Discussion of "Monetray Policy and Unemployment", by Jordi Gali

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General

- The paper addresses an issue that has become an active research are in the last 4-5 years.
- Not much has been written yet and empirical work is especially lacking
- The paper gives a good exposition of a particular approach with different assumptions about price and wage setting
- My comments will be on the approach taken by the paper - the version that I saw is preliminary and incomplete, so some might be obsolete - with some suggestions how to generalize it.

Motivation

- Paper needs better motivation why the topic of unemployment and monetary policy is interesting.
- Is it because unemployment is an interesting variable in itself, because policy makers react to it so Taylor rules should have unemployment on the right-hand side?
- Or is it because labor market frictions might influence monetary policy, with unemployment as a peripheral outcome?
- The paper shifts from one to the other, yet each objective would require a different type of paper.

Motivation, cont.

I found three statements that point to different reasons why unemployment is an interesting variable to study in a model with money:

- Unemployment is an interesting variable in itself because of the attention paid to it by policy-makers
- Labor market frictions may or may not alter the usual Taylor rule
- Labor market frictions reconcile the presence of nominal wage rigidities with privately efficient employment relations

An example of what I mean by different type of model is that the last two statements about frictions do not necessarily require unemployment; we could have a model with turnover frictions without unemployment

Structure of paper

- As a Handbook contribution, I was hoping to see more survey-type material, of the type one finds in an advanced textbook. Namely, not in a summary form about coverage of topics by different authors, but a critical review of modelling techniques and empirical findings.
- Currently the paper does not provide this. The framework is based on the Blanchard-Gali paper in *AEJ: Macro* and the issues addressed are mainly about the impact of monetary policy on unemployment in the model in a variety of situations - sticky prices with flexible nominal wages, or with sticky nominal wages

Relation to data

- The section on evidence is inadequate. It summarizes some aggregate cyclical facts but does not make the case that these facts need a monetary model
- This case could be made either because of correlations with monetary variables which are important, or more convincingly, because a real model could not explain the facts
- As far as I know, real models can explain the facts shown, though perhaps not the full quantitative impact
- The motivating-empirical section should be addressing a sub-heading: "why do we need a monetary model"

Comments on framework

- The Blanchard-Gali framework is neat, although in some respects the exposition is unconventional and might create some confusion to those familiar with the search and matching literature without money.
- For example, why call the "job finding rate", "tightness"? In the literature "tightness" is something else and the x of this paper is invariably referred to as the job finding rate.
- Why introduce a new parameter γ and use up space to explain the relation with the matching function approach, when you could simply say "the job finding rate is derived from a conventional Cobb-Douglas matching function with unemployment elasticity η (or whatever)"
- These things are small but they tax the reader who is familiar with a set of conventions in this literature, and who comes to this paper to learn about monetary policy.

Innovations

- Two innovations of the framework are good
  - the utility of the unemployed is such that labor productivity shocks do not have an impact on unemployment with flexible wages and prices
  - unemployment is not a state variable
- I do not necessarily believe the first point, but I think it is a good modelling device, at least in a benchmark model
- But I would still like to see how the paper fits in with the voluminous literature started by Shimer and Hall, on the cyclical volatility of unemployment in real models
- Some of us thought that nominal stickiness and monetary shocks could provide an answer to the unemployment volatility puzzle, and investigating this within the conventional model is a good topic for a Handbook survey.
- The second innovation is consistent with the data - unemployment flows are large

Labor supply

- Another innovation is that the model has flexible labor supply.
- Over the cycle volatility in labor supply (in the US) is very small compared with the employment-unemployment volatility, and to a good approximation it can be taken to be fixed. The correlation between cyclical employment and unemployment is about $-.95$.
- It is a puzzle why labor supply is so insensitive to the cycle and it is not easy to get it in the usual model. This paper gets too flexible labor supply
- One may have to assume special-looking utility functions (as in the concluding section of this paper) or family insurance considerations, as in some recent labor papers, or more general models of hours allocations, as in some recent work by Rogerson, Krusell and others.
- The question is whether the added complexity of the model buys you anything important in monetary policy

Comments on the model

- I believe Walsh (2003 or 05) was the first to suggest the two-tier "production" structure and he should be acknowledged.
- The claim is made that in these models the supply of labor influences employment decisions only indirectly, through the wage rate. This is generally incorrect in this class of models: it also influences equilibrium through the search externalities (the "worker arrival rate"), the main point emphasized by Peter Diamond in his early contributions, where wages play no allocative role.
- It should be noted that the model of the firm is a fairly conventional dynamic model with costs of employment adjustment. The search and matching innovation is that these costs depend on the tightness of the market
- They could also depend on what the firm does (through advertising intensity)

Comments, cont.

- The search and matching framework has one key feature - it implies bilateral monopoly at the individual level
- For the cycle this means that the firm and the worker can keep wages fixed and yet not be "irrational", in the sense of not exploiting gains from trade
- It also implies that the firm might rationally adjust employment through hiring, or hire at new wages, and yet not change wages of existing employees
- But to get the full impact of this split between new and old jobs one needs to make strong assumptions about the relation between the wages in ongoing jobs and those offered to new hires

Comments, cont.

- The paper does well to emphasize the point about the wage indeterminacy range and the consistency with wage stickiness.
- The key here is empirical: Which wages do firms and workers keep constant when there are shocks: real, nominal, or neither?
- Do they adjust the real wage when they violate participation constraints, or the nominal?
- Do they make wage offers to new employees at the level of the existing wages, and are they nominal or real?
- In RBC-type models, some authors (Hall in particular) assume that the wage is kept constant in real terms
- Here the assumption is made that it is kept constant in nominal terms

Comments, cont.

- It is important to resolve this issue because results are very different under each assumption
- How can it be resolved? We know from the data
  - real wages in ongoing jobs are sticky
  - real wages offered to new employees are not sticky
  - but small rigidities could have large cyclical effects
- We know nominal wages are sticky (what do we know about nominal wages in new matches? ECB work?)
- How can these data be reconciled and what do they imply for unemployment volatility and monetary policy?
- If this paper could resolve this issue it would be making a really important contribution

Comments, end

- The paper assumes that nominal wages are sticky, set a la Calvo, and new employees hired at the mean wage offered to existing employees
- I can see the attractions of this but it suffers from two problems:
  - we know from labor-market research that new employees are not hired at the wages of existing employees, and this has a large impact on job creation
  - we know from bargaining theory that if nominal wages are sticky because of the bilateral monopoly, they are adjusted when the participation constraints are violated, not exogenously at a parametric average duration
- Would like to see a more data-driven assumption about wage setting here: real or nominal stickiness? when do firms adjust?

Calibration

- Some key parameters are important. $\varphi = 5$ implies a Frisch elasticity of 0.2, which is rather low (the paper says "elasticity of labor supply", which would make it plausible, which elasticity is it?). Frisch elasticity of 0.7 more plausible. $\gamma = 1$ is good
- But the value of ψ seems to be critical. What exactly is it? For a parameter this important we need more discussion. Is it the cost of search? We know from time use surveys that although the unemployed have a lot of free time, they do not make much use of it - more sleeping, more TV watching etc.
- If this is dismissed as boredom, then ψ is high, but if it is leisure it is low. Why is $\psi = 0.82$ "plausible"?

Calibration, cont.

- Usually, in calibrations we take $\xi = 0.5$ and utility of the unemployed $0.4 - 0.7$ (with value of marginal product 1)
- Hagendorn and Manovskii discuss this issue at length and come up with much higher ξ and much higher utility of the unemployed, with vastly different cyclical results. How is this related to your results? Why is a low ξ associated with a high ψ?
- $\xi = 0.05$ gives very little bargaining power to firms, so real wage is equal to MPL. Not surprisingly that the model behaves like a neoclassical model. Very high ξ is more popular because it separates wages from productivity and potentially implies more sticky wages and more volatility.

Conclusion

- To conclude, the paper makes a good start at bringing together labor market frictions, unemployment and monetary policy
- It needs to settle the issue of wages: real and nominal stickiness, if any, in new and ongoing jobs. How much is there in the data, and what does it imply for monetary policy and for the impact of nominal shocks on the evolution of unemployment?