# SECONDARY MORTGAGE MARKET (SMM): IS IT RIGHT FOR FINANCING HOUSING IN GHANA?

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#### **ABSTRACT**

The formal housing finance system in Ghana is inadequate and highly underdeveloped. The formal finance institutions have provided very little mortgages particularly to the low and middle-income households. However, the fast growing capital market of Ghana offers an opportunity for sustainable housing finance in the country. This paper explores the possibility of addressing the housing finance problems in the country through the use of Secondary Mortgage Market (SMM). It does so by surveying the literature on SMM. It also examines the housing finance system in Ghana. It finds out that an SMM in principle will enable Ghana to overcome some of the constraints on the mortgage market and attract housing funds. But in practice it is not the best way of solving the housing finance problems in the country since the fundamentals are not right for a successful implementation of SMM. It notes that the scale of mortgage origination in the primary market is limited; the adjudication process is slow; collateralization is inadequate; and the land title regime is poor. It suggests that it is appropriate for Ghana to concentrate on solving these basic problems before any attempt at implementing a secondary mortgage market in the country.

**Keywords:** Mortgages, Primary Mortgage Market, Housing Finance

# INTRODUCTION

All housing finance systems across the globe are aimed at delivering funds to the producers and purchasers of housing. Housing finance structures are therefore created with the aim of making funds available to borrowers. This basic aim has brought about a profusely wide spectrum of institutional arrangements ranging from contractual savings scheme to depository institutions specializing in mortgage finance, to the

issuance, sale, trading and transfer of mortgage securities to third parties. All these arrangements have been created with the same purpose in mind, that is to channel funds from savers to borrowers (Lea, 2000). As economies develop, the provision of housing finance often moves away from the extensive reliance on special circuits towards the integration of housing finance into the broader financial markets (Diamond and Lea, 1992b).

In the traditional system of formal housing finance, an institution mobilises savings from depositors and then grant loans to borrowers. Under this system, a lender originates, services, and funds the loan; and manages the portfolio risk. However, under a secondary mortgage market regime, mortgages are originated by one agent and are then transferred to capital market investors who serve as the final holders. It therefore mobilises long term housing funds from capital market investors thus mitigating interest rate, liquidity and default risk. It removes the risks of holding mortgages from the mortgage originators and transfers same to capital market investors. The fast growing capital market of Ghana has provided an opportunity for sustainable housing finance. The major issue is whether Ghana is ready to exploit the huge potential of the capital market to overcome the low and poor housing consumption in the country.

The housing finance systems in Ghana are inadequate and highly underdeveloped. The formal finance institutions have provided very little mortgages particularly to the low and middleincome households. For instance, the total mortgages originated by the Home Finance Company (HFC, now HFC Bank) in 2001 was US\$4.9 million which constituted approximately 95% of all mortgages created in Ghana for 2001 (HFC, 2005). In 2007 the formal finance institutions allocated 15.9% of their total credit to miscellaneous sectors which included mortgages (2008 Budget Statement, Ghana). The inclusion of mortgages in the miscellaneous credit gives ample evidence of the little importance attached to mortgage finance by the financial institutions as an investment opportunity.

It is argued that if a formal housing finance market could be developed in Ghana, it will promote housing investment and development by providing sustainable housing funds to households in the country. Similarly, property finance through the formal finance market will free up capital that might be locked up in dwellings under development which eventually becomes "dead capital".

Property owners will also be able to realize equity from their properties for investment in profitable ventures. Homeowners as well as the overall economy could be enriched, thereby complementing government's effort to reduce poverty (Asare and Whitehead, 2006).

This paper explores the possibility of addressing the housing finance problem in Ghana through the Secondary Mortgage Market (SMM). This is done by surveying the literature on SMM. It also highlights on Ghana's attempt at SMM in 1993. The paper relies much on secondary data from the literature and official sources such as the HFC, Ghana Statistical Service (GSS), and the Ministry of Works and Housing (MWH). Information was gathered through mail shots, telephone contacts and archival and official documentary surveys. The mortgage market is evaluated to determine whether the fundamentals are right to implement SMM in Ghana.

## Housing finance systems in Ghana

There remains a clear segregation between the housing sector and the formal finance market in Ghana (Asare and Whitehead, 2006). Leod, (2001) noted that there is an increasing gap between poor people living in the informal sector and the formal finance sectors. As a result most households in Ghana use their own savings; sweat equity; barter arrangements; and remittances from family members abroad to build their houses. Debrah et al., (2002) noted that this process of housing development takes between five to fifteen years. Housing finance therefore remains in a primitive state compared to the rapid development of banking (Jaffe and Renaud, 1996). Smet (1996) noted that this approach to housing provision is both expensive and ineffective. The excessively long time required by most households to complete their greatly profusely increases construction costs and also locks up funds that could be invested in income-generating ventures in properties for several years without any returns.

In all economies long-term housing loans creates significant credit, interest rate and liquidity risks for lenders (Jaffe and Renaud, 1996). In Ghana, high inflation rates¹ have expanded this risk further. Most banks are therefore unable to invest in the long and medium term, which have had negative impact on housing investment. Financial institutions such as the Social Security Bank (now SG-SSB) and First Ghana Building Society (FGBS) all aimed at developing formal debt finance systems for housing development in Ghana but did not succeed partly because of the absence of long-term sources of funds and economic instability which are essential ingredients for a well functioning mortgage market.

In some cases lenders have been ostensibly willing to offer long term housing finance, "but in order to survive, the banks must make a profit, to thrive, the return must warrant the investment of capital and to grow the bank must accumulate earnings to support retained growth" (Karley, 2002). Lenders, therefore result to stringent underwriting criteria, such as a higher equity requirement of borrowers, security of title to land, a sustained and reliable monthly income, consent of borrowers' employers, and the location of properties in prime areas as a means of minimizing risk and mitigating losses. The security requirement of lenders has made it impossible for most potential mortgagors to qualify for mortgages in Ghana. The conventional bank lending, based on asset securities assumes that collateral should be restricted to legally restricted property and certifiable earnings (Karley, 2002). This conception of capital assets immediately excludes the vast majority of those living in the informal settlements and depended on livelihood generated within the Ghanaian informal economy. Alternative asset bases that may offer far greater security in the long term are not understood or recognized as effective indicators or predictors of "safe" lending. The requirements for evidence of clear land title have excluded many potential mortgagors in Ghana despite the fact that they may have effective security of tenure through customary rights.

Government involvement in housing finance has

been done through direct construction and subsidised loans provision. For instance between 1957 and 1966 the government invested £G 9,100,000<sup>2</sup> in affordable housing and also granted £G 2,150,000 as concessionary housing loans to households (Government of Ghana Development Plan 1959). Similarly in 2004 and 2005 the government of Ghana respectively invested ¢ 77,728.24 and ¢125,513.4 (in millions) in the housing sector (Ghana Statistical Service, 2007). However, all these efforts by government have proved largely inadequate in providing sustainable housing funds for the bulk of Ghanaians and have been unable to solve the housing problem of the country. For instance, Ghana had a housing deficit of approximately 1,000,000 units in 2000 (Ghana Statistical Service 2002). It was also estimated by the HFC (Now HFC Bank) in 2002, that the country had an estimated unsatisfied housing need of 1,232,835 units, with an estimated unsatisfied annual demand of 108,000 units. The investments by the government have made little impact in solving the housing finance problem in the country.

#### Mortgage securitization and housing finance

In traditional intermediation, all the functions related to mortgage lending are integrated: the originator of a portfolio of loans holds, services and funds them until maturity, thereby bearing all the risks associated with them (Amelia, 2001). However, an SMM system operates a dual housing finance market: a primary market where mortgages are originated and a secondary mortgage market (SMM) where the originated mortgages are sold. Securitization enables mortgages to be originated by one institution (e.g. banks and building societies) and then sold to final investors who hold them. It is a mechanism where bundles of mortgages are pooled together and then sold to capital market investors. Whitehead and Karley (2002) noted that securitization is a device of structured financing where an entity seeks to pool together its interest in identifiable cash flows over time, transfer the same to investors either with or without the support of further collateral, and

thereby achieve the purpose of financing. The right to receive cash flow from a mortgage contract can be sold to a third party, which is the basis for securitization. Investors in the mortgage backed securities provide the funding for the loans and bear default risk, which is generally mitigated by the use of different mechanisms of credit and liquidity enhancement (Amelia, 2001).

Mortgage securitization involves the sale of mortgage loans (or loan portfolios) or mortgage securities backed by specific pool of mortgages. It securitizes the originated mortgages and sells them to long term investors (Sa-Aadu, 1997). As such, it involves the transfer of risk and ownership of mortgage loans to a third party; the security holder assumes default risk and the lender then expunges the loan amount from its balance sheet. Securitization allocates the risk in mortgage instruments to those better able to handle them (Sa-Aadu, 1997). The loans may be sold to specialized institutions called conduits or through specialized purpose vehicles. These entities raise funds through the issuance of securities collateralized by the principal and interest payments on the loans. It separates the three functions of financial intermediation: origination, servicing and holding and allows each to be handled by the most efficient provider. This lowers the intermediation costs of institutions that choose to specialise in originating and servicing of mortgages. Mortgage securitisation leads to the specialisation of the mortgage industry which also improves competition in the mortgage market (Amelia, 2001). Increased competition reduces the cost of credit to consumers and market prices govern the allocation of funds" (Lea 1994). Securitization therefore provides a wide array of benefits for lenders, borrowers and investors and has a substantial social and economic impact.

Hendershott and Shilling (1989) showed that the expansion of securitisation leads to a reduction in mortgage rates (mortgage cost). The cost of mortgages will be reduced as a result of improvement in the marketability of mortgage backed securities (MBS) (Black et al., 1981). The decline in mort-

gage credit cost as a result of securitization will make it possible for most households to qualify and afford home mortgages. Sellon and Van Nahmen (1988) argued that the development of mortgage pass-through securities will improve the efficiency of housing finance thereby increasing the liquidity of the mortgage market. Lenders achieve greater liquidity by holding a mortgagebacked security instead of the mortgage itself (Heuson et al., 2001). Liquidity will reduce liquidity risk, facilitate participation in the mortgage market and increase lending activities, by providing lenders access to the capital market and expanded funding opportunities. SMM will reduce interest rate risk by matching long-term mortgages with long-term sources of funds. Pollock (1994) noted that SMM provides institutional investors with attractive trade-offs between profitability, liquidity, simplicity and security. A well functioning mortgage market will provide enormous external benefit to the economy including capital market development, increased labour market mobility, construction sector employment, and the efficient allocation of real estate asset (Jaffe and Renaud, 1996).

Hendershott (1990) and Hendershott and Van Order (1989) noted that mortgage securitisation improves the integration between the mortgage and capital markets, which in turn soften housing market cycles. Gabriel (1987) also noted that securitisation will improve the integration between the mortgage and capital markets. Integration will increase the availability of housing funds. Securitisation will therefore help to alleviate the effects of capital shortages and financing constraints on the housing sector. Roth (1988) reports a faster adjustment of mortgage rates to changes in money market rates and an increase in the volatility of mortgage rates since the use of securitisation. Ryding (1990) argued that mortgage securitisation reduces the spread between mortgage and other money market interest rates. The reduction in the spread makes mortgages very competitive with other investment opportunities in the economy which helps to attract sustainable funds to the housing sector.

Mortgage securities market now exists in over 25 countries across the globe and these include United Kingdom, Australia, Italy, Germany, Spain, Netherlands, Ireland and Finland, The outstanding success of mortgage securitization in the United States (US) has encouraged many countries that are seeking for a sustainable means of housing finance to replicate their experience. In the United States, more than 53% of all mortgages have been securitised and over 70% of new mortgage originations are sold in the secondary market each year (Whitehead and Karley, 2002). In 1993 securitisation was used to fund 93% of the total residential mortgage origination in the US (Kolari et al., 1998). The yearly agency securitisation rate in the US fluctuated between 45% and 78% of conforming mortgages origination during the 1990's (Passmore et al., 2001). The secondary mortgage market is the dominant source of housing funds in the US. The outstanding amount of US Agency mortgage-backed securities was \$2,292 billion and \$4,604.2 billion by the end of 1999 and 2007 respectively (Securities Industry and Financial Markets Association, 2008). Important initiatives, both legal and policy based, that are aimed at increasing securitisation have been embarked on in many European countries. By the end of 2006, the outstanding European commercial mortgage-backed securities stood at €118.4 billion (Securities Industry and Financial Markets Association, 2008).

## **Requirements for securitization**

There are prerequisites for a successful mortgage market. These include a stable macro-economic environment (a low inflation and interest rates as well as a stable currency) and liquidity. These factors are very crucial for the attainment of a vibrant mortgage market (Gyamfi-Yeboah and Boamah, 2003). Illiquidity means increased interest rate risk for mortgagees since they have short term liabilities relative to their mortgage assets. A well organised primary market, reliable legal and regulatory framework and a vibrant capital market are also extremely important for the success of SMM. Lenders are highly interested in the

quality and security of the property to be used as collateral (Boamah, 2003). They are also mostly concerned about the enforceability of the collateral in the face of default. This calls for an efficient land title regime and an expeditious foreclosure procedures.

Similarly mortgages must be attractive investments with market driven interest rates that provide investors with a positive, real risk-adjusted rate of return. The primary market base must be large to justify the costs of setting up the secondary market (Whitehead and Karley, 2002). The mortgage instrument and documentation should be standardized, underwriting must be comprehensive and consistent, and servicing must be efficient (Jaffe and Renaud, 1996; Sa-Aadu, 1997; Boamah, 2003). For underwriting to be an effective system for pricing risk, some form of standardization in mortgage instruments is necessary. Too much diversity in mortgage instruments makes mortgages more illiquid. The more developed the government bond market, the greater the likelihood of success in developing a mortgage securities market. It will provide a benchmark yield to compare yields on other instruments against; market makers; regulatory body to oversee security issues; and rating agencies.

## Mortgage securitization in Ghana

Ghana attempted a Secondary Mortgage Market in 1993 in its quest to create a sustainable housing finance regime in the country. It was created with the passage of the Home Mortgage Finance Law (PNDCL 329) 1993, which established and enjoined the Home Finance Company (HFC) to provide mortgage finance to individuals and to provide liquidity to participating financial institutions under the law. The HFC was thus a primary participant and also a liquidator. The banking institutions, which were then going through a process of restructuring and recapitalization, were expected to operate a primary mortgage market to complete the two-tier mortgage financing system in Ghana. The restructured financial institutions were expected to bear only 10% default risk thereby insulating them from significant risk. The Government of Ghana was to bear the remaining 90% default risk. HFC was thus to bear no default

Unfortunately, the system did not succeed as the financial institutions failed to assume their new role of operating a primary mortgage market. To ensure its survival, the HFC assumed the role of a primary mortgage lender. It therefore emerged as the dominant primary mortgagee instead of being a mortgage liquidator. That is, the purpose of establishing a liquidating institution was attained but that of operating a secondary mortgage market was not achieved. Interestingly, the HFC has now joined the commercial banking industry with mortgage lending becoming part of the company's overall investment portfolio. This of itself changed the nature of the initiative and raised the possibility of more general banking activities diverting the company from its prime objective of providing finance for housing (Asare, 2004). The failure of Ghana's 1993 attempt at SMM may be attributed to high inflation rates, high interest rates, inadequate mortgage originations in the primary market, inadequate regulatory framework, slow adjudication procedures, poor land titling system and inadequate collateralization. These issues are discussed further in the next section

# Why a secondary mortgage market in Ghana?

An SMM is necessary for solving the housing finance problem of Ghana, since it enables lenders to shed the risk associated with the holding of mortgage loans. It will also create standards for credit evaluation and collateral procedures that will directly increase the efficiency of the primary market. Many of the benefits of standardization are due to appropriate documentation and risk assessment procedures rather than from the range of products available (Whitehead and Karley, 2002). Greater standardization will reduce transaction costs in Ghana and make mortgage securities more easily accepted by credit rating agencies and investors alike. Securitization will generate funds at a relatively stable cost. This can make it

a useful way of providing marginal funds - as it can be done without increasing overall average costs. It is cheaper to raise funds via mortgage backed securities (MBS) than with a deposit system (Sa-Aadu, 1997). Donahoo and Shaffer (1991) and Pennacchi (1988) noted that asset securitization reduces the financing costs of lenders. It is appropriate if primary market lenders have a poor access to the broader capital markets or concerns exist about their ability to manage interest rate or liquidity risk as is the case in Ghana.

A properly structured secondary market will lead to an increased funding for housing, lower mortgage credit cost for both participants and lenders, reduce transaction costs, and provide liquidity for primary market lenders in Ghana. Two of the main features of securitisation are that it increases liquidity (and therefore the investor base) and redistributes the risks associated with the securitised loans (Sa-Aadu (1997). The consequence of this would be a lower mortgage cost for Ghanaian borrowers than in the traditional intermediation case. By expanding the pool of funding options available there will be less pressure on government to provide direct (and often subsidized) credit to households seeking to acquire their own housing units. It will also allow for greater diversification and thus reduce mortgage lending (liquidity, interest rate, default) risk in Ghana.

There is high liquidity risk in the Ghanaian mortgage market; mortgages have long-term maturities (about 30 years) and there are also no markets to trade them in. Mortgage lenders in Ghana are therefore unable to rapidly convert their mortgage assets to cash. However, depositors mostly prefer to convert deposits to cash to meet their respective demand for funds. This potentially large and unexpected deposit outflows, requires that asset be rapidly sold to finance the deposit outflows (Jaffe and Renaud, 1996). Mortgages thus create significant liquidity risk to lenders in Ghana. The Ghanaian mortgage market is therefore unattractive to lenders since Government securities are good assets for this purpose (they trade in active and liquid markets) whilst business and personal loans are self-liquidating due to their short-term maturities. A secondary mortgage market will help to address the liquidity problem that mortgage lenders in Ghana face. Improved liquidity is a key effect of mortgage securitization (Jones, 1962).

Interest rate risk a decrease in the market value of a mortgage loan as a result of an unanticipated rise in interest rates is very substantial in Ghana. It occurs as a result of the imbalance between the maturity of assets and liabilities of lenders. The cost of their liabilities may increase relative to the returns on their mortgage assets. If interest rates suddenly rise, lenders who have huge outstanding fixed interest rate mortgages may face serious difficulty as interest cost on savings rises relative to interest revenue from mortgages. The interest rate risk is accentuated by the long term nature of mortgages. Interest rate in Ghana has been on the ascendancy and unstable since 1990. It increased from, 29.20% to 39% from 1991 to 1992, 37.50% to 47.50% from 1994 to 1995, 40.50 to 51.58% from 1999 to 2000, and subsequently rose to 55% in 2001. Most borrowers are unable to service loans at such high interest rate thereby expanding the default risk of lenders. The interest rate risk increases the likelihood of borrowers' default (Jaffe and Renaud, 1996). However, an SMM will enable mortgagees in Ghana to shed this risk by transferring it to long term investors.

Securitization is necessary in achieving a long-term sustainable housing finance in Ghana since it will address some of the risks- interest rate, liquidity and default that Ghanaian mortgage lenders face. A secondary market facility allows mortgage lenders to manage their liquidity and interest rate risks and acts as a potent force for the diffusion of mortgage lending among a variety of institutions (Sa-Aadu, 1997). Hess and Smith (1988) noted that asset securitization is a means of reducing risk through diversification. Boot and Thakor (1993) demonstrate that diversification may improve access to information. The diversification leads to efficient mortgage markets and

eliminates asset idiosyncrasies. It will lead to a vibrant mortgage market in Ghana and ensure a sustainable flow of funds to the housing sector thus making it possible for many Ghanaians particularly the middle income households to be able to afford their own homes. Mortgage securitization will provide the needed funds for housing investment in Ghana and also offer enormous benefit to the Ghanaian economy. There are however some issues to be addressed if it is to succeed in the country.

First the volumes of mortgages originated in the primary market are crucial for the success of mortgage securitization. Whitehead and Karley (2002) noted that securitization benefit could best be realized when there are economies of scale. Securitization is expensive when the scale of originated mortgages is low. The total outstanding mortgages of the HFC in 1997, 2000 and 2001 were respectively \$19.7, \$39.3 and \$44.2 (in millions); these constituted about 95% of all outstanding mortgages in Ghana (HFC, 2004). The volume of mortgages in Ghana is small for any effective securitization, and until the primary market provides adequate scale of mortgages to allow for economies of scale it would be expensive to operate SMM and its benefits are unlikely to be realized in Ghana.

Second, problems of collateralization and land titling must be adequately addressed. Without adequate collateral large scale mortgage origination in the primary market that is required for successful securitization will not be attained. Lea (2000) noted that "without collateral lenders are more reluctant to lend, housing loans are more expensive, and borrowers do not benefit from the fixed asset they own". This can happen if clear title cannot be established or if the legal system does not allow for foreclosure or expeditious foreclosure as exists in Ghana. The Mortgages Decree 1972 (N.R.C.D 96) which deals with foreclosure is outdated. Sections 15 and 18(9) of the N.R.C.D. 96 have abolished foreclosure as a remedy to the mortgagee. Section 18 of the N.R.C.D. 96 makes judicial sale of property on default the

only remedy available to the mortgagee. This process is slow, expensive and does not provide the mortgagee adequate collateral. Similarly, land title registration system is not very effective despite the existence of the Land Title Registration Law (P.N.D.C.L 152) 1986. The whole process is very cumbersome, frustrating and does not encourage land owners to register their title. The inability of Ghanaians to use their houses as collateral because of the lack of proper legal title is a major hindrance to the development of the primary mortgage market and hence mortgage securitization in the country. Ajanlekoko (2001) noted that most banks shy away from land development loans in Ghana and Nigeria due to unreliable title documents. Until the problem of collateralization is addressed mortgage securitization will be unsuccessful in Ghana.

Finally, the role of the government is germane for the success of SMM. The government should explicitly guarantee the mortgage backed securities issued. This will instil investor confidence in the securities and help attain the purpose of setting up the SMM. Black et al. (1981) and Passmore and Sparks (1996) noted that the government guarantee enhances liquidity. Implicit guarantees are inefficient since the government remains obligated, but the issued securities do not benefit fully. The government should maintain an important supervisory role, reflecting its stake in the guarantees it provides on mortgages and the institutions operating in the SMM (Jaffe and Renaud, 1996). The P.N.D.C.L. 329, 1993 did not guarantee mortgagees created by all mortgage lenders in Ghana. Only the mortgages that were created by the participating financial institutions benefited from the state guarantee in the event of default. This did not create a level playing field for all mortgagees in Ghana. But the SMM and the associated state guarantee should be accessible by all lenders and borrowers who offer for sale mortgage instruments that conform to the underwriting standards. This will ensure that only efficient institutions operate in the mortgage market.

The development of a sound mortgage finance system cannot be achieved without a sound regulatory framework (Sa-Aadu, 1997). The regulatory framework should promote competition and free entry to the mortgage market by new lenders. Competition and efficiency should determine the participants of the mortgage market and not any form of institutional pre-selection. The purpose is to create an effective housing finance system and not to support any specific class of lenders or borrowers (Jaffe and Renaud, 1996). The Home Mortgage Finance Law (P.N.D.C.L. 329) 1993, that regulated the SMM in Ghana did not promote competition and free entry to the mortgage market. Instead of allowing competition to determine market participants it pre-selected institutions such as the Barclays Bank of Ghana, Standard Chartered Bank (GH) Ltd, SSB Bank Ltd (now SG-SSB Bank), and the State Insurance Corporation as the participating financial institutions. This in essence restricted the market participants, prevented the entry of new lenders to the mortgage market and hindered the development of the primary mortgage market in Ghana. The regulatory framework must define capital adequacy; specify the type of mortgage assets purchased, asset classification, and mortgage securities issued; state rules for diversification; and specify the accounting system, management, and mechanism to control self-dealing by management. These requirements were not met by the P.N.D.C.L. 329, 1993. But this is essential if investor confidence is to be built in the entire financial system.

#### **CONCLUSION**

An SMM in principle would enable Ghana to deal with some of the constraints on the mortgage market and attract housing funds. But in practice it is not the best way of solving the housing finance problem in the country since the fundamentals are not right. The scale of mortgage originations in the country is extremely tiny for any effective securitization. SMM is not the best option at least until the problem of scale, land titling, and adjudication procedures are resolved. Securitiza-

tion cannot solve the fundamental problems of poor legal framework, poor land titling system, inadequate collateralization, and inadequate household income that constrain the flow of funds and/or increase the cost of mortgages. However, these problems hinder the realization of a vibrant primary mortgage market and hence an efficient secondary mortgage market. Even though the capital markets in Ghana are fast growing, the scale of mortgage origination in the primary market is limited; also the adjudication process is slow-foreclosure costs in terms of time and other resources are thus huge. It is appropriate for Ghana to concentrate on solving these basic problems before any attempt at implementing a secondary mortgage market. Until the fundamental problems are solved securitization would not be the appropriate means of solving the housing finance problems in the country. At the moment it is unclear when Ghana may attempt to reintroduce SMM. However, it is expected that the full implementation of the Land Administration Project (LAP) will ensure efficient land title registration system in Ghana. The macro-economic environment has also improved over the years. What is needed now is a sound regulatory framework. When this is done then Ghana can implement SMM in the foreseeable future.

## **ENDNOTES**

- 1. The inflation rates by the end of 1990, 1995, 2000, 2007 and the first quarter of 2008 were respectively 39.5%, 70.8%, 18.4%, 12.7% and 13.2%.
- 2. EG refers to Ghanaian pounds which was the then currency in use.

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