

The objective of the paper is to study the effects of offshoring on individual job satisfaction and perceived risk of job loss. The authors also investigate whether these effects (if they exist) differ among four categories of collars. For this purpose, they use an unbalanced panel of 69,733 observations (17,888 respondents), which is obtained by merging microdata on personal and household characteristics from several waves of the German Socio-economic Panel dataset (SOEP) with information on offshoring intensities at sectoral level computed from the Trade in Value Added (TiVA) OCDE database. From a methodological point of view, in the equation for job satisfaction, which is a cardinal indicator, they implement Probit Adapted Ordinary Least Squares (POLS). In the case of job insecurity, which is a binary variable, they use Ordinary Least Squares (OLS). Their results suggest that offshoring is associated with lower job satisfaction, being the largest negative effects those for low skilled blue-collar workers. However, regardless of the worker' categories of collar, offshoring does not seem to be significantly related with job insecurity.

I think that the topic of the paper is very interesting and the empirical analysis is well motivated. However, the paper needs to clarify/address several issues related to the database and the methodology used to test the main hypotheses. I list them in more detail below.

1)Framework: I think that one of the contributions of the paper is to analyze whether the relation between offshoring and job satisfaction or job insecurity is different depending on categories of collar, as these categories have been taken into account in previous literature about the effects of offshoring on employment and wages. In this respect, previous literature suggests that workers in 'tradable occupations' are more likely to lose than those in 'non-tradable occupations'. I guess that the information in SOEP database does not allow having a measure of the tradable task content in occupations that could be combined with the four categories of collar considered. Nevertheless, I think that at least a comment on this issue should be included in Section 2.

In any case, I agree with the authors that it would be interesting to consider the nature of offshoring by distinguishing between service and material offshoring or, at least, between service and manufacturing sectors. In my opinion, one extra robustness check that would increase the contribution of the paper would be performing models 2a and 2b for the separate subsamples of workers in services activities and workers in manufacturing sectors.

2)Database: It should be clarified whether women are part of the individuals in the sample. The information in page 9 indicates that the sample includes male full-time employees of prime age. However, summary statistics in Table 1 show that women account for 46.8% of the sample. From my view, if women are not part of the final sample, the authors should justify whether this

generates a bias in the estimates. If women are in fact included, the gender dimension should also be considered for the estimates.

3)Econometric methodology: I understand the reasons for using POLS in the estimation of the equation for job insecurity. However, I think that, in the case of job insecurity, it would be better to show the results from a probit or logit model that takes into account the binary nature of the dependent variable. Marginal effects can be easily computed and the authors could also provide information about the percentages of correctly predicted zeros and ones.

4)Results: Some of the unexpected effects obtained in the estimations could be explained by correlations among explanatory variables. For example, I would expect a positive correlation between age and tenure, and a negative correlation between tenure and temporary. Is this so? Having this information would help to interpret the results.

5)I agree with the authors that temporary workers are frequently used as a channel to buffer negative economic shocks and, therefore, they might face stronger job insecurity in case employers adjust to globalization pressure. To explore this issue, the authors expand their specification with interactions between offshoring, temporary contracts and workers' categories. With this specification, they intend to test whether offshoring affects differently workers with a temporary contract. However, this specification does not allow capturing whether temporary workers react differently to the offshoring intensity depending on the phase of the business cycle (the inclusion of year fixed effects in models 1b and 2b is not enough)

In this regard, much more information is needed about the evolution of the main variables during the period considered for the analysis. Have been the average year-to-year changes in offshoring intensity similar before and after the beginning of the crisis? And between services and manufacturing sectors?

The results in Table 5 suggest that there are not find significant differences among temporary and permanent workers regarding the offshoring effect. Given this result, I would also try a different specification that, instead of introducing interactions between offshoring, temporary contracts and categories, allows for interactions between offshoring, temporary contracts and a dummy for the crisis period. Alternatively, estimates in Table 5 could be repeated separately for the period

prior to the crisis and for the years of downturn. These estimates would allow analyzing whether the relations among the key variables are moderated/qualified by the phase of the economic cycle.

**Minor comments:**

- The meaning of sub-indexes in equations should be explicit. For instance, I understand that, in equation (1), sub-index “*i*” corresponds to individuals. However, it is confusing that this sub-index also applies to the offshoring intensity, which is measured at the industry level.
- In page 13, the authors say that “a well-determined coefficient on the type of task-offshoring interaction term  $\delta$  would imply that the effects of offshoring differ between individuals with permanent and fixed-term contracts”. However, I cannot find any interaction term with coefficient  $\delta$  in equation (4), nor any variable related to the fixed-term contracts. I guess that this interaction term corresponds to the (not displayed) specification used in the second sensitivity check performed in Section 5. Is this so?
- In Table 2, the coefficient of offshoring in Model 1b shows \*\*. However, in page 15 the authors affirm that in this case ‘the estimate of the offshoring fails to be statistically significant’, which is consistent with the value of the t statistic (-1.22) of the coefficient in Table 2.