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Effect of Equity Liberalization on Financial Development in Kenya

Wesley Okoth Otieno, Prof. Florence Memba and Dr. Tobias Olweny
The Previous DAFx Crew
Jomo Kenyatta University of Agriculture and Technology, Kenya

Abstract
Financial liberalization has been part of financial reform packages in many countries as stabilization for financial development tools of respective economies. One of these countries is Kenya which has been undergoing various financial sector reforms since 1980 to improve economy mainly on the ease of equity market. This research was conducted to establish the effect of equity market liberalization on financial development in Kenya in relation to various financial liberalization effects and measures adopted from 1985 to 2018. The principal component analysis method was used in the calculation of the index required data for all the years since the liberalization process started in Kenya to calculate the financial liberalization index required for the study period. The research first identified events dates of major policy changes or reforms and their effect on financial development and population of study were from various financial sector institutions operating in Kenya. The Secondary data was sourced from Central Bank of Kenya reports and statistical bulletins. The findings revealed that equity market liberalization is beneficial to the financial development in Kenya. When moderated with business risk, business risk does not moderate the relationship between equity market liberalization and financial development. The study recommended that, in a bid to promote capital inflows and enhance better risk-sharing, there is a need to reform financial rules, it is essential for equity market liberalization to be embedded within a sound institutional framework to enhance financial development.

Keywords *(financial liberalization, financial development, equity market liberation and business risks)*

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I. Introduction

Both financial theory and practical experience suggest that financial liberalization can stimulate economic development. Until the 1980s, extensive government intervention was the norm in the financial markets of developing countries. Ceilings were imposed on bank interest rates; credit was allocated by administrative decision rather than market criteria; and inflows of foreign capital were strictly controlled. Over the last twenty years, however, many developing countries persuaded by both the theoretical arguments made in support of liberalization and the experience of many of the rapidly growing countries have begun to liberalize their financial markets by abolishing these types of controls (Pill, 1997)

Led by the seminal papers of McKinnon (1973) and Shaw (1973), a significant number of studies have pointed out that financial liberalization can exert a positive effect on growth rates as interest rate levels rise towards their competitive market equilibrium, while resources are efficiently allocated. Accordingly, eliminating controls on interest rates and allowing them to increase could stimulate a higher level of savings. According to Taylor (1983), the reserve requirements of the formal sector may reduce the total supply of funds to the whole economy as credit flows from the informal to the formal sectors. Just as importantly, the higher real interest rates would result in greater firm distress and a contraction in investment and aggregate demand.

According to Kaminsky and Schmukler (2003), A fully liberalized domestic financial system is characterized by lack of controls on lending and borrowing interest rates and certainly by the lack of credit controls, i.e. no subsidies to certain sectors or certain credit allocations. Also, deposits in foreign currencies are permitted and full financial liberalization occurs when at least two of the three sectors are fully liberalized and the third one is partially liberalized.

In developing countries like Kenya, domestic financial sector was liberalized along with capital account in the 1970s, when controls were re-imposed that remained in place until the late 1980s (especially capital account controls) when a liberalization wave took place in Asia and then in Latin America. By the early 1990s, the domestic financial sector and stock market had been jointly deregulated in developing countries which predates capital account liberalization, which only commences in the early 1990s.In early 1970s, Government intervention in the determining of the price and allocation of credit was termed as 'financial repression' by

McKinnon and Shaw. Interest rates control by government, credit controls, barriers to entry to financial sector, state control of banking sector, government ownership of banks and restrictions on capital flows.

Caprio et al., 1999, Proponents of financial liberalization argue that financial repression is the cause for lower growth rates that otherwise would be higher if open market would decide the flow of capital to projects. Therefore Assumed costs associated with repression are described as follows
(1) deteriorating growth rates for countries with high levels of financial repression;
(2) limited access to financial resources for individuals and small firms, whereas wealthy elites take advantageous position in financial repressed system;
(3) increased dependence on external financing because of negative real interest rates which results in capital flight;
(4) Excessive use of capital-intensive production techniques, because artificial low real interest rates makes those projects attractive;
(5) reduced monitoring and financial resource allocation functions of financial intermediaries as the result of state allocation of financial resources to inefficient state-owned enterprises;
(6) increased risk for external crises, as the result of deteriorating fiscal balances, increased external financing or money printing.

Statement of the Problem

The issue of importance in this study is whether the level of financial sector development of a country depends on adoption and implementation of financial liberalization measures which has been identified to be strategic to financial development as postulated by the Financial Development Report 2012 which says that improvement efforts need to be driven by national level reforms so as to ensure that appropriate financial systems are in place which helps in improving the economy as a whole. Kenya planning blue prints, vision 2030 identifies the financial sector as one sector which can spur economic growth and investment as it projects to double rate of financial access, depth, stability and efficiency.

There are doubts whether liberalization indeed improved the efficiency of equity market and credit allocation and the Major concerns have been raised which show that the financial system is still operating in oligopolistic manner.

The problem that this study seeks to address is how embracing and execution of equity market liberalization measures affect financial sector growth and its impact on Kenya economy growth over the period 1985-2018 considering the role of central bank and Capital market authority major policy interventions to establish its independence and avoid being vulnerable to government influences and inadequate supervision in regulation and determination of interest rates, financial access and credit creation if are policy or market determined . Therefore, it is against this backdrop that this research work was conducted to address the research gap to know if there is effect of equity market liberalization measures on financial development in Kenya in the face of financial crisis.

Specific Objectives

The specific objectives are:

a) To determine effects of equity market liberalization on financial development in Kenya.

b) To ascertain the moderating effect of business risk on the relationship between financial development and Equity market liberalization

II. Literature Review

Legal Theory of Financial Development

According to La Porta et al (1997, 1998, 2000a), the legal policy view highlights the importance of some macroeconomic policies, role of legal institutions in facilitating and explaining differences in financial liberalization and financial development in promoting financial development.

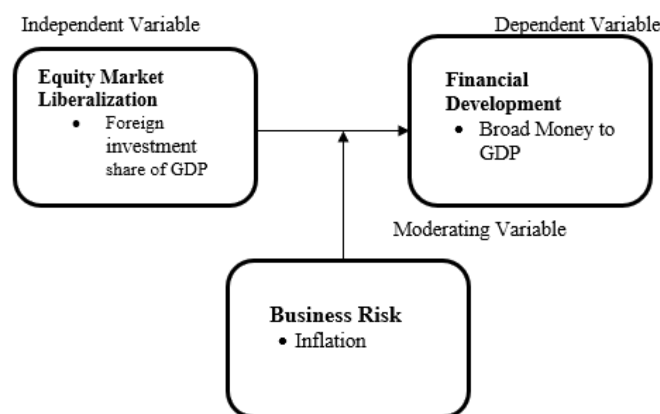
Institution Theory of Financial Development

By applying the settler mortality hypothesis of Acemoglu *et al.* (2001) to financial development, Beck *et al.* (2003) address how institutions matter for financial development. Greenwood and Jovanovic (1990) and Saint-Paul (1992) document that as the economy grows, the costs of financial intermediation decrease due to intensive competition, inducing a larger scale of funds available for productive investment.

Financial Intermediation Theory

According to Andrieş (2009, the financial intermediation theory analyses the functions of financial intermediation and how they influence an economy, therefore highlighting the roles of financial intermediaries, their controls, supervision and impact of financial intermediaries' regulation to stimulate an economy.

The Conceptual Framework



III. Methodology

Research Design: The study adopted causal design approach because it is quantitative in nature as well as structured in design. The suitability of adopting this design is that it explains the cause-and-effect relationship between study variables to determine the study objective.
Population: The data employed in this study is secondary data. The study employed annual time series data of the variables from 1985 to 2018.

There are basically two sources of data collection; namely, primary and secondary sources of data collection (Olaogun, 2010). For this study, only secondary method of data collection was utilized. According to Kothari (2004), secondary data defined as data that is already available or which have already been collected and analysed by someone else while Polit and Beck (2003) sees it as the use of data gathered in a previous study to test new hypotheses or explore new relationships.

The data was obtained from various international compilations such as, UN Statistical Yearbooks by the United Nations, World Development Indicators by the World Bank, Global Development Finance data base, International Financial Statistics by the International Monetary Fund (IMF), ADB Key Indicators by the African Development Bank (ADB), and Kenya publications such as Statistical Projections by Kenya Bureau of Statistics, CBK and Kenya Economic Surveys by the Kenya Government, covering the period 1980 to 2018 which includes 34 annual observations.

IV. Results And Discussion

Table 41 Descriptive for Study Variables

Stats	FD	EML	BR
N	34	34	34
Min	26.68	-3.72E+09	0
Max	43.25	7.75E+08	1
Mean	36.4	-1.15E+08	0.206
p50	36.74	1.89E+07	0
Sd	4.341	6.76E+08	0.41
Kurtosis	2.568	25.23526	3.116
Skewness	-0.57	-4.577063	1.455

FD = *Financial development measured using broad money as percentage of GDP*
EML = *Equity market liberalization measured as gross Investment as Share of GDP*
BR = *Business Risk as measured using inflation rates*

In all the three variables were utilized in this study to achieve the research objective both the independent and dependent variables. From table 4.1, the number of observations used in this study are 34 in number, that means covering the period between January 1985 to December 2018 and this shows that all the intended data was collected and analysed as per the study objective. It also shows that the mean total of financial development as a measured using broad money as a percentage of GDP stood at 36.4 having the highest percentage being 43.25 and lowest being 26.68 with variability of 16.57 and a standard deviation of 4.341 and a skewness

of -0.57. The equity market liberalization measured as gross investment as share of GDP had a mean of -1.1 billion and a minimum of -3.72 billion and a maximum of 7.75 billion and a standard deviation of 6.76 and a positive kurtosis of 25.23

Further, the study provided summary statistics for transformed data. The data was converted to their natural logs to deal with the problem of large numbers and eliminate heteroscedasticity.

In table 4.2 shows that all the variable measures which represents both the dependent independent variables and moderating variables have been tested. From the table 4.2, the mean broad money was having natural log of 3.587 with a standard deviation of 0.125, and business risk mean being -0.501 and a standard deviation of 1.266.

Table 4.3 Serial correlation Test

Breusch-Godfrey LM test for autocorrelation			
F-statistic	1.341419	Prob. F(2,18)	0.2864
Obs*R-squared	4.02111	Prob. Chi-Square(2)	0.1339
H0: no serial correlation			

The output of table 4.3, The Breusch-Godfrey LM test confirms that there was no serial correlation in the error correction model since the probability chi-square value of the observed Squared 0.1339 was greater than 0.05 therefore we accept the null hypothesis that there is no serial correlation in the model.

Granger causality Test

One importance of the application of distributed log models is to provide evidence about the direction of causality in economic relationship (Studenmund, 2017). Such a test is useful when we know the two variables are related but we don't know which variables cause the other to move. Granger causality, or precedence, is a circumstance in which one-time series variable consistently and predictably changes before another variable (Granger, 1969). Granger causality is important because it allows the researcher to analyze which variable precedes or "leads" the other.

Table 4.4 shows that the data was lagged by two periods before the error correction to see whether changes in the independent variables in the previous periods would have implications on broad money in the subsequent years.

Table 4.4 Engle-Granger Error Correction Model (ECM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D_EML	0.03585	0.012058	2.973056	0.0075
ERRORTERM	0.319346	0.141589	2.255443	0.0355
C	-0.00346	0.006824	-0.507209	0.6176
R-squared	0.785852	Mean dependent var		0.006926
Adjusted R-squared	0.678778	S.D. dependent var		0.064805
S.E. of regression	0.036729	Akaike info criterion		-3.49906
Sum squared resid	0.026981	Schwarz criterion		-2.99022
Log likelihood	65.23538	Hannan-Quinn criter.		-3.33319
F-statistic	7.339323	Durbin-Watson stat		1.473938
Prob(F-statistic)	0.000086			

V. Conclusion And Recommendations

Summary of Findings

The primary objective of the study was to establish the effect of equity market liberalization on financial development in Kenya. The study period was between 1985 and 2018. The study utilized data from the Central Banks statistical bulletin for several years and the World Bank development index. Basing on the findings in the previous chapter, financial development measured by broad money to GDP had an average natural log of 3.587. while business risk at a mean of -0.501. Furthermore, the mean broad money was having a natural log of 3.587.

Also, after highlighting the profile of trend in equity market liberalization and financial development in Kenya, diagnostic tests were performed. To start off, normality test indicated that the assumption of normality was met. Besides, there was no presence of heteroscedasticity. As well, there was no serial correlation, as indicated by the Breusch Godfrey test. Besides, the ADF unit root test indicated that equity market liberalization were found to be stationery at level. However, broad money were stationary after the first difference. As such,

the assumption of constant variance, normality, no serial correlation and stationarity were met for the panel cointegration test.

The vulnerability of Kenya economy, which present constraints to growth and financial development can be attributed to the relying heavily upon external trade and foreign investment to overcome inherent scale and resource limitations hence living the nation vulnerable to external economic shocks. Since domestic inflation is largely influenced by landed prices of imported goods, ranging from food to capital goods results to findings of fixed exchange rate regime. Uncontrolled inflation strangles financial growth, hurting entire populace and international trade hence high inflation creates higher business risk resulting into various relationship like: Unstable growth creates risk for investors and investors require compensation for risk, so interest rates will be higher, then higher interest rates mean lower levels of borrowing by businesses resulting to lower levels of borrowings hence mean fewer resources for companies to invest resulting to less financial growth.

Conclusion

In conclusion , equity market liberalization is beneficial to the financial development in Kenya. The findings imply that the financial sector in Kenya is reaping from greater diversification of the portfolio, higher market liquidity, as well as an avenue for risk-sharing.

Besides, the enhanced development in the equity market could be attributed to freeing capital accounts. As well, the findings are in support of the notion that equity market liberalization leads to not only an increase in equity prices but also promotes investments which have the potential to impact on financial development positively. As well, business risk does not change the direction of relationship between equity market liberalization and financial development.

Recommendations

The study has shed light on the positive link between capital account liberalization and financial development in Kenya. It is therefore vital for the country to ensure there is a stable macroeconomic framework as a prerequisite for capital account liberalization. There is also a need to develop both the private sector and the institutional environment. Furthermore, in a bid to promote capital inflows and enhance better risk-sharing, there is a need to reform financial rules, strengthen the banks and promote the business sector. In so doing, the positive contribution of capital account liberalization on financial development is enhanced.

other economic determinants.

Equity market liberalization is vital in enhancing the financial development in Kenya. It is instrumental in lowering interest rates and fostering the inflow of foreign funds. It is therefore essential for equity market liberalization to be embedded within a sound institutional framework to enhance financial development. Further, it is vital to encourage equity flows by allowing foreign investors to have access to the domestic stock markets. To further benefit from equity market liberalization, it is necessary to have a well-developed financial structure.

Limitations of the Study

The study contributes to significant insights on the effect of financial sector liberalization on financial development in Kenya. Nevertheless, the study suffers from some weaknesses. First, the study relied on annual time series data for empirical investigation, which has the potential to reduce the accurateness of the parameters. As such, quarterly data is most appropriate. However, since quarterly data is not readily available, annual data was utilized. Secondly, the study only relied on interest rate liberalization, capital market liberalization, equity market liberalization and credit liberalization as measures of financial liberalization.

Further Research Recommendations

The study contributes vital insights on the effect of financial sector liberalization on financial development in Kenya. There is thus need for further research to ascertain the validity of the study findings. As evident, in the literature, few studies have highlighted the benefits of Equity liberalization on financial development. It is essential to conduct further research in this field to compare financial development, pre- and post-financial liberalization in Kenya. Besides, future scholars could delve into the implication of implementing interest rate restraints policy on financial development. Also, the study recommends future studies on the influence of microeconomic determinants on the link between financial liberalization and financial development.

DECLARATION

I confirm that this is my sole research and hasn't been submitted for any examination. I did self-funding and data collected are available.

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