

**EFFECTS OF GLOBAL FINANCIAL INTEGRATION ON FINANCIAL
STABILITY OF COMMERCIAL BANKS IN KENYA**

BY

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D61/P/8583/05

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**A Research Project Report Submitted in Partial Fulfilment of the
Requirements for the Award of the Degree of Masters of Business
Administration, University of Nairobi**

NOVEMBER 2009

DECLARATION


This management project is my original work and has not been presented for a degree in any other university.

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This project has been submitted with my approval as university supervisor.

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DEDICATION

To my family and friends

ACKNOWLEDGEMENT

I would like to acknowledge the following persons whose contributions facilitated the completion of this project. First, I thank the Almighty God for the gift of life and for giving me the skills, knowledge and energy to be able to complete this paper.

My special thank you goes to my supervisor Mr. Sifunjo Kisaka for shaping the project idea into a meaningful form, and for his consistent and insightful reviews. Without his encouragement and patience, it would have been difficult to complete this project.

I am most grateful to my husband and family for the invaluable support and understanding you accorded me while studying for the MBA Programme.

Finally, I am indebted to all those who helped me achieve this dream in one way or another especially my classmates and my friend, Fredrick Odhiambo, for their invaluable assistance in proof reading and critic of the paper throughout the stages.

To all of you wherever you are I say a big *ASANTE SANA!*

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LIST OF ABBREVIATIONS

FDI	Foreign Direct Investment
UNCTAD	United Nations Committee of Trade and Development

ABSTRACT

This study sought to determine the effect of global financial integration on the financial stability of commercial banks in Kenya. A relational study designed was used and secondary data was collected from a sample of 43 commercial banks operating in Kenya. These were the commercial banks registered and operating in Kenya under the watch of Central Bank of Kenya. A regression model was devised for the study and analysis made in terms of t-statistics and R^2 . The significant influence of financial integration on bank stability was interpreted at 95% level of confidence.

The study found that financial integration had a generally negative influence on stability of commercial banks as shown from its coefficient of determination. The R square was 0.092 showing that financial integration influenced up to 9.2% of the variance in financial stability. The analysis of variance showed that the regression did not significantly explain the variance in the model. The significance was very low at 0.620. The study concludes that much of the variance in financial stability of commercial banks was as a result of other factors not tested in this study and these conform to previous studies (Eatwell, 1997, Rodrik, 1999 and Rogoff, 2002) who do not agree that financial integration is beneficial to stability of financial markets in developing countries.

The study recommends that the Government and management of various commercial banks in Kenya need to be cautious when setting up policies that open up the Kenyan market to foreign investors. This is especially important at this time when the world is experiencing global economic recession which may have the implication of increasing volatility of Kenyan financial market.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The last few decades have been characterized by a rapid integration of the world's financial markets. For example the global issuance of bonds has risen rapidly in the last decade even as capital rose with cross-listed stocks. Furthermore, the international trade of financial assets has increased substantially. A key factor underlying this process has been the increased globalization of investments seeking higher rates of return and the opportunity to diversify risk internationally (van Horen, 2005). At the same time, many countries have encouraged capital inflows by lifting capital account restrictions and other barriers to investment in combination with improvements in the economic environment and the introduction of market-oriented reforms.

Developing countries can potentially benefit a great deal from increased integration with world financial markets (World Bank, 1997). In most developing countries saving rates are low and as such internal resource mobilization is constrained. This makes it difficult for investors to find adequate resources for projects with high rates of return. Integrating the domestic financial market with the world has a positive impact on the development of the domestic financial market and improves access to the international capital market (van Horen, 2005). This increases the pool of potential resources and makes it more likely that high return investments can be financed, which can bring about economic growth.

This study adopts a definition of financial integration as defined by Baele et al., (2004). They assert that the market for a given set of financial instruments and/or services is fully integrated if all potential market participants with the same relevant characteristics (1) face a single set of rules when they decide to deal with those financial instruments and/or services; (2) have equal access to the above-mentioned set of financial instruments and/or services; and (3) are treated equally when they are active in the market.

Events over the past decade, such as the Tequila Crisis, the Asian financial crisis, and the collapse of the Argentine currency board, and the US financial crisis of 2008 have focused attention on the risks of integration of financial markets, especially for developing countries (van Horen, 2005). Being highly dependent on externally generated funds to generate growth, the resilience of the economies in times of sudden stops is low. Once linked to other financial markets, developing countries may suffer not only from volatility in their own financial markets but also from the contagion effects of volatility occurring elsewhere.

In the last three decades, financial stability has emerged as an important public policy objective. Financial stability is a situation where the financial system operates with no serious failures or undesirable impacts on the present and future development of the economy as a whole, while showing a high degree of resilience to shocks (van Horen, 2005). Financial stability of commercial banks refers to the level of risks and exposures commercial banks are exposed to. The main reasons for the increased interest in financial stability included high costs of financial crises and their increased frequency, the explosive growth in the volume of financial transactions, and the increased complexity of new instruments. One of the most visible signs of this increased focus on financial

stability has been the rapidly growing number of financial stability reports (FSRs) published by central banks.

1.1.1 Changing Financial Environment

While the cyclical downturn in global interest rates provided important initial impetus for the resumption of capital flows to developing countries in the 1990s, these flows have now entered a new phase, reflecting structural forces that are leading to progressive financial integration of developing countries into world financial markets (World Bank, 1997). According to the World Bank (1997) report, the two primary forces that are driving investor interest in developing are the search for higher returns and opportunities for risk diversification. The responsiveness of private capital to cross-border opportunities has gained momentum as a result of internal and external financial deregulation in both industrial and developing countries and major advances in technology and financial instruments.

There are two key developments that have increased the responsiveness of private capital to cross-border investment opportunities in industrial countries. First, competition and rising costs in domestic markets, along with falling transport and communication costs, have encouraged firms to look for opportunities to increase efficiency and returns by producing abroad (World Bank, 1997). Second, financial markets have been transformed over a span of two decades from relatively insulated and regulated national markets toward a more globally integrated market (World Bank, 1997). This has been brought about by a mutually reinforcing process of advances in communications, information, and financial instruments, and by progressive internal and external deregulation of

financial markets. This is seen in the growing importance of institutional investors willing and able to invest internationally.

The changes both in the international setting and in the developing countries have seen a strong surge of private capital in the developing countries. Foreign Direct Investment (FDI) as a type of capital has responded most vigorously to the improving economic environment in developing countries (World Bank, 1997). Commercial bank lending has also made a strong comeback and so has been the growth of portfolio bond and equity flows. The growth of portfolio bond and equity flows has been stimulated by mutual funds, pension funds, and institutional investors who now form a very important part of investor base in emerging markets (World Bank, 1997).

The developments have resulted in a wide range of investors and a broader composition of flows to developing countries with an increasing share of these investments going to the private sector. Thus, two important implications emerge from the process of financial integration of developing countries (World Bank, 1997). One, continuing deregulation of financial markets in industrial countries, and technological progress and financial innovations at the international level, will spur increased responsiveness of private capital to international investment opportunities. Two, developing countries' markets are likely to become increasingly accessible, and policy reforms are likely to deepen in countries that are already implementing such reforms and broaden to countries that are not yet embarked on the process.

Factors in the international environment could interact with domestic policies and conditions to give rise to significant differences in the volatility of private

capital. Thus, the international environment could magnify and exacerbate shocks in the domestic economy (World Bank, 1997). Further, domestic investors could react to foreign investors' initial reactions, leading to a magnification of the shock.

1.1.2 Role of Commercial Bank in the Macro-economy

Financial intermediaries play a crucial role in the process of economic developments and growth by channelling savers' money to more productive uses in an economy. They do this by screening and selecting investment projects and transforming assets from illiquid to liquid assets (World Bank, 1997). Past studies have asserted that the banking sector amplifies the magnitude of the business cycle because bank credit behaves procyclically (World Bank, 1997). In addition to amplifying the magnitude of the business cycle, a poorly regulated and supervised banking industry will tend to misallocate resources, increasing the economic cost of the boom-bust cycle in bank lending (World Bank, 1997). Poorly capitalised and regulated banks may, for instance, invest excessively in risky projects, such as real estates. Also, poorly managed banks operating under distorted incentives will not diversify their portfolios adequately, thus exacerbating financial sector vulnerability. The weaker initial conditions in the banking sector are, the more vulnerable countries will be to large downturns and costly banking crises (World Bank, 1997).

In an integrated environment these effects can become even more pronounced for several reasons. First, integration gives banks access to a larger supply of funds to intermediate which allows them to increase credit rapidly (World Bank, 1997). Second, financial integration usually occurs with the implementation of economic reforms that improve the country's economic prospects and raise

agents' expectations (World Bank, 1997). Third, integration increases the sources of risk and the speed of market reaction (World Bank, 1997).

A study by Sachs et al., (1996) conclude that the impact of Mexican peso crisis of December 1994 on other emerging economies can be partly explained by the level of private sector debt held by the countries' banking systems. In other words, developing countries in which bank credit was growing rapidly during the surge in private flows in the early 1990s were more vulnerable to the shocks of the Mexican crisis. Similarly, recent work by Kaminsky and Reinhart (1996) and Hausmann and Gavin (1995) provides empirical evidence that the boom-bust cycles in domestic bank credit, asset prices and economic activity resemble and precede those in the external accounts. This confirms that in financially integrated economies the domestic banking sector plays an important role in amplifying cyclical swings. Finally, Goldfajn and Valdes (1996) use a theoretical model to show that in a financially integrated economy the existence of a domestic banking system exacerbates capital movements from abroad and, therefore, amplifies the magnitude of external shocks.

1.1.3 Benefits and Risks for Financial Integration

The benefits of financial integration arise in two main ways. First, financial integration can boost growth by raising the level of investment and by improving the returns on investment through knowledge spillover and market efficiency effects (World Bank, 1997). Second, integration allows individuals to insure themselves against adverse developments in their home economies by diversifying their assets and tapping global markets to smooth temporary declines in income (World Bank, 1997).

Financial integration can boost investment in developing countries by severing the link between local savings and investment. The potential gains from higher investment vary from country to country depending on the relative profitability of investment opportunities and on the difference between the domestic and the world cost of capital before integration (World Bank, 1997). Integration may also boost growth by shifting the investment mix toward projects with higher expected returns because of the improved ability to diversify the higher risks typically entailed in higher-return projects (World Bank, 1997). A third and more immediate channel through which financial integration can raise growth is through FDI. A dollar of FDI raises the sum of domestic and foreign investment by more than a dollar; thus FDI complements rather than substitutes for domestic investment (World Bank, 1997).

Integration enhances the depth and efficiency of the domestic financial system, with important positive feedback to investment and growth (World Bank, 1997). Greater openness of the banking system can yield significant efficiency gains. The gains from knowledge spillovers, deepening, enhanced competition, and the stimulus given to improvements in the institutional and supervisory framework are likely to be much greater for developing countries (World Bank, 1997).

Foreign investment has been a driving force of change in the development of capital markets and banking sectors in developing countries. Financial integration enhances the role of capital markets through its effect on depth and liquidity (World Bank, 1997). In addition to these spillover effects on the banking system and capital markets, integration can promote better macroeconomic policies (World Bank, 1997). The market discipline that comes with integration

can be a powerful force in promoting prudent and stable macroeconomic policies, with large benefits over the longer term.

Further, the increased opportunities for risk diversification with integration can bring gains in the form of higher and less variable consumption (World Bank, 1997). Integration reduces the volatility of consumption by allowing a better diversification of portfolios and by permitting international borrowing and lending to offset temporary income movements. Integration can also boost consumption by permitting a shift toward a portfolio with higher expected returns.

Despite the large potential benefits, growing financial integration and increased reliance on private capital flows might render emerging markets more susceptible to volatility (World Bank, 1997). Such fears are not without foundation especially for countries with weak fiscal policies, badly managed or overprotected banking systems, and highly distorted domestic markets. At the aggregate level, private capital flows to developing countries are less likely to suffer from major reversals as they have demonstrated a remarkable degree of resilience (World Bank, 1997).

However, at the individual country level, volatility of flows and potential vulnerability to reversals remain a serious concern. According to World Bank (1997) report, there are three separate elements of this concern: large surges in the inflow of capital in the early stages of integration; susceptibility to large reversals; and the increase in volatility as a country becomes integrated.

Another effect as discussed by Agenor (2003) is the generation of significant costs. These potential costs include high degree of concentration of capital flows and the lack of access to financing for small countries; an inadequate domestic allocation of these flows; the loss of macroeconomic stability; the pro-cyclical nature of short-term capital flows and the risk of abrupt reversals; a high degree of volatility of capital flows; and risks associated with foreign bank penetration.

1.2 Problem Statement

The world's financial markets are rapidly integrating into a single global marketplace and developing countries are being drawn into this process. If they have adequate institutions and sound policies, developing countries may proceed smoothly along the road to financial integration and gain the considerable benefits that accrue due to integration. In as much as there are benefits of financial integration, there are also problems associated with integrations. There is vast literature that supports benefits of integration (Agenor 2003, De Gregorio, 1998, Lane and Milesi-Ferretti 2003, Obstfeld and Taylor 2004) as well as those that show potential negative consequences of integration especially on the financial systems of developing countries (Eatwell, 1997; Rodrik, 1999; Rogoff, 2002). The benefits include boosting of growth and diversification. The problems of financial integration are increase in volatility of emerging markets and generation of significant costs.

As more capital flows to Kenya, the domestic banking industry will be affected in a number of ways. These benefits may include increased depth and breadth of domestic financial markets and improved quality and availability of financial services in the domestic market. There may be other potential risks such as rationing of credit to small firms, creation of pressure for bank mergers, and

instability of domestic banking system especially during financial crises. These are issues which have not yet received attention from scholars in Kenya.

There is very little research that has been done in Kenya on financial integration. In fact, Korir (2007) is so far the only study that has discussed the issue of international capital inflows. However, the current study differ from Korir (2007) given that it focused on the factors that make regional integration attractive to international capital inflows with specific reference to East African Community Union (EACU). In another related study, Macharo (2003) studied the determinants of FDI in Kenya ranging from the rate of growth of real GDP to the volatility of real exchange rate. Weche (2006) on the other hand evaluated the effect of taxation on FDI while Nyamweya (2006) analysed the relationship between macroeconomic indicators and the flow of FDIs in Kenya. Therefore, no study has examined the effects of financial integration on stability of commercial banks in Kenya. This is the gap that the current study sought to fill by seeking responses to the following research question: what effect does global financial integration has on financial stability of commercial banks in Kenya?

1.3 Objective of the Study

This study sought to determine the effect of global financial integration on the financial stability of commercial banks in Kenya.

1.4 Importance of the Study

The study is important to policy makers in Kenya as the results of this study can provide a sound basis upon which macroeconomic policies can be formulated. It may guide towards enactment of regulations that can help reform the domestic financial sector with regard to financial integration.

Given that the world still lacks clear rules for dealing with financial crises, the study can help policy makers find ways to enhance confidence of international creditors without exacerbating moral hazard.

This study is also important to the management of various commercial banks in Kenya as they are now aware of the possible effect that financial integration may have on their bank stability. Recommendations given in the study should therefore be invaluable to the managers.

The government can also be a beneficiary from the study in terms of policy recommendations made. These policies will ensure that the banking industry in Kenya is not negatively affected by financial integration.

The study is also important to the scholars who may wish to carry out more studies on financial integration in developing countries as it provides direction for future research in Kenya and in Africa.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter reviews literature on the potential risks and benefits of financial integration as well as effect of financial integration on financial systems and on commercial banks. A summary of the issues discussed in the chapter is then provided at the end of the chapter.

2.2 Risks and benefits of Global Financial Integration

Internationally, there is a growing interest in regional and global financial integration of which developing African countries are not left out. Economic theory suggests that financial integration promotes economic growth and enhances welfare by providing opportunities for more efficient allocation of resources, portfolio and risk diversification and allowing higher profitability of investment, as well as by helping to promote domestic financial development, especially in developing countries (World Bank 1997). However, the question of whether financial integration truly benefits developing countries and if it does, under what conditions, has been hotly debated without any consensus till date. While several authors (Agenor 2003, De Gregorio, 1998, Lane and Milesi-Ferretti 2003, Obstfeld and Taylor 2004) and some international institutions such as the IMF and the World Bank (Demirguc-Kunt and Levine 1996, World Bank 1997, Nissanke and Stein 2003) present arguments that favour a positive influence of financial integration, others did not.

Critics even include economists such as Jagdish Bhagwati, who strongly favoured free trade in goods and services, but argued that the risks of global

financial integration outweigh the benefits. In an influential article, Bhagwati (1998) argued that the 'claims of enormous benefits from free capital mobility are not persuasive' and added that the 'substantial gains (from capital account liberalization) have been asserted, not demonstrated'. Other critics include economists such as Lord Eatwell and Dani Rodrik.

Eatwell (1997:2) as quoted in Obstfeld and Taylor (2004:4), contends that, since the 1960s, free international capital flows have been associated with a deterioration in economic efficiency (as measured by growth and unemployment). In like manner, Rodrik (1999:30) noted that "openness to international capital flows can be especially dangerous if the appropriate controls, regulatory apparatus and macroeconomic frameworks are not in place". Also, commenting on the subject after a review of the issues, the then Chief Economist and Director of Research for the IMF, Kenneth Rogoff, noted that "these days everyone agrees that a more eclectic approach to capital account liberalization is required" (Rogoff, 2002:55).

In addition, known previous studies on the subject employ cross-sectional and panel framework in which developed and developing countries are grouped together in the analyses (Quinn 1997, Kraay 1998, Rodrik 1998; Klein and Olivei 1999, Edwards 2001, Reisen and Soto, 2001, Edison et al, 2002, Klein 2003). Even in studies where some attempts were made to differentiate between developed and developing countries, in such studies, the results obtained are still a broad generalisation about the effects of financial integration in developing countries. Given the differences in the level of institutional development, economic performance, and political environment among developing countries, such generalisation may not apply to any specific country.

Very important too, the cross-section/ panel data frameworks have another limitation, in that they cannot be used to determine the causal link between financial integration and economic performance of countries involve since the possibility of differences in causality pattern across countries is likely. Arestis and Demetriades (1996), for instance, have provided evidence that shows that the causal link between finance and growth is crucially determined by the nature and operation of the financial institutions and policies pursued in each country.

Economic theory leaves no doubt about the potential advantages of global financial trading. Obstfeld (1998) asserts that international financial markets allow residents of different countries to pool various risks, achieving more effective insurance than purely domestic arrangements would allow. Furthermore, a country suffering a temporary recession or natural disaster can borrow abroad (Obstfeld, 1998). The study also asserts that developing countries with little capital can borrow to finance investment, thereby promoting economic growth without sharp increases in saving rates. At the global level, the international capital market channels world savings to its most productive uses, irrespective of location. The resulting economic gains are difficult to quantify (Obstfeld 1998). For example, producers who can diversify risks in financial markets may undertake more high-yield but risky investments, increasing average rates of economic growth. In that case, the welfare gains can be enormous (Obstfeld, 1998).

The other main potential positive role of international capital markets is to discipline policymakers who might be tempted to exploit a captive domestic capital market (Obstfeld 1998). Unsound policies—for example, excessive government borrowing or inadequate bank regulation—would spark speculative

capital outflows and higher domestic interest rates. In theory, a government's fear of these effects should make rash behaviour less attractive.

Access to world capital markets may allow a country to engage in consumption smoothing, by allowing the country to borrow in "bad" times (say, during a recession or a sharp deterioration in the country's terms of trade) and lend in "good" times (say, in an expansion or following an improvement in the country's terms of trade). By enabling domestic households to smooth out their consumption over time, capital flows can therefore increase welfare. This "counter-cyclical" role of world capital markets allows international risk sharing and is fully justified if shocks are temporary in nature (Agenor, 2003).

The ability to draw upon the international pool of resources that financial openness gives access to may also affect domestic investment and growth. In many developing countries, the capacity to save is constrained by a low level of income. As long as the marginal return from investment is at least equal to the cost of capital, net foreign resource inflows can supplement domestic saving, increase levels of physical capital per worker, and help the recipient country raise its rate of economic growth and improve living standards. These potential benefits can be particularly large for some types of capital inflows, most notably foreign direct investment (FDI) (Agenor, 2003).

In addition to this direct effect on growth, FDI may also have significant indirect long-run effects. As emphasized early on by Berthélemy and Démurger (2000), FDI may facilitate the transfer or diffusion of managerial and technological know-how--particularly in the form of new varieties of capital inputs--and improve the skills composition of the labor force as a result of "learning by

doing" effects, investment in formal education, and on-the-job training. In addition, as suggested by Markusen and Venables (1999), although the increased degree of competition in the product and factor markets induced by FDI may tend to reduce profits of local firms, spillover effects through linkages to supplier industries may reduce input costs, raise profits, and stimulate domestic investment.

It has also been argued that by increasing the rewards of good policies and the penalties for bad policies, the free flow of capital across borders may induce countries to follow more disciplined macroeconomic policies and thus reduce the frequency of policy mistakes (Obstfeld, 1998). To the extent that greater policy discipline translates into greater macroeconomic stability, it may also lead to higher rates of economic growth, as emphasized in the recent literature on endogenous growth. A related argument is that external financial liberalization can act as a "signal" that a country is willing (or ready to) adopt "sound" macroeconomic policies, for instance by reducing budget deficits and foregoing the use of the inflation tax (Bartolini and Drazen (1997)). From that perspective, an open capital account may also encourage macroeconomic and financial stability, ensuring a more efficient allocation of resources and higher rates of economic growth.

The experience of the past two decades has led economists and policymakers to recognize that, in addition to the potential benefits just discussed, open financial markets may also generate significant costs. Such potential costs include the high degree of concentration of capital flows and the lack of access to financing for small countries, either permanently or when they need it most; an inadequate domestic allocation of these flows, which may hamper their growth effects and

exacerbate pre-existing domestic distortions; the loss of macroeconomic stability; the pro-cyclical nature of short-term capital flows and the risk of abrupt reversals; a high degree of volatility of capital flows, which relates in part to herding and contagion effects; and risks associated with foreign bank penetration (Agenor, 2003).

There is ample historical evidence to suggest that periods of “surge” in cross-border capital flows tend to be highly concentrated to a small number of recipient countries. The dramatic increase in capital inflows in the early 1990s, for instance, was directed to only a small number of large, middle-income countries of Latin America and Asia (Fernandez-Arias and Montiel (1996)). The share of total private capital flows going to low-income countries actually fell during the 1990s (from levels that were already quite low), whereas the share going to the top ten recipients increased significantly (World Bank, 2001). Little foreign capital flows to sub-Saharan Africa as a whole, and most of what is directed to the region is limited to a few countries (such as Nigeria and South Africa) with significant natural resources (Bhattacharya et al., 1997)).

Moreover, access to these markets tends to be asymmetric (Agenor, 2003). Many developing countries (including oil producers) are able to borrow on world capital markets only in “good” times, whereas in “bad” times they tend to face credit constraints. Access is thus pro-cyclical, as discussed further below. Clearly, in such conditions, one of the alleged benefits of accessing world capital markets (the ability to borrow to smooth consumption in the face of temporary adverse shocks), is simply a fiction. Pro-cyclicality may, in fact, have a perverse effect and increase macroeconomic instability: favourable shocks may attract large capital inflows and encourage consumption and spending at levels that are

unsustainable in the longer term, forcing countries to over-adjust to adverse shocks as a result of abrupt capital reversals (Agenor, 2003).

Although the capital inflows that are associated with an open capital account may raise domestic investment, their impact on long-run growth may be limited (if not negligible) if such inflows are used to finance speculative or low-quality domestic investments--such as investments in the real estate sector. Low-productivity investments in the nontradables sector may reduce over time the economy's capacity to export and lead to growing external imbalances (Agenor, 2003).

The misallocation of capital inflows may in part be the result of pre-existing distortions in the domestic financial system (Agenor, 2003). In countries with weak banks (that is, banks with low or negative net worth and a low ratio of capital to risk-adjusted assets) and poor supervision of the financial system, the direct or indirect intermediation of large amounts of funds by the banking system may exacerbate the moral hazard problems associated with (explicit or implicit) deposit insurance. That is, lenders may engage in riskier and more concentrated (or outright speculative) loan operations.

An example of how asymmetric information problems can affect the benefits of capital inflows is provided by Razin, et. al., (1999), who focus on the impact of FDI flows. They argue that through FDI and the transfer of control that it entails, foreign investors may gain inside information about the productivity of the firm(s) that they are investing in. This gives them an informational advantage over less informed domestic investors (whose holdings of share may be insufficient to give them corporate control)—an advantage that they may be

tempted to exploit by retaining the high productivity firms and selling the low-productivity ones to partially-informed domestic savers. This type of adverse selection problems can lead to over-investment by foreign direct investors.

The large capital inflows induced by financial openness can have undesirable macroeconomic effects, including rapid monetary expansion (due to the difficulty and cost of pursuing aggressive sterilization policies), inflationary pressures (resulting from the effect of capital inflows on domestic spending), real exchange rate appreciation, and widening current account deficits (Agenor, 2003). Under a flexible exchange rate, growing external deficits tend to bring about a currency depreciation, which may eventually lead to a realignment of relative prices and induce a self-correcting movements in trade flows. By contrast, under a fixed exchange rate regime, losses in competitiveness and growing external imbalances can erode confidence in the viability and sustainability of the peg and thus precipitate a currency crisis and increase financial instability.

There is evidence that short-term capital flows to developing countries appear to be pro-cyclical. A recent World Bank study, for instance, based on data for 33 developing countries during 1986-98, found that such flows tend to increase when economic growth is cyclically faster and decline when growth rates fall (Dadush et. al., 2000). In contrast, medium- and long-term debt appeared to be weakly counter-cyclical to GDP shocks. By itself, this pro-cyclical behavior may not be a cause for concern if it results from changes in demand in the developing countries themselves. In practice, however, it often arises from external, supply-side factors, such as a sudden change in the country's terms of trade, which raises the risk perceptions of lenders; it tends therefore to magnify the impact of

a shock. Indeed, the same study found that the pro-cyclical response to be twice as large when a country faces an adverse terms-of-trade shock relative to when it faces a positive shock.

A high degree of financial openness may also be conducive to a high degree of volatility in capital movements, a specific manifestation of which being large reversals in short-term flows associated with speculative pressures on the domestic currency. The possibility of large reversals of short-term capital flows raises the risk that borrowers may face costly "liquidity runs", as discussed for instance by Chang and Velasco (2000). The higher the level of short-term debt is relative to the borrowing country's international reserves, the greater the risk of such runs will be. High levels of short-term liabilities intermediated by the financial system also create risks of bank runs and systemic financial crises.

Volatility of capital flows can also result from contagion effects. Financial contagion may occur when a country suffers massive capital outflows triggered by a perceived increase by international investors in the vulnerability of a country's currency, or, more generally, a loss of confidence in the country's economic prospects, as a result of developments elsewhere (Dornbusch, Park, and Claessens (2000), and Masson (2000)). It may also occur through two other channels, with indirect effects on the volatility of capital flows: through terms-of-trade shocks or competitiveness effects. An example of the former effect is provided by the events that followed the Asia crisis, which led to a sharp reduction in the demand for imports by crisis-stricken countries and a sharp drop in world commodity prices. By increasing the degree of uncertainty regarding the short-term economic prospects of a country, terms-of-trade shocks may translate into financial contagion--as appeared to have happened in the case

of Chile in late 1997 and early 1998. As an example of the latter effect, the sharp depreciation of the Thai baht that began in July 1997 put pressure on the currencies of neighboring countries that maintained a pegged exchange rate, in part because it implied a loss of competitiveness for these countries (Alba et al. (1999)).

2.3 Effects of Global Financial Integration on Banking System

An increasingly common argument in favor of financial openness is that it may increase the depth and breadth of domestic financial markets and lead to an increase in the degree of efficiency of the financial intermediation process, by lowering costs and “excessive” profits associated with monopolistic or cartelized markets, thereby lowering the cost of investment and improving resource allocation (Agenor, 2003).

Levine (1996) and Caprio and Honohan (1999), for instance, have argued that foreign bank penetration may: improve the quality and availability of financial services in the domestic market, by increasing the degree of bank competition and enabling the application of more sophisticated banking techniques and technology (such as more advanced risk management systems), which may improve efficiency by reducing the cost of acquiring and processing information on potential borrowers; serve to stimulate the development of the domestic bank supervisory and legal framework, if the local foreign banks are supervised on a consolidated basis with their parent; enhance a country's access to international capital, either directly or indirectly through parent banks; contribute to the stability of the domestic financial system (and reduced volatility in capital flows) if, in periods of financial instability, depositors shift their funds to foreign institutions that are perceived to be more sound than domestically-owned banks,

rather than transferring assets abroad and engage in capital flight. In addition, foreign banks may also contribute to an improvement in the overall quality of the loan portfolios of domestic banks because they are less susceptible to government pressure to lend to “preferred” borrowers--as may be the case with domestic financial institutions, particularly those in which the state is involved (Agenor, 2003).

Although foreign bank penetration can yield several types of benefits, it also has some potential drawbacks as well. First, foreign banks may ration credit to small firms (which tend to operate in the non-tradables sector) to a larger extent than domestic banks, and concentrate instead on larger and stronger ones (which are often involved in the production of tradables) (Agenor, 2003). If foreign banks do indeed follow a strategy of concentrating their lending operations only to the most creditworthy corporate (and, to a lesser extent, household) borrowers, their presence will be less likely to contribute to an overall increase in efficiency in the financial sector. More importantly, by leading to a higher degree of credit rationing to small firms, they may have an adverse effect on output, employment, and income distribution.

Second, entry of foreign banks, which tend to have lower operational costs, can create pressures on local banks to merge in order to remain competitive (Agenor, 2003). The process of concentration (which could also arise as foreign banks acquire local banks) could create banks that are “too big to fail”--as monetary authorities may fear that the failure of a single large bank could seriously disrupt financial markets. Although these potential problems could be mitigated through enhanced prudential supervision or an outright ban on mergers that are perceived to increase systemic risks sharply, they may lead to an undesirable

extension of the scope and cost of the official safety net. A too-big-to-fail problem may, in turn, increase moral hazard problems: knowing the existence of an (implicit) safety net, domestic banks may be less careful in allocating credit and screening potential borrowers. Concentration could also create monopoly power that would reduce the overall efficiency of the banking system and the availability of credit. In particular, a high degree of banking system concentration may adversely affect output and growth by yielding both higher interest rate spreads (with higher loan rates and lower deposit rates relative to competitive credit and deposit markets) and a lower amount of loans than in a less concentrated, more competitive system (Agenor, 2003).

Third, entry of foreign banks may not lead to enhanced stability of the domestic banking system, because their presence per se does not make systemic banking crises less likely to occur--as may happen if the economy undergoes a deep and prolonged recession, leading to a massive increase in default rates and an across-the-board increase in nonperforming loans, and because they may have a tendency to "cut and run" during a crisis (Agenor, 2003). To some extent, the latter effect could in principle be mitigated by strengthening prudential supervision in domestic markets and improving information sharing between supervisors in industrial and receiving countries. In practice, however, countries have very few options to prevent foreign banks from, say, cutting lines of credit to domestic borrowers in a crisis.

Goldberg, Dages and Kinney (2000) examined the lending behavior of foreign and domestic banks in Argentina and Mexico in the period surrounding the 1994-95 Mexican crisis and concluded that foreign banks exhibited stronger loan growth compared to all domestic-owned banks, with lower associated volatility,

and thereby contributed to greater stability in the amount of credit allocated by the overall financial system. Furthermore, they found strong similarities in the portfolio composition of lending and the volatility of lending by private foreign and domestic banks in Argentina, while the same was true in Mexico for banks with low levels of problem loans. Overall, they argued that bank health, and not ownership per se, was the critical element in the growth and volatility of bank credit. At the same time, however, the recent experience of other countries appears to indicate that foreign banks may indeed "cut and run" during crisis periods and may not therefore represent a stable source of domestic funding (International Monetary Fund (2000), and Marhieson and Roldós (2001)). Thus, there does not appear to be clear support for the view that a greater foreign bank presence contributes to a more stable domestic financial system and less volatility in the availability of credit. Making strong claims in these areas is thus premature.

Claessens, Demirguc-Kunt and Huizinga (2000) studied empirically the cost and profitability effects of foreign banks, in both developed and developing countries. They considered a sample consisting of bank-level data for 80 countries covering the period 1988-95, with about 7900 individual commercial bank observations. They considered a bank to be foreign-owned if 50 percent or more of its capital was owned by foreign residents. They found that increased penetration of foreign banks in the domestic banking system (as measured by the relative importance of foreign banks in either the total number of banks, or total assets, of the banking system) is associated with a reduction in both profitability and overhead costs for domestic banks. By contrast, the effect on net interest margins (that is, the ex post spread between lending and deposit rates), which

can be viewed as a measure of the efficiency of financial intermediation, is not significant.

Demirgüç-Kunt and Huizinga (1999), using a similar data set, found that differences in interest margins and bank profitability reflect a variety of determinants: bank characteristics, macroeconomic conditions, explicit and implicit bank taxation, deposit insurance regulation, overall financial structure, and underlying legal and institutional indicators. A larger ratio of bank assets to gross domestic product and a lower market concentration ratio lead to lower margins and profits, controlling for differences in bank activity, leverage, and the macroeconomic environment. Foreign banks were found to have higher margins and profits than domestic banks in developing countries, while the opposite held in industrial countries. They also found that the corporate tax burden was fully passed onto bank customers, whereas higher reserve requirements were not, especially in developing countries. Overall, therefore, the evidence appears to suggest that the competitive pressures created by foreign bank entry led to improvements in banking system efficiency.

However, the fact that this conclusion holds "on average" across a large group of countries (given the very nature of regressions with pooled, time-series cross-section data) cannot be construed as supportive evidence for any particular subset of countries or country. A particular problem with the above studies is that, in part to alleviate degrees-of-freedom problems, the authors perform their estimation in samples consisting of both industrial and developing countries. However, it is not obvious that pooling countries with very different financial characteristics is warranted; because proper statistical tests for the adequacy of pooling are not reported by the authors, one cannot conclude that their results

hold for any group of developing countries--nor, for that matter, any particular country.

Clarke et al. (2000), for instance, used data for the period 1995 to 1997 to analyze the impact of foreign entry on domestic banks in Argentina and found that foreign penetration increased overall efficiency in the banking sector and raised competitive pressures on domestic financial institutions. However, their analysis did not address the issue of adverse effects on credit allocation to small and medium-sized enterprises. 20 Research on Argentina and other countries in Latin American and elsewhere--such as Brazil, where foreign bank penetration increased also significantly in the second half of the 1990s--is necessary to assess the robustness of their policy conclusions.

2.4 Financial Integration and Commercial Bank Financial Stability

Aziakpono (2007) examined the effects of financial integration on financial development and economic performance of the SACU countries within a country-specific framework. The paper employed four measures of financial integration, two measures of financial development and real per capita output and annual time series from 1970 to 2004 for the analysis. The econometric analyses were carried out using the Johansen cointegration and error correction modelling techniques. The effects of financial integration were mixed, but what is apparent is that countries that are more integrated to South Africa produce more discernible evidence of positive effects of financial integration. The paper attributed the weak gains from the official integration arrangement to weak institutional and structural impediments in the countries.

Eozonou (2008) analyzed the relationship between international financial integration and macroeconomic volatility. The study examined empirically the interaction effects between domestic financial sector and international financial integration. The study used GMM-IV estimator to ask (1) whether financial integration has a significant impact on macroeconomic volatility, and (2) whether this relationship depends on the level of financial development. Looking at a panel of 90 countries over the period 1960-2000, the study found that domestic financial conditions matter when assessing the impact of financial integration on consumption growth volatility. More specifically, consumption growth volatility is found to increase with the degree of financial integration in countries with low level of financial development and to decrease in countries with high level of financial development. When measuring domestic financial conditions by the share of private credits to GDP, the threshold level of financial development above which financial integration yields consumption smoothing benefits is estimated to be around 60%-70% GDP.

Various empirical studies have found that the cost of financial instability is high. For example, Hoggarth and Saporta (2001) find that the average fiscal costs of banking resolution across countries are 16% of GDP. For emerging countries the figure is 17.5% and for developed countries it is 12%. Although these costs are substantial, they are much lower than the costs, estimated at 23% of GDP, of banking and currency crises occurring together. A proportion of the fiscal costs are transfers, so these figures do not represent the deadweight economic costs.

A number of studies measure the cumulative output loss resulting from a financial crisis by using the deviation from trend output. Table 2 gives estimates for these costs. The average cumulative output loss for all crises is 16.9% of GDP.

Here the costs of twin crises are again higher: the loss caused by twin banking and currency crises is 29.9% of GDP versus 5.6% for banking crises alone. However, in contrast to fiscal costs, developed countries have a greater loss, 23.8% of GDP, than emerging countries, 13.9% of GDP.

The large literature on the efficiency of the banking industry (for a survey see, e.g., Berger and Humphrey (1997)) is mostly concerned with the cost- and profit-efficiency of retail banking. For example, Canoy et al. (2001) summarize the evidence as suggesting that the average bank operates at a cost level that is 10 or 20 percent above the best-practices level. This is just one (probably small) part of the total costs of deviations from perfect competition. Unfortunately, the total costs of a deviation from perfect competition have not been documented as carefully as the costs of financial instability.

Given the large and visible costs of financial instability, it is natural for policymakers to make the avoidance of financial crises a high priority. By contrast, the difficulty of measuring the efficiency costs of concentration may suggest that competition policy warrants a lower priority. In fact, the uncertainty about the costs of concentration together with the perceived (negative) tradeoff between competition and financial stability may actually encourage policymakers to favor concentration at the expense of competition policy. This subordination of competition policy to financial stability may be unwise for a number of reasons, however. In the first place, the extent to which there is a negative tradeoff between competition and financial stability may be questioned. The costs of financial crises are undoubtedly high, but it does not follow that it is necessary to reduce competition to avoid those costs. Secondly, the wide range of estimates of the efficiency costs from concentration is at least consistent with a

high efficiency gain from greater competition. Thirdly, the costs of financial crises occur infrequently, perhaps every decade or few decades, whereas the inefficiency costs concentrations are borne continuously.

2.5 Summary

This section has reviewed the analytical arguments for and against financial integration and examined whether the empirical evidence suggests that countries can expect net benefits from it and, if so, what conditions are required to maximize them. A first issue addressed in the paper is the view that, in principle, financial openness allows countries to use international capital markets to diversify and hedge against both idiosyncratic and global risks, particularly when those risks are temporary. It was argued that, in practice, this alleged benefit is often a mirage for small developing countries, which often get access to these markets (if at all) only in “good” times; as a result, the opportunities for global risk sharing and consumption smoothing are simply not there.

A second issue discussed in the section is the role of entry of foreign banks. Some of the recent evidence on the effects of foreign bank penetration appears to support the view that the competitive pressures that it creates have led to improvements in the efficiency of domestic banks and financial intermediation in general in terms of lower operating costs and reduced net interest margins. Nevertheless, despite creating the possibility of costly crises, global financial integration appears to hold significant benefits in terms of economic growth—particularly when the capital inflows that it leads to take the form of FDI.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section presents the study methodology. Section 3.2 is the research design. Section 3.3 is the population of study. Section 3.4 discusses the sample size and sampling technique,. Section 3.5 presents data collection method and procedures. Lastly, section 3.6 explains the data analysis techniques used in the study.

3.2 Research Design

This was a relational study designed to establish the effect of global financial integration on financial stability of commercial banks in Kenya.

3.3 Population

The population of study was all the 43 commercial banks operating in Kenya. These were the commercial banks registered and operating in Kenya under the watch of Central Bank of Kenya. Commercial banks were targeted because they are more likely to be affected when economies are financially integrated than any sectors of the economy. Given that previous studies, as outlined in the literature review section of this study had shown that financial institutions are more likely to feel the brunt of financial integration especially in developing countries like Kenya, it was appropriate to target commercial banks.

3.4 Sample and sampling technique

Given that the number of banks in Kenya was not so large and that there was readily available data on their financial performance, the study selected all commercial banks that had their financial data published in the recently released Banking Survey (2009) for the entire period of study. All the 43 commercial

banks were finally used in the survey hence a census of commercial banks in Kenya.

3.5 Data collection

The study used secondary data. The type of secondary data sought were financial statements for the selected commercial banks which were found from Banking Survey (2009). Here, the information on equity capital, reserves, assets, and return for the entire period of study was sought. This information was appropriate for forming stability indices for analysis.

Data on foreign direct investment as a proxy for financial integration were also sought from secondary sources. This information was available from UNCTAD (2009) Handbook of Statistics as well as from the UNCTAD website. These were therefore the two main sources that were used to collect such information.

3.6 Research Models

3.6.1 Conceptual Model

The primary dependent variable was the z-score as a measure of individual bank risk. The z-score has become a popular measure of bank soundness (for example Boyd and Runkle, 1993; and Maechler, et. al, 2005). Its popularity stems from the fact that it is inversely related to the probability of a bank's insolvency, i.e., the probability that the value of its assets becomes lower than the value of the debt. The z-score can be summarized as $z=(k+\mu)/\sigma$, where k is equity capital and reserves as percent of assets, μ is average return as percent of assets, and σ is standard deviation of return on assets as a proxy for return volatility. The z-score measures the number of standard deviations a return realization has to fall in order to deplete equity, under the assumption of normality of banks' returns. A

higher z-score corresponds to a lower upper bound of insolvency risk—a higher z-score therefore implies a lower probability of insolvency risk. The bank stability (z-score) was measured for a five year period for each of the selected banks beginning 2004 – 2008.

Financial integration has been measured in two ways: de jure measures and de facto measures (Schindler, 2009). De jure measures aim to reflect the extent to which countries impose legal restrictions on cross-border financial flows. On the other hand, de facto measures are outcome-based measures aimed to capture a country's actual degree of financial integration.

The de jure measures have some drawbacks. As Schindler (2009) summarises, they do not reflect the extent to which legal controls are enforced in practice; even the more disaggregated indices may not capture subtle, but possibly important differences between countries' capital control regimes; and they do not necessarily reflect a country's actual degree of financial integration, which is presumably the key issue of interest.

Dell'Ariccia and others (2008) document that even countries with relatively closed capital accounts became substantially more financially integrated over the past decades. De facto indicators avoid these issues by focusing directly on outcomes. Thus, the study used de facto measures for financial integration. In this study, financial integration was measured by the amount of foreign direct investment (FDI) for a five year period beginning 2004 – 2008.

3.6.2 Analytical Model

From the foregoing discussion, the following regression model was used for purposes of testing the relationship between financial integration and bank stability:

$$STAB_{i,j} = \alpha_{i,j} + \beta_{i,j} FINIT + \varepsilon_{i,j}$$

Where:

α , β , and ε = are constants for various commercial banks for the period of study.

STAB = is the dependent variable measuring stability of commercial.

FINIT = is the independent variable measuring financial integration.

To perform the regression, the Statistical Package for Social Sciences (SPSS) was used. The original data from the financial statements of each of the selected commercial banks was entered in Microsoft Excel for purposes of determining the z-score. Data for z-score and FDI were then entered in the SPSS for the entire period and analysed. The resulting t-statistics and the coefficient of determination R^2 were interpreted as the effect of financial integration on stability of commercial banks in Kenya. The significant influence of financial integration on bank stability was interpreted at 95% level of confidence. This helped show whether financial integration significantly influences stability of commercial banks.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

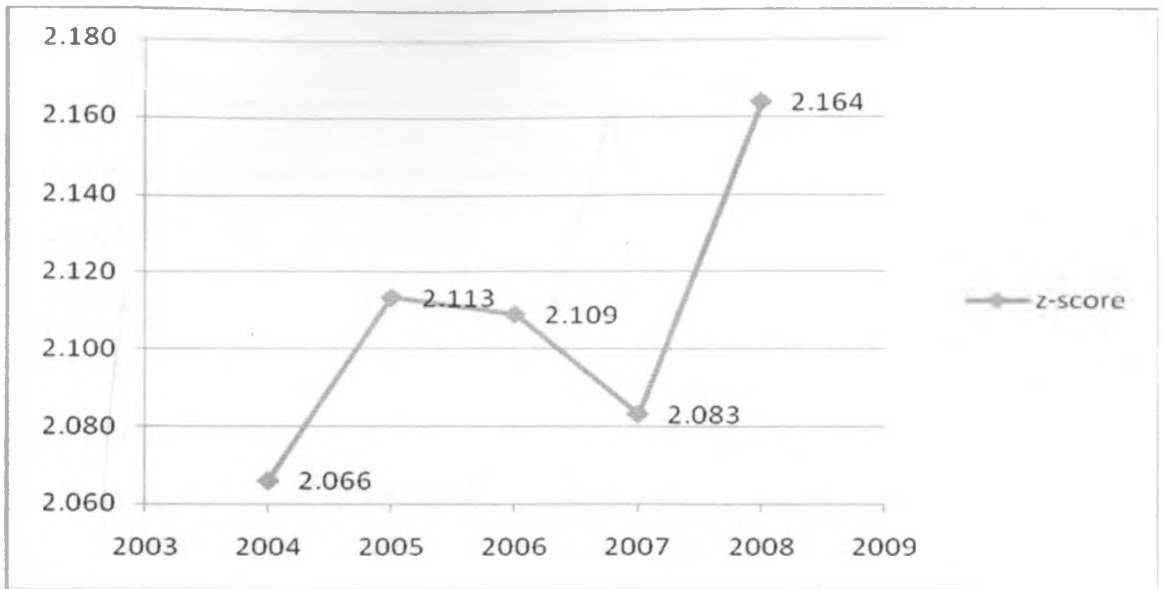
This chapter presents the results of the study. The section 4.2 presents the results on the financial stability of commercial banks as measured by the z-score. Section 4.3 presents results on FDI inflows which measure the financial integration. Lastly section 4.4 present results of the effect of financial integration on commercial bank stability in Kenya.

4.2 Financial Stability of Commercial Banks

The financial stability of commercial banks was measured using Z-score. As shown in Figure 4.1, the study found that the Z-score was lowest in 2004 at 2.066. This rose to 2.113 in 2005 before falling to 2.109 in 2006 and further dipping to 2.083 in 2007. This deep can be explained as being a result of the post election violence in 2007. This may have affected the financial markets.

The highest score was in 2008 at 2.164. Given that the higher Z-scores imply lower probabilities of insolvency, the commercial banks were more stable in 2008 and least stable financially in 2004. Thus, it can be construed that the financial stability of commercial banks has generally been rising. This rise in financial stability can be attributed to strict guidelines by the Central Bank of Kenya as well as sound financial management practices employed by the management of various commercial banks in Kenya. The stability rise can also be attributed to a smoother political environment in 2008 after the post election violence.

Figure 4.1: The Stability of Commercial Banks in Kenya 2004-2008



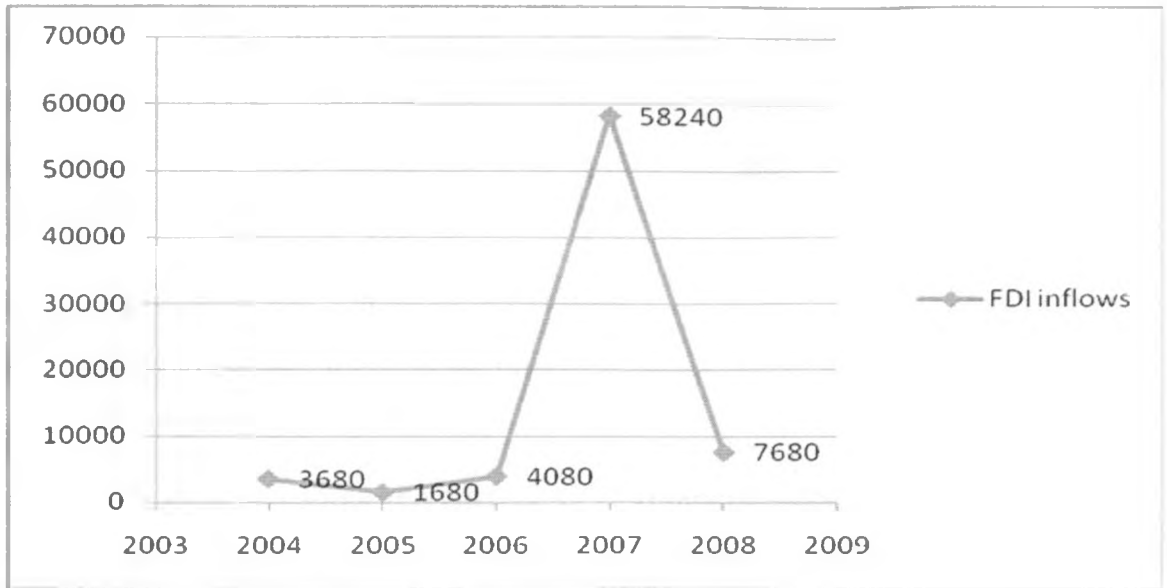
Source: Author (2009)

4.3 Foreign Direct Investment flows for 2004-2008

The FDI inflows show that the FDI inflows were low in the period 2004-2006. These figures are in millions of shillings. As shown, the FDI flows rose in 2007 to Kshs. 58,240 M before sharply dropping to Kshs. 7,680 M in 2008. These results are shown in Figure 4.2. The fall in FDIs can be attributed to the global economic crisis that began in 2008. This has made most of the foreign investors become more cautious in investing in the financial markets hence the drop in FDIs.

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Figure 4.2: Level of Financial Integration of Kenya 2004-2008



Source: Author (2009)

4.4 Effect of financial integration on financial stability of commercial banks

The effect of financial integration on financial stability was tested using t-statistics and R². As shown in Table 4.1, the R square was 0.092 showing that financial integration influenced up to 9.2% of the variance in financial stability.

Table 4.1: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.303	.092	-.211	.04098

The analysis of variance (ANOVA) presented in Table 4.2 show that the regression does not significantly explain the variance in the model. The significance was very low at 0.620. Most of the variance in the model is therefore as a result of other factors other than financial integration. These may be legislation, economic growth or management issues.

Table 4.2: ANOVA

	Sum of Squares	df	Mean Square	F	p-value
Regression	.001	1	.001	.303	.620
Residual	.005	3	.002		
Total	.006	4			

Predictors: (Constant), Financial integration

Dependent Variable: Financial stability

Results in Table 4.3 show the coefficient of financial integration in the model as well as the t-statistics for the model. As shown, financial integration did not have a significant influence on financial stability of commercial banks. The t-statistic was very low at -.550. The negative coefficient implies that financial integration may have a negative implication of stability of commercial banks. But the t-statistics indicate that this effect on stability is insignificant.

Table 4.3: Relationship between Stability and Financial Integration

	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std. Error	Beta		
Constant	2.114	.022		94.704	.000
Financial integration	-0.00000047	.000	-.303	-.550	.620

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This section presents the summary of the study, conclusions made from the study as well as study recommendations. The section also presents suggestions on areas that need further research.

5.2 Summary

The objective of this study was to examine the effect of global financial integration on financial stability of commercial banks in Kenya. Secondary data from the financial statements of various commercial banks in Kenya were sought as well as data from the UNCTAD on foreign direct investments. These were used to perform regression analysis. The key findings were as follows.

The study found that financial stability of commercial banks as measured by the Z-score generally rose within the period of study. The study found that the Z-score was lowest in 2004 at 2.066. This rose to 2.113 in 2005 before falling to 2.109 in 2006 and further dipping to 2.083 in 2007. The highest score was in 2009 at 2.164.

Financial integration as measured by the FDI inflows in Kenya was found to be improving over the years generally. The study found that the FDI inflows were low in the period 2004-2006. The FDI inflows rose in 2007 to Kshs. 58,240 M before sharply dropping to Kshs. 7,680 M in 2008. The Kenyan market is therefore increasingly becoming more and more globally integrated given the FDI inflows.

The study found that financial integration had a generally negative influence on stability of commercial banks as shown from its coefficient of determination. The R square was 0.092 showing that financial integration influenced up to 9.2% of the variance in financial stability. The analysis of variance shows that the regression did not significantly explain the variance in the model. The significance was very low at 0.620.

From the coefficient of financial integration in the model, the study found that the t-statistic was very low at -0.550 hence leading to the fact that financial integration did not have a significant influence on financial stability of commercial banks in Kenya.

5.3 Conclusions

The study sought to examine the effect of global financial integration on financial stability of commercial banks in Kenya. The results show that the Kenyan banking sector has generally been experiencing more stability over the years. The Z-score values were found to increase over the years suggesting that there was a low probability to insolvency of commercial banks.

On the level of global financial integration as was measured by the FDI inflows, the study found that there has been a general upward trend in the FDI inflows in Kenya. This therefore suggests that the market has generally become more financially integrated over the years.

It was noted from the analysis that there was a negative correlation between global financial integration and financial stability of commercial banks in Kenya. The tests of significance at 95% confidence level failed to establish a significant

effect of global financial integration on financial stability of commercial banks in Kenya. Thus, much of the variance in financial stability of commercial banks was as a result of other factors not tested in this study. These results therefore support the critics such as Eatwell (1997), Rodrik (1999) and Rogoff (2002) who do not agree that financial integration is beneficial to stability of financial markets in developing countries.

5.4 Policy Recommendations

The study recommends that since global financial integration has been found to have a negative influence on the financial stability of commercial banks in Kenya, the Government needs to be cautious when setting up policies that open up the Kenyan market to foreign investors. This is especially important at this time when the world is experiencing global economic recession which may have the implication of increasing volatility of Kenyan financial market.

The management of various commercial banks in Kenya should use this study as a basis for putting in place strategies to attract more capital from foreign investors but at the same time ensuring that sound financial management practices are upheld. This needs to be done in caution putting in mind the regulations relating to ownership and capitalisation as well as ensuring that it does not compromise on bank stability especially in times of financial crises.

5.5 Limitations of the study

The major study limitation was the period the study covered. The 5 year period may not have been sufficient enough to provide sound results on the effect of financial integration on financial stability. Another limitation was that the study

was a case of commercial banks in Kenya. If the study would have been done for several countries around the globe, the results may have provided more conclusive results.

5.6 Recommendations for further research

More studies need to be done in this area to establish the determinants of financial stability of commercial banks in Kenya. This will help bring into focus the factors that need to be considered for future analysis in the study of such context. Further, studies need to be done in this area to establish what other effects financial integration has had on various sectors in Kenya and the Kenyan development as a whole. This will help get a clear picture on whether the influence of financial integration has been beneficial to the Kenyan economy.

REFERENCES

Agenor, P. R. (2003) "Benefits and Costs of International Financial Integration: Theory and Facts" *The World Economy*, 26(8): 1089-1118

Alba, Pedro, Amar Bhattacharya, Stijn Claessens, Swati Ghosh, and Leonardo Hernandez, (1999) The Role of Macroeconomic and Financial Sector Linkages in East Asia's Financial Crisis, in *Financial Crises: Contagion and Market Volatility*, ed. by Pierre-Richard Agénor, Marcus Miller, David Vines, and Axel Weber, Cambridge University Press

Arestis, P. and P. Demetriades (1997) Financial Development and Economic Growth: Assessing the Evidence, *Economic Journal*, 107(442): 783-799

Aziakpono, J.M. (2007) *Effects of Financial Integration on Financial Development and Economic Performance of the SACU Countries*, Paper for presentation at the ECA/ADB African Economic Conference, 15-17 November

Baele, L., Ferrando, A., Hördahl, P., Krylova E. and Monnet C. (2004) *Measuring Financial Integration In The Euro Area*, Occasional Paper Series, European Central Bank

Bartolini, Leonardo, and Allan H. Drazen, (1997) Capital Account Liberalization as a Signal, *American Economic Review*, 87: 138-54

Berthélemy, Jean-Claude, and Sylvie Démurger, (2000) Foreign Direct Investment and Economic Growth: Theory and Application to China, *Review of Development Economics*, 4: 140-55

- Bhagwati, J. (1998)** The Capital Myth: The different between Trade in Widgets and Dollars *Foreign Affairs*, 77(3): 7-12
- Bhattacharya, Amar, Peter J. Montiel, and Sunil Sharma, (1997)** Private Capital Inflows to sub-Saharan Africa: An Overview of Trends and Determinants, in *External Finance for Low-Income Countries*, edited by Zubair Iqbal and Ravi Kanbur, the World Bank, Washington DC
- Boyd, John H., and David E. R. (1993)** Size and Performance of Banking Firms, *Journal of Monetary Economics*, 31: 47–67.
- Caprio, G. and Honohan, P. (1999)** Restoring banking stability: beyond supervised capital requirements, *Journal of Economic Perspectives*, 13(4): 43-64
- Chang, Roberto, and Andrés Velasco, (2000)** Banks, Debt Maturity, and Financial Crises, *Journal of International Economics*, 51: 169-94
- Dadush, Uri, Dasgupta, Dipak, and Dilip Ratha, (2000)** The Role of Short-term Debt in Recent Crises, *Finance and Development*, 37: 54-57
- De Gregorio, Jose (1998)** *Financial Integration, Financial Development and Economic Growth*, Available from http://faculty.faqha.duke.edu/charvey/spur/Gregorio_Financial_integration_financial.pdf.
- Dell’Ariccia, Giovanni, Julian di Giovanni, André Faria, Ayhan Kose, Paolo Mauro, Jonathan Ostry, Martin Schindler, and Marco Terrones (2008)** *Reaping the Benefits of Financial Globalization*, IMF Occasional Paper 264
- Demirguc-Kunt, A and Levine, R. (1996)** Stock markets, corporate finance and economic growth: an overview, *World Bank Economic Review*, 10(2): 223-39

- Dornbusch, Rudiger, Yung Chul Park, and Stijn Claessens, (2000)** Contagion: Understanding How It Spreads, *World Bank Research Observer*, 15: 177 –97
- Eatwell, J. (1997)** *International Financial Liberalization: The Impact on World Development*, Discussion paper series 12, New York: Union Nations Development Programme
- Edison, H., Levine, R., Ricci, L. and Slok, T. (2002)** International Financial Integration and Economic Growth, *Journal of International Money and Finance*, 21: 749-776
- Edwards, S. (2001)** *Capital Mobility and Economic Performance: Are Emerging Economies Different?* Working paper series no 8076. National Bureau of Economic Research (January)
- Eozenou, P. (2008)** *Financial Integration and Macroeconomic Volatility: Does Financial Development Matter?* NBER Papers
- Fernandez-Arias, Eduardo, and Peter J. Montiel, (1996)** The Surge in Capital Inflows to Developing Countries: An Analytical Overview, *World Bank Economic Review*, 10: 51-77
- Goldfajn, I. and Valdes, R.O. (1996) *Balance of Payment Crises and Capital Flows: the Role of Liquidity*, Department of Economics, Brandeis University, Waltham, Mass
- Hausmann, R. and Gavin, M. (1995)** *Securing Stability and Growth in a Shock-Prone Region: the Policy Challenge for Latin America*, IADB, Washington D.C.
- Kaminsky, G.L. and Reinhart, C.M. (1996)** The Twin Crises: the Causes of Banking and Balance of Payment Problems, Board of Governors of the Federal Reserve, *International Finance Discussion Paper 544*, March, Washington D.C.

Kiehlborn, T. (2005) Effects of EU Financial integration on banking configuration and coordination strategies - Propositions and evidence, <http://www.finance.uni-frankfurt.de>

Klein, M. W. (2003) *Capital account openness and the varieties of growth experience*, Working paper series no 9500, National Bureau of Economic Research (February)

Klein, M. W. and Olivei, G. (1999) *Capital account liberalization, financial depth and economic growth*, Working Paper Series No 7384, National Bureau of Economic Research (October).

Korir, P. (2007) Factors That Make Regional Integration Attractive To International Capital Inflows – A Case Study of the EACU, *Unpublished MBA Project*, University of Nairobi

Kraay, A. (1998) In search of the macroeconomic effects of capital account liberalization.

http://siteresources.worldbank.org/DEC/Resources/22237_CALMacroEffects_Manuscript.pdf

Lane, P. R. and Milesi-Ferretti, G. M. (2003) *International financial integration*, Working Paper WP/03/86, Washington D.C.: International Monetary Funds

Levine, R. (1996) *Foreign banks, financial development and economic growth*, *International Financial Markets: Harmonization versus Competition*, pp. 224-54, Washington D.C.: AEI Press

Macharo, C.M (2003) FDI Determinants: The Case of Citibank's Clients Investing in Kenya, *Unpublished MBA Project*, University of Nairobi

Maechler, A., Srobona M., and DeLisle W. (2005) *Exploring Financial Risks and Vulnerabilities in New and Potential EU Member States*, Second Annual DG ECFIN Research Conference: Financial Stability and the Convergence Process in Europe, October 6–7

Markusen, James R., and Anthony J. Venables, (1999) Foreign Direct Investment as a Catalyst for Industrial Development, *European Economic Review*, 43: 335-56

Masson, Paul R., (2000) Multiple Equilibria, Contagion, and the Emerging Market Crises, in *Financial Crises in Emerging Markets*, ed. By Reuven Glick, Ramon Moreno, and Mark M. Spiegel, Cambridge University Press: Cambridge

Nissanke, M. and Stein, H. (2003) Financial Globalization and Economic Development: Toward an Institutional Foundation, *Eastern Economic Journal*, 29(2): 287- 308

Nyamweya, M. (2006) An Analysis Of The Relationship Between Macro Economic Indicators and The Flow Of FDIs In Kenya, *Unpublished MBA Project*, University of Nairobi

Obstfeld, M. (1998) The global capital market: benefactor or menace?, *Journal of Economic Perspectives*,. 12: 9-30

Obstfeld, M. and Taylor, A. M. (2004) *Global Capital Markets: Integration, Crisis, and Growth*, New York: Cambridge University Press

Quinn, D. P. (1997) The correlates of change in international financial regulation, *American Political Science Review*, 91: 531-51

Razin, Assaf, Efraim Sadka, and Chi-wa Yuen, (1999) *Excessive FDI under Asymmetric Information*, Working Paper No. 7400, National Bureau of Economic Research

Reisen, H. and Soto, M. (2001) Which type of Capital Inflows foster Developing Country Growth?, *Journal of International Finance*, 4(1): 1-14.

Rodrik, D. (1999) *The New Global Economy and Developing Countries: Making Openness Work*, Overseas Development Council, Policy Essay No 24, Washington, D.C. distributed by the John Hopkins University Press, Baltimore, Maryland.

Rogoff, K. (2002) Rethinking capital controls: when should we keep an open mind? *Finance and Development*, 39(4): 55-56.

Sachs, J., Tornell, A., and Velasco, A. (1996) Financial Crises in Emerging Markets: the lessons from 1995, *NBER Working Paper 5576*, Cambridge, Mass

Schindler, M. (2009) *Measures of Financial Integration*, IMF Research Bulletin, March

Van Horen, N. (2005) Economic Effects of Financial Integration for Developing Countries, *Research Thesis*, Tinbergen Institute Research Series

Weche, E.B. (2006) The Impact Of Taxation On FDI In Kenya, *Unpublished MBA Project*, University of Nairobi

World Bank (1997) *Private Capital Flows to Developing Countries: the Road to Financial Integration*, Oxford University Press: New York

World Bank (2001), *Global Development Finance 2001*, the World Bank Washington DC

APPENDICES

Appendix 1: Financial Stability and Financial Integration

Year	Equity	Assets	Return	K	μ	δ	Z	FDI (In KSh'000)
2004	1679.3	13505.6	1608.4	0.124	0.12	0.118	2.066	3680
2005	1958.9	15191.45	1907.2	0.129	0.13	0.120	2.113	1680
2006	2304.6	18006.38	2274.3	0.128	0.13	0.121	2.109	4080
2007	3005.0	23404.31	2641.0	0.128	0.11	0.116	2.083	58240
2008	3892.1	28234.3	3529.7	0.138	0.13	0.121	2.164	7680

Appendix 2: Financial Data for Commercial Banks

Bank name	Equity + reserves					Assets					Return				
	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
ABC	505	541	677	812	1108	4188	5140	5357	6143	6757	447	569	669	824	986
BANK OF AFRICA	1662	1263	978	676	649	4942	5373	6488	7657	12304	148	449	604	794	1054
BANK OF BARODA	969	1069	1263	1583	1910	8335	9265	11773	14759	18361	734	852	1164	1495	2004
BANK OF INDIA	959	858	1023	1312	1690	6039	7206	8702	10344	12049	422	621	866	1198	1473
BARCLAYS BANK	12295	13177	14862	17564	20463	110083	104522	117722	157656	168510	14354	15185	16615	21113	27438
CFC-STANBIC	1731	2029	2739	3362	7118	11492	14994	25824	34469	83166	932	1507	2408	3170	6677
CHASE BANK	526	574	636	718	845	2082	2613	4123	5776	10300	216	299	460	705	1112
CITIBANK	3510	5355	6256	7330	9190	25108	30928	37794	47301	47535	1899	2710	3491	3717	5542
CITY FINANCE BANK	417	371	354	326	323	543	511	527	744	538	58	58	42	44	98
COMMERCIAL BANK OF AFRICA	1962	2286	3717	4720	5182	20189	29539	37438	42011	55202	1500	2480	3371	4167	5766
CONSOLIDATED BANK	565	706	722	748	846	2753	2916	3437	4109	4657	371	452	537	674	791
CO-OPERATIVE BANK	3394	4067	5219	6855	13994	46434	51830	58038	65709	83871	4781	6797	7996	9051	11379
CREDIT BANK	419	464	510	562	666	2708	2798	2610	3358	3637	250	351	340	405	441
DEVELOPMENT BANK	974	1056	1073	1149	1232	2219	2718	3270	4678	6494	280	274	352	496	647

DIAMOND TRUST BANK	1437	1652	2868	547 9	702 0	1117 2	16384	21737	35998	5614 6	5910	3704	2360	1816	1015
DUBAI BANK	373	386	397	403	411	920	1153	1248	1544	1639	172	199	213	254	281
ECOBANK	604	1287	1571	166 3	174 3	4210	8856	8910	9426	1049 9	402	507	1010	1063	1097
EQUATORIAL BANK	508	579	617	670	674	2873	3671	3962	4879	4409	288	347	411	445	544
EQUITY	1271	1594	2201	149 17	195 38	6707	11457	20024	53129	7883 7	1099	1885	3498	6317	13968
FAMILY BANK				127 7	155 7				8569	1041 0				1168	2094
FIDELITY BANK	262	269	283	313	424	1565	1667	2314	3192	4329	166	232	308	400	573
FINA BANK	871	966	1184	150 8	178 1	8386	8638	9785	11623	1436 6	639	965	1095	1405	1756
FIRST COMMUNITY BANK					775					3180					22
GIRO BANK	431	452	495	528	608	4744	4926	5098	56111	5938	719	665	591	516	430
GUARDIAN BANK	715	757	788	805	835	4112	4451	4917	5540	5558	405	479	564	586	753
GULF AFRICAN BANK				155 5	127 3				1766	5000				1	252
HABIB AG ZURICH	448	543	650	742	774	4451	4743	5323	6206	6557	262	423	462	522	610
HABIB BANK	413	428	446	522	620	3378	2890	2963	3845	4491	257	256	268	339	369
HOUSING FINANCE BANK	2410	1272	1373	144 6	365 2	1075 1	9861	9134	10369	1429 4	1369	1199	1206	1158	1533
I&M BANK	1851	2056	2795	386 7	518 8	1491 2	18046	22348	29420	3665 6	1285	1923	2589	3414	4417
IMPERIAL BANK	927	1122	1443	158 0	191 2	5814	7778	9496	11723	1343 2	1142	1504	1929	2473	2880
KENYA COMMERCIAL BANK	8580	1008 2	11620	132 05	210 87	6960 0	78315	92527	12048 0	1912 12	8404	10024	1290 3	15766	24919
K-REP BANK	765	804	898	101	112	2710	3800	5220	7039	8184	459	590	947	1345	1567

				8	9										
MIDDLE EAST BANK	734	794	842	879	877	3983	4051	3401	3097	3297	262	426	375	372	362
NATIONAL BANK OF KENYA	2625	3223	3848	496	620	3059	32584	36123	41414	4269	4648	5226	6175	5456	5884
NIC BANK	2644	2793	3036	473	556	1664	20700	26062	31281	4261	1361	2313	2894	3554	4923
ORIENTAL BANK	388	723	673	819	944	1630	1376	1449	1695	2289	89	156	109	416	239
PARAMOUNT UNIVERSAL BANK	292	304	426	456	492	1327	1494	2197	2367	2646	137	152	251	274	327
PRIME BANK	670	722	1318	192	307	5703	7154	10452	13862	1994	521	716	969	1285	2028
SOUTHERN CREDIT BANK	486	519	551	534	483	3822	4221	4598	5218	5171	492	566	620	698	745
STANDARD CHARTERED BANK	6063	9589	10130	109	114	6711	72842	81014	91122	9902	6723	8514	9519	11121	11745
TRANS-NATIONAL BANK	1009	1060	1122	110	123	2368	2035	2566	3221	3414	463	325	384	469	552
VICTORIA COMMERCIAL BANK	507	562	581	657	763	3620	4212	4284	4131	4460	268	389	405	437	484
Average	1679	1958.	2304.6	300	389	1350	15191	18006	23404	2823	1608.	1907.	2274.	2641.	3529.
	.3	85	25	5	2	5.6	.45	.38	.31	4.3	35	225	25	024	698