

Report on Katarina Juselius and Javier Ordóñez: Wage, Price and Unemployment Dynamics in the Spanish Transition to EMU Membership

This is a creditable effort to analyse a 7 equation system subject to structural change with cointegration methods. However, I am not sure it was wise to tackle the problem with a two stage approach – first examine the 5 obviously endogenous domestic variables, and then add the real exchange rate and the bond yield. There is a certain disjunction between institutional facts and the method: from 1995 the Peseta was de facto fixed and hence exogenous. One could argue that since interest rates were effectively set by Europe from then on, that the bond yield too became exogenous. The model for the real exchange rate from 1995 should really be a model for the consumer price index, conditional on the exogenous nominal exchange rate and the exogenous German consumer price index. But there is already an equation for the log change in the consumer price index. This makes me feel somewhat uneasy. It also suggests that the real exchange rate process should have shifted in 1995: before 1995, it is a joint model for the consumer price index and the nominal exchange rate; after, a model just for the former.

In practice, an exogenous step dummy is used to handle the major exchange rate jump of 1992; but not those of 1993Q2 or 1995Q1, though an impulse dummy is used for 1995Q1. Similarly, the bond yield probably behaves rather differently before and after 1995. But in both cases, one would have expected German interest rates to be a key driver. The fact that the German yield is missing from the model, suggests that any claim for the model to contain a stable yield relationship is implausible. It would have been good to see a graph of the Spanish-German yield differential to get some insight into this issue.

Handling a system where a structural break shifts the exogeneity of some of the variables half way through the period is surely not easy. I would be tempted to treat the nominal yield and the nominal exchange rate as exogenous throughout and search for stable conditional relationships for the remaining variables.

To put it another way, I would argue against the two step approach and instead condition on the two (more or less) exogenous variables in the 5 equation system for the 5 domestic endogenous variables. This way of going about it would have almost certainly have brought the exchange rate into the cointegrating vector interpretable as an unemployment equation, instead of generating (13) which looks to me quite dubious.

My other concern is this: it seems to me surprising that one can tell a coherent story for unemployment in a small open economy without some exogenous external demand variable. For example, one might be an output gap for the EU, or the non-Spanish EU if one wants to be rigorous. Another might be some world activity variable such as detrended world trade or the growth rate of world trade. In such a small sample, omitting such influences could seriously distort the estimated responses.

Detailed points

The abstract is a little incoherent. Perhaps some text got shifted? There are 2 'second' points.

p.2 where the text says ppp, does it mean the real exchange rate? Rationale (spelling)

p.3 real ULC looks seasonal. Is this why seasonals were used?

p.5 end of section 2. 'utterly' is an exaggeration, particularly in view of the currently evolving crash of the Spanish economy

p.6 Figure ??

p.8 there is no cyclical element in (1) but since this doesn't matter for (3) one could put it in.

p.9 just below eq (3), v_3 not v_5

p.10 foot: as a point of grammar, one says 'the inflation rate' but 'Spanish inflation' (p.2). Also p.21.

p.12 it is odd to refer to an impulse dummy as 'permanent' – it seems very transitory. If the unemployment rate measure shifted in 2001:1 why does that need a 1999:1 dummy? Why not adjust the unemployment rate to eliminate the break in the data?

p.14 I think it would help some readers to have the implications of 'a unit vector in alpha' explained a little more. What, for example, would it mean in the context of Table 5?

p.17 Table 3: It is a little irritating to have coefficients reported as 0.00 and with a t-ratio of 18.6! Better to scale by 100.

p.18 below (11): is this what is meant?: 'whereas the unemployment rate is not,'

p.19 below (13): with $\alpha=0.06$, is the unemployment **strongly** equilibrium correcting? The last 2 lines of p.19 seem not to make sense: it surely wasn't the big devaluation which lowered the inflation rate!

p.20 Is the sign on 0.01q correct in (14)?

In my view, see my initial comments, normalising on the nominal yield does not make much sense. The exclusion of a German interest rate in (15) makes this into an expression with little meaning, in my view, and (16) seems preferable.

p.23 foot: this is a similar thought to the one I expressed above. So why not treat R as determined outside the system?

p.24 It is not easy for the reader to figure out exactly how each of the ecm1 to ecm5 terms are defined.

Table 5 is not reassuring on the behaviour of the unemployment rate and the associated interpretation of the cointegrating vectors. Only a small part of the adjustment seems to be occurring through ecm3. Much more is coming through ecm1, in apparent contradiction to what was said just below (13) on p.18. Ecm4 also plays a large role and presumably this is (14) (but with the wrong sign on q ???). Making the sign correction, (14) does bring the exchange rate into the unemployment adjustment process. The large positive alpha for ecm4 offsets the large negative alpha for ecm1 so that the inflation effect is largely cancelled out. I do not think the current identification set-up is very appealing, as suggested in the fourth paragraph of my opening remarks above.

p.26-27 In view of the above, I do not find all of the bullet points in the conclusions plausible. For example, how does 'the tendency of the Spanish peseta to appreciate with high levels of (the) Spanish long-term bond rate has prolonged the convergence' square with the fact of an effectively fixed exchange rate for the last 13 years?. I also question bullet points 4 and 5. It could well be that an alternative identification strategy might have led to one relationship or perhaps a pair with somewhat different stories.

Bullet point 6 could lead to some retrospective embarrassment given the ongoing rise in Spanish unemployment. I guess another shift dummy will be needed in future to fix it.

While the lessons for the new EU members look appropriate, the risks of embarking on unsustainable credit (particularly foreign credit) and house price booms may figure rather large on the radar screens of these countries in the next few years. There are Spanish parallels, of course, though not so much on foreign credit. It might be wise not to claim too much for the conclusions of the current paper since this very important part of the Spanish story is outside the scope of the paper.