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Investing Africa's External Reserves In Africa: Issues, Challenges And Prospects



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Abstract

This paper essentially explores how to invest African reserves on the continent. The paper underlined the challenges and opportunities for managing Africa's external reserves by Africans after identifying several pre-conditions for an African currency to emerge as international currency and noted that these conditions have not yet crystallized in Africa. Although African external reserves have grown over time the benefits of such growth in terms of facilitation of domestic financial markets and even the earning are not commensurate with the reserves growth rate. The non-convertibility of African currencies, volatile macroeconomic and sometimes volatile political environment coupled with the shallowness of the domestic markets are the main challenges that are faced by the continent. However, with recapitalization of the African financial institutions especially banks and the attainment of stable polity in both economic and political fronts, there is hope for the continent's institutions to take their rightful place in the emerging global financial system by first using the African resources as the first step. The involvement of creditable African financial institutions in the management of the reserves either within or outside Africa will in no small

measure strengthen the development of the African financial system but also ensure that a bulk of African resources work for Africa as the difference between what the current fund managers paid to the African central banks and what they actually get as commission or profits will be retained explicitly or implicitly in Africa. Africa's financial systems have been deepening and broadening over the past years, the result not only of improvements in the macroeconomic and institutional framework, but also of the worldwide liquidity glut, which directed more capital flows into Africa. The current global crisis threatens to reverse this trend and undermine recent progress. In these adverse circumstances, it is even more important to upgrade the necessary frameworks for sound, efficient, and inclusive financial systems. This call for further institution building as well as cautious and case-by-case government intervention to aid financial market participants expand financial services to the frontier of commercially sustainable possibilities.

JEL Classification: C19, C22 C59, E45

Keywords: External Reserves, International Reserves Currency, Financial Markets

Introduction

Over the last few years, there has been considerable build up of foreign exchange reserves by some central banks of developing economies including some African countries, particularly in the

aftermath of the East Asian crisis of the late 1990s. Foreign exchange reserves held by developing countries have risen from 56.9 percent of global reserves to over 62.0 percent between 2000 and 2007. The growth in the international reserves of African countries is striking when compared with the contemporaneous trends in reserves in industrial countries. Whereas reserves in a group of industrial countries as a percentage of world reserves declined from 43.0 per cent in 2000 to 37.8 per cent in 2007, that of African countries increased from 3.8 per cent to 6.3 per cent during the same period. The recent global financial crisis has brought to the fore the danger of concentrating external reserves investment in a particular currency and/or country.

Much of Africa's external reserves accumulation was accounted for by the oil producing African countries. However, the increase in the world price of non-oil commodities also contributed to reserves accumulation by other countries. The buildup in reserves is seen as insurance against the increased volatility of capital flows associated with financial globalization.

In general, official foreign exchange reserves are held to meet a battery of objectives including, safeguarding the external value of the domestic currency, limiting the vulnerability arising from external shocks, providing a level of confidence to markets; and assisting the government in meeting its foreign exchange needs and external debt obligations.

Table 1 : International Reserves (%)

	2000	2003	2006	2007
Africa / Developing Countries	6.68	6.70	10.91	10.11
Africa / World	3.80	4.07	6.06	6.29
Developed Countries/ World	43.04	39.27	44.48	37.77
Developing Countries / World	56.96	60.73	55.52	62.23

Source: IMF/IFS Tables

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To effectively implement these objectives, the external reserves of countries are expected to be managed optimally.

By their dealings in the financial markets, reserve managers gain access to important information that keep policy makers informed of market developments including potential threats. The importance of appropriate practices has also been underscored by experiences where fragile or risky reserve management practices have restricted the ability of the authorities to respond efficiently to financial crises, which may have heightened the harshness of the crises.

Weak or risky reserve management can also have major financial costs. A few countries, have sustained large losses that translate into colossal fiscal consequences. Accordingly, appropriate portfolio management policies concerning the currency composition, choice of investment instruments, and acceptable duration of the reserves portfolio, which reflect a country's specific policy settings and circumstances, serve to ensure that assets are safeguarded, readily available and support market confidence (IMF, 2003).

Incidentally, most of the world reserves are held in the internationally traded currencies. None of the African currencies is currently serving as a reserves currency. This development implies that the continent's external reserves are entirely invested outside of the continent. This is a classical element of what Lawrence Summers calls the *capital flows paradox* as capital is flowing upstream from less developed African countries toward the industrialized countries, mainly the United States. However, a pertinent question to ask is: what are the impediments that militate against African countries investing their external reserves in the continent? This paper seeks to underline the challenges and opportunities of investing Africa's external reserves in Africa.

The remaining part of the paper is arranged thus: Part II dwells on conceptual and theoretical issues. Part III adumbrates the challenges confronting

African countries with respect to investing foreign reserves in Africa. Part IV examines the way forward. Part V contains the summary, recommendations and the concluding remarks.

II. Conceptual/Theoretical Issues

Foreign exchange reserves are defined as external stock of assets, which are available to the country's monetary authorities to cover external payment imbalances or to influence the exchange rate of the domestic currency through intervention in foreign exchange market, or for other purposes (IMF, 2000). A country's reserve consists of gold, foreign currencies, Special Drawing Rights (SDR) and the reserve position with the International Monetary Fund (IMF).

Previously under the Bretton-Woods system, the foreign exchange reserves were utilized by central banks to maintain the external value of their respective currencies under the then fixed exchange regime. However, following the break down of Bretton-Woods system in the early 1970s, countries started adopting relatively flexible exchange rate regimes, under which the reserves assumed a less important role.

International currency reserves have largely been viewed as inventory held against an uncertain future in the balance of payment accounts. The uncertainty is largely due to the status of the current account, where adequacy level is adjudged by the size of trade flow. This reasoning is derived from the fact that international trade historically accounts for the largest factor in the balance of payments. Consequently, to assess levels of reserves, the first benchmark ideally should be the reserves to imports (R/M) ratio. The (R/M) ratio of a country is the number of months of normal imports capable of being financed by its international currency reserves. IMF (1958) indicated that, in general, countries achieve an annual (R/M) Ratio of between 30.0 and 50.0 percent. Admittedly, this minimum benchmark figure has been a matter of debate. However a three to four months worth of import consensus has emerged over the years (Fischer, 2001).

Frenkel and Jovanovic (1981) developed a solution for optimal reserve levels using the (R/M) ratio approach. They incorporated interest rates, an allowance for trend movement governing international payments and receipts, and the mean rate of net payments. The demand for reserves is a function of benefits in the form of smooth external transactions (trade) and a negative function of the opportunity cost (forgone earnings) of holding them. However, their assumption for interest rate as a measure of forgone earnings may not be appropriate; thus the approach described by the authors is merely indicative.

Economic theory postulates that reserve holdings will rise in tandem with economic size. Similarly, a high ratio of import to GDP, high trade to GDP, and high current account deficit to GDP may lead to current account vulnerability and this may in turn induce high reserve demand. In the same vein, a high ratio of capital account deficit to GDP, high short-term debt to GDP, and high broad money to GDP could be associated with higher capital account vulnerability and this may lead to a demand for reserve holdings. Greater exchange rate flexibility would reduce the demand for reserves because central banks no longer need a large stock of reserves to manage a pegged exchange rate. Also, a higher opportunity cost is expected to lead to a reduction in reserve holdings because alternative investments become comparatively attractive.

Clark (1970) developed a theoretical relationship between demand for reserves and cost of adjustment in the economy. He noted that the benefit of reserve holdings is simply the avoidance of the cost of adjustments. Reserves help to pursue domestic policy goals in the face of temporary deterioration in the Balance of Payments (BoP). The disturbance in BoP is either financed from reserves or eliminated by adjustments within the economy through appropriate government policies. He opined that the two policies implied different cost to the country. For instance, if a country holds a higher level of reserves as buffer, the domestic investment will be low and there will be a reduction of income. If a country prefers a high speed of adjustment due to

low reserves, this will lead to high variability in income. Consequently, the preferred position is to maximize the welfare of a country by deriving an optimum combination of level of reserve and the rate of speed of adjustment.

The IMF (2003) examined the demand for foreign exchange reserves in emerging economies in the 1980s and 1990s. The results reveal that more than 90.0 per cent of variation in reserves is explained by economic size, current account vulnerability, capital account vulnerability, exchange rate flexibility and opportunity cost.

Frenkel and Jovanovic (1981) provide an approach where international currency reserve demand depends on the marginal propensity to import, a change in the balance of payments and the opportunity cost of holding the reserves. Even in this arrangement, there has been a difference of opinion on the assumed relationship of the reserve demand function and tendency to import. A negative relationship is expected as currency reserves are built by import policies including reduction in aggregate expenditure.

Frenkel (1978) argues that a high (low) import-GDP ratio reflects a high (low) openness of an economy which reflects vulnerability to external shock by presenting evidence on the stability of the demand. The demand for reserves by developed countries differs from that of less-developed countries. Consequently, a positive relationship is expected between reserve demand and propensity to import.

Ben-Bassat and Gottlieb (1992) take a different perspective by taking into account sovereign risk in their model for optimal international currency reserves and find the variable in their risk premium equations significant. The cost and probability of levels of reserves can be related to the default of external debt. Countries with default on external debt incur a higher borrowing cost; hence the level of international currency reserves depends on the credibility rating of the country.

A sudden drain on a country's reserves may hurt creditor's confidence regarding the borrowing countries ability to meet its payment obligations. Once a lender loses confidence in the borrowing government, it will be unable to restore assurances about the stability of its reserves which are likely to decrease rapidly. The rate at which the reserves deplete may further hurt the confidence in the borrowing country. However, for most developed countries which usually have a lower default risk rating, need for a large safety net is unjustified since they can borrow in world capital market as requirement arises (Flood and Marion, 2001).

An alternative view on reserve accumulation is that it is the by-product of a government strategy to keep the international value of the domestic currency low in order to boost export growth. In this view purchases of foreign reserves are not motivated by a desire to smooth consumption in the face of external shocks, but rather they are the unintended consequence of sterilized interventions in the foreign exchange market. Fatum and Hutchison (2003) explore the efficacy of sterilized intervention policy. In the traditional portfolio balance model sterilized intervention can only be effective if domestic and foreign assets are imperfect substitutes and Ricardian equivalence holds.

There have been a number of recent empirical studies attempting to measure whether the precautionary or mercantilist motive better explains foreign reserve accumulations by both industrialized and developing countries. These studies generally find evidence in support of both motivations, while at the same time finding that neither motivation fully explains the recent upsurge in reserve accumulations by developing countries (Jeanne, 2007).

However, a notable exception is a study by Obstfeld, Shambaugh and Taylor (2007) which suggests that if reserve adequacy is gauged against the size of the banking sector, the recent reserves accumulation in emerging markets is less puzzling. The rationale for reserve

accumulation, typically labeled the mercantilist motive, has been advanced by Dooley, Folkerts-Landau and Garber (2003) as a description of the development strategy followed by many East Asian countries, particularly China.

The literature has identified five major factors that could facilitate the emergence of a currency as an international currency and by extension, a reserve currency. These include **large economic size, well-developed financial system, confidence in the currency's value, and political stability** (Chinn and Frankel, 2005).

Reserve currencies are typically linked with large, competitive economies, mainly those with extensive trade and financial ties. Such an economy will usually generate a large market in foreign exchange transactions with at least one strut in its own currency. Large market size has a tendency to effect lower transaction costs, reflecting *economies of scale* in financial resource management. That is, while large costs may be associated with installing the essential software, hardware, trading, and clearing systems, when installed, these investments can accommodate many more transactions without incurring additional cost. Consequently, marginal costs are negligible and average costs drop with scale, bringing about lower transaction costs.

International currencies which might also serve as a reserve currencies are generally linked with open, liquid, and well-developed financial systems. When sterling was the dominant international currency in the 19th and early 20th centuries, London was the world's superlative financial market. Presently, the dollar is backed by the deep, liquid, and well-diversified financial markets in New York. A well-developed financial system enhances the attractiveness of the domestic currency. It provides deep and liquid secondary markets for securities to global market participants; who do not usually hold their international money in the form of currency balances, but as alternative need liquid, interest-bearing assets of a short-term risk-free instrument, to hold their temporary

positions.

Cooper (1997) notes that the liquid secondary markets allow participants to quickly build up or liquidate large positions in the currency without dread of capital loss. A well-developed financial system offers a wide range of subsidiary services proficiently to international market participants, who may want to borrow or invest in the domestic currency, or hedge their foreign currency positions. Greenspan (2001) opines that a well-developed financial system is more apt to attract business from abroad, where financial markets may be less developed or barriers to efficiency exist. This possibility makes it cheaper for market participants to borrow or invest abroad in an international currency and then exchange the proceeds for domestic currency, rather than conduct the transactions domestically.

International currencies (reserves currencies) are also held as stores of value, such as the short-term instruments noted above, working balances, and international bonds, etc. Consequently, an international currency must be perceived as sound, with stable future value in terms of goods and services it can command. Volatility in value raises holding risk, and inflation obliterates purchasing power. The prevalence of these elements would discourage investors from holding assets in that currency. Friedman (1971) noted that no exchange medium can survive if it is not also a store of value (although the converse does not necessarily hold). Confidence in a currency's value is also imperative indirectly for its medium-of-exchange function. However, noted by (Hartmann, 1998), since investors seek to curtail risk through diversification, an array of international currencies is likely to coexist as stores of value at any one time. Indeed, contemporary portfolio theory advocates that efficient portfolios are likely to be diversified over several currencies.

Political stability is specially underscored by most economists. For instance, Mundell (1998) observes that *when a state collapses, the currency goes up in smoke*. He underpinned the strong

chronological link between international currencies and strong central states, because strength implies political stability, which also facilitates the pursuit of monetary stability. In the same way, Bordo (2003) and Dwyer and Lothian (2003) indicate that national monetary unions, where monetary integration is tied to political union, have historically been stable (e.g. the United States). On the other hand, international monetary unions, where monetary integration is not tied to political union, have historically failed (e.g. the Scandinavian Monetary Union). The reason is that shocks may affect each national member differently and give rise to pressures that weaken the political will to maintain the union.

Net externalities, a trend associated with international currencies whereby a good or service becomes more valuable as more people use it has been identified as one of the factors that facilitates the emergence of a currency as an international currency and by extension a reserve currency. Varian (2003) summarizes three features of net externalities. Network externalities are efficiencies because they increase average revenue (or demand) with scale, in contrast to the technical or supply-side economics, which decrease average cost with scale.

Many network goods also exhibit supply-side returns to scale, making the positive feedback extremely strong. That is, more sales lead to lower unit costs (supply side) and greater appeal to customers (demand side). Strong positive feedback is likely to drive the network good to market dominance; and once dominance has been achieved, it becomes extremely difficult to unseat it. Applying this concept to the currency implies that a currency becomes more useful if more people are using it. The larger the dollar's network of users, the more attractive the dollar becomes to a user. The demand-side economies derive from the currency's increased liquidity, which results because a larger network implies more potential counteroffers for a trade, thus enhancing the probability of a favorable match and quick sale. The increased liquidity then induces even more people to join the network, resulting in a self-reinforcing

cycle.

Krugman (1984) indicates that an expanding network and market size reduces average cost with scale. In addition, large market size tends to reduce the average waiting time between matching buy/sell orders, allowing market-making banks to carry smaller (costly) inventories of currency, which also reduces cost.

III.0 Challenges of Investing African Countries' Reserves in Africa

Before discussing the challenges faced by the African countries in investing reserves in the continent. It is germane to examine briefly the nuances that have aided the American dollars as the reserve currency over time. The dollar has maintained the role of international reserves currency over the years, despite substantial fluctuations in its exchange value, because the size, sophistication, and relative stability of the US economy generally render the costs of transacting in US dollars lower than the costs of transacting in currencies that do not equally share these characteristics.

In large part, the widespread use of the dollar developed and continued because the US has been the largest, most broad-based exporter and importer in the world. With a lot of Americans trading globally, a lot of dollars naturally change hands. Because traders must finance a large portion of their business in US dollars, they maintain accounts, seek loans, and undertake myriad other financial arrangements in dollars.

A strong and open US financial system facilitates the dollar's international use. While a high degree of feedback naturally exists between the dollar's expanding role in trade and the growth of an accommodating financial structure, US financial markets have always been innovative and relatively free of cumbersome regulations. Their breadth and depth enhances the liquidity of dollar-denominated assets. Moreover, as dollar trade expands and US financial markets grow, more and more foreign financial firms, including those not located in the US, offer dollar-denominated products. This makes holding dollars convenient

and transacting in dollars relatively easy. As the global network for dollars expands, the benefits of using the dollar in exchange rise. The process is self-reinforcing. Moreover, once the network benefits of a particular currency become substantial, people are prone to continue using it, even if viable competitor exists.

Since the peak in the US dollar's effective exchange rate in early 2002, the global stock of foreign exchange reserves has continued to grow rapidly. Between 2001 and 2005, official international reserves doubled, compared with cumulative global trade growth of two thirds and global nominal GDP growth of two fifths. Some of this expansion presumably reflects central banks' conscious decision to accumulate precautionary reserves, particularly in the case of those countries that were affected by the Asian financial crisis of 1997-98. But there can be little doubt that most of the recent accumulation of official international reserves has resulted from purchases of dollars to limit the appreciation of the currencies of a number of countries. From this perspective, central bank reserve accumulation has been more an instrument than a goal of national monetary and financial policy.

In the management of foreign reserves, two policy issues arise. The first is their allocation by currency; the second is their allocation across instruments. The currency allocation of global foreign exchange reserves has remained relatively stable over the past few decades, while the instrument allocation has changed significantly.

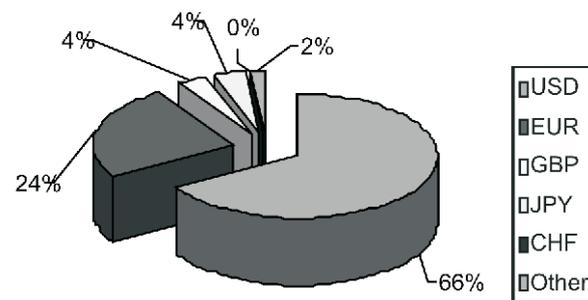
Heller and Knight (1978) found that in 1975 dollar share in foreign reserves was 80.0 per cent. Available data as at 2007 put this share at about two thirds. Indeed, this ratio has shown intriguing stability over time. On the average, countries tend to hold 66.0 per cent of their foreign-exchange reserves in dollars ... independently of their trading patterns and exchange arrangements. In other words, the modest decline of dollar holdings from 80.0 per cent of central bank reserves to 66.0 per cent over 32

years may reflect the simple fact that fewer countries formally peg to the dollar than was the case in the mid-1970s, and that their trading pattern is less focused on dollar area countries.

All in all, it appears that the two thirds share has held up remarkably despite a net decline over the past thirty three years of some 16.0 per cent in the value of the dollar against a weighted basket of other major currencies and its secular declines of 24.0 per cent and 44.0 per cent against the euro and the yen, respectively.

This remarkable persistence and resilience of the dollar as a reserve currency reflects several factors, including the liquidity of US financial markets and network externalities that lead to inertia in the use of vehicle currencies. Support has also come from

Figure 1: Currency composition of official foreign exchange reserves end 2007 in percentage of total



the sustained share of global output produced by countries that we can think of as being part of a broadly defined dollar zone in the sense that their currencies tend to move in tandem with the dollar. Today, most of the currencies of the Middle East and Asia fluctuate less against the dollar than against the euro or yen.

In contrast, the allocation of foreign reserves by instrument has changed markedly. A cursory perusal on official foreign exchange reserves held in US dollars indicates that since the 1960s the proportion held in US Treasury securities has declined significantly. Today, probably less than half of central banks' US dollar reserves are invested in US Treasuries.

These holdings have declined in favour of

investments in other US sovereign, semi-sovereign and Agency paper, as well as US private (mortgage and corporate) bonds. US corporate equities also attract a surprisingly large amount of official investment, reflecting placements by central bank and other public long-term investment funds and central bank in-house pension funds. In addition, central bank reserve managers have extended the duration of their portfolios, and now hold most of their dollars in long-term instruments.

Perhaps a prefatory point of departure in assessing the challenges confronting African countries in the investment/management of their external reserves in the continent is a brief appraisal of the African financial system.

African financial systems are small, both in absolute and relative terms. In addition, Africa's financial systems are characterized by very limited outreach, with less than one in five households having access to any formal banking service (World Bank, 2007). Banking is inefficient and expensive in Africa, as reflected by high interest spreads and margins and high overhead costs. Banking is also very expensive for deposit customers, as reflected by very high minimum balance requirements and annual fees in many African countries (Beck et al. 2008). High documentation requirements to open an account that is, the need to present several documents of identification also represent significant barriers given that large parts of the population live and work in the informal sector. Similarly, physical access is limited, as the low bank branch and ATM penetration numbers for Africa illustrate.

However, standard indicators of financial intermediary development, such as the ratios of liquid liabilities to GDP, bank deposits to GDP, and private credit to GDP have shown financial deepening in most African countries in recent years. As credit has been growing faster than deposits in most countries, financial intermediation, that is, the extent to which banks intermediate society's savings into private credit, has also increased,

Table 2

Instrument composition of identified US dollar reserves at end- June 2008 in billions of US dollars

	Short term	Long term	Total
Treasury securities	205	1,054	1,259
Other assets	695	604	1,299
Repos and deposits in the United States	155		
Commercial Paper and certificates of deposits in the United States	122		
Offshore deposits	418	42	
Agency Securities		324	
Corporate bonds		61	
Equities		177	
Total	900 (35.2%)	1,658 (64.8%)	2,558 (100%)
<i>Memo:</i>			
<i>Share of Treasury securities in assets of the given maturity</i>	<i>22.7%</i>	<i>63.6%</i>	<i>49.2%</i>
<i>Total IMF - reported US dollar reserves at end June 2008</i>			<i>1,789</i>

Note: Figures for US Treasury, agency and corporate bonds and equities are from US Treasury, Federal Reserve Bank of New York, Board of Governors of the Federal Reserve System, *Report on foreign portfolio holdings of U.S. securities as at June 30, 2007*, June 2008. Figures for deposits and money market paper in the United States are from BEA, International Transactions Table 4 (or the *US Treasury Bulletin*, Tables CM-1-2 and IFS-2). Figures for offshore US dollar deposits are from *BIS Quarterly Review*, Table 5c, and the Japanese SDD for June 2005. The US Treasury definition of foreign official institutions, including "national government sponsored investment funds" (page 10), may be broader than those of the BIS and IMF.

Seychelles, Ghana, Kenya, Mozambique, Nigeria, Tanzania, Uganda, and Zambia). Though they vary in their degree of financial development, the linkages between financial segments and with global markets are fewer than in emerging markets. Foreign investors have increasingly participated in local and debt markets. Financial products are evolving and gradually more sophisticated.

Underdeveloped markets: The other 31 sub-Saharan African

although from very low levels. Although not documented in a statistical sense, there seems to have been progress in expanding outreach as well.

African financial system is heterogeneous. Financial market structure and degree of development vary significantly across African countries. Three groups of countries can be identified on the basis of financial depth indicators and capital market development. *Promising markets:* South Africa, the only emerging market in the region, has a well-developed financial system with a full continuum of market segments that are interconnected and integrated with global markets. The financial system includes subsidiaries of

foreign-owned banks and insurance companies; large domestic financial conglomerates, asset management firms, insurance companies, and pension funds, many with significant cross border operations in sub-Saharan Africa and other regions; and nonresident and institutional investors (pensions, insurance, hedge funds) that invest heavily in equities and debt markets. Sovereign and corporate debt issuers are active in both domestic and international markets, and may issue in South Africa's own currency in developed offshore markets.

Border market countries: This group consists of twelve countries (Botswana, Cape Verde, Mauritius, Namibia, and

countries have narrow financial sectors, in which most segments are underdeveloped, and few financial instruments. Access to global financial markets has been non-existent or severely limited; where capital markets exist, they lack depth and liquidity. Systemic and institutional constraints have also contributed to a low level of intermediation and limited availability of financing for productive investments.

African financial system is essentially dominated by commercial banks. Most of the banks in Sub-Saharan Africa rely on deposits to fund their loan portfolios (which they keep on their books to maturity); the interbank market is small;

Table 3: Africa: Indicators of Financial development 1990-2008

	Africa			Promising Markets			Border			Underdeveloped		
	1990-99	2000-04	2005-08	1990-99	2000-04	2005-08	1990-99	2000-04	2005-08	1990-99	2000-04	2005-08
Bank deposits/GDP	26.7	29.2	31.8	46.6	50.5	58.1	16.0	29.5	22.2	13.7	15.8	16.4
Private sector credit/GDP	27.4	29.4	33.8	55.6	63.5	72.1	11.1	14.0	18.4	10.9	9.8	10.5
M2/GDP	30.7	32.5	36.4	49.4	52.8	61.3	20.0	22.7	25.8	19.5	21.5	21.0
Liquid liabilities/GDP	16.1	18.1	22.4	28.7	33.0	43.5	10.2	12.4	14.2	6.9	8.4	8.5

Source: IMF, *International Financial Statistics*

the market for securitized or derivative instruments is either small or non-existent, and few rely on foreign borrowing to fund their lending operations.

Preceding 1989, there were just eight stock markets in Africa. In 2009 there are nineteen stock exchanges. With the exception of South Africa, most African stock markets doubled their market capitalization between 1992 and 2002. Total market capitalization for African markets increased from US\$113,423 million to US\$ 364,672 million between 1992 and 2007. African stock markets are effectively small in size and illiquid, partly a reflection of the low level of economic activities. Thus, while the price-earnings ratios for many African stock markets were above their sectoral equivalents in developed markets in 2007, the ongoing global financial crisis act as a reminder that what goes up eventually must come down (Caprio and Kane, 2008).

Integration into international financial markets has been a second important and controversial aspect of financial-sector policy over the past decades. Although capital account restrictions are still in place in many countries of Sub-Saharan Africa, these are often more *de jure* than *de facto*. And while capital account liberalisation has many benefits, it has to be managed carefully on the macroeconomic level and accompanied with appropriate regulatory policies (Kose et al., 2009).

While there has been a focus on opening capital accounts toward developed countries, the potential of regional financial integration has been much less exploited, although there are large economies of scale to be reaped by cooperation in technical areas such as harmonizing approaches to bank regulation or payment systems (World Bank, 2007). Reducing, if

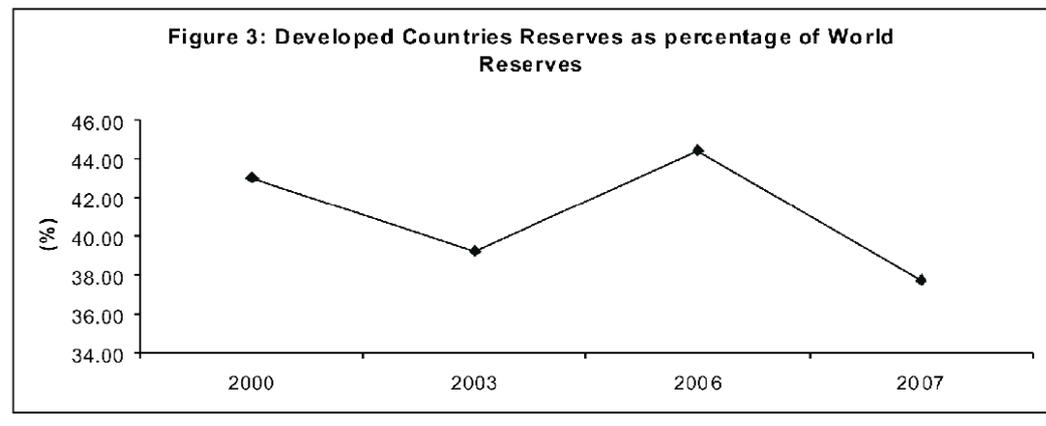
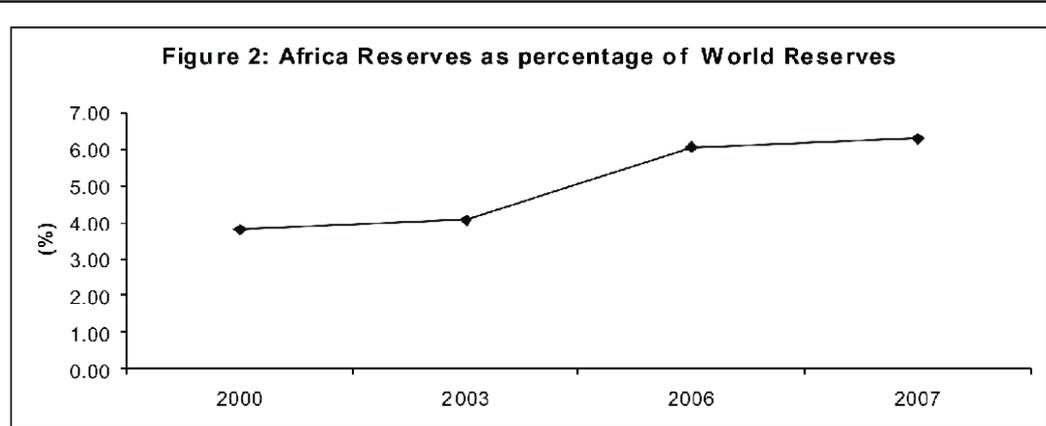
not eliminating, intra-regional capital account restrictions can help overcome the scale problem for financing large projects, such as those in infrastructures. While reducing dependence on international capital markets to a certain degree, such intra-regional capital account liberalisation seems less risky than complete capital account liberalisation vis-à-vis international investors.

Having gone through the cycle of nationalizing and privatizing their banking systems, more than half of the African countries have banking market with either a dominant or a significant share of foreign-owned financial institutions. Foreign bank entry has several advantages that are specific to Africa: international banks can help foster governance, bring in much-needed technology and experience from other parts of the region, and help exploit scale economies in their small host economies. However, there are many factors that can prevent countries from reaping the potential benefits of foreign bank ownership, such as the presence of dominant government-owned banks that reduce competitive pressures or the small

size of many financial markets in sub-Saharan African markets preventing the necessary competitive pressure to emerge. The result in many sub-Saharan African countries has been a concentration of both domestic and foreign banks' portfolios on government papers and international assets and shying away from private sector lending.

Nevertheless, the new wave of foreign bank entry after liberalisation in the 1990s has seen not only the return of old colonial banks but also some new important players, such as several South African banks, banks from non-African regions other than Europe, and several regional banks, such as the Bank of Africa, Zenith Bank, Access Bank, United Bank of Africa and Ecobank. Many of these new entrants have put a much higher weight on sustainable outreach, introducing new products and technologies.

Banks in Africa have not been known for their innovative and liberal banking practices. Most banks are extremely conservative and traditionally invested in government securities and fixed assets. However, in recent times, real private sector credit, in particular, has been



growing at an accelerating rate, and its median value has doubled in the past decade. Even as a share of GDP, it has turned the corner, with the median share approaching 18.0 percent in 2007, about a third higher than at its anemic trough in 1996. Much of this increase was on the back of innovative non-collateralized lending practices (Geithner, 2007).

The reserves of small African central banks are growing because of debt relief, foreign aid, and other external inflows. And while these reserves may be small in absolute terms, the foreign currency reserves may be huge relative to the

losses on account of investing in hitherto top rated financial institutions in developed economies.

If this type of loss is more widespread, it is likely to occur in central banks with no overall policy for managing the Central Bank's reserves in place; limited capacity to oversee their relationship with their fund managers and to monitor the market risks or capable information technology system for managing and monitoring the reserves portfolio. Overall, the present financial crisis has brought to the fore the need to have a defined strategy to manage African resources including the external reserves.

overriding objective of securing monetary and financial stability overwhelmingly dictates the reserve management decision. Overall safety and liquidity are generally given prime consideration over returns. Definitely, it is specifically in the pursuit of this goal that central banks are normally exposed to very huge exchange rate risk.

To a large extent reserves management at the level of the central bank has political undertones. Thus, the domestic governance environment and the central bank's relationship with the government and the body politic play an important role. This is particularly so if higher volatility (that could bring about temporary losses) results from seeking higher returns, the central bank may come under closer public scrutiny including risk to its reputation. Furthermore, regulations for operational surplus remittances to the government may reinforce aversion to volatility.

Although individual country's policies differ widely, they tend to be asymmetric. In this regard, higher volatility of returns available for distribution increases the likelihood that central bank capital is eroded over time. This, in turn, may be perceived as undermining the central bank's budgetary and operational independence. Additionally, in some countries an advance estimate of the profit remittances to the government may need to be provided. Such a practice is also likely to constrain central banks from investing in riskier assets whose income flow cannot be forecasted with reasonable degree of certainty.

The first issue, and certainly the most obvious one even to the casual observer of central bank reserves management, is the current explosion in reserves asset growth. From a level of about \$1.2 trillion at end 2000, total world international reserves exceed \$2.9 trillion in 2008. Such a pace of reserves accumulation is unprecedented, and has generated considerable interest in recent times.

What is particularly evident is that the reserves accumulation is concentrated in really very few hands. Most of the growth is accounted for by less than ten major

Table 4: International Reserves (US\$ bn)

Rank	Country	Reserves	% of total	Reserve/GDP (%)	Reserves/Imports (%)
		(US\$ Bn)	Africa		
1	Algeria	110.32	27.86	82.14	402.82
2	Libya	78.41	20.05	139.16	517.30
3	Nigeria	51.33	12.97	29.38	136.53
4	Egypt	30.19	7.62	22.71	74.58
5	South Africa	29.59	7.47	10.42	33.62
6	Morocco	24.12	6.09	32.11	80.14
7	Angola	11.20	2.83	34.10	74.40
8	Botswana	9.79	2.47	84.76	235.33
9	Tunisia	7.85	1.98	22.27	41.32
10	Eq Guinea	3.85	0.97	36.98	119.44
11	Kenya	3.36	0.85	11.45	37.28
12	Cameroon	2.91	0.73	14.08	76.49
13	Tanzania	2.89	0.73	17.84	64.46
14	Ghana	2.84	0.72	19.34	35.15
15	Uganda	2.56	0.65	22.79	73.77
16	Cote d'Ivoire	2.52	0.64	12.00	41.30
17	Congo Rep	2.17	0.55	28.46	139.38
18	Mauritius	1.78	0.45	23.67	45.65
19	Senegal	1.66	0.42	14.14	39.06
20	Mozambique	1.44	0.36	19.11	47.68
21	Sudan	1.38	0.35	2.99	16.21
22	Gabon	1.23	0.31	10.86	55.78
23	Benin	1.21	0.31	24.78	108.94
24	Zambia	1.09	0.28	9.77	36.45
25	Malawi	1.09	0.27	14.61	54.36
26	Burkina Faso	1.03	0.26	14.50	60.54
27	Chad	0.96	0.24	13.45	63.67
28	Namibia	0.90	0.23	12.11	24.89
29	Togo	0.84	0.21	16.72	30.21
30	Madagascar	0.84	0.21	16.72	30.21
31	Cote d'Ivoire	0.78	0.20	19.68	37.63
32	Congo Kin	0.78	0.20	19.68	37.63
33	Mali	0.72	0.18	20.53	41.92
34	Mali	0.72	0.18	20.53	41.92
35	Sierra Leone	0.59	0.15	13.51	28.12
36	Sierra Leone	0.59	0.15	13.51	28.12
37	Mali	0.56	0.14	19.67	37.63
38	Congo DR	0.18	0.05	1.72	13.36
39	Burundi	0.18	0.04	18.76	55.10
40	Gambia	0.14	0.04	20.11	46.06
41	Djibouti	0.13	0.03	15.73	14.68
42	Liberia	0.12	0.03	16.35	1.67
43	Comoros	0.12	0.03	24.93	83.69
44	Guinea Bissau	0.11	0.03	6.84	102.63
45	CAR	0.08	0.02	5.01	35.91
46	Guinea	0.05	0.01	1.09	3.80
47	Seychelles	0.04	0.01	5.74	5.23
48	Sao Tome & Principe	0.04	0.01	28.09	5.39

Source: Wikipedia (2007).

economy. How they are managed is of crucial importance. It has not been uncommon, for some central banks to place as much as 50.0 per cent of their total reserves with external fund managers on account of their own lack of skills in reserve management. Following the recent global financial crisis, at least one African central bank has indicated that it has suffered not negligible financial

The objectives and constraints of African central banks, like most other central banks in the developing countries are the optimal asset composition of foreign reserve portfolios. In principle the three main objectives (safety, liquidity and return) are usually trade-offs by the central banks in their reserve management decision. However, the

holders, mostly from Asia, and indeed no less than seven Asian central banks now have over \$100 billion in reserves. And for the first time, the bulk of international reserves are held by developing / industrializing countries.

Several reasons have been put forward for this rapid growth in reserve assets. For some countries, especially in Asia, it signifies a desire to self-insure, following the experience of financial crisis in the late 1990s. Secondly, sequel to the attainment of the objective of rebuilding reserves, there has been a desire to maintain given exchange rates.

Finally, in the resource-rich countries, the unprecedented increases in the world commodity prices accounted for the increase, given that in many cases, domestic markets were unable to fully absorb the revenue streams. Many oil exporters especially find their domestic markets at risk of overheating and choose to keep a substantial proportion of their oil revenues abroad. In all an interesting development with regard to reserves accumulation is that in several countries it has moved from being a deliberate objective of policy to a by-product of other policies.

Consequently, some countries are confronted with the dilemma of when the continued increase in their reserves ceases to be an undeniable benefit and begin to pose its own challenges, including the sterilization of domestic credit expansion or the risks to the central bank's own balance sheet from such large unhedged positions. In other words, a growing number of central banks have had to mull two critical questions: how much reserves is adequate, and how much reserve is too much?

The next question that confronts central banks is how to invest their reserves. There are essentially two critical area of concern, first a reliance exclusively on traditional asset sectors such as money markets and short duration government bonds risks over-concentration in a limited number of securities, and second, as reserves levels grow and the need to

keep the bulk of the assets fully liquid at all times diminishes, the opportunity arises to seek incremental revenue.

Admittedly, none of these concerns is completely new. And the solution that central banks have adopted: diversification into new asset classes in order both to reduce concentration risk and enhance return, has a protracted history. But the pace of the diversification and the range of new asset classes that central banks have invested in have increased considerably in recent times. In a recent survey of central banks, 80.0 per cent of those that responded said that they had added a wholly new asset class to their reserves portfolio in the last 24 months, and some of the new sectors that reserves managers have been studying and investing in include Mortgage-Backed Securities (MBS), Asset-Backed Securities (ABS), corporate bonds and Equities (BIS, 2008).

Given the increasing diversification of central bank reserves, several issues are emerging. The first is does the official sector have the required skills to manage increasingly diverse portfolios? Several countries have identified the need to establish a specialist investment agency to manage non-typical assets, though the exact location of the dividing line between what remains in the traditional central bank portfolio and what is hived off into the new investment portfolios is inconclusive. Other central banks prefer to keep all their assets in one place, but in recognition of the limits to their internal expertise they are increasingly willing to outsource the actual management of the assets to the private sector.

The second concern has to do with the classes of assets and their suitability. For instance, should some be considered unsuitable whatever their financial attractiveness in risk-return stipulations? Today the boundaries appear to be moving quite fast, as official sector asset managers are looking at asset classes that were considered hitherto to be outside their normal domain. It is, however, becoming increasingly obvious that the abstinence from holding

obligations of another country's private sector no longer holds. One enthralling addition to the current debate is the use of public or national assets to buy other countries' private sector companies outright. It is increasingly the developing world which is seeking to purchase companies in the developed world.

Whatever the political concerns surrounding this issue, it could be argued that purely on a portfolio risk management basis, there are legitimate grounds for asset-rich countries to seek real assets in this way, not least to avoid the risk that official sector debtors from the industrialised countries will seek to reduce their (nominal) liabilities through a policy of inflation. It is not yet clear what the consequences of this new investment dynamic will be, and whether it is in fact either optimal or even in some senses legitimate for public sector asset managers to push the boundary of risk-reward maximization in this way. But the subject is certain to remain a live one as long as asset-rich states continue to look to diversify their national wealth away from portfolios consisting wholly of securities and paper assets.

Another major challenge is the question of the optimum currency allocation for reserves. There are two main reasons why this debate continues to occupy market participants. The first is the simple dynamic that it is by no means obvious that, as reserves levels rise, the optimal allocation of those reserves would remain constant. As reserves grow, they increasingly move from being mainly pools of liquidity to a mix of liquidity and investment, and while the US dollar markets remain the preferred source of central bank liquidity, the investment universe is wider and other markets come more and more into play.

Secondly, despite the seemingly widening trade deficits of the US, creditor nations of the United States are unable to ignore the longer term consequences for the dollar. The future value of the dollar is central to this decision, and as reserves managers move more and more into long term investment and store-of-wealth

³ Profits are remitted but losses do not lead to automatic recapitalization of the central bank

portfolios, it is increasingly driving attitudes to their preferred currency allocation. The debate is not only about the future consequences of these imbalances, but also about their causes. Two main theories have been identified: one, the US current account deficit is mainly a reaction to the excess of saving in the developing world, and secondly that the deficit is more home-grown, and the result of excess US consumption.

Drawing from the issues discussed above, the critical challenges in investing African reserves in the continent include: inadequate capitalization of African institution, especially; banks, shallowness of the African financial markets; non-convertibility of African currencies; political and macroeconomic instability.

With regards to the capitalization of the African banks, the issue of foreign reserves management as noted earlier is critical for all the countries and the institutions identified or entrusted with such responsibility must be ones that are big, strong and reliable. It will be economically incorrect to allow an institution with a paid up capital that is less than the value of the external reserves it is supposed to manage to participate in reserves management for the country. In the aftermath of the bank consolidation exercise 2006, the Nigerian authorities granted selected commercial banks that met certain conditions approval to manage some fraction of the country's external reserves. This is a model that could be adopted by other African countries.

Concerning the depth of the financial market, the absence of robust and well developed financial markets in Africa is usually identified as the key constraint to the development of financial products. The non-convertibility of the African currencies automatically implies that none of these currencies can function as a reserves currency. Consequently, most African countries have their international reserves in US dollars, Euro, pounds, etc.

With respect to political and economic stability, African countries have had their unfair share of instability. It is expected that for a country or a currency to attract patronage it should be seen to be stable and the issuing authority must be an offshoot of a politically stable environment. This has not been in abundant supply in Africa.

IV.0 WAY FORWARD

In this segment we shall discuss in practical terms drawing extensively from the discussion above on the opportunities available to the Africans to manage the African external reserves.

The regional breakdown of reserves buildup suggests a positive correlation between reserves buildup on the one hand and trade and output on the other. On the average the East

Asia and Pacific region has accumulated more foreign exchange reserves than other developing regions over the last decade. However, in addition to relatively high trade-driven growth, the East Asia and Pacific region witnessed the severest financial crisis in the last two decades. In this context analysts identify three factors, beside high oil prices, for the buildup of

holders to global financial risks. Over the last few years, more than 95 per cent of African non-gold reserves were held in foreign exchanges including currency (mainly the US dollar) plus deposits with monetary authorities and banks and securities (US/foreign government securities, equity, bonds and notes, money markets, derivatives). Thus the value of African reserves can change with fluctuations in the reserve currency (especially the US dollar) or wider global financial market fluctuations.

The safest reserve asset, treasury bills, pays the lowest rates of return. Again this makes efficient reserve management a top priority for reserve holders. Private capital flows to sub-Saharan Africa reached over US\$50 billion about four times larger than flows in 2000. Most flows were directed to Nigeria and South Africa, but the increases also reflect the improved fundamentals elsewhere in the region. In a small group of countries, notably Ghana, Uganda, and Zambia, portfolio flows have been on the rise, attracted by improved risk ratings and higher yields. Sub-Saharan African countries have continued to reinforce their financial systems. Banking systems in much of the region are more stable because many countries (though not all) have liberalized interest rates, rehabilitated banks, and modernized the sector. Bank credit to the private sector is growing rapidly, but economies in the region still lack financial depth.

reserves in developing countries (ECB 2006)./

Faster progress in increasing financial intermediation would help foster private investment and growth. The priorities

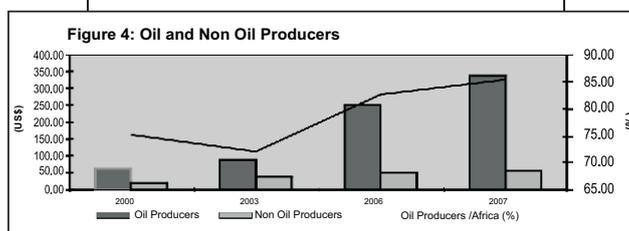


Table 5: African Countries Reserves (US\$bn)

	2000	2003	2006	2007
Top 15 African countries	72.72	112.00	284.24	372.19
Bottom 10 African countries	0.32	0.47	0.84	0.10
Total Africa	79.19	122.89	304.00	395.94
Top 15/Total Africa (%)	91.84	91.14	93.50	94.00
Bottom 10 Total Africa (%)	0.41	0.38	0.28	0.03

The composition of African reserves highlights high exposure of reserve

should be to increase access to formal bank financing; eliminate distortions in

⁴ To self-insure;

⁵ The desire to stop domestic overheating.

monetary and fiscal policy that discourage bank lending; strengthen creditor rights and information sharing; reduce reliance on unremunerated reserve requirements as a monetary tool; build domestic debt markets; improve the risk management capacities of banks; and encourage integration to increase competition and use economies of scale.

One of the key advantages of investing external reserves in Africa is obviously income and asset diversification. Foreign reserves are invested in more aggressive asset classes *vis a vis* the usual G-7 sovereign bonds or commercial bank deposits.

Admittedly, one main obstacle would probably be the ill-preparedness of the African domestic financial industry. Africa's foreign reserves have been reaching record highs. Along with global demand for natural resources, this trend could continue in the years to come. The continent has a lot to gain from optimally using those reserves. Apart from income reasons, external reserves management could be a way of developing the domestic financial markets.

One of the critical requirements to manage external reserves is adequate capital base of the financial institution concerned. As noted earlier, most financial institutions in Africa are not adequately capitalized. Therefore the opportunity to manage the African reserves by these institutions in the current form is slim. The experience of Nigeria cited earlier, where commercial banks were given some portion of reserves to manage after the recapitalization of the banks that resulted in consolidation of the banks from over eighty nine to just twenty-five is an example that other African countries can emulate. This has the twin impact of aiding the advancement of the African institutions as well as ensuring that the realized profit from such venture is to a large extent domiciled in Africa.

The development of the financial sector will also be realized through the

opportunities that would be created through the avenue of managing these reserves by African institutions. One quick win would be to work towards the integration of the existing capital markets in the continent. In this way the African countries that have excess reserves could make same available to those countries that have deficits. This will make the African resources to work in and for Africa. Admittedly, the immediate constraint to this opportunity is the non-convertibility of the African currencies. This shortcoming, notwithstanding, the transactions in a reserve currency like the US dollar could still be carried out on the continent.

Overall, the opportunities abound but the supporting infrastructures are relatively inadequate. There is the urgent need to work towards the upgrade of the critical infrastructure that will aid the management of the African reserves by the African institutions and ensure that African resources work for the development of Africa.

V.0 Summary and Conclusion

The intention of this paper was essentially on how to invest African reserves in the continent. This paper underlined the challenges and opportunities for managing Africa's external reserves by Africans after identifying several pre-conditions for a currency to emerge as international currency. It is obvious that these conditions have not yet crystallized in Africa. Thus a lot of work is expected to deepen and broaden the continent financial system. Although African external reserves have grown over time the benefits of such growth in terms of facilitation of domestic financial markets and even the earning are not commensurate with the reserves growth rate. The non-convertibility of African currencies, volatile macroeconomic and sometimes volatile political environment coupled with the shallowness of the domestic markets are the main challenges that are faced by the continent. However, with recapitalization of the African financial institutions especially banks and the attainment of

stable polity in both economic and political fronts, there is hope for the continent's institutions to take their rightful place in the emerging global financial system by first using the African resources as the first step.

The involvement of creditable African financial institutions in the management of the reserves either within or outside Africa will in no small measure strengthen the development of the African financial system but also ensure that a bulk of African resources work for Africa as the difference between what the current fund managers paid to the African central banks and what they actually get as commission or profits will be retained explicitly or implicitly in Africa.

Africa's financial systems have seen deepening and broadening over the past years, the result not only of improvements in the macroeconomic and institutional framework, but also of the worldwide liquidity glut, which directed more capital flows into Africa. The current global crisis threatens to reverse this trend and undermine recent progress. In these adverse circumstances, it is even more important to upgrade the necessary frameworks for sound, efficient, and inclusive financial systems. This call for further institution building as well as cautious and case by case government intervention to aid financial market participants expand financial services to the frontier of commercially sustainable possibilities.

For better or worse, the future of Africa's financial systems is closely linked to the development of global finance, as are its real economies. However, it is up to Africa's financial sector stakeholders bankers, donors, and policymakers to guide financial sector reforms in a way that maximizes Africa's opportunities, learning both from their own experience over the past 50 years and the experience in other emerging and developed economies. One of the ways to accomplish this is to fast track regional economic and monetary integration in Africa as well as infrastructure upgrade.

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