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5. Author(s)

1. Graybill, Steven	5. Valdas, Joel
2. Lamberton, Mario	6. Vogel Robert C.
3. Sheets, Dennis	

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ABSTRACT

Small Savers Instruments

by

Steven Graybill, Robert C. Vogel, Dennis Sheets,
Mario Lamberte, and Joel Valdes

February 1994

USAID/Philippines and the Department of Finance of the Government of the Philippines undertook this study to design a small savers instrument (SSI) that would improve small savers access to the government securities market, attract informal sector savings from secondary cities and rural areas into the formal financial system, and generate competition among government securities dealers that would reduce yields to much lower levels than exist in the current market comprised of a few large investors. The lower yields are expected to result, in turn, in lower commercial or bank lending rates that will benefit exporters and thus improve the country's export competitiveness in the long run.

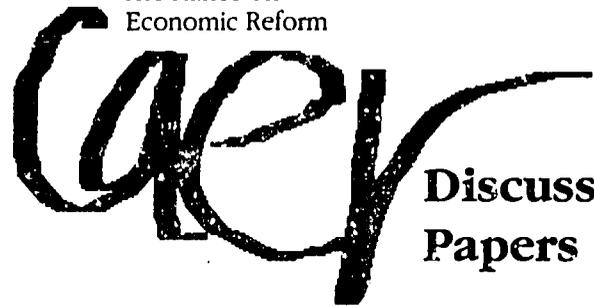
The paper reviews the history of SSIs in the Philippines, describes the current situation; recommends the design of the new SSI; suggests distribution and redemption systems, and audit and control procedures/safeguards; presents a cost analysis; reviews existing legislation, regulation and taxation provisions; identifies possible obstacles and negative side effects; and recommends action steps for implementation.

The report finds that, contrary to traditional views, there are small but significant accumulations of liquid assets in the Philippines, and that a market exists for SSIs. Previous SSIs had been unsuccessful, and the paper concludes that improper design was responsible for these failures. The authors then identify what they believe are the essential characteristics of a successful SSI for The Philippines. Characteristics are presented in terms of appropriate denominations, security, an adequate rate of return, and liquidity.

Annexes include a *Review of Existing Informal Credit Markets (ICMs)*, a *Draft Survey Form* (a questionnaire circulated to banks, cooperatives, and governmental institutions before holding field interviews), and a *Benefit-Cost Analysis of the SSI*.

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**Small Savers Instruments in
the Philippines**

Steven Graybill
Mario Lamberte
Dennis Sheets
Joel Valdes
Robert C. Vogel

CAER Discussion Paper No. 19, February 1994

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For information contact:

CAER Project Administrator
Harvard Institute for International Development
One Eliot Street
Cambridge, MA 02138, USA
Tel: (617) 495-9776 FAX: (617) 495-0527

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EXECUTIVE SUMMARY

INTRODUCTION

The following is the executive summary for a study performed by IMCC on behalf of USAID and the Department of Finance, Government of the Philippines. This summary contains only a brief background, the recommendations and the action steps derived from the study; the full text should be consulted for supporting documentation and analysis. The U.S. team was composed of Steven C. Graybill (co-team leader), Robert C. Vogel and Dennis R. Sheets; the Filipino team was composed of Mario B. Lamberte (co-team leader) of the Philippine Institute for Development Studies, Joel C. Valdes and Arnulfo Aurellano. The findings and recommendations of the study are a result of numerous field interviews with government and quasi-government officials, commercial and rural bankers, NGOs, and private business people. These interviews were conducted in Cebu City and General Santos as well as Metro Manila. The study also builds on several existing in-depth studies concerning commercial, rural and informal credit structures in the Philippines, the financing of the Philippine public debt, and the existing capital market structure in the Philippines. Annexes C and D provide a full listing of source material and individuals interviewed, respectively.

OBJECTIVE

The objective of the study was to devise a workable way to further the mobilization of small savings through providing the small saver wider access to high yielding government securities, particularly in the secondary cities and rural areas.

This is in direct support of one of the Support for Development II policy objectives of improving efficiency in mobilizing financial resources. Increased competition among government securities dealers generated by providing small savers with wider access to government securities should result in lower yields on government securities than currently exist. A reduction in rates should translate into more attractive commercial or bank lending rates likely to bring immediate benefits to exporters while causing export competitiveness to improve in the long run.

The Scope of Work provided by USAID is composed of: (A) a basic assessment of small savers' access to financial instruments, including the capabilities of institutions that could be tapped to offer financial instruments to small savers; (B) identification and analysis of options for improving the access of small savers to high-yielding government securities, and recommendation of a specific option that is deemed best suited to the Philippine environment and has a high probability of success; and (C) development of an action program based on the findings in A and the options presented in B.

BACKGROUND

Various recent studies conducted by Dale Adams, Robert Vogel and Mario Lamberte, among others, have clearly indicated that small savings exist even in the poorest areas. However, due to a variety of factors these savings are most often accumulated through informal structures such as "paluwagans". Factors such as travel time, distance and cost to reach a formal savings institution, the minimum initial deposit requirements and the small amounts available for savings at any one time represent high entry barriers. The list goes on to include the need for almost instant liquidity in the case of an emergency, the absence of a well-developed secondary market in government securities, a passbook savings interest rate that after adjustment for taxes and inflation produces a negative return, and an attitude on the part of many commercial banks that small savings and small savers are not an integral part of their business focus. All of these are instrumental in discouraging the small saver from participating in more formal forms of savings mobilization.

Thus, the conclusion was reached that in order to resolve many of the problems and remove many of the barriers encountered by small savers in the current environment, a new instrument was needed. It was recognized that to have wide appeal and, at the same time, to be both effective and cost-efficient, the instrument would need to utilize existing traditional and non-traditional institutions and distribution systems.

RECOMMENDED SMALL SAVERS INSTRUMENT

The recommended Small Savers Instrument (SSI) is a savings bond which was designed after observing the mistakes and problems of earlier experiments and taking into account the uniqueness of the Philippine context. There have been a number of savings bond programs in the recent financial history of the Philippines, most of which have been less than successful. The most often cited is the Premyo Savings Bond which had a number of features that, in combination, contributed to its failure from the very inception. For example, it carried a zero coupon and had no fixed maturity, it was tied to a lottery system, and it could be applied for full credit against the reserve requirements that banks keep with the Central Bank. As a result, the vast majority of the Premyo Savings Bonds were held by banks rather than sold into the market and fully 97 percent remained in Metro Manila. The SSI is specifically designed to avoid the mistakes of past.

The simplicity of the recommended design and the low entry level denominations of the SSI would serve to further the Department of Finance (DOF) request that the SSI be sold for the most part outside of Metro Manila. Specifically, it is recommended that the SSI be launched in P500 and P1000 denominations and be discounted front-end so that, after adjusting for taxes and inflation, it would produce a positive rate of return. The SSI would have a fixed maturity of 24 months from the date it is sold into the market. Full redemption of principal (defined as "encashment") would be possible at any time, although there would be interest rate incentives to encourage holding the SSI to maturity. In order to encourage acceptance of the instrument

as freely negotiable, it should be in bearer form. Since the full faith and credit of the Government of the Philippines would stand behind the instrument, it should be considered a risk-free investment.

The denominations of P500 and P1000 were selected after numerous interviews clearly indicated that these amounts represent the lowest entry level attainable without creating diminishing returns in terms of transaction costs. For example, reducing the amount to P250 would most likely not generate an additional increase in amounts purchased sufficient to offset the increased transaction costs (the assumption being that the transaction costs are the same regardless of the denomination of the SSI). Conversely, economies of scale do not appear to support denominations in excess of P1000. Recognizing that even P500 could represent an entry barrier for many potential small savers, programs are recommended that would allow the gradual accumulation of funds. Included in such programs could be a payroll deduction plan and a fractional savings stamp program. No interest would be earned by the saver until an actual SSI is acquired.

The SSI would be discounted front-end and, after adjusting for taxes and inflation, would produce a positive rate of return. Currently, the nominal rate would be approximately 11.875 percent per annum, or, for a P500 SSI, the small saver would pay approximately P394. Discounting the SSI front-end has at least five advantages. First, the concept is already well understood due to the common practice of "5 for 6" lending in the informal credit markets whereby the lender gets paid back six pesos for every five pesos lent. Second, accounting and control measures are simplified. Third, tax withheld on interest earned is collected at the time of issue. Fourth, as interest is accrued the holder does not have to travel to collect it; the value of the SSI automatically increases. Fifth, as the SSI passes through various holders of due course, no further calculations are necessary.

The fixed maturity of 24 months is in keeping with the DOF's request that the SSI be a medium-term instrument, yet short enough to be palatable to a small saver. The validation of the date when the instrument is sold into the market would be through a simple "one punch" system. Printed on the face of the instrument would be the months of the year and the years themselves for, as an example, the next five years. On sale, the issuer would punch out the current month and year; the SSI then matures two years from that month/year combination.

In order to provide a sense of liquidity, the SSI must have a pre-redemption or encashment feature. By presenting the instrument to any official redemption center (e.g., a commercial or rural bank) the holder would receive the original principal plus accrued interest. To ensure easy and accurate computation of the value of the SSI in the case of early encashment, a pre-redemption schedule would be printed on the back of the SSI giving the value of the instrument for each of the 24 months of its life.

The pre-redemption schedule could also be used if the SSI were to be traded in the informal secondary market. Since the instrument would be in bearer form and freely negotiable, it is fully expected that numerous variations of secondary trading would develop. This is highly desirable because it strengthens the liquidity feature. It is anticipated that the SSI could become

almost another medium of exchange. This concept is somewhat parallel to the practice of payroll checks being discounted and traded among a number of parties, particularly in rural areas. In another variation, a large department store in the General Santos area cashes payroll checks provided a minimum of 10 percent of the value is spent in the store. In areas or with individuals where the travel time, distance and costs to reach a formal financial institution are formidable barriers, the bearer form of the SSI should make it particularly attractive and convenient.

ISSUANCE AND DISTRIBUTION SYSTEMS

The success of the SSI will depend on the use of both traditional and non-traditional distribution systems, with meaningful incentives and compensation.

For the most part, the initial reaction of commercial banks (and to a lesser degree thrifts and rural banks) to acting as official distribution centers has not been enthusiastic. This stems primarily from the competition that the SSI could represent to banks' passbook savings accounts on which they are paying between 4 and 6 percent per annum. While the minimum deposit amount is generally P500 (the same as the SSI), interest is usually not paid on an average daily balance of less than P1,000. There exist, however, regional variations, particularly where there is intense bank competition. In these areas, a minimum opening deposit may be as low as P100, and savings interest rates may be up to 4 percentage points higher than elsewhere. Savings accounts represent more than 55 percent of total deposits in the banking system and are a cheap source of core deposits that the banks would prefer to protect. Not only could the SSI present interest rate competition, but it would also be a form of disintermediation in that funds would be channeled directly to the national government rather than into the banking system.

The SSI in many cases does not fit into the banks' business focus. As one commercial banker in Cebu City expressed, "I don't want a lot of P500 savers clogging up my lobby". While there are often collateral products that can be sold to a customer who may be a passbook savings holder, the SSI is a stand-alone instrument that may not develop any add-on business. Finally, there is the small saver himself who may feel uncomfortable or awkward conducting business in the more formal setting that commercial banks represent.

Interestingly, while the head offices of some thrifts were not enthusiastic about the SSI, some of the outlying branches were. They quickly recognized that the SSI represents a potential new business product that could either attract new, or help retain existing, customers.

Rural banks were the most receptive among the formal financial institutions. In many cases, rural banks send deposit solicitors into the marketplace on a daily basis. Thus, it would be a natural add-on function for them to sell the SSI at the grass-roots level.

What could make the SSI attractive to both the thrifts and rural banks, and even to commercial banks, is an incentive structure composed of a selling commission based on the Peso amount

sold, along with the potential of an average of 30 days float before the collected funds are remitted to the national government.

Two viable non-traditional organizations have been identified that could also act as distribution agencies: the Post Office; and the credit union federations, particularly as represented by the Visayas Cooperative Development Center, Inc. (VICTO). Both have existing organizations in place, including audit and control procedures, that make them natural candidates to play a leading role in the initial pilot marketing of the SSI.

The Post Office has in excess of 2,200 branches and local offices. By unofficial count, they have some form of representation in approximately 800 towns and villages that do not have a bank. They are experienced in conducting business at the most basic grass-roots level, and the individual users of their services do not view the Post Office as a formal or intimidating institution. Moreover, even in the most basic of units, the staff is trained in the handling of, and accounting for, cash through the sale of not only postage stamps but also postal money orders.

In discussions with various Postal System officials from the Postmaster General, to Regional Directors, to Branch Postmasters, considerable interest was expressed in performing this function. The use of the Post Office could also facilitate the savings stamp program for smaller incremental savings. As the Post Office prepares to go through its conversion to a government corporation and is actively seeking profit-oriented products, the SSI is seen as a high potential instrument to be sold along with other products. It may also play a role in the anticipated resurrection of the Postal Savings Bank. It is recognized that the Post Office has a reputation of being less than totally accurate with many of its transactions. However, the simplicity of the SSI and the accompanying audit and control procedures should satisfy this concern. As with any potential distribution agent, strict personal accountability and control of unsold SSIs in custody would have to be maintained.

VICTO, a federation of cooperatives, was launched by the Scarborough Fathers during the 1960s as a training and development facility for member cooperatives. It is now the most viable cooperative-owned institution in the Visayas with in excess of 250 cooperative society affiliates. Its services include extensive training, audit and consultancy programs for its member cooperatives, as well as the Visayas Cooperative Central Fund, a savings-based inter-cooperative lending fund. In discussions with VICTO, there was immediate recognition of the role that it and its credit union members could play. VICTO's existing infrastructure, distribution capability, audit and control procedures, and familiarity with the handling and accounting for cash make it a natural selection as an official issuing agent. In addition, credit union interaction with both employers and employees provides a grass-roots level of participation, such as payroll deduction, that could be instrumental in the success of the SSI. VICTO is also desirous of playing a major role in the promotional and educational process that will be vital to "selling" the concept and benefits of the SSI to the individual saver, and its participation could easily be expanded to similar organizations in other regions.

Two other organizations have potential and have expressed interest in playing the role of an issuing agent: the government social security systems, SSS and GSIS. Both indicated that they think that a payroll deduction plan is feasible under three different schemes: (1) an automatic deduction for the minimum denomination at a regular interval; (2) an incremental savings deduction, also at a regular interval, until the required amount is reached for a minimum denomination SSI; and (3) a "salary" loan that would advance the funds to the individual for immediate purchase of the SSI, with subsequent repayment to the advancing agency through payroll deductions at regular intervals. This last option might allow the individual purchaser to engage in elementary interest arbitrage between the rate of return on the SSI and the possibly lower rate on the loan from the advancing organization. While this study does not recommend below market interest rate loans to subsidize the purchase of SSIs, the suggestion by the SSS may be taken as an example of their enthusiasm in supporting the SSI.

Finally, two large corporate employers were interviewed in southern Mindanao regarding the feasibility of voluntary payroll deductions for the purchase of SSIs. Neither saw any structural impediments to handling such deductions, but both cautioned that the popularity of the SSI would depend on the quality of advertising used to attract employees to the idea. The idea of utilizing savings bonds for productivity bonus awards for employees was also discussed.

Given the bearer nature of SSI and the front-end discount, it is expected that various informal (secondary) distributions systems would develop to take advantage of local circumstances. This is highly desirable and should be actively encouraged.

REDEMPTION SYSTEMS

Because the SSI would be in bearer form and freely negotiable, and eligible for pre-redemption (with the schedule of values printed on the instrument), the SSI would be potentially redeemable at a variety of both formal and informal institutions.

In addition to the Post Office, it is strongly recommended that all commercial banks, thrifts and rural banks be actively encouraged to facilitate encashment requests. As a government debt instrument, there is no credit risk for redeeming parties as long as they satisfy themselves as to the genuineness of the instrument, the issue date, and the current value at the time of presentation. It is recognized that there is a cost to the encashing institution composed of the transaction costs and the negative float (defined as the time period between the encashing institutions disbursement of funds to the holder of the SSI and the reimbursement of the institution by the government's clearing agent). However, assuming that compensation is adequate (including the interest that encashing institutions can earn while holding SSIs), unquestioned encashment by formal financial institutions is critical to the image of credibility and liquidity. It is further recommended that the Development Bank of the Philippines (DBP) or the Land Bank be appointed as the clearing bank for the SSI so that private financial institutions can quickly clear redeemed instruments and thus reduce their negative float.

In keeping with the concept of using existing, albeit non-traditional systems, the development of informal secondary encashment agencies should be actively encouraged. For example, pawn shops, as a regulated non-bank industry, could perform a viable role as informal redemption facilities. In fact, almost any outlet from a "sari-sari" store down to an individual with the required level of disposable cash could become a "facility" for redemption. It is not inconceivable that some individuals would establish a business whereby they would encash other individuals' SSIs for less than the stated redemption value but save those individuals travel time, distance and cost, and then, in turn, present the SSIs at official redemption facilities for the full value of the instruments. The option to savers of encashing their SSIs at banks will serve as a restraint on gouging in the informal market.

PRICING

There are two aspects to pricing. One is the interest rate of the SSI itself; the other is the incentive and compensation package provided to the issuing and redeeming agencies.

The interest rate would be fixed for the two year life span of the individual SSI. The nominal rate should be a function of the existing tax structure, plus the expected rate of inflation, plus not less than a 1 percent add-on in order to produce an adjusted real positive rate of return for the small saver. For example, in today's environment, with no adjustment to the tax structure, the nominal rate would be approximately 11.875 percent per annum. Thus, for a P500 SSI, the small saver would pay approximately P394.

Concerning the encashment values, interest should be earned for each month that the SSI is held, even if for only one month. However, the schedule would reward the longer-term holder on a graduated basis so that the earlier months will earn less interest than the later months.

The incentive and compensation package for the issuing and redeeming agencies is a little more complex. A sales commission paid outright on the Peso volume sold is recommended. This could take the form of a slightly deeper discount in the amount remitted to the national government by the formal selling agent. For example, if a commercial bank were to sell an SSI it would remit an amount representing the market discount less an additional 1/4 of 1 percent. An additional incentive would be to allow the issuing agencies an average 30 day float period on the funds they collect. This is an idea that almost all financial institutions find attractive enough to make them willing and active sellers of the SSI.

Transaction costs should also be compensated based on the absolute number of instruments sold. As a rule of thumb, most of the financial institutions considered a P500 average daily balance to be just break-even for a passbook savings account, assuming that no interest is paid on the account and there is an average of five transactions per month. This would imply a per transaction cost of approximately one Peso. Thus, one Peso might be paid by the government for each SSI sold as reimbursement for transaction costs.

It is recognized that there has to be some form of compensation to all official redemption agencies for incurring transaction costs and negative float. One method could be to charge the holder of the SSI directly at the time of encashment through a two or three Peso levy for each P500 denomination (and less than proportionately more for each P1000 denomination). That is, instead of receiving the full encashment value, the holder would receive that amount less two or three Pesos which the encashing institution would keep as compensation.

The SSI is intended to cost the government several percentage points less in interest than its Treasury Bills, but since an SSI will have a fixed yield during the two years of its life the spread between the fluctuating Treasury Bill rate and the SSI rate cannot be predicted with certainty. For example, the yield on 91-day Treasury Bills was trending down during the first half of April 1992. Currently, in terms of yield the SSI would cost the government 3.5 to 4 percentage points less than it is paying on newly-issued 91-day Treasury Bills. Moreover, if it is assumed that the average SSI will be redeemed about 12 months after it is sold (i.e., it will circulate for only one half of its intended life), then it would be circulating for four times longer than a 91-day Treasury Bill. Accordingly, the transaction costs to the government related to the issuance of an SSI should be considerably less than that for maintaining 91-day Treasury Bills over a one-year period, but, on the other hand, the face value of a Treasury Bill is considerably greater. The costs associated with audit and control procedures, and educational and promotional activities have not yet been fully quantified; however, Annex E presents a tentative Benefit/Cost analysis.

OBSTACLES TO SUCCESS

There are two primary obstacles to the success of the SSI. The first is the credibility of the national government's efforts in stimulating the mobilization of small savings. In many of the field interviews, the first reaction was that this represents yet another attempt by the national government to channel funds from the rural areas to Metro Manila without providing any benefit to those areas generating the funds.

The second obstacle is the negative image of "savings bonds". The almost immediate reaction in the field interviews was: how will the commercial banks or other financial institutions use these instruments for their own gain?

To overcome both these obstacles, and those that were not explicitly articulated, education and promotion will be required. The government will need to mount an extensive education and promotion program carefully explaining the features and safeguards of the SSI, the benefits and advantages to the purchasers/holders, and why the issuing and redemption agencies should want to participate.

There are numerous cost-effective vehicles that could facilitate such programs. For example, VICTO offered to introduce an educational module in their regular training programs if the national government would provide such a module. This would have the added advantage of

private sector involvement. Cooperatives, employers of a certain size, the Post Office, and commercial and rural banks are conduits that should also be explored. It cannot be stated too strongly that, without an extensive and effective education campaign, the SSI will not live up to the expectations of the national government.

ACTION STEPS FOR IMPLEMENTATION

A fully detailed implementation plan cannot be supplied until certain decisions have been made by the Government of the Philippines. However, the following minimum sequential action steps are recommended as an integral part of a more comprehensive implementation plan:

1. Appoint an individual with country-wide responsibility and full authority to oversee the project. This individual should be of a relatively senior rank, most likely a government official, and have considerable relevant experience.
2. Two test markets should be used for controlled pilot projects; one test market should be a secondary city, and the other test market should be a frontier city. The tests should run for at least six months. By definition, a test market must be a segregated controlled area. Tests should not be conducted in the largest urban areas, but in secondary urban areas where all of the population can be reached. The two cities suggested below were specifically selected because they offer the opportunity to test the SSI under various conditions across all segments of the population.
 - A. The first test market should be Eastern/Central Visayas centered on Cebu City, the largest secondary city in the Philippines.
 - B. General Santos, a frontier city, should be the second test market and should start approximately three months after the first test market.
 - C. If the first two test markets are successful, then additional test markets should be initiated.
3. It is strongly suggested that the test marketing not be addressed to selected segments of the population. This would automatically skew the results of the test and would ignore one of the primary goals of the SSI which is to penetrate segments of the population not normally reached by more formal mechanisms. Thus, the choice of selling institutions becomes important in test marketing. At a minimum, the following institutions are suggested for use as test issuing institutions:
 - A. Post Office (in both Cebu and General Santos);
 - B. VICTO (Cebu);
 - C. A selected rural bank in General Santos; and

- D. A selected commercial bank or thrift in Cebu.
 - E. Discussions should be initiated with the most senior individuals in these institutions in order to arrive at an agreement concerning their participation. Each institution should also appoint a senior individual within the organization to be the person responsible for implementation.
4. Establish the interest rate and the front-end discount.
5. Define the mechanics of the SSI.
- A. The certificates should be in checkbook form with perforation and stub record.
 - B. The physical size should be about the same as a Peso bill.
 - C. Each SSI should have a unique serial number.
 - D. Validation of the issue date should be through a "one punch" system where the month and year is punched as the SSI is sold into the market and also punched on the corresponding stub (which is retained by the selling agent).
 - E. Schedule of redemption values should be printed on the back of the SSI for each of the 24 months that represent the life of the SSI.
6. Identify and define the distribution system.
- A. The following is recommended for issuance.
 - 1) The Central Bank would be the prime government agent for issuance.
 - 2) The Post Office, and either the DBP or the Land Bank, should be the primary distribution channels.
 - 3) All other formal institutions would receive SSIs from either the DBP or the Land Bank.
 - 4) Compensation for selling on consignment.
 - a. The selling agent would deduct from the sales proceeds 1/4 of 1 percent as the sales commission.
 - b. The selling agent should receive an average of thirty days float prior to remitting funds to the Central Bank.

I. INTRODUCTION

The Scope of Work provided by USAID is composed of: (A) a basic assessment of small savers' access to financial instruments, including the capabilities of institutions that could be tapped to offer financial instruments to small savers; (B) identification and analysis of options for improving the access of small savers to high-yielding government securities, and recommendation of a specific option that is deemed best suited to the Philippine environment and has a high probability of success; and (C) development of an action program based on the findings in A and the options presented in B. This Scope of Work is in support of one of the Support for Development II policy objectives: improving efficiency in mobilizing financial resources.

The U.S. team was composed of Steven C. Graybill (co-team leader), Robert C. Vogel and Dennis R. Sheets; the Filipino team was composed of Mario B. Lamberte (co-team leader) of the Philippine Institute for Development Studies, Joel C. Valdes and Arnulfo Aurellano. The findings and recommendations of the study are a result of field interviews with government and quasi-government officials, commercial and rural bankers, NGOs and private business people. These interviews were conducted in Cebu City and General Santos, as well as in Metro Manila. In many cases the organizations interviewed were provided with questionnaires prior to the interview in order to provide a framework for discussions (see Annex B). This study also builds on several existing in-depth studies concerning commercial, rural and informal credit structures in the Philippines, the financing of the Philippine public debt, and the existing capital market structure in the Philippines. See Annexes C and D for a full listing of source material and individuals interviewed, respectively.

The study begins in Section II with a discussion of the objectives set forth by the Department of Finance. It then proceeds to Section III with an identification of small savers and the current options open to them, a review of the pertinent background including an analysis of the current state of government funding, and the history and experience associated with previous small savers instruments in the Philippines. Section IV identifies and defines the market-generated needs that must be satisfied if a small savers instrument is to be successful. Section V outlines the recommended design of a Small Savers Instrument (SSI). Section VI examines the distribution and redemption systems, both formal and informal, explains why they are critical to the success of any small savers instrument, and outlines some of the current impediments. Section VII is an outline of the recommended audit and control procedures. Section VIII is a discussion of the cost of the recommended SSI compared with government T-Bills in terms of interest rates, transaction costs, and the possible cost to the government in terms of lost revenue from reserves kept with the Central Bank if the SSI were to draw funds out of the banking system ("substitution"). Section VIII continues with a review of compensation, incentives and transaction costs associated with issuance and redemption. Section IX reviews the legal and regulatory environment. Section X discusses the major obstacles to implementation of the recommended SSI and suggested solutions. Section XI outlines the action steps for implementation.

II. OBJECTIVES

The objective of the study is to devise a workable way to further the mobilization of small savings through providing the small saver wider access to government securities, particularly in the secondary cities and rural areas.

This is in direct support of one of the Support for Development II policy objectives of improving efficiency in mobilizing financial resources. Increased competition among government securities dealers generated by providing small savers with wider access to government securities should result in lower yields on government securities than currently exist. A reduction in rates should translate into more attractive commercial or bank lending rates likely to bring immediate benefits to exporters while causing export competitiveness to improve in the long run.

It is a goal of the Department of Finance (DOF) that a significant amount of savings currently outside the formal financial system be attracted into that system and that meaningful incentives be structured to encourage additional savings. It is believed that this objective can be achieved through a properly structured, distributed and promoted SSI. Because of the relative lack of competition among banks, the lack of options now available to small savers, and the fairly wide spreads between interest rates paid for savings deposits and those that the government is paying to fund its public debt, an SSI could be successful.

It should be noted that an argument can be made concerning the "additionality" of funds that would be brought into the system versus the "substitution" achieved by shifting funds already within the system. That is, of the funds that would flow into the SSI, how much would be new to the formal financial system and how much simply redeployed? The relative mix of new versus redeployed funds may have an effect on the cost to the government through the potential loss of revenue on reserves kept with the Central Bank if sufficient funds were to flow out of savings deposits into the SSI. This question is examined in more detail in Section VIII.

III. BACKGROUND

A. DEFINITION OF "SMALL SAVER" IN THE PHILIPPINE CONTEXT

The term "savings," as used in this study, refers to that particular stock of wealth held at any point in time by an individual or household that may be allocated to some form of financial assets.

"Small saver," as used in this study, avoids a precise definition. The small saver is best viewed simply as any individual or household in the medium or lower income levels, although the very lowest income levels are not likely targets for the SSI.

Numerous studies of developing countries indicate that savings exist to a surprising degree even among people below the poverty line. Gadway (1991) makes a very good case in asserting that

the myth prevalent in the 1960s and 1970s that the rural poor, by virtue of their poverty, had no demand for deposit facilities has been demolished. Lamberte cites findings regarding considerable savings held by the urban and rural poor in the Philippines. Traditionally, much wealth in the Philippines has been held in the form of non-financial, but readily convertible, assets. The proliferation of pawnshops that lend largely against jewelry attests to the fact that this form of savings is still prevalent.

An informal credit market (ICM) implies a corresponding savings market; i.e., the existence of informal loans implies an equal counterpart of savings. (See Annex A for a more complete discussion of ICMs and their importance in the Philippine economy). Significant informal modes of savings mobilization and credit allocation exist throughout the Philippines. The relative importance of ICMs in the rural and poorer urban sectors has been enhanced by the gradually increasing failure of formal financial institutions to provide adequate conduits for savings mobilization. Even where bank offices exist they cannot, by their nature, serve the needs of all segments of the population. The ICMs, largely unregulated and inadequately measured, have proliferated since the mid-1980s, filling a need and capitalizing on the demonstrated preference of small savers to "bank" with their friends and neighbors where the personal touch, quick response, easy access, flexibility and perceived low transaction costs tend to be the norm.

A very interesting phenomenon in the Philippines is the "paluwagan," the local form of rotating savings and credit associations (ROSCA) seen in many developing countries. A more thorough description of the "paluwagan" is found in Annex A. People throughout the Philippines save regularly by means of the "paluwagan". However, the life cycle of any particular "paluwagan" is seldom more than a few months and never longer than a year. The existence of numerous informal moneylenders and "paluwagans" demonstrates that a significant volume of savings is being mobilized outside the formal credit and savings institutions that, given the right circumstances, might be tapped for the sale of SSIs. There is no definitive study on how many informal moneylenders and "paluwagans" exist; their numbers may be in the tens of thousands. Significant is the fact that in the low income community studied by Lamberte and Bunda, the average amount contributed by "paluwagan" members was ₱12,577 over periods of time which were less than one year. It may be that such amounts would not have been saved by members had it not been for such informal savings circles.

The economic, psychological and sociological aspects of savings behavior have been the subject of numerous academic studies in many countries. How households decide to allocate their total revenue among production, consumption and saving (if any) is beyond the scope of this study. More relevant is how households that are able and willing to save decide to allocate their savings. The 1985 study by Sacay, Agabin and Tanchoco dealt with this subject to some extent in regards to rural Philippine households. They cite empirical evidence showing that farmers' investment propensity for household fixed assets was relatively higher than for farm capital assets. This pattern probably holds true today, and if investing in a household appliance would take priority over a productive investment, then a decision to hold financial assets for any period of time might take a tertiary position in the hierarchy of values -- except for the importance of liquidity, as stressed below. The Sacay study found that in the rural areas the principal reason

cited for keeping financial assets was concern about health emergencies and the education of the children in the household.

Numerous people save through the buying and holding of jewelry and other small portable items that, in case of need, can be pawned or otherwise used as collateral for short-term loans. Others simply prefer to keep cash "under the mattress."

The various informal means of savings all share at least one major feature -- liquidity. Not having cash when needed for an emergency, and a lack of access to short-term credit at other than usurious rates, are very strong disincentives to tying up one's funds. There seems to be an intuitive conservatism that works against popular acceptance of any savings mechanism not assuring ready conversion to cash. However, evidence clearly indicates that savings are accumulated even among relatively low income groups and that there is an opportunity to tap these savings with a properly designed instrument.

B. THE CURRENT SITUATION

I. Existing Philippine Government Securities

One of the stated objectives of the SSI is to provide the small saver with wider access to the government securities market. Small savers are currently effectively excluded from the government securities market. As they now exist, government securities are for large, mostly institutional, investors who buy securities through a small group of authorized dealers who, in turn, bid for the paper at weekly auctions held at the Central Bank. These issues are sold in large amounts of not less than ₱50,000 (although individual investors can participate through trusts for as little as ₱10,000) and are illiquid due to the lack of a developed secondary market for government securities. That is, even if a small saver were able to accumulate the necessary amount to purchase a T-Bill, there is no effective way for that individual to liquidate his holdings efficiently prior to maturity. As this study demonstrates, liquidity is one of the critical criteria for a small saver. The following information and tables demonstrate the concentration in the distribution of government securities and the preponderance of short-term maturities.

Government securities are issued by three different entities:

- (1) The National Government, which issues treasury securities;
- (2) The Central Bank, which issues bills with maturities of less than 61 days in order to control excess liquidity; and
- (3) Government Corporations, which under limited conditions issue minor amounts of notes.

Table I shows the amounts issued by the three issuers during the period 1988 to 1991. Table II shows the percentages purchased by banks, private non-bank institutions and government non-

banks, and indicates the concentration of distribution. Private non-banks consist of investment houses, insurance companies and other private entities. The growth of government non-bank securities holdings is due in large measure to purchases by the government social security system (SSS and GSIS).

Table I. Classification of Securities by Issuer
(billions of pesos)

	1991	1990	1989	1988
National Govt.	475.5	370.8	328.4	226.40
Central Bank	153.2	038.8	024.4	11.00
Govt. Corporations	000.5	000.7	000.2	0.0
Total	611.2	410.3	353.0	237.4

Source: Central Bank

Table II. Primary Purchasers of Government Securities
(percents)

	1991	1990	1989	1988
Banks	61	69	62	75
Priv. non-banks	16	19	26	18
Govt. non-banks	23	12	12	7

Source: Central Bank

There is a decided market preference for short-term maturities. In the January 1992 IMCC report to USAID, Philippine Public Debt Management, Diokno, Penner, and Lamberte made the point that, while short-term T-Bills represented only 29 percent of total government domestic debt in 1986, this percentage soared to 63 percent by 1990. The report states that the rapid growth in government security issues reflects the increasing nominal budget deficit which, in turn, is mainly due to the impact of inflation on interest payments on the public debt. The report suggests that two factors are largely responsible for the preference for short-term maturities: inflationary pressures and expectations of a sizeable peso devaluation. Approximately 75 percent of the public debt must be refinanced each year, thereby putting pressure on the already thin domestic financial market. The remaining 25 percent of government

securities with longer maturities have not met with significant market demand, half of them being "sold" to the social security system and other public entities.

Large amounts of securities must be auctioned each week, the current weekly level being about P7.5 billion. Table III shows the maturity profile of weekly T-Bill auctions during late 1991.

Table III. Maturity Mix of Weekly T-Bill Auctions
(as of late 1991)

<u>Maturity</u>	<u>Volume</u>
91-day	P3.0 billion
182-day	P2.5 billion
364-day	P2.0 billion
Total	<u><u>P7.5 billion</u></u>

Source: Central Bank

The IMCC report estimates that the average cost of government domestic debt in late 1991 was about 19 percent. The mid-April 1992 drop in the 91-day T-Bill rate to around 16 percent will have an effect on the average cost, but this may be only a temporary effect. The IMCC report also estimates that each one percentage point decrease in the T-Bill rate, if sustained over a one-year period, would result in a reduction of government interest payments of P1.44 billion, equivalent to 3 percent of the 1990 fiscal deficit.

In an attempt to lengthen the maturity profile, Floating Rate Treasury Notes (FRTNs) were introduced to the market in the third quarter of 1991. The FRTNs are three-year notes with quarterly interest rate adjustments based on the average rate of the two preceding weekly 91-day T-Bill issues. While it is too soon to judge the success of this innovation, initial acceptance was not overwhelming.

2. Savings Accounts and Alternatives

Table IV shows the average size of savings accounts for the period 1988 to 1990. Table V shows the average nominal interest rates paid on savings accounts. Table VI details the breakdown of bank deposits by type in terms of amounts and percentages of total bank liabilities. Of importance is the relatively high level of savings deposits held by the public since this is the link through which the small saver fits into the banking system. All banks have a minimum acceptable level for opening a savings account, and some have an even higher level required for an account to earn interest. A saver can usually find a bank that will be willing to open a savings account for a minimum of P500 or P1000.

Table IV. Average Size of Savings Accounts
(pesos)

	1990	1989	1988
Commercial banks	20,228	12,478	9,608
Thrift banks	8,638	7,597	5,940
Rural Banks	1,446	1,056	904
Consolidated Average	14,289	9,191	7,223

Source: Central Bank

Table V. Nominal Interest Rate Paid on Savings
(average annual rate)

Year	Rate	Inflation rate
1970-1975	6.000	negligible
1976-1978	7.000	
1979-1980	9.000	
1981	9.812	
1982	9.811	
1983	9.729	
1984	9.855	
1985	10.842	
1986	7.993	
1987	4.530	3.79
1988	4.100	8.76
1989	4.374	10.60
1990	5.063	12.68

Note: During the period 1970-1980 interest rates were regulated.

Source: Central Bank

Table VI. Commercial Bank Deposit Liabilities
Demand, time and savings deposits
(billions of pesos and percents)

	1991		1990		1985	
	Peso	Percent	Peso	Percent	Peso	Percent
Demand	38.1	10.5	32.6	10.5	14.9	10.0
Savings	205.8	56.9	181.1	58.3	58.6	39.3
Time	118.1	32.6	97.1	31.2	75.3	50.6
Total	362.0	100.0	310.8	100.0	148.7	100.0

Source: 1985 and 1990, Central Bank; 1991 midyear, Philippine Yearbook, 1991.

Alternatives to savings accounts for the small saver are scant in the formal financial system. While time deposit interest rates are higher than those for savings accounts, and will likely stay higher than the interest rate offered for the SSI, they are usually accepted in minimum amounts of P5000. Government securities are sold in denominations too large for the small saver to participate. The Manila and Makati stock exchanges list only a handful of actively traded securities of private companies. Some banks offer unit trusts for savers, but here again the entry levels are usually too high for the small saver. Such bank operations, which have been exempt from reserve requirements, pull together the funds of several investors and place the funds in government securities, with the individual investor having a unit share in the operation. The absence of a well developed secondary market for government securities precludes the use of unit trusts for the small saver since liquidity is lacking.

C. HISTORY OF SMALL SAVINGS INSTRUMENTS

Bond issues designed to appeal to the small savers are not new in the Philippines. The government has a long experience with attempts at mobilizing small savings through government securities. In fact, while experiences in other countries could have been examined, it was felt that the Philippine experience provided ample source material.

In the past, there have been at least five different bond issues meant for small savers. These are the Tulong Sa Bayan (TSB) Bonds, the Premyo Savings Bond (PSB), the Public Works and Economic Development Bonds, the Socio-Economic Bonds and the DEP Progress Bonds.

These issues had certain features that, on first examination, would appear to have made them successful: small denominations, full faith and credit of the national government, and yields that, seemingly, were at least moderately attractive in relation to bank savings accounts. Some of the bond issues had lottery-type features that planners thought would appeal to the public.

Most issues involved tax-free interest or prizes. Yet, for various reasons, the earlier issues were not successful in tapping small savings. Following is a brief examination of why these instruments were not successful, and what are the lessons to be learned from each instrument. These lessons will then be applied to the recommended design for the SSI set forth in Section VI.

1. Tulong Sa Bayan (TSB)

The TSB shares several features with the proposed SSI, and it would be useful to analyze it in some detail with a view toward avoiding the problems that arose. This review is based on data furnished by the Development Bank of the Philippines (DBP). Discussed here is only the small saver series of the TSB. Another series of TSB bonds with a minimum denomination of P100,000 was issued for the institutional market and was considerably more successful.

The small saver TSB or "earthquake bond" was designed to meet a single objective, the raising of funds for reconstruction efforts related to the July 1990 earthquake in the Philippines. It was not promoted to appeal particularly as an investment instrument, but more with an appeal to patriotic or charitable instincts. Despite costly media promotion, sales were dismal, and marketing efforts were discontinued after a few months. Only P42 million were sold nationwide (compared with P7.5 billion in Treasury Bills being sold weekly). Half of the small saver TSB bonds had to be absorbed by the DBP, the accredited marketing and servicing agent.

The features of the small saver TSB issue were as follows:

<u>Denominations:</u>	P500 and P1000.
<u>Form:</u>	Payable to bearer. Any possessor of a TSB was presumed to be a "holder in due course," barring evidence to the contrary. Existing Central Bank regulations covered accidental destruction or mutilation of the bonds.
<u>Security:</u>	Fully backed by the national government.
<u>Maturity:</u>	Ten years from issue date, with no early redemption contemplated except for an official "call."
<u>Yield:</u>	8 percent tax-exempt (effectively 10 percent on a pre-tax basis). An additional feature was a lottery scheme that awarded weekly tax-exempt prizes based on the bonds. Over any year's time, 4 percent of the amount outstanding in bonds was raffled.
<u>Authority and Responsibility:</u>	As with all government bond issues, the Monetary Board appointed the Central Bank as the fiscal agent. In this case, the Central Bank

in turn signed an agreement with the DBP authorizing it to act as the marketing and servicing agent and to accredit other financial institutions as agents. Design, printing and promotional expenses were all for the account of the national treasury.

The ₱500 and ₱1000 denominations of the TSB were meant to appeal to the mass market. The bond yield on a pre-tax basis was at least moderately attractive. The full faith and credit of the government stood behind the bond. Transferability, if not real liquidity, was simple because the bonds were in bearer form. In addition, considerable money was spent promoting the TSB. Yet, the response to the TSB was disappointing, with only about ₱21 million sold to the public, while the remaining ₱21 million of the total ₱42 million sold was absorbed by the DBP. The weekly raffle of prizes for bondholders proved to be a burdensome activity for the government, and the bookkeeping tasks for the DBP regarding annual interest payments proved to be out of proportion to the size of the outstanding issue.

What went wrong with the TSB and what problems might be avoided in designing the SSI?

Because of the nature of its appeal, the TSB had to be issued with urgency, and this meant that there was little time to analyze or test the market. Once the bond was being sold nationwide, it was difficult to adjust for any marketing or design errors not initially foreseen. With the SSI, a more strategic approach to planning and a multi-staged launching is recommended, allowing time to absorb feedback and to make adjustments in test markets prior to a nationwide marketing effort.

Despite the urgency of issuing the TSB, it was unavoidably too late, coming out four months after the earthquake, when public sympathy and attention had already been diverted by more recent problems (typhoons, volcanic eruptions, the Gulf War, etc.). The TSB was related to a one-time event which lasted only briefly in the short attention span of the public. The SSI, on the other hand, is intended to be promoted as a more permanent attractive investment instrument.

The bearer form of the TSB made it transferable, but it was not truly liquid, since the bonds were redeemable only at maturity in ten years. The maturity was too long for the small saver who simply could not afford to tie up his money for such a long time and who had no access to a secondary market for the resale of the TSB bonds. To overcome this type of sales resistance, the SSI is meant to be an instrument with nearly immediate liquidity, something as near as possible to cash itself. Ease in pre-redemption or encashment of the SSI, coupled with low transaction costs, would be the central point in maintaining its liquidity.

The TSB paid interest once a year in arrears. This meant that the small saver who had, perhaps, just one ₱500 bond would face the nettlesome task of annually going to a bank to collect a small amount of interest. This burden is purposely avoided with the SSI, since the bonds will be sold on a discount basis and the reverse side of the bond will show its value at any point in time after initial purchase.

The issuance of a bond with a ten-year maturity does not easily allow for periodic adjustments to meet the dynamics of the market as time goes by. Although this was largely an academic point with the TSB, which failed so quickly after it was issued, this fact has been taken into account in the design of the SSI. While it is expected that the SSI will continue indefinitely in some form, the maturity of the initial series is recommended to be only two years. This permits the government to issue new series modified to match the market as conditions change. While biennial series do not achieve the interest rate adjustment flexibility available for floating rate treasury bills (FRTNs), they do allow for reasonably frequent modifications. The possibility also exists for a new series of SSI to be issued prior to the two-year maturity of the initial issue if there appear to be modifications that should not be delayed in implementation.

Perhaps expectations for the small saver TSB were too high in view of the transitory nature of the appeal made in marketing them. Widespread media promotion, small denominations and even a reasonable interest rate seem not to be sufficient alone to achieve satisfactory sales at the small saver level if the most vital factor, perceived liquidity, is missing. To be successful, any SSI must be popularly accepted as a profitable alternative to holding cash. This aspect was missing with the TSB.

2. Premyo Savings Bond (PSB)

The PSB has already been the subject of several previously published studies by Lamberte and others. Only a summary is presented here as a means of identifying pitfalls that need to be avoided in the design of the SSI.

As would be the case with the SSI, the PSB was designed to provide an alternative mechanism available at the grass roots level to promote widespread savings. The PSB, designed for economic development projects, was issued over an eleven-year period beginning in 1974, but was pre-terminated when the Monetary Board decided to call in and redeem all outstanding bonds. The PSB failed to achieve its objective, being a victim of its own features.

The PSB bore neither an interest rate nor a maturity date. The earning mechanism for this perpetual bond was a weekly lottery scheme awarding tax-free cash prizes ranging from P500 to P50,000. The PSB was a series of bearer bonds issued in denominations of P10, P20, P50 and P100 that were marketed through accredited banks. The small denominations and the lack of a stated interest rate or maturity date underscored the lottery ticket aspect of the issue.

There was active promotion of the PSB through all the media. A nationwide survey of 2600 respondents done in the mid-1980s showed a near 100 percent awareness of the PSB, indicating that the promotion succeeded in spreading awareness, if not in achieving desired sales.

Despite attractive features, the PSB failed to achieve its small saver objectives. Total sales over more than a decade amounted to only P1.4 billion, with sales peaking at P103.3 million in 1977. Thereafter, sales declined rapidly, perhaps because yields on savings and time deposits began a sharp rise in 1978 that lasted until 1985. High inflation rates during the 1984-1985 balance

of payments crisis probably caused a drop in investor interest and foreshadowed the 1987 demise of the bonds.

A special variant of the PSB was the Biglang Bahay Bond (BBB) introduced in 1977. It shared all the features of the PSB except that the tax-free lottery prizes were a house and a lot, or P100,000, with sales proceeds going to the National Shelter Program. The BBBs shared the same fate of the PSBs, for identical reasons.

The consensus of those who have studied the PSB program is that it failed to attract any important share of small savers' funds because of design flaws in the distribution scheme. The designers seem to have bent over backwards to make the bond a lucrative business for accredited banks, the sole channel for distribution. Banks were allowed to retain 20 percent of sales proceeds from the bonds. This fact, however, did not result in banks enthusiastically selling PSBs.

The inherent fatal flaw of the bonds was the fact that by retaining the bonds instead of selling them to the public, banks could count 100 percent of their investment toward satisfaction of legal reserve requirements on deposits. This feature was possibly included as a means of compensating banks for the potential loss of savings account balances when people withdrew deposits to purchase the bonds. As it turned out, the PSBs posed no real threat to savings accounts in banks, since few bonds ever got into hands of the public.

Seizing an opportunity too good to resist, the banks, mostly through their head offices in Manila, absorbed and held most of the bonds for their own portfolios, satisfying reserve requirements by doing so and, at the same time, winning the majority of the lottery-related prizes. The banks liked the bonds well enough for themselves but had little inclination to sell them, despite the 20 percent commission. It is not surprising that 94 percent of the PSB/BBB issues remained in the Metro Manila area, mostly in banks, nor is it a coincidence that once the Central Bank began phasing out the reserve eligibility features of the PSBs, the banks unloaded their holdings back to the CB.

There are some valuable lessons from the PSB program that should be kept in mind for the SSI program:

- An advertising campaign can raise public awareness of the instrument to a high level, but this alone may not lead to widespread small saver participation.
- Initially attractive bond features may prove less so with the passage of time. Continued periodic assessment of how the bond meets the needs of the market is required in order to permit major adjustments or minor fine-tuning as the need arises.
- Banks, if they are to fit into the distribution scheme, should have an incentive to participate, but that incentive must not be self-defeating for the objectives of the bond.

- Reliance on a sole medium of distribution, in this case the banks, is probably not wise.

The idea of allowing banks to hold savings bonds in portfolio to satisfy reserve requirements should not necessarily be rejected as a planning tool. For instance, rather than allowing 100 percent credit for reserve requirement satisfaction, a much smaller percentage could be feasible under certain circumstances. Compensation to banks for selling the SSI to the public should not be difficult because it could be achieved by allowing the banks a measure of positive float as well as a small commission.

More difficult is the compensation to banks for redeeming SSIs from the public because a certain amount of negative float (defined as the time period between the encashing institutions disbursement of funds to the holder of the SSI and the reimbursement of the institution by the government's clearing agent) is inevitably involved before the encashing banks can be reimbursed. A small fee charged by the redeeming institution to the public for encashing should prove to be an adequate stimulus for banks to cash the SSIs; if not, additional compensation could be contemplated. This additional compensation could be through a commission paid by the government to the banks. (See Section VIII for a more complete discussion).

3. Other Small Savers Bonds

Public Works and Economic Development Bonds were tax-exempt 4 percent savings bonds issued from 1954 to 1974 in P20, P50 and P100 denominations to public and private employees through payroll savings plan deductions. Administrative costs and servicing difficulties involved with semi annual interest payments and redemption led to these bonds finally being phased out. The payment of interest semi annually for very small denomination bonds is obviously an administrative burden, and it would be avoided in the SSI issue which, although it has the feature of interest "earned" monthly, would be sold with the interest discounted up front. It is hoped that the SSI would be sold in significant amounts through the mechanism of payroll deductions via the social security system, thereby permitting employers float on funds collected as a means of compensating them for the bookkeeping involved in making periodic deductions. Few, if any, servicing difficulties are anticipated for this mechanism.

Socio-economic Bonds had minimum denominations of P100 and were issued for only three years during the 1960s. They were not highly promoted, despite the 7 percent tax-free interest rate. It is interesting that they were offered exclusively through the Manila Stock Exchange, probable an inappropriate medium for small denomination bonds.

DBP Progress Bonds ranged in denomination from P100 all the way to P100,000 and were sold nationwide through the offices of the DBP, accredited banks, dealers and brokers. They were eligible as loan collateral. Interestingly enough, they were incorporated into the DBP's lending process in that approved loans were funded partly in bonds, partly in cash. The introduction of competing Central Bank instruments affected the marketability of the Progress Bonds, which were discontinued in the late 1960s after only three years.

4. Conclusions

Although each of the issues described above had its own peculiarities, there were certain shared traits that negatively affected their acceptability for small savers. On non-lottery issues, interest was paid in arrears after a passage of time. The periodic paying and collecting of interest on bonds is well enough suited for large-sized bonds intended to be handled by professional investors, but it is too costly to administer for small bonds and too time-consuming to follow up for the small investor with perhaps one or two P500 bonds. The SSI, by being an appreciation-type security on which interest is added gradually to the redemption value rather than being paid out periodically, should prove to be less costly for the issuer to service and less burdensome for the holder to maintain. Once the saver has purchased an SSI at a discount, no more work is involved for him since the value of the SSI increases on an automatic monthly basis.

With the earlier issues, the importance of liquidity as a prime concern for the small saver was not given sufficient consideration. In general, a small saver simply cannot afford to hold financial assets in anything that is illiquid. That is why savings accounts, despite offering a negative real rate of return, remain so popular with savers. If any SSI is to be successful in competing with bank deposits, and in drawing funds out of the ICMs into the formal system, liquidity has to be one of the main characteristics.

The distribution systems for earlier bond issues were relatively narrow, focusing on a single medium for sales. There were problems with sales even when a large number of banks were accredited as sales agents. While, because of their widespread locations, banks of all kinds should be induced to become agents for sales of the SSI, dependence on a single medium should be avoided.

IV. MARKET-GENERATED NEEDS

As the analysis of previous small savers instruments indicates, the recommended SSI must be able to satisfy critical market-generated needs in order to experience greater success than that experienced by the earlier issues. In broad categories these include the design characteristics of the instrument, the distribution system and the redemption system.

This section will examine the design requirements for the recommended SSI in light of the lessons learned from the earlier experiences. These requirements are liquidity, simplicity, flexibility, distribution and redemption at a grass roots level, meaningful incentives and compensation for the issuance and redemption agents, a low level of entry for the small saver, a rate of return competitive or superior to other viable options (particularly in the informal credit markets), and an advantageous cost to the government. Although distribution and redemption and incentives and compensation are touched on in this section, they are more fully explored in Section VII.

Liquidity. The ability to convert savings into a medium of exchange almost immediately

is, perhaps, the most critical requirement for small savers. Every effort in servicing and redeeming the SSI should be made to insure that the holder feels that he has an instrument that he can readily convert into cash, or use as a medium of exchange, without a loss of principal value. Two key factors influencing liquidity are the perceived credit risk to the holder of the SSI and the transaction costs involved in the conversion to a medium of exchange.

Simplicity. The SSI needs to be simple to understand when it is bought, while it is held by one or more people over time, and when it is encashed or finally redeemed. Interest calculations, accrual and collection need to be straight-forward and as easy as possible for the holder as well as the issuing and redeeming agencies. Redemption values need to be easy to calculate and easily understood by all parties. Validation, authorization or certification should be easily accomplished, particularly at the point of actual sale. Simplicity should also apply to audit and control procedures.

Flexibility. The initial series of the SSI should be of short enough tenor to permit adaptation to the dynamics of the market. Concepts valid in 1992 might later need adjustments, not only in reference to the nominal interest rate, but perhaps also in certain aspects of marketing or redemption. The initial SSI series is recommended to have a two year maturity, but with pre-redemption possibilities. This time period is not short enough to permit rapid adaptations to market conditions, but any shorter tenor would work against the lengthening of the maturity mix of government securities. However, it is suggested that modifications to the SSI not take place too frequently as this would only create uncertainty among prospective holders.

Distribution System. Along with liquidity, one of the most crucial factors is a grass roots issuance and redemption system that facilitates easy and widespread access in a familiar and non-intimidating setting. Travel time, distance and cost for either purchase or redemption of the SSI should not be a major impediment.

Issuance and Redemption Incentives and Compensation. Organizations and individuals involved in the issuance and redemption must receive adequate incentives and compensation for transaction costs and expenses incurred. The lack of such incentives and compensation generally have produced a reluctance to sell or redeem the product. In the case of redemption, this could result in either a real or perceived lack of liquidity for the SSI.

Low Level of Entry. The small saver must feel that the ability to participate in the SSI program is well within his reach. The SSI must be a viable option not only to products offered by formal financial institutions, but it must also compete with those offered by the informal credit markets. Issues such as denomination and tenor are instrumental in ensuring widespread participation. Also important is the concept of fractional or incremental savings. It could well be that potential savers are not able to commit even as little as P500 immediately for an SSI. Fractional or incremental savings allows

individuals to commit smaller amounts over periods of time that, through accumulation, can be converted into an SSI. Two possible mechanisms for accumulation could be the use of savings stamps and the periodic withholding of amounts from paychecks.

Competitive Rate of Return. The SSI should produce a rate of return that is competitive with alternative instruments in both the formal and informal credit markets and is also a meaningful incentive to re-allocate funds from alternative stores of wealth. Thus, after adjustment for taxes and projected inflation, it should produce a positive real rate of return. It has been suggested elsewhere in this study that there is little direct correlation between interest rates and the decision to save. While this appears to be true in regard to the household decision to save or not to save out of income flows, once that decision has been made, and as long as liquidity is nearly the same among different modes of holding savings, then the saver can be expected to select that mode of savings that promises the best return.

Advantageous Cost to the Government. Clearly, the cost to the government in terms of interest rates, transaction costs and revenue forgone as a result of "substitution" of the SSI for savings deposits must be in line with other options available for the funding of public debt. The cost of distribution of SSI certificates, including shipping, insurance and supervision, should be very similar to that involved with shipping money. The components of cost to the government for the SSI issue are more fully discussed in Section IX.

V. RECOMMENDED DESIGN OF THE SSI

As discussed in Section III, commercial banks and other formal financial institutions do not offer viable options for the small saver. Unit trusts, which have met with success in other locations, are not a viable option in the Philippine context due to the lack of a developed secondary market for government securities, including especially T-Bills. This absence precludes the liquidity that is crucial to any small saver instrument. Therefore, after evaluating the options available to the small saver in formal financial markets, the recommendation of this study is for a Small Savers Instrument (SSI) in the form of a savings bond.

The recommended SSI was designed after taking into account the mistakes and problems of earlier experiments, and the particular Philippine context, in order to meet the needs identified in Section IV. The SSI should have the following characteristics:

- A. The SSI would be discounted front-end and, after adjusting for taxes and inflation, would produce a positive rate of return. Currently, the nominal rate would be approximately 11.875 percent per annum or, for a P500 SSI, the small saver would pay approximately P394. (This is discussed in more detail in Section IX). Discounting the SSI front-end has at least five advantages. First, the concept is already well understood in the market place due to the common

practice of "5 for 6" lending in informal credit markets whereby the lender is repaid six pesos for every five pesos lent. Second, accounting and control measures are simplified. Third, tax withheld on interest earned is collected at the time of issue. Fourth, as interest is accrued, the holder does not have to travel to collect it; the value of the SSI automatically increases. Fifth, as the SSI passes through various holders of due course, no further calculations are necessary.

- B. It is suggested that the SSI be issued in two denominations -- P500 and P1000. These were selected after numerous interviews clearly indicated that these amounts represent the lowest entry level attainable without creating diminishing returns in terms of transaction costs. For example, reducing the amount to P250 would most likely not generate an increase in the amount purchased sufficient to off-set the increased transaction costs (the assumption being that the transaction costs are the same regardless of the denomination of the SSI). Conversely, economies of scale do not support denominations in excess of P1000. Recognizing that even P500 could represent a significant entry barrier for many potential small savers, programs are recommended that would allow for the gradual accumulation of funds. Included in such programs should be a payroll deduction plan and a fractional savings stamp program. No interest would be earned by the saver until an actual SSI is acquired.
- C. In order to encourage acceptance of the instrument as highly liquid and freely negotiable, it should be in bearer form. Being in bearer form presents some risks for the holder since, just as with cash, an SSI would belong to the person who has possession of it. If the holder of an SSI were to lose it, or if it were to be stolen, this holder would most likely not have legal recourse to have the SSI replaced, although PD 649 does provide for some recourse if the GOP so chooses. However, the positive aspect of liquidity that would be provided by the SSI being a bearer instrument outweighs any negative effects. Equally important to the perception of liquidity is the full faith and credit of the Government of the Philippines standing behind the instrument; as a direct government obligation, it should be considered risk-free. The elements of liquidity and lack of credit risk should enable the SSI to compete favorably with both the formal and informal credit markets.
- D. A fixed maturity of 24 months is recommended and is in keeping with the DOF's request that the SSI be a medium-term instrument, yet short enough to be palatable to a small saver. The validation of the date the instrument is sold into the market would be through a simple "one punch" system. Printed on the face of the instrument would be the months of the year and the years themselves for, as an example, the next five years. Upon sale, the issuer would punch out the current month and year; the SSI would then mature two years from that month/year combination. The audit and control procedures discussed in Section VII should be adequate to prevent fraudulent dating.

- E. Although the SSI would have a fixed maturity of 24 months from the date it is sold into the market, full redemption of principal (defined as "encashment") would be possible at any time. In order to convey a sense of liquidity, the SSI must have a pre-redemption or encashment feature. By presenting the instrument to any official redemption center (e.g., a commercial or rural bank) the holder would receive his original principal plus accrued interest. To ensure easy and accurate computation of the value of the SSI in the case of early encashment, a pre-redemption schedule will be printed on the back of the SSI giving the value of the instrument for each of the 24 months of its life. While interest would accrue each month, it is recommended that a sliding scale be used, giving more weight to the later months. This would provide an incentive to continue holding the SSI to maturity.

The pre-redemption schedule could also be used if the SSI were to be traded in an informal secondary market. Since the instrument would be in bearer form and freely negotiable, it is to be expected that numerous variations of secondary trading would develop. This is highly desirable because it emphasizes the liquidity feature. It is anticipated that the SSI could become almost another medium of exchange. This concept is somewhat parallel to the practice of payroll checks being discounted and traded among a number of parties, particularly in rural areas. In areas or with individuals where the travel time, distance and costs to formal financial institutions are a formidable barrier, the bearer form of the SSI could make it particularly attractive and convenient.

- F. Transaction costs for the government should be as low as possible. To begin, the cost of printing the SSI certificate could be kept low by printing it in sizes not much larger than paper money. The cost of printing each Treasury Bill was around P2.41 in 1991, while the cost of printing paper money of any denomination is presently about P0.50 each. While the cost comparison might not be completely valid due to economies of scale in printing money, it affords a fair indication of how economies could be effected. The cost of distribution of the SSI certificates, including shipping, insurance and supervision, should be very similar to that involved with shipping money.

VI. DISTRIBUTION AND REDEMPTION SYSTEMS

A. DISTRIBUTION

The field interviews show that, for the most part, the initial reaction of banks (and to a lesser degree the thrifts and rural banks) to acting as official issuing agents was not enthusiastic. This stems primarily from the competition that the SSI could represent to banks' passbook savings accounts on which banks are generally paying 4 to 6 percent per annum. Savings accounts

represent more than 55 percent of total deposits in the banking system, and they are a cheap source of core deposits which the banks would prefer to protect.

While the minimum deposit amount is generally ₱500 (the same as recommended for the SSI), interest is usually not paid on an average daily balance of less than ₱1000. There exist, however, regional variations, particularly where there is intense competition among banks. In some areas, a minimum opening deposit may be as low as ₱100, and savings interest rates may be up to 4 percentage points higher than elsewhere.

In many cases, the SSI does not fit into the banks' business focus. As one commercial banker in Cebu City expressed, "I don't want a lot of ₱500 savers clogging up my lobby". Although there are often collateral products that can be sold to a customer who may be a passbook saving holder, the SSI is a stand-alone instrument that may not develop any add-on business. Finally, there is the small saver himself who may feel uncomfortable or awkward conducting business in the more formal setting that commercial banks represent.

Interestingly, while the head offices of some thrifts were not enthusiastic about the SSI, their outlying branches were. They recognized that the SSI could represent a potential new business product that could attract new, or help retain existing, customers. Particularly in areas of intense competition, there was a recognition that the more products an institution could offer customers, the greater the likelihood that the institution would be successful in increasing profits.

Rural banks were the most receptive among formal financial institutions. In many cases rural banks are sending deposit solicitors into the marketplace on a daily basis. Thus, it would be a natural add-on function for them also to sell the SSI at the grass roots level. By taking the SSI directly to the marketplace and saving potential purchasers the travel time, distance and cost, such vendors could sell the SSI at a slight margin over the official discount and keep the profit for themselves.

However, what could make the SSI attractive to both the thrifts and rural banks, and even to commercial banks, would be an incentive structure composed of a selling commission (based on the peso amount sold) plus the potential of an average 30 days float before the funds collected are remitted to the Central Bank.

Given the foregoing, the success of the SSI would depend to a large extent on the use of both traditional and non-traditional distribution systems, coupled with the use of meaningful incentives and compensation. It is suggested that either the DBP or the Land Bank, being substantially government-owned banks, act as the primary channel for distribution between the Central Bank and other formal issuing institutions. They would act as the conduit through which all other official issuing agents would have access to newly issued SSIs.

Two viable non-traditional organizations have been identified that could act as issuing agents: the Post Office; and select cooperative organizations, particularly as represented by the Visayas Cooperative Development Center, Inc. (VICTO). Both have existing organizations in place,

including audit and control procedures, that make them natural candidates to play leading roles. They could be particularly helpful in the initial test marketing of the SSI.

The Post Office has in excess of 2,200 branches and local offices. By unofficial count, the Post Office has some form of representation in approximately 800 towns and villages that do not have a bank. It is experienced in conducting business at the most basic grass roots level, and the individual users of its services do not view the Post Office as an excessively formal or intimidating institution. Moreover, even in the most basic of units, the staff is trained in handling and accounting for cash through the sale of postage stamps and postal money orders. The use of the Post Office would also facilitate a savings stamp program for incremental savings.

In discussions with various Postal System officials from the Postmaster General, to Regional Directors, to Branch Postmasters, considerable interest was expressed in performing this function. As the Post Office prepares to go through its conversion to a government corporation and is actively seeking profit-oriented products, the SSI is seen as a high potential instrument to be sold along with other products. It may also play a role in the anticipated resurrection of the Postal Savings Bank. It is recognized that the Post Office has a reputation for being less than fully accurate with many of its transactions. However, the simplicity of the SSI and the accompanying audit and control procedures should satisfy this concern. Moreover, as with any potential distribution agent, strict personal accountability and control of unsold SSIs in custody would have to be maintained.

VICTO, a federation of cooperatives, was launched by the Scarboro Fathers during the 1960s as a training and development facility for member cooperatives. It is now the most viable cooperative-owned institution in the Visayas with in excess of 250 cooperative affiliates. Its services include extensive training, audit and consultancy programs for its member cooperatives, as well as the Visayas Cooperative Central Fund, a savings-based inter-cooperative lending fund. In discussions with VICTO, there was immediate recognition of the role that it and its credit union members could play. VICTO's existing infrastructure, distribution capability, audit and control procedures, and familiarity with handling and accounting for cash make it a natural choice as an official issuing agent. In addition, credit union interaction with both employers and employees provides a grass roots level of participation, such as payroll deduction, which could be instrumental in the success of the SSI. VICTO is also desirous of playing a major role in the promotional and educational process that will be vital to "selling" the concept and benefits of the SSI to the individual saver, and its participation could easily be expanded to similar organizations in other regions.

The two government social security organizations (the SSS and the GSIS) also have potential and have expressed interest in performing an issuing agent role. Both have indicated that they think that a payroll deduction plan is feasible under three different schemes: (1) an automatic deduction for the minimum denomination on a regular interval; (2) an incremental savings deduction, also on a regular interval, until the required amount is reached for a minimum denomination SSI; and (3) a "salary loan" that would advance funds to the individual for

immediate purchase of the SSI, with repayment to the advancing agency through payroll deductions at regular intervals. This last option might allow the individual purchaser to engage in elementary interest arbitrage between the rate of return on the SSI and the possibly lower rate on the loan from the advancing organization. While this study does not recommend below market interest rate loans to subsidize the purchase of SSIs, the suggestion by the SSS may be taken as an example of their enthusiasm in supporting the SSI.

Finally, two large corporate employers were interviewed in southern Mindanao regarding the feasibility of voluntary payroll deductions for the purchase of SSIs. Neither saw any structural impediments to handling such deductions, but both cautioned that the popularity of the SSI would depend on the quality of advertising used to attract employees to the idea. The idea of utilizing SSIs for productivity bonus awards for employees was also discussed and favorably received.

Given the bearer nature of the SSI and its front-end discount, it is expected that various informal (secondary) distributions systems will develop to take advantage of local circumstances. This is highly desirable and should be actively encouraged as it helps support the grass-roots level of distribution that is integral to the SSI. For example, a "sari-sari" store owner or market vendor with excess cash might purchase SSIs from an official issuing agent at the standard discount and then resell them at a somewhat lower discount in the local marketplace, the difference between the discounts being the profit on the transaction. Local ROSCAs may also want to make use of SSIs as part of their activities. The key factors in informal financial markets would be widespread and easy accessibility to the SSI and complete liquidity as guaranteed by the early redemption/encashment feature.

B. REDEMPTION

Because the SSI would be in bearer form, freely negotiable and eligible for pre-redemption (with the schedule of values printed on the instrument), the SSI could be redeemed through a variety of both formal and informal institutions.

In addition to the Post Office, it is strongly recommended that all commercial banks, thrifts and rural banks be actively encouraged to facilitate encashment requests. As a government debt instrument, there is no credit risk for the redeeming party as long as it satisfies itself as to the genuineness of the instrument, the issue date, and the current value at the time of presentation. It is recognized that there is a cost to the encashing institution composed of transaction costs and the negative float incurred from the time funds are disbursed until they are collected from the clearing bank. However, assuming that compensation is adequate (discussed later in this section), unquestioned encashment by formal financial institutions is critical to the image of credibility and liquidity. It is further recommended that either the DBP or the Land Bank be appointed as the clearing bank for the SSI so that private financial institutions can clear redeemed instruments quickly and thus reduce their negative float. For example, if a private commercial bank were to encash an SSI it would then present that SSI to a local branch of the DBP for clearing, and the DBP would credit the inter-bank account of that bank (the time required for this to take place is the negative float). The DBP would, in turn, present the SSI

to the Central Bank which would then credit the DBP's account with the Central Bank.

In keeping with the concept of using existing, non-traditional systems, the development of informal secondary encashment agencies should be actively encouraged. In fact, almost any outlet from a "sari-sari" store down to an individual with the required level of disposable cash could become a "facility" for redemption. Individuals might establish businesses whereby they would encash other individuals' SSIs for less than the stated redemption value but save those individuals travel time, distance and cost. The new holders would, in turn, present the SSI at an official redemption facility for the full value of the instrument. The option to the saver of encashing the SSI at a bank, along with the redemption values printed on the SSI, will serve as restraints on gouging in the informal market.

Pawn shops, as a regulated non-bank industry, could perform viable roles as informal redemption facilities. Mario Lamberte (1991) has published a short review on the regulatory framework for pawnshops in the Philippines and their role in the financial system, and additional information was obtained through an interview in Manila with the president of the Chamber of Pawn Brokers of the Philippines, Mr. Philippe Lhuiller. There are an estimated 2200 pawn brokers throughout the Philippine Islands, of which some 1000 are members of the Chamber.

What could be important to the SSI program in regard to pawn brokers is their broad geographical distribution. Lamberte found, and Lhuiller confirmed, that pawnshops are prevalent throughout the country. Their clientele consists in large part of persons who represent one of the demographically targeted markets for the SSIs. If it could be made financially attractive to them, pawnshops constitute viable candidates for possible non-traditional redemption agents for SSIs. Their willingness to redeem SSIs for a small commission would help to underscore the liquidity afforded by SSIs. It would, of course, be unusual for a pawnshop client to pledge an SSI as loan collateral due to the wide interest differential between the anticipated yield on the SSI and pawnshop lending rates, but serving as redemption centers could attract business to the pawnshops. Their image as financial transaction points for the public already exists, and their addition to the network of redemption points for SSIs could be beneficial.

It is recognized that there has to be some form of compensation to all official redemption agencies for incurring transaction costs and negative float. One method would be to charge the holder of the SSI directly at the time of encashment through a two or three Peso levy for each SSI. That is, instead of receiving the full encashment value, the holder would receive that amount less two or three Pesos which the encashing institution would keep as compensation.

Although not fully quantified, the amount of this levy is arrived at as follows:

1. Assume an average cost of funds of 8 percent per annum to fund the disbursement to the holder of the SSI (some financial institutions will have a substantially lower cost of funds, while some non-financial institutions will have a higher cost-of-funds);

2. Assume an average negative float period of two weeks before the encashing institution is reimbursed;
3. Thus, on a P500 SSI, the cost of the negative float for two weeks is:
 - a. $P500 \times .08 = P40$ per annum;
 - b. $P40/52 \times 2 = P1.5$;
4. Add P1 for transaction costs to the P1.5 negative float cost;
5. Therefore, the total levy for a P500 SSI should be in the range of P2.5, or 1/2 of 1 percent of the face amount.
6. Following the same methodology, for a P1,000 SSI the levy should be P4.

The levy should be low enough so that it is not a deterrent to holding SSIs, and the charge would have to be clearly stated on the SSI. This mechanism would have the added effect of discouraging excessively early encashment, as the transaction charge would reduce the interest earned substantially in the early months.

VII. AUDIT AND CONTROL PROCEDURES AND SAFEGUARDS

The design simplicity of the SSI provides for easily implemented audit and control procedures. While it is not the intention of this study to detail such procedures, nor the mechanisms through which they would be effected, the following areas should be accommodated:

- A. Since the SSI would be in bearer form, it should be treated and accounted for in the same manner as cash. As an additional control feature, and to help protect against counterfeiting, it is strongly recommended that all SSIs be serialized in much the same manner as paper currency. It may be prudent to print the SSIs on currency grade safety paper using currency grade ink. In addition, serialization would make it easier to maintain an audit trail.
- B. There should be assigned individual liability for distribution and consignment at all levels. Individuals should formally acknowledge receipt (and responsibility) when they accept consignment for specific serial numbers.
- C. There should be periodic, but not less than monthly, reconciliation of all SSIs on consignment, SSIs sold and cash collected, and SSIs redeemed. This audit should occur at each level of official issuance and redemption. This should not be difficult since the SSIs would be serialized and there should be signed receipts evidencing who is responsible at each level. Thus, at each level, there should be

only one of three situations: the correct SSIs are still in the book and have not been issued; an SSI has been issued and the stub in the book indicates the issuance date and that cash was collected and recorded at the time of sale; or an SSI was redeemed and cash was paid out.

- D. A simple tracking system would be required to evidence that cash collected in the course of issuing an SSI has been remitted through proper channels to the Central Bank. A similar system should track the SSIs that would have been redeemed and submitted for clearing to the Central Bank.
- E. Since the specific areas to be controlled are few and the techniques not complex, the ability and integrity of the audit teams would become one of the major concerns. Whether private or public sector audit teams (or a combination of both) are employed, a reasonably high degree of professional competency would be required at all levels of the audit procedure.

VIII. COST ANALYSIS

There are three aspects to cost analysis: the interest rate of the SSI itself; the incentive and compensation package provided to the distributing and redeeming agencies; and transaction costs. This section first examines the recommended mechanisms and then analyzes the overall cost to the government. Please see Annex E for a tentative macroeconomic Benefit/Cost analysis.

The interest rate should be fixed for the two year life span of the SSI. The nominal rate should be a function of the existing tax structure, plus the expected rate of inflation, plus not less than a 1 percent up-front add-on in order to produce an adjusted positive real rate of return for the small saver. For example, in the current interest rate environment, with no adjustment to the tax structure, the nominal rate would be approximately 11.875 percent per annum. For a P500 SSI, the small saver would pay approximately P394.

Concerning the encashment values, an interest rate should be earned for each month that the SSI is held, even if only for one month. However, the schedule should reward the longer-term holder on a graduated basis so that the earlier months will earn less interest than the later months. Upon encashment, the holder would receive the value stated on the redemption schedule, possibly less a transaction cost charged by the encashing institution.

The incentive and compensation package for the issuing and redeeming agencies is more complex. A sales commission paid on the Peso volume sold is recommended. This could take the form of a slightly deeper discount in the amount remitted to the Central Bank by the selling agent. For example, if a commercial bank were to sell an SSI it could remit an amount representing the market discount less an additional 1/4 of 1 percent.

Transaction costs are composed of costs associated with printing, distribution, audit and control, and education and promotion, as well as those associated with the mechanical act of selling and redeeming. The selling and redemption costs of accredited institutions should be compensated based on the absolute number of SSIs sold in a given time frame. As a rule of thumb, most financial institutions interviewed consider a ₱500 average daily balance to be just break-even for a passbook savings account, assuming that no interest is paid on the account and that there is an average of five transactions per month. This would produce a per transaction cost of approximately one Peso. This number is arrived at as follows:

1. Assuming an effective reserve requirement of 21 percent and that no interest is paid on the ₱500 deposit, then the institution has ₱395 to lend;
2. Assuming that the institution is getting not less than 16 percent net on its funds lent (i.e., the ₱395), this would produce an income of ₱63 per annum or ₱5 per month;
3. Recalling the assumption of five transactions per month, this amounts to ₱1 per transaction as a break-even cost. A further assumption is made that the issuance, or redemption, of an SSI is of about the same complexity and time requirement as a passbook savings transaction.
4. Therefore, the SSI transaction costs should be in the range of ₱1 for each SSI sold.
5. As presented in Section VI-B, the transaction and negative float costs associated with redemption should be absorbed by the holder of the SSI paying a 2 or 3 peso levy directly to the encashing institution at the time of encashment.

Table VII details the above in matrix form.

TAE VII. TRANSACTION COST ANALYSIS.

COST ELEMENTS	CALCULATIONS	VALUES
Lendable funds from a ₱500 deposit.	$₱500 * (1-.21)$	₱395
Monthly income on lendable funds.	$(₱395 * .16) / 12$	₱5.26
Cost per transaction, assuming 5 transactions per month.	$₱5.26 / 5$	₱1.05

The value of the total recommended remuneration to issuing/redeeming institutions would be calculated as follows:

1. Assuming that these institutions are allowed a 30-day float factor on average prior to remitting collected funds to the Central Bank, the value to them would be their average per annum lending rate, adjusted to 30 days. There would be no adjustment for the cost of funds, and it is suggested that the funds be free of reserve requirements (if the objective of the SSI is developmental, exemptions from reserve requirements can be granted by the Monetary Board or, as an alternative, the reserve free feature could be incorporated in the supporting legislation). The funds would have an immediate value to these institutions equal to their full lending rate (currently around 16 to 18 percent per annum), as these funds could be used totally to help fund their lending portfolios. This should provide a significant profit incentive. The simplest way to accomplish this is to permit these institutions to remit the proceeds from the sale of SSIs to the Central Bank once every two months.
2. A 1/4 of 1 percent sales commission would be paid on the face value of the SSI issued.
3. To these profit incentives, one peso would be added for each SSI sold -- which these institutions would subtract from their remittance to the Central Bank to cover their transaction costs.

Table VIII details the above in matrix form.

TABLE VIII. BANK REMUNERATION ANALYSIS.

REMUNERATION ELEMENTS	CALCULATIONS	VALUES (PERCENT)
30 day float factor.	16	16
Selling commission.	.25	.25
One peso transaction cost reimbursement, assuming a P500 SSI.	1 / 500	.002
TOTAL		16.252 per annum

While not part of the concept for the initial structure of the redemption cycle for the SSI, the government may wish to keep open the option of permitting additional compensation for banks

through partial credit against reserve requirements for encashed SSIs held by banks and not sent for collection. While the amount of credit allowed should not be 100 percent, given sufficient reserve requirement credit, banks could find it advantageous to hold the SSIs they have encashed until maturity. For the government, there would be an additional cost involved if banks are permitted a reserve requirement credit for the encashed SSIs held in their portfolios. This is because the Central Bank currently pays only 4 percent interest on required reserves held by banks and, by lowering the level of reserves that banks must keep, the Central Bank would have to replace the forgone reserves by raising funds at market interest rates considerably in excess of 4 percent. Therefore, the percentage of credit allowed for reserve requirement purposes could be adjusted as necessary to maintain the proper mix between the provision of an adequate incentive to the banks and the cost to the government of forgoing some of banks' required reserves at the Central Bank. Instead of either retaining the SSIs or sending them for collection, the banks could also have the option of reselling them to the public.

Currently the interest rate paid on an SSI would cost the government about 3 percentage points less than it is paying on newly issued 91-day Treasury Bills. Moreover, if it is assumed that the average SSI will be redeemed about 12 months after it is sold, (i.e., that it will circulate for only one half of its intended life), then it would be circulating for four times longer than a 91-day Treasury Bill. Accordingly, the transaction costs to the government related to the issue of an SSI on a per instrument basis (i.e., not considering the denomination) would be considerably less than that for maintaining 91-day Treasury Bills over a one-year period. However, the cost advantage would have to be balanced against the difference in denominations between the SSI and T-Bills.

It may be helpful to examine the pricing mechanism for the government as follows:

1. The front-end discount should be a function of: $(\text{inflation rate} + 1 \text{ percent real interest rate}) / (1 - \text{withholding tax rate})$. This would allow the holder a positive real rate of return.
2. The average 30 day float factor as an expense to the government would be the per annum cost of the government's borrowing divided by 12.
3. The commission to the selling agent would also include 1/4 of 1 percent of the face amount of SSIs sold.
4. One peso per SSI sold would be retained by the issuing institutions to cover their transaction costs.
5. Thus, the cost to the government is a function of the sum of these four factors or, given an inflation rate of 8.5 percent and a 16 percent cost of borrowing for the government, the overall interest cost to the government is about 13.46 percent, without adjusting for tax revenue.

Table IX below demonstrates the above in matrix form.

TABLE IX. SSI COST ANALYSIS.

PRICING ELEMENTS	CALCULATIONS	VALUES (PERCENT)
Front-end discount	$(.085 + .01) / (1 -.20)$	11.875
30 day float factor	.16/12	1.33
Selling commission	0.25	0.25
Transaction reimbursement (P500 SSI)	1/500	0.002
TOTAL		13.46 per annum

6. As stated above, assuming that the average maturity profile of the SSI is one year, then the transaction costs on a per instrument basis (i.e., disregarding the denomination) should be approximately two to three times less expensive than a T-Bill which has a 91 day life span. The printing costs of the SSI should probably be about the same as for paper money, P0.50 each, compared to P2.50 for each T-Bill.
7. Yet to be calculated is the potential loss of cheap funds in the form of reserves kept by banks with the Central Bank. If there is a substantial flow of funds out of savings accounts into SSIs, this would reduce the amount of reserves that banks are now keeping on which the government is paying only 4 percent.

IX. EXISTING LEGISLATION, REGULATION AND TAXATION

Under Republic Act 245 as amended, the Secretary of Finance, with the approval of the President of the Philippines, and after consultation with the Monetary Board, is authorized to borrow from time to time on the credit of the Republic of the Philippines such sums as in his judgment may be necessary to meet public expenditures authorized by law; the Secretary may issue bonds for such purpose. The SSI would seem to fit under this authority and would constitute a direct, unconditional and general obligation of the National Government.

Section 122 of Republic Act 265 provides for the issuance of bonds to be made through the Central Bank as agent for the government. Section 123 of Act 265 permits the Central Bank to place such securities with various intermediaries for sale or resale to the public. Rather than make direct sales of SSIs to the public, the Central Bank may contract brokers who will retail them. The Central Bank may accredit the brokers, financial and non-financial institutions (such

as cooperatives), and non-governmental organizations that it selects. Section 124 of Act 265 provides that "the servicing and redemption of the public debt shall also be effected through the Central Bank", and, although in the past the Central Bank has designated only financial institutions as redemption units, it has the authority to designate non-financial institutions as well. Pawnshops, for instance, could be so designated.

The SSI would be liable for two different types of tax. The first is the documentary stamp tax imposed on all deposit substitutes, which would include the SSI. Under Section 2(h) of Revenue Regulations No. 17-84, dated October 12, 1984, deposit substitutes include all borrowings of the national and local governments through the issuance of debt instruments denoted as Treasury Bonds, Treasury Bills, Treasury Notes and similar instruments. In view of this, the SSI would be subject to a stamp tax of ₱0.20 on each ₱200 of face value. Technically, however, the Secretary of Finance may, after consultation with the Monetary Board, determine that the National Government shall absorb the documentary stamp tax. It is recommended that this be the case for the SSI because the amount involved would be so small for each SSI, and such a determination would further the desired image of simplicity for the SSI.

The other type of tax to which the SSI is subject is the 20 percent final tax on interest income from deposits and yields from deposit substitutes. The authority for such tax is expressed in Bureau of Internal Revenue (BIR) Memorandum Circular No. 28-86 which became effective August 1, 1986. Normally, such tax is withheld at the source. The current BIR ruling prescribes the application of the present value method in computing taxes due on discounted medium-term instruments. The Secretary of Finance has the capability, after proper consultation with the Monetary Board, to make the determination to issue tax-exempt bonds. For the SSI, it could be a matter of indifference whether the SSI would be issued at a higher rate, pre-tax, so that after deduction for the tax the yield remains attractive, or would be issued tax-exempt to yield the same after-tax rate. For the purposes of this study it has been assumed that the SSI is subject to the income tax and that the desired after-tax yield has been achieved by grossing up the nominal interest rate to accommodate the tax.

X. POSSIBLE OBSTACLES AND NEGATIVE SIDE EFFECTS

This Section will examine a few of the perceived obstacles and possible negative side effects of the SSI. These issues are more of a "what if..." type, but they could become topics for analysis as the implementation plan becomes more detailed and goes into effect. These are some issues that could require close monitoring during implementation and might necessitate adjustments and fine-tuning in the marketing, distribution, redemption, or design of the SSI.

Bonds for the small saver have a somewhat negative image because of the earlier issues that did not fully achieve their objectives. It can be expected that the SSI may encounter initial resistance due to this image. However, the SSI offers a different combination of design features than those earlier issues. A major and sustained promotional and educational effort should be able to overcome this obstacle.

Suspicion exists outside the Metro Manila area about the SSI being another way to draw funds out of the provinces to the capital area. While, to an extent, this is true, it should be noted that the decision to purchase an SSI is voluntary and a highly liquid asset that earns interest (i.e., the SSI) is being left behind to compensate for the outflow of funds. Two factors would be key to overcoming the negative perception: an effort to educate the public about the features of the SSI; and the competitiveness of the SSI's interest rate with options in informal credit markets.

Possible resistance to the SSI on the part of banks should not be ignored, although the actual degree of threat which the SSI poses to their cheap core deposits is probably less than the banks' initial reaction to the idea would suggest. Disintermediation would exist to the extent that funds presently within the banking system are drawn to the government through the sale of SSIs. However, banks appear to have the option of adjusting interest rates paid on savings accounts within the wide margin currently enjoyed between the cost of funds and lending rates. While beyond the scope of this study, there are a number of macroeconomic-based arguments concerning the cause of the large gap between deposit rates and lending rates and the best way to address this problem. If the SSI is issued, on-going monitoring should be performed to judge the performance of the SSI in competing effectively and efficiently with both formal financial instruments and informal financial markets.

Given the liquidity and interest bearing features of the SSI, and the potential development of secondary markets, the SSI could pose a challenge to the monetary authorities' management and control of domestic liquidity and inflation. A specific side effect could be a reduction in the reserves that banks are required to keep with the Central Bank if the SSI is successful in attracting funds that are now kept in savings accounts. This could result in the government paying a rate of interest on replacement funds that is substantially higher than the 4 percent currently paid on required reserves. For this reason it is important to analyze the impact on bank deposits when (and if) the SSI become significant. Similarly, the SSI may have an impact on the demand to hold cash which will also need to be analyzed.

As mentioned in Section V, there is a potential security problem presented by the SSI being in bearer form. Although PD 649 provides legal recourse if a holder were to lose possession of an SSI, it is doubtful that the government would want to adopt a policy to have lost SSI replaced or to reimburse their holders. In any case, the aspect of liquidity is so crucial to the potential success of any small saver instrument that the positive aspects of the SSI being in bearer form far outweigh the negative aspects. Moreover, if the demand is strong enough, some institutions will undoubtedly provide custodial safe-keeping services.

XI. ACTION STEPS FOR IMPLEMENTATION

A fully detailed implementation plan cannot be supplied until certain decisions have been made by the Government of the Philippines. However, the following minimum sequential action steps are recommended as an integral part of a more comprehensive implementation plan:

1. **Appoint an individual with country-wide responsibility and full authority to oversee the project. This individual should be of a relatively senior rank, most likely a government official, and have considerable relevant experience.**
2. **Two test markets should be used for controlled pilot projects; one test market should be a secondary city, and the other test market should be a frontier city. The tests should run for at least six months. By definition, a test market must be a segregated controlled area. Tests should not be conducted in the largest urban areas, but in secondary urban areas where all of the population can be reached. The two cities suggested below were specifically selected because they offer the opportunity to test the SSI under various conditions across all segments of the population.**
 - A. **The first test market should be Eastern/Central Visayas centered on Cebu City, the largest secondary city in the Philippines.**
 - B. **General Santos, a frontier city, should be the second test market and should start approximately three months after the first test market.**
 - C. **If the first two test markets are successful, then additional test markets should be initiated.**
3. **It is strongly suggested that the test marketing not be addressed to selected segments of the population. This would automatically skew the results of the test and would ignore one of the primary goals of the SSI which is to penetrate segments of the population not normally reached by more formal mechanisms. Thus, the choice of selling institutions becomes important in test marketing. At a minimum, the following institutions are suggested for use as test issuing institutions:**
 - A. **Post Office (in both Cebu and General Santos);**
 - B. **VICTO (Cebu);**
 - C. **A selected rural bank in General Santos; and**
 - D. **A selected commercial bank or thrift in Cebu.**
 - E. **Discussions should be initiated with the most senior individuals in these institutions in order to arrive at an agreement concerning their participation. Each institution should also appoint a senior individual within the organization to be the person responsible for implementation.**
4. **Establish the interest rate and the front-end discount.**
5. **Define the mechanics of the SSI.**

- A. The certificates should be in checkbook form with perforation and stub record.
 - B. The physical size should be about the same as a Peso bill.
 - C. Each SSI should have a unique serial number.
 - D. Validation of the issue date should be through a "one punch" system where the month and year is punched as the SSI is sold into the market and also punched on the corresponding stub (which is retained by the selling agent).
 - E. Schedule of redemption values should be printed on the back of the SSI for each of the 24 months that represent the life of the SSI.
6. Identify and define the distribution system.
- A. The following is recommended for issuance.
 - 1) The Central Bank would be the prime government agent for issuance.
 - 2) The Post Office, and either the DBP or the Land Bank, should be the primary distribution channels.
 - 3) All other formal institutions would receive SSIs from either the DBP or the Land Bank.
 - 4) Compensation for selling on consignment.
 - a. The selling agent would deduct from the sales proceeds 1/4 of 1 percent as the sales commission.
 - b. The selling agent should receive an average of thirty days float prior to remitting funds to the Central Bank.
 - c. The selling agent would receive a one peso transaction cost reimbursement for each SSI sold.
 - B. The following is recommended for redemption.
 - 1) Any formal institution encashing or redeeming a matured SSI would clear through either the DBP or the Land Bank.
 - 2) Compensation for negative float could be through having the customer pay a service charge of 2 or 3 Pesos per P500 denomination upon redemption or encashment. This charge should be clearly stated on the SSI.

7. Identify and define audit and control procedures.
 - A. Identify and appoint a team to design and implement controls with emphasis on the following issues.
 - 1) Control, accounting and accountability for distribution/consignment, including plans for a monthly audit at all levels.
 - 2) Review of internal controls of the formal issuing/selling institutions to ensure that they comply with government standards.
 - 3) Periodic, but not less than monthly, reconciliation of:
 - a. SSIs on consignment;
 - b. SSIs sold and cash collected; and
 - c. SSIs redeemed.
 - 4) Identification of a responsible person at each appropriate level within the formal institutions.
 - B. The individuals who comprise the team should have extensive experience in the relevant fields and most should have a CPA background. It may be advisable to use a private sector firm, at least for the design stage.
8. Identify and appoint a team to design and oversee the implementation of an educational/promotional program. The individuals who comprise the team should have relevant experience in educational design, advertising campaign design and direct marketing. In addition, there should be one team member with relevant experience in working with financial institutions and who understands financial instruments.

ANNEX A

REVIEW OF EXISTING INFORMAL CREDIT MARKETS (ICMs)

The inability to compile countrywide data on ICMs and incorporate the data into formal economic models does not lessen the importance of ICMs to the Philippine economy. In many cases, ICMs operate at socio-economic levels that are impractical for formal financial institutions.

For small savers, the costs of transportation and time involved in making a deposit or withdrawal in a bank may be quite heavy in relation to the small amount involved in the transaction. Added to these costs are the disincentives of the negative real interest rate paid on savings deposits by banks, the widespread belief in the limited likelihood of the small saver being able to obtain a loan from a bank in times of an emergency, and the feeling that the banks are not interested in the "small guy". It is understandable why ICMs, which overcome many of these disincentives and meet otherwise unsatisfied demands for credit and savings, have become successful throughout the Philippines.

The Savings-Credit Link

The existence of loans implies an equal counterpart of savings. An informal credit market implies a corresponding informal savings market. Very significant informal modes of savings mobilization and credit allocation exist throughout the Philippines. The relative importance of ICMs in the rural and poorer urban sectors has been enhanced by the gradually increasing failure of formal financial institutions to provide adequate conduits for savings mobilization. Even where bank offices exist they cannot, by their nature, serve the needs of all segments of the population. ICMs, largely unregulated and inadequately measured, have proliferated since the mid-1980s, filling a need and capitalizing on the established preference of small savers to "bank" with their friends and neighbors where the personal touch, quick response, easy access, flexibility and perceived low transaction costs tend to be the norm.

Credit Unions

While credit unions (CUs) are subject to regulation and are, therefore, not part of the informal credit market, they grew out of the same matrix from which the existing ICMs developed; they satisfy needs which the formal banking system does not satisfy. While classified among formal credit and savings institutions, CUs are more correctly viewed as intermediate between formal and informal institutions. CUs were studied in some detail by Lamberte, Relampagos and Graham (1990). At the end of 1989, there were 2,325 CUs which made up 36 percent of all registered cooperatives in the country. According to the Cooperative Development Agency, a government entity, CUs are now designated as "stock cooperatives", and all cooperatives, including CU's, have grown exponentially since 1989 to a present total of over 20,000.

Lamberte noted that in some towns CUs have more assets than the thrifts and rural banks. From their members, CUs accept limited amounts of savings in the form of participation quotas and deposits. While the amount of a loan obtainable is limited to a given multiple of the amount a member has invested in the CU, there are also absolute loan limits, meaning that investing beyond a certain amount does not confer the investor additional borrowing rights.

Nearly two-thirds of the 200 members in the several CUs surveyed by Lamberte believed that the interest rate offered by their CU on savings deposits was lower than that paid by nearby banks. The principal motivating factor to join a CU seems to be the privilege of being able to borrow at some time in the future -- the feeling that one will be well received among one's peers in the CU when credit is requested. In fact, 86 percent of the CU members polled by Lamberte had at some time applied for a loan at their credit unions. It appears that in the minds of the cooperative members Lamberte surveyed, the interest rate paid on savings was secondary to the peace of mind resulting from building up goodwill for the future when credit might be needed.

While banks foresee a threat to their core deposits from the SSI, there was no analogous reaction against the SSI from the cooperative leaders interviewed during the field work. CUs, as well as the other types of cooperatives, should be considered as excellent candidates for becoming both distribution and redemption agents for SSIs to their members.

The Sapang Palay Example

Lamberte and Bunda (1988) seriously challenged the notion that no financial savings can be mobilized in low income communities and stressed the overwhelming importance of ICMs in a community lacking any formal banking services. They carried out an in-depth study of ICMs in Sapang Palay, a very low income community of 86,000 inhabitants in one of the outlying areas of Manila, a long commute by bus from the nearest bank. While that study focuses on a single low-income suburban community, certain observations and lessons drawn are probably applicable throughout the Philippines. Adams and Nazarea-Sandoval (1989) surveyed ICMs in a rural area of the country about 65 kilometers south of Manila in the Laguna de Bay area, with results generally confirming those of Lamberte in Sapang Palay.

In Sapang Palay, the principal operating entities in the ICM were: (1) trader/suppliers who offer very short-term trade credit, sometimes interest free, to their market vendor clients; (2) informal moneylenders who lend amounts usually under ₱5000 for 90 days or less at rates of 10 percent per month or more to borrowers well-known to them, with or without collateral or formal legal documentation; and (3) rotating savings and credit associations, or ROSCAs, a widespread phenomenon in developing countries known in the Philippines as "paluwagans." (See the next section of this Annex for a fuller discussion of "paluwagans"). All three entities are characterized by personal relationships, frequent and uncomplicated accessibility for clients, and a minimum of formal impediments to transactions. The Adams and Nazarea-Sandoval study found a decided preference for informal over formal savings arrangements by their respondents. Reasons given for this preference were faster rates of turnover and familiarity and compatibility with cultural beliefs and customs.

"Paluwagans"

The most common form of rotating savings and credit association (ROSCA), or "paluwagan" as it is known in the Philippines, permits each member, sooner or later, to "win" back the same amount of money he or she has contributed through periodic quotas. Adams noted that in some cases the "paluwagan" manager collected a form of commission from members when they won their turn, but this variation was apparently not generally popular. A fixed quota of anywhere from ₱20 to ₱1000 or more is paid by each shareholder on a daily, weekly, semi-monthly or monthly basis. There are usually no more than 30 shareholders in a given "paluwagan". Except for the manager who receives the first winning lot or "sahod", the rotating order of "winning" is determined by chance. The manager, who is usually a respected community member, is motivated to start a "paluwagan" chiefly because of the privilege of having the first turn, since this means he has the interim use of interest-free funds which he only gradually returns as he meets his periodic quota obligation during the life of the cycle. The risk for the manager is in having to assume the quota obligation of any defaulting member, thereby assuring that the "winning" lots remain constant in amount during the cycle. The manager must therefore be astute in selecting by character and capacity the members he permits to join the "paluwagan". The manager may go so far as to require a notarized contract with members.

Joining a "paluwagan" is a savings-investment decision by members who may join for the purpose of forcing themselves to accumulate funds. Adams and Nazarea-Sandoval found that 41 percent of the "paluwagan" participants they interviewed wanted to be pressured to save even when they had no specific purpose in mind. This percentage did not differ significantly for those who also saved in banks at the same time. Participants who had borrowed from moneylenders on occasion were undoubtedly well aware of the opportunity cost involved in not having sufficient liquidity when the need arose and were perhaps more prone to join a "paluwagan" as a means of assuring liquidity for emergencies. A "paluwagan" manager will usually permit a needy member to jump the established order of priority and win an earlier lot if the need is genuine. Thus, the "paluwagan" serves as an informal safety net for members. Participants may also be motivated by the opportunity to build up goodwill and establish their personal creditworthiness in the community through the gradual process of showing their ability to meet quotas and their honesty in never defaulting, creating in this way credit "markers" which they may be able to call in should they have a future need for credit. It is noteworthy that some "paluwagan" managers are also informal moneylenders.

Adams and Nazarea-Sandoval noted in their survey in the rural Laguna de Bay area that "paluwagans" are more common in marketplace towns than in villages without an important market. They believed this to be due to the fact that marketplaces have a larger proportion of storekeepers, professionals and others with regular incomes than is the case in more scattered rural populations.

In addition to accrediting various formal governmental and non-governmental institutions to distribute and redeem savings bonds, it may be worthwhile attracting "paluwagan" managers to establish new "paluwagans" for the purpose of investing accumulated funds in SSIs. A member

could, through a series of "paluwagans", accumulate enough SSIs to enable himself to convert them eventually into a time deposit at a bank paying a higher interest rate than he earns on the SSIs. This is one example of how informal savings clubs might function to permit small savers to parlay modest savings into larger instruments with greater return. "Paluwagans" are but one such vehicle that could utilize the SSI as an intermediate station on the way toward attaining an individual's longer term goals.

Advantages of the Informal System

Both informal moneylenders and "paluwagans" are important for several reasons with respect to the introduction of SSIs in the Philippines. The existence of numerous informal moneylenders and "paluwagans" demonstrates that a large volume of Pesos is already being mobilized outside the formal credit and savings institutions that might be tapped by the sale of SSIs, provided there are low transaction costs for savers and other features that they find attractive. In the low-income community studied by Lamberte and Bunda, the average amount contributed by "paluwagan" members was ₱12,577 over periods of time of less than one year. It is believed that such amounts would not have been saved by members had it not been for informal savings circles. Gadway (1991), in a diagnosis of rural finance in Peru, asserts that it is a myth that the rural poor, by virtue of their poverty, have no demand for deposit facilities. This is probably true for both the urban and the rural poor in the Philippines.

Both informal moneylenders and "paluwagans" offer positive real rates of return for savers from whom they tap funds and, as a result, constitute potential competitors to SSIs in terms of interest rates. However, as already noted, interest rates may be secondary to other factors when a saver decides where to put his money. Lamberte and Bunda showed that three out of the seven moneylenders they studied obtained part of their loanable funds through borrowing in the informal market. One borrowed short-term funds from friends, paying a rate of 60 percent per year for such money which constituted one-third of her operating funds. Another actually accepted what amounted to one-year time deposits, paying 80 percent per annum interest for the funds which made up 70 percent of her operating funds. While acting in this way as a depository was of questionable legality, she had 51 depositors with an average deposit of ₱788 each and was willing to accept deposits as small as ₱100. The capacity of informal lenders to absorb the savings of friends and acquaintances is theoretically limited only by the aggregate demand for their loan services. Noteworthy is Lamberte's finding that most informal moneylenders do not work full time in this activity. Rather, they are often friends and neighbors, or at least acquaintances, of their saving and borrowing clients.

Nominal interest is neither paid nor earned in a "paluwagan", though an implicit interest rate is involved when members winning early shares have the use of funds which they only gradually return in the form of meeting their periodic quotas. The significant point regarding investing in a "paluwagan", or depositing funds with informal moneylenders to earn a high rate of return, is that the small saver already has high return options to bank savings accounts if he is willing to accept a higher level of risk. The SSI could compete favorably with these options by offering a comparable rate of return with very little default risk.

By accepting minimal deposit amounts (P100 for informal moneylenders and P20 or less for periodic "paluwagan" quotas) these mechanisms permit all but the very poorest to begin saving and to accumulate minimum amounts necessary to invest, to consume, or to pay off existing debts. A low-income person who begins to save regularly, regardless of the modest amounts involved, is able to overcome certain barriers presented by the indivisibilities of savings (as evidenced by minimum opening deposit amounts in banks), investment and consumption (particularly of bigger ticket items that would otherwise be out of his reach). His "economic planning horizon" is expanded beyond his day-to-day struggle for subsistence. The introduction of an SSI, if it is to attract those who are currently outside of the formal financial system, must be designed with these indivisibilities in mind. The minimum purchase size of an SSI must be kept low enough to permit the marginal saver to join in. Elsewhere in this study the idea of reviving the practice of selling fractional savings stamps is discussed. Such stamps could be accumulated until they equal the purchase price of the minimum sized SSI. This would lower the entry barrier for small savers and could encourage first time savers, such as children, to acquire the saving habit.

ANNEX B

DRAFT SURVEY FORM

The following questionnaire was circulated among a number of banks and government and quasi-government institutions and cooperatives prior to holding field interviews.

1. Briefly describe your organization's national or regional structure; for example, does it have a strong national headquarters which gives directives to the regional level which in turn passes them on to the district or local office, or is each district and local office self-directed?
2. How widespread is your organization; how many offices are there at the national, regional, district and local levels?
3. What is the primary purpose or activity of your organization? At which level is it the most active (national, regional, district or local)?
4. What are the responsibilities of each level (national, regional, district and local)? How much authority does the local office manager have; what are his/her direct responsibilities?
5. What kind of staff is there at each level; what are their responsibilities? Please describe the staffing of a local office; how many people, what is the average education level, what are their work responsibilities, what are the average salary/compensation requirements?
6. Please describe the communications network between the various levels and offices/branches.
7. What kind of system is there for distributing supplies, materials, etc. between offices/branches at the various levels? What kinds of controls are there? What kinds of costs are associated with the distribution system and who pays these costs?
8. Does your organization frequently handle cash or negotiable instruments? If so, please describe this activity; how is cash distributed and collected, how is it accounted for, and who is responsible?
9. Are you audited? If so, by whom, how frequently, and at which levels (national, regional, district, local)?
10. Do you have a direct relationship with the Department of Finance or any other department of the Government of the Philippines? If so, please describe.

11. What is your organization's potential interest in participating in the distribution, marketing, and possible redemption of government small savers instruments? Who is the ultimate decision-maker?
12. What incentives would your organization require in order to implement this plan, and how would you do it?
13. What problems would you anticipate?

ANNEX C

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ANNEX D

INDIVIDUALS CONTACTED AND INTERVIEWED

Luz Aguilar *Assistant Branch Manager, Development Bank of the Philippines, General Santos.*

Beatroz B. Alaan *Executive Director, Postal Services Office, Republic of the Philippines.*

Ruben Almendas *Executive Vice President/Treasurer, Cebu International Finance Corporation.*

Noli B. Bajada *President, Association of Thrift Banks.*

Bayani P. Basilio *Branch Manager, Union Bank, General Santos.*

Joey A. Bermudez *Vice President, Philippine Commercial International Bank.*

R. Buenaventura *President and CEO, Philippine Commercial International Bank.*

Rosalina Cajucom *Treasurer of the Philippines, Department of Finance, Bureau of the Treasury.*

Agustin L. Climaco *President, Castilex Industrial Corp.*

Edgar V. Comeros *Executive Director, Visayas Cooperative Development Center (VICTO).*

Bruno Cornelio *Chief, Private Enterprise Support Office, U.S. Agency for International Development.*

Ben Cruz *Division Chief, Development Bank of the Philippines, General Santos.*

Omar Cruz *Citibank, Manila.*

Porfirio Cubar *Senior Manager, Philippine Commercial International Bank, General Santos.*

E. Ealdama Jr. *Director, Government Securities Department, Central Bank of the Philippines.*

Grace Enerio Du *Branch Manager, Monte de Piedad and Savings Bank, Cebu City.*

Myron Gawigawen *Administrator, Cooperative Development Authority, Republic of the Philippines.*

Rene Q. Gallo *Vice President, Land Bank.*

S. D. Glorioso *President and Chairman, Rural Bank of Pagbilao.*

Nancy L. Go *Senior Assistant Manager, Bank of the Philippine Islands.*

Carmen Huang *Treasurer, Land Bank of the Philippines.*

Nellie M. Ilas *President, Capitol City Rural Bank of Trece Martires.*

Myrna L. Kho *Senior Assistant Vice President, Development Bank of the Philippines.*

Vilma U. Kho *Manager, B/A Finance Corp., General Santos.*

Francisco Laiz, Jr. *Manager, Sarangani Rural Bank, General Santos.*

Philippe Lhuiller *President, Philippines Association of Pawn Brokers.*

Virginia Manalo *Project Manager, Business Resources Center, Notre Dame of Dadiangas College, General Santos.*

Ed Matas *Personnel Manager, Pure Foods Corporation, General Santos.*

Brother McGovern *Project Director, Business Resources Center, Notre Dame of Dadiangas College, General Santos.*

P. M. Montemayor *Financial Manager, Sarangani Aqua Resources, Inc., General Santos.*

N. C. Nazareno *President, Citicorp Vickers Philippines.*

Eliseo P. Ocampo *Attorney, formerly Director of the Progress Bond Program, Central Bank of the Philippines.*

M. J. B. Ongsingco *Senior Vice President, UBF Capital Corporation.*

Sinforoso Pading *Regional Director, Postal Region VII, Mandaue City, Cebu.*

Reynaldo Palmiery *Deputy Administrator, Social Security System, Republic of the Philippines.*

Girlie Piccio *Manager, Philippine National Bank, General Santos.*

- Vincente Quintana** *Administrator, Cooperative Development Authority, Republic of the Philippines.*
- Daisy Quitain** *Regional Marketing Officer, Development Bank of the Philippines, General Santos and Davao.*
- Danilo A. Quinto** *Assistant Vice President, Bank of the Philippine Islands.*
- Edwin S. Ragos** *Assistant Vice President/Area Head, Central/Eastern Visayas, Bank of the Philippine Islands.*
- Ed John Reyes** *Assistant Vice President, Development Bank of the Philippines.*
- Eugenio E. Reyes** *Director, Securities and Exchange Commission, Republic of the Philippines.*
- G. Salvatierra, Jr.** *Assistant Executive Director, Visayas Cooperative Development Center (VICTO).*
- Geronimo Sta. Ana** *President, Cebu Chamber of Commerce.*
- Jorge V. Sarmiento** *Postmaster General, Postal Service of the Philippines.*
- Cecilia Soreano** *Undersecretary, Department of Finance.*
- Renee Subido** *Branch Manager, Land Bank of the Philippines, General Santos.*
- Ofelia Templo** *Director III, National Planning and Policy Staff, National Economic Development Authority.*
- Deogracias Vistan** *President, Land Bank of the Philippines.*
- Benigno L. Zialcita** *Executive Vice President, Government Service Insurance System, Republic of the Philippines.*

ANNEX E

BENEFIT-COST ANALYSIS OF THE SSI

Introduction

The issuance of SSI has two major objectives. The first is to bring down the interest cost of government borrowing. At present, the government is mainly banking on the short-term Treasury bills as its instrument for borrowing from the public. The interest rates on the Treasury bills are quite high and interest payments comprise a very significant share of the government's debt-service burden.

The second objective is developmental in nature. At present, only large savers have access to the high-yielding Treasury bills because of the size of minimum investment. The severely negative real interest rate on savings deposits, the instrument most accessible to small savers, does not provide enough incentive for saving in financial instruments. Therefore, the SSI, which will be denominated in small amounts and will offer a positive real rate of interest, will provide small savers with access to high-yielding financial instrument. Aside from this, it will provide competition with banks, at least in the small deposit market.

This annex provides a rough benefit-cost analysis of the SSI. Many of the assumptions here are tentative and must be verified further during the test marketing of the SSI. Tentative as it is, nevertheless, the analysis provides some rough magnitudes of the cost and benefits involved in issuing SSI.

The analysis is done over a period of five years. In reality, however, SSI issuance may be done for a longer period, perhaps as long as the government wants it to partly finance its deficits.

Benefits from the SSI

The direct benefits that the government will realize from the issuance of SSI will be in the form of interest savings from reduced issuance of Treasury bills. This requires a forecast of the volume of Treasury bills with and without the SSI and the corresponding interest rate. In the absence of a macroeconomic model,¹ a simple methodology is used for forecasting the volume of Treasury bills for the period 1993-1997. As shown in Table 1, the volume of Treasury bills grew phenomenally in 1987 when the government had to finance a much larger deficit due to its assumption of the non-performing assets of government-owned financial institutions. Since then, however, the growth rate of outstanding Treasury bills has decelerated.

¹The PIDS-NEDA macroeconomic model, which to date is the largest macroeconomic model in the Philippines, does not include the stock of Treasury bills and interest payments on Treasury bills. Adding these variables to the model would involve substantial re-working of the model itself.

During the last two years, the growth rate averaged 13%. It is assumed here that this growth rate will be maintained for the period 1993-1997.

The forecast of the interest rate on the Treasury bills, which is also shown in **Table 1**, is based on the working numbers that the government is presently using in its planning exercise. The last column of **Table 1** gives the figures for the government's interest payments on Treasury bills without the issuance of SSI.

The next task is to determine the volume of Treasury bills that must be replaced by SSI. For lack of a rigorous method for determining it, it is assumed that the SSI will replace 5% of the total volume of Treasury bills for the first year. Thereafter, SSI's share will increase by 3 percentage points each year. The projected composition of Treasury bills and SSI is shown in **Table 2**.

The interest savings from the reduction in the volume of Treasury bills due to the issuance of SSI may now be computed using the information in **Table 1** and **Table 2**. The results are shown in **Table 3**. Note that the figures in this table refer to gross interest savings. To obtain the net interest savings, the interest cost on SSI and other costs associated with its issuance must be taken into account. This is discussed below.

Costs of the Issuance of SSI

The cost of issuing SSI may be broken down into the following three components: direct cost; administrative cost; and the opportunity cost for putting up a liquidity fund.

The direct cost includes the interest payments on the SSI and incentives provided to distribution channels/agents of SSI. The details of this were already discussed in Section VIII (as summarized in **Table IX**), hence, there is no need to elaborate them here. Given certain assumption on inflation rate for the period 1993-1997 and using the information on Treasury bill rate shown in **Table 1**, the direct unit cost of SSI can be derived. The results are shown in **Table 4**. Since the volume and the direct unit cost of the SSI are already known, the total direct cost on SSI issuances can now be obtained. The figures are shown in **Table 5**.

To be attractive to savers, the SSI must include a liquidity feature; that is, the government must stand ready to service early redemptions at any time. The best way to guarantee quick redemption is to have a standby liquidity fund. Our rough estimate of the required minimum liquidity fund is equivalent to 10% of the volume of SSI on its first year of operation. This amounts to about P1.5 billion, and is assumed to be kept up to the fifth year. It is going to be fully recovered and returned to the government on the last year. The opportunity cost of the liquidity fund is equal to cost of borrowing from the market, which is here represented by the Treasury bill rates shown in **Table 1**, times the value of the liquidity fund. The estimated opportunity costs of this liquidity fund are shown in **Table 6**.

A successful issuance of the SSI requires an efficient back room operation, which will handle the daily activities of the SSI project, and an aggressive marketing program. It is envisioned that 8 full-time staff headed by a Project Manager will run the back room operation of SSI. It may be attached to the Department of Finance. It will have its own office and will be equipped with the necessary office equipment and furniture.

As regards marketing program, it is assumed that the SSI project will use the radio, television and print media to advertise all the features of the SSI. Advertising will be intensive in the first year of operation. The government has the option of availing the less costly services of the Philippine Information Agency (PIA), a government-owned agency, or the more costly services of the private sector in developing advertising formats. It is assumed here that the government will hire the services of the private sector, hoping that it can do a better job than PIA.

The government may secure from broadcast media free airing of the SSI propaganda. However, radio and television stations have full discretion with regard to the time of their airing. Usually, they broadcast non-revenue programs during non-prime time when very few people are watching or listening to the program. To reach out more people, it would be better for the SSI project to buy airing slots at prime time.

The total administrative cost which includes the maintenance of a back room operation and a marketing program is shown in **Table 7**.

A summary of the total costs of SSI issuance for the period 1993-1997 is presented in **Table 8**.

Benefit-Cost Analysis

The standard benefit-cost analysis technique is applied here. The ₱1.5 billion liquidity fund is considered as the investment outlay of the government which will be fully recovered at the last year of analysis. The flow of net benefits accruing to the SSI project is shown in **Table 9**. The estimated internal rate of return is 42%, which greatly exceeds the NEDA-recommended social discount rate of 15%.

Benefits to the Entire Economy

At first blush, the absolute values of the net benefits of the SSI project seem to be small, ranging from ₱66 million to ₱1.6 billion (excluding liquidity fund). This is because the spread between the Treasury bill rate and the SSI interest rate is quite narrow. The spread could widen if the Treasury bill rate increases, assuming the same inflation rate.

To the entire economy, however, the benefit that can be derived from the SSI project will be in terms of increased income, which will be brought about by additional investment financed by additional savings generated by the SSI. The issue therefore is whether offering savers high-

yielding instruments will induce them to save more. This hypothesis was tested by regressing real savings deposits of the banking system (SDR), which are supposed to represent the savings instrument accessible to small savers, on real interest rate on savings deposits (r), i.e., nominal interest rate on savings deposits minus the inflation rate, and on real GNP using the period 1980-1990. The result is:

$$\text{SDR} = -122973.88 + 424.47r + 0.3566254\text{GNP}$$

$$(-3.52) \quad (5.32) \quad (7.24)$$

$$\text{Adjusted R square} = 0.97 \quad \text{D.W. statistic} = 1.81$$

All the estimated coefficients are statistically significant at the 1% level. The result suggests that 1 percentage point increase in the interest rate on savings deposits will increase real savings deposits by ₱424.5 million. During the period 1980-1990, the real interest rate on savings deposits averaged -6.3%. With the SSI, which will give a positive real interest rate of at least 1%, small savers will experience an increase in real interest rate of about 7 percentage points. This will generate about ₱3 billion additional savings, *ceteris paribus*.

It is to be noted that only a portion of the total bank deposits will be lent out to finance investment. To determine the transformation of financial savings into investment, the following simple investment function was estimated:

$$\text{INV} = f(\text{T-bill rate, TDBS})$$

where: INV = total investment capital formation as reflected in the national income accounts; and

TDBS = total deposits of the banking system.

The result is as follows:

$$\text{INV} = 8087.3647 - 343.71423\text{Tbill rate} + 0.6738\text{TDBS}$$

$$(0.50) \quad (-0.45) \quad (10.51)$$

$$\text{Adjusted R square} = 0.93 \quad \text{D.W. statistic} = 1.42$$

Although all the coefficients have the correct sign, only the coefficient of TDBS is statistically significant at the 1% level. It means that for every peso increase in bank deposits, 57 centavos will go to capital formation or investment. Therefore, the availability of SSI could increase total

investment in the economy by about P2 billion. Assuming an incremental-capital output ratio (ICOR) of 4.6,² the additional investment generated through the SSI would increase real GNP by P440 million.

Table 1
NATIONAL GOVERNMENT'S INTEREST PAYMENTS ON TREASURY BILLS
(In Million Pesos)

Year	Outstanding	Average Interest Rates (%)	Estimated Interest Payments
1986	55,420	15.843	8,780
1987	107,008	13.077	13,993
1988	142,615	15.721	22,420
1989	172,543	19.462	33,581
1990	192,589	24.927	48,007
1991	219,495	22.622	49,655
1992*	248,029	16.4	40,677
1993	280,273	15.0	42,041
1994	316,709	16.0	50,673
1995	357,881	16.5	59,050
1996	404,405	16.0	64,705
1997	456,978	16.0	73,117

* Estimates for outstanding Treasury bills and average interest rates start this year. The outstanding Treasury bills are assumed to increase by 13% per year.

Sources: (1) Bureau of Treasury
(2) Central Bank

²This is the average ICOR for the period 1986-1990. The ICOR for 1991 was excluded in the calculation because it yielded a large negative coefficient.

Table 2
PROJECTED COMPOSITION OF OUTSTANDING TREASURY BILLS AND SSI
(In Million Pesos)

Year	Total ^{1/}	T-Bills	SSI
1993	280,273 (100.0)	266,259 (95.0)	14,014 (5.0)
1994	316,709 (100.0)	291,372 (92.0)	25,337 (8.0)
1995	357,881 (100.0)	318,514 (89.0)	39,367 (11.0)
1996	404,405 (100.0)	347,788 (86.0)	56,617 (14.0)
1997	456,978 (100.0)	379,292 (83.0)	77,686 (17.0)

^{1/}
Taken from Table 1.

Table 3
INTEREST SAVINGS FROM REDUCTION IN TREASURY BILLS ISSUANCE
(In Million Pesos)

Year	T-Bills		
	Before SSI	After SSI	Interest Savings
1993	42,041	39,939	2,102
1994	50,673	46,620	4,673
1995	59,050	52,555	6,495
1996	64,705	55,646	9,059
1997	73,117	60,687	12,430

Table 4
DIRECT COST PER PESO OF SSI
(In %)

Items	1993	1994	1995	1996	1997
1. Front-end discount	10.625	11.875	12.500	11.875	11.875
2. 30 Day-Float	1.250	1.330	1.338	1.330	1.330
3. Selling Commission	0.250	0.250	0.250	0.250	0.250
4. Transaction Reimbursement	0.002	0.002	0.002	0.002	0.002
5. Printing Cost	0.001	0.001	0.001	0.001	0.001
Total Cost	12.128	13.458	14.091	13.458	13.458

Note: Assumed inflation rates are as follows: 1993 - 7.5%; 1994 - 8.5%; 1995 - 9%; 1996 - 8.5%; and 1997 - 8.5%.

Table 5
DIRECT COST OF SSI ISSUANCE
(In Million Pesos)

Year	Vol. ^{1/}	Unit Cost (%) ^{2/}	Total Cost
1993	14,014	12.128	1,700
1994	25,337	13.458	3,410
1995	39,367	14.091	5,547
1996	56,617	13.458	7,620
1997	77,686	13.458	10,455

1/
From Table 2.

2/
From Table 4.

Table 6
OPPORTUNITY COST OF THE ₱1.5 BILLION LIQUIDITY FUND
(In Million Pesos)

Year	Cost
1993	225
1994	240
1995	248
1996	240
1997	240

Table 7
ADMINISTRATIVE COST: SSI PROJECT
(In Million Pesos)

Items	1993	1994	1995	1996	1997
A. Fixed Costs					
1. Office Equipment (see Appendix A)	500	-	-	-	-
2. Furniture and Fixtures	100	-	-	-	-
3. Advertising Cost (see Appendix B)	2,345	-	-	-	-
Sub-Total	2,945	-	-	-	-
B. Recurrent Costs					
1. Personnel (see Appendix C)	980	1,078	1,186	1,304	1,435
2. Office Rental (75 sqs.xP240/sq. x12mos.)	216	238	261	288	316
3. Utilities	36	40	44	48	53
4. Communications	30	33	36	40	44
5. Office Supplies	15	16	18	20	22
6. Advertising Costs (see Appendix B)	106,600	57,035	62,738	69,012	75,913
Sub-Total	107,877	58,440	64,283	70,712	77,783
Grand-Total	110,822	58,440	64,283	70,712	77,783

Table 8
TOTAL COST OF SSI ISSUANCE

Items	1993	1994	1995	1996	1997
1. Administrative Cost	111	58	64	71	78
2. Direct Cost on SSI Issuance	1,700	3,410	5,547	7,620	10,455
3. Opportunity Cost of the Liquidity Fund	225	240	248	240	240
Total	2,036	3,708	5,859	7,931	10,773

Table 9
BENEFIT-COST ANALYSIS
(In Million Pesos)

Year	Benefit	Cost	Net Benefit
	Investment Outlay: P1,500		
1993	2,102	2,036	66
1994	4,673	3,708	965
1995	6,495	5,859	636
1996	9,059	7,931	1,128
1997	13,930	10,773	3,157

Estimated Internal Rate of Return = 42%

**Appendix A
OFFICE EQUIPMENT**

2	Personal Computers with Printers	₱170,000
1	Laser Printer	120,000
1	Electric Typewriter	25,000
1	Copier	70,000
1	Facsimile Machine	50,000
3	Filing Cabinets	12,000

		₱447,000
		or ₱500,000
		=====

Appendix B

ADVERTISING COSTS^{1/}
(In Thousand Pesos)

Item	1993	1994	1995	1996	1997
I. Radio					
1. Production Cost (3 Formats)	45	-	-	-	-
2. Airing Costs ^{2/}	3,650	4,015	4,416	4,858	5,344
Sub-Total	3,695	4,015	4,416	4,858	5,344
II. Television					
1. Production Cost (3 Formats)	300	-	-	-	-
2. Airing Costs ^{3/}	91,250	40,150	44,165	48,581	53,439
Sub-Total	91,550	40,150	44,165	48,581	53,439
III. Print					
1. Brochures/Info Materials	2,000	-	-	-	-
2. Newspaper Ads ^{4/}	11,700	12,870	14,157	15,573	17,130
Sub-Total	13,700	12,870	14,157	15,573	17,130
Grand-Total	108,945	57,035	62,738	69,012	75,913

1/

See Schedule 1 for estimated costs from PIA.

2/

It assumes 5 times a day prime-time airing at ₱2,000 per airing time for 365 days with a 10% adjustment cost per year.

3/

It assumes for the first year 5 times a day prime-time airing at ₱50,000 per airing time for 365 days. For the succeeding years, airing time is reduced to twice a day with 10% adjustment cost per year.

4/

It assumes ₱25,000 Ad in 3 newspapers, 3 times a week with 10% adjustment cost per year.

Schedule 1

ADVERTISING COSTS: SSI PROJECT
(60 - Seconder Spots)

A. Radio

	PIA ---	Others -----
1.) Production (including syndication fee for reels)	₱7,450	₱10,000 - 15,000
2.) Airing Costs	None (done thru KBP)	Primetime ----- ₱1,000 - 2,000
		Non-Primetime ----- ₱ 800 - 1,200

B. Television

	PIA ---	Others -----
1.) Production (within studios only)	₱35,000 - 40,000	₱ 50,000 - 100,000
(in location)	add transport meals and accom. to be paid by client	-
2.) Airing Costs	PIA --- None (thru KBP)	Others ----- Primetime ----- ₱60,000 - Channel 2 50,000 - Channel 7 30,000 - Channel 13
		Non-Primetime ----- ₱10,000 - ₱24,000 - Channel 2

* Source: Philippine Information Agency (PIA)

**Appendix C
PERSONNEL COST**

1	Project Manager (P18,307/mo. x13 mos.)	P237,991
1	Asst. Project Manager (P14,919/mo. x13 mos.)	193,947
1	Supervising Specialist (P8,845/mo. x13 mos.)	114,985
1	Accountant (P10,866/mo. x13 mos.)	141,258
2	Accounting Clerks (P5,670/mo. x13 mos.)	147,420
1	Computer (P6,199/mo. x13 mos.)	80,587
1	Secretary (P4,386/mo. x13 mos.)	57,018

		P973,206

	or	P980,000
		=====

Note: The compensation schedule follows the Salary Standardization Law.
