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The effect of macroeconomic conditions on the capital structure adjustment speed of South African listed firms

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DECLARATION

I, Sudha Krishna, declare that this research report is my own unaided work. It is submitted in partial fulfilment of the requirements for the degree of Masters in Commerce in Business Economics (Finance) at the University of the Witwatersrand, Johannesburg. It has not been submitted before any degree or examination in this or any other university.

SIGNED AT THE UNIVERSITY OF THE WITWATERSRAND ON THIS THE 14TH DAY OF MAY 2012

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SUDHA KRISHNA

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DEFINITIONS OF TERMS AND ABBREVIATIONS

AR(1) and AR(2) – First- and second-order autocorrelation

ALSI – The JSE (Johannesburg Securities Exchange) All-Share Index

ASGI-SA - Accelerated and Shared Growth Initiative for South Africa

BRIC(S) – Brazil, Russia, India, China, (South Africa)

CPI – Consumer Price Inflation

DPACS model – Dynamic Partial Adjustment Capital Structure model

FE – Fixed Effects

GDP – Gross Domestic Product.

GMM regression – Generalised Method of Moments regression

IV regression – Instrumental Variables regression.

JSE – Johannesburg Securities Exchange

OECD – Organisation for Economic Co-Operation and Development

OLS – Ordinary Least Squares

SARB – South African Reserve Bank

SOA – Speed Of Adjustment.

TED Spread – Treasury Bill-Eurodollar Spread

VIF – Variance Inflation Factor

ABSTRACT

This paper uses a two-stage, dynamic partial adjustment model which accounts for potential mean-reversion, with the Arellano-Bover GMM estimation technique, to observe the effect of various macroeconomic variables on the speed at which South African listed firms adjust toward their target capital structures. Employing two definitions of financial constraints, these effects were also compared for financially constrained and unconstrained subsamples. Using a sample of listed firms spanning from 2000 to 2010, the findings of the study show some indication that firms adjust faster in unfavourable macroeconomic states relative to favourable states. There is also evidence to suggest that the adjustment dynamics of unconstrained firms differ from that of constrained firms. In addition, higher adjustment speeds are generally observed when using short-term debt relative to other debt definitions. However, the evidence is largely inconclusive as adjustment speed estimates are highly sensitive to the definition of financial constraints used, and to the inclusion of extreme leverage observations.

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