Coming Second? Secondary Market Development in Developing Countries A Case Study

by David Porteous

ABSTRACT

During the past decade, a number of developing countries have investigated, and some have embarked on, the process of establishing a secondary housing finance system, usually influenced by the United States model. Few have yet been proved successful. Based on the assessment that a secondary market offered a means of extending access to housing finance to lower-income groups, South Africa embarked on a pilot secondary market project in 1999. This article reviews the progress of the S.A. pilot known as "Gateway" and chronicles lessons to date in the hope that they may inform moves to secondary market development in other developing countries. The article concludes that there remains a strong general case for secondary market development in South Africa, but that this case must be nuanced and realistic to take account of the dynamics of a developing economy.

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INTRODUCTION

The October 1999 International Union of Housing Finance Congress in Rio de Janeiro in some ways marked a high tide in the process of secondary mortgage market development in emerging economies. The presentation by Martin Levine and Soula Proxenas of Fannie Mae (1999) documented successive cases of economies which had established secondary housing finance institutions during the 1990s, such as Hong Kong (1996), Brazil and Russia (1997), Thailand, Ecuador and Algeria (1998), and Korea (1999). Fannie Mae's International Housing Finance Services Unit has assisted a number of these institutions in different ways, earning Levine and Proxenas at the conference the title "high priests" of the secondary market "movement." Despite this support, some of the new institutions have found the ground rocky and the soil hard, literally coming off second relative to original hopes or expectations.

South Africa was one of the countries which investigated the feasibility of a secondary mortgage market in 1997/1998 through a process called "Project Gateway." A secondary market was seen as another way of achieving the policy objective of promoting broader access to housing finance; and it was an extension of, rather than a departure from, the 1994 national housing strategy whereby the state sought to facilitate wholesale funding for housing. In late 1999, the state-owned housing development bank, the National Housing Finance Corporation (NHFC) decided to pilot the concept by establishing a public-private partnership company called Gateway Home Loans (Pty.) Ltd.

At the time of writing, Gateway Home Loans is just over a year old, and has nine months left of the envisaged initial two-year pilot period. This article reviews progress made in the development of a secondary market to date and documents the main lessons learned. While every country has idiosyncratic features which will affect the nature and success of a secondary housing market concept, the Gateway experience in South Africa may inform other developing countries which are considering heading down this increasingly well trodden path.

Secondary Market Development: Objectives and Preconditions in South Africa

The objectives of secondary market development usually include one or more of the following:

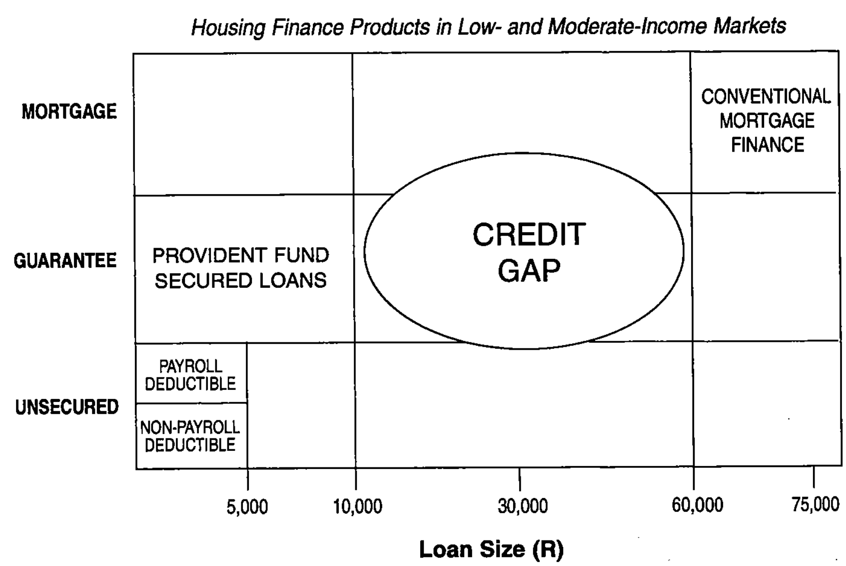
- Extending broader access to housing credit through repackaging risk, and achieving economies of scale through standardization.
- Providing liquidity to the banking system by converting illiquid on-balance sheet credits into potentially liquid asset-backed securities (and thereby creating greater stability for the banking system).
- Restructuring and reallocating various housing finance risks so that they are more efficiently borne throughout the economy (for example, transferring interest rate risk from borrowers to investors via fixed-rate loans).
- Mobilizing longer term funding for housing lenders by tapping long-term capital markets, potentially even beyond national borders.
- Developing the national capital markets through the issuance of debt securities which are not simply government credits.

Clearly, some of these objectives are closely related, so that achievement of one may bring as a corollary the achievement of another. And equally clearly, various instruments are available to achieve each objective apart from establishing a secondary housing finance market. For example, there are other, more direct (and probably more effective), ways to develop national capital markets, such as introducing an effective regulatory and taxation regime. It is essential that the main objective of secondary market development is clarified up front, since the nature and form of secondary market will flow from this choice; and so that the cost and benefit of alternative interventions can be properly assessed before deciding that a secondary market is the best option.

In the South African case, broadening access to housing finance was the paramount objective. About one of five of South African households have access to a reasonably developed primary mortgage system, but the balance of the population who can afford a home purchase loan (perhaps a further 30% or three million households living above subsistence levels) cannot obtain one readily.[1] Large mortgage banks claimed that smaller mortgage loans were uneconomic at existing margins in the presence of uncertain risks of repossession and fixed costs of lending. While a certain degree of cross-subsidization of smaller loans by larger is possible in a large portfolio, the proportions requiring subsidy in S.A. are too high, at a time when S.A. banks are increasingly under pressure to become more competitive and profitable. Hence large mortgage lenders were, and are, increasingly unwilling to make smaller mortgage loans (typically less than US$10,000[2]). Instead, formally employed consumers who had some security of tenure increasingly accessed micro-loans for purposes including home improvement. However, the shorter term of most micro-loans (typically no longer than three years) and the high rates of interest limited the affordable loan sizes to $1,500, well below that necessary for the purchase of a new basic starter house (typically $4,000-$6,000).

The absence of finance for housing on scale in the loan size range between $1,500 to $10,000 became known as the "credit gap," which is depicted in Figure 1 below. The main objective of Gateway was to fill this gap, through the twin strategies of:

Figure 1. The Credit Gap in S.A. Housing Finance



1. Re-financing loan products so that they would not be carried on bank balance sheets, and

2. Standardizing the origination and servicing process which would make smaller loan sizes viable.

Pre-conditions for Secondary Market Development

In addition to establishing the main objective, the standard pre-conditions (see for example, Lea 1997) for secondary market development were assessed in the feasibility exercise.

PRE-CONDITION 1
There must be a functioning primary market.

South African banks had been active in the primary mortgage market for many years, with over a million residential mortgages in existence, although they did not have substantial distribution capacity in township areas. Furthermore, banks had experienced significant problems with the foreclosure and repossession of homes in these areas in the early 1990s. In the non-mortgage home loan asset class initially considered (see below), an aggregate book of some 300,000 loans, worth over US$500 million, had been built up by banks and others, suggesting an active primary market. Market research among consumers indicated higher than expected potential levels of demand for the loan class.[3] Hence, S.A. satisfied this condition on first analysis.

PRE-CONDITION 2
There must be a suitable legal and regulatory regime, for example, allowing the easy cession of loans.

There were no impediments in this area to proceeding with the development of a secondary market. While in areas such as taxation and the Banks Act, existing S.A. law did little to promote a secondary market with ultimate funding through debt securitization, it did not prohibit this either. Hence, this pre-condition was also met. Gateway was explicitly designed to be able to start functioning within existing laws, in order to avoid the long lead time associated with making changes.

PRE-CONDITION 3
There must be a functioning capital market, in which, for example, a yield curve exists.

By 1998, there had been few non-government debt issues on the S.A. Bond Exchange, and those which had taken place were generally illiquid. However, a yield curve existed and institutional investors indicated a cautious openness to new instruments, and it was clear that, following global trends, capital markets would develop in this direction. Hence, this pre-condition was also in place.

The Gateway feasibility study, completed in September 1998, therefore found that the essential pre-conditions for secondary market development were in place. A prior survey by Douglas Diamond and Theresa Clarke (1997), which was part of the pre-feasibility phase, had earlier concluded that, while there was little incentive for S.A. banks to move high-margin, low-risk middle market mortgages off their balance sheet in the mid-market, there existed the potential at the high and low ends of the market place: at the high end, because relatively high margins made banks vulnerable to competition here; and at the low end, because desirable product features, such as fixed interest rates, did not suit typical bank funding profiles. On the basis of the conclusion of the feasibility study, a decision was made by the NHFC to launch a two-year pilot project to test the implementation of the concept.

Planned Process and Product Implemented

Against this background, Gateway Home Loans (Pty.) Ltd. was formed in late 1998 as the vehicle to implement the planned process. Gateway was set up as an autonomous subsidiary of the NHFC. An initial private placement of 15% of Gateway's equity in 1999 aimed to cement strategic relationships with institutional investors which may ultimately also purchase debt. The balance of the minority shareholding was warehoused by NHFC to be taken up by other strategic partners over time. NHFC further agreed to provide warehousing facilities of around $70 million in order to get the purchased loan portfolio to critical mass before placing debt. The public-private partnership notion was therefore integral to the formation of Gateway, which was endorsed by S.A. government, business, labor and civil society sectors as part of a pilot housing project at the 1998 Presidential Jobs Summit. As part of Gateway's mandate from its majority shareholder, NHFC, its operations were restricted to low and moderate income borrowers (defined to be those earning less than $800 per month).

The initial Gateway product and process differed from a conventional secondary market process in certain respects.

Loan Product: The initial loan product was a non-mortgage home purchase loan. Designed from the success of unsecured micro-loans for formally employed workers, the so-called "Makhulong Home Loan" has the features shown in the table on page 21. The decision to start with this loan class reflected a strategic choice to seek to close the credit gap by building upon the success of micro-loans, with their lower proven risk profile, rather than seeking to extend average mortgage loan size downwards.

Hence, by comparison with a mortgage, the makhulong-type loan is shorter in term, and

Table 1. Comparison of Makhulong-type Home Loan to Standard S.A. Mortgage

	Makhulong-type	*Standard S.A. mortgage*
Maximum Term	8 years/ 12 years	20 years
Interest Rate Type	Fixed/ flexi[4]	Generally variable
Installment to Gross Income	25%/ 27.5%	25-30%
Repayment Via	Payroll deduction from employer	Debit order Payroll deduction Deposit
Collateral	Retirement fund guarantee: minimum 30% Bought in credit insurance for difference	First mortgage bond LTV not limited but extra capital required above 80% LTV

has a generally fixed installment, corresponding to desirable characteristics in the affordable housing marketplace. The loan is repaid via direct deduction from the borrower's pay packet by employers, which has the effect of:

1. Removing willingness to pay considerations, provided the borrower remains in the same job; and

2. Reducing collection costs, since an employer pays over one amount monthly in respect of all employees in the scheme.

The most important difference from the mortgage, however, is the collateral for the loan. In terms of the Pension Funds Act, retirement funds in S.A. can guarantee the loan obligations of members provided (1) these loans are used for housing purposes broadly defined; and (2) the member pledges his benefits to the fund to back the loan guarantee. Hence, in the event of default, the fund pays out on the loan guarantee, and "offsets" the payment from the defaulting member's retirement funding account (in the case of defined contribution funds), hence avoiding cross-subsidization of defaulters by other members.

Essentially, this mechanism allows retirement fund members to arbitrage inter-temporally in favor of investing now in a fixed asset, a house, while not affecting their financial investment for the future, provided they do not default on the loan. Top-up credit insurance from South Africa's affordable housing insurer, the Home Loan Guarantee Company, is an essential pre-condition for turning the loans into fully secured loans, even if the borrower has as little as 30% of the loan available from the retirement fund. Hence, compared with a standard mortgage, the collateral is (1) easy to value, since it is financial; and (2) relatively easy to realize, since it involves a claim on guarantees rather than a foreclosure process.

Other than the risk that the guarantors fail, the main credit risk of the makhulong-type loan to the lender/investors is therefore restricted to a situation in which the borrower changes employment and the new employer is unwilling to deduct the installments—in this case, a costly alternative collection system may be necessary. In all other cases, such as death, disability or retrenchment, the guarantees will cover the lender's credit risk, provided certain underwriting standards were adhered to.

Process: Several differences from the standard (U.S.-type) secondary process were envisaged. These included:

- Since no loans of the makhulong class existed prior to the start of Gateway, it was envisaged that new conforming loans made would be bought from accredited primary lenders on a back-to-back basis, eliminating the need for lenders to manage pipeline risk; also, warehousing may be necessary for an extended period to allow a portfolio of sufficient critical mass to grow.

- A web-enabled origination/underwriting system was developed for accredited primary lenders to ensure that all loans sold to Gateway were granted using standardized credit criteria, including a credit score developed using consumer credit standards. This was to ensure consistency in credit decision making from the start.

- Brand name: the Makhulong Home Loan name was created and trademarked by Gateway in order to profile the new class of loan in the primary market place. Since the loan class was new, it was the intention to create a generic name (similar to the concept of a "mortgage") with general market acceptance, which primary lenders could then co-brand for marketing purposes.

The envisaged process therefore involved more intervention in the primary market than is usual for a secondary market corporation, but this reflected the main objective of broadening access to housing finance.

ENVIRONMENT

A pilot project does not take place in a vacuum, hence the product and process described above was launched in April 1999 against the background of wider macro-economic events:

- *Interest rate spike:* Like most developing economies, South Africa suffered a bout of "Asian flu" in 1998; prime interest rates increased over 7% within three months, squeezing mortgage borrowers since mortgage loans are overwhelmingly variable rate. While the sudden increase did not affect Gateway directly since this was prior to launch, it did mean that the makhulong-type product was introduced at a time when rates were historically high although falling. However, the rate spike served as a healthy reminder of the volatility inherent in a small, open developing economy, and of the need for home loan products which remove the interest rate risk from unsophisticated lower income borrowers.

- *Liquidity crisis of smaller banks:* In 1999, a combination of the much publicized failure of a small local bank, together with Y2K fears, led to severe liquidity pressure on smaller banks generally. This pressure has continued into 2000, and has forced the smaller banks to reconsider their funding options, including securitization and alliances with larger banks. This has made the general case for a secondary market stronger, although for a different reason than originally envisaged.

- *Launch of single-channel conduit "private label" securitization:* At the beginning of 1999, a new entrant was launched in the high-end mortgage market. S.A. Home Loans (SAHL) was modeled broadly on Aussie Home Loans of Australia, and sought to attract re-financing by bank mortgage customers by offering large mortgages at a rate around 2% below the prime bank mortgage rate. SAHL has succeeded in generating a larger than expected volume of loans in portfolio in a year of operation. It has recently appointed a U.S. investment bank to conclude its first domestic securitization issue, which is expected by year end. As a result in part of SAHL and several other private loan book deals between banks, there is growing recognition of the potential benefits of securitization. This is positive for the development of the capital market in S.A. However, the increasing competition at the high end of the market is likely in the medium run to lead to further withdrawal by large banks from the low end of the market, as their margins across the mortgage book are eroded further and as they focus on competing to retain higher-income borrowers.

- *Primary housing market shrinks:* Recent figures from the regulator of home builders, the National Home Builders' Registration Council (NHBRC), meanwhile show both the cause and effect of the credit gap: of a total national volume of new houses built in 1999 using bank finance, only around 5% (or 1,000 houses) were sold for less than US$8500, i.e., in the "credit gap" range. For the first half of 2000, with registration now compulsory for all new houses, only 350 new houses were completed for less than $8,500. While the government subsidy system delivers around 170,000 per annum of fully subsidized small structures (not reflected in the above figures) for free, the market for affordable new houses involving private finance remains highly inactive.

- *Government legislation:* Government has recently tabled the Home Loan and Mortgage Disclosure Bill, modeled on the U.S. Home Mortgage Disclosure Act, which is likely to be passed into law by 2001. In its present form, the law will require all mortgage lenders to disclose their mortgage lending applications and loans granted by such characteristics as geographic area, race and gender. While the bill is careful to avoid any compulsion to lend, instead concentrating on the prohibition of unlawful discrimination, it is likely to increase pressure on banks to undertake lending in the lower-income market place. For those banks which are not retail mortgage lenders (the majority by number), there is likely to be demand to invest in suitable paper backed by low-income mortgages, which will boost potential funding sources.

Gateway Status: July 2000

As of July 2000, the original makhulong-type loan pipeline is still looking dry: Gateway has been offered few makhulong loans for purchase. In part, the process, involving the creation of a new housing asset class, has simply been much slower than expected. The very credit strength of the makhulong loan class—the use of financial collateral and payroll deduction—carries the operational weakness of greatly adding to the initial complexity in relationships, since the employer, the retirement fund trustees, the fund administrator and the unions must all agree upfront, and some must enter into contractual obligations to perform. Once these agreements are in place in sufficient scale, the process becomes much easier; however, aligning all the parties to the transactions, including banks with existing micro-lending relationships with employers and retirement funds, has required Gateway to develop a "joint-venture" type approach with lenders.

Indeed, much of the first year of operation was spent developing the relationship and processes with primary lenders who are the clients of Gateway, which is the second link in the chain shown in Figure 2 below. After the accreditation of three larger banks at inception, a further four lenders have been applied for and been accredited, including another smaller bank and four non-bank lenders. Unlike for the bigger banks, liquidity is a pressing need for these smaller institutions. In the process of working with these clients, it has become important to solidify value propositions with them, and to be able to tailor a process to suit different circumstances.

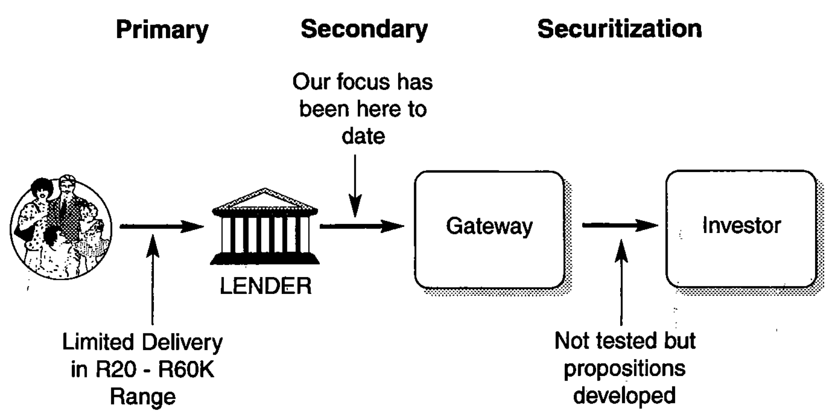
However, it soon became clear that the major constraint was lack of activity in the primary market in the targeted range: both in the supply of houses and the effective demand from consumers eligible for finance. As a result, Gateway has had to develop strategies to stimulate and promote the primary market. These include:

- *Product diversification:* A variant of the makhulong home loan has been developed to cater to housing institutions which supply housing and administer it; this product class is showing some promise, but also involves a long lead time since the clients in this sector—which range from private developers to housing companies linked to city governments or employers—are relatively new. While the product innovation is necessary, Gateway has still to find the vanilla product as the cornerstone of a standardized secondary market portfolio—without such a cornerstone, it will be hard to anchor the funding process.

- *Information provision:* Part of the weakness of the primary market is due to lack of information about the nature and patterns of effective demand for housing. Consequently, the provision of accurate, consistent information about demand and supply trends in the affordable housing market has been identified as a key role for Gateway, and a Geographic Business Intelligence Unit was established this year to coordinate the collation, analysis and dissemination of information to the market. This information will also be important for risk management purposes in the future.

- *Intensive origination focus:* The development of the makhulong-type product has meant the creation of new origination channels, since lenders which had previously granted similar smaller secured micro-loans did not have the origination capacity for mortgage substitutes, which involves a more intensive and complex process than a micro-loan. However, these larger lenders do have the ability to deal with the corporate relationships with employers and funds, and can administer large loan books. Hence, Gateway is piloting the accreditation of a new class of Primary Market Originators, which will focus on origination at the borrower level, while larger lenders collect and administer. At one level, this "unlocking of the lending value chain" is to be welcomed and has been called for by other commentators on S.A. housing finance (for example, Riordan 1999); but since it involves intensive interaction with smaller clients, it is questionable whether this is Gateway's long-term role or prime focus.

Figure 2. The Secondary Chain



The slowness of the primary market has also prompted strategies to seek to develop the funding side through the acquisition of existing loan books with similar characteristics to makhulong, where negotiations are underway. Since these loans have a high credit quality, the main issue is making a case for the large banks which are the main holders to move these assets off-balance sheet. However, there are sufficient existing loans, used largely for home improvement, to enable the development of a debt security in this class.

In addition, Gateway is now widening its focus to include small mortgages which are at the higher end of its target income range in certain conditions. In part, this shift back to mortgage comes because of awareness of the weaknesses of mortgage substitutes (see page 24); and in part, because the main lenders in the small mortgage market are substantially strapped for liquidity, hence wish to see the development of a secondary process through which they can continue to expand their activities here.

LESSONS LEARNED

While much of the experience in the pilot to date is unique to its South African context, it is possible to list some more general lessons from the work-in-progress.

- The pre-conditions discussed above are necessary but not sufficient conditions for secondary market development. Other conditions are required; for example, in a concentrated banking system, there must be compelling incentives in existence for primary lenders to sell quality loans to a secondary market institution: these can be financial—for example, reducing capital requirements, but this only works where the banking system is short of capital; or legislative, where banks are required to report on or undertake certain types of lending; or both.

- *Primary market:* If broadening access to housing finance is the main objective in creating a secondary market, then great attention must be paid initially and on an ongoing basis to primary market issues. These include loan product design, origination channels and credit risk, as opposed to other financial risks. Unless these issues are addressed adequately, then the primary market will not produce a sufficient volume of loans or sufficient credit quality to allow sustainable secondary market development.

- *Policy environment:* This cannot be taken as given; even if existing laws and regulations allow the introduction of a secondary market at first, new issues are bound to emerge quickly if the system has been designed around the primary market. This is particularly true if the aim is to promote access, since this will involve product innovation, which is likely sooner or later to run into obstacles from existing legislation, especially since most financial regulation focuses on the consumer (i.e., retail product) side.

- *Realistic expectations:* Housing is always and everywhere a long-term process, given the complexity of the usual housing environment, and the fact that most home buyers are undertaking their largest lifetime investment decision. It is unrealistic to expect that a sustainable secondary market can be developed in a short period of time. Even the most developed secondary systems such as the U.S. have taken decades to evolve; and the more successful emerging market examples such as the Home Mortgage Bank of Trinidad and Cagamas of Malaysia have been in business for over a decade.

- *Loan product:* Micro-loans are increasingly accepted as vital aspects of a housing finance system (see for example, Tomlinson 1997), just as micro-lending has been accepted as a cornerstone of Small, Micro and Medium Enterprise development strategy. However, while micro-loans undoubtedly have a major part to play in incremental housing and in home improvement, which is a natural and significant part of any housing market, they have limitations as mortgage substitutes. Most importantly, home purchase finance usually requires longer time frames to be affordable, especially at the higher interest rates associated with micro-finance. In a long-term home financing decision, it is necessary to provide some form of bond or lien over the title to the property in order to protect the interests of both borrower and lender against other short-term creditors, especially if these creditors include so-called loan sharks who have few scruples about attaching and repossessing houses to cover consumer debts. More research is necessary into ways of making the land transfer and bond registration processes more efficient.

- *Scale:* Ultimately, a sustainable secondary market is a numbers game. Unless certain debt issuance size thresholds are crossed, the instruments are unlikely to be liquid; and without liquidity in the instruments, a sizeable premium is likely to paid in higher interest rates: higher even than the marginal cost of funds for primary mortgage banks, which reduces the incentive to sell any loans into the secondary market. Most secondary market institutions start life much smaller in asset size than many of their bank clients, hence need to leverage their initial size rapidly to achieve critical mass. The core value proposition of a multi-lender secondary market conduit is that the whole is more than the sum of the parts: if it is not, its reason for existence will sooner or later be threatened by larger lenders who can and will go it alone.

CONCLUSION

Just over a year into the Gateway pilot period, we cannot yet report success, still less can we report that we have found a viable basic product and process for a successful secondary market to develop in South Africa. Until we have tested the whole value chain from origination to debt issuance, we cannot claim that. We can, however, report that we are older and wiser. The many complex issues around secondary market development have moved from the drawing board to the meeting room, as we wrestle daily with understanding and meeting the needs of primary clients.

The basic case for a secondary market in South Africa remains, and is perhaps stronger than when Gateway started in 1999. The "credit gap" in the primary market has widened by all accounts and liquidity pressures on smaller banks have risen. However, our case is now more nuanced. Going forward, it is possible to see a fork in the road which we walk. We cannot pursue the development of a full secondary market, while so much energy is required to build the primary market. The choice may be between abandoning the secondary market development objective in favor of a greater primary market facilitation role; or withdrawing from the primary market in favor of building a working secondary market in an asset class and market segment where the primary market is active. Clearly, both strategies are necessary, and complementary; but each requires clear focus, and different resources, both financial and human.

It is only through such clear focus on realistic objectives that secondary markets in emerging economies can move from coming second to coming first.

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NOTES

[1] *Gateway Feasibility Study Summary Report,* 1998, p.15.

[2] Figures are converted from S.A. rand to U.S. dollar at the prevailing exchange rate in July 2000 of around 7.

[3] *Project Gateway Feasibility Study,* 1998, p.18.

[4] Flexi: means that while the interest rate varies, the installment is held fixed under most interest rate variations (hence variable term).