Are flexible workers more insecure?
An integrated approach based on micro-data

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Extended abstract

In this paper we take a comprehensive approach and identify three main determinants of (objective) worker insecurity: (i) employment discontinuity, (ii) inadequate wages, (iii) limited access to social protection. We then provide an empirical assessment, based on individual micro-data for Italy, of the effect of non-standard work arrangements on these three dimensions. In particular, and differently from the economic literature which mainly focus on the effects of social protection on labor supply, we focus on the interaction between the first two determinants and the third, namely on the effects of working careers on social protection coverage. We show that insurance-based Bismarckian welfare systems – of which the Italian system is representative – absent an additional layer of universal social assistance might fail to provide security when most needed. This is in sharp contrast with the *flexicurity* policy recommendations in order to reconcile work flexibility and workers' security.

1. Introduction

Aimed at reducing unemployment rates and recover competitiveness [Oecd 1994; Imf 1999], in the last decades many European countries have undertaken reforms in the labor market in order to increase flexibility. This has been mainly done "at the margin", i.e. by easing the conditions under which a worker can be hired with non-standard work arrangements. In the period 1990-2008, the Oecd EPL index for temporary workers has indeed been reduced in thirteen out of twenty-six countries, remaining stable in eight and increasing in only five[1], while the same index for permanent workers kept almost unchanged [Brandt et al. 2005]; as a likely consequence, the share of workers employed with a contract of limited duration reached 13.5% in the EU27 in 2009 – it was almost 15% before the ongoing economic crisis – and topped 25% in

[1] Our computations on Oecd data. The group of countries respectively are: Belgium, Denmark, Finland, Germany, Greece, Italy, Japan, Korea, the Netherlands, Norway, Portugal, Spain and Sweden; Australia, Austria, Canada, France, Mexico, Switzerland, Turkey and the US; Hungary, Ireland, New Zealand, Poland and the UK.

Spain, 22% in Portugal and 26% in Poland. The share of part-time workers, in turn, reached 18.8% (21.6%) in the EU27 (EU15) in 2009, with a spike in the Netherlands (48.3%) and many countries well over 20%[2].

This strategy puts forward a potential problem of (increasing) worker (in)security, in as much as many temporary jobs simply substituted more protected positions [Kahn 2010], and involuntary part-time work is high in many countries, with a worrying increasing trend (18.9% in the EU15 in 2009 up from 12.8% in 2000, with numbers as high as 28.7% in France, 29.2% in Greece, 34.0% in Italy, 46.8% in Spain). Moreover, risk-averse workers, for any given present value of their future earnings, strictly prefer more stable career patterns, so that temporary workers usually feel less secure than their standard colleagues [Clark and Postel-Vinay 2009]. Not surprisingly, therefore, the empirical evidence suggests that non-standard workers are less secure according to both objective and subjective measures [Pacelli et al. 2007].

Our focus is on the causal mechanisms linking non-standard working arrangements and objective worker security. It is now widely recognized that worker security is a multidimensional object, extending beyond simple job security – the retention of the same job with the same employer, the prevalent focus of the analysis during the seventies [Doeringer and Piore 1971], towards broader *employment security* – the expectation of continued employment, although not necessarily with the same employer and in spite of brief and sporadic periods of unemployment [EC 2006]. This notion has taken on a crucial role within the debate on *flexicurity*, which advocates a combination of active and passive labor market policies to counteract the detrimental effects of flexibility on job security. Active policies, by facilitating out-of-unemployment transitions, are meant to foster employment security, while passive policies – namely income maintenance schemes – are meant to guarantee *income security*, by substituting *wage security* with *social security* during transitions from one job to the other [Wilthagen and Tros 2004].

These dimensions of worker security show a high degree of complementary: as an example, a low level of wage security, which prevents precautionary savings during the employment spells, can be balanced by access to social protection during non-employment, or by a high level of employment security reducing the number and duration of the unemployment spells.

However, in the literature on worker (in)security a trade-off between the number of dimensions taken into account and the capability to assess causal relationships seems to emerge. Economics scholars usually aim to identify the causal effect of holding a non-standard working arrangement on subsequent career perspectives – for instance by testing the capability of a temporary job to represent a stepping stone into open-ended employment [Addison et al. 2009; Booth et al. 2002; De Graaf-Zijl et al. forthcoming; Gagliarducci 2005; Jahn and Rosholm 2010; Ichino et al. 2008] – or to estimate wage gaps between standard and non-standard workers [Addison and Surfield 2007; Oecd 2008; Comi and Grasseni 2010]. They generally abstract from social protection, but for a strand of the literature that takes social protection as an input and looks at the effects on labor supply (see, for instance, [Schmieder et al. 2010]). Their result, despite causality is explicitly modelled, are therefore not decisive in assessing the impact of flexible work arrangements. On the other hand political science and political economy scholars try to depict the broader

[2] Namely: Belgium, Denmark, Germany, Ireland, Austria, Sweden, the UK, Iceland and Norway; Switzerland is at

picture taking interactions between all the dimensions into account, but the empirical evidence they provide is only at the macro level, often failing in assessing causal mechanisms [Häusermann and Schwander 2010].

This paper provides an empirical assessment of the relative importance of employment security, wage security and social security in reducing workers' insecurity, in Italy. In particular, it investigates the ability of social protection to reduce insecurity in a country characterized by an occupational welfare system. Given that the eligibility requirements for social benefits are either conditional on the contract type – excluding *a priori* important forms of non-standard work arrangements – or linked to employment continuity and minimum contribution accumulation, we show how poor social security is in complementing employment security and wage security. In addition of having a pure insurance-based social protection system, Italy represents a relevant case-study for studying the relationship between the deregulation of the labor markets and worker security for two reasons: (i) Italy ranks first among the Oecd countries with respect to the reduction of restrictions to the use of temporary contracts in the last twenty years, and ranks second with respect to the degree of compliance to the Oecd Jobs Strategy; (ii), Italy has, as we have seen, one of the highest percentage of involuntary part-time workers among EU countries.

2. Data and results

In order to quantify the impact of non-standard work on employment continuity, gross wage differentials, and access to income maintenance schemes in case of non-employment we fully exploit the potential of Whip, an employer-employee linked database of individual work histories built using social security records of Italian workers.

Results are neat. Workers with contracts of limited duration – with respect to standard workers – enjoy employment spells the shorter duration of which is not compensated either by more frequent job-to-job transition rates or by shorter unemployment spells. The probability to get an open-ended job is on average higher with respect to unemployed workers. However, as pointed out in a related research [Berton et al. 2009], this port-of-entry effect seems to be completely explained by within-firm transitions; in other words, temporary jobs – probably due to low investments in human capital [Bassanini et al. 2007] – do not represent a valuable asset in cross-firm transitions, and thus to a large extent for employment security. We also confirm in our data a large and persistent wage penalty for some forms of non-standard work. In the Italian insurance-based social protection system, these two empirical findings mirror also into a poorer access to income-maintenance schemes, including unemployment benefits, maternity and sickness allowances[3]. For each individual, we check whether eligibility criteria are met, and offer a quantification of the relative importance of employment discontinuity vs. low wage and contribution accumulation. Moreover, by looking at an overall measure of income coming from wages and (state-provided) income-maintenance schemes over a 5-year period (1998-2003) and providing an operationalization of the concept of (material) worker

34.6%.

[3] While working part time does not imply more employment and wage insecurity with respect to full-time work, it leads to less social security, since the contributions paid during one's working career are proportional to the total – and not unitary – wage.

security based on such measure, we are able to test at an individual level whether social security is or would have been decisive for granting worker security. As a final result, and focusing on a sub-sample of labor market entrants, we estimate the impact of starting to work with a non-standard contract on the probability of being insecure over the next 5 years, as the sum of three distinct effects corresponding to the three pathways examined above: an employment discontinuity effect, a wage effect, and a social protection effect.

References

Addison, J.T. and Surfield, C.J. (2007). Atypical work and pay. *Southern Economic Journal* 73(4): 1038-1065.

Addison, J.T., Cotti, C. and Surfield, C.J. (2009). Atypical work: who gets it and where does it lead? Some U.S. evidence using the NLSY 79. *IZA Discussion Paper* n. 4444.

Bassanini, A., Booth, A., Brunello, G., De Paola, M. and Leuven, E. (2007). Workplace training in Europe. In: Brunello, G., Garibaldi, P. and Wasmer, E. (eds.), *Education and training in Europe*, Oxford: Oxford University Press.

Berton, F., Devicienti, F. and Pacelli, L. (2009). Are temporary jobs a port of entry into permanent employment? Evidence from matched employer-employee data. Department of Economics and Finance Working Paper No. 6/2009, University of Turin.

Booth, A.L., Francesconi, M. and Frank, J. (2002). Temporary jobs: stepping stones or dead ends? *The Economic Journal* 112(480): F189-F213.

Brandt, N., Burniaux, J.M. and Duval, R. (2005). Assessing the Oecd Jobs Strategy: past developments and reforms. *Oecd Economic Department Working Paper* No. 429.

Clark, A. and Postel-Vinay, F. (2009). Job security and job protection. *Oxford Economic Papers* 61(2): 207-239.

Comi, S. and Grasseni, M. (2009). Are Temporary Workers Discriminated Against? Evidence from Europe. *ChilD WP* n. 17/2009

De Graaf-Zijl, M., Van Den Berg, G.J. and Heyma, A. (forthcoming). Stepping stones for the unemployed: the effect of temporary jobs on the duration until regular work. *Journal of Population Economics*.

Doeringer, P. and Piore, M. (1971). *Internal labor market and manpower analysis*. Lexington: Heath Lexington Books.

European Commission (2006). *Employment in Europe 2006*, Luxembourg.

Gagliarducci, S. (2005). The dynamics of repeated temporary jobs. *Labour Economics* 12(4): 429-448.

Häusermann, S. and Schwander, H. (2010). Varieties of dualization? Labor market segmentation and insider outsider divides across regimes. Paper presented at the conference «The dualisation of European societies?», Green Templeton College, University of Oxford.

Jahn, J. and Rosholm, M. (2010). Looking beyond the bridge: how temporary agency employment affects labor market outcomes. *IZA Discussion Paper* n. 4973.

Kahn, L.M. (2010). Employment protection reforms, employment and the incidence of temporary jobs in Europe. *Labour Economics* 17(1): 1-15.

Ichino, A., Mealli, F. and Nannicini, T. (2008). From temporary help jobs to permanent employment: what can we learn from matching estimators and their sensitivity? *Journal of Applied Econometrics* 23(3): 305-327.

Imf (1999). *Chronic unemployment in the Euro area: causes and cures*. Washington, DC.

Oecd (1994). *Oecd Jobs Study: evidence and explanations*. Paris.

Oecd (2008). *Growing Unequal?Income distribution and Poverty in Oecd countries.* Paris.

Pacelli, L., Devicienti, F., Maida, A., Morini, M., Poggi, A. and Vesan, P. (2007). *Working conditions and employment security and employability*, research report for the European Foundation for the Improvement of Living and Working Conditions, Dublin.

Schmieder, J.F., von Wachter, T. and Bender, S. (2010). The effects of unemployment insurance on labour supply and search outcomes. Regression discontinuity estimates from Germany. *IAB Discussion Paper* No. 4/2010

Wilthagen, T. and Tros, F. (2004). The concept of flexicurity: a new approach to regulating employment and labour markets. *Transfer-European Review of Labour and Research* 10(2): 166-186.