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**Using the Financial Cycle to Predict the Business
Cycle in South Africa**

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Abstract

The business cycle has changed over time due to globalization. One of these changes is synchronization between different countries' business cycles. Studies have shown that because of synchronization in developed markets; business cycles have become less volatile. However, the impact of globalization on emerging markets and developed markets are different. In this paper, the changes in business cycles of emerging markets will be compared to the changes in developed markets. Understanding these changes is important if turning points are to be predicted so that the business cycle can be modeled and informed business and policy decisions can be made as a result. Another change in the business cycle is the likelihood of a financial cycle within the business cycle. The financial cycle makes the business cycle more volatile, this lead to asymmetries such as chaos, hysteresis and ARCH effects. The financial cycle might be a useful leading indicator for the real business cycle. Cointegration between the business cycle and the financial cycle, as well as cointegration between the emerging markets and developed markets' business cycles can provide useful information to construct a new leading indicator for South Africa. Various linear and non-linear methods can be applied to model the business cycle. One of the non-linear methods to be used is neural network technique which can be used to model the cycle. The advantage of this method is that learning takes place over time, which implies that the prediction of turning points might be improved.