002 to 9.1% in in 2014, while the number of workers with permanent contracts remained relatively stable. As a result, in 2014 the employment rate of 15-64 year olds in Poland was at a record-high level in the post transition history, but the share of permanent employment was the lowest. Temporary jobs are usually characterised by lower job quality, in particular due to contractual insecurity. However, they may also entail lower job quality in other dimensions (pay, hours, work environment, discontinuous social security / retirement contributions). It is particularly relevant for Poland due to the regulation of civil law contracts, a type of temporary contracts which are not fully covered by social security, paid leave nor minimum wage. Thus, we focus on temporary jobs but account for several dimensions of jobs quality, and try to answer the following questions:

- How has the job quality of temporary workers evolved in Poland during the period of temporary contracts' incidence increase? How has it changed during the Great Recession?
- Has the quality of temporary jobs held by various socio-demographic groups of workers been different?
 Which types of workers have had the lowest job quality.
- What were the parallel tendencies of job quality of permanent workers? In particular, has the job quality of permanent workers declined in parallel to rising incidence of temporary, lower quality jobs?
- How has the average job quality evolved in Poland? Was there any job quantity vs. quality trade-off?

To this end, we use the following datasets and methods:

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- The Polish LFS and SES data to calculate the job quality measures of temporary and permanent workers, their changes over time and contribution to overall job quality level, and dispersion of job quality between segments of the labour market.
- A unique 2014 LFS module focused on civil law contracts to assess the job quality of civil law contracts workers, in particular in those dimensions where the labour law provisions don't apply.
- Country-level labour market and macroeconomic variables and synthetic control method to estimate a counterfactual employment level provided no temporary jobs boom occurred in Poland, that would allow us to quantify the "excessive" employment related to temporary contracts proliferation and assess the job quantity vs. quality trade-off.

In the extended abstract below we provide further explanation of our approach and measurement of job quality, and provide details on the proliferation of temporary contracts in Poland that motivate the analysis of job quantity vs. quality trade-off.

1 Introduction

European labour markets in the 21st century evolve following demographic developments and their consequences. Traditional 20th century institutions don't cope well with a reversal of the demographic dividend to a negative one. A high incidence of temporary and other irregular jobs is observed around Europe. That low quality jobs are taken mostly by younger workers while the ones more advanced in their working lives are better protected by the 20th century institutions that still organise the labour market. This tension may create an important policy dilemma: is it better to stress the need to create traditional, high quality jobs at the expense of their quantity, or allow the use of various ways to reduce costs and create more jobs, especially for the young, even if that jobs are of lower quality. How pronounced can this dilemma be?

To shed light on this dilemma we analyse the nature of a possible trade-off between quality and quantity of jobs in Poland, a country that in the 20th century has experienced the strongest increase in temporary jobs not only among the post-transition economies, but in the entire EU, which coincided with unemployment reduction, total employment increase and solid GDP growth.

2 Dimensions of job quality

The issue of job quality has received increasing attention in the economic literature. The current concepts have expanded the basic view that wages contain all information of job quality. The conceptualisation and measurement framework of non-pecuniary job quality has been developed by e.g. ILO, OECD and European Commission (Eurofound). ILO and Eurofound worked on the extensive list of non-pecuniary jobs characteristics ranging from skills and training, working condition and the work-life balance. OECD connects the quality more directly to the labour market institutions proposing three dimensions of job quality: earnings quality, labour market security and quality of work environment. It follows the view of Kalleberg, Reskin and Hudson (2000) who define bad jobs as those without the health insurance and pension benefits. Hurley, Fernandez-Macias and Storrie (2013), Eurofound (2012) and Muñoz de Bustillo et al. (2011) focused on the contractual stability of jobs and

distinguished directly two components of job quality: degree of contractual stability of the worker, and the prospects that a job provides for the further development of an employee.

Thus, although our paper is focused on temporary contracts, we look beyond contractual instability and account for the following dimensions of job quality:

- Contractual instability
- Wage penalty
- Retirement pension penalty
- Social security penalty
- Training opportunities gap
- Unemployment, and long-term unemployment risk.

Previous studies show that these are valid dimensions for the quality of temporary jobs in Poland:

- Less job stability according to EU-SILC data, fewer than 30% Poles employed on a temporary basis were offered stable employment after a year, and fewer than 50% of workers aged 18-29 had stable employment three years later (Eurofound 2013). The Social Diagnosis 2013 survey shows that individuals who were working under fixed-term contracts in 2011, suffered from almost three times higher risk of being unemployed in 2013 than people who in 2011 were working under open-ended contracts (9.2% and 2.8%, respectively), and were half as likely to be working under an open-ended contract (36% and 79%, respectively).
- Lower pay and higher risk of poverty OECD (2012) estimates the pay penalty on temporary contracts in Poland at approx. 30%. Lewandowski and Kamińska (2014) estimate that temporary contracts involve a significantly higher risk of in-work poverty than open-ended contracts.
- Worse skill acquisition, promotion and professional development opportunities workers employed under temporary contracts are less likely to participate in professional development and training courses (Chłoń-Domińczak and Lis, 2013). Magda (2016) shows that probability of participation in training varies significantly depending on socio-demographic characteristics of temporary workers.
- Pension penalty on civil law contracts Lewandowski, Stroński, Keister (2015) calculate that workers in the civil law contract segment can expect by 17% lower retirement pension than similar workers in the permanent employment contract segment.

3 Proliferation of temporary contracts in Poland

Between 2002 and 2014, the number of all temporary workers (including TWA, FTC, civil contracts) in Poland doubled (cf. Figure 1). Poland leapfrogged Spain as the EU country with the highest share of temporary employment (27% of total employment in 2014).

There are three main types of non-standard employment forms in Poland – fixed-term employment contracts based on the labour code (FTC henceforth), civil-law contracts (not based on the labour code) and work via temporary work agencies (TWA henceforth) which in principle should provide a worker with a labour code type coverage by social security and minimum wage guarantees. Table 1 summarises the most important features

differentiating the various types of fixed-term employment and civil law contracts. Although contractual instability is a central feature of types of temporary jobs, civil-law contracts in Poland are characterised by lower worker entitlement also in other dimensions – paid leave, social security benefits (in particular retirement pension), minimum wage. The growth of temporary employment was partly fuelled by the increase in civil-law contracts' incidence. According to the Ministry of Finance, in 2014, 1.04 million people in Poland worked solely under civil law contracts, while in 2002 this figure was equal to 580 thousand.

Table 1. Features of various employment contracts in Poland

Benefits and rights of workers	Labour Code contracts		Civil-law contracts	
	Permanent (PLC)	Temporary (TLC)	Contract of mandate (umowa zlecenie)	Contract to perform specified task (umowa o dzieło)
Social security benefits	Yes	Yes	Yes, but can be relatively low	No
Health insurance	Yes	Yes	Yes	No
Paid leave	Yes	Yes	No (upon agreement)	No (upon agreement)
Minimum wage requirement	Yes	Yes	No	No
Period of notice	Yes	Yes, but till 2016 was shorter than in PLC	Upon agreement	Upon agreement
Justification to terminate contract	Yes	No	No	No
Severance pay	Yes	Yes	Upon agreement	No

Source: Own elaboration based on Gatti et al (2014).

As the incidence of temporary contracts grew, the number of persons working under open-ended employment contracts fluctuated around 12 million, but their share in total employment declined by 10 pp. It implies that most of employment expansion after 2002 was driven by contracts different than open-ended employment contracts. Indeed, temporary jobs were increasingly important as a path from unemployment to employment. In 2003-2014, more unemployed people found temporary jobs than permanent jobs. Flows from unemployment to permanent employment were rather stable over time at approx. 4% per year, while flows from unemployment to temporary jobs involved 21% of unemployed in 2003-2014 on average. These flows rose from 14% of unemployed in 2003 to 24% in 2014. Flows between permanent and temporary employment in Poland were relatively limited. On the average in 2003-2014, 94% of workers with permanent contracts retained their status a year later. Remaining in temporary jobs a year later concerned on average 72% of temporary workers in 2003-2014, but the fraction of workers remaining in temporary jobs rose from 64% in 2003 to 80% in 2014. The number of temporary workers, who had the same status a year before (so they remained in temporary jobs for at least a year) doubled between 2004 and 2014 (from 1.1 million to 2.2 million) (cf. Figure 3). The share of temporary workers moving to a permanent job a year later amounted to 14% on average in 2003-2014, but it was decreasing from 18% in 2003 to 10% in 2014. On the other hand, flows from temporary jobs to unemployment decreased from 12% in 2003 to 4% in 2014. This was related to the fact that unemployment rate decreased substantially over this period.

4.0 16.5 Total employment right axis 16.0 3.5 15.5 3.2 3.0 Number of workers employed under 15.0 temporary contracts 2.5 (fixed-term contracts, 14.5 civil law contracts, etc.) - left axis 2.0 Self-employment 14.0 outside agriculture with no employees- left axis 1.5 13.5 1.0 1.0 1.0 0.9 0.9 0.9 0.8 0.8 1.0 13.0 Number of taxpayers settling taxes only 0.5 based on civil law 12.5 contracts - left axis 0.0 12.0 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Figure 1. Number of people working under various contracts in 2002-2014 (in millions).

Source: Own elaboration based on LFS and Ministry of Finance data.

Figure 2. Labour market flows from temporary employment in Poland [%].

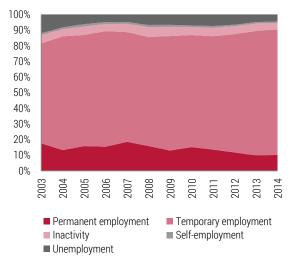
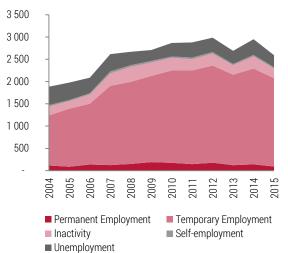


Figure 3. Labour market flows to temporary employment in Poland [thousands of people].



Source: Own elaboration based on Polish LFS data.

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It is thus possible that without non-standard employment forms, the total employment expansion in Poland would have been smaller as it would have meant higher employment protection and higher tax wedges. However, to our knowledge there is no empirical estimate of the size of this potential 'honeymoon effect' (Boeri and Garibaldi 2007). We will provide such estimate in the context of parallel changes of job quality. The presented descriptive statistics suggest that temporary workers' prospects of securing permanent contracts might have declined as

their number grew, which both could have contributed to decreasing job quality. In the next section we describe our methodology to quantify the related job quantity vs. quality trade-off.

4 Identification of quality-quantity trade-off

The available empirical research delivers only indirect results on the quality – quantity trade-off. Green (2006) shows for the UK that rising hours worked might decrease the extensive labour demand with negative impact on job quality. She also points that the job creation since early 1980 in affluent economies resulted in creation of many skilled and fulfilling jobs but also in rising share of low wages, unsecure and stressful ones. Appelbaum et al. (2003) confirm rising share of bad jobs in USA. Auer, Berg & Calibaly (2005) show that labour productivity increases with job tenure, and therefore lower quality of jobs might negatively affect the productivity.

The relation between job quality and quantity is not obvious. The drop in the job-security may facilitate the rise in employment and drop in unemployment if it's related to lower labour costs and higher labour demand. The descriptive statistics suggest such a pattern in Poland. However, the proliferation of the temporary contracts in Poland was a continuous process and it was not related to any sudden change in policy. On top of that, temporary contracts rose in all types and sizes of firms, as regulation was not diversifying between different types of firms or sectors. It is therefore not possible to identify the causal impact of contracts on employment with a natural or a quasi-natural experiment approach through instrumental variables, discontinuity design or difference-in-difference as in case of Boeri & Garibaldi (2007), Angrist & Kruger (2001), Pereira (2003), Van der Klaauw (2014).

In order to identify the causal impact of decrease in job quality on employment and unemployment we will utilise the variation in the developments of temporary contracts' incidence in European countries, where presumably no comparable decline in job quality was observed. With the use of other countries' labour market and macroeconomic dynamics we will construct a synthetic control to judge the dynamics of Polish employment. We will particularly focus on the 2003-2008 period when the incidence of temporary employment rose strongly, against a counterfactual scenario (Abadie and Gardeazabal, 2003; Abadie, Diamond, and Hainmueller, 2010; Abadie, Diamond, and Hainmueller, 2013). Such approach has been used to research the impact of minimum wages (Sabia, Burkhauser & Hansen, 2012) or the impact of the immigration on the labour market (Peri & Yasenov, 2015). The synthetic control method suits best our approach i.e. the causal inference in a comparative case study. It consists of constructing a control group as a weighted combination of the other countries. The evolution in employment and unemployment given by the synthetic control will serve as an counterfactual for the observed dynamics of labour market in Poland (Abadie and Gardeazabal, 2003).

There are few methodological aspects important for applying this method. First, our outcome variables will be employment and unemployment rates. Second, the initial characteristics to be used for the weights in synthetic control include: employment rate, unemployment rate, employment share of construction, employment rate by age, employment share of agriculture, GDP per capita, GDP per capita dynamics. Following Abadie, Diamond, and Hainmueller (2010) we will also include the employment and unemployment into the matching characteristics. Finally, the control group will comprise of those European countries where no comparable rise in temporary employment took place. We will start with other countries from the Central and Eastern Europe (Slovakia, Czech Rep., Lithuania, Latvia, Estonia, Slovenia, Hungary) and Germany (as a major trading partner), but widening the control set for all EU countries will be checked. The estimation will be performed on the country level data on

employment, temporary jobs proliferation and control variables (GDP, age structure of the working force, the sectoral structure of employment) obtained from Eurostat, OECD and ILO for the time span 1992-2015. The estimation excluding and including the Great Recession period will be performed as robustness check.

A common factor model will be estimated as an additional robustness check to measure the trade-off among job quantity and proliferation of temporary employment in the panel of European countries (Pesaran, 2006, Bai, 2009, Dube and Zipper, 2014). This model allows controlling for common trends, cross-sectional dependence and heterogeneity impact of loss of quality on the quantity of employment (Totty, 2015). Aside from controls, the model will directly link the employment share of temporary contracts with employment and unemployment rates.

Expected conclusions and policy implications

The quality-quantity trade-off seems to be a permanent feature of contemporary labour markets. This poses a policy dilemma how to organise labour markets and balance the need to support both the number of jobs and their quality. The paper uses the Polish example to provide a piece of quantitative evidence for multidimensional job quality developments in the context of rising temporary employment, and possible job quality vs. quantity trade-offs, which may shed light on policy dilemmas related to pros and cons of the use of temporary and non-standard contracts.

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