

**THE STOCK MARKET
AND SOUTH AFRICA'S ECONOMIC
DEVELOPMENT**

by

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Just let me say how much I love you,
let me speak of your mercy and grace.
Just let me live in the shadow of your beauty,
let me see you face to face.
And the Earth will shake as your word goes forth.
And the heavens can tremble and fall.
But let me say how much I love you,
O my Saviour, my Lord and Friend.

Just let me hear your finest whisper,
as you gently call my name.
And let me see your power and your glory,
let me feel your Spirit's flame.
Let me find you in the desert,
'til this sand is holy ground.
And I am found completely surrendered,
to you my Lord and Friend.

So let me say how much I love you,
with all my heart I long for you.
For I am caught in this passion of knowing,
this endless love I've found in you.
And the depth of grace, the forgiveness found,
to be called a child of God:
Just makes me say how much I love you
O my Saviour, my Lord and Friend.

Preface and Acknowledgements

Capital market theory is currently a "hot" topic on both sides of the Atlantic with much interest (from both the academic community as well as practitioners) being focused on the channels and impact of financial intermediation on the real economy. Because of its implications for development policy, South African researchers too need to become engrossed in the relationship between financial development and economic growth, so that we can make informed choices about strengthening our financial system. Thus we need to go to the very heart of how capital should be allocated in the economy, examining the relative emphasis that should be placed on stock markets, banks and other financial intermediaries.

First however, we need to acknowledge that the fields of economics and finance are interrelated. In fact many would define finance as a sub-field of economics dealing with intertemporal and portfolio decisions. Yet there appears to be two cultures developing, with researchers in economics examining questions involving financial markets, in ways which seem, to researchers in finance, to be hopelessly misguided. Equally economists regard much finance research as doctrinaire or trivial. Even critical comment by each group of the other's work is not terribly common and parallel literatures regarding the same questions, with literally no points of contact, seem to have developed. [For instance, consider the vast unconnected literature in both finance and economics about the effects of inflation on interest rates or, see the different ways industrial organisation and financial economists treat the phenomenon of mergers and acquisitions]. Summers (1985) observes that "most researchers operating in one tradition are almost entirely ignorant of basic concepts in the rival tradition".

Neither the finance approach to financial markets nor that taken by general economists has a unique claim on virtue. Rather they complement each other, with both having the potential to increase our understanding of how the economy operates. It may therefore be lamented that researchers in economics pay so little attention to finance and that financial-economists are so reluctant to accept any research relating asset prices to fundamental values.

It is this separate development paradigm that allows eminent scholars like Jeffrey Sachs (2002) to posit that, being poorly trained in economics, the job of the financial analyst is simply to say something clever for the television cameras. He holds that analysts "do not trade on fundamental information but on the latest gossip and fads". And that in our public pronouncements we provide nonsense rather than knowledge.

Being a financial analyst myself, when I initially set out to obtain my doctorate I was immediately aware that the disjunction between economics and finance is inefficient. It is my opinion that the diversion of intellectual effort stems in large part from a lack of reading and keeping abreast of the various research methodologies available to those of us who wish to study the major questions arising at the interstices of finance and economics. I believe that we can do better and this study of causality using recently developed time series techniques is but a first step at bridging that divide. I trust that it will be received in that same spirit.

There are several people to whom I owe a debt of appreciation for assisting me along my path to doctorate. First, there are those who responded efficiently to my requests for data, both primary and secondary: Leon Brummer (University of Pretoria), Anneline Dalais (BFA-McGregor) and the library staff at UNISA's Durban regional office.

Then there are those who responded positively to my initial ideas for research into this area: Mike Page (Erasmus University), Colin Firer & Haim Abrahams (University of Cape Town) and Mike Ward (Wits Business School).

Others were kind enough to discuss with me their personal experiences and views of the study at various stages of its development: Stephan Malherbe (Genesis Analytics), Shafiur Rahman (University of Oxford), Keith Yeomans &

Mike Bendixen (University of the Witwatersrand, Johannesburg), Chris Brooks (University of Reading) and Willem Naudè (Potchefstroom University).

There are four people to whom I wish to say a special emphatic thank you. Primary among these is my promoter Egbert Begemann (University of South Africa) who was immediately supportive of my research proposal and showed unflinching belief in my abilities to successfully complete the study (even when I doubted those abilities myself). Then, to Jurgens van Tonder (University of Pretoria) who kindly served as a *pro bono* consultant, helping me to use the econometric tests central to the data analysis presented here. Considering the constantly progressive nature of this field and the scarcity of people skilled in it, the study would not have been possible without such an unselfish contribution. I have received a great deal of encouragement and support throughout this project, as along my development in academia, from Narendra Bhana (Regent Business School). I am deeply honoured that a person of his calibre has taken to me as his own protégé. Rounding off these considerable influences is Abbot-Bishop Robert Dittler (who holds an earned doctorate himself). By guiding me through the novitiate experience whilst I read for my degree, he ensured that I gained not only knowledge but grew in wisdom as well.

Finally, I dedicate this study and the achievement of my goal of "becoming a Doctor" to my mother, Mildred. Simply being able to deliver on my promise to her means more to me than any title I can earn.

Summary

Financial liberalisation, through increasing investment as well as the average productivity of capital, should stimulate economic growth, or so the theory goes. Bank lending unfortunately suffers adverse selection and moral hazard effects, to which the establishment and expansion of stock markets has been offered as a remedy. However, research from developing country stock markets have shown that in many cases these markets did not complement the effects of credit market liberalisation but in rather important aspects subverted them. Countries that implemented credit market liberalisation and raised real interest rates only increased the price of debt capital rather than all capital. This caused a share price boom in many of them. When the price of equity capital fell it seriously undermined and indeed allowed large private corporations to skip altogether the main channel of high interest rates through which the theoretical McKinnon-Shaw effects were to operate.

This study asks the research question of what effect the expansion of the South African stock exchange has had for its economic development. It makes use of a general empirical model to explain the relationship between financial development and real output. The model comprises indicators for growth, banking system development, stock market volatility; and, stock market development through a conglomerate index that accounts for market size, liquidity and integration with world capital markets. Quarterly data from 1989 to 2001 is analysed based on the null hypothesis that, as far as financial architecture is concerned, the development of the JSE Securities Exchange has stimulated the country's economic growth.

This study found a negative and statistically significant relation between stock market development and economic growth. It suggests that while the JSE Securities Exchange is a relatively large stock market it is the presence of thin trading that prevents the proposed benefits of market development from accruing to the economy. Thus the hypothesis is rejected. However, since the only stable

cointegrating vector is between growth and banking sector development, it recommends that by expanding their universal banking functions, the present banking structure, though oligopolistic, may be better suited to act as a catalyst for growth.

Key terms:

Financial liberalisation; De-repression; McKinnon-Shaw thesis; Savings; Real interest rates; Johansen cointegration; Granger causality; Financial intermediaries; Market failure; Liquidity; Group-banking; Cost of capital.

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