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Lessons from the Foreign Exchange Market Reforms in Ghana: 1983-2006¹

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Abstract

This paper critically examines the trade and exchange reforms that paved way for the implementation of the current flexible, market-based exchange rate regime in Ghana. Using descriptive method, the paper argues that Ghana has succeeded in unifying its exchange rates without the inflationary consequences, as Pinto (1988, 1990) predicts, partly because of the strategy used. The strategy involved a gradual, rather than overnight, exit from the rigidly fixed exchange rate regime. It therefore enabled the development of a relatively more liquid and deeper foreign exchange market as well as the development of monetary authorities' capacity to monitor and supervise the operations of the market. In addition, the IMF/World Bank's support with foreign exchange (loans and aid) enabled an orderly and gradual exit to a flexible regime in Ghana. The paper then examines the macroeconomic response to the reforms by analysing the trends in some major economic aggregates during the reform process. One major policy lesson from the Ghanaian exchange rate reforms is that unless there is a reliable source of foreign exchange, liberalising trade could cause policy reversals by causing substantial and sudden exchange rate depreciations that are politically risky.

Keywords: Economic Reform, Trade Reforms, Parallel Market, Exchange Rates Unification, Ghana

JEL Classification Codes: F13, F31, F35

1 Introduction

The dominant view in the literature on the IMF/World Bank inspired Structural Adjustment Programmes (SAP) is that those reforms are always in contrast with the internal dynamics of the third world countries (see for instance Faruqee and Hussain, 1994; Mosley, 1996; Ng and Yeats, 2000; Pinto, 1990, 1991; and Gervais and Larue, 1999). This sceptical view is even more strongly held on the external sector liberalisation component of the reforms. For instance, Pinto (1988, 1990 and 1991) and Gervais and Larue (1999) present theoretical models suggesting that the removal of the black market premium, which is at the centre of the reforms in African countries, takes inflation to a higher steady state path. In Pinto's (1988, 1990 and 1991) model, the black market premium serves as implicit tax revenue to the government. Its elimination reduces government revenues leading to higher fiscal deficits, which have to be financed with new monies, given the external credit constraints, thereby raising inflation. While this theoretical prediction appears to be in line with several episodes of African reforms experiences, there are a few cases that are to the contrary. Ghana, for instance, is one case of a successful IMF/World Bank inspired reform (see Leechor, 1994)².

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² Others are Uganda, Botswana, Mozambique, and Mauritius.

Ghana's experience, however, demonstrates the possibility that these reforms can work well in the third world countries. The Ghanaian foreign exchange market is now liberalised and the hitherto high black market premium eliminated with no inflationary consequences, contrary to Pinto's (1989, 1990) argument. In addition, the Ghanaian foreign trade regime is one of the most liberalised in the region, with a trade-to-GDP ratio of up to 100% in 2008 (IMF, 2009). The financial sector is also fully liberalised, and is increasingly becoming stable and resilient to potential financial shocks. Indeed, because of the financial sector stability and low inflation achieved, by May, 2007 the monetary and financial environments were deemed ripe for the adoption of Inflation Targeting as the framework for monetary policy. As a result, Ghana is now the first (and only) country in West Africa to formally adopt Inflation Targeting as its framework of monetary policy, and second in Africa, after South Africa.

The relevant question that the Ghanaian success story raises is of the lessons that can be learned for other Sub-Saharan African countries that have not succeeded in their reform efforts³. In other words, what are the major reasons that made the Ghanaian reforms succeed? Specifically, how did the authorities unified the dual exchange rates without inflationary consequences?

The broad objectives of this paper, therefore, are to critically examine the exchange rate reforms that paved way for the implementation of a flexible, market-based exchange rate regime, and see the lessons that can be drawn from the Ghanaian experience. Because of the importance and tenacity of the parallel markets, especially in Africa, the paper places emphasis on the strategy used in unifying the pre-existing dual exchange rate system, and then in exiting the rigidly fixed exchange rate regime. Indeed, the central argument of this paper is that the success of the Ghanaian external sector reform can be explained by three major factors. First, the *gradual, rather than an overnight, approach to the unification of the dual exchange rates*. This strategy enable the orderly *exit* to a flexible regime, and allowed the development of a relatively more liquid and deeper foreign exchange market as well as the development of monetary authorities' capacity to monitor and supervise the operations of the market. Secondly, *the IMF/World Bank's support with foreign exchange* (loans and foreign aid) that fed the rising demand in the foreign exchange market as imports were gradually liberalised. Thirdly, the *political will* that make the policy makers determined, and resisted the temptations to reverse those policies, most of which were politically risky (see for instance, Bawumia *et al.*, 2008, IMF, 1994, 2004, 2007 and Hadjimichael, *et al.*, 1994).

The rest of the paper is organised as follows: Section two presents an overview of the initial conditions, examining the pre-1983 trade and exchange regime. Section three examines the trade and exchange reforms, as well as the monetary and financial sector reforms. Section four examines the response of the economy to the reforms, and section five concludes the paper.

2 The Pre -Reform Trade and Exchange Regime: 1964-1983

This section critically examines the initial conditions in Ghana, which are broadly similar to those in most other Sub-Saharan African (SSA) countries. The colonial economy, prior to 1983, maintained a controlled fixed exchange rate regime characterised by surrender laws, foreign exchange rationing and currency inconvertibility (see Mumuni and Owusu-Afriyie, 2004 and

³ Some of the not-so-successful reforms in the SSA include those of Nigeria, Kenya, Sierra Leone, Senegal, Namibia, Congo and Malawi.

Gyimah-Brempong, 1992)⁴. Under this regime, exporters were required by law to surrender all their foreign exchange earnings to the Bank of Ghana (BoG henceforth) at the fixed official rate, and the purchase of foreign exchange for capital transaction was illegal⁵. Because imports were quantitatively controlled, through foreign exchange allocation by the BoG, trade surpluses were recorded in most of the period (1972-1982). However, these surpluses were achieved at a very low trade level. As Figure A1 shows, the ratios of exports and imports to GDP had declined from a little over 20 percent in 1970 to about 3 percent in 1982. High rates of inflation (averaging over 60 percent, see Table A1), chiefly caused by general scarcity and monetisation of huge fiscal deficits (Sowa, 1994), amidst fixed exchange rates meant that the exchange rate became increasingly overvalued⁶. By 1982, exchange rate overvaluation was estimated at 816 percent (Werlin, 1994). The collapse of exports and imports as well as domestic production, which led to a weakening of the government's tax revenue base, was the major cause of huge fiscal deficits (peaking at 11.28 percent of GDP in 1976, see Figure A2). As imports were quantitatively restricted, and foreign exchange rationed, smuggling activities thrived leading to the emergence of black market for foreign exchange as a source of its finance. As a result of the higher rates farmers received for their foreign exchange in the black market, about 20 percent of the cocoa harvested was smuggled out (May, 1985), further reducing the government revenue.

The economy, therefore, had two foreign exchange rates: the official exchange rate, which was fixed and subject to foreign exchange rationing and currency inconvertibility (Gyima-Brempong, 1992); and the illegal black market rate, which was flexible, convertible and subject to no quantitative rationing⁷. The black market, although it existed since the introduction of the cedi and the Exchange Control Act in 1965, became more prominent in 1976 when official import capacity became chronically low and importers became increasingly reliant on the black market⁸. In fact, by December 1982 the black market exchange premium had reached 42.64⁹ (see also Figure A3).

An inference from above estimates is that if the (¢/\$) black market rate 42.64 times the official rate (or 50 times according to Gyima-Brempong, 1992), and 8.16 times the equilibrium (according to Werlin, 1994: 209), it implies that the black market rate was undervalued by about

⁴ In fact, the fixed regime was retained up to 1986; the major difference was the frequent devaluation of the official rate, as will be seen later. The currency was pegged to the pound sterling until 1971 when it was pegged to the US\$. Between 1973 and 1982 it was pegged to a basket of multiple currency, and to the US\$ until 1986.

⁵ This surrender laws allow governments to implicitly tax exports by exchanging exporters' foreign currencies at artificially appreciated rate. This tax is measured by the black market premium multiplied by the amount of foreign currency the exporters surrenders. The elimination of this implicit tax, when exchange rates are unified, can raise inflation according to Pinto (1989, 1990, and 1991).

⁶ When cocoa exports collapsed, which was the major source of government revenue, the huge fiscal spending to maintain the import substituting industries resulted in huge deficits. The need to finance such deficits led to money printing and inflation (Werlin, 1994: pp. 209).

⁷ Note however that the black market's flexibility may not lead to a rate that is equilibrium for the economy due to the possible foreign exchange shortage its illegality creates on the supply side, and the high demand because most importers did not have access to the official market.

⁸ Acheampong's regime *re-valued* the cedi in 1972, and the US\$ was devalued in 1973. He refused to repay foreign loans borrowed by previous governments and increased the minimum wage fourfold. These policies were aided by the boom in cocoa exports earning of 1972-1974 and the 2/3rd increase of gold price in 1973. When the boom ended, and exports became increasingly uncompetitive while excess demand for imports continue to mount. With less foreign exchange available for imports, by 1976 import licence premium started to rise.

⁹ See Dordunoo (1994). Gyima-Brempong (1992) reported from the World Currency Yearbook, 1988 that the black market premium had reached 5,000 percent by 1983. The Black Market Premium is defined here as the ratio of the black market to official exchange rate.

535 percent (or about 5.35 times the equilibrium rate)¹⁰. This suggests a situation of extreme foreign exchange shortage in which the official rate was extremely overvalued while the black market extremely undervalued. This situation is suggestive of a very thin black market, as its illegality and surrender laws impede the supply while bureaucracy, rationing and rent-seeking in the official market boosts the demand in the black market. Contrary to the general assumption, therefore, the black market rate in Ghana during this period should not be considered the equilibrium rate, or even near-equilibrium. In such a situation where the equilibrium rate is stronger than the black market rate but is weaker than the official rate, liberalisation can be expected to lead to appreciation in the black market rate but depreciation in the official. In addition, the extreme overvaluation of the official rate at which exports earnings were surrendered suggests that the implicit tax revenue during this period was very large. *A priori*, therefore, an overnight unification of the rate should result in higher fiscal deficits and inflation. As will be argued in the next sections, however, the gradual strategy prevented this, as it allowed time for other non-inflationary sources of revenue to be developed.

3 Trade and Exchange Rate Reforms

The (gradual) shift in the exchange rate management in Ghana took place between 1983 and 1992 from a rigidly fixed to a flexible exchange rate regime. The rigidly fixed exchange rate regime Ghana had pursued before 1983 led to a substantial overvaluation of the cedi, especially in the late 1970s and early 1980s when inflation hovered around 140 percent¹¹. There was a highly developed parallel foreign exchange market which, coupled with the foreign exchange surrender laws, acted as a tax-type disincentive to exporters. The exchange rate reform, therefore, aimed at realigning the overvalued exchange rate, eliminating the parallel market premium and moving away from the rigidly fixed and controlled regime towards flexibility. The hope was that the new flexible exchange rate regime would make adjustment of the exchange rate somewhat automatic thereby maintaining external competitiveness of the economy. In addition, a flexible exchange rate regime would eliminate the need for the politically risky and difficult devaluations¹². As we shall see below, within the transition period (1983 to 1992) the operational, institutional and technical requirements for an orderly transition to, and smooth operation of, the new regime were put in place¹³. These requirements included the attainment of fiscal discipline, development of a better regulated and supervised financial sector, as well as a deeper money market with market determined interest rates (Duttgupta *et al.*, 2004). These were achieved in the following four distinct phases.

¹⁰ Proof: $\frac{e_b}{e_o} = 42.64$, Or $e_b = 42.64e_o$ (1) (where $e_b, e_o = \text{¢}/\text{\$}$). Also, $\frac{e'_o}{e'_e} = 8.16$ or $\frac{1}{e'_e} = 8.16 \frac{1}{e'_o}$ (where : $e'_o, e'_e = \text{\$/¢}$) $\Rightarrow e_e = 8.16e_o$... (2) Substituting from (2) in (1), yields: $e_b = 42.64e_o / 8.16 = 5.23e_e$.

¹¹ The divergence between the official and black market exchange rate of the cedi reached a peak of 4,264% in 1983 from about 8% in 1967 (see Dordunoo, 1994), an indication of the overvaluation of the cedi. Apart from two devaluations and one revaluation, the exchange rate was rigidly fixed between 1967 and 1983 (Dordunoo, 1994).

¹² Devaluation of the cedi had been a major reason for toppling the previous governments in Ghana (see Leith and Söderling, 2000 for an account of the political economy of the reform).

¹³ Successful exit from a peg requires (i) a sufficiently deep and liquid foreign exchange market, (ii) formulating an intervention policy consistent with the new regime, (iii) establishing an alternative nominal anchor in the context of the new policy framework, (iv) building the capacity of market participants to manage exchange rate risks and supervisory capacity to regulate and monitor them (see Agenor, 2004 and Duttgupta *et al.*, 2004).

3.1 The ERP Period: Crawling Peg (1983-1986)

The gradual transition to floating rates started with the introduction of a system of (exports) *bonuses and* (imports) *surcharges* between April and October of 1983. This system effectively instituted a *multiple official exchange rate regime*, in which the official exchange rate was *dualised* into first- and second-tier rates, with each rate serving different transactions. Traditional exports, imports of crude oil, essential raw materials, basic foodstuffs and capital goods were subjected to the first-tier rate (of ₵23.36/\$), while the non-traditional exports and all other imports were subjected to the higher second-tier rate (of ₵29.98/\$)¹⁴. This strategy sought to improve the chronically low foreign exchange supply by encouraging non-traditional exports¹⁵. In addition, because the export bonuses were financed by the surcharges on imports, the strategy had avoided serious budgetary drain on the government. In October 1983, the average nominal exchange rate rose from ₵2.75/\$ (set in 1978) to ₵25/\$, roughly offsetting the cumulative inflation from 1978 through 1983. In October, 1983, the two rates were first devalued by 26 percent and 15 percent, respectively, before they were *unified* and further devalued, putting the unified rate at 30 cedi to a dollar in the same month.

Between October 1983 and September 1986, a *crawling peg* regime was adopted. The quarterly rate of crawl was determined on the basis of quarterly Purchasing Power Parity (PPP) calculations (Dordunoo, 1994). Consequently, by January 1986, the exchange rate had depreciated to ₵90/\$ from just ₵30/\$ in October, 1983. With inflation substantially less than these exchange rate changes (and declining) the desired real devaluation was achieved (Harrigan and Oduro, 2000), with the real rate approaching its 1976 level (Leith and Söderling, 2000). In addition, the black market premium had declined substantially, as indicated by the ratio of black market to official exchange rate, which fell from about 43.64 at the beginning of the reform to 2.22 in September 1986 (see, for instance, Figure A3)

Meanwhile, balanced government budgets - a key condition associated with IMF and World Bank support - were achieved by 1986, through increased revenue. The rise in revenue resulted from a combined effect of the exchange rate and tax reforms. First, the adjustment of the exchange rate from ₵2.75/\$ to ₵90/\$ increased the base for all trade taxes by over 30 fold, in addition to the expansion of trade volume. Second, the tax reform reduced and simplified customs tariffs, thereby increasing efficiency of collection. As a result of these, import duty collection had approximately tripled as a percentage of GDP (Leith and Söderling, 2000). By the end of 1986, a fiscal surplus (of 0.06% of GDP) was recorded and inflation was substantially brought down (to around 30% from over 140% in 1983). Monetary control was also achieved, following the attainment of fiscal discipline, as the need for deficit financing was reduced (Dordunoo, 1994).

It is noteworthy that up to September 1986, the institutional settings in the official foreign exchange had remained essentially unchanged. The only significant change was the introduction

¹⁴ The exports included in the second-tier market are the non-traditional: they include some agricultural products (pineapples, mangoes, chillies, beans, aubergines, copra, rubber, yam, shrimps, cassava, tuna fish, lobsters, prawns, cashew, pawpaw, avocado pear and plantain), processed and semi-processed items (furniture, veneer, plywood, wooden toys, aluminium utensils, canned fruit and vegetables, chocolate, common salt, agricultural implements and food processing machines) and handicrafts (decorative ceramics, floor tiles, beads, textiles, carvings, and jewellery).

¹⁵ The two main disadvantages of the dual rate system and, hence, the reasons why it could not last long are that, first, the IMF considers multiple exchange rate system a taboo, and so it wouldn't be retained as a permanent feature on its reform programme. Second, such a scheme is intensive in administration but the government was severely constrained in its capacity for competent administration.

of a special scheme under which financing of imports through the black market was allowed, provided that the requisite taxes were paid. Apart from recognising the hitherto illegal black market, this scheme had substantially relieved the official market of demand pressure as more importers increasingly use the black market.

3.2 Introduction of the Weekly Retail Auction (1986-1988)

The massive devaluations during the crawling peg period had started to generate negative political reactions, just as previous governments had experienced. These negative political reactions were stirred by the removal of the rents from the system, and the substantial pass-through to prices of imported goods following the devaluations. Therefore, to depoliticise the setting of exchange rate, a weekly foreign exchange auction was introduced. It started with the re-introduction of a dual exchange rate, each serving different international transactions. Changes were gradually made to the surrender laws, access to the market as well as to the import licensing schemes which was later unified under one window. The auction was largely successful because of the massive financial support from both IMF/World Bank and other bilateral donors as Ghana proved its determination in the reform.

The Dual Rate System (September 1986-February 1987)

On September 16th 1986 a weekly foreign exchange auction was introduced, marking the beginning of an independent floating mechanism which was considered the best way of depoliticising the issue of exchange rate adjustment (Dordunoo, 1994). The auction was conducted under two windows: the first window's rate was *fixed* at the prevailing official rate that was set in January 1986 (i.e., ₵90/\$). This rate governed the import of crude oil, processed petroleum products, essential drugs and all official government transactions. The second window's rate was *market-determined*, in the weekly auction conducted by the BoG. The second window rate covered all other transactions that were excluded from the first window (Oduro, 2000)¹⁶. The auction was initially *retail* in nature, where authorised dealer banks served only as intermediaries, i.e., bidding only on behalf of their end-user clients¹⁷. The role of the banks here was only to centralise the bids, and auction funds, from their clients to the BoG.

The first auction was based on the Marginal Pricing Auction System (MPAS) in which successful bidders paid the marginal price for the foreign exchange allocated to them. In the second auction, however, the Dutch Auction System (DAS) was introduced under which successful bidders paid the bid price. Unlike under the MPAS, the DAS allowed a multiple currency auction in which the successful bidders for currencies other than dollars were allocated the dollar equivalent of their bid using international cross rates for conversion.

The auctions were conducted on Fridays and bidders were required to submit, by the end of Thursdays, sealed envelopes containing the standard bidding form stating the amount and bid price, as well as supporting documents such as import licences, letters of credit, *pro forma* invoice and the currency they were bidding for. Bidders were then required to submit an authorisation form from their commercial banks, which allowed the BoG to debit the bank's account with the cedi equivalent of the successful bid. The foreign exchange was allocated such

¹⁶ These other transactions were about 2/3 of all Ghana's external transactions (Dordunoo, 1994; Harrigan and Oduro, 2000).

¹⁷ The objectives of the auction, and hence the various modifications that followed, were to increase the supply of the foreign exchange to match the rising demand; reduce the weekly variation of the official rate; reduce the spread between the highest and lowest bids; and to narrow the divergence between the auction and the parallel/bureau rates (Dordunoo, 1994).

that the foreign exchange requirements of bidders with the most depreciated exchange rate were satisfied first until the supply was exhausted. There was a committee that supervised the auction clearance and decided the marginal exchange rate, which was the rate at which foreign exchange supply was exhausted by the demand. This marginal rate, declared at the end of each auction, ruled every extra-auction transaction until a new rate was announced¹⁸. In the case where the demand at the marginal rate exceeds the supply at that rate, foreign exchange was allocated on *pro rata* basis to all the bidders whose bid price equalled that marginal rate.

The choice of auction rather than some interbank market arrangement was aimed at attracting the foreign exchange held outside the banks into the banking system (Harrigan and Oduro, 2000). To facilitate this, and address the demand and supply sides of the foreign exchange market, several modifications were made to the institutional, legal and operational arrangements of the auction over time. For instance, on the supply side, the foreign exchange surrender laws were continued but modified to reflect the new dual rate system: earnings from cocoa exports, gold, logs and residual oil products were surrendered to the first window, with a general retention ratio of 35 percent. Specifically, the ratios of retention were respectively 45 percent, 20 percent and 5 percent for Ashanti Gold Mining Company, Logs and Cocoa Board (Dordunoo, 1994; Oduro, 2000). Residual oil and electricity did not qualify for retention. All other earnings had to be 100 percent surrendered to the BoG directly or through the commercial banks. The BoG, then decided the amount to be allocated to the auction, after allocating to the government and certain other public institutions¹⁹.

On the demand side, changes to the import licensing scheme were also made effective from October 6th 1986. The licence was re-classified to reflect the new system and indicate qualifications to accessing the auction market. There were now three types of licences: “A”, “S” and “G”. The “A” licence allowed the holder to bid at the auction and was issued for all non-consumer goods such as drugs and producer inputs²⁰. The “S” licence holders could use their own foreign exchange to import goods allowed under the existing Special Import Licence (SIL) regulations and the “G” licence was issued to government and its agencies and get their foreign exchange directly allocated outside the auction²¹. The essence of this new licensing system was that holders of A and S licences were given access to foreign exchange from the auction, which implied higher demand for foreign exchange in the auction market.

Unified Exchange Rate System (1987)

The dual exchange rate system lasted for only seven months, but led to a slight increase in the black market premium instead of reducing it (see Figure A3B). Thus, on February 19, 1987 the first-tier *fixed rate* was abolished and all transactions were subjected to the second-tier market-rate determined at the weekly Dutch auction rate (which stood at ₵150/\$). Between the 21st

¹⁸ For example, the marginal rate was used for all BoG’s purchase of foreign exchange and, later under the wholesale system, the sale of foreign exchange to commercial banks to replenish their foreign exchange needs.

¹⁹ Other measures taken to increase the supply of foreign exchange included the introduction of export incentives. Export tax rates were also reduced so as to reduce the anti-export bias. The nominal producer price of cocoa was also increased, so that despite the fall in world prices, the real producer price actually increased until the 1987/88 crop year (Oduro, 2000). However, it is noteworthy to point out that the supply of foreign exchange to the auction relied heavily on foreign support, which kept rising as more import transactions are included on the auction. For example, foreign aid provided 40.06% of the foreign exchange requirement of the auction in 1986, but rose to 69.3% in 1988 (Jebuni, 1994; Harrigan and Oduro, 2000 pp. 153).

²⁰ Also, the restrictions on the number of “A” licences were removed.

²¹ Before October 1986, under the Import Programming Scheme there were two types of licences: the Special Import Licence (SIL) and the Specific Import Licence (SPIL); the SPIL allowed the use of foreign exchange from the banking system, the SIL carried condition that the importer use their own foreign.

auction (February 19, 1987) and the 176th auction (April 27, 1990), all transactions through the banking system were settled at the marginal rate determined at the weekly auction. The market, however, continued to be on retail basis, reflecting in part the relative scarcity of official foreign exchange.

Following this unification, more changes to the auction were made to widen the access to it and thus to expand the coverage of the floating exchange rate arrangement and reducing importers' reliance on the black market. Moreover, the intensive trade liberalisation, especially the removal of most foreign exchange restrictions²² in 1988, meant that more transactions needed access to the auction. As most trade and exchange restrictions were dismantled, import licensing and the Import Programming Scheme became redundant and, therefore, were abolished in January 1989. After this, importers were only required to submit import declaration forms to their commercial banks, in order to access the auction market.

Other modifications included the addition of services and transfer payments that are approved by the exchange control authorities in the qualified transactions for bid in the auction, in March 1987. Also, in February 1988, foreign exchange demand for business travel (up to a maximum of \$3000 per trip) was also made eligible for bid in the auction. Finally, in February 1989 dividends and profits for repatriation (except from companies whose capital was raised locally) were qualified to bid at the auction.

The retention scheme was further modified, in order to increase the supply of foreign exchange to meet the increased demand, following the inclusion of more transactions in the auction. For instance, the cocoa board's retention ratio was reduced from 5 percent to 2 percent in March 1987. In addition, in April 1989, the retained foreign exchange by all exporters had to be lodged with a bank in Ghana within 60 days of shipment. Also, the payments for cocoa in non-convertible currencies under bilateral agreements were gradually reduced to only 10,000 tons.

These various measures increased access to the auction, thereby diverting demand for foreign exchange from the parallel market towards the official market. The result was a much faster depreciation of the official market rate than that of the black market rate. This led to further decline in the black market premium, as well as substantial real exchange rate depreciation. Indeed, Leith and Söderling, 2000 reported that by 1987, the average bilateral real exchange rate (¢/\$) had depreciated back to its 1968 level.

3.3 Licensing of Bureau de Change (1988)

Because of the continued co-existence of the parallel market along with the auction market, the parallel market was legalised in January 1988²³. This, along with the subsequent licensing of bureaux de change in February 1988, marks a key step in the effort towards the liberalisation and stabilisation of the exchange rate market. The key objective of institutionalising the bureaux de

²² Following the unification of the rates, on March 20 1987, several categories (about 70%) of imports that were hitherto excluded from the auction became eligible. Import licences were also reclassified to allow more goods to qualify for bids and be imported, and on February 5 1988 all imports were eligible, except beer, cigarettes, cements pipes, asbestos and fibre roofing sheets. Other existing restrictions on the demand for foreign exchange were also removed including the import licence which was abolished on January 14, 1989 (Oduro, 2000).

²³ Despite all the modifications to the implementation of the auction and institutional arrangements, the divergence between the marginal rate at the auction and the parallel rates persisted. The mere co-existence of the black market along with the official rates is indicative of a fundamental disequilibrium in foreign exchange market and trade regime, hence more corrective action was required.

change was to eliminate the parallel market, capture the main market forces behind the determination of the cedi/dollar rate and absorb the parallel market into one single foreign exchange market (Dordunoo, 1994). The first bureau started operations on April 8, and by the end of 1988 over 70 bureaux had been established and over 180 were fully licensed by the early 1990s (Harrigan and Oduro, 2000).

The bureaux were allowed to be owned and operated as separate entities by banks, institutions, individuals, or groups provided that they had the licence. The bureaux were allowed to fund all legal imports and services. They could buy and sell foreign exchange at a freely negotiated rate and no requirements were made on them to indicate or identify their sources of foreign exchange or customers. The only two requirements were for them to (1) report to the BoG on a monthly basis the volume of purchases and sale and the type of currencies involved, and; (2) not buy travellers cheques in other currencies than British pounds and American dollars. Also, the currencies they were allowed to buy included the Canadian dollar, US dollars, UK pounds, CFA and French francs, and Deutsche marks.

The main sources of foreign exchange supply for the bureaux were the exporters' retention accounts, receipts from unofficial (illegal) exports, non-traditional exports, and private remittances. Their main sources of demand for foreign exchange include all legal (and indeed illegal) imports, service payments and capital transaction²⁴.

The foreign exchange market was segmented between April 1988 and December 29 1989 with two spot rates separately quoted: the bureau and the auction rates. During this period, bureaux were not allowed to bid in the auction market and thus there was no seepage between two markets. As a result, the demand and supply in the two markets became unbalanced²⁵ leading to further divergence between the rates.

In terms of volume of transaction, the bureaux market grew rapidly from monthly purchases and sales of about half a million dollars in April 1988 to about 8 million dollars in August of the same year. The bureau rate continued to be above the auction but closer to the parallel rate. The closeness of the parallel rate with the bureau rates indicated the absorption of the parallel rate by the bureau rate²⁶. The divergence between the bureau/parallel and the auction rate initially widened, but the premium of the parallel rate over the auction declined from 41 percent at the first auction to 20 percent at the 14th auction (Harrigan and Oduro, 2000).

3.4 Introduction of Wholesale Auction (1989-1992)

To reduce further the divergence between the bureau and the auction rates and eliminate the spread between the buying and selling rates in the bureau, in December 1989, the bureaux were allowed to bid in the auction markets. The condition for eligibility criteria for the bureaux to access the auction were: a minimum monthly turn over of \$250,000; be at least a year old; and use facilities of an authorised bank for the disbursement of the auction funds (Dordunoo, 1994). The bidding procedure for end-users involved submitting applications for foreign exchange, the

²⁴ Some capital transactions are illegal as the law requires that all outgoing capital must be approved by the BoG.

²⁵ The supply of foreign exchange to the bureau was further reduced as a result of the termination of contraband activities involving the sale of cocoa by Ghanaian farmers and traders for the neighbouring countries. Farmers from these countries used to sell their cocoa through or to the Ghanaian farmers and traders because Ghanaian producer prices were higher, and cocoa was easier to sell in Ghana than in those countries.

²⁶ In fact, by the end of April 1990 the gap between the two rates had narrowed to 2.00 cedis from about 10.00 cedis in 1988 immediately after the legalisation of the bureaux (Dordunoo, 1994).

bureaux then computed the consolidated amount at each rate and submitted it to the auction through an authorised dealer bank. The bank then submitted the aggregated bids including its own requirements to BoG. A committee of 11 participating dealer banks and bureaux decided the eligibility of the bid, and not the BoG as had previously been the case. Successful bidders then paid the bid amount plus a margin determined freely by the bureau or the dealer bank.

Furthermore, on March 23 1990, an interbank market was set up to handle wholesale transactions in foreign exchange, and the *retail auction system* was replaced with the *wholesale auction system*. Until 1992, therefore, the wholesale auction was run in parallel with the interbank market. Under the wholesale system auction, authorised dealer banks and the eligible bureaux could now buy foreign exchange from the BoG for sale to their end-user clients at their determined margin or for their own foreign exchange needs. They could also trade in foreign exchange among themselves (banks and bureaux). The BoG also participated as both a buyer and a seller depending on its policy requirements and the wholesale auction market system continued to be based on the Dutch Auction System (DAS).

The introduction of the interbank market, in April 1992, was the final stage of the foreign exchange market reform process. The market provided the place for price discovery and would, in principle, eliminate the dominance of the BoG in market-making²⁷. This led to the final convergence of the parallel and official exchange rate as the latter depreciated towards the former. Since April, 1992, the BoG's management of the exchange rate takes place directly through the interbank market.

It is noteworthy that these reforms in the trade and foreign exchange market were simultaneously carried out with the monetary and financial sector reforms. In fact, these reforms have been well coordinated to be reinforcing each other. In the next section, the monetary and financial sector reforms are examined.

4 Monetary and Financial System Reforms

In this section, the paper first examines how the monetary reforms have helped in improving the conduct and effectiveness of monetary policy, and hence the attainment of low inflation. The paper then reviews of the institutional reforms that were required for the attainment of price stability.

4.1 Money and Inflation

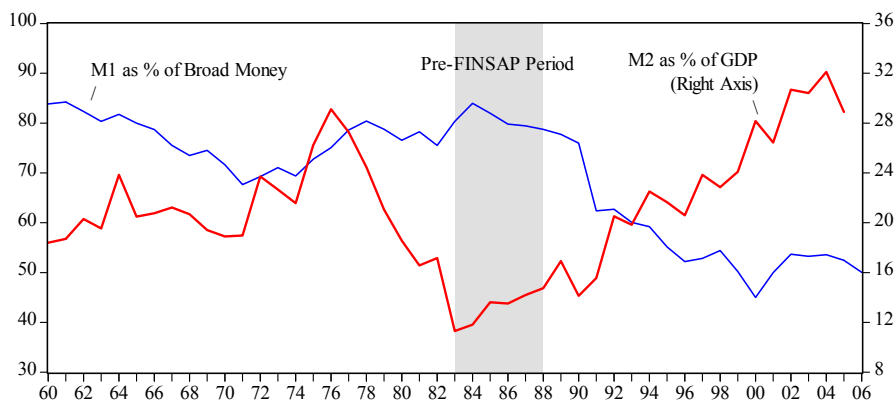
Attainment of monetary stability was not only a requirement for an orderly exit to a float, and smooth operation of the new regime, it was also an important means of disinflation in Ghana. However, this proved to be even more difficult to achieve than fiscal balance. One of the reasons for this was that the public's willingness to hold domestic currency had been sharply reduced by the previous decades' inflation and the arbitrary confiscation of monetary assets of 1979 and 1982. Although the money to GDP ratio did show a modest rise after 1983, the public remained wary of holding larger balances, despite the decline in inflation, either in cash or in

²⁷ As noted earlier, the smooth operation of flexible exchange rate regime would require an active interbank foreign exchange market so that when the cedi strengthens (for instance because of export boom) the banks would buy and hold foreign exchange. In period of adverse shock that weakens the cedi, they sell the foreign exchange thereby acting as stabilising speculators. Absence of this behaviour would mean that exchange rate would fluctuate in tandem with exports revenue shocks, unless the BoG intervenes to stabilise the rate.

deposit for fear of a repeat of past experience. The ratio of M_2 to GDP, although it rose slightly during the early ERP period, remained much lower than it was in 1960 (see Figure 1 below). In addition, the high ratio of M_1 to broad money persisted, with M_1 accounting for over 80 percent of the broad aggregate. These suggest that the public was holding money only to finance transaction and not as store of value. Inflation during the early years of ERP continued to be high and variable: after the decline from the 122% in 1983, it fluctuated between 44% and 20% between 1984 and 2000, except in 1985 and 1992 when good harvest kept inflation exceptionally low, at about 10.3%. Since 2001, however inflation has been on a downward trend (Figure A3).

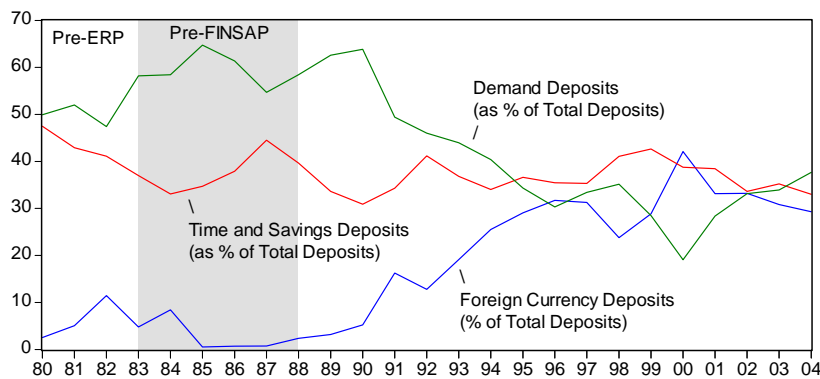
Monetary growth in the first few years of ERP was kept in check for three reasons: first, government was no longer drawing large volumes of credit from the monetary system. Secondly, there was access to foreign loans and aid which the government drew from. Finally, credit to both the parastatal and private sectors was kept in check by credit ceilings. However, in the late 1980s when the various quantitative restrictions had been dismantled and no market-based system had been developed to replace them, monetary growth became excessive once again. It became increasingly difficult for the BoG to sterilise the foreign exchange inflows as well as increased government spending. In late 1989, the BoG started using open market operations to absorb excess liquidity. Also, despite the increase in the BoG's discount rate from 14.5 percent in 1983 to 33% in 1990, the real rate remained negative at the inflation rate of over 37 percent (see Figure 4).

Figure 1. Ratio of M2 to GDP

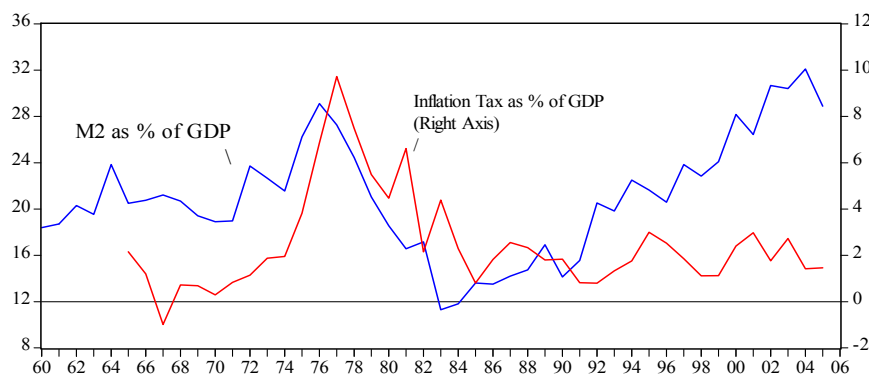


Source: Computed by the author from WDI, IFS data, online

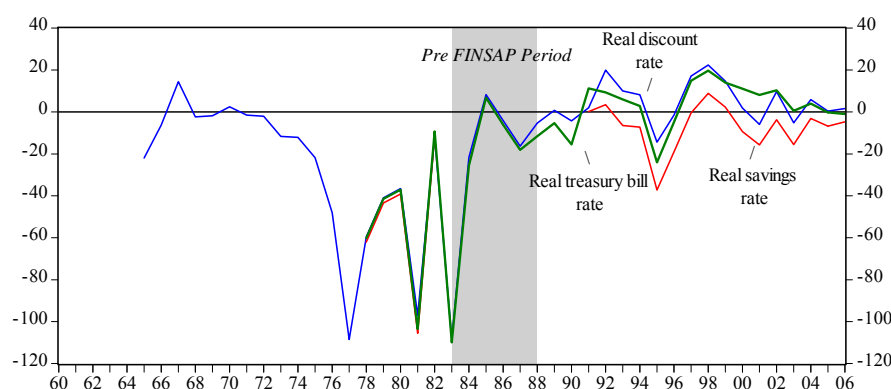
Figure 2. Deposits as Percent of Total Deposits



Source: Computed by the author from WDI, IFS data, online

Figure 3. Inflation Tax (% of GDP)²⁸

Source: Computed by the author from WDI, IFS data, online

Figure 4. Real Interest Rates²⁶

Source: Computed by the author from WDI, IFS data, online.

4.2 Financial Institutions and the Financial Sector Reform

Decades of direct government control had resulted in a financial sector characterised by inefficiency, lack of competition, shallowness and a high proportion of non-performing loans. Interest rates and their structure were determined by regulation: the BoG imposed minimal rates on savings accounts, and maximum and differentiated sectoral lending rates²⁹. Credit allocation had been biased towards state owned enterprises, some of which were effectively bankrupt or towards activities that could not service their debts. As at 1982, 92 percent of all credit outstanding was to the public sector (Sheng and Tannor, 1996). With most lending directed by government towards high risk sectors, the banks responded to the minimum lending requirements by holding funds in liquid assets far in excess of their liquid asset requirements. Occasionally, banks were turning away potential depositors or refusing to pay interest on deposits over certain limits.

Financial sector reform did not start with the ERP in 1983 when efforts were first directed at achieving fiscal and monetary stability. During this period, therefore, the banks' balance sheets

²⁸ Inflation tax is calculated as $[(\pi/\pi+1)*M_0]/GDP$ where π is the inflation rate, M_0 is the base money. Real interest rates are calculated as the respected rates less rate of inflation.

²⁹ Sometimes, imposed lending rates to priority sectors such as agriculture and manufacturing were lower than the minimum savings rate.

continued to deteriorate with non-performing loans of about 41% of the total credit as at 1989 (Leith and Söderling, 2000).

Comprehensive financial sector reforms were launched in 1987, and implemented in four phases. In the first phase (1987-1988), interest rates and credit allocation were gradually liberalised. In 1989 a far reaching Financial Sector Adjustment Programme (FINSAP) was launched. FINSAP was carried out in three stages: FINSAP-I (1989-1991) concentrated on the development of prudential regulation and restructuring of banks in order to make them viable. The BoG act of 1989, as well as intensive staff training, improved the BoG capacity to regulate and supervise the financial sector more effectively. Also, the non-performing assets of the banks were transferred to the BoG in 1990. FINSAP-II (1992-1995) and FINSAP-III continued to reinforce the restructuring by decreasing the role of government in the financial sector and creating new institutions. For instance, the Ghana Stock Exchange (GSE) was set up in 1990 with 11 listed companies, and the number increased to 21 in 1999 and to 33 in 2007. Non-Banking Financial Institutions such as savings and loans companies (7) and brokerage firms were established. By 1992 when the foreign exchange market was fully liberalised, most of the bottlenecks in the financial sector had been removed (Sheng and Tannor, 1996). On the evidence of the subsequent relative expansion of money holdings, these reforms succeeded in restoring confidence in the banking sector (Figures 1 and 2 above). These institutional developments have been important for the effective conduct of monetary policy, and the maintenance of price stability. In the next section, the response of the Ghanaian economy to these reforms is examined.

5 Macroeconomic Response to the Reforms

In general, the Ghanaian economy has responded well to the structural reform programme. As Table 1 and Figures 5 and 6 show, the real growth rates of both GDP and per capita GDP were volatile (and negative on average) during the earlier economic crises of the 1970s. Inflation was also high and volatile (Figure 8), averaging 77 percent between 1975 and 1983, while investment had declined to an average of 7 percent of GDP. Similarly, although real government spending had declined, the fiscal deficit of about 4.8% of GDP did not as revenues stagnated. Following the introduction of the reforms, these trends have generally been reversed. The annual average real growth rates of GDP and per capita GDP rose to 6.3 and 2.8 percent respectively during the 1984-1986 period, and have since then remained positive and relatively high (Figures 5 & 6). One distinctive feature of the post-reform period is the relative stability of the growth rate of both real GDP and per capita GDP, indicating a stable macroeconomic environment. In fact, in recent years, their growth rates have been on the upward trend, an unrivalled performance in the sub region (see Figures 5 & 6).

Total gross investment as a percentage of GDP has also grown sharply following the reforms from less than 7 percent in the pre-reform period to about 22 percent in the late 1990s, and to 26 per cent in the period 2000-2005 (Figure 7). Instead of rising after the exchange rate unification, fiscal deficits and inflation fell in the period immediately after the reforms. However, following their elimination in the late 1980s the deficits have resurfaced around 2000 (Figure 8)³⁰ but are declining again. Inflation has remained generally lower and more stable than its pre-reform

³⁰ Note that the rise in government spending since 2003 poses a threat to the fragile fiscal situation so that, by 2004, the deficit had started to rise again after the initial decline from the 2000 levels.

levels, but the years running up to the elections of 1996 and 2000 provided examples of slippage in this measure of financial stability.

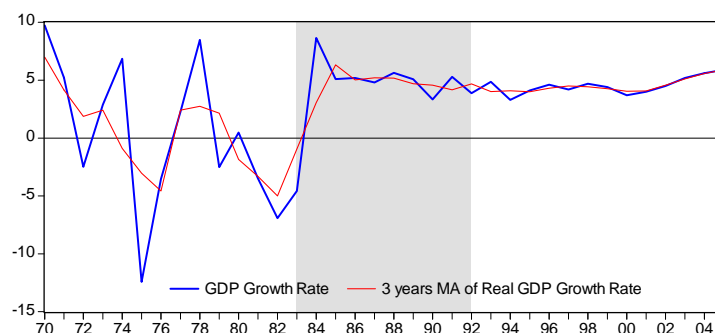
Another feature of the post-reform period has been the declining terms of trade (throughout the years 1983 to 1993), and their later tendency to remain generally lower than in the pre-reform period. Increased aid inflows, however, have tended to balance these declines, thus supporting stability in real government spending (Figure 9). Foreign aid rose from an average of about 3.5 percent of GDP in the pre-reform period to about 11 percent in 1987-1993, and then to over 12 percent in the 2000-2006 period after a slight decline between 1994 and 1999.

Table 1. Macroeconomic Indicators (Annual Averages)

	1975-83	1984-86	1987-93	1994-99	2000-06
GDP Growth Rate	-2.47	6.31	4.67	4.22	5.01
Real Per Capita GDP Growth	-4.82	2.83	1.73	1.66	2.70
Gross Investment (% of GDP)	6.75	8.56	12.95	21.78	25.96
Inflation (annual %)	71.29	24.85	26.96	30.97	19.75
Government Expenditure (%GDP)	10.39	12.82	14.91	22.98	29.56
Overall Fiscal Deficit (-) or Surplus	-4.75	-1.31	-0.29	-2.37	-4.72
Aid (% of GDP)	3.45	5.14	10.86	8.99	12.17

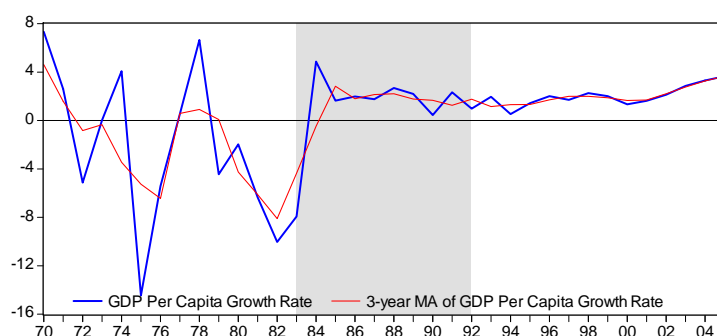
Source: Computed by the author from WDI, IFS data online, IMF's GFS online, and Bank of Ghana.

Figure 5. Real GDP Growth Rate (1960-2005)

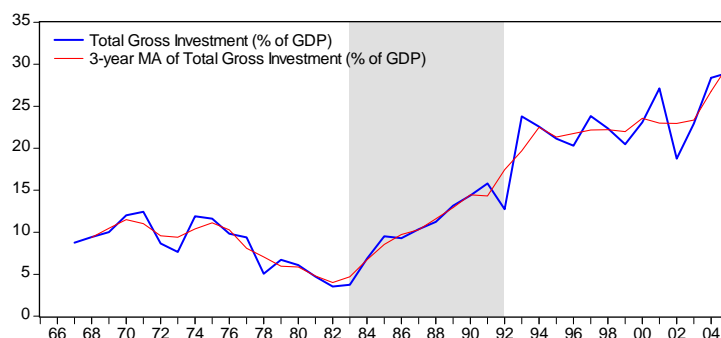


Source: Computed by the author from WDI, IFS data, online

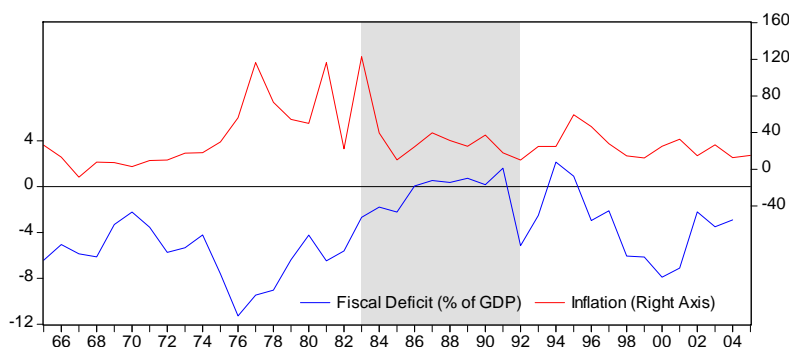
Figure 6. Real Per Capita GDP Growth Rate (1960-2005)



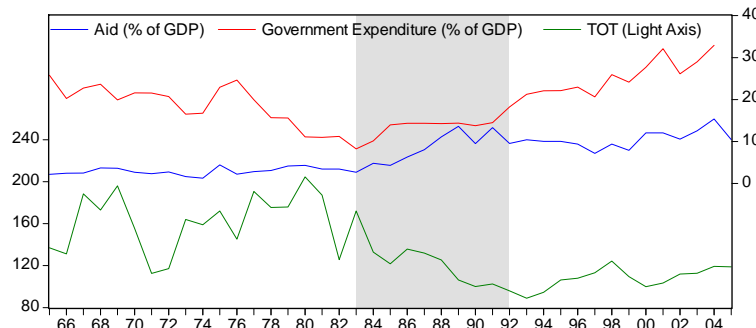
Source: Computed by the author from WDI, IFS data, online

Figure 7. Gross Investment (1965-2005)

Source: Computed by the author from WDI, IFS data, online

Figure 8. Inflation and Fiscal Deficits (1965- 2005)

Source: Computed by the author from WDI, IFS data, online

Figure 9. Aid, Government Spending and Terms of Trade (1965-2005)

Source: World Development Indicators, online.

6 Summary and Conclusions

This paper has examined the exchange rate reform process in Ghana by tracing the various methods, strategies and techniques used in unifying the official and parallel foreign exchange markets. Contrary to Pinto's (1989, 1990) theoretical argument that eliminating the black market premium will lead to higher steady-state inflation, Ghana has succeeded in eliminating its black market without the inflationary consequences. It is argued that this success is partly attributable to the strategy used in unifying the markets, which was a gradual rather than an overnight one. It took about a decade to fully liberalise the foreign exchange market and eliminate the black market premium. This, the paper argues, allowed the institutional and operational requirements for smooth operation of the flexible exchange rate regime to be put in place. These requirements included, among others, restoration of monetary discipline, fiscal balance, and resuscitation and

liberalisation of the financial sector. The foreign exchange market reforms were implemented alongside extensive, albeit gradual, trade liberalisation. This approach allowed for the demand for foreign exchange from more import categories to be accommodated in the official market as more foreign exchange became available (as exports recovered and more foreign aid was received). The trade liberalisation, particularly of imports, had significantly increased the availability of the hitherto scarce consumer and intermediate goods, thereby reducing their prices. However, by 1992 when the market was fully liberalised, the cedi had depreciated to ₵520.83/\$ from ₵2.75/\$ in 1983, or by an annual average rate of over 58 percent (on a logarithmic basis). In addition, it was shown that the foreign exchange market reforms were largely successful because of the substantial inflows of foreign aid and loans, as well as the ability of authorities to modify and fine-tune the foreign exchange market arrangements as the need arose. This, as Chhibber and Shafik (1991) argue, contrasts with the unsuccessful approach used in Zambia. It was also observed that the economy had performed well following the reforms, with both real GDP and per capita GDP growth rates remaining positive despite the declining terms of trade. This performance is attributable to the reforms as well as the enhanced foreign aid inflows during the reforms.

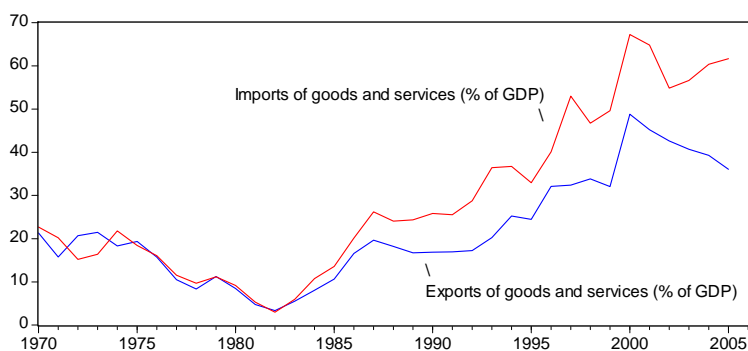
References

- Bawumia, M., T. Owusu-Danso and A. McIntyre (2008). "African Financial Reforms: Ghana's Reforms Transform Its Financial Sector". *IMF Survey*, May, 22
- Chhibber, A. and N. Shafik (1991) "Inflationary Consequences of Devaluation with Parallel Markets: The Case of Ghana", in *Economic Reforms in Sub-Saharan Africa*, Washington, DC, World Bank.
- Dordunoo, C. K. (1994) The Foreign Exchange Market and the Dutch Auction System in Ghana. *African Economic Research Consortium Research Paper*, 24.
- Duttgupta, R., G. Fernandez and C. Karacadag (2004) "From Fixed to Float: Operational Aspects of Moving toward Exchange Rate Flexibility", *IMF Working Paper no.* 126.
- Faruqee, R. And I. Hussain (1994) "Adjustment in seven African Countries" in. Hussain, I. and R. Faruqee (Eds.), *Adjustment in Africa: Lessons from Country Case Studies*, Ch 1, pp. 1-10
- Gervais, J.-P. & Larue, B. (1999) Do Reductions in Black Market Exchange Rate Premia Cause Inflation? *CREA Research Series*, R.99.07.
- Gyima-Brempong, K. (1992) Exchange Control and Black Market Exchange Rate in Ghana: A Simultaneous Equation Approach. *East African Economic Review*, 8, 41-53.
- Hadjimichael, M. T., Nowak, M., Sharer, R. & Tahari, A. (1994) Adjustment for Growth: The African Experience. *IMF Occasional Paper*, 143.
- Harrigan, J. & Oduro, A. D. (2000) Exchange Rate Policy and the Balance of Payments: 1972-96. IN Aryeetey, E., Harrigan, J. & Nissanke, M. (Eds.) *Economic Reforms in Ghana: The Miracle & the Mirage*. Oxford, James Curreys Ltd.
- IMF (1994) Ghana, Senegal, and Uganda Adopt Bold Reforms. *IMF Survey*.
- IMF (2004a) Macroeconomic and Structural Policies in Fund-Supported Programs: Review of Experience.
- IMF(2007a) Ghana: Ex Post Assessment of Longer-Term Program Engagement. *IMF Country Report*.

- A.R. Sanusi, *Journal of Economics and Allied Fields, Vol. IV No. 2, 2010*
- IMF (2009) *International Financial Statistics*. International Monetary Fund
- Jebuni, C. (1994) "Financial Structure, Reforms and Economic Development: Ghana." *African Development Report*, Abidjan, African Development Bank.
- Leechor, C. (1994) Ghana: Frontrunner in Adjustment. IN Hussain, I. & Faruquee, R. (Eds.) *Adjustment in Africa: Lessons from Country Case Studies*. Washington DC, World Bank.
- Leith, J. C. and L. Söderling (2000) Ghana: Long Term Growth, Atrophy, and Recovery, *Emerging Africa*, OECD Development Centre.
- May, E. (1985). "Exchange Controls and parallel Economies in Sub-Saharan Africa: Focus on Ghana." *World Bank Staff Working Papers* 711.
- Mosley, P. (1996) "The Failure of Aid and Adjustment Policies in Sub-Saharan Africa: Counter-Examples and Policy Proposals", *Journal of African Economies*, 5, 406-443.
- Mumuni, Z. and E. Owusu-Afriyie (2004) "Determinants of the Cedi/Dollar Rate of Exchange in Ghana: A Monetary Approach", *Bank of Ghana Working Paper* (WP/BoG-06).
- Ng, F. & Yeats, A. J. (2000) "On the Trade Performance of Sub-Saharan African Countries: Cause for More Hope or More of the Same", *Africa Region Research Working Paper*, Series No. 7.
- Pinto, B. (1988) "Black Market for Foreign Exchange, Real Exchange Rates and Inflation: Over Night versus Gradual Reform in Sub-Saharan Africa", *World Bank Policy Research Working Papers*, 84.
- Pinto, B. (1990) "Black Market Premia, Exchange Rate Unification and Inflation in Sub-Saharan Africa", *The World Economic Review*, 1, 321-339.
- Pinto, B. (1991) "Black Markets for Foreign Exchange, Real Exchange Rates and Inflation" *Journal of International Economics*, 30, 121-135.
- Oduro, A. D. (2000) "Performance of the External Trade Sector Since 1970, *Economic Reforms on Ghana: The Miracle & the Mirage*. E. Aryeetey, J. Harrigan and M. Nissanke. Oxford, James Currey Ltd: 152-167.
- Sheng, A. and A. A. Tannor (1996) "Ghana's Financial Restructuring, 1983-91", in *Bank Restructuring: Lessons from the 1980s*, Sheng, A. Washington, DC, World Bank.
- Sowa, N. K. (1994) "Fiscal deficits, output growth and inflation targets in Ghana", *World Development* 22(8): 1105-1117.
- Werlin, H. (1994) "Ghana and South Korea: Explaining Development Disparities", *Journal of Asian and African Studies*, 29(3-4)

APPENDIX A2

Figure A 1. Exports and Imports (% of GDP)



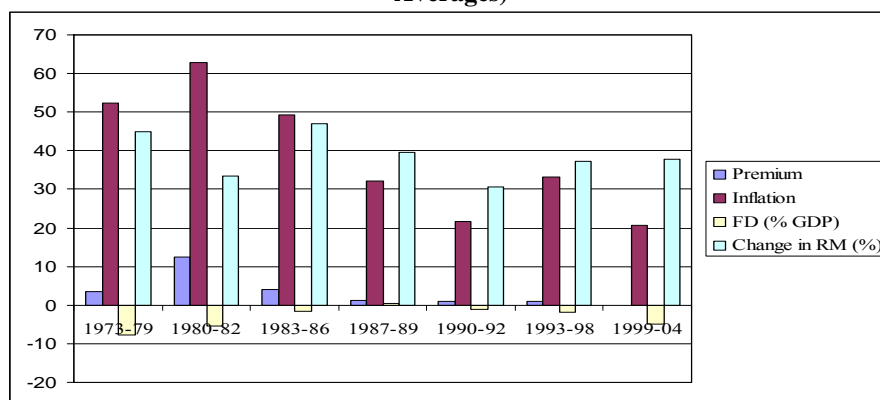
Source: Data from WDI, World Bank Africa Database

Table A 1. Black Market Premium, Fiscal deficit, Money Growth and Inflation: 1973-2004 (Annual Averages)

	Premium	Inflation % p.a	Change in RM (%)	Fiscal Surplus (¢ Bil.)	Fiscal Surplus % GDP
1973-1979	3.57	52.24	44.90	-0.90	-7.61
1980-1982	12.58	62.96	33.49	-3.79	-5.44
1983-1986	3.96	49.35	46.93	-4.26	-1.66
1987-1989	1.30	32.13	39.46	6.09	0.55
1990-1992	1.08	21.78	30.50	-34.03	-1.13
1993-1998	1.02	33.06	37.19	-266.20	-1.77
1999-2004	NA	20.77	37.71	-1958.53	-4.96

Source: Calculated from data obtained from WDI, IFS and Reinhart and Rogoff (2002)

Figure A 2. Black Market Premium, Fiscal deficit, Money Growth and Inflation: 1973-2004 (Annual Averages)



Source: Calculated from data obtained from WDI, IFS and Reinhart and Rogoff (2002)

Figure A3. Inflation and Parallel Market premium (Monthly)

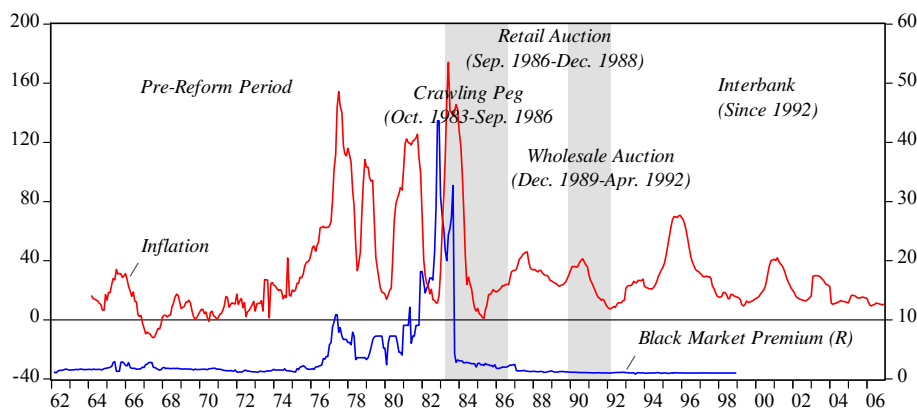
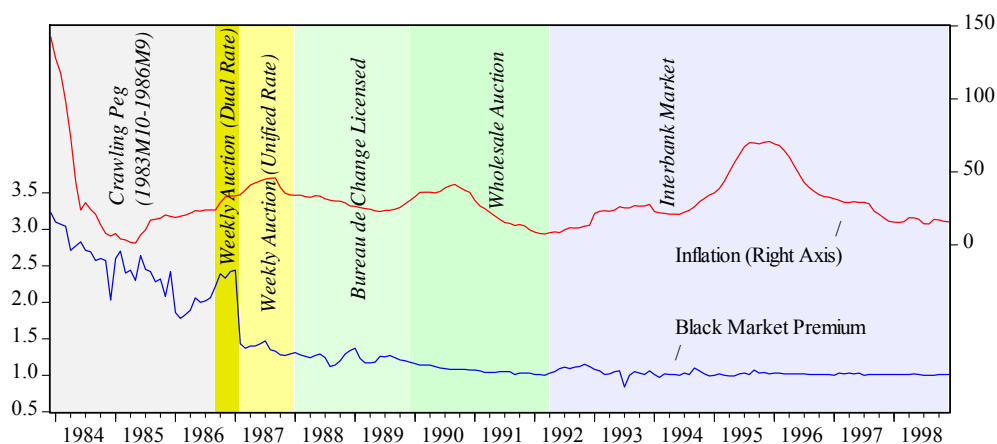
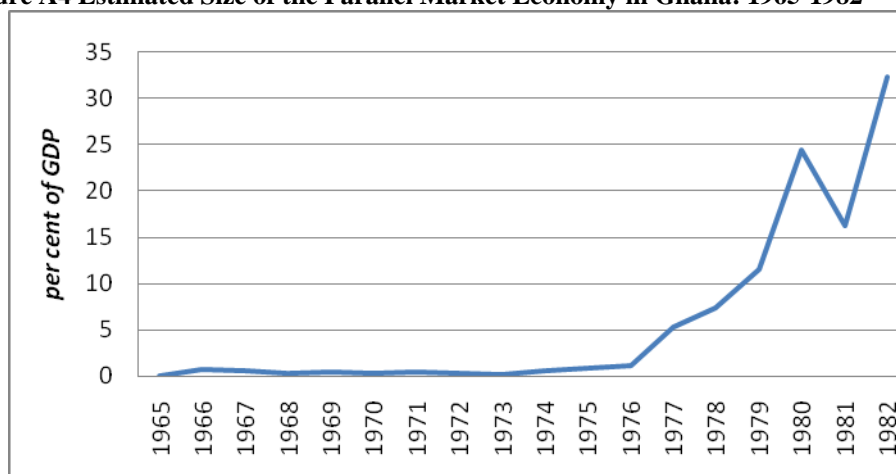


Figure A3B. Inflation and Parallel Market premium (October, 1984-December, 1998)



Source: Data from IMF IFS and Reinhart and Rogoff (2002)

Figure A4 Estimated Size of the Parallel Market Economy in Ghana: 1965-1982



Source: Plotted from data obtained in May (1985: pp89-92)