

Brief answer to Referee Report 2 dp 2013-27

First, let's start by thanking the referee for the comments. I think that the paper will benefit from addressing these comments and I hope to have the opportunity to submit a revision of the paper that takes into account the points made by the referee. In what follows, I rewrite what I interpret as the main referee's comments and try to provide a brief answer to them and to explain how a new version of the paper could deal with them.

1. From the point of view of the referee, the value added of this paper is quite limited since it is an application of Osuna and Ríos-Rull (2003).

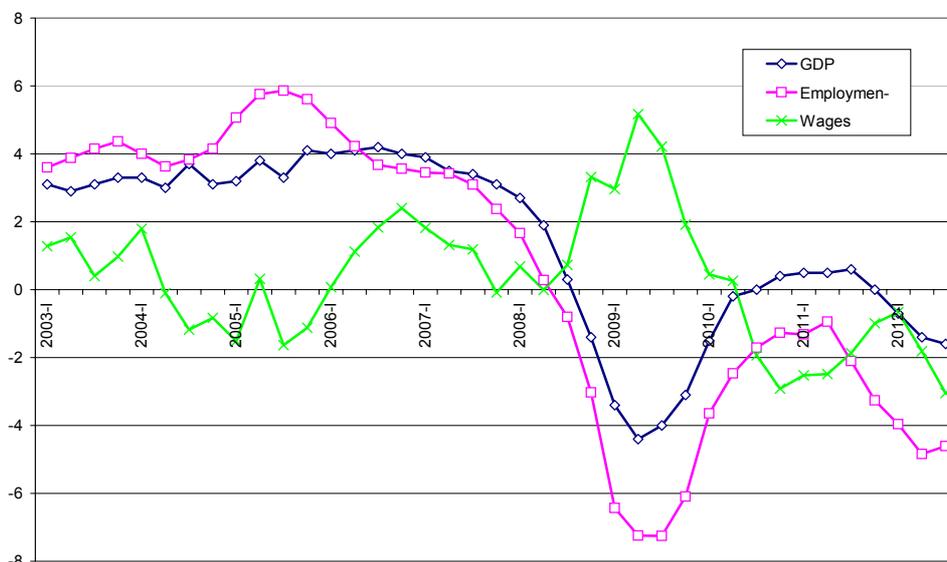
I see things rather different myself. From my point of view, theoretical models should be developed in order to be applied to real cases and applications have value in themselves. It is true that I am not adding any new feature to the model because the purpose was not to develop a new theoretical model, but to use that theoretical model to provide answers to this particular reform. That is why I tried to present the model in a more friendly way than in Osuna and Ríos-Rull and I have also tried to eliminate every technical detail that was not needed to follow the discussion on the application to the Spanish case. For all these details I have referred the interested reader to Osuna and Ríos-Rull. A different question is whether the model is or is not appropriate to discuss this issue, which is another point raised by the referee.

2. From the point of view of the referee the model does not represent the Spanish institutional setting sufficiently well because the Spanish labour market was dominated by collective bargaining until the "2012 reform." In his opinion the Osuna and Ríos-Rull setting is not the best one if the goal is to understand the workings of the Spanish labour market before the reform, and to compare it to the post-reform situation even if the reform can be considered an important institutional break point.

I see the point made by the referee and I partially agree with him. As I said in the last sentence in the conclusion, I consider the role of this paper as a first step in the formal discussion about the possible implications of introducing more internal flexibility in the Spanish labour market, not as a definite answer.

I, however, disagree with the referee and think that the fact that I abstract from collective bargaining is not very important. First, in the status quo, hours are not allowed to deviate. In that sense, the market is "strictly regulated" and the fact that wages are determined in a competitive way does not matter much because hours are fixed and the employment rate is calibrated. This would matter more in the exercises where I allow for adjustments in hours, which could be interpreted as relaxing these "strict regulations". But, as I have argued in the paper, the 2012 reform has introduced substantial changes in the system of collective agreements that have allowed for an internal devaluation by facilitating the adjustment of hours and wages to changes in a firm's economic conditions as an alternative to job destruction. For the first time, the firm is able to unilaterally modify working conditions, such as hours worked and wages, when subject to negative shocks. I think that these changes resemble more to a competitive labor market than to a labour market where unions are very powerful.

In fact, the graph provided below is illustrative of the fact that since the 2012 reform was put in place wages are more responsive to the cycle. This was not the case at the beginning of the crisis, where wages have shown a countercyclical pattern.



To sum up, I do think that the exercise takes care of the concern of the referee about the comparability issue, and that it is not necessary to have different ways of determining wages for the pre- and the post-reform situation, which would, instead, complicate more the comparison. In fact, one of the virtues of the model is its simplicity, which allows us to know where the main effects come from. In the homogenous workweek case without capital, it is even possible to solve it with paper and pencil.

3. From the point of view of the referee the Calibration exercise is not properly done.

I understand the concern of the referee regarding the calibration strategy and I think that it might be due to a misunderstanding that I would like to clarify.

Let me explain first the strategy and the procedure that I followed, and then an alternative strategy that was not shown in paper, but whose results serve as a reference point which gives me some confidence.

Strategy

What I did in the paper was to calibrate the heterogeneous workweek version of the model using effective weekly hours as reported by the Spanish Labour Force Survey in the period 2005-2001. The underlying assumption is that the cross-sectional distribution of workweeks in the data should provide an indication of the desired degree of flexibility regarding the workweek. That is, I am assuming that in the data firms are free to set a particular working-week, but once this working-week has been chosen,

deviations are not allowed under the status quo. So, the fact that the Spanish labour market was “strictly regulated” during the period 2005-2011 does not mean that hours could not be freely chosen when the match between the firm and the worker was formed. What the “strict regulation” means is that once these hours were stipulated in a contract, they could not be easily changed.

Procedure

In order to calibrate the model, I compute the average effective weekly hours for those who work less than, equal to and more than forty hours a week and the percentage of workers in each of these groups. I use these percentages as the weights for a three-valued idiosyncratic process (of course, these groups are not equally large, the majority are in the middle group). The values of the three shocks are determined such that the model replicates the percentage deviation of each of the previously computed workweek averages with respect to the whole sample average in a scenario where firms are free to change the working-week when hit by a productivity shock. The calibrated cross-sectional hours distribution is such that 21% work 1.18 of mean hours, 63% work 0.98 and 16% work 0.67 of mean hours, that is, the cross-sectional distribution of hours is 32, 40, and 48 hours.

Alternative Strategy

An alternative strategy would be to use the same degree of flexibility that I found for the US in Osuna and Ríos-Rull (2003) making the assumption that the US economy represents better the desired degree of flexibility regarding the workweek. In fact, the workweek distribution for the US turns out to be very similar (30.6, 39.2 and 45.7 hours) to the calibrated cross-sectional hour distribution that I have in the paper (32, 40, and 48 hours). The difference, though, is in the weights. For the US case I divided the sample into three equally large groups, and then computed the average working week in each group and the deviations from the legal workweek as explained above. If I were to follow exactly the same procedure (dividing the sample into three equally large groups) using the Spanish data, the variability of the cross-sectional distribution would be largely reduced, from 32-40-48 hours to 36-40-46 hours. I think that, based on the evidence provided in the paper, the resulting cross-sectional distribution would not be consistent with the actual degree of desired flexibility, and this is the reason why I used the procedure as explained above.

Of course, I admit that using the procedure followed in the paper implies that good and bad shocks have less weight in the simulations because these weights are related to the proportion of people with hours above and below the 40 hours working week. But I think that the strategy is consistent with the Spanish data because it reproduces the cross-sectional workweek distribution and, at the same time, it reflects a lower degree of flexibility than in the US case (which I think it is reasonable) because of the lower weights attached to good and bad shocks.

Probably, I should have done some sensitivity analysis regarding this parametrization in order to convince the reader about the plausibility of the results.