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Risk Control versus Risk Management in the Context of an Active Management: The Emerging Market Alternative

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Abstract The regulatory environment to which financial institutions and specially banks are subjected has been evolving over the years. However, global financial sector stability has remained elusive with the global economy experiencing more financial crises in the past decade than the preceding decades. These financial tremors have had their epicenters in the advanced economies triggered by events in the banking industry. Further, economic growth in the developed economies has been very low and sometimes negative with close to 50 percent of the stock market value having been wiped out by the 2007/2008 global financial crisis. Against a backdrop of improved bank supervision and regulation courtesy of the Basel frameworks the Eurozone economies are reeling in recession. On the other hand the emerging and transitional economies have for the past close to a decade and a half showed resilient and outstanding performance with less stringent supervisory regimes enabling commercial banks to earn high profits. The profitability of the industry bolsters investment and recurrent expenditure all of which have the effect of fueling inflation and volatile exchange rates which accelerate economic growth, high interest and lending rates as well as market liquidity. These conditions provide opportunities for arbitrage trading that gives above average returns on investment as exemplified by the trend analysis. The high economic growth comes with attendant high inflation, lending rates and returns on government securities. The study set out to determine whether the high return environment within developing economies provides arbitrage investment opportunities and influences foreign investment by attracting foreign investment participation in government securities trading. The specific objectives were to demonstrate the adverse effects including the systemic vulnerabilities imposed by excess competition occasioned by thorough regulation and to empirically determine whether higher high exchange, lending, Tbill and Tbond rates attract foreign investment to developing economies with focus on Kenyan government securities. The study adopted secondary time series data analysis to establish whether or not lending rates, USD exchange rates, Tbond and Tbill rates affect foreign investment in government securities. The time series data analysis confirmed that in the long run, Tbond, USD exchange and lending rates all significantly influence the foreign investment in Kenya vide the Treasury bonds avenue. Based on these findings we conclude that emerging and transitional economies offer a perfect arbitrage investment opportunity for low return advanced economies.

Keywords: *Risk, management, economic, crisis, banking, performance, Tbond, Tbill, exchange rate, lending rate, regulation, developed, emerging, financial*

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1. Introduction

1.1. Background of the Study

The globalization of trade and financial markets and the associated liberalization of international capital markets may be the most important economic development of the late 20th century. However, the increased volatility of global financial markets partly due to unsound financial and banking systems and deficiencies in regulatory intervention could be a threat to the benefits of the past two or so decades. While the long-term benefits of financial liberalization and globalization are not in doubt, the seamless integration of global markets and the frequency of financial sector problems in developed countries is a source of concern. Financial markets have evolved over the decades and with them the level and sophistication of risk regulatory frameworks. Despite these, financial sector stability seems all the more elusive, like a mirage it keeps receding the closer we get to it.

Generally speaking, we should be better prepared to today, to deal systemic risks confronting the financial systems and global economy than we were yesterday. However, recent events from the Asian crisis, the dotcom bubble, the 2007/2008 financial crisis and the Eurozone crisis seem to tell a different story. The pattern of the financial sector stability seems to point towards greater fragility and volatility in advanced economies than in

emerging and underdeveloped economies. Whatever the cause of the financial sector fragility, two facts are apparent. The first is that the epicenter of the global economic tremors is primarily in the banking industries of advanced economies. Secondly, the weak regulation framework in the emerging markets seems to support stability. Financial crises, as we shall see, are triggered either by innovation, vulnerabilities in the financial sector and/or dwindling economic growth prospects.

The integration of these similarly regulated markets amplifies correlation risk and the overall susceptibility of the entire system to shocks emanating from any of the single financial systems within the economic groups. The first concern then becomes the question: Does the convergence of regulation and functioning of global financial markets present correlation risks that are undoubtedly beyond the current scope of risk modeling and regulation? Out of these factors, we have controllable decision factors/risks and inherent risks that are non-decision risks.

For example innovation is necessary for economic growth and cannot be controlled in a bid to ensure financial sector stability. As such, we briefly review how it affects financial sector stability but later on in the paper focus on the controllable decision variables. According to Kindleberger & Aliber [16] financial crises often follow soon after major financial or technical innovations that present investors with new types of financial opportunities, which he called "displacements" of investors' expectations. More recently, many financial crises followed changes in the investment environment brought about by financial deregulation. The crash of the dot com bubble in 2001 arguably began with "irrational exuberance" about Internet technology [3]. The convergence of the global markets as seen above may serve to amplify the vulnerability and susceptibility of global financial markets but it is a “necessary evil” of the modern age.

1.2. Statement of the Problem

Whereas developed economies have for the past close to a decade and a half witnessed slow, no and sometimes negative economic growth; emerging markets and least developed economies have enjoyed significant positive economic growth, high interest rates and financial sector stability. Most of the economic crises that have been witnessed have originated in or been triggered by events in the developed economies. We argue that the excessive regulation and harmonisation of global risk management practices in advanced economies subtly builds vulnerabilities into the financial systems that predisposes these integrated and overregulated markets to failure. The low return environment is characteristic of the financial markets in the advanced economies. We argue that emerging and transitional economies and financial markets, which enjoy less regulation and high growth are high return environments and could offer a perfect investment hedging opportunities for developed countries. First of all, the growth is attributed to flexible regulation which limits cut-throat competition, enhances financial sector stability and overall economic growth. Secondly, these countries are generally under-developed and have high capacity and potential for economic development before they can rival their developed counterparts. For as long as this gap in economic advancement lasts, the opportunity for investment arbitrage will continue to exist. The primary question becomes “do the high returns in transitional economies characterised by high interest and investment rates that provide arbitrage opportunities influence foreign investment?”

1.3. General Objective

The general objective of this study was to determine whether the high return environment within developing economies provides arbitrage investment opportunities and influences foreign investment by attracting foreign investment participation in government securities trading.

1.4. Specific Objectives

i. To demonstrate the adverse effects including the systemic vulnerabilities imposed by excess competition occasioned by thorough regulation

ii. To empirically determine whether higher high exchange, lending, Tbill and Tbond rates attract foreign investment to developing economies with focus on Kenyan government securities.

2. Literature Review

2.1. Banking Regulation

Banking regulation originates from microeconomic concerns over the ability of bank creditors (depositors) to monitor the risks originating on the lending side and from micro and macroeconomic concerns over the stability of the banking system in the case of a bank crisis. In addition to statutory and administrative regulatory provisions, the banking sector has been subject to widespread informal regulation, i.e., the government’s use of its discretion, outside formalized legislation, to influence banking sector outcomes [4]. We can effectively argue that the advent of the Basel and other frameworks aimed at regulating the banking industry have raised awareness regarding market, credit, liquidity and operational risks and imposed a level of discipline that assures banking sector stability.

With the advent of these regulations, individual commercial banks are better run which reduces systemic risks emanating from collapse of major banks globally. However, in recent years regulation in banking has become less pervasive and has shifted from structural regulation to other more market oriented forms of regulation. As a consequence competition has come to play a very important role in the allocation of credit and in the improvement of financial services. The capital requirements paved way for the development of a more competitive banking sector. It is unquestionable that all over the world banks now face greater competition both from new entrants in the banking sector and from other financial companies [4].

2.2. The Regulation, Bank Performance and Financial Sector Stability

Condition: Increased regulation predisposes the entire industry to excessive competition which in turn makes the industry, and more so mid-tier banks with ambitious growth plans, susceptible to adverse effects of competition

Question: Is the level of regulation counterproductive to the efficient and effective operation of the financial system?

Proposition: Commercial banks should be sufficiently regulated but allowed discretion for competitive pricing that makes their operations sufficiently profitable

Banks mobilize and allocate society's savings and the efficiency with which they intermediate capital has substantive repercussions on economic performance [2,10]. One common view holds that regulatory impediments to competition and monopolistic power create an environment in which a few powerful banks stymie competition with deleterious implications for efficiency [8]. Banks in countries with a more competitive banking sector where banking assets constitute a larger share of GDP have smaller margins and are less profitable.

According to Goodhart [12] one of the lessons learnt, rightly or wrongly, from the financial collapse in 1929-33 was that competition within the financial system was dangerous to the maintenance of stability. Such competition pared profit margins and hence the build-up of capital buffers. It encouraged banks to take on more risk in pursuit of higher profits. The more oligopolistic banking systems, for example in Canada and the United Kingdom, had fared better than the more competitive and less diversified system in the United States. In explaining the outstanding performance of the Egyptian banking industry prior to the uprising, Naceur and Kandil [19] argue that at the micro level, the structure of the banking system (lack of competition) may have supported high cost of intermediation, absent serious competition from other small non-bank financial institutions and stock market. They opine that the banking industry in Egypt is concentrated and segmented which weakens competition. Persistence of super normal profits in any industry means the forces of competition are not sufficiently strong to dissipate super normal profits both in the short and long-run [11].

Demirguc-Kunt and Maksimovic [10] found that the net interest margin was highest inthe transitional economies at 6.4 percent, and also rather high in Latin America at 6.2percent, while it was the lowest for industrialized countries at 2.7 percent. The transitional countries further stood out with high ratios of overhead, taxes, loan loss provisioning, and net profits to assets. Industrialized countries, have the lowest net profit/ta value at 0.4percent, probably due to high level of competition in banking services.

According to Naceur and Kandil [19], subject to robust demand for credit exists, structural reforms should aim at establishing more competition in the banking industry to ensure that performance indicators are commensurate with the optimal practices of the intermediation function that guarantees financial stability over time. The problem that this proposition lies in establishing the optimal level of regulation that ensures a balance between over-regulation and weak regulation. Government policies that rely excessively on direct government supervision and regulation of bank activities should in parallel foster incentives for private agents to promote bank development, performance and stability [19].

Activity restrictions is an indicator of the degree to which banks face regulatory restrictions on their activities in securities markets, insurance, real-estate, and owning shares in non-financial firms. Activity restrictions may also have an important impact on bank efficiency by reducing competition and limiting economies of scope.

According to Friedman [14] oligopolies obtain above-competitive profits by the threat of returning to competitive behaviour whenever a single firm does not cooperate and this threat is sufficient to induce cooperation by all firms. The Kenyan banking system operates in an oligopolistic fashion with players displaying collusive behaviour and more so pricing behaviour. They act in in sync in raising interest rates which become sticky even after CBR rates are revised. The lack of competition (collusion) enables the banks to charge above competitive rates and earn above competitive profits. In many popular macro models, prices are sticky by assumption, in the sense that there are either restrictions on how often they can change, following Taylor [22] or Calvo [6], or there are real resource costs to changing them, following Mankiw [18].

Recent economic crises have revealed the importance of bank regulations to hedge against the high risk attributed to imbalances in banks' balance sheets. Nonetheless, excessive regulations may have adverse effects. On the one hand, they serve as prudential measures that mitigate the effects of economic crises on the stability of the banking system and subsequent accompanying macroeconomic results. On the other hand, excessive regulations may increase the cost of intermediation and reduce the profitability of the banking industry. Simultaneously, as banks become more constrained, their ability to expand credit and contribute to economic growth will be hampered during normal times [19]. Naceur and Kandil [19] contend that while most analysts would argue for the need to enforce regulations, the question is what would be the right benchmark to enforce regulations without jeopardizing the ability of banks to service the economy?

There is no evidence, however, that the best practices currently being advocated by international agencies are the best ones for promoting well-functioning banks. There is no evidence that successful practices in the developed economies will succeed in countries with different institutional and political environments. There is no evidence, moreover, that each regulatory and supervisory practice can be considered as part of an extensive checklist of desirable best practices in which more checks are better than fewer as opposed to considering regulation and supervision as reflecting broad views about the role of government in society. There is no broad cross-country evidence about which regulatory and supervisory policies work best to promote bank development, efficiency, and stability.

Chiuri, Ferri, and Majnoni [7] examine a panel of data for 572 banks in 15 developing countries. They find consistent evidence, after seeking to control for banking crises, that the imposition of capital regulation induces a reduction in loan supply and hence, in total lending in these countries which adversely affects financial sector stability. Demirgüç-Kunt, Laeven and Levine [8] examined the impact of bank regulations, concentration, inflation and national institutions on bank net interest margins and overhead costs using data on over 1,400 banks across 72 countries while controlling for bank-specific characteristics. The data indicated that tighter

regulations on bank entry and bank activities boost the cost of financial intermediation.

While concentration is positively associated with net interest margins, this relationship breaks down when controlling for regulatory impediments to competition and inflation. The results raise a cautionary flag regarding government policies that rely excessively on direct government supervision and regulation of bank activities [10]. An interesting examination of how capital requirements alter the incentives that banks face is contained in Demirguc-Kunt and Huizinga [9]. An increase in capital requirements pushes banks to substitute equity for deposit financing, cutting into shareholder's surplus.

The reduction in surpluses increases the probability of loss, forcing a rise in the cost of intermediation to maintain profitability. In support of this hypothesis is the empirical evidence showing a significant impact on interest margins in response to higher capital holdings and the share of total assets held by banks [19]. The evidence also supports higher net interest margins and more profitability for well capitalized banks. This is consistent with the fact that banks with higher capital ratios have a lower cost of funding because of lower prospective bankruptcy costs [19].

2.3. The Emerging Markets Alternative

Condition two: By all standards, emerging markets have been higher yielding environments than the developed economies for the past close to one and half decades. The risk-reward tradeoff, as we shall see in the discussion that follow, has constantly made more sense than investing in the less risky low return (nil to negative return) environments.

Question two: Does the level of regulation and economic growth in emerging market economies make them better operating environments and investment destinations?

Proposition two: Emerging markets offer arbitrage opportunities and form a perfect investment hedging destinations for advanced economies.

The Standard Chartered bank global research paper for 2012 entitled Fragile West, Resilient East, said that although there would be some slowing in the growth of the global powerhouse, China, the emerging market economies still held the key to global recovery, a key of ever-increasing value and global influence. The outcome for any economy depends on the interaction between the fundamentals – policy and confidence [20]. According to the report, in the West, the fundamentals are poor, the policy cupboard is almost empty and confidence has been shot to pieces. In contrast, across the emerging world, the fundamentals are good, the policy cupboard is almost full and confidence is likely to prove resilient. After decades of stalled and even regressed convergence, emerging markets (EMs) started closing the income gap with advanced economies in the last decade. This return to convergence was facilitated by supportive external conditions, improved policy frameworks, and growth-enhancing reforms of the previous decade in many EMs.

The strength of emerging market cash flows observed over the last few years can be explained by a number of factors, including opportunity for global diversification, heady trailing returns, and the newfound ability of investors to access emerging markets through liquid, low-cost, indexed vehicles (Vanguard, 2010). Despite the numerous factors impacting emerging market stock returns, investors increasingly cite the rapid growth of emerging market economies as the primary motivation for boosting their strategic allocation to emerging markets in their global equity portfolios. Emerging market economies are still offering good opportunities to companies and investors across a wide range of sectors (EY, 2012). According to EY (2012) rapid growth economies (RGM) are robust and business confidence is on the rise as labor market growth, rising consumption and expanding trade flows emerge as key growth drivers. Growth prospects, of course, have direct implications for business. If they are good, they attract investment, stimulate innovation and promote trade.

It is very reasonable for an investor to associate rapid economic growth with strong stock market returns. Ibbotson and Chen, among others, have demonstrated that the growth in U.S. corporate earnings over time has paralleled the growth of overall U.S. economic productivity. As is well known, earnings growth is a fundamental building block when constructing estimates of expected stock returns. Hypothetically, if country A's GDP is growing at 9% annually and country B's is growing at 3% annually, isn't it reasonable to expect the public companies in economy A to experience higher earnings growth and subsequently higher returns on equity when compared to companies in economy B (Vanguard, 2010)?

Other parts of the developing world are experiencing similar growth spearheaded by entrepreneurship [5]. It is predicted that by 2050, the economies of Brazil, Russia, India, and China (the BRIC economies) will be larger than that of the United States, Japan, Germany, U.K., France, and Italy (G6) [23]. If investment opportunities in an economy are correlated with the business cycle, as is always the case, there may exist a positive relationship between business opportunities for banks and the growth rate of the economy Demirgüç-Kunt, Laeven and Levine [8].

According to economic theory, free movement of capital across national borders is beneficial to all countries, as it leads to an efficient allocation of resources that raises productivity and economic growth. Looking back over the past ten years, emerging markets investors were rewarded for the risk they bore not because of high economic growth *per se*, but rather because of comparatively low equity valuations in the early 2000s coupled with consistently higher than-expected economic growth throughout the period. As of year-end 2009, market valuations and consensus GDP growth expectations for emerging markets are higher than they were ten years ago (Vanguard, 2010). Shorter term capital flows (portfolio investment and bank lending) were generally revised up, while 2013 FDI flows turned out weaker than projected. Today, the four largest emerging economies are called "BRICs," which refers to Brazil, Russia, India and China account for about 40% of the world's population and have become an economic force.

The paradigm shift in the fortunes of the emerging and transitional economies can be explained by the fundamentals of financial sector regulation and economic growth. Commercial banks are a key component of the financial sector in many countries globally. Financial

sector stability is quintessential to economic growth but also vital to global economic stability. The demand of credit fell because of recession and the greater reluctance of borrowers to become indebted. Simultaneously the supply of bank credit declined, banks became more risk averse and a major stiffening of supervisory oversight reinforced this effect in many countries. Financial development is deciding factor for economic growth at the macro-level [1] as an increase in national income and wealth permits people to make more deposits and encourages monetary sophistication [15].

On the other hand, more advanced financial intermediation enables firms to raise and manage large amounts of funds more effectively, resulting in rapid economic development [17]. Banking sector development is particularly important for developing economies since a bank-based system has a greater impact on growth at the early stages than does a market-oriented financial system [13].

Over the past close to two decades, emerging markets and transitional economies have adopted risk based banking regulation either based on the Basel Frameworks or independent frameworks. These risk based bank supervision systems have stabilized the financial sector and created ample macroeconomic conditions that have fostered and accelerated economic growth. This coupled with improved democracy and governance as well as influx of FDI have contributed to the rapid expansion and growth in these markets. A subtle but salient factor behind this growth that makes these economies investment havens the general economic underdevelopment. Assuming any generic system that can be subject to saturation or equilibrium, we can argue that subject to appropriate boundary conditions, the greater the gap to equilibrium or saturation the more the system can accommodate. Based on this we can argue that the difference in the economic growth and attractiveness of the emerging markets has partly been supported by improved regulation and supervision of the banking sector.

The developed economies on the other hand have gone beyond the risk based banking supervision to fully implementing the fine grained guidelines under the Basel frameworks and other regulations. Initially, these guidelines improved financial sector stability. However, the excessive application of these regulations, other than opening up the industry to excessive competition, may have subtly induced vulnerabilities at the macro level. These gradual systemic effects coupled with the fact that the developed economies are almost at the verge of economic growth equilibrium measured by the general degree industrialization and living conditions have led to slow economic growth in the recent past. This is exemplified by the number and magnitude of financial crises that have been witnessed in these countries as well as the attendant slow economic growth. As we shall see in the next section, over the past close to a decade and a half economic growth in the developed economies has been stunted while the emerging and transitional economies have enjoyed significant positive growth. The conspiracy between regulatory imposed vulnerabilities and economic growth stuntedness is likely to last.

3. Methodology

The study adopted a combination of time series data and trend analysis to determine whether high rates (exchange, tbond and lending) attract foreign investors hence or otherwise demostrate that investing in emerging markets could provide arbitrage trading opportunity for low return advanced economies. The study utilised monthly secondary time series from the Central Bank for the regression analysis from July 2010 to June 2015. Trend analysis data was obtained from CBK and World Bank data repositories and was used mainly to analyze trends on the comparative performance of commercial banks while establishing the relationship between some numerical variables such as total assets and net profit. The regression model was of the form;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where ,Y = The foreign component Tbond, Tbill volume,
β_0 = is the model constant,
β_1, β_2 = coefficients of the criteria,
X_1 = Tbond rate,
X_2 = USD Exchange rate
X_3 = Lending rate
ε_I = Error term

4. Data and Trend Analysis

4.1. Data Analysis

4.1.1. Tbond Rate, USD Exchange Rate, Lending Rate and Foreign Component of Tbonds

Table 4.1. Coefficients for Treasury Bonds

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.568[a]	.323	.287	19824778797.50600

a. Predictors: (Constant), Tbondr, Usdxcr, Lndngr

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1049953578570910700000.000	3	349984526190303600000.000	8.905	.000[b]
	Residual	2200922384472243800000.000	56	39302185437004350000.000		
	Total	3250875963043154500000.000	59			

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-273978239937.648	67173127597.521		-4.079	.000
	Lndngr	1427880630.839	1585326737.383	.127	.901	.372
	Usdxcr	3503878440.006	701381337.760	.660	4.996	.000
	Tbondr	-2834404454.201	1180493585.799	-.367	-2.401	.020

a. Dependent Variable: BondsVol

Treasury bond (Tbond) rate, USD exchange rate and lending rates jointly account for 56.8 percent (R=0.568) of the variation in the value of the foreign component of the total treasury bonds volume in Kenya based on 5 year time series data from the Central Bank of Kenya with a 32 percent model fit (R^2=0.323).

Foreign Invst in Tbonds

= −0.367Tbond rate + 0.660 USD Exchange Rate

+0.127 Lending Rate

This implies an inverse relationship between Tbond rates and foreign investment in Tbonds (a unit increase in Tbond rates causes a 0.367 reduction in foreign investment in bonds). A unit increase in USD exchange rates causes a 0.66 increase in foreign bonds volume while a unit increase in lending rates increases the bond volume by 0.127. This is rather paradoxical given the fact that Tbondrates go up in response to the same variables as Tbill rates.

Increase in Tbond volume is more responsive to exchange rates than it is to lending rates. This is expected since an increase in exchange rates means that for every unit of foreign currency, the investor gets more value in Kenyan currency. This coupled with rising values of investments, investors make more. The ANOVA and t-statistics are all significant indicating that the results are statistically significant. It is a bit confounding that Tbond rates have an inverse relationship with Tbond traded volumes. Experience has shown that when interest rates are rising, investors prefer to lock-in their monies in short term instruments in anticipation of medium-term higher interest rates to plough back investments at higher rates. But when rates are falling, it is more attractive to lock-in money in longer term securities. This could explain the inverse relationship between Tbond rates and the foreign component of traded volumes of Tbonds. We thus conclude that long term investment in treasury bonds is affected by exchange rates, Treasury bond rates and lending rates.

4.1.2. USD Exchange Rates, 91/182/364 Day Tbill Rates, Lending Rates and Foreign Component of Tbill Volumes

Table 4.2. Coefficients for Treasury Bills

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.232[a]	.054	-.034	12914024851.36047		
a. Predictors: (Constant), Tbill364, Usdxcr, Lndngr, Tbillr91, Tbillr182						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5143005442288247000000.000	5	1028601088457649500000.000	.617	.687[b]
	Residual	9005690044524019000000.000	54	166772037861555900000.000		
	Total	9519990588752844000000.000	59			
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	32105685174.241	67573099247.364		.475	.637
	Tbillr182	4870513825.960	2961760300.456	1.650	1.644	.106
	Lndngr	-294294704.742	1720038311.278	-.048	-.171	.865
	Usdxcr	-257709202.760	605665031.029	-.090	-.425	.672
	Tbillr91	-3918923488.723	2998251023.527	-1.311	-1.307	.197
	Tbill364	-543452510.366	1820075899.125	-.194	-.299	.766
a. Dependent Variable: BillsVol						

Treasury bill (Tbill) rates (81/182/364), USD exchange rate and lending rates jointly account for 23.2 percent (R=0.232) of the variation in the value of the foreign component of the total treasury bills volume in Kenya based on 5 year time series data from the Central Bank of Kenya with a 5.4 percent model fit (R^2=0.054). Neither the ANOVA nor the t-statistics are statistically significant. The conclusion is that short-term interest and exchange rates in Kenya do not influence short term foreign investment decisions.

4.2. Trend Analysis

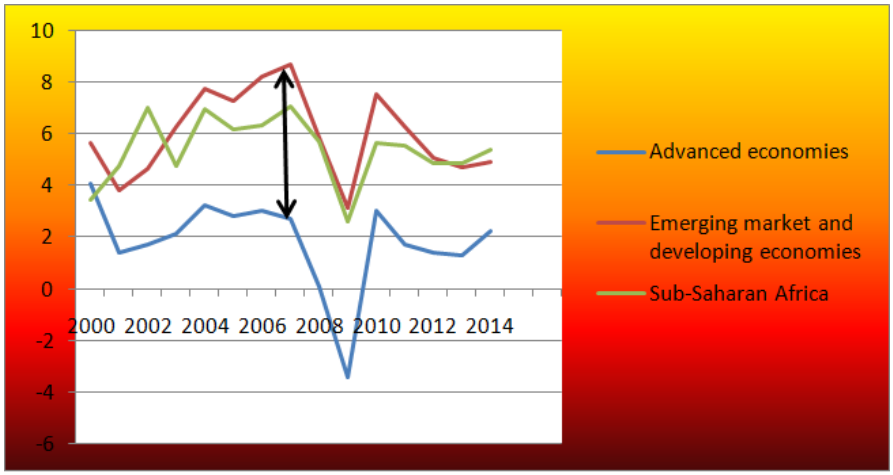

Figure 1. GDP Trends (IMF, Research)

The graph in Figure 1 shows the trends in growth of GDP for advanced, emerging markets and developing economies as well as Sub-Saharan Africa economies. The economic growth for advanced economies has been under

four percent since 2000 with a trough in 2008/2009. The trough is attributable to the global financial crisis of 2007/2008 that was triggered by systemic events in the US mortgage industry. Following this, the Basel committee delayed the issuance of the Basel II framework so as to incorporate the lessons learnt from the global financial crisis. However, soon after the release of Basel II, the European Economies went into recession due to financial sector instability related problems.

There is evidence that since the financial crisis that the value of the stock markets in the west dropped by nearly 50 percent and are yet to recover (GARP, 2010). The frequent and catastrophic occurrences in the developed economies affirm their vulnerability and volatility. This makes developed economies high investment destinations despite of the low political risk ratings. From the black arrow in figure one shows a near uniform gap between the GDPs of developed, developing and Sub-Saharan Africa economies. This gap represents arbitrage trading opportunities between developed and the developing economies. If, based on the literature above, economic growth and performance can be matched to investment attractiveness then it can be argued here that transitional and emerging economies are the perfect investment destinations of the 21st century.

In fact the kinks in the graph of these economies mirror the economic slowdown in developed economies during financial crises which could be due reduced purchasing power or reduced FDI from the developed economies. Despite these kinks, the gap representing the arbitrage opportunity is still relatively constant over the years other than in the early 2000s. This means that the emerging and transitional economies have a mechanism of absorbing the shocks adduced by the global financial turmoil to ensure that the full brunt of the crises is not reflected in their economic performance. The banking sector is a barometer of macroeconomic health. Since most of the global crises have been triggered by and have surrounded the banking and financial services sector in general.

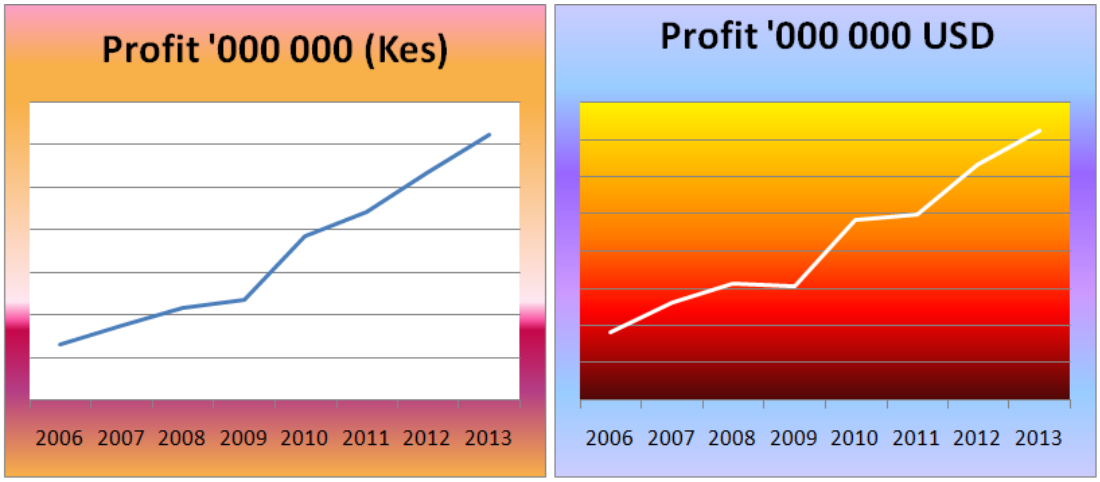

Figure 2. Profitability of Kenyan Banks (CBK, Research)

Kenya was recently upgraded by IMF from LDC to transitional economy status. The following graph illustrates the performance of the banking industry in Kenya from the year 2006 to 2013. The trend of the performance is consistent with the trends in the GDP growth highlighted in Figure 2. This resilient performance in volatile global economic times underlies the economic potential and prospects of the transitional economy markets. The profits are translated to USD equivalent to give a trend that is globally comparable. Despite the fact that during the period we have considered here the Kenya shilling weakened significantly particularly in 2011 due to the Eurozone crisis, the performance of the banking industry remained outstanding with trends in Kes and USD profits showing the same trend except for scale differences.

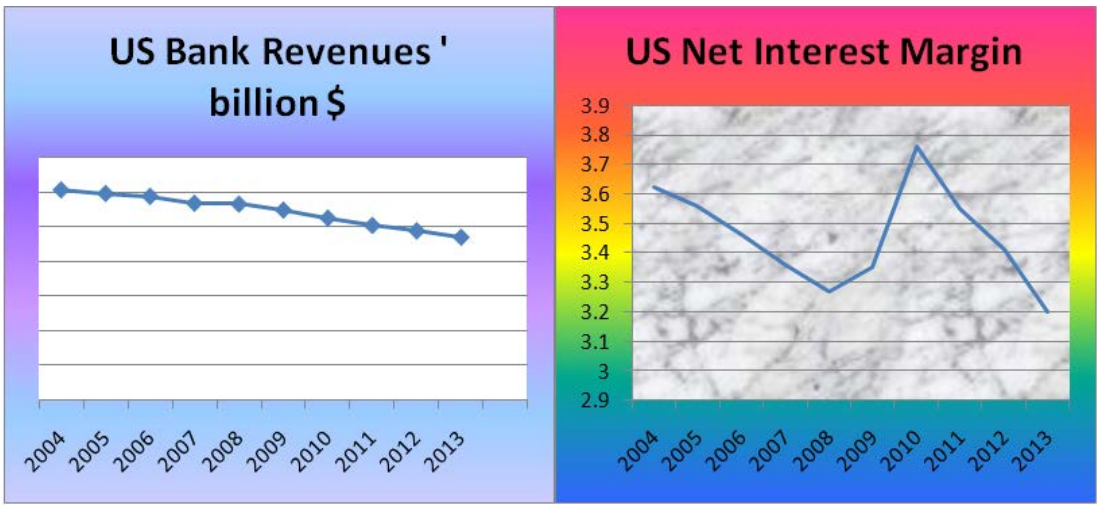

Figure 3. Net Revenues by US Banks (Fed Reserve Bank)

The trend in Figure 3 indicates declining revenues through the years of the credit crisis that nearly brought the US and global economy to recession and is consistent with the trend of weak performance of global financial markets. The net interest margin slows down from 2004 to 2009 but recovers significantly in 2010/2011 before plummeting again in 2012/2013. Despite the interest margin recovery, the general trend in the revenues of US banks decays constantly with no reflection of the effect in the recovery of net interest margin. The difference the performance of these two countries can be attributed to the influence of the regulatory environment and economic growth. The bank regulators in Kenya have failed to cap the base lending rates and foster sufficient competition that would lead to auto-market regulation mechanisms that would push prime and effective lending rates to the floor.

Instead, oligopolistic market forces dictate the interest rates charged by commercial banks. This allows discretionary pricing implying that commercial banks can pass on any added costs to customers through higher interest rates. The interest rates in Kenya are set to accommodate the regulatory risk capital requirements in such a way that the commercial banks effectively cushion their net earnings against the burden of regulatory capital requirements. This uncompetitive oligopolistic pricing model which is almost pervasive in the transitional economies across all industries due to demand that far outstrips supply and other profit protection market dynamics is sustainable in the long run and could offer perfect arbitrage investment opportunities for low return developed economies.

This advantage will last until the forces or production and consumption, supply and demand remain below the equilibrium point. For ass long these economies are under the developed economy threshold, it can be presumed that that the advantage will persist. Finally, Figure 4 shows a comparison between the lending rates in Kenya, the US and other jurisdictions that use LIBOR as an indicative rate. The trend in base lending rates (approximated in our case by adding 500 basis points to the CBR which is the trend in commercial banks in Kenya) vis a vi other global similar indicators like LIBOR+300 basis points and the US prime rates confirm our earlier assertions. These indicative rates play a critical role in commercial bank performance since they determine the interest income which banks earn given that interest income is the primary revenue source for commercial banks. The gap labeled A represents the arbitrage profit opportunity.

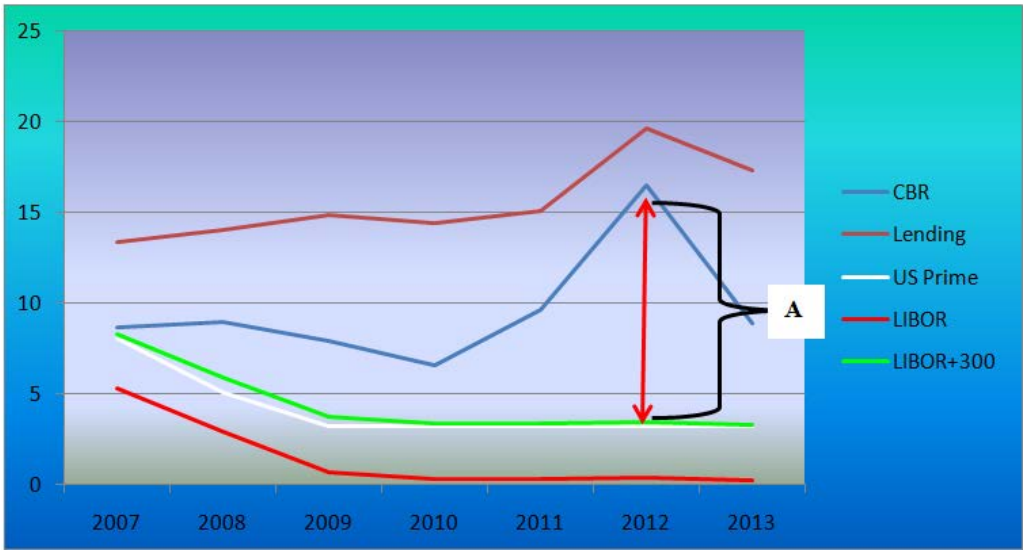

Figure 4. Indicative Lending Rates (CBK, Fed Reserve Bank)

In well regulated and mature markets such as the US and the EU which use the US prime lending rate and LIBOR+300 respectively as depicted in Figure 4, bankers are unable to transfer additional costs to borrowers lending to the graph sloping downwards over time. The regulation induced competition and other restrictive regulatory policies and requirements inhibit banks from proportionately transmitting additional costs to customers thus adversely influencing performance and increasing systemic risks. The gap between the Kenyan rates (CBR and lending) and the developed economy rates depicts the ability of the banking industry in Kenya to transfer rate increases directly and proportionately to customers to secure their profit margins. The Kenyan lending rate graph has a consistent steep slope driven by the interest rate stickiness. In a perfectly competitive market, prices are set or determined by market forces of demand and supply. This Keynesian perfect competition model works in optimally and overregulated financial markets while sub-optimally markets that are driven by rent seeking behaviour and oligopolistic tendencies defy this model. According to Friedman [14] oligopolies obtain above-competitive profits by the threat of returning to competitive behaviour whenever a single firm does not cooperate and this threat is sufficient to induce cooperation by all firms.

The Kenyan banking system operates in an oligopolistic fashion with players displaying collusive pricing behaviour. They act in in sync in raising interest rates which become sticky even after CBR rates are revised downwards. The lack of competition (collusion) enables the banks to charge above competitive rates and earn above competitive profits. In many popular macro models, prices are sticky by assumption, in the sense that there are either restrictions on how often they can change, following Taylor [22] or Calvo [6], or there are real resource costs to changing them, following Mankiw [18]. According to Goodhart [12] one of the lessons learnt, rightly or wrongly, from the financial collapse in 1929-33

was that competition within the financial system was dangerous to the maintenance of stability.

5. Conclusion

Regulation and supervision of banks is essential for financial sector stability and consequently national and global economies. It has been argued that the banking sector is the barometer of the economic health of a nation. There is extensive empirical support that fine grained regulation compromises profitability of commercial banks by encouraging cut throat competition leading to financial sector vulnerability.

The low profits compromise the ability of banking industries in advanced nations to accumulate reserves and raise operational capital which reduces their ability to deal with externally and internally adduced shocks. On the flipside, emerging and transitional economies have less fine-grained risk based banking regulatory regimes that allow for near oligopolistic operation of the banking industry. This allows them to transfer any additional cost of doing business to their customers thus safeguarding their profits. The profitability of the industry bolsters investment and recurrent expenditure all of which have the effect of fueling inflation and volatile exchange rates which accelerate economic growth, high interest and lending rates as well as market liquidity. These conditions provide opportunities for arbitrage trading that gives above average returns on investment as exemplified by the trend analysis. The time series data analysis confirmed that in the long run, Tbond, USD exchange and lending rates all significantly influence the foreign investment in Kenya vide the Treasury bonds avenue. Based on these findings we conclude that emerging and transitional economies offer a perfect arbitrage investment opportunity for low return advanced economies.

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