

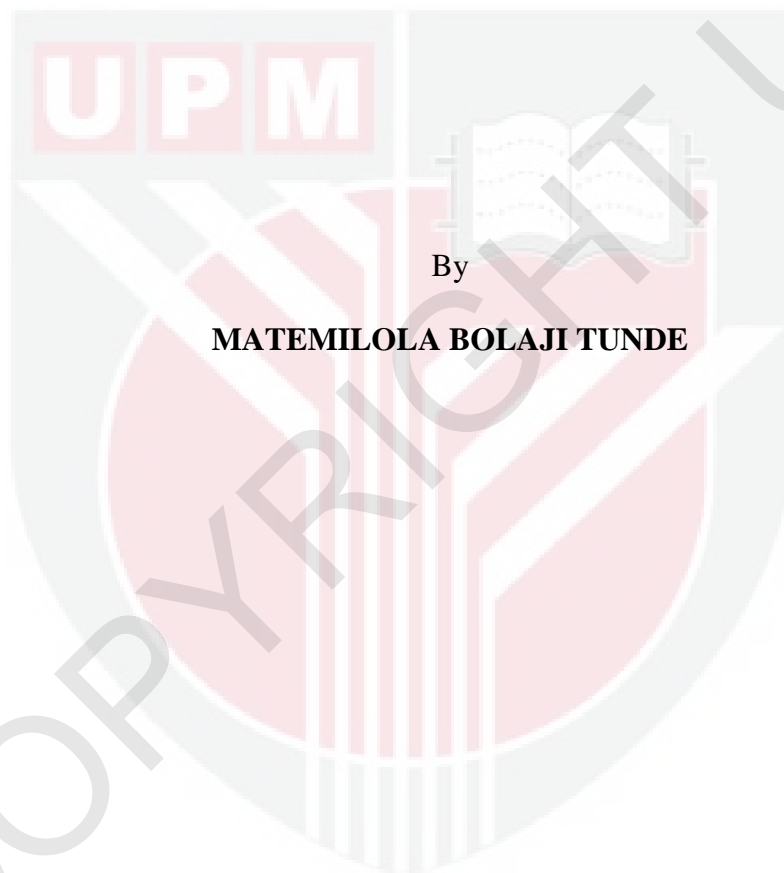


***VALIDITY OF PECKING ORDER AND TRADE-OFF THEORIES IN
EXPLAINING CAPITAL STRUCTURE OF LISTED FIRMS IN SOUTH
AFRICA***

MATEMILOLA BOLAJI TUNDE

FEP 2012 20

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EXPLAINING CAPITAL STRUCTURE OF LISTED FIRMS IN SOUTH
AFRICA**



By

MATEMILOLA BOLAJI TUNDE

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in
Fulfillment of the Requirements for the Degree of Master of Science

March 2012

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Master of Science

VALIDITY OF PECKING ORDER AND TRADE-OFF THEORIES IN EXPLAINING CAPITAL STRUCTURE OF LISTED FIRMS IN SOUTH AFRICA

By

MATEMILOLA BOLAJI TUNDE

March 2012

Chair: Associate Professor Bany Ariffin Amin Noordin, PhD

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Theoretical and empirical debates on how firms finance themselves remain inconclusive. Pecking order and trade-off theory of capital structure emerge as the main theories of capital structure that explains how firms finance themselves in real world. However, static model specifications are mostly used to test these theories. The study analyses the validity of pecking order theory and trade-off theory of capital structure on South Africa listed firms using dynamic panel model specifications. It uses panel regression and generalized method of moment estimation technique to determine the relation between profit and long-term debt, as well as the relation between profit and total debt. Moreover, panel regression and generalized method of moment is used to determine the relation between fixed assets and long-term debt as well as the relation between fixed assets and total debt. The results of pecking order theory show that profit has significance negative relation with long-term debt. Similarly, profit has significant negative relation with total debt. The results of the trade-off theory show that fixed asset has significant and positive relation with long-

term debt. Similarly, fixed asset has significant and positive relation with total debt. In addition, the coefficient of lagged dependent variable indicates that firms' adjust back to their target debt level. In general, the results support the pecking order theory and trade-off theory and they are consistent with empirical findings in developed countries. The evidence of pecking order theory implies need to further develop the capital market in order to minimize information asymmetry costs associated with raising external finance. Furthermore, the evidence of trade-off theory implies that fixed assets are required as collateral to obtain long-term capital needed to finance profitable investment opportunities in South Africa. Moreover, the trade-off theory implies that South African firms have target debt level and they make effort to adjust to their target debt level. The study contributes to empirical research on capital structure in Africa. In addition, the study uses better estimation technique which is Generalized Method of Moments that control for unobservable firm-specific effects and endogenous problem, and better able to give consistent estimators that are robust to heteroskedasticity and serial correlation.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

VALIDITY OF PECKING ORDER AND TRADE-OFF THEORIES IN EXPLAINING CAPITAL STRUCTURE OF LISTED FIRMS IN SOUTH AFRICA

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Perdebatan teori dan empirik berkaitan bagaimana firma membiayai sendiri masih lagi tidak mencapai kesimpulan. “Pecking order” dan teori “trade-off” struktur modal muncul sebagai teori utama dalam struktur modal yang menjelaskan bagaimana firma membiayai sendiri di dunia luar. Akan tetapi, model spesifikasi static digunakan untuk mengkaji kebanyakan teori tersebut. Kajian untuk menganalisa teori pecking order dan trade-off dalam struktur modal firma tersenarai Afrika Selatan menggunakan model dinamik panel spesifikasi. Kajian ini menggunakan “panel regresi dan teknik generalized method of moment estimation untuk menentukan hubungan antara keuntungan dengan hutang jangka panjang, dan juga hubungan antara keuntungan dengan jumlah hutang. Tambahan pula, panel regresi dan teknik generalized method of moment estimation digunakan untuk menentukan hubungan antara asset tetap dengan jumlah hutang.

Keputusan teori pecking order menunjukkan bahawa keuntungan mempunyai hubungan signifikansi yang negative dengan hutang jangka panjang. Begitu juga dengan hubungan antara keuntungan dengan jumlah hutang yang mempunyai hubungan signifikansi yang negatif. Keputusan teori trade-off menunjukkan bahawa asset tetap mempunyai hubungan signifikansi positif dengan hutang jangka panjang. Begitu juga dengan hubungan antara asset tetap dengan jumlah hutang yang mempunyai hubungan signifikansi positif. Tambahan pula, pekali lagged “dependent variable” menunjukkan firma mengubah kepedatahapan sasaran hutang. Secara amnya, keputusan kajian menyokong teori pecking order dan teori trade-off dan didapati konsisten dengan penemuan empirik dalam Negara-negara membangun. Bukti teori pecking order mempunyai implikasi bahawa kajian lanjutan diperlukan untuk membangunkan pasaran modal untuk mengurangkan kos asymmetry maklumat yang berkaitan dengan peningkatan kewangan luaran.

Tambahan pula, bukti teori trade-off mempunyai implikasi bahawa asset tetap diperlukan sebagai jaminan untuk mendapatkan modal jangka panjang untuk membiayai peluang pelaburan yang boleh mencapai keuntungan di Afrika Selatan. Selain itu, teori trade-off mempunyai implikasi bahawa firma-firma Afrika Selatan mempunyai tahap hutang sasaran dan mereka berusaha untuk menyesuaikan tahap tersebut. Kajian ini menyumbang kepada penyelidikan secara empirik dalam struktur modal Afrika.

Di samping itu, kajian ini menggunakan kaedah penganggaran iaitu “Generalized Method of Moments” yang mengawal kesan firma spesifik dan masalah dalaman yang tidak dapat diperhatikan, sekaligus memberi penganggaran konsisten yang kukuh kepada “heteroskedasticity” dan siri korelasi.



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I am most grateful to my family for their love and financial support which helped me to complete this study.

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I certify that an Examination of Committee met on 6 March 2012 to conduct the final examination of Matemilola Bolaji Tunde on his Master of Science thesis entitled “Validity of Pecking Order and Trade-off Theories in Explaining Capital Structure of Listed Firms in South Africa” in accordance with the Universities and University College Act 1971 and Constitution of the Universiti Putra Malaysia [P.U. (A) 106] 15 March 1998. The Committee recommends that the student be awarded the Degree of Master of Science.

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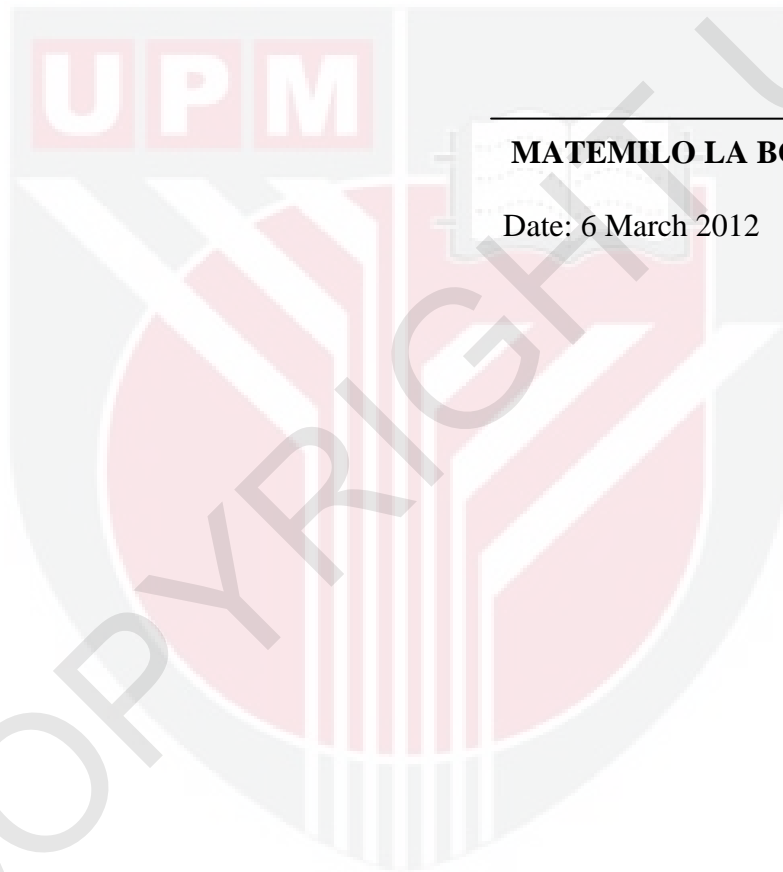
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DECLARATION

I declare that the thesis is my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously, and is not concurrently, submitted for any other degree at Universiti Putra Malaysia or at any other institution.



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Date: 6 March 2012

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CHAPTER ONE

INTRODUCTION

Capital structure theories have received attention in the finance literature for over 50 years. However, theoretical and empirical evidence on capital structure remain inconclusive. Theories explaining capital structure and the variation of debt ratio across firms range from the capital structure irrelevance proposed by Modigliani and Miller (1958) to a host of relevant theories. If leverage can increase firms' value in the Modigliani and Miller tax model (Miller 1977; Modigliani and Miller, 1963), firms have to trade-off between the costs of financial distress, agency costs (Jensen and Meckling, 1976) and tax benefits, so as to have an optimal capital structure. However, pecking order theory states that there is no well-defined target debt ratio (Frank and Goya, 2008). The latter theory suggests that there is hierarchy in firms' preferences for financing starting with retained profit, follow by debt, and equity issue is the last resort.

The debate on these capital structure theories is partly due to different assumptions state in each theory. The theories of capital structure hold under different assumptions. However, in reality, it is hard to assume that corporate financing decisions are made according to the precise assumptions of a certain capital structure theory. Rather, it is better to assume that capital structure decisions could be affected by joint interaction of two or more theories since a single theory may not fully explain the dynamics of capital structure decisions. Myers (2001) states that the two competing theories of capital structure are 'conditional' because each works out under its own assumptions, and

propositions. Therefore, none of the competing theories can give a complete picture of how financial managers make capital structure decisions in the real world.

This implies that two or more theories of capital structure may affect corporate financing decision at the same time. Recent studies now focus on the dynamic specification of the trade-off and pecking order theory (Byoun, 2008 and Flannery Rangan, 2006). The introduction of dynamic model specification to analyze the validity of trade-off and pecking order theories of capital structure improve on the static model specification use in the literature and make the static theory a lot more accurate and reflective of that in practice. Hence, this study specifies dynamic panel models and uses Generalized Method of Moment estimation technique to study the dynamics of trade-off theory and pecking order theory of capital structure.

Available empirical evidence mostly focuses on firms in developed countries, yet no consensus has been reached. A study that extends to other countries could potentially help test the robustness and generalization of the trade-off theory and pecking order theory. On this note, extensive research has been conducted in developed countries to study the pecking order and trade-off theories of capital structure using static and dynamic model specifications (Byoun, 2008; Frank and Goyal, 2003; Bontempi, 2002 and Shyam-Sunder and Myers, 1999) but such research is scanty in Africa. Few available researches on capital structure in Africa focuses mainly on static model specification to

test the pecking order and trade-off theories of capital structure, and mostly investigate the determinants of firms' capital structure from static point of view (Eldomiaty, 2009; Salawu, 2007 and Boateng, 2004). This study attempts to fill this gap in the literature. South Africa is selected because of the existence of a well-functioning financial markets compare to financial markets in other African nations.

1.1 Study Background

Private sector plays important role in the economic development of any country. Growth theory tells us that the key to economic development is investment. One of the problems that have affected the rapid growth of private sector in Africa is access to capital to finance profitable investment project. This study focuses on how firms in South Africa behave when it comes to raising capital to finance profitable investment opportunities using a dynamic model specification. Do they follow the pecking order theory or trade-off theory of capital structure? If pecking order theory is followed, it would provide empirical justification for information asymmetry problem that arises when management has private information regarding the investment prospect of the firms which is unknown to shareholders. Information asymmetry problem between management and shareholders influence the choice of debt-equity mix use by financial managers and this is common in Africa where some degree of market imperfection exist.

If trade-off theory is followed, it would provide empirical justification of the importance of collateral in mitigating information asymmetry problem so that firms could obtain long term debt capital to finance profitable investment projects. In addition, knowing how firms are dealing with information asymmetry problem when it comes to raising capital can help policy makers decide on how best to minimize information asymmetry problem affecting firms' ability to obtain external finance from the financial markets.

Pecking order theory and trade-off theory validity are analyzed on listed firms' in South Africa because the two theories are believed in the literature to better explain firms' capital structure decision in real business world. Pecking order theory and trade-off theory are usually tested together in the literature because both theories predict opposite signs. Also, it is implied in pecking order theory that the capital market is efficient in the semi strong form, but not efficient in the strong form. Since capital market of most emerging markets are not efficient in the strong form, South Africa listed firms is a good sample to analyze the validity of pecking order theory. Wu and Negash (2002) use Shyam-Sunder and Myers (1999) framework to test pecking order theory against trade-off theory on listed firms in South Africa. They find evidence of pecking order theory which supports hierarchy of financing among South African listed firms.

Why is it necessary to study capital structure of South African firms in a dynamic context? Firstly, firms in South Africa operate in dynamic political, economic and business environments (Akinboade and Makina, 2009). Secondly, South African economy has experienced rapid changes over the years (Akinboade and Makina, 2009) compare to country like Uganda and Somalia that has remained static for several years. Third, the study of capital structure dynamics in South Africa would provide valuable information for potential investors who may want to invest in these markets. Potential investors can minimize the cost of reversing investment decisions which may be too costly. Besides, government would have an understanding of how to mitigate information asymmetry problem preventing firms' from raising external finance in the financial markets.

Therefore, a good knowledge of how firms in South Africa make capital structure decision in a dynamic setting will fill an important gap in the literature; provide a useful guide to potential investors as well as to policy makers.

1.1.1 Evolution of South African Political and Economic History

Changes that have occurred over the years in South African political and economic history are discussed, and where appropriate with the aid of graphs as well as tables below:

1.1.2 Political History

In 1910, the second republics and British colonies became the Union of South Africa, a self-governing dominion of the British Empire with Louis Botha as prime minister. In an effort to fight against unfavorable laws made by the British administration, the native blacks established the South African Native National Congress (SANNC), which later became the African National Congress (ANC), to protest the creation of laws and practices based on color.

In 1927, compulsory segregation among different races was announced where the whites' were given more privileges than the black indigenes in their own country. Furthermore, in 1948, the victory of the National Party (NP) in all-white elections led to the creation of a strict policy of white domination and racial separation known as apartheid. Consequently, strict racial laws were passed in 1950-1952 to govern South African people in their own country.

In 1960s, following protests in the town of Sharpeville that leave 69 black protestors dead and hundreds injured, the African National Congress (ANC) and the Pan-African Congress (PAC) were banned and ANC leader Nelson Mandela was imprisoned in 1962 on charges of treason. From this time onward the ANC functions as an illegal but powerful opposition force for black rights in South Africa.

After series of protest by the South African people, the nation eventually left the British Commonwealth in 1961 and became the independent Republic of South Africa. The constitution was revised in 1984 to give black and Asian people a limited role in the national government, but power remain in white hands.

Following years of mounting black protest and increasing sanctions against South Africa because of apartheid, President F.W. De Klerk announced the unconditional release of Nelson Mandela from prison and the legalization of the African National Congress (ANC), Pan-African Congress (PAC) and other anti-apartheid groups. In 1991, pillars of apartheid—the Group Areas Act, Land Acts, and Population Registration Act were officially canceled. As a result, first democratic elections took place in April 1994 under a new constitution. The African National Congress (ANC) won a majority in the legislature and elected Nelson Mandela as president.

In 1996, National Party (which was dominated by the whites’) pulled out of the Government of National Unity (GNU) and first official census occurred in post-apartheid South Africa. In the second democratic election in 1999, the African National Congress (ANC) increased its majority in the legislature and selected Thabo Mbeki as president.

South Africa was under the British colonization for several years before it gained independence in 1994. The presence of the British brought advantages and disadvantages to South Africa. The British set the pace of economic development that South Africa is enjoying today. However, the British presence created a dichotomy between the rich and the poor. This dichotomy was later transferred to the South African economy where the parallel (black) markets existed side by side with the formal market. South Africa went through series of political and economic transformation before she gained independence and Nelson Mandela became the first indigenous president in 1994.

Since then, South Africa has continued to enjoy sustained economic growth. This sustained economic growth was as a result of implementation of comprehensive political and economic reform programmes which include liberalization, privatization, globalization, and market oriented policies. Besides, the financial sector was further strengthened with laws and regulations that conform to international standard. These programmes aimed at improving efficiency and competitiveness of the financial markets, integrate South Africa with international economy and create favorable investment environments (Akinboade and Makina, 2009).

1.1.3 Evolution of South African Economy

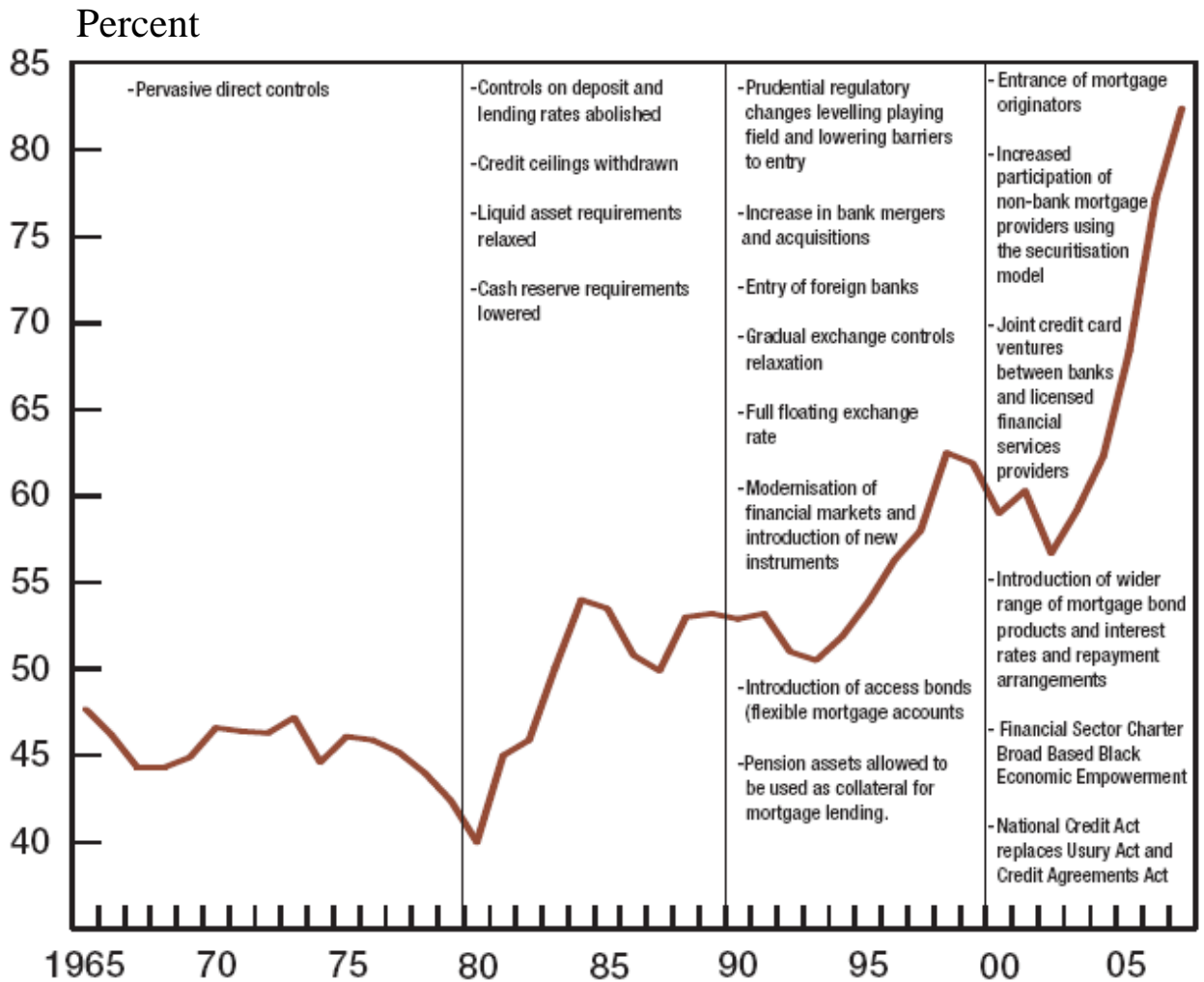
Changes and development that have occurred in South African economy over the years are discussed in this section. Specifically, this section discusses dynamics in financial

sector, structural and regulatory changes, monetary policy changes, financial flows, and business cycle phases in South Africa.

1.1.3.1 Dynamics in Financial Sector Liberalization of South Africa (1965 to 2005)

The domestic financial sector of South Africa has liberalized over the years and has become an integral part of the global economy. Consequently, this has influenced developments in real economic activity. Financial liberalization and globalization speed up financial innovation in South Africa. The graph 1 below reveals that over the years, credit ceiling, deposit rate control, link between bank rate and banks' prime rate, relative high cash and liquid asset requirement for banking institutions are eliminated.

Graph 1 Structural and Regulatory Changes and Ratio of Credit Extension to GDP

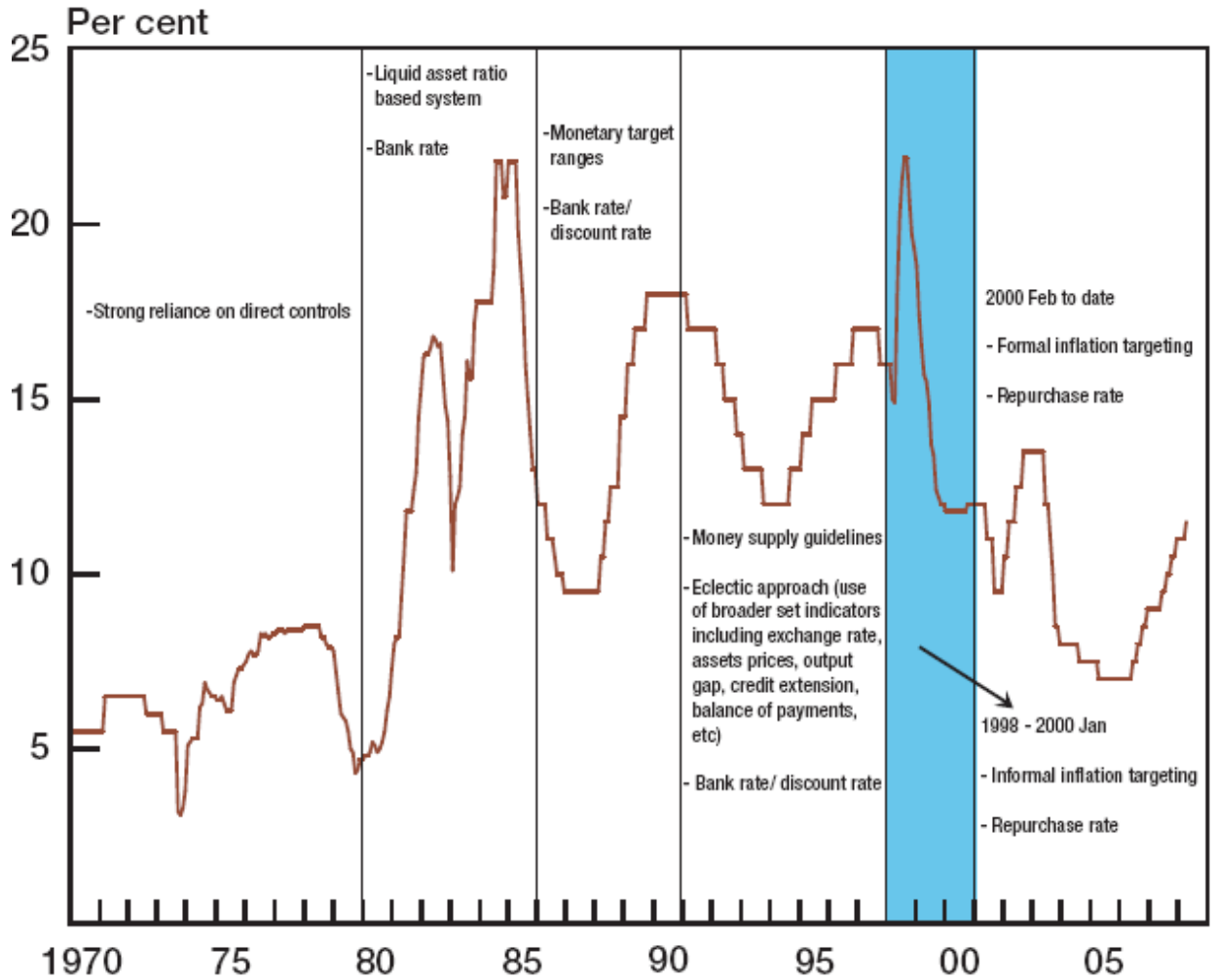


Source: Mnyande and Gumata (2010).

1.1.3.2 Evolution of Monetary Policy

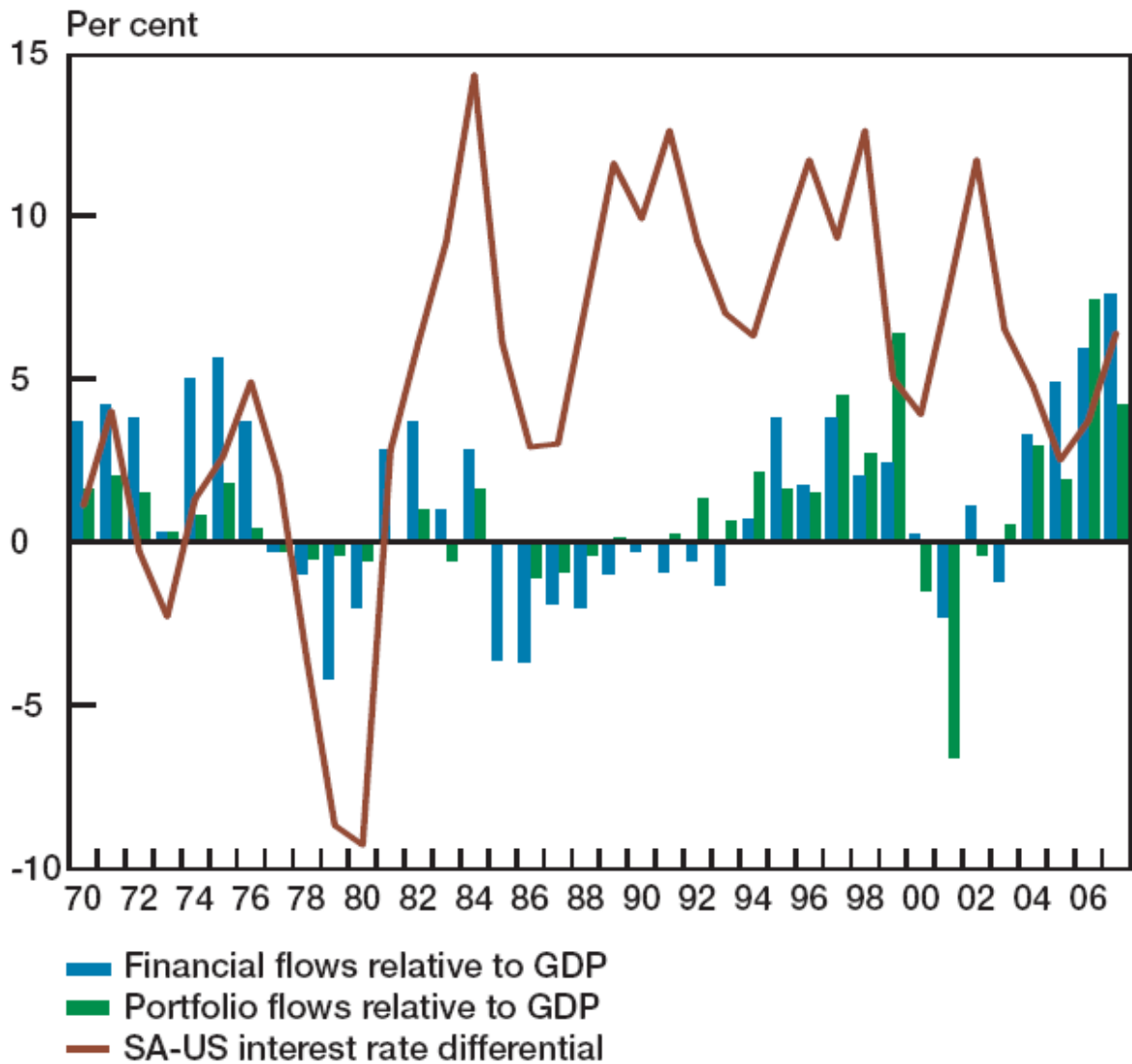
The monetary policy framework and operating procedures in South Africa have undergone changes over the years (see graph 2). It starts from direct controls through money supply targets to the current inflation targeting goal.

Graph 2 Changes in the Monetary Policy Framework and the Main Accommodation



Source: Mnyande and Gumata (2010).

1.1.3.3. Graph 3 Dynamics in Financial Flow and Interest Rate Differentials



Source: Mnyande and Gumata (2010).

Over and above country-specific factors, exchange rates are highly responsive to short term interest rate differentials over the years as well as capital inflows from interest rate differentials. Consequently, this results in asset price changes (See graph 3 above).

Changes in asset prices will alter the capital structure decision of the firm because if asset prices are low, debt finance could be preferred to raising external equity. Conversely, if asset prices are high, equity could be preferred to raising debt capital.

1.1.4 Table 1 Business Cycle Phases in South Africa since 1945

Upward phase	Downward phase
Post-war - July 1946	August 1946-- April 1947
May 1947 – Nov. 1948	Dec. 1948 - Feb. 1950
March 1950 – Dec. 1951	January 1952 – March 1953
April 1953 - April 1955	May 1955 – September. 1956
October 1956 – January 1958	February 1958 – March. 1959
April 1953 – April 1960	May 1960 – August 1961
September 1961 – April 1965	May 1965 – December 1965
January 1966 – May 1967	June 1967 – December 1967
January 1968 – December 1970	January 1971 – August 1972
September 1972 – August 1974	September 1974 – December 1997
January 1976 – August 1981	September 1981 – March 1983
April 1983 – June 1984	July 1984 – March 1986
April 1986 – February 1989	March 1989 – May 1999
June 1993 – November 1996	December 1996 – August 1999
September 1999	-

Source: Akinboade and Makina (2009)

Table 1 presents business cycle phases in South Africa since 1945. The South African Reserve Bank (SARB) determines the business cycle episodes for the country since 1945 (Akinboade and Makina, 2009). The peaks and troughs in the South African economy have been regarded as the reference points in the business cycle. Important economic

events and developments that occur near a turning point are used in the process of determining the turning point.

At the high and booming period in the cycle, firms make more profits and banks as well as investors are more willing to extend external capital to the firms. However, during the low period in the cycles, firms' make low profits and banks as well as investors will be unwilling to extend external capital to the firms. Certainly, firms' capital structure decision would not be static, but dynamic in the presence of business cycles.

1.2 Statement of problem

Growth theory tells us that key to economic growth is investment, but most firms in South Africa do not have easy access to debt capital needed to finance profitable investment opportunities despite the state of development of the South African financial market. This raises the question of what theory explains capital structure behavior of South African firms. Do South Africa firms follow pecking order theory or trade-off theory of capital structure?

Pecking order theory is based on the assumption of information asymmetry problem between financial managers and shareholders. Information asymmetry problem between financial managers and shareholders affects choice of debt-equity mix use to finance firms' operation and this is common in most emerging markets as well as South Africa where some degree of market imperfection exist.

In the strict version of the pecking order theory propose by Shyam-Sunder and Myers, (1999) when financial managers are in need of cash they use retained profit; follow by debt, but external equity is never issued if debt capital is available. This is because equity capital is associated with higher information asymmetry costs compare to debt capital. Equity issue is perceived as bad news by investors and this bad news has negative effect on stock prices. Consequently, financial managers will avoid equity issues in favor of retained profit. If retained profit is insufficient, debt capital is used. Equity issue is the last resort. Since pecking order theory is mainly driven by information asymmetry problem and information asymmetry problem is severe in African financial markets, South African listed firms would be a good sample to empirically analyze the validity of pecking order theory.

Furthermore, there are cases of firms going bankrupt in South Africa in spite of moderate debt in their capital structure. Bankruptcy problem could limit firms' access to debt capital. Also, there are indirect costs of bankruptcy such as legal fees and loss of

customers; these costs are non-trivial for firms. This bankruptcy problem is explainable within the framework of trade-off theory of capital structure because trade-off theory predicts adjustment to target level at high debt ratio to avoid bankruptcy problem.

Moreover, the study analyzes validity of trade-off theory in South Africa because the existence of information asymmetry problem implies that fixed assets could serve as collateral to avoid or mitigate asymmetric information problem that affect raising of external debt capital. Firms with large amount of fixed assets could obtain long term debt capital from banks even if there are information asymmetry problem because debt is secured with collateral. Trade-off theory predicts a positive relation between debt ratios and fixed assets.

In addition, South Africa has experience rapid changes in its political and economic history over the years. The graphs and table in previous section show that the economic and business environments that firms operate in South Africa are dynamic. Since the economic and business environments that South African firms operate in are not static, but dynamic, South African firms' capital structure decision would be dynamic as well.

Thus, static model specification would be inappropriate to capture and explain the dynamics inherent in capital structure decision of South African firms.

Theories explaining how firms make capital structure decisions remain inconclusive. Over the years, many theories have emerged to explain how capital structure of firms is determined. However, mixed results are mostly reported. The debate on capital structure started 50 years ago after the seminar work of Modigliani and Miller (1958), but it is still an ongoing debate open for further research. Modigliani and Miller (1958) argue that capital structure is irrelevant. Modigliani and Miller (1958) assume that the capital market is perfect. If the assumption of a perfect capital hold, then, capital structure decision is truly irrelevant.

However, the assumption of a perfect capital market is unrealistic because various imperfections exist in capital markets, especially in most emerging markets as well as South African capital market. In practice, capital structure decision matters because banks would be reluctant to finance a firm having excess debt because such firm could easily go bankrupt and unable to repay loan capital with interest.

Subsequent researchers have challenged Modigliani and Miller theory, empirically explaining why capital structure decision matters. Capital structure decision matters in the presence of market imperfections such as information asymmetry costs, agency costs, transaction costs, bankruptcy costs and tax etc. This debate has led to the development of six major theories of capital structures (Modigliani and Miller theory, trade-off theory, pecking order theory, agency theory, market timing theory and signaling theory) of which

two competing theories namely; trade off theory and pecking order theory emerge as best possible explanation of how financial managers make capital structure decision.

Some researchers believe that none of the two competing theories can give a complete story of how financial managers make capital structure decisions in real world. That is, in practice, it is expected that if business conditions change, the financing decisions may change, moving from one theory to another. For example, at certain times, the tax rate may be high enough to favor the use of more debt financing which supports trade-off theory. Conversely, when some economic factors change and the tax advantage of debts are not favorable, the firm may seek financing from internal sources which supports the pecking order theory (Frank and Goyal, 2008). Recent research has attempted to empirically test the pecking order theory versus the tradeoff theory to find out which theory has a better predictive power, but mix results are mostly reported.

Most recent research now attempts to develop a dynamic theory of pecking order financing that extend the basic pecking order theory (Autore and Kovacs, 2010). Besides, recent empirical research has shifted to dynamic specification of capital structure model to reflect the dynamics of capital structure decisions that firms face in real world.

Furthermore, extensive research has been conducted in developed countries on capital structure (Frank and Goyal, 2007; Flannery and Rangan, 2006; Bontempi, 2002 and Shyam-Sunder and Meyers, 1999) but such research is scanty in Africa. Besides, a few researches in Africa mainly focus on static specification of capital structure model. In the real world, firms operate in a dynamic economic and business environments, thus capital structure decision of firms would not be static, but dynamic.

Research that analyses the validity of pecking order theory and trade off theory of capital structure using dynamic model specification are hard to find in Africa. These are the gaps this study attempt to fill. In summary, the dynamic model specification propose in this study will give a better insight into the above issues in a way different from conventional static model commonly used by previous researchers in Africa.

1.3 Research objectives

Trade-off theory says that firms seek debt level that balances the tax advantages of additional debt against costs of financial distress. The trade-off theory predicts a moderate borrowing by a tax paying firms. Conversely, the pecking order theory maintains that businesses adhere to a hierarchy of financing sources and prefer internal profits when available, and debt is preferred over equity if external financing is needed. Trade-off theory and pecking order theory has received attention among practitioners, possibly, because they conform more too how practitioners choose between debt and

equity financing (Flannery and Rangan, 2006). This study uses dynamic panel model specification and Generalized Method of Moments (GMM) estimation technique to capture capital structure dynamics of South African firms.

The main objectives of this research are:

- (1) To analyze the validity of pecking order theory of capital structure on South African listed firms using dynamic model specification.
- (2) To analyze the validity of trade-off theory of capital structure on South African listed firms using dynamic model specification.

1.4 Motivation and Significance of Study

Capital structure issues have been widely debated in the literature, yet the debate is unending. Specifically, how firms choose their capital structure is still a puzzle to date. Another motivation for analyzing the validity of pecking order theory and trade off theory using dynamic panel model specification and Generalized Method of Moments (GMM) estimation technique is to capture the dynamic capital structure decision that firms face in real business world which static model specification use by past researchers in Africa is unable to capture. Besides, the methods use in this study effectively control for influence of unobservable firm-specific factors which have been identified by Lemmon *et al* (2008) to explain most of the cross sectional variation in firms' capital structure. The use of dynamic panel model with fixed effect specification and GMM

estimation technique allows this issue to be addressed through first differencing which eliminates unobservable firm-specific effects. In addition, this study will provide better insights into the dynamics of capital structure decision that financial managers face in South Africa as well as control for endogeneity problem which could bias the estimated results.

The analysis of this research topic will reveal to financial managers, shareholders and policy makers the relevance of dynamic trade-off theory and pecking order theory of capital structure to South African firms. Specifically, the study contributes to capital structure research in South Africa by using dynamic panel model specification and Generalized Method of Moments estimation technique that controls for endogenous problem and better able to give consistent estimators that are robust to serial correlation and heteroskedasticity problems.

1.5 Outline of Study

This thesis is divided into six chapters. The organizations of the chapters are as follows: Chapter one starts with introduction and background information on development in South African political and economic history. Chapter two describes South African financial markets. Chapter three presents the theoretical framework and extensively reviews relevant theories and empirical evidence. Chapter four discusses model specification, estimation method, data and justification of variables.

Chapter five presents the discussion of the GMM estimation results. Chapter six summarizes and concludes the study.



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Matemilola Bolaji Tunde was born on 5th of November 1979 in Lagos. He is the third out of five children born to Mr. and Mrs. Matemilola. He attended St Augustine's Primary School and Angus Memorial High School in Lagos. He obtained his Bachelor of Science in Finance from the University of Lagos and also holds a Master of Arts in Finance and Investment from Nottingham University.

He was the senior prefect of Angus Memorial High School from 1996 to 1997 and served as Auditor of Finance Students' Association (FINSAs) as well as chairman of tutorial committee at University of Lagos. In recognition of his academic performance and contribution to Finance Students' Association, he was awarded the Most Industrious Student in year 4 Finance in 2004. He has also served as financial secretary for TCLM a nonprofit making organization situated in Lagos from 2003 to 2004.

He has over 2 years work experience as business and equity researcher with Capital Express Insurance Company as well as several years of part time teaching experience (which include corporate finance and econometrics). He has presented papers at conferences and three of his recent papers have been published in international journal. One of his recent papers won Best Paper Award at the Malaysian Finance Association conference. He has completed his Master Science (Financial Economics) degree at the Faculty of Economics and Management, University Putra Malaysia.

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