Change in Inventories, Final Sales and their Effect in Business Cycle

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Although change in inventories forms only minor part of GDP, its role seems to be enormous within business cycle. This thesis focuses on finding relationship between cyclical component of this aggregate, final sales and production (GDP) in Czech Republic and Germany since 1996 Q1 till 2012 Q4. It is also clarified, whether there is any suitable microeconomic model which is able to satisfactorily explain founded results. In theoretical part Production smoothing model is explained as well as its main modifications. There are discussed their consequences on relationship between change in inventories, final sales and production. In empirical part cyclical component of individual aggregates are obtained. There are detected variability of particular cyclical aggregates as well as correlation between them. Correlation is measured as well with respect to time delay of individual time series. Regarding the findings, there was found positive correlation between cyclical component of change in inventories and final sales in Czech Republic as well as in Germany. It was also detected, that variability of GDP cycle is higher than variability of final sales cycle. This result could be interpreted so that existence of change in inventories increases variability of GDP in business cycle and processes in the economy may be described by modifications of Production smoothing model.

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