

Discussion of '*Forecasting turning points of the business cycle: dynamic logit models for panel data*' by Anna Pestova

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¹The views expressed here are those of the authors and do not necessarily reflect the position of the Czech National Bank.

Anna has wrote an **interesting paper** on the **important subject** and her effort should be applauded.

The paper contains two main contributions:

- ▶ Methodological contribution is centered on the explicit regulator loss function.
- ▶ The dynamic loss function is estimated for a panel of countries, some of them have short time series.

What is the recession?

There are various definitions of '*recession*':

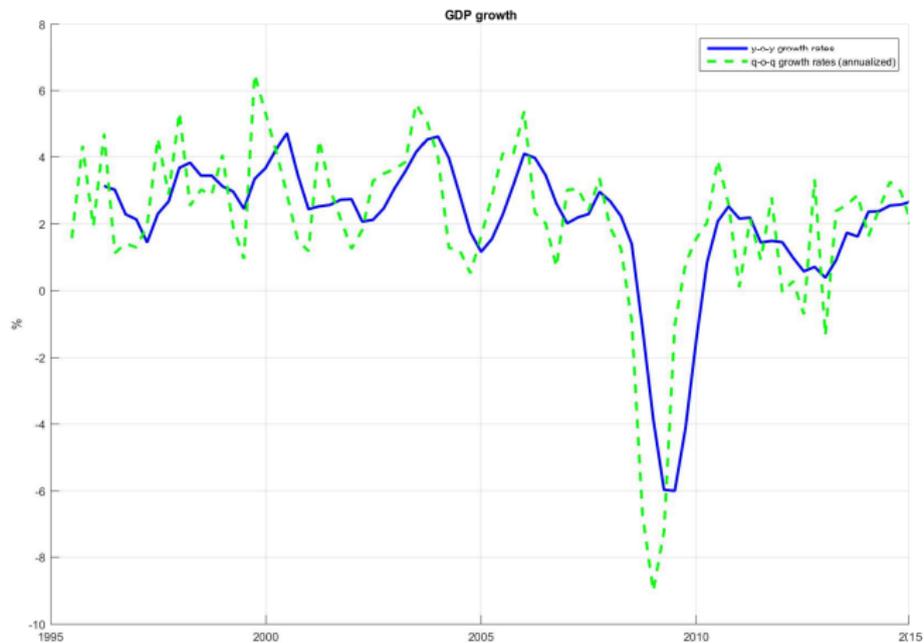
- ▶ growth-based measures (usually GDP growth),
- ▶ deviation cycles,
- ▶ official datings;

and the correlation between them is not perfect.

Is GDP growth necessary the best approach? What about unemployment?

- ▶ unemployment is measured almost in real time,
- ▶ and maybe unemployment is more related to social problems than the GDP growth.

Y-o-Y growth rates: a phase shift?



Does one model fit all countries?

I perfectly understand the motivation of using panel of countries to estimate the coefficients of the model as some countries may not have long time series.

On the other hand:

- ▶ various countries may react to different shocks differently (think of commodity prices),
- ▶ and different shocks may be important:
 - ▶ I were to construct such a model for the Czech Republic, I would surely include some leading indicator for German car industry; ...
 - ▶ while for other countries, it may be unimportant ...

Other comments

Real time issues:

- ▶ GDP and investments are measured with considerable lags, and there are many revisions ...
- ▶ on the other hand, labour market data are available soon;
- ▶ I acknowledge that labour market data typically lags the GDP (see Brůha and Polansky, CNB WP, 15/2015), but at least for short prediction horizons they can be useful:
 - ▶ for my country, I first look at the Beveridge curve to inquire about immediate outlook of the Czech economy.

Despite possible heterogeneity, I miss some variables:

- ▶ mainly: YIELD CURVE that is known (at least for the U.S. but also for the E.A.) to have strong predictive power

Conclusion

The paper by Anna is **excellent** and **important**.

Main points of my discussion:

- ▶ Y-o-Y and phase shift:
 - ▶ try to smooth the Q-o-Q growth rates.
- ▶ Real time data:
 - ▶ may be worth checking the real time variables (yield curve, labour-market)
- ▶ Heterogeneity of countries:
 - ▶ Random (country-specific) coefficients under the Bayesian shrinkage (?)