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Providing Housing Subsidies in Surinam
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I Introduction

This report outlines a scheme for providing housing subsidies in Surinam. The author was in Suriname as consultant to the Inter-American Development Bank (IBD) during April 17-29, 1998. The report also builds upon previous studies of the housing finance system in Suriname including the following:

Inter-American Development Bank, Suriname: Issues for Financial Sector Development, October 27, 1997

John J. McGuire, Report to Inter-American Development Bank About Commercial Banks in Suriname, November 12, 1997

Marja Hoek-Smit, Claude Bovet and Douglas Diamond, Strengthening Surinam's Housing Market and Housing Finance Sector, December, 1997

State-Banks Consulting Group, An Action Plan for the Reform of the State-owned Banks [in Suriname], March 19, 1998

The Hoek-Smit, Bovet and Diamond study (HS,B&D) in particular provides a foundation for this report. That study served the important purpose of demonstrating some of the many ways in which housing finance services can be delivered. It is now understood in Suriname that there is "more than one way to skin a cat". The next step, taken in this report, is to establish priorities. The Suriname Government cannot do everything at once. I have spent as much time thinking about what should not be done as in thinking about what should be done.

New institutional arrangements that can be avoided or deferred include programs that directly subsidize lenders, mortgage insurance and other risk sharing arrangements between lenders and government, dual index mortgages, and a new wholesale (or "mezzanine") financing entity. Insofar as concerns housing finance institutional development beyond the immediate requirements of the housing subsidy program, the priority ought to be the reorganization of the existing government-owned insolvent banks.

While "simple and sweet" is the way to go in designing the subsidy program, I do propose some new wrinkles in subsidy design. The rationale is that they will substantially reduce subsidy cost per household. The Surinam lenders to whom these new wrinkles were described responded favorably to them.

Section II of this report addresses the critical question of how to get interest rates down in Surinam. Section III discusses the inducements required to elicit bank participation. Section IV considers subsidy design issues and proposes some new approaches. Section V considers

the type of entity required to manage the subsidy program. And Section VI addresses the best approach to restructuring government-owned banks that are insolvent.

II Reducing Interest Rates in Suriname

The higher the level of interest rates, the larger the cost of housing subsidies. For reasons that will be explained in Section III, the cost impact of higher rates increases as borrower income increases. Using the subsidy arrangements proposed below, for example, an applicant with monthly income of $200 requires a subsidy about twice as large at 35% as at 12%. For an applicant with monthly income of $500 a month, the subsidy is over 6 times larger at 35%.

The current mortgage rate is 35% but the banks are willing to make mortgage loans denominated in US dollars (with appropriate exchange rate guarantees by the central bank) at only 12%. Since the rate in the US is currently about 7%, the absolute maximum portion of the 35% guilder rate that can be attributed to cartelization and inefficiency is the spread between 12% and 7%, or 5%, and this assumes a zero cost of attracting dollars to Suriname. Assuming more realistically that it would take a rate premium of 1-2% to move dollars to Suriname, the spread due to cartelization and inefficiency shrinks to 3-4%, which is consistent with the magnitudes we see in other developing countries.

The difference between the guilder rate of 35% and the dollar rate of 12% must be due to expectations of a future decline in the guilder exchange rate. These expectations, in turn, are driven by expectations of resurgence of the hyper-inflation that prevailed during 1993-94, based mainly on an expected surge in the government's budgetary deficit, along with strikes and massive wage demands by the labor unions.

The government's position is that the deficit is under control and that pessimistic (and unfounded) expectations are being fed by the opposition political party. According to the government, the deficit in 1998 will be 4.7% of GDP, and will be substantially smaller in 1999. If this scenario materializes, interest rates will surely come down. But if the critics are right, rates will not come down and might rise. In 1994 the mortgage rate reached 52%.

If the loans offered under the housing subsidy program were denominated in dollars, not only would the subsidy costs be reduced substantially but borrowers would be much less vulnerable to future interest rate shocks. When I surfaced this idea at the central bank, the President's reaction was that it was worth considering. While the benefits are clear and compelling, there are also risks that need careful assessment. I did not view such an assessment as within the scope of my current assignment.

II Inducing Banks to Participate in the Subsidy Program

IDB policy is to combine an upfront subsidy paid on behalf of consumers with a loan from private sources at commercial terms. This approach facilitates accountability and strengthens

the private sector. It raises a question, however, regarding the requirements for bank participation.

Cost Recovery

Small loans cost just as much to originate and service as large loans but the fees that lender's collect to defray these costs are smaller on small loans. Origination fees are expressed as a percent of the loan amount, while servicing costs must be recovered from the interest charge, which is expressed as a percent of the (declining) balance.

If necessary, lenders can be allowed to recover their costs from the borrower, with the subsidy paid on behalf of the borrower adjusted accordingly. There is no need to subsidize lenders directly.

Assume, for example, that the minimum loan size lenders will accept in their ordinary commercial business is $25,000 and that they charge a 1% origination fee to cover their costs. Then on the smaller subsidized loans they would be authorized to charge a flat fee of $250, which would be included in the subsidy calculations, but no percentage fee.

A similar if somewhat more complicated approach can be employed in connection with servicing fees. Assume that it costs a lender $10 per month to service a loan. On a $25,000 loan for 20 years and 12%, this is the equivalent of .57% in yield. (The yield net of servicing cost, in other words, is 11.43%). Then on subsidized loans smaller than $25,000 the lender would be authorized to charge the borrower a servicing fee of $10 per month while reducing the rate to 11.43%.

Hopefully, however, these adjustments won't be necessary. In my discussions with DSB and Hakrinbank, neither expressed any concern about the costs of small loans.

Default Risk

Lenders would have protections under the subsidy program that are comparable to those they have under their regular home loan programs. The down payment requirement would be the same, or they would accept lower down payments but be compensated for the greater risk with mortgage insurance premiums that are acceptable to them.

Borrower selection and underwriting criteria and procedures would be developed by the Program Implementation Unit (PIU), but the lenders would participate in developing the procedures and would sign off on them. The PIU would qualify the borrowers for the program but the lenders would have the right to check their internal files, and perhaps those of other lenders, before granting final approval.

Loan collections would be left to the lenders, with assurances against meddling by politicians or others.

Denomination of loans in dollars would reduce the potential for sharp increases in interest rates that might threaten borrower's capacity to repay.

Interest Rate Risk

Lenders would have the discretion to adjust rates with changes in the market. This is not a happy arrangement, but it is necessary for bank participation. Banks will not make fixed-rate loans for 20 years and there is no satisfactory way to index the rate. Indexation probably isn't desirable anyway if inflation erupts anew, since it might result in larger rate increases than discretionary rate adjustments by banks.

A problem with discretion is that all rate changes become policy decisions, which invites outside interference including political interference. It is in the interests of the lenders as well as the subsidy program if the decision process is made as objective as possible, even if it is not completely mechanized as with indexing. This is an issue to discuss with the banks.

Availability of Funds

Because interest rates in Surinam reflect inflationary expectations, they are above market-clearing levels and the banks have excess funds. The same is true of their trust departments. At least in the short term, bank participation in the subsidy program will not be deterred by lack of funds.

If the situation changes in the future, the central bank can always make more funds available to the banks by reducing reserve requirements or loan limits. In the absence of a domestic securities market, a "wholesale" financing entity has no role to play, except perhaps as a proxy for the central bank in financing abroad, which wouldn't fool anyone with money to invest.

III Subsidy Program Design

The Down Payment Subsidy

A down payment subsidy involves an upfront contribution to the down payment in order to 1) reduce the mortgage payment to the level where it is affordable, or 2) help meet the lender's down payment requirement. The subsidy required for each purpose is determined separately, and the larger of the two is the required subsidy. The calculation procedures are set out in an appendix note.

A weakness of the down payment subsidy is that it results in higher subsidy costs than needed to place a given applicant in a given house. The down payment subsidy needed to make the

payment affordable is unnecessarily high because it assumes a level payment throughout the life of the loan. The subsidy can be reduced by using an instrument that calls for a rising mortgage payment. Similarly, the subsidy needed to meet the lender's down payment requirement could be scaled down by inducing the lender to reduce the requirement in exchange for a mortgage insurance premium that covers the added risk.

These approaches will be described below. Consistent with IDB's policy of demanding financial accountability, both require that the subsidy-granting entity budget the full cost of each subsidized transaction at the time of the transaction.

The Interest-Only Buydown Mortgage

The interest-only buydown mortgage (IOBD) was developed in the US as a tool for home builders to subsidize the mortgage payments of home buyers in the early years. To make the loan acceptable to lenders, it was designed to avoid increases in the loan balance ("negative amortization") in the early years.

The payment begins at the level the borrower can afford and rises by a specified percent every year. In the early years, the difference between the borrower's payment and the interest on the loan is made up by a withdrawal from the buydown escrow account. As the borrower's payment rises, these withdrawals decline and the account is exhausted when the borrower's payment covers the interest. The loan balance is unchanged until the borrower's payment covers the interest, at which point it begins to amortize. The payment continues to rise until it becomes "fully amortizing", at which point it levels off.

If no interest is paid on the buydown escrow account, the amount that must be deposited in that account at the outset of the transaction is equal to the sum of the required withdrawals. If interest is paid on the account, the required deposit is smaller.

A typical amortization schedule, assuming a fixed rate of 12%, is shown in Table 1. In the first year, the total interest payment is $75 of which $60 is paid by the borrower and $15 by a withdrawal from the escrow account. The escrow account is exhausted in the 5th year, since in year 6 the borrower's payment covers the interest. The payment must rise for 10 years to reach the fully-amortizing level, where it remains unchanged for the remainder of the 20-year term. The sum of all withdrawals from the escrow account is $521 but only $469 need be deposited because of interest earned on the account.

As shown later, the IOBD does not necessarily eliminate the need for a down payment subsidy. However, subject to an important qualification, the sum of the down payment subsidy required with a IOBD plus the buydown subsidy will be less than the down payment subsidy required without the IOBD.

The qualification is that the IOBD does not work at very high interest rates. The reason is that the spread between the mortgage rate and the rate earned on the escrow rises with the general

level of rates, increasing the required subsidy. In addition, the payment must increase more rapidly at high rates. These points are illustrated in Table 2, which compares IOBDs at mortgage rates of 12% and 35%.

Mortgage Insurance

Private mortgage insurance is well developed in the US as an economical way to reduce the required down payment. Borrowers can pay the insurance premium entirely upfront, they can pay it with a monthly increment to the mortgage payment, or they can select a combination of the two. In line with IDB objectives, an insurance premium paid as a subsidy should be entirely upfront.

Assuria Insurance expressed interest in developing a mortgage insurance program when I raised it with them, but this would take some time at best. Much the simpler approach is to have the mortgage lenders self-insure by collecting the premiums themselves. Both DSB and Hakrimbank responded positively to this proposal._

In estimating mortgage insurance subsidy costs, I follow the practice of the US companies of quoting the premium on the total loan rather than on the amount of insurance coverage. Thus, an upfront premium rate on a $10,000 loan with $3000 of coverage would be, e.g., 3% of the loan rather than 10% of the coverage. The premium will vary with type of loan, loan-to-value ratio and coverage. In the subsidy program the required coverage is equal to the lender's required down payment without insurance, less the borrower's down payment less the down payment subsidy.

Comparing Subsidy Costs

Table 3 quantifies the benefits of shifting from down payment subsidies alone to the alternative approach that uses the IOBD and mortgage insurance along with down payment subsidies. I compare subsidy costs on both bases using the $13,500 house suggested in (HS, B&D) for borrowers with incomes ranging from $100 to $500 a month. The calculations were done both at 12% and 35%, but only down payment subsidies are shown at 35% because the alternative approach doesn't work at that rate.

A quick overview that compares columns 3, 4 and 9 illustrates both the savings from shifting to the alternative system and the drag that would be imposed on the program by having to lend at 35%. At an income of $200, the subsidy cost at 35% is twice as large as the subsidy cost at 12% using the alternative approach, and 1.5 times as large using the down payment subsidy. At an income of $500, the ratios are 6.4 and 1.7, respectively.
The cost savings using the alternative approach rise with income mainly because the down payment subsidy becomes smaller and the more efficient mortgage insurance subsidy becomes larger.

In using the IOBD, a down payment subsidy is required to the extent that the sale price exceeds the sum of the affordable loan plus the borrower's down payment. If the down payment subsidy exceeds the lender's down payment requirement less the borrower's down payment, as it does in the lower two income groups, there is no scope for mortgage insurance.

As income rises, the affordable loan also rises and the down payment subsidy correspondingly declines. When the down payment subsidy falls to the point where it is smaller than the lender's required down payment less the borrower's down payment, as is the case when income is $300, the mortgage insurance subsidy kicks in.

When the affordable loan using the IOBD rises to the maximum, which is the sale price less the borrower's down payment, the down payment subsidy disappears and the insurance coverage reaches its maximum. This is the case for the borrower with an income of $400.

Finally, when the borrower's income rises to the level where the affordable payment can be met with a level payment mortgage, the IOBD is no longer needed, and only the mortgage insurance subsidy is required. This is the case for the borrower with income of $500.

It is thus evident that borrowers fall into 4 income groups as follows:

Down payment subsidy exceeds the lender's down payment requirement less the borrower's down payment. This group requires the largest subsidy and cannot use mortgage insurance.

Down payment subsidy is smaller than the lender's down payment requirement less the borrower's down payment, but greater than zero. These applicants use all three subsidies but the total is sharply lower than for group one.

Down payment subsidy is wholly replaced by the mortgage insurance subsidy, with corresponding further reduction in total subsidy cost, but the affordable loan still requires the IOBD.

The borrower can afford the payment using a level payment loan without the need for an IOBD subsidy. Only the mortgage insurance subsidy is needed.

The income levels defining these groups are dependent on the assumptions made with respect to sale price, the lender's down payment requirement, the down payment requirement imposed on the borrower, the interest rate and loan term, the ratio of affordable payment to borrower income, the mortgage insurance premiums, and the escrow rate, payment graduation rate and graduation period on the IOBD. Using a sale price of $13,500 and the other assumptions stipulated in Table 3, the critical monthly income levels are as follows:

Group 1: Less than $216
Group 2: $216-$324
Group 3: $324-$446
Group 4: Higher than $446

While the calculation of subsidy amounts and critical income levels might appear to be dauntingly complex, they really aren't. The calculation procedures could be programmed in such a manner that the complexities are all behind the scenes. I have not attempted to do it because there isn't any point to it unless IDB makes a decision to move ahead using this approach. The appendix note does have a more precise formulation of the manner in which the subsidy costs are determined.

Dual Index Mortgage

The dual index mortgage (DIM) has been used to bridge the increasing conflict that arises between the interests of borrowers and lenders when inflation escalates. On a DIM the interest rate to the lender is indexed to a market rate, while the payment made by the borrower begins at an affordable level and increases with a wage and salary index.

The DIM has no automatic mechanism to assure that the loan will amortize at term, and if real income declines it may never amortize. Hence, most DIMs rely on the government to assume the obligation of repaying any remaining balance at the end of the term. Private lenders who write a DIM at their own risk start the initial payment much higher than lenders who are backstopped by government.

I don't believe that the DIM is a suitable instrument for Surinam. This is not because the DIM was not designed as a subsidy vehicle, since a subsidy feature could easily be incorporated. The more important problem is that lenders in Surinam probably would not trust the government to take them off the hook if the DIMs don't amortize. And while an external guarantee might serve this purpose, this would run counter to IDB's policy of paying the full subsidy cost upfront.

In addition, if inflation erupts again in Surinam, the interest rate on a DIM would increase much more than on an IOBD. There is no reason for lenders to exercise restraint in raising rates on a DIM because higher rates do not affect the borrower's payments._ On the IOBD, in contrast, an increase in rates is translated immediately into an increase in payments, and lenders are constrained by their perceptions of the borrowers' ability to pay. The mortgage rate never went above 52% in 1994-5, for example, even though the inflation rate reached 400%.

Savings Plan and Rationing

A savings plan for loan applicants could be a valuable feature of the housing subsidy program. One purpose of such a plan is to encourage savings by holding out the prospect of obtaining a house if the saver can accumulate the funds required for the down payment. The PIU or an affiliated non-government organization could counsel applicants in designing a savings plan hand tailored to the applicant's financial situation.

A second possible purpose of a savings program is to provide a credit-worthiness test, on the assumption that completion of a savings plan by an applicant constitutes evidence that the borrower has the discipline needed to repay a loan. No doubt this is true in many cases, but I have serious reservations about making the completion of a plan a requirement for eligibility. Such a rule would disadvantage applicants who can meet the down payment requirement now because they did their savings earlier.

In this connection, it is worth emphasizing that "savings plan" is really a misnomer. It is difficult to determine that an applicant's assets, whether accumulated before or after the program began, resulted from systematic savings as opposed to gifts or other transfers. While lenders in the US often ask for documentary evidence that at least part of the down payment was saved by the applicant, little credence is placed in such evidence. In Surinam, it probably would be even more difficult without costly intrusions into the applicant's affairs.

A third possible purpose of a savings plan, which as far as I know has not been considered heretofore, is to reduce subsidy costs. This possibility arises because of a weakness inherent in down payment subsidies. Applicants who can afford to make down payments in excess of the minimum have no incentive to do so because any extra payments would be matched dollar for dollar by reductions in the subsidy, with no change in the borrower's equity.

An incentive to invest more than the minimum down payment would be created if a) applicants who make larger down payments rise to the top of the rationing queue, and b) savers are offered a bonus (on top of the rate paid by the bank) on amounts above the required down payment.

Consider the applicant with income of $200 in Table 3 who pays a 10% down payment of $1350. If this borrower actually has more than $1350 available, perhaps from gifts or from savings of non-reported income, there is zero inducement to invest it in a larger down payment because of the dollar for dollar loss in subsidy. But if that applicant rises to the top of the queue, such an incentive is provided. Further, it would pay to offer the applicant a bonus that matched incremental savings (above $1350) dollar for dollar, provided that the savings are used to increase the down payment. For example, if this applicant saved an additional $1350 to raise the down payment to 20%, with half of it or $675 comprising a savings bonus, net subsidy cost would decline by $675.

The generous matching bonus in this example is justified because the increment in down payment reduces subsidy cost dollar for dollar. For the higher income applicant not receiving a down payment subsidy, such as the borrower with income of $400 in Table 3, the savings bonus would be scaled down because the subsidy saving from a larger down payment is smaller. A general rule of thumb might be to offer bonuses equal to half the subsidy saving.

Within an income bracket, I can't see any valid objections to rationing by down payment. Borrowers who can make larger down payments because they saved more deserve to move up in the queue. If they saved more by concealing income or receiving gifts, they nevertheless receive smaller subsidies even if they are not otherwise more deserving. If they are not moved

ahead, furthermore, they may be tempted to try and buy their way up in the queue, testing the credibility of the program and the administrators.

Across income groups the argument for down payment rationing is shakier because it could result in the higher-income applicants getting most of the houses at the beginning. My inclination would be to ration by down payment within income categories.

The proposed savings plan can be summarized as follows:

To become eligible for the subsidy program, applicants must have an amount on deposit equal to the minimum down payment. No distinctions would be made regarding the source of deposits, but counseling would be available to applicants who need a systematic savings plan to get there.

Within each income category, priority in acceptance would depend on the down payment.

Within each income category, applicants would be offered a bonus on amounts above the minimum down payment equal to, e.g., half the savings in subsidy cost.

Loan Terms

Since the loans granted in the subsidy program will be made voluntarily by lenders on commercial terms, there is no rationale for attempting to dictate rates and other lending terms. However, the Surinam mortgage market is not highly competitive or efficient and lenders quote somewhat different terms on the same loan. For example, one lender charges an origination fee of 1% while another charges 2%. One lender is prepared to accept a 30% down payment although the others require 40% or 50%. How should these differences be dealt with?

Borrowers cannot be depended upon to find the lowest fees because the fees don't mean anything to the borrower. A higher fee just means a larger subsidy. Further, the mortgage insurance subsidy provided a lender willing to accept a 30% down payment will be smaller than the subsidy payment to a lender requiring 40% down. It appears unavoidable that the PIU is going to have to negotiate a uniform set of terms with participating lenders, hopefully at the most favorable levels quoted by any of them. The savings plan would be an attractive carrot the PIU can offer the lenders.

A Fall-Back

If the macroeconomic situation in Surinam deteriorates to the point where the subsidy program described here becomes excessively costly, a fall-back program may be needed. Such a program would eliminate the loan component, reduce the maximum allowable value of the houses covered, and increase the down payment required from the borrower. For example, if

the maximum value is set at $7,000 and the down payment requirement increases 10 percentage points for each $100 increment in monthly income, we get the following:

A Scaled-Down Program With Property Value Equal to $7,000

Monthly Income	Down Payment(%)	Down Payment($)	Subsidy
$100	10%	$700	$6300
$200	20	1400	5600
$300	30	2100	4900
$400	40	2800	4200
$500	50	3500	3500

The lower property value under a scaled-down program would require shifting the focus from construction of new houses to construction of "core" (unfinished) houses, or to the rehabilitation of existing houses. The larger down payment requirement would mean that most borrowers would already own either a house or a plot of land that would satisfy the requirement.

IV Managing the Subsidy Program

Effective management is critical to the success of the subsidy program. This raises the question, What entity ought to be the project implementation unit (PIU)? And should an existing entity be given this responsibility, or should a new entity be created for the purpose?

Instead of attempting to answer these questions, I am going to provide a checklist of functions for which the PIU should accept responsibility._ With such a list in hand, it should not be difficult to determine whether there are existing entities that would fill the bill.

Public Relations

The PIU would develop materials explaining and promoting the program; and disseminate information about the program to the media including newspapers, TV and radio.

Subsidy Program Design

A core responsibility of the PIU is designing the subsidy program. This includes determining the types and amounts of subsidy to be provided, the groups to be served, the qualification rules for participation by households, the provisions of a tied savings plan, and the rationing and selection procedures to be used. IBD would participate in the development of all aspects of subsidy program design, while lenders should participate in the development of qualification rules.

Selection of Beneficiaries

Once the ground rules for participation have been established, the PIU has the task of evaluating applications for acceptability, and establishing their priority in the queue. Ferguson notes that "Since tens of thousands of households can be expected to apply to the program, this task requires the establishment and competent operation of automated systems as well as considerable capacity for household interviews and data collection."

Work With Participating Lenders

The PIU must work with lenders in designing the savings accounts that will be integrated into the subsidy program. It must also negotiate the terms on which loans will be made under the program, which may include construction loans as well as permanent mortgages.

Work With Builders

The PIU must "evaluate builders' new construction plans and sites to determine their eligibility for the program, make periodic construction inspections, and verify completion of the unit." [Ferguson]. It may be obliged to do the same for self-help construction and rehabilitation.

Work With IDB and Agencies of the Surinam Government

The PIU would work with IDB and with Surinam Government entities that are involved in the provision of land and residential infrastructure.

Work With Non-Government Organizations (NGOs)

Low-income households may have difficulty in accessing, and complying with the rules associated with a housing subsidy program, and outreach efforts by the PIU may be unduly costly. NGOs sometimes fill the gap by acting on behalf of a group of such households with help from the PIU. The PIU may provide financing, training, and administrative support to NGOs who assist households in accessing the subsidy program. This issue is treated extensively in [HS, B&D].

Financial Management

The PIU would administer the subsidy funds and otherwise manage all financial aspects of the program, excepting the loans which would be advanced by the lender to the household and repaid to the lender.

Promote Policy Reforms

Ideally the PIU would become a "housing overview agency", promoting legal and regulatory reforms, and such other measures that are needed to facilitate the acquisition of land, home building, flow of credit, and provision of infrastructure. For example, one of PIU's objectives should be to increase competition among mortgage lenders, in which connection it would be appropriate to involve itself in the Government's plans for restructuring the insolvent Government-owned banks.

V Restructuring Insolvent Banks

Four government-owned banks in Surinam are insolvent: Landbouw Bank (LBB), Nationale Ontswikkelings Bank (NOB), Surinaamse Postpaarbank (SPSB), and Volkscredietbank (VCB). The future of the housing finance system in Surinam will be significantly affected by how successful the government is in restructuring these institutions.

The central bank engaged State-Banks Consulting Group (SBCG) to advise it on this issue, and the firm's recommendations will serve as a point of departure for my comments.

SBCG recommended the creation of a Restructuring and Privatization Commission (RPC) to oversee and administer the restructuring process, and a new wholesale development bank (SAIDB) which would be government-owned and would assume responsibility for all development activities of the 4 existing banks. This would involve complete absorption of NOB into SAIDB, and the transfer of selected assets and functions from the other 3 banks. These proposals appear sensible.

SBCG's recommendations for privatizing the 3 remaining banks are troublesome, however. They recommend, in chronological order:

Cleaning up their portfolios of non-performing loans by transferring them to a special fund in exchange for good assets

Merging 2 and perhaps 3 of the banks

Recapitalizing the remaining 1 or 2 banks as needed

Privatization

The problem with this approach is that it delivers 2 bad messages to the existing management of these banks. First, by replacing their bad loans with good assets they are told that these loans are now someone else's problem. Second, by leaving the management out of the sequence of steps leading to privatization, they are told that they probably will lose their jobs and there isn't anything they can do about it. These messages would create incentives on the part of

management to use the time remaining to them to protect themselves, which could well lead to additional losses to the banks._

I believed that it is important to make the management a part of the privatization process. In the time between now and privatization, we want them to build value for the banks rather than to protect themselves. To do that, the management must be incented to improve the condition of the banks before recapitalization and privatization, and must believe that how well they do will have some influence over what happens to them personally.

The following sequence of steps, if properly executed, would accomplish this:

Establishment of a base line mark-to-market valuation of the banks based on an audit by a reputable accounting firm

Development by the management of each bank of a 5-year plan for increasing the value of the bank, including incentives for management and staff.

Sign-off on the plan by the RPC, which would also negotiate the terms of the incentive provisions with management.

Provisions for enlarged bank powers as needed to meet plan objectives, and assurances from the RPC against political meddling.

Immediate initiation of liquidation proceedings if the bank and the RPC cannot negotiate a plan that promises to build value for the bank

RPC monitoring of the banks' performance on a year-to-year basis, and initiation of liquidation proceedings if the results consistently fall short of the plan

Recapitalization as needed, and privatization upon the successful conclusion of the 5-year plan

Compared to the SBCG proposals, this approach should reduce cost to the government, pushes the cost further out in time, and would be fairer to the existing managers.

Appendix Note on Subsidy Cost Calculations

Down Payment Subsidy Cost

A down payment subsidy (DPS) may be needed to reduce the loan amount to the level where it is affordable (DPSA), or to help meet the lender's down payment requirement (DPSD). DPS is the greater of DPSD and DPSA.

DPSA is calculated as follows:

The borrower's affordable payment (AP) is the borrower's income (I) multiplied by the maximum ratio of mortgage payment to income (R). If I is $200 as in the second line of Table 3, and R is .3, AP is $60 per month.

The borrower's affordable loan (AL) is the present value of AP at the mortgage interest rate (MR) and term (T). AL can be calculated from the annuity routine on the HP19B hand calculator, among others. Enter AP in PMT, T in N, MR in I%YR, 0 in FV, and solve for PV. With an AP of $60 and an interest rate of 12% for 20 years, AL is $5449 (see column 2 in Table 3).

DPSA is equal to the property value (PV) less the borrower's down payment (BDP$) less AL. BDP$ is equal to PV times the percent down payment requirement imposed on the borrower (BDP%). If PV is $13,500 and BDP% is 10%, DPSA is $13,500 - 1350 - 5449 = $6701.

DPSD is calculated as follows:

DPSD is the down payment required by the lender without mortgage insurance (LDP$), less the down payment made by the borrower (BDP$). LPD$ is equal to the percent down payment required by the lender (LPD%) times PV. If LPD% is 40% and PV is $13,500, LPD$ is $5400. DPSD is $5400 - 1350 = $4050.

Since DPSA is $6701 and DPSD only $4050, DPS is $6701 (column 3).

Interest-Only Buydown and Mortgage Insurance Premium Subsidy Cost

The total subsidy cost using the interest-only buydown mortgage (IOS) is equal to the buydown escrow required (BD), a DPS if the affordable loan is less than SP - BDP$, and a mortgage insurance premium (MIP$) if the affordable loan using the buydown (ALBD) exceeds the maximum loan permitted by the lender without insurance (1- LDP%)PV.

The ALBD uses the Interest-Only Buydown module in MARSDP, the mortgage software routine available from GHR Systems, Inc. To find the ALBD requires a trial and error routine but only a few iterations are needed once the user gets the feel of the procedure.

The interest rate, escrow rate, term, and payment graduation rate, are entered. I have used 12% interest, 6% escrow rate, 240 months term, and payment graduation of 5% a year. These stay put during the iteration procedure. A trial loan amount is then entered. The "Payment Rate" that must be entered is the interest rate that is consistent with this loan amount. If you use the HP19B, enter 12%, 240 months, and AP, solving for the interest rate.

You then bring up an amortization schedule by hitting <F5> at the bottom of the screen. Hit <End> to make sure the loan amortizes. If there is a loan balance in month 240, you must reduce the loan amount and try again. Keep in mind that each time you change the loan amount you must also change the payment rate. This will assure that the initial payment will always be the AP.

Assuming the loan amortizes and the initial payment is the AP, you then want to check out the payment pattern. I adopted the rule that the payment should increase for 10 years. If it increased for more than 10 years, I went back and lowered the loan amount, and if it increased for less than 10 years I increased the loan. When the process is completed, BD is shown at the top right side of the first amortization screen (the screen that shows the payment in month one).

The ALBD (affordable loan using the interest-only buydown mortgage) will be larger than AL but it is likely to be smaller than the maximum loan, which is SP - BDP$. The difference must be made up by a DPS.

If ALBD exceeds the maximum loan permitted by the lender without insurance [(1-LDP%)PV], a mortgage insurance premium (MIP$) is required to induce the lender to accept the larger loan. MIP$ is MIP% (L).

In determining MIP%, I doubled the premium charged by private mortgage insurers in the US on their riskiest category of loans. The premiums charged by the US companies depend on the loan-value ratio and the amount of coverage required expressed as a percent of the loan. In the subsidy program, the insurance coverage equals (LDP$ - BDP$ - DPS)/L.

For example, the borrower with income of $300 requires coverage of 28% and has a loan-value ratio of 83.3%. The premium table shows an insurance premium of 2.8%, which I doubled to 5.6%.

Table 1

Amortization Schedule on an Interest-Only Buydown Mortgage

Loan Amount: $7500
Term: 240 months
Interest Rate: 12.00%
Payment Graduation Rate: 5% per year
Qualifying Initial Payment: $60
Interest Rate on Escrow: 6.00%
Required Buydown Subsidy: $469

		Payment by Escrow	End of Period	
Months	Total Payment	Borrower	Withdrawal	Loan Balance
1-12	$75_	$60	$15	$7500__
13-24_	75	63	12	7500 __
25-36_	75	66.16	8.84	7500__
37-48_	75	69.47	5.53	7500__
49-60_	75	72.94	2.06	7500__
61-72	76.59	76.59	0	7480__
73-84	80.42	80.42	0	7409__
85-96	84.44	84.44	0	7277__
97-108	88.66	88.66	0	7076__
109-121	93.09	93.09	0	6763__
122-240	97.46	97.46	0	0

Table 2

Required Subsidies and Payment Graduation on a $10,000 IOBD for 20 Years, When the Borrower Can Afford the Mortgage Payment at 6%, At Mortgage Rates of 12% and 35%, At Various Rates Paid on the Escrow Account

Mortgage Rate = 12%

Escrow Rate	Payment Graduation	Required Subsidy
0%	6.6%	$1,111__
6_	6.5	$1,000
12	6.4	$903

Mortgage Rate = 35%

0%	16.0	16,668
18	15.7	9,464
27	15.6	7,500
35	15.5	6,272__

Table 3

Subsidy Cost of a $13,500 House For Borrowers With Different Incomes, At 12% and 35%, Using Down Payment Subsidies Alone, and Using a Combination of Down Payment, Interest-Only Buydown and Mortgage Insurance Subsidies

	Down Payment Subsidies			Interest-Only Buydown, Mortgage Insurance & Down Payment Subsidies			
Monthly Pmt Income	Affordable Mortgage Ins Loan	Total Subsidy	Subsidy at 12%	Subsidy at 35%	Affordable Loan	Buydown Subsidy	Down Subsidy
$100_	$2725	$9425	$11122	$3750	$234	8400_	
	$0	$8634					
$200_	5449	6701	10095	7500	469	4650	
	0	5119					
$300	8174	4050	9607	11250	787	900	
	630	2317					
$400_	10898	4050	8040	12150#	760	0	
	1094	1854					
$500	12150#	4050	7012	12150#	0*	0	
	1094	1094					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) (9)

\# This is the maximum loan at 10% down payment
* Borrower can afford level payment loan

Note: Affordable loans are calculated from the affordable payment, which is defined as .3 times the borrower's income. The assumed term is 20 years. The down payment requirement imposed on the borrower is 10%, while the lender requires 40% down or the equivalent in down payment plus mortgage insurance coverage. The buydown subsidy assumes an escrow rate of 6% and 5% payment graduation for 10 years. The mortgage insurance subsidy uses insurance premiums twice those quoted by private mortgage insurers in the US on their riskiest loans.

_ Under self-insurance, lenders should book a sizeable portion of the insurance premium as a reserve against losses, taking the premiums into income as loans are paid down. As the supervisor of banks, the central bank should monitor this.
_ Indexed mortgage contracts usually allow a lender the discretion not to raise the rate when the index rises, but not the reverse. Of course there are no satisfactory rate indexes in Surinam, but a single-index version could be used in which the payment was indexed but the rate was discretionary with the lender.
_ I am indebted to Bruce Ferguson for providing a helpful memo "Illustrative Functions of the Project Implementation Unit of Direct Demand Subsidy Programs."
_ During 1981-86, I was on the board of an insolvent savings and loan association, and of a Federal Home Loan Bank which supervised numerous insolvent S&Ls.