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Temporal homogeneity between financial stress and the economic cycle

Raputsoane, Leroi (2018): *Temporal homogeneity between financial stress and the economic cycle.*

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Abstract

This paper analyses the homogeneity of temporal variations between the economic and financial cycles in South Africa. This is achieved by identifying the similarity of cyclical and volatility regime changes between the indicator of financial stress and the economic cycle. The results show that periods of moderate growth in financial stress coincide with periods of similar growth in the economic cycle whereas the periods of high growth in financial stress coincide with periods of low growth in the economic cycle. The results further show that the periods of low volatility of financial stress coincide with periods of similar volatility of the economic cycle and that the periods of high volatility of financial stress coincide with periods of similar volatility of the economic cycle with the exception of the period following the US war on terror where the volatility of the economic cycle remained low despite high volatility of financial stress. Although the results show that the cyclical regime shifts of financial stress occur earlier than those of the economic cycle, they do not conclusively show whether or not the volatility regime changes of financial stress occur earlier or later than those of the economic cycle perhaps on data frequency.

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References:

Auger, I. E. and Lawrence, C. E. (1989). Algorithms for the Optimal Identification of Segment Neighborhoods. Bulletin of Mathematical Biology, 51(1):39–54.

Bai, J. and Perron, P. (1998). Estimating and Testing Linear Models with Multiple Structural Changes. Econometrica, 66(1):47–78.

Balakrishnan, R., Danninger, S., Elekdag, S., and Tytell, I. (2011). The Transmission of Financial Stress from Advanced to Emerging Economies.Emerging Markets Finance and Trade,47(2):40–68.

BCBS (2010).Guidance for National Authorities Operating the Countercyclical Capital Buffer. Basel Committee Banking Supervision (BCBS), Bank for International Settlements, Switzerland.

Beaulieu, C., Chen, J., and Sarmiento, J. (2012). Changepoint Analysis as a Tool to Detect Abrupt Climate Variations. Phil. Trans. R. Soc. A, 370(1962):1228–1249.

Bernstein, J., Schaling, E., and Raputsoane, L. (2016). Credit Procyclicality and Financial Regulation in South Africa.South African Journal of Economic and Management Sciences,19(4):467–478.

Birge, L. and Massart, P. (2007). Minimal Penalties for Gaussian Model Selection. Probability Theory and Related Fields, 138(1-2):33–73.

Borio, C. (2014). The Financial Cycle and Macroeconomics: What Have We Learnt?Journal of Banking and Finance, 395(C):182–198.

Borio, C. E., Drehmann, M., and Tsatsaronis, K. (2012). Characterising the Financial Cycle: Don't Lose Sight of the Medium Term! Working Paper, 380. Bank for International Settlements (BIS).

Cardarelli, R., Elekdag, S., and Lall, S. (2011). Financial Stress and Economic Contractions. Journal of Financial Stability, 7(2):78–97.

Cevik, I., Dibooglu, S., and Kutan, A. (2013). Measuring Financial Stress in Transition Economies.Journal of Financial Stability, 9(4):597–611.

Claessens, S. and Kose, A. (2013). Financial Crises Explanations, Types and Implications. Working Paper, 13/28. International Monetary Fund

Claessens, S., Kose, M. A., and Terrones, M. E. (2012). How do Business and Financial Cycles Interact? Journal of International economics, 87(1):178–190.

Drehmann, M., Borio, C., and Tsatsaronis, K. (2011). Anchoring Countercyclical Capital Buffers: the Role of Credit Aggregates.International Journal of Central Banking, 7(4):189–239.

Drehmann, M. and Tsatsaronis, K. (2000). Credit to GDP Gap and Countercyclical Capital Buffers: Questions and Answers. BIS Quarterly Review, March:55–73.

Eckley, I. and Killick, R. (2014). Changepoint: An R Package for Changepoint Analysis.Journal of Statistical Software, 58(3):1–19.

Eckley, I. A., Ewans, K., Jonathan, P., and Killick, R. (2010). Detection of Changes in the Characteristics of Oceanographic Time Series using Statistical Change Point Analysis.Ocean Engineering, 37(13):1120–1126.

Eckley, I. A., Fearnhead, P., and Killick, R. (2012). Optimal detection of changepoints with a linear computational cost.Journal of the American Statistical Association, 107(500):1590–1598.

Hakkio, C. and Keeton, W. (2009). Financial Stress: What is it, How can it be Measured and Why does it Matter?Economic Review, 94(2):5–50. Federal Reserve Bank of Kansas City.

Hiebert, P., Schuler, Y. S., and Peltonen, T. A. (2015). Characterising the Financial Cycle: a Multivariate and Time Varying Approach.Working Paper, 1846. European Central Bank(ECB).

Hodrick, R. and Prescott, E. C. (1997). Postwar U.S. Business Cycles: An Empirical Investigation. Journal of Money, Credit and Banking, 29(1):1–16.

Illing, M. and Liu, Y. (2006). Measuring Financial Stress in a Developed Country: An Application to Canada.Journal of Financial Stability, 2(3):243–265.

Kliesen, K., Owyang, M., and Vermann, K. (2012). Disentangling Diverse Measures: A Survey of Financial Stress Indexes.Review of Economics, 94(5):369–398.

Lavielle, M. (2005). Using Penalized Contrasts for the Change Point Problem. Signal processing, 85(8):1501–1510.

Mise, E., Kimand, T., and Newbold, P. (2005). On Suboptimality of the Hodrick Prescott Filter at Time Series Endpoints. Journal of Macroeconomics, 27(1):53–67.

Raputsoane, L. (2014). Financial Stress Indicator Variables and Monetary Policy in South Africa. Journal of Economics Bibliography, 3(2):203–214.

Raputsoane, L. (2015a). Alternative Measurement of Credit Extension for Countercyclical Buffer Decisions. Journal of Advanced Studies in Finance, VI(2):210–221.

Raputsoane, L. (2015b). The Lean versus Clean Debate and Monetary Policy in South Africa. Journal of Economics and Political Economy, 2(4):467–480.

Ravn, M. O. and Uhlig, H. (2002). On Adjusting the Hodrick Prescott Filter for the Frequency of Observations. Review of Economics and Statistics, 84(2):371–376.

Stock, J. H. and Watson, M. W. (1999). Business Cycle Fluctuations in US Macroeconomic Time Series. Handbook of Macroeconomics, 1(Part A):3–64.

Taylor, J. B. (2013).Getting Off Track: How Government Actions and Interventions Caused,Prolonged and Worsened the Financial Crisis. Hoover Press.

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