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9. ABSTRACT

El Salvador's unexpectably sagging economy during the past six years, after a period of sustained growth, has prompted this study of the country's fiscal institutions, with emphasis on agricultural credit. An agricultural overview and a review of sources of institutional credit are given. The El Salvodorean monetary policy is discussed and the question of the influence of credit creation upon the balance of payments is explored. Other topics covered are: Commercial and Hipotecario Banks and Agricultural Credit, Small Farms and Institutional Credit, the Agricultural Development Bank, the Fedaracion de Cajas de Credito, and the Interest Rate Structure and Small Farm Credit. It was found that the Agricultural Development Bank has been successful in granting credits, especially to groups, and should continue to do so. However, it is seen only as a short term solution. More groups of farmers needing loans must be organized, more information about available credit must be dessminiated, and subsidies for these operations must be found. Also direction of small farmer credit through the commercial banking system requires both economic controls and subsidies. The "Junta Monetaria" must provide a mechanism to insure that allocated funds do, in fact, reach the farmer.

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MONETARY POLICY, CREDIT INSTITUTIONS, AND AGRICULTURAL CREDIT IN EL SALVADOR

BY

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CHAPTER I

AGRICULTURAL OVERVIEW AND SOURCES OF INSTITUTIONAL CREDIT

Table 1

ANNUAL RATE OF INCREASE 1960 to 1972, Agricultural and Industrial Sectors

YEAR	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
SECTOR												
Agriculture	3.6	15.3	-2.7	9.0	1.7	-1.0	4.5	0.5	0.7	19.4	-0.2	2.3
Industry	8.0	8.0	10.9	14.3	15.0	12.6	6.5	6.1	4.1	3.9	7.1	6.0

Source: CONAPLAN

TABLE 2

INDEX OF VOLUME OF AGRICULTURAL PRODUCTION

BASE YEAR: 1968 = 100

	1968	1969	1970	1971	1972	1973
General Index	100.00	103.95	112.04	117.31	118.63	123.42
Agricultural Production	100.00	100.90	112.36	119.62	117.97	123.35
Coffee	100.00	100.71	106.14	112.25	114.46	98.18
Cotton	100.00	125.36	146.48	148.54	181.67	237.50
Corn	100.00	108.92	142.30	146.80	93.18	159.68
Beans	100.00	124.24	138.36	161.35	169.21	177.51
Rice	100.00	44.80	55.56	68.89	44.71	45.33
Sorghum	100.00	103.11	118.52	125.93	117.41	125.93
Sugar Cane	100.00	81.07	87.58	109.88	127.59	134.66
Cattle Production	100.00	114.46	110.95	109.40	120.89	123.65
Beef	100.00	117.19	114.84	104.69	122.66	114.06
Pork	100.00	116.06	115.33	110.22	110.95	129.20
Milk	100.00	105.13	106.18	107.24	108.32	109.40
Eggs	100.00	135.70	116.85	120.87	157.71	172.02

SOURCE: Revista Mensual

Agricultural Sector Overview

Following the 1962-67 period of industrialization in which the El Salvadorean economy grew at a seven percent annual rate, economic expansion has slackened such that in 1968-70 G.D.P. rose at only 3-1/2 percent per annum, and, since 1971 growth has been a sluggish 4 to 4-1/2 percent per annum. At the same time, however, population has been rising by over three percent, and annual per capita G.D.P. increased by less than one percent during 1968-70, and by only 1 to 1-1/2 percent for each year since that time. In short, the El Salvadorean economy has stagnated during the past six years after having been perhaps the most significant recipient of CACM engendered growth of all the Central American countries during the early 1960s.

Perhaps the most neglected economic sector in El Salvador during the period of the Central American Common Market has been the traditional, backward agricultural subsector in which reside approximately two-thirds of the nation's population. The industrialization process generated by the opening of intra-regional markets along with generous extra-regional tariff protection in the 1960s, combined with fiscal incentives investment legislation, resulted in the channeling of available resources into the capital-intensive industrial manufacturing sector. The game plan , based upon the Prebisch terms-of-trade thesis and the import-substitution bias of the ECLA group which initially envisioned a common market, was

apparently fully embraced by El Salvador on the view that the demand for labor generated through the industrialization process would, as is postulated in the more simplistic development models, generate direct employment and multiplier effects which could absorb over time the excess disguised rural unemployed. At the same time the technologically efficient agricultural export sector - which generates the bulk of El Salvador's foreign exchange from coffee, cotton, and sugar - was encouraged through (1) ample credit made available through the financial system, (2) an abundance of low priced labor made so by, among other things, the lower-than-equilibrium price for capital resulting from special exemptions, and (3) fiscal exemptions for much of the imported capital required for capital-intensive development of the agricultural export sector.

Thus, while focus was directed towards the three major agricultural export crops as a means to finance the industrial development process, the traditional or primitive subsector in the dualistic El Salvadorean agricultural sector failed to receive the planning or resource inputs required for its own dynamism.

This subsector is characterized by primitive technology, inadequate access to financial resources or to technical skills and knowledge, and it contributes a small (perhaps five percent) amount to El Salvadorean G.D.P. Nevertheless, it is the major source of familial support for more than one-half of the national population.

The policy shift to the rural poor is still in the process of being articulated and it requires a separate agricultural strategy

for those small farmers outside the export agricultural activities who make up the bulk of the population in El Salvador. Since 1969 there has been evidence of continuing, through erratic, interest by the GOES in the rural poor. The further focus of AID and other international development agencies upon problems of the rural poor have provided added impetus to the relatively new focus upon the technologically primitive agricultural subsector. Largely ignored during the process of industrialization during the decade of the 1960s, the rural poor appear to now be, in words if not yet in deeds, a major political priority of the Molina administration. The Five Year Plan reemphasizes the role of agriculture, points to the twenty-year stagnation in per capita agricultural output for the economy (average growth rate in agriculture 1950-70 was 3.1 percent per year with a population growth rate to equal that figure). The Five Year Plan suggests that unemployment at a rate of 35 percent exists year-round in the rural sector, and focuses upon policies aimed at more balanced regional development, increased agricultural income, less skewness in the distribution of that income, and improved social development and mobility.

With the gains from the Common Market rapidly coming to an end in the industrial sector for El Salvador, it is clear that one neglected area which can potentially stimulate both growth and income redistribution during the ensuing decade is agriculture. While there has been some reallocation between the agricultural and industrial sectors during the past fifteen years, El Salvador's economy remains

predominately agricultural. Table 1 shows the annual rates of increase in the agricultural and industrial sectors between 1961 and 1972. The table clearly illustrates the stagnation in the agricultural sector between 1961 and 1972 (except for the year 1970 in which a 19 percent increase was recorded due largely to favorable export prices and not to increased production of volume). Table 2 shows the volume of agricultural production between 1968 and 1973. Volume of output shows an annual growth rate in 1969 of four percent with 7 percent in 1970, 4 percent in 1971, one percent in 1972, and around 4 percent in 1973. The output indexes by commodity (Table 2) show that during the past five years coffee output has not changed substantially. Cotton output, however, increased by 137.5 percent over the six-year period, while the other export crop, sugar cane shows erratic production but, by 1973, output was 34 percent above 1968.

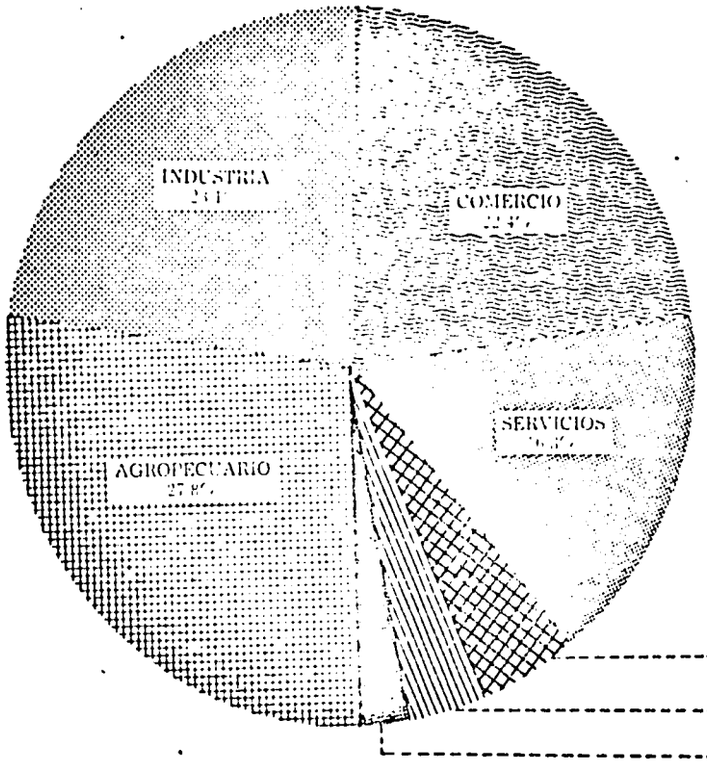
The traditional small farm crop (corn, beans, and rice) shows substantial growth in output with corn outfront increasing by volume over the 1968-73 period by 60 percent, beans 77 percent, and the volume of sorghum output increased by 25 percent. Since, of course, these basic grains contribute only a small amount to total agricultural output the overall index remains increased by only 23 percent during the six-year period.

The fact that El Salvador remains, by and large, an agricultural economy is demonstrated by Chart 1 which gives the structure of gross domestic product in 1964 and 1973. Agriculture claimed 30.9 percent of the total G.D.P. in 1964 and 27.8 percent by 1973, while

PRODUCCION Y PRECIOS

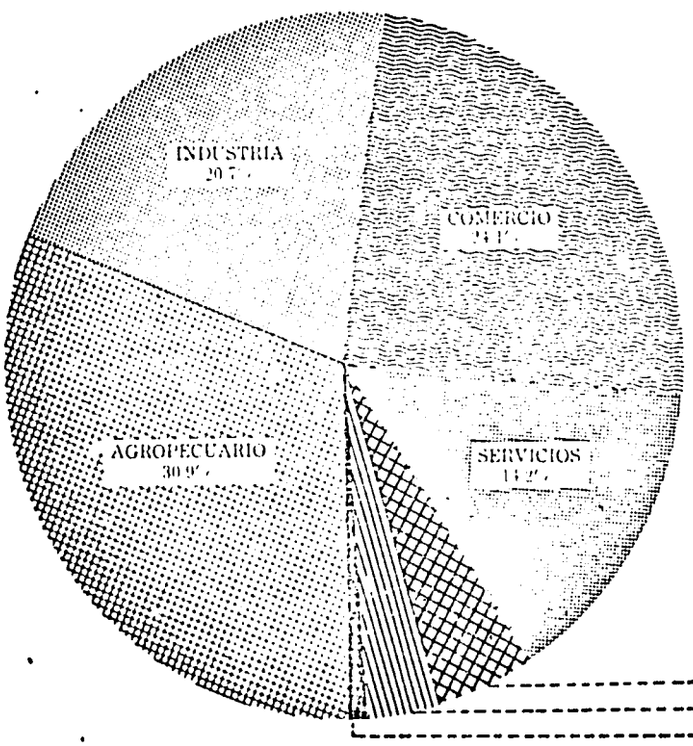
Estructura del Producto Territorial Bruto

(Precios Corrientes)



1973

SECTORES		%
AGROPECUARIO		27.8
INDUSTRIA		23.1
Manufacturera	18.1	
Construcción	3.4	
Electricidad	1.5	
Minería y Canteras	0.1	
COMERCIO		22.4
SERVICIOS		16.3
TRANSPORTE		4.5
VIVIENDA		3.6
FINANCIERO		2.3



1964

AGROPECUARIO		30.9
INDUSTRIA		20.7
Manufacturera	16.3	
Construcción	3.0	
Electricidad	1.3	
Minería y Canteras	0.1	
COMERCIO		24.1
SERVICIOS		14.2
TRANSPORTE		4.6
VIVIENDA		3.9
FINANCIERO		1.7

Source: Revista Mansual, Central Reserve Bank, December 1974

Table 3

PERCENTAGE COMPOSITION OF THE GROSS TERRITORIAL PRODUCT
BY ECONOMIC SECTORS OF ORIGIN

Sector of Origin	1967	1968	1969	1970	1971	1972	1973 (P)
Agriculture	27.1	26.3	25.5	28.4	26.9	25.3	28.7
Mining	0.2	0.1	0.1	0.2	0.2	0.2	0.2
Manufacturing	19.1	19.6	19.6	18.9	19.2	19.5	18.0
Public and Private Construction	3.1	2.5	2.8	2.8	3.0	3.5	3.3
Electricity, Water Sanitary Servic	1.4	1.5	1.5	1.5	1.5	1.5	1.4
Transportation and Communication	4.4	5.0	5.2	5.0	4.9	4.8	4.4
Commerce	23.8	23.6	22.7	21.1	21.7	22.3	21.6
Finance	1.9	2.0	2.2	2.2	2.3	2.3	2.9
House Construction	3.9	3.9	3.9	3.7	3.7	3.7	3.5
Public Administration	7.5	7.4	8.0	7.8	8.1	8.3	7.9
Personal Services	7.6	8.1	8.5	8.4	8.5	8.6	8.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(P) Preliminary

Revista Mensual, JANUARY, 1975

industry increased its relative claim slightly from 20.7 percent to 23.1 percent. The table shows that despite the emphasis on the industrialization process that has taken place in El Salvador during the past ten years, the structure of G.D.P. remains relatively unchanged. Table 3 gives a percentage composition of G.D.P. by economic sector since 1967. The agricultural sector, as a percentage of total G.D.P., ranged between a low 25.3 percent in 1972 to a high of 28.7 percent in 1973, exhibiting no clear trend over the seven-year period. Interestingly, 1967 percentage contribution of manufacturing industry was 19.1 percent, while by 1973 it had fallen to 18.0 percent. The Commerce sector also declined from 23.8 percent in 1967 to 21.6 percent by 1973. In short, agriculture has consistently contributed something over one-fourth of total G.D.P., during the past ten years and it has done so in spite of the relative neglect of the traditional sector by planning authorities. In 1973, agriculture remained the most important single sector in the economy at 28.7 percent of total G.D.P., followed by Commerce (21.6 percent) and Manufacturing Industry (18.0 percent).

Table 3a gives gross agricultural product for the period 1965-73 and it disaggregates the agricultural product into its major components. Coffee is clearly the most important single contributor to gross agricultural product, producing over one-third of total agricultural output, (¢359.8 million) followed in order of significance by cotton (¢83.2 million) corn (¢80.6 million) fruits and vegetables (¢46 million), sorghum (¢39.7 million) and sugar cane (¢35.4

TABLE 3a

GROSS TERRITORIAL PRODUCT
AGRICULTURAL SECTOR

AT CURRENT PRICES IN MILLIONS OF COLONES

ACTIVITY	1965	1966	1967	1968	1969	1970	1971	1972(P)	1973(P)
TOTAL	579.5	573.9	599.9	602.7	607.1	731.2	729.0	728.0	936.7
1. Agriculture ..	447.2	422.9	445.1	442.9	437.8	557.0	556.4	539.6	713.1
Coffee	229.9	222.7	234.3	219.5	217.1	302.2	284.5	273.6	359.8
Cotton	63.1	41.9	42.9	42.4	51.5	57.0	62.9	82.7	83.2
Corn	33.8	32.7	33.7	42.4	43.0	48.7	48.3	25.5	80.6
Beans	6.5	6.4	8.2	9.2	12.2	18.8	19.2	14.9	23.9
Rice	9.6	15.1	22.1	21.1	9.3	12.4	14.3	8.5	9.8
Sorghum	18.7	14.3	16.1	20.3	18.8	25.4	23.7	21.6	39.7
Sugar Cane ..	14.8	18.4	19.0	20.9	17.2	20.9	29.4	32.5	35.4
Brown Sugar.....	2.9	2.8	2.1	2.0	2.5	1.8	1.4	2.3	2.6
Tobacco	2.6	2.9	3.1	1.6	1.8	3.3	2.8	3.6	3.5
Cotton Seed	13.6	10.7	11.7	9.8	13.0	14.7	17.3	21.2	18.5
Henequen	2.0	1.9	1.3	1.5	1.1	1.0	1.1	1.9	2.1
Balsam	1.7	1.2	1.0	1.0	0.8	1.1	1.2	1.6	3.5
Copra	0.9	0.8	0.7	0.9	0.7	0.9	1.0	1.0	0.8
Fruits & Vege.	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0
Other (1).....	1.1	5.2	2.9	4.3	2.4	2.8	3.3	2.7	3.7
2. Livestock ...	72.4	78.0	86.6	89.0	92.4	95.4	91.8	101.9	124.7
3. Forestry ..	17.1	17.8	18.1	18.9	21.3	23.5	24.5	22.8	24.1
4. Fishing	7.3	12.2	10.7	12.5	15.3	15.7	17.3	20.0	25.0
5. Apiculture	0.6	0.7	0.6	0.8	0.7	0.6	1.3	2.6	3.7
6. Aviculture	34.9	42.2	38.8	38.6	39.6	39.0	37.7	41.1	46.1

(P): Cifras preliminares.

(1): Comprende: ajonjolí, semilla de aceituno, añil y copra.

' Banco Central de Reserva.

million). The most important small farmer crops include corn, beans, rice, and these collectively contributed in 1973 ₡154 million or 22 percent of total agricultural output. Inclusion of fruits and vegetables increases the percentage to 28 percent.

Institutional Credit Structure in El Salvador

The institutional agricultural credit system of El Salvador consists of the Central Reserve Bank, several private banks (two of which are foreign owned), one semi-private mortgage bank (Banco Hipotecario) the Federación de Cajas de Crédito, the Agricultural Development Bank (Banco de Fomento), the Cotton Cooperative, and the Coffee Institute. Other less important institutions include F.D.I., a private development bank, INSAFI, an industrial development bank, a private company specializing in subdivision of farmland (Parcelaciones Rurales), I.C.R., a semi-autonomous government institution financing government land purchases and resale to small farmers, FEDACACES, a credit union federation financing agricultural credit cooperatives.

Interest and Terms of Credit

In general, agricultural loans in El Salvador require considerable collateral, are made for less than one year, and carry rates of 8 to 12 percent per year. Of the public and private financial institutions, perhaps the only ones that come close to the target group in terms of provision of credit are, the Agricultural Development Bank, the Federación de Cajas de Crédito, and FEDACACES. Each of these lenders also provide credit for medium and large size farm units as well, and FEDACACES and Cajas have substantial portfolio in nonagricultural investments.

Agricultural Credit Sources in El Salvador

Two kinds of sources serve agricultural credit in El Salvador: institutional and non-institutional.

Institutional sources include banks and financial intermediaries as follows:

Public: Banco Central de Reserva, Banco de Fomento Agropecuario.

Private: Commercial Bank System and Foreign Bank Branches

Mixed: Banco Hipotecario de El Salvador

Nonbank financial intermediaries include:

Public: INSAFI, (Instituto Salvadoreño de Fomento Industrial)
FIGAPE, (Fondo de Garantía a la Pequeña Empresa)
Financiera de Desarrollo e Inversión

Private: Compañia Salvadoreña de Café, Cooperativa Algodonera, Federación de Cajas de Crédito Rural, FEDECACES.

Non-institutional Sources include: Inputs distributors, coffee milling and export business, sugar mills and exporters, merchants, etc.

Institutional Agricultural Credit in El Salvador

It is estimated that total institutional credit received by agriculture in El Salvador during the production period 1973/74 was approximately ¢400 million distributed as follows:

Institutional Credit - Agricultural Sector 1973/74

SOURCES[1]	¢ Millions
Commercial and Hipotecario Bank System	272.96
Banco de Fomento Agropecuario	29.7
Federación de Cajas de Crédito	14.0
Federación Cooperativas de Ahorro y Crédito	2.15
Other financial institutions of the system[2]	85.14
T O T A L	403.95

1/ Sources: Revista Mensual, B.C.R., Junio 1974, p 489 y 506; Banco de Fomento Agropecuario, Balance General al 31 de Dic. 1973; Memoria Federación de Cajas de Crédito, Ejercicio 1973-74, Anexo #5; Memoria FEDECACES, 1973, Anexo No. 1; Plan Operativo de Sector Agropecuario, 1974, MAG p. 25

2/ Mainly Cía. Salvadoreña de Café S.A., Coop. Algodonera, IRA, etc.

Table 4 shows agricultural credit by source and use for 1973. Total credit extended was ¢414,056,000, with 92 percent utilized for cultivation of crops and the remaining 8 percent for animal husbandry. The table shows that the overwhelming amount of credit was for operating capital (97%) while the remainder was authorized for fixed capital investment (3%). Agricultural credit through institutions rose from ¢324,865,000 in 1972 to ¢414,056,000 in 1973, an increase of twenty-seven percent within one year.

Table 5 gives agricultural institutional credit by use for the four year period 1969-73. Total agricultural and cattle credit rose from ¢171 million in 1969 to ¢414 million in 1973, for a four year increase of 139 percent. Operating, as opposed to fixed, capital was, throughout the entire period, the major claimant upon agricultural credit.

Table 4

AGRICULTURAL INSTITUTIONAL CREDIT BY SOURCE AND USE

1973

	BANCO COMERCIALES, HIPOTECARIO Y OTRAS INSTITUCIONES (2)	BANCO DE FOMENTO AGROPECUARIO (3)	COMPAÑIA SALVADOREÑA DEL CAFE 1/ (4)	COOPERATIVA ALGODONERA SALVADOREÑA LTDA. (5)	FEDERACION DE CAJAS DE CREDITO (6)	TOTAL (7)
	Thousands of Colones					
AGRICULTURE	302 055	17 322	47 568	2 533	10 922	380 400
operating capital	295 034	17 322	47 568	2 533	10 922	373 379
fixed capital	7 021	-	-	-	-	7 021
CATTLE	23 652	6 882	-	-	3 122	33 656
operating capital	19 450	6 882	-	-	3 122	29 454
fixed capital	4 202	-	-	-	-	4 202
TOTAL 1973	325 707	24 204	47 568	2 533	14 044	414 056
TOTAL 1972	254 165	16 721	44 007	2 500	7 468	324 861

*Source: Anuario de Estadisticas Agropecuarias, 1973/74, Ministerio de Agricultura y Ganadería, El Salvador, p. 11.

Table 5

AGRICULTURAL INSTITUTIONAL CREDIT BY USE, 1969 - 1973*

USE OF CREDIT	1969 (2)	1970 (3)	1971 (4)	1972 (5)	1973 (6)
	Thousands of Colones				
AGRICULTURE	158 040	177 616	253 954	306 730	380 400
operating capital	153 343	174 256	249 725	299 699	373 379
fixed capital	4 697	3 360	4 299	7 031	7 021
CATTLE	13 726	14 762	17 180	18 131	33 656
operating capital	10 622	11 043	14 596	18 131	29 454
fixed capital	3 104	3 719	2 584		4 202
TOTAL	171 766	192 378	271 134	324 861	414 056

* Anuario de Estádisticas Agropecuarias, 1973/74, Ministerio de Agricultura y Gánaderia, El Salvador, p. 10.

CHAPTER II

MONETARY POLICY IN EL SALVADOR: THE MONETARY BOARD THE CENTRAL RESERVE BANK, AND FINANCIAL SYSTEM INTEREST RATE STRUCTURE

THE STRUCTURE AND OPERATION OF MONETARY POLICY

The Monetary Board

The Monetary Board structure of Central Banking in El Salvador was established in August, 1973 as the primary decision-making body for monetary policy in El Salvador. It is responsible for the formulation of general financial policy guidelines which are implemented through the Central Reserve Bank and the Superintendency of Banks as well as the other financial intermediaries. Among its functions, the Board is empowered to change the parity of the Colón without need for ratification by another public body, authority for which, prior to 1973, was vested in the Legislature. The Board, whose chairman is the President of the Republic, is composed of the Ministers of Economy, Finance, and Agriculture, the Executive Secretary of CONAPLAN and the President of the Central Reserve Bank who acts as Board Secretary. As a result, therefore, monetary policy is executed by those with political interest (elected officials) in El Salvador. Distinct from the United States Federal Reserve System in which the Bcard of Governors is asemi-autonomous nonpolitical unit established on the basis of 14-year staggered appointment in order to mitigate the potential for political influence in the monetary policy, the Monetary Board of El Salvador is clearly empowered to reflect the political, social and development goals of the Executive and his appointees.

Decreto Ley #407, dated August 29, 1973, which established

the Monetary Board, lists the three basic considerations leading to the Board's establishment. First, "the State must orient monetary policy with the objective of promoting and maintaining the most favorable conditions for orderly development of the National Economy." Second, "in order to reach the objectives of development programs it is necessary that the State have at its disposal the adequate organisms to assure the realization of those programs that have general benefits." Third, "in order to give strict compliance to constitutional mandate and to achieve the objectives set out earlier it is necessary to create a body at the highest government level responsible for the formulation of State policy in matters of monetary, exchange rate and general financial policy."

In order to pursue monetary policy as an instrument of economic development, the Junta Monetaria, as outlined in the "Creación de la Junta Monetaria y Ley Monetaria de El Salvador, Article 1," pursues the following objectives:

> .....To create the Monetary Board as an organism that will have as its job the formulation and direction of State policy in matters of monetary, foreign exchange, credit, and financial policy in general oriented towards the economic and social development of the nation.

The Board is convened periodically as required on the call of the President of the Republic. The Board has control over the entire Salvadorean financial system which the Decreto Ley identifies as:

a. The Central Reserve Bank;
b. The institutions of credit and auxiliary organizations;

c. Official credit institutions;
d. La Financiera Nacional de La Vivienda and public/ private savings and loan companies;
e. insurance companies;
f. Cajas Cooperativas affiliated with issuance of credit;
g. societies and cooperative associations that involve matters of credit.

In short, the Monetary Board has control over all facets of monetary institutions and financial intermediaries.

The Monetary Board has blanket authority in the exercise of the tools of monetary policy, although in practice delegates much of the decisions to the Federal Reserve Bank. Decreto Ley #407 lists seventeen major responsibilities of the Monetary Board as follows:

(1) to fix and modify the percentage of deposits that individual financial intermediaries must place as reserves with the Central Bank, including both the form and the composition of those reserves;

(2) the approval of the monetary credit and foreign exchange budget prepared by the Central Bank, and therefore to estimate the monetary credit needs of the nation and assign priorities for optimum utilization of foreign exchange holdings;

(3) establishment of regular and special quotas for Central Bank credit on the basis of resources available to satisfy the financial needs of the different economic sectors of the country;

(4) establishes interest rates and other charges which financial intermediaries may require of their constituents;

(5) determine the quantitative and selective control of credit by establishing the maximum percentage of growth for total credit in the various credit classes; and

(6) establishes those credit documents which may be discounted or acceptable as collateral for loans from the Central Bank as well as the conditions for rediscounting through the Bank.

With regard to the role of the Monetary Board in foreign exchange, gold and special drawing rights (SDR's), the Monetary Board has five special charges. They include

(1) fix the legal parity or legal exchange rate for conversion of foreign money as related to the Colón;

(2) determine both the level and the distributional form of Central Bank international reserves;

(3) authorize whatever operation that significantly increases or decreases the Salvadorean quota with the International Monetary Fund as well as the matters that relate to IMF SDR's;

(4) dictate the regulatory methods of international transfer in the payments for monies;

(5) determine the limits, amounts, and other operational conditions of the Central Bank in the purchase and sale of securities

issued or guaranteed by the Central government, municipalities, economic institutions, and all state enterprises.

Additional important functions in which the Monetary Board has final authority include the

(1) regulation of consumer credit operations including limits and conditions of such credit, and approval of the establishment of consumer lending institutions;

(2) authorization of the emission of bills and other forms of money which may be issued by the Central Bank;

(3) designation of the government representatives and alternates to the International Monetary Fund, the International Bank for Reconstruction and Development and related organizations, the InterAmerican Development Bank and other international financial institutions which have relations with El Salvador or at least have ex officio representation in the country;

(4) naming of the personnel of the Superintendency of Banks.

In short, the Monetary Board appears to have close to absolute power in the determination of monetary policy. The 1973 Decreto also amends the Ley Orgánica del Banco Central de Reserva (Decree #496 in December 1961) by adding the following statement which indicates the fact that the Central Bank policy is at the leisure and discretion of the Monetary Board and the executive branch.

> "In order to obtain the earlier cited objectives, the Bank (Central Bank) will act in accord with the policies that are established by the Monetary Board."

Limits on Monetary Policy

One should take caution in assuming the policy statements of the Board can be fully implemented due to natural barriers.

a) Clearly, the Junta's control of the money supply is only within the boundaries of the natural laws of supply and demand for money. Further these boundaries are regulated under the present state of international exchange rate parity.

b) The degree to which credit may be directly allocated depends largely on whether or not the "rules" of the Central Bank can be enforced. The financial intermediary credit portfolio under control of the Central Bank may easily show an allocation of credit commiserate with the dictates of the Bank, while in fact loans were structured in such a manner so that allocation was left to the market. For example, a bank may be directed by the Central Bank to allocate credit as follows:

50% small farmer
20% large farmer
20% Commerce and Industry
10% Miscellaneous

The commercial bank can easily loan money to a large farmer to buy an airplane for dusting purposes. A dusting plane may be considered funded out of any of the four areas of allocation. The plane itself is indicative of a commercial tool. By the nature of the individual receiving the loan it may be funded from large farmer allocation. If the large farmer explained that there would be dust

settling on small farmer's property the money could easily be allocated from the small farmer's portfolio allocation. Clearly the financial intermediary is able to loan at his discretion as if no controls existed.

Though trite, this example illustrates the difference in theoretical and "real" credit allocation policy. It has been the experience of the Mexican authorities at the Banco de Mexico that the only effective credit allocation programs of the banks are those which lend themselves to Central Bank control, such as discounting.

Junta Directiva

Junta Directiva, the second most powerfu. monetary decision-making body in the country, was established by the Ley Orgánica del Banco Central in December, 1961 (Decree #496). It appears that, prior to the law of 1973 establishing the Monetary Board, the Junta Directiva was the primary decision-making body for monetary policy in the country. It consists of a President, who is named by the President of the Republic; three directors named by the President of the Republic who are chosen from nine persons proposed by a nominating committee consisting of the Ministers of Finance, Economy and Agriculture; and three directors named by the advisor of the Central Bank. In addition, there is a Vice-President who is named by the President of the Republic and six substitute Directors. The President, Vice-President, the Proprietary Directors and Substitute Directors are designed for a period of five years.

Tools of Monetary Policy

The following tools of monetary policy are at the disposal of the Central Bank and ultimately of the Monetary Board in the regulation of credit expansion.

Reserve Requirements. All credit institutions are subject to minimum reserve requirements which are established on deposits and other liabilities. The reserve requirements may be met with deposits at the Central Bank or with specified securities, but the proportion of the securities that can count towards reserve requirements may not exceed more than fifty percent of the total required reserves. For commercial banks and savings institutions the reserve requirements range from ten percent to 30 percent for sight and time deposits of less than ninety days, and from five percent to 30 percent for savings deposits. In special circumstances the bank may introduce marginal reserve requirements on sight and time deposits of less than ninety days. When the amount of reserve on deposit with the Central Bank represent more than fifty percent of a total deposit and other liabilities subject to reserve requirements, the Central Bank must pay interest on the excess. For savings the prevailing requirements for deposit banks and savings institutions, which were established in January, 1971, are 30 percent against all local and foreign currency, savings deposits and sight and time deposits of less than ninety days to be discharged only in deposits with the Central Reserve Bank. Time deposits more than ninety days are now subject to a reserve requirement, although they were readjusted recently.

Selective Credit Controls

Since 1965, the Central Reserve Bank has applied limits to the commercial loan portfolio of the credit institutions. All financial

institutions (with the sole exception of the Federation of Rural Credit Cooperatives) and insurance companies are subject to these requirements, and commercial lending for this purpose is defined to include all financing for imports and exports, domestic trade, personal loans and refinancing. At present, commercial loans are limited to 30 percent of an institution's total portfolio.

Rediscounts and Advances

The Central Reserve Bank is authorized to make loans to the banks and other credit institutions, except foreign owned banks, and since 1967 rediscount quotas for each bank have been established periodically. In 1966, the Central Reserve Bank also established the Economic Development Fund through which it could extend medium and long-term credits to State enterprises and financial institutions for relending to the private sector for special purposes such as agriculture and livestock improvements, development of manufacturing industries based on use of domestic raw materials, tourist industry, educational services. The Fund is financed mainly from the Central Reserve Bank's profits supplemented by receipts from the sale of Bank's securities and from foreign and domestic loans.

Documents carrying an interest rate of nine percent or more are not in general, eligible for rediscounting.

Interest Rates

The Central Reserve Bank is authorized to fix maximum rates of interest that banks may pay on deposits or charge on loans. However, with the exception of a maximum rate of interest of 12 percent

for personal loans, and the prohibition of payments of interest on sight deposits, interest rates in El Salvador are not subject to any legal limitations. Rates paid on deposits have been fixed by an understanding between the banks, and loan rates, other than for personal loans, are influenced to some extent by the rediscount rate of the Central Bank.

Rediscount Rate

The rediscount rates effective January, 1975, are as follows:

Rates of rediscount and interest of the Central Reserve Bank as published in the January, 1975 Revista Mensual include the following:

A. Rediscounts, advances, and loans

1. Current rediscount

a. Basic Rates (for users of credits up to ¢100,000 and with assets no greater than ¢500,000 and for cooperatives - 6.0%

b. Rate above basic (for the rest of users) - 9.0%

2. Special Rediscount

a. Basic Rate (same as 1a) - 6.0%

b. Rate above basic (same as 1b) - 9.0%

B. Advances with security collateral: Interest is equal as that provided for in the security.

Limits on Foreign Borrowing

Control by the Central Bank on the use of short-term foreign

borrowing of the commercial and mortgage banks was first exercised in 1961. Annual quotas are assigned for each institution. The largest quotas are assigned to the two foreign owned banks, which are not eligible for rediscount.

The Central Bank also controls the conditions for short-term borrowing abroad by private firms exporting agricultural products. In principle, these loans are only for the seasonal financing of the crops, and must be repaid by the end of the crop year. The use of suppliers' credits by importers also is regulated by the Central Bank.

Commercial and Hipotecario Banks in El Salvador

The following commercial and mortgage banks comprise the banking structure of El Salvador:

Commercial and mortgage banks	
a. Banco Hipotecario (Mortgage Bank)	A privately owned Salvadoran bank with government participation in its management. In addition to its normal functions as a deposit money bank, this bank carries out mortgage operations which are financed by the sale of mortgage bonds. Thirteen branches.
b. Banco Agricola Comercial	A privately owned Salvadoran bank with 15 branches.
c. Banco Salvadoreño	A privately owned Salvadoran bank with 15 branches.
d. Banco de Comercio	A privately owned Salvadoran bank with 16 branches.
e. Banco Capitalizador	A privately owned Salvadoran bank with 16 branches.
f. Banco de Credito Popular	A privately owned Salvadoran bank with 9 branches.
g. Banco Cuscatlán	A privately owned Salvadoran bank with 2 branches.
h. Bank of London and Montreal	A branch of a foreign-owned bank based in the Bahamas, with 5 local branches.
i. First National City Bank	A branch of a foreign-owned bank based in the United States, with 1 local branch.

In addition to the commercial banks which have the power to create credit on the basis of the policies established by the Monetary Board and the Directiva Monetaria, there are a number of non-bank financial intermediaries in the country. A list of the non-bank financial intermediaries and a short description of the structure is included in the following summary.

El Salvador: Structure of the Financial System (continued)

Name of Entity	Functions and Structure
	III. Nonbank Financial Intermediation
1. Salvadoran Institute for Industrial Development (INSAFI)	The Institute was established in 1956 and reorganized at the end of 1961, to promote the development of manufacturing industry. It is run by a president and a Board of six directors, three of whom are appointed by the Government, one by the Central Reserve Bank, one by the rest of the banking system, and one by the industrial sector. The Institute is authorized to grant and guarantee loans for industrial development, to participate in the capital of private enterprises, and to invest on its own initiative. Until 1967 INSAFI received substantial capital transfers from the Government, but the contributions were reduced in 1968 and eliminated in 1969. INSAFI has also received the proceeds of a U.S. AID loan to the Government and has borrowed from the IDB and the ECIE. In addition, INSAFI issued ₡ 2 million of bonds in 1957, of which ₡ 1 million was redeemed in 1969 and the remainder in 1970.
2. Guarantee and Finance Fund for Small Business	The Guarantee and Finance Fund for Small Business (the Fund) was created by the Government in 1973 as an expansion of the Guarantee Fund for Small Industry which had been operated by the Central Reserve Bank since 1970. The Fund provides credit directly to small commercial and industrial enterprises (defined as those having assets between ₡ 3,000 and ₡ 100,000, and employing at least 5 persons), and indirectly through their cooperative organizations. It also guarantees loans made by public and private institutions, as well as those granted by cooperative organizations of small businessmen, to small enterprises. The Fund's resources consist of the assets of the Guarantee Fund for Small Industry; government subsidies; short-, medium-, and long-term domestic and foreign credits which it might obtain; and credit from the Central Reserve Bank.
3. Agricultural Development Bank (BFA)	In 1973 the Government created the BFA to absorb and enlarge the agricultural development activities of the former Small Farmers Welfare Administration (AFC). In addition to the latter's resources, the BFA received a government grant, the transfer of agriculture-related special development funds until recently managed by the Central Reserve Bank, and will receive the proceeds from Agricultural Development Bonds to be issued by the Government. Small and medium farmers, as well as their organizations, are the beneficiaries of BFA's activities.
4. National Housing Finance Agency (FNV) and Savings and Loan Associations	In March 1963 the Assembly passed a law establishing the National Housing Finance Agency and authorizing the organization of savings and loan associations for financing the construction of medium-priced houses (i.e., with a value of less than ₡ 25,000 per house). Two savings and loan associations were organized at the end of 1964 and a third started operating at the beginning of 1965. These associations extend mortgage loans, repayable within 25 years, and finance up to 90 per cent of the value of a house. The loans may be rediscounted with the National Housing Finance Agency, which for this purpose is authorized to borrow abroad and to sell bonds in the domestic market.
5. Social Fund for Housing (FSV)	In 1973 the Government established the FSV in order to assist workers in the acquisition of adequate housing. The FSV provides loans to workers directly; to employers for the construction of workers' housing units; and to workers' cooperatives for the financing of home furnishings and furniture. In addition, the FSV may provide credit or make capital contributions for the promotion, establishment, and expansion of enterprises engaged in the construction of workers' housing units. The FSV may carry out its operations directly or through intermediaries approved by the Ministry of Economy. Resources consist of an initial Government transfer of ₡ 35 million to be paid in 5 years; 5 per cent of the worker's salary paid by the employer; one half of one per cent of the worker's salary paid by the worker; and future subsidies which may be granted by the Government.
6. Salvadoran Coffee Company (CSC)	The Salvadoran Coffee Company is a private corporation that was established in 1942, at the initiative of the Government, to participate in the marketing and export of coffee. The Company is run by a board of five directors, two of whom are appointed by the Government, two by the Coffee Association, and one by the Central Reserve Bank. The Company extends credit directly to producers, processors, and exporters of coffee. Credits to producers are granted just after the harvest, against future deliveries of coffee. The Company also gives commercial credits to processors, who in turn sometimes finance producers. It participates in the export of coffee, standing ready to buy or sell at prevailing market prices, and it operates a producers' pool for the sale of excess stocks. The Company operates primarily with its own capital and reserves, but in recent years the Company has also increased its use of Central Reserve Bank credit, for which it pays 4 per cent, and made use of lines of credit from foreign commercial banks.

El Salvador: Structure of the Financial System (concluded)

of Entity	Functions and Structure
III. Nonbank Financial Intermediaries (cont'd)	
Salvadoran Cotton Cooperative	The Salvadoran Cotton Cooperative was established in 1942 to stimulate interest in cotton production and exports. All producers of cotton must belong to the Cooperative, which has the monopoly of ginning and marketing cotton. The Cooperative does not finance the planting or the cultivation and harvesting cycles; it provides credit only after the crop has been harvested and delivered to its warehouses. It does provide technical advice and sells seed, fertilizer, and insecticides to producers, and it contracts for crop spraying. Marketing of the cotton is on a pool basis, whereby the Cooperative makes an initial advance against cotton delivered to the gin, with final settlement in October of each year, when the growers receive the balance of their share of the proceeds less ginning charges, marketing costs, and other expenses. The Cooperative finances itself from its own working capital derived mostly from members' contributions, and from Central Reserve Bank credits. It used to finance its operations largely by short term borrowing from foreign commercial banks, but in the 1969/70 crop year the Central Reserve Bank undertook to finance the Cooperative at a preferential interest rate of 3 per cent.
Federation of Rural Credit Cooperatives	The Federation of Rural Credit Cooperatives was established in 1943 to provide credit facilities to small- and medium-sized farms. It originally was capitalized by the Banco Hipotecario and by the coffee cooperatives, and it has received contributions and loans from the Central Government and credit from the Central Reserve Bank, part of which was financed by drawings on an IDB loan.
Private investment companies	
a. Investment and Development Finance Agency	The Agency started operations in May 1965, is owned by a consortium of local banks, and is authorized to grant credit for productive activities that favor the economic development of El Salvador and the Central American Common Market. In addition to its capital and reserves, the Agency has had access to Central Reserve Bank credit and has made extensive use of foreign credits, including a long-term loan from the U.S. AID and short-term loans from private foreign institutions.
b. Industrial and Commercial Credit Company	
c. Commercial and Industrial Finance Agency	
d. Agriculture and Commercial Finance Agency	
Insurance companies	There are eight insurance companies operating in El Salvador, of which two are foreign-owned. Since the introduction of exchange controls in 1961, the insurance companies have not been able to invest their technical reserves outside El Salvador. The insurance companies are supervised by the Superintendency of Banks, and their loan operations are subject to Central Reserve Bank regulations.

A synopsis of the agricultural sector and structure is provided in the following summary made available from the IMF Mission Report in 1973. It includes summary data on production, marketing, taxation and incentives, and credit facilities for the major export commodities including coffee, cotton, and sugar as well as basic grains and livestock. It is interesting to note that under the listing for credit facilities both for basic grains and for livestock there appears no statement, suggesting that most of these activities are outside of the credit facilities available at the present time.

El Salvador: Structure of the Agricultural Sector

	Production	Marketing	Credit Facilities	Taxation and Incentives
Agriculture and related sectors 1/	Accounts for about 25 per cent of GDP. About 50 per cent of the labor force are engaged in agriculture and related sectors. Information on El Salvador's land resources is given in SM/72/204, Appendix A. The Rural Colonization Institute is responsible for projects intended to increase agricultural productivity, and to improve living conditions in the rural areas. The Institute receives regular current and capital transfers from the Government which amount to about ₡ 2 million a year.	About 45 per cent of the gross value of agricultural production is exported. The Commodity Stabilization Institute was established to stimulate the production of basic foodstuffs and to regulate the marketing process so as to ensure adequate supplies at reasonably stable prices. The Institute is responsible for the regulation of prices for corn, rice, beans and sorghum and in this regard it is also responsible for the construction and maintenance of silos. The Institute finances most of its current operations through a line of credit with the Central Reserve Bank.	The Federation of Rural Credit Cooperatives provides credit to small and medium sized farms. The Development Fund was established in 1961 to provide medium- and long-term credit for production and industrialization of foodstuffs, and agricultural raw materials, and for conservation and marketing of agricultural products, as well as for development of extractive and tourist industries. The Fund finances its current operations through a line of credit from the Central Reserve Bank. The Agricultural Development Bank (BFA), provides credit to small and medium farmers as well as their organizations.	Shrimp exports are taxed according to Decree 154 of 6/5/61; see SM/72/204, Appendix F. A law to stimulate sea fishing beyond six miles from the coast grants the following exemptions for ten years; customs duties for fishing boats and parts, fishing accessories, and fuels used for fishing ships; income tax exemptions, and exemptions on net worth. A law was passed in November 1961 to encourage the formation of agricultural cooperatives. The law grants the following benefits: a. Total exemption of fiscal and municipal taxes on agricultural or agro-industrial buildings, production, and sale of agricultural products. b. Total exemption of import taxes and surcharges on agricultural machinery and equipment and its accessories; building materials; raw materials; chemical products and medicines for cattle raising; packing materials; and, raw materials used in the preparation of foodstuffs.
a. Coffee	Coffee is El Salvador's principal export commodity. It occupies the second largest area of land, exceeded only by corn. Coffee production accounts for 35 per cent of the export value of production of the agricultural and related sectors. About two thirds of El Salvador's coffee is grown in the departments of Santa Ana, La Libertad, and Usulutan. In all, there are about 34,000 producers, but most of the production comes from a relatively small number of farms of 66 hectares or more. The processing of coffee is mainly in the hands of about 270 private firms (beneficios). The Salvadoran Institute for Coffee Research (ISIC) is in charge of all research work for coffee such as improving quality, increasing yield and developing new coffee products.	Coffee exports represent about 45 per cent of all exports and about 75 per cent of coffee production. The Salvadoran Coffee Association is the most influential of the coffee organizations. Its purpose is to identify and solve problems of producers relative to production, distribution and consumption of coffee. An important role in the marketing process is played by the Salvadoran Coffee Company, a state sponsored organization which is owned by its member stockholders. It was established as a private corporation in 1941. The Company is run by a board of five directors, two of whom are appointed by the Government, two by the Coffee Association and one by the Central Reserve Bank. The Coffee Company stands ready to buy and sell coffee at prices based on the world market price, and it also administers the export quotas and organizes growers' pools for selling surplus production on domestic markets. Germany is the leading market for El Salvador's coffee followed by the U.S. Marketing of coffee [illegible] handled by about 80 exporters [illegible] exporters.	The Salvadoran Coffee Company extends credits to producers, processors and exporters. It grants credits to producers, just after harvest, against future deliveries of coffee.	Tax on ad valorem coffee exports decree 534 of 9/13/50. See SM/72/204, Appendix F.

El Salvador: Structure of the Agricultural Sector (concluded)

	Production	Marketing	Credit Facilities	Taxation and Incentives
b. Cotton	Cotton production is concentrated in three departments (Usulután, San Miguel and La Paz) which together account for about four fifths of total production. About 70 per cent of cotton is produced on large land holdings of between 65 and 340 hectares, representing about 9 per cent of the total number of farms. Cotton is produced by capital intensive methods: about 96 per cent of the area is cultivated by tractor and 57 per cent is planted by machinery; however, most picking is done by hand in order to maintain the fiber quality. Cotton is El Salvador's second ranking export crop. Cotton accounts for about 10 per cent of gross value of agricultural production. High yields (754 kgs. per hectare, average 1961-63) are achieved, and maintained, at fairly high cost as prices of fertilizers, insect control, and other inputs have increased. The Salvadoran Cotton Cooperative provides treated seed for planting, fertilizer and insecticides but producers are not required to use these. The Cooperative promotes such improved practices as disease and insect control, fertilization and soil conservation.	The cotton industry is closely regulated by the Salvadoran Cotton Cooperative established in 1942. All producers are required to hold membership and the Cooperative is the only ginner and purchaser in the country. Japan is the leading market for El Salvador's cotton fiber.	The Salvadoran Cotton Cooperative obtains seasonal financing from the Central Reserve Bank to carry inventories and to extend advances to its members. The Cooperative does not finance the planting, cultivation or harvesting cycles; it provides credit only after the crop has been harvested and delivered to its warehouses. The financing is on a pool basis, whereby the Cooperative makes an advance against cotton delivered to the gin, with the final settlement in October of each year, when the growers receive the balance of their share of the proceeds less ginning charges, marketing costs, and other expenses.	
c. Basic grains	Production of corn, beans, rice and sorghum account for about 13 per cent of gross value of agricultural production.	Basic grains are mostly consumed locally. During 1970, beans and corn were imported to satisfy local demand, whereas about 24,000 tons of rice were exported during 1968. The Commodity Stabilization Institute plays an active role in basic grains (see above).		
d. Livestock	Accounts for 22 per cent of the gross value of agricultural production.	The Ministry of Health is responsible for supervising the sanitary handling of meat for domestic consumption. El Salvador is a net exporter of live cattle; the animals are imported from Honduras and Nicaragua and are exported to Guatemala along with local animals. There are no import duties or quantity restrictions on imports of pure bred cattle. The Ministries of Agriculture and Health are in charge of quality controls regarding the production of milk and milk-related products.		Incentives to the poultry industry are extended in accordance with Decree 471 of December 1971, which grants 5-year exonerations of import duties on baby chicks, building materials, machinery and accessories, and raw materials. It also exonerates the poultry industry from local production and consumption taxes.

Source: U.S. Department of Agriculture. Agriculture and Trade of El Salvador, Washington D.C., 1971.

** Includes livestock and fishing.

Monetary Policy, 1974

The Monetary Board directed its policies in 1974 towards the financing of productive activities, attempting to minimize the inflation rate while maintaining an adequate level of international reserves, fostering the development of the financial market, and setting new interest rates. In the pursuit of appropriate policy the "Junta Monetaria" made the following changes in monetary policy in 1974.

A. Interest Rates

1. Approved rate increases in the financial system. The rate of interest paid by banks on savings deposits was increased from 4 to 5 percent, and from 6 to 6.5 percent for savings and loan associations. On CD's up to 180 days, interest rates were raised to 5.5% from 5 percent, and for those over 180 days to 6% from 5 percent.

2. Active Operations

The "Junta" ordered increased interest rates on the following:

a. Banco Central

1. Ordinary Rediscount and special lines:

	Rate "BCR"	Maximum Rate At Banks
Basic Rate	6%	9%
	9%	11%

BCR, following its policy of giving preferential treatment to agricultural activities, retained for that sector the lower interest rates approved until the 1st. of January.

ii. Ordinary Rediscount

	Rate "BCR"	Maximum Rate At Banks
Basic Rate	5%	7.5%
	6%	8.0%
	7%	8.5%
	8%	9.0%

iii. Special Lines

	Rate "BCR"	Maximum Rate At Banks
Basic Rate	4.5%	7.5%
	6%	8.0%

b. Commercial banks, Banco Hipotecario and other Credit Institutions and Insurance Companies:

Own Resources	Maximum Rate
Class "A"	
Up to 5 years	11%
More than 5 years	12%
Class "B"	
Up to 5 years	12%
More than 5 years	13%

3. Bond Issues

The "Junta Monetaria" increased the rates of interest on bonds and debentures issued or guaranteed by the government. Current rates are:

a. Bonds from 3 to 5 years:	7% annually, payable every 6 months
b. Bonds from 5 to 10 years:	7.5% annually, payable every 6 months

c. Bonds from 10 to 15 years: 8% annually, payable every 6 months

d. Bonds for more than 15 years: 8.5% annually, payable every 6 months

The primary reason for the rate increases is to provide an incentive for the purchase of the various instruments so as to strengthen the financial markets within the country. Commercial banks and the Banco Hipotecario must maintain as part of their reserves a minimum of 8 percent in credits and investments made with their own funds at issued value and/or guaranteed by the government. Insurance Companies must also maintain an investment in government bonds equal at least to 15 percent of their reserve.

The reasons for these changes were to reduce credit pressure on the "BCR" and to achieve a greater participation of the financial institutions in the financing to the public sector, insuring in this manner at least a potential market for the country's government issues. The net effect of the change was, in fact, a reduction in credit from the BCR to the Central Government, and an increase in bank purchases of bond issues, as can be seen on this table:

Year	Official	Government	Total (1)	%
1972	3.3	3.2	6.5	--
1973	3.9	5.4	9.3	43.1
1974	8.4	13.5	21.9	135.5

(1) Millions of Colones

4. Operating Fund

The "BCR", as authorized by the "Junta Monetaria", agreed to temporarily reduce the Operating Fund reserve requirement from 8 to 6.6% in order to allow credit institutions to meet credit demands from the various productive sectors. This reduction increased the credit capacity of financial institutions from 12.5 to 15 times their capital.

B. Effect of Interest Rate Increases on Savings and Term Deposits

The effectiveness of the increases in the rate of interest can best be appreciated by comparing the quarterly rate of growth for 1974 with those of the previous years.

Quarterly Rate of Growth of Savings and Term Deposits

	First	2nd	3rd	4th
		SAVINGS		
1972	5.2%	2.9%	1.2%	2.8%
1973	8.3%	2.9%	-0.6%	2.0%
1974	11.6%	7.8%	2.4%	2.2%
		TIME		
1972	5.6%	3.5%	12.5%	5.3%
1973	3.5%	9.9%	20.8%	5.6%
1974	8.5%	1.2%	-3.2%	-1.1%

Savings deposits in the first and second quarter of 1974 showed a slight increase in the rate of growth over the same period in 1973; the same growth pattern can also be observed in the last two quarters. Time deposits showed a rate increase of 8.5% during the first quarter of 1974, higher than the increase shown

for the same period the previous year. Both increases in the first part of the year were higher than for the same period the year before. This may be due, at least in part, to higher interest rates paid on savings and time deposits. One can deduce from the preceding that, though increased interest rates did lead to a temporary and partial increase in the use of savings and time deposits, the effect during the second half of the year was nil, since the rate of growth readjusted itself to previous patterns, with time deposits showing an even lesser growth rate.

The following explanations for the lack of public reaction to the changes in interest rates can be offered:

1. An increase in the rate of interest of just 1 percent was too small to attract more depositors.
2. The internal inflation rate has caused the public to demand less liquidity, reducing its investment in savings and term deposits and increasing purchases of real goods as an inflation hedge. It would appear wise to establish interest rates that at least offset the rate of inflation in order to provide incentive for stimulation of domestic savings and time deposits.

Monetary policy in 1974 was somewhat restrictive if one considers the credit limits set on the banking system through the "Programa Monetario", but largely expansionistic considering the increase in the credit capacity of the commercial banks through the reduction in the Operating Fund reserve requirements.

II. Monetary Base

The monetary base can be measured by totalling the monetary liabilities of the BCR, (Demanda de Base Monetaria) or by adding the asset column of the BCR called "Fuente y Oferta de Base Monetaria." What is important is to distinguish between that which is made available by the financial authorities, and the demands upon the monetary base of other sectors within the economy. The "Oferta de Base Monetaria" is made up of two entries which determine its behavior: the net "external" assets of the BCR and the credit extended by the BCR to the various economic sectors.

The most important expansionist component of the "Oferta de la Base Monetaria" was net credit under the control of the BCR. The credit expansion of ¢214.5 million was centered around the financing of the official entities of the banks in the system (33.5% of the total), and of the private sector (18.7%). This can be seen on the following table

Assets BCR
(Millions of Colones)

		1973	1974	Absolute	Comp % of Total
I.	External Sector	71.4	46.5	117.9	
II.	Internal Sector	412.5	627.0	214.5	100%
	1. Credit Public Sector	21.3	12.5	33.8	-15.7
	2. Credit Private Sector	89.8	128.4	38.6	18.0
	3. Credit Official Entities	83.8	224.5	140.7	65.6
	4. Credit Banks	217.6	286.6	69.0	32.2

Net credit to the central government (loans to the government - deposits from the government) suffered a considerable reduction in 1974, caused primarily by the small investment from the BCR in bonds and by the increase of 53.6 percent in the deposits made by the government at the BCR.

Demands on the monetary base, represented by the liabilities of the BCR, increased by ¢86.7 million. This was due mainly to general public (not banking) demands for currency. Approximately 45.5 percent of the variation in the demands on the monetary base is explained by the demand for obligatory reserves implying a demand derived from the total deposits, reflecting the decisions of the commercial banks and the general public. In 1974, the monetary base registered a rate of growth of 18.2 percent as compared t. 15.7 percent in 1973. This is accounted for by the increase of currency in public hands, due to a higher rate of inflation, and increased currency-deposits ratios. This implies an awareness on the part of the public of increased monetary instability.

As a result, the means of payments reacted mainly to the credit expansion of the BCR, since it is the main source of liquidity. The BCR directed its expansionary credit policy towards the financing primarily of autonomous official activities, and applied a partly restrictive credit policy to the banks in the system whose rate of credit expansion in 1974 was less than that of the year before. This can be seen even more clearly on the following table:

Credit Performance of The BCR

Sector	72/73	73/74
To Banks	51.7%	31.7%
To Other Financial Institutions	16.0	43.0
To Official Autonomous Institutions	10.8	167.9
To Central Government	-37.0	-58.4

III. Origin and uses of "BCR" resources

A. Mobilized Internal Resources: total internal resources mobilized during 1974 increased ¢117.7 million, derived mainly from an increase in the BCR monetary obligations to commercial banks (deposits into BCR) and to the private sector (circulating currency).

B. Credit Expansion: there was a credit increase in 1974 of ¢235.6 million, demanded primarily by official autonomous entities and commercial banks plus Banco Hipotecario.

C. Financing of Credit Expansion: the increase of ¢235.6 million in BCR credit, was financed with ¢117.7 million in internal resources and ¢118.0 million in external resources. Of all the available resources (320.4 million), ¢84.7 were channeled to reinforce net international reserves, and the difference (¢235.7 million) went to the financing of the aforementioned credit expansion.

IV Origin and uses of Banking System Resources

1. Mobilized Internal Resources

Internal resources mobilized during 1974 increased by ¢193.4 million. The increase was largely due to a circulating currency increase of ¢99.7 million and to non-monetary liabilities totalling ¢97.8 million.

B. Credit Expansion

Given the uncertain economic condition described above, the banking system in 1974 increased credit utilization by 27.8 percent, as compared to a 19.5 percent increase in 1973 over 1972. The total amount ¢322.9 million, was absorbed primarily by the private sector (¢201.8 million), and by the autonomous institutions (¢145.2 million) as their financing through BCR reached an unprecedented level. Credit extended directly to the central government was reduced by ¢12.4 million due mainly to a reduction in BCR investment in bonds and debentures.

C. Financing of Credit Expansion

Credit expansion was financed with resources totalling ¢396.2 million, of which ¢193.4 million corresponded to internal resources and ¢202.8 million to resources from outside the country as this year the BCR was forced to borrow ¢158.7 in long term debt and utilize ¢53.9 million from the FMI oil facility. This expansion caused a worsening of the external situation in the country, as the net external assets dropped from ¢55 million in 1973 to a ¢74.6 deficit, a reduction of ¢129.6 million. From these resources ¢73 million went to reinforce the net international reserves with the ¢323 million difference serving to finance economic activities within the country. As a result, the system's credit expansion was financed 60 percent with internal resources and 40 percent with external resources.

Analysis of Monetary Expansion Effects of Bond Issuance

The 1974 decisions by the "Junta Monetaria" to allow rates of interest on government guaranteed bonds to rise was made in order to increase the strength of the internal financial market. As this shifts some of the burden of government deficit financing from the BCR to the commercial bank sector, pressure to finance government debt through expansionary monetary policy is relieved. Traditionally, countries which do not have fully developed fiscal financing systems have chosen to become dependent upon the commercial banking system to finance government debt.

Some feel this method of shifting debt is very effective and it has been considered non-expansionary. However, the last statement is not necessarily true. The replacement of deposits of financial intermediaries at the BCR by government bonds actually is expansionary in itself. Let us assume that commercial banks have a 20 percent reserve requirement of which zero percent is held in the form of government bonds. Now suppose the commercial banks are allowed to keep half of their reserves in government bonds. As these bonds are interest bearing while deposits at the BCR are not, it is rational for commercial banks to move from deposits at the BCR to reserves in the form of public debt. The net result is a transfer of funds through the financial intermediaries from the BCR to the government. Essentially, the effect is to expand the money supply though not the monetary base. The base remains the same, but the multiplier is increased. Of course, this explanation is simplified as to the actual expansionary effect on the money supply. However, it is illustrative of the

pitfalls some countries encounter while trying to finance government deficits through supposedly non-expansionary financing.

Land Purchase Bonds and the Money Supply

To the extent that government financing of land purchases are made by issuance of government bonds and these bonds are held as reserves by the financial intermediaries, the program is expansionary. If the financial intermediaries do not enter into this transfer of funds from the BCR reserve accounts either because of already having a maximum amount of bonds used as reserves or because of portfolio decisions, the issuance of bonds carries no expansionary effect. In this case, the bond issuance is a simple transfer of funds from the public sector to the government sector.

EL SALVADOR

FINANCIAL SYSTEM - RATES OF INTEREST

A. Liabilities

1. Deposits

Commercial Banks and "Banco Hipotecario"

a) Savings Accounts	5.0% annually compounded daily
b) Certificates of deposit	
Up to 180 days	5.5%
More than 180 days	6.0%

Savings and Loans Associations

Savings Accounts	6.5% compounded daily

2. Bonds and Debentures

a) Short Term	
Public and private financial institutions	Interest rates to be determined when issuance permission is requested.
b) Medium and Long Term	
Private financial institutions	No less than 2% below the rate of interest earned by the instruments backing the bond emission

Public Sector

Instruments issued or guaranteed by the State	
5 to 10 years	7.0% annually payable every 6 months

10 to 15 years	7.5% annually payable every 6 months
15 years or more	8.0% annually payable every 6 months

B. Assets

"Banco Central de Reserva"

	Rate at "BCR"	Maximum Rate to Borrower
1. Rediscount, Advances and Loans		
a) Ordinary rediscount		
Basic rate (for loans up to ¢100,000 and for co-ops)	6%	9%
Rate above the basic (for all other borrowers)	9%	11%
b) Special Lines		
Basic rate (for loans up to ¢100,000 and for co-ops)	6%	9%
Rates above the basic (for all other borrowers)	9%	11%
c) Processors - exporters	The rate of interest charged by the coffee processors-exporters to the producers may not be more than 2% higher than the interest these pay a financial institution.	
2. Advances with stocks or bonds as collateral	Same rate as the rate earned by the collateral.	
3. Autonomous non-financial government institutions	Rates to be determined by the lending bank taking into account the income-yield capacity of the project for which funds are used.	
4. Loans made from foreign funds	Rates to be determined by "BCR", taking into account the conditions and characteristics of the loan agreement.	

Commercial Banks and "Banco Hipotecario"

1. Loans from own funds	
a) Class "A"	
Less than 5 years	11% on the unpaid balance
5 years or more	12% on the unpaid balance
b) Class "B"	
Less than 5 years	12% on the unpaid balance
5 years or more	13% on the unpaid balance
c) Loans from short term foreign funds obtained directly	Up to 2% higher than the rate paid on the funds.
d) Loans from long term foreign funds obtained directly	Rates to be set by "BCR" taking into account the conditions and characteristics of the loan agreement.
2. Loans with "BCR" funds	Whatever "BCR" itself determines, according to its resources and within current "Junta Monetaria" norms.

Other private Loan Institutions and Insurance Companies

	Maximum Rate
1. Loans from own funds	
a) Class "A"	
Less than 5 years	11% on the unpaid balance
5 years or more	12% on the unpaid balance
b) Class "B"	
Less than 5 years	12% on the unpaid balance

5 years or more	13% on the unpaid balance
c) Loans to policy holders with funds drawn out of reserves	Rates set in accordance with the contractual stipulation of the policies or titles as applicable.
d) Loans from short term foreign funds obtained directly	Up to 2% higher than the rate paid on the funds.
e) Loans from long term foreign funds	Rates set by "BCR" taking into account the conditions and characteristics of the loan agreement.
2. Loans from "BCR" funds	Whatever "BCR" itself determines, according to its resources and within current "Junta Monetaria" norms.
Savings and Loans Associations	Rates to be set by "BCR" having considered the judgment of "La Financiera Nacional de la Vivienda".
"Compañia Salvadoreña de Café, S.A."	Rates to be set by "BCR" having considered the judgment of "La Junta Directiva de la Cía. Salvadoreña de Café".
"Federación de Cajas de Crédito"	Rates to be set by "BCR" having considered the judgment of the board of directors of "La Federación de Cajas de Crédito".
Public Financial Institutions	
(Banco de Fomento Agropecuario, INSAFI, FIGAPE, FNV, etc.)	Rates to be set by "BCR" having considered the judgment of their respective boards of directors.

B. COMMISSION RATES ON LOAN SUPERVISION AND CONTROL

When it is necessary for a lending institution to supervise the use of loaned funds, or in a similar manner control and oversee its investment, and this service is performed effectively, the institution may charge the borrower:

1.	On construction loans:	
	a) Individual home, on loaned amount	1% maximum
	b) Group homes, on loaned amount	1% maximum
	c) Urbanization projects, on loaned amount	1% maximum
	d) Industrial construction, agricultural, commercial, touristic and the like, on loaned amount	Subject to approval by the "Superintendencia de Bancos" and other financial institutions.
	e) Other control and supervision costs, such as having to take control over the project, or any expense incurred while attempting to collect on the loan.	Subject to approval by the "Superintendencia de Bancos" and other financial institutions.
2.	On agricultural loans	¢50.00 maximum
3.	On cattle loans	¢50.00 maximum

NOTE:

Commission fees for "Supervision and Control", when paid for in advance of a loan, are subject to the following rules:

a) They are considered as a deposit on the payments until the loan is formalized;

b) If the loan application is turned down, without the lending agent having incurred any supervision expenses, they must be refunded in total;

c) If the loan application is turned down, but the lending agent has already incurred supervision expenses such as reviewing blueprints or making feasibility studies, these expenses may be charged against the fee and what's left refunded the applicant;

d) If the loan is approved but for a lesser amount than requested, a refund of the supervision fee must be made to maintain the just proportion between the fee and the amount lent.

C. LATE PAYMENT CHARGES

Charges to be based on the loan balance still due.	2% annual maximum

D. "COMPROMISO" CHARGE

On loans requiring the periodic partial disbursement of funds, a charge may be made on funds not withdrawn within the agreed time period.	1% annual maximum

E. CHARGE FOR LEGAL EXPENSES

The lending agent may charge a fee for legal expenses incurred which would normally be paid by the borrower.	The exact cost of the legal expense.

CHAPTER III

THE INFLUENCE OF CREDIT CREATION UPON THE EL SALVADOREAN BALANCE OF PAYMENTS: ARE DOLLAR LOANS REQUIRED FOR EXPANDED AGRICULTURAL CREDIT TO RURAL POOR?

Macroeconomic Implications of Credit

Any development program designed to bring credit to the small farmer of El Salvador can have major economic implications not only for sectoral, but also national, economic development. The approach of this section is not to analyze the real effects of increased credit to small farmers on the economy, but to examine the effects of credit expansion on the monetary sector. Once alternative implications are examined and policy alternatives are agreed upon, then one may further analyze the alternative real changes which could be generated by credit allocation.

One question central to this analysis is "what are the alternative procedures by which the small farmer may be financed - internally or externally?" What are each policy alternative effects on the balance of payments and maintenance of a stable exchange rate within the historical context of the El Salvadorean monetary policy? To properly analyze these questions we shall examine the balance of payments of El Salvador following a monetary approach which is presently under intensive review in the literature. The following section theoretically and empirically examines monetary demand and the monetary approahh to balance of payments for El Salvador for the period 1950-74.

Review of the Theoretical Literature on Monetary Balance of Payments

Although the view that the balance of payments is essentially a monetary phenomenon is relatively new, its rationale can be traced to David Hume and his discussion of the price specie-flow mechanism. Hume argued that a country's stock of money would be adjusted exactly to the demand for money in that country through surpluses or deficits in the balance of payments.

Though Hume's work is basically the forerunner of the modern monetary approach, it differs in a number of respects. The major theoretical work on balance of payments was essentially elaborations of Hume's work until the 1930's when the collapse of the international monetary system led economists to seek alternative explanations. While Hume's theory rested on automatic adjustment, the Keynesian revolution postulated a theoretical framework that challenged the assumptions of automatic adjustment and replaced it with the view that the balance of payments was a policy problem of the government. Johnson notes[1].

> On the Keynesian assumptions of wage rigidity, a devaluation would change the real prices of domestic goods relative to foreign goods in the foreign and domestic markets, thereby promoting substitutions in production and consumption.
>
> On Keynesian assumptions of mass unemployment and repercussions of these substitutions on the demand for domestic output would be assumed to be met by variations in output and employment and repercussions of such variations onto the balance of payments regarded as secondary.

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[1] Harry Johnson, Further Essays in Monetary Economics (Cambridge: Harvard University Press, 1973) p 231

> Finally, on the same assumption together with the general Keynesian denigration of the influence of money on the economy and concentration on the short-run the connections between the balance of payments and the money supply and aggregate demand could be disregarded.

Other economists in the Keynesian and post-Keynesian periods discussed balance of payments primarily in light of trade theory while leaving the monetary sector a secondary role[2].

Although there has been relatively little theoretical and empirical work on the role of money in international trade, it was Meade in the 1950s and Mundell in the 1960s who began stressing its influence in managing the balance of payments while being sometime committed to a goal of full employment[3]. Mundell has stressed the proper mix of monetary and fiscal policy in achieving balance of payments and full employment simultaneously. According to Mundell one may use these two policy instruments for different objectives, with monetary policy having a more significant effect on the external sector than fiscal policy. He believes that monetary policy may be paired with the objective of maintaining an external balance while

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[2] See Jacob Viner, Studies in the Theory of International Trade (New York: Harper Brothers, 1973); F. W. Taussig, International Trade (New York: MacMillan Company, 1937); Joan Robinson, "The Foreign Exchange" Readings in the Theory of International Trade (Homewood, Illinois: Irwin, 1950) pp 23-103.

[3] See J. E. Meade, The Balance of Payments (London: Oxford University Press, 1951); and R. Mundell, op.cit., Chapter 16.

fiscal policy is paired with the internal sector. Following Mundell's seminal work in 1968 several economists have contributed to the literature on monetary approach to the balance of payments. Among those who have more recently offered theoretical and empirical insight on the issue are H. Johnson, R. Zecher, and B. Aghevli[4].

While the monetary approach is gaining theoretical support in the literature very little empirical work has been undertaken. Indeed, there has been no application of the model to an emerging country. Mundell, Johnson, and Frenkel and Rodriguez have mainly dealt with the theoretical implications of the model. Johnson notes that monetary models of the balance of payments are basically simple since they concentrate on the overall balance of payments while ignoring individual accounts and possible changes in the structure of payments over time.[5] Though simple, the basic monetary models are logically derived given the view that the balance of payments is essentially a monetary phenomenon. Aghevli and Khan state[6]

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[4] See Harry Johnson, op. cit.; J. Frenkel and C. Rodriguez, "Portfolio Equilibrium and the Balance of Payments: A Monetary Approach", AER Papers and Proceedings (forthcoming); A. B. Laffer, "Monetary Policy and the Balance of Payments", Journal of Money Credit and Banking Vol. 4 (May, 1971); M. G. Porter, "The Interdependence of Monetary Policy and Capital Flows in Australia", Economic Record (August, 1974); R. J. K. Kouri and M. G. Porter, "International Capital Flows and Portfolio Equilibrium", Journal of Political Economy, Vol. 82 (August, 1974); Richard Zecher, "Monetary Equilibrium and International Reserve Flows in Australia", Journal of Finance Vol. 29 (Dec. 1974) pp 1523-30.; cit.; Bijan B. Aghevli and Mohsin S. Khan, "The Monetary Approach to the Balance of Payments Determination: An Empirical Test," Presented at the American Economic Association Convention, Dec. 1974.

[5] Harry Johnson, Ibid. p.237

[6] B. B. Aghevli and M. S. Khan, op. cit. pp 1-10

> In the framework of the monetary approach the balance of payments position of a country is considered a reflection of decisions on the part of its residents to accumulate or rundown their stock of money balances. It is this process of adjustment to the desired stock of money balances that result in balances of payments deficits and surpluses.

Given the world mobility of capital and goods combined with the assumptions of a fixed exchange rate and full employment of resources, the importation and exportation of capital from a small country will not affect prices. They are exogeneously determined by world prices. If one assumes interest rates are also exogeneously determined then any excess demand for money by the internal sector must be met by an increase in the domestic money stock or from foreign borrowing. If one assumes that the domestic money is not increased to meet the new demand for funds there will automatically occur an increase in international reserves or a balance of payments surplus. The channel by which the excess funds arrive is of no importance here since the issue is the final balance of payments position and not the means by which the surplus is generated; i.e. the current or capital account.

In short the model assumes that prices are determined exogeneously, the interest rate is equal to the world rate, and the country is at equilibrium full-employment. These premises follow from the assumptions of mobility of goods and services between countries in the goods market and freely flowing funds in the capital market. H. Johnson notes that this model does not suggest the money illusion which some of the more standard models require for adjustment[7]. Clearly, given a fixed exchange rate the assump-

7 Harry Johnson, op. cit., p. 237

tion of world price arbitrage denies the necessity of money illusion for adjustment. Further, the assumption of full employment is defendable on the grounds that the monetary approach is essentially one dealing with the long-run. The relationship between excess demand for money balances and the balance of payments raises an aforementioned implication: an increase in real income leads to increased demand for real cash balances, generating an inward force on foreign reserves. Therefore, economic growth will generate an inflow of foreign reserves. This is contrary to both the standard Keynesian models and the Hume specie-flow mechanism. Where growth leads to increased money demand by raising real income, ceteris paribus, it will be positively related to reserve movements.[8] The Hume specie-flow mechanism, on the other hand, implies that growth in real income will generate increased demand causing a rise in relative prices in the home country. This generates an eventual reserve outflow as domestic demand for imports rises. The reduced money stock associated with the reserve outflow will then lower income and prices into equilibrium. This argument does suggest adjustments of reserves to excess demand or supply of money but adjustment through the goods market without consideration of the capital account. Furthermore, all money is considered outside money assuming no central bank capable of creating monies not backed by international reserves. Also, Hume appeals to relative price changes as his mechanism for adjustment where the monetary model allows prices to be determined exogeneously.

The monetary model is therefore similar to the Hume model in

[9]Richard Zecher, op. cit., pp. 1523-30.

that they both have automatic adjustment mechanisms. However, they differ in that the monetary approach permits reserve balances to adjust directly to excess demand and supply of money instead of to the price movements postulated in classical theory.

The model may be defined in seven steps. The stock of high power money is related to the money supply in the following identity statement:

$$M = a \cdot H \tag{1}$$

where M = money supply, a = the money multiplier, and H = the stock of high powered money.

The monetary authority's balance sheet sppears as follows

Monetary Authority Balance Sheet

Assets	Liabilities
R	H
OA	OL

where R = international reserves, OA = assets of monetary authority other than R, and OL = liabilities other than high powered money.

Therefore,

$$H \equiv R + (OA - OL) = R + D \quad \text{where} \tag{2}$$

D = OA - OL = domestic credit

Substituting (2) into (1) we derive a new money supply function:

$$M = a \cdot (R + D) \tag{3}$$

Zecher postulates a money demand equation in the form

$$(M/P) = \frac{Y^{\alpha_1} e}{i^{\alpha_2}} \quad \text{where} \tag{4}$$

p = the price index
Y = permanent income
i = the rate of interest
c = a stochastic disturbance term

Assuming money demand is homogeneous of degree one, (4) is rewritten as:

$$M = \frac{PY^{\alpha_1} e}{i^{\alpha_2}} \tag{5}$$

Since $M = a \cdot (R + D)$ then $a \cdot (R + D) = \frac{PY^{\alpha_1} e}{i^{\alpha_2}}$ (6)

As we are interested in percentage changes in the variables a transformation is necessary.

$$\ln a + \ln (R + D) = \ln P + \alpha_1 \ln Y - \alpha_2 \ln i + \ln e \qquad (7)$$

Now differentiating (7) with respect to time.

$$\frac{1}{a}\frac{da}{dt} + \frac{1}{R+D}\frac{d(R+D)}{dt} = \frac{1}{P}\frac{dP}{dt} + \frac{\alpha_1}{y}\frac{dy}{dt} - \frac{\alpha_2}{i}\frac{di}{dt} + \frac{1}{e}\frac{de}{dt}$$

Define $gx = \frac{1}{x}\frac{dx}{dt}$ where x = a, R, D, y, P, and i

$$ga + \frac{R}{R+D} gR + \frac{D}{R+D} g_D = gp + \alpha_1 gy - \alpha_2 gi$$

from (2)

$$ga + \frac{R}{H} gR + \frac{D}{H} gD = gp + \alpha_1 gy - \alpha_2 gi$$

Defining

$(\frac{R}{H})$ gr as the dependent variable

$$(\frac{R}{H})\, gr = \alpha_1 gy - \alpha_2 gi + gp - ga - (\frac{D}{H})\, gD \qquad (8)$$

As evidenced in equation (8) the variation in the foreign reserves held depends upon the percentage change in income (gY), the percentage change in the interest rate (gi), the percentage change in the price level (gp), the percentage change in the money multiplier (ga), and the percentage change in domestic credit (gD) multiplied by D/H. This follows from equation (3) which shows that every change in the money stock is related to changes in the amount of reserves. Therefore, if changes in the money stock result from the postulated money demand relationship, changes in foreign reserves depend upon the same factors as changes in money

demand. As noted earlier, a positive α_1 is anticipated since income is positively related to reserve flow via the money demand equation. Further, domestic credit is negatively related to reserve flows. Both of these conclusions are in disagreement with one or more of the Keynesian theories on the balance of payments.[9]

The relationship of domestic credit to international reserves in the monetary model offers a policy outline that is straightforward for increasing foreign exchange reserves. A contraction in the domestic money supply will necessarily cause reserve inflow (ceteris paribus). Therefore, to correct a negative balance of payments the policy strategist should be concerned with keeping domestic credit expanding at a slower rate than money demand. The nature of the model is, as H. Johnson remarked, simple. The fact that it ignores some of the channels of reserve creation does not distract from the model's theoretical and empirical usefulness.

The Demand for Money

The purpose of this section is to determine the theoretical specification for the demand for real and nominal money in El Salvador. While such analysis has been undertaken by several economists, one of the more successful studies was by Phillip Cagan in 1956.[10] Cagan, though primarily interested in hyperinflation, offers insights into why individuals hold money. Milton Friedman's analysis on money demand is helpful in specifying the appropriate demand for money variables.[11]

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[9] H. Johnson points out that the monetary model may be contrasted with various Keynesian theories of growth and the balance of payments. He notes that one theory suggests that growth necessarily leads to a reserve outflow (completely ignoring the demand for money effects) while the other suggests "domestic credit expansion will improve the balance of payments by stimulating investment and productivity increase and thereby lowering domestic prices in relation to foreign prices and improving the current account through the resulting subsitutions of domestic for foreign goods in the foreign and domestic markets. H. Johnson, op. cit., p. 240.

[10] Phillip Cagan, "The Monetary Dynamics of Hyperinflation," Studies in The Quantity Theory of Money, edited Milton Friedman (Chicago) Univ. of Chicago

The fact that the demand for money is an integral part of the monetary approach to balance of payments may be illustrated by reference to equation (4). Equation (4) is a real money demand equation which takes the form

$$(M/P) = \frac{Y^{\alpha} l_e}{r^{\alpha_2}} \qquad (9)$$

where

P = the price index
Y = permanent income
i = the rate of interest
e = a

The resulting theoretical equation for reserve flows derived from (17) is given by

$$\frac{(R)}{H}\, gr = \alpha_1 gy - \alpha_2 gi \neq gp - \frac{(D)}{H}\, gD.$$

Thus, final specification of the reserve flow equation depends upon the definition of money demand. It is therefore necessary to develop further the demand for money relationship prior to specification of the appropriate reserve flow equation.

There are a number of models in money demand theory that may be utilized to postulate a money demand equation. The real demand for money (M^d/P) is a function of several key variables. The Cambridge equation shows that $\frac{\text{money}}{\text{prices}} = \frac{kY}{\text{prices}}$ where $k = 1/V$, and V is velocity in the Fisherian sense. As a result $(M^d/P) = f(Y,V)$ i.e. real money balance is positively related to real income (Y) and to the inverse of velocity. What are the factors determining V, and what, therefore will stimulate changes in k? It is this change in (k) which is critical to money demand analysis and, as Deaver notes characteristic of the "simple way that characterizes modern quantity theory approach.[12]

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[11] M. Friedman, "The Quantity Theory of Money - A Restatement," Studies in the Quantity Theory of Money, Univ. of Chicago Press, 1956, 3-210.

There are several variables which affect k. In analyzing economic order under conditions of rapid inflation, Deaver and Cagan, following the postulates of Friedman, show that the cost of holding money motivates individuals to alter their real money balances.[12,13] If the rate of inflation rises, one expects, according to Deaver and Cagan, individuals to economize on real money balances as the cost of holding these balances increases. Since those holding monetary balances adjust them to the anticipated costs of holding money, the appropriate cost variable determining the amount of money demanded is the expected cost of holding an asset. In the case of money the expected cost is the anticipated rate of inflation. Other variables that would fully specify a money demand equation, according to Friedman, would encompass the nominal return on bonds and equities, the ratio of human to non-human wealth, and individual tastes and preferences.

A fully specified money demand equation is, therefore,

$$\frac{M^d}{P} = g(Y,\ V,\ i_B,\ i_E,\ \frac{W_N}{W_h},\ t) \qquad (10)$$

where

i_B = rate of return on bonds

i_E = rate of return on equities

$\frac{W_N}{W_h}$ = ratio of nonhuman to human wealth

t = tastes and preferences

V = anticipated rate of inflation

This enumeration of independent variables may be utilized to specify the appropriate money demand equation for El Salvador. The lack of

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[12] John Deaver, "The Chilean Inflation and Demand for Money," in Varieties of Monetary Experience, Editor David Meiselman (Chicago: University of Chicago Press, 1970), 23.

[13] M. Friedman, The Optimum Quantity of Money and Other Essays (Chicago, Aldine, 1650.)

data available on (1) the ratio of nonhuman to human wealth and (2) tastes and preferences requires that these be eliminated from the money demand equation. Because of (1) questionable reliability of meaningful interest rate data in most underdeveloped countries, (2) the relatively primative state of financial market structures, and (3) government intervention in the money market through mandatory subsidized credit quotas by the economic sector, it is not possible to construct a reliable estimator of interest rates over time.

As a result, a fully specified model for El Salvador could include measures of permanent income, the cost of holding money, the rate of return on bonds, and the return on equities, i.e.

$$\frac{M^d}{P} = g(Y, V, i_b, i_e). \tag{11}$$

Selecting a log-linear form for the real money demand equation

$$\frac{M^d}{P} = \frac{Y^{\alpha_1} V^{\alpha_2}}{i_b^{\alpha_3} i_e^{\alpha_4}} \tag{12}$$

where $\alpha_1, \alpha_2, \alpha_3$, and α_4 are the elasticities of the respective variables. Since equation (12) represents real money demand, nominal money demand may be approximated by

$$M^d = \frac{Y^{\alpha_1} V^{\alpha_2} P^{\alpha_5}}{i_b^{\alpha_3} i_e^{\alpha_4}} \tag{13}$$

This formulation assumes homogeneity of degree one in the price level in money demand.

Taking the logarithem of equations (12) and (13) we obtain

$$\ln \frac{M^d}{P} = \alpha_1 \ln Y - \alpha_2 \ln V - \alpha_3 \ln i_b - \alpha_4 \ln i_e$$

and

$$\ln M^d = \alpha_1 \ln Y - \alpha_2 \ln V - \alpha_3 \ln i_b - \alpha_4 \ln i_e + \alpha_5 \ln P$$

respectively.

In equation (12) the anticipated sign of α_1 is positive, while the signs of α_2, α_3, and α_4 are expected to be negative. These signs follow from expectations of individual reaction in distributing their wealth portfolios optimally. As the rate of return on bonds and equities increases individuals rearrange their portfolios so that equilibrium is maintained. As money is not the only form of wealth, when wealth portfolios are diversified optimally a change in one of the rates of return on alternative assets will effect a change in money demand.[14] Similary, a quantum movement or increase in the anticipated rate of inflation will undoubtedly motivate individuals toward decreasing

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[14] See Frank Zahn, Macroeconomic Theory and Policy (New York: Prentice-Hall, 1975) pp. 78-94.

their real money balances since there is now an increased cost to holding these balances relative to other assets. An increase in real income will have the opposite effect since individuals, through their increased real income position can maintain higher balances of all assets. The nominal demand for money equation will have the same expected signs for its independent variables with the signs of the coefficient P/P being $\neq 1$. This follows from the assumption of homogeniety of degree one in prices for equation (20).[15]

The variable selected to measure the expected costs of holding money is V, the expected rate of inflation. There are several possible methodological procedures to calculate this variable. While Aghveli and Khan simply assume that individuals will make decisions about the costs of holding money based on the present rate of inflation,[16] the method is theoretically deficient for time series analysis. Deaver suggests that the cost of holding money may be calculated by taking a weighted average (geometrically declining lag structure) of past inflation as an approximation of

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[15] The empirical validity of the above theoretical specifications depends largely upon the availability of reliable data. See D. S. Wilford, The Demand for Foreign Reserves in Mexico (unpublished Masters thesis, Vanderbilt University, 1973); W. T. Wilford and J. M. Villasuso, "Central America: The Demand for Money in the Common Market," Economic and Social Studies, June, 1975; A. Monte Mayor, "La Demanda de Dinero: El Caso de Mexico, (unpublished thesis, Facultad de Economia de la Universidad de Nuevo Leon, Monterrey Mexico, 1969).

anticipated inflation.[17] Cagan builds a series on expected cost from a model by assuming that individuals alter their expectations of future inflation on the basis of mistakes that they have made in the past. While this method is mathematically more appealing than Deaver's, it is, at the same time, more restrictive in that the function relating weights of the various periods is predetermined by the approach itself.

Empirical Analysis: The Demand for Money

As was noted in the theoretical development of the monetary approach to the balance of payments, money may be considered a function of several variables. Due to monetary data limitations for El Salvador we empirically tested the following money demand models:

$$M^d = f(y) \qquad (16)$$
$$M^d = f(y, CPI) \qquad (17)$$
$$M^d = f(y, CPI, INFLA) \qquad (18)$$

where

y = Real Income
CPI = Consumer Price Index
INFLA = Inflation
M^d = Money Demand

Money demand is equal to M_1 or M_2 where M_1 is defined as coin and currency in circulation plus demand deposits; and M_2 is defined as M_1 plus time deposits. Following earlier work on money demand, both

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[16] It is only fair to note that this study employed cross-sectional data.

[17] Deaver states, "Call the expected rate of inflation in period t, C. If P_{t-1} and W_1 are the actual rate and its weight in period t-1, and $W_0W_1W_2 \ldots W_n$, then we have $C_t = \frac{P_{t-1}W_i}{W_i}$." See Deaver, op.cit., p.26

definitions of money are investigated. These definitions of money and resulting empirical investigation lead to interesting insights as to the process of development of the financial sector of El Salvador.

The Variables

(a) M_1: This definition of money assumes that money serves mainly for transaction purposes. The cliché that money is what money does indicates the chief function of money is to facilitate transactions for goods and Services. Clearly, the demand for money for this purpose will be extremely high as a LDC moves from the barter dualistic state into a fully (economically) integrated society.

(b) M_2: This definition of money assumes money serves other functions besides facilitating the movement of goods and services, including a store of value. M_2 is defined to include this aspect of money. Time deposits are similar to demand deposits in that they are liquid enough to be readily available to the depositer while simultaneously acting as an interest bearing store of value. The ability to have quick access to time deposits is generally given as the reason for defining money to include them. However, for this study, the theoretical justifications for defining money broadly (M_2) are unimportant. The reaction of a money demand equation where money is defined thus can lead to insights into the nature of the development of the Salvadorean financial system.

(c) RGDP: Real Gross Domestic Product (RGDP) is defined as the total value of goods and services produced within El Salvador adjusted for the rate of inflation. RGDP acts as a proxy for real income in the money demand equation. Logically, an increase in real income will enable an individual to, ceteris patibus, increase his holdings of

money balances. As real income changes, the holder and consumer of money balances must adjust those balances to conform to other movements in his wealth portfolio. This is done in order to maintain the highest possible utility available from holding money in relation to some other asset.

(d) RNI: Real National Income (RNI) is second measure of real income. This measure probably better reflects the assets of El Salvador vis a vis money demand, since it more directly measures variations in the major component of total wealth.

(e) CPI: The Consumer Price Index (CPI) indicates the change in the overall price level for El Salvador. Clearly, if one is to maintain real money balances within the portfolio of wealth, an increase in the price level will have a positive effect upon the amount of nominal money held.

(f) INFLA: Inflation (INFLA) is included in some of the specifications as a change in the rate of inflation carries a negative effect on money demand. As Cagan, Friedman, and Deavers showed, an increase in the rate of inflation will cause persons to lower their real and nominal balances of money since any money not spent loses value. Money begins to lose some of its attractiveness as a store of value as inflation increases therefore the number of dollars held relative to other assets changes.

El Salvador Model Specifications

The models are tested under the assumption of a log-linear relationship between money and the independent variables. The assumption

of this type of relationship is quite useful empirically as one can easily estimate the elasticities of the dependent variable with respect to the independent variable directly from the regression coefficients.

Postulating a log-linear specification the formulas are

$$\ln M^d = B_1 \ln y + e \qquad (16a)$$

$$\ln M^d = B_1 \ln y + B_2 \ln CPI + e' \qquad (17a)$$

$$\ln M^d = B_1 \ln y + B_2 \ln CPI + B_3 \ln INFLA + e'' \qquad (18a)$$

The (B) coefficients should all have a positive sign except for B_3 which will carry a negative relation to nominal money demand.

Tables 1 and 2 contain the results of estimation equations (1a), (2a), and (3a). Notice that both RNI and RGDP are used in the estimates. The estimations were performed on a PDP 10 computer utilizing the program PLANETS developed by the Brookings Institution for time series analysis. Computations were performed at the University of New Orleans Computer Research Center, June 1975.

All regressions estimated had significant F-values and high R^2. The regressions were adjusted for first order auto-correlation using a method similar to the Cochrane-Orcutt procedure. Both the Durbin-Watson statistics and the rho values are reported. The t-statistics are reported under the coefficients to which they refer and are contained inside parenthesis. Table 1 reports regressions which assumed money takes the more narrow definition of M_1 while Table 2 reports regressions under the assumption money is defined as M_2. The first three rows of each table use RNI as the independent proxy variable for Real Income while the second three rows use RGDP as the proxy variable for Income.

Table 1

Regression results for equations 1a through 3a on Money Demand in El Salvador where money is defined as M_1*

	Constant	Real Net National Income	Real Gross Domestic Product	CPI	Inflation	R^2	RHO	DW
(1)	-1.02 (-.0314)	.954 (4.15)				.99	.89	.758
(2)	-1.78 (-.0632)	.806 (3.84)		.637 (1.67)		.99	.851	1.275
(3)	.084 (.029)	.679 (3.53)		1.95 (2.96)	-1.33 (-2.37)	.99	.832	1.20
(4)	.503 (.165)		.837 (3.91)			.99	.866	.86
(5)	-533 (.198)		.698 (3.47)	.655 (1.60)		.99	.825	1.340
(6)	1.22 (.464)		.594 (2.11)	2.112 (3.06)	-1.503 (-2.544)	.99	.796	1.25

*The t-values in parentheses are reported below the coefficients.

Table 2

Regression results for equations 1a through 3a on Money Demand in El Salvador where money is defined as M_2*

	Constant	Real Net National Income	Real Gross Domestic Product	CPI	Inflation	R^2	RHO	DW
(1)	-3.63 (-3.79)	1.52 (9.44)				.99	.848	1.00
(2)	-9.44 (-4.94)	1.405 (10.22)		.527 (1.76)		.99	.785	1.59
(3)	-8.538 (-4.54)	1.33 (10.89)		1.731 (3.34)	-1.162 (-2.57)	.99	.750	1.44
(4)	-7.35 (-3.46)		1.413 (9.49)			.99	.791	1.165
(5)	-8.533 (-4.52)		1.325 (10.07)	.531 (1.50)		.99	.710	1.58
(6)	-7.446 (-4.12)		1.254 (11.63)	2.011 (3.45)	-1.48 (-2.85)	.99	.796	1.49

*The t-values in parentheses are reported below the coefficients.

Empirical Results: The Demand for Money in El Salvador

All regressions where M_1 is used as the definition of money (as reported in Table 1) indicate an income elasticity of money demand of slightly (though not significantly different) less than one. This is indicative of the developed state for the El Salvadorean economy in using money for transactions. A transitional economy in the "monetary sense" would have a higher income elasticity of demand for money. The t-values are significant in all cases for the income coefficients in Table 1 at the .05 level.

The only disappointing value for income elasticity of demand is the .594 coefficient in equation (6). (This value may be less believable than the other results as its t-value, though low, could possibly carry an upward bias.) The size of the coefficients for CPI and INFLA in regression 6 are indicative of statistical problems. There is evidence of multicollinearity between CPI and INFLA and during the autocorrelation adjustment process this could have caused biases in the coefficients and a downward bias in the coefficient for RGDP. Clearly the t-values are affected, but the direction of bias is not clear as there are two problems, autocorrelation and multicollinearity along with the adjustment process itself. Separately either problem does not bias the regression results, but affect the standard errors of the regression. However, in combination with the correction factor the direction and degree of bias cannot be estimated.

Even discounting the relative importance of equations (3) and (6) due to possible statistical problems, it is clear a 3 percent increase

in real income measured either as RNI or RGDP leads to a less than 3 percent increase in the stock of M_1 demanded. The obvious point for policy decision-making is that any increase in the stock of M_1 above that demanded (above the growth in real income) tends to generate an upward pressure on prices.

As indicated in the theoretical discussion, CPI and INFLA carry a positive and inverse relation respectively with money demand. All regressions carry the anticipated signs and show satisfactory fits. The size of the CPI coefficient in equations (2) and (4), .637 and .655 respectively, are much more believable than those in (3) and (6). The omission of interest rates in the empirical specifications of the models is a result of the lack of acceptable data on rates of return for El Salvador. It is this researcher's opinion that the omission of this variable does not detract from the implications of these models.

Table 2 gives regression results for the broader definition of money, M_2. The most striking difference between Table 1 and Table 2 is the size of the beta coefficients for RNI and RGDP. The income elasticities of demand for money where money is defined as M_2 are significantly (in a statistical as well as absolute sense) greater than their counterparts in Table 1. Regardless of whether real income is measured by RNI or RGDP the income elasticity coefficients are all above one and significantly different from one. Interpretation of this data suggests that, as El Salvador increases its real income by 3 percent, there is a greater than 3 percent increase in the demand

for money defined as M_2. These results are indicative of the growth of the financial community of El Salvador. The large differences in the income elasticities of Table 1 and Table 2 can be attributed to the growth in the hitherto underdeveloped and underutilized financial community. Historically (1950 - 1973) we may conclude El Salvador has experienced a maturing of its financial community where money (in the form of time deposits, savings deposits, etc.) has been increasingly utilized as a store of value - with the greater emphasis upon an interest bearing store of value.

Equations (3) and (6) of Table 2, as in Table 1, have some statistical problems and should be somewhat discounted. However, all signs are as anticipated and the size of the inflation proxy, though biased upward, is indicative of inflation's effect on money demand. The INFLA coefficient in Table 2 (-1.48) is absolutely smaller - though not statistically different -- than in Table 1.(-1.503). This difference, though small, could be reflective of the increased desirability of time deposits over demand deposits during inflationary periods, especially where rates of interest paid as deposits are artificially low and no interest is paid on demand deposits. Discounting the possibility of statistical aberrations in equations (3) and (6) of both tables, the theoretical and empirical results of our analysis indicate a large (absolutely) negative coefficient for anticipated inflation. The increasing rates of inflation experienced over the past two years have in our opinion, had negative adjustment affects upon the demand for real money balances and therefore an inverse effect upon the level of nominal money balances demanded.

To the extent that increases of the money supply have been greater than the demand for money there will be a negative affect upon balance of payments and pressure to devalue as an adjustment mechanism. If one is to maintain a fixed exchange rate, the negative pressure on the balance of payments must be countered by foreign borrowing or devaluation under the present parity system.

In conclusion, it is apparent that any expansion in domestic credit (herein to be equated with the money supply) at a rate greater than the rate of growth in real income will carry pressures on prices in the commodity sector. Further, and more importantly for El Salvador, there will be a tendency for this extra credit creation to leave the country in the form of declining foreign reserves in adjusting money supply to money demand. According to the monetary approach to the balance of payments, the equilibrating nature of the balance of payments, with respect to money demand and supply insures (under the assumption of a fixed exchange rate) that there will be pressure on the foreign sector and reserve outflows.

Empirical Results: Monetary Approach to the Balance of Payments

The results of examining the monetary approach to the balance of payments as applied to El Salvador are important because of their direction in establishing the effect of credit creation (via domestic or foreign credit) upon the balance of payments. Since this model is developed from the utilization of a money demand model and the balance sheet of the BCR, under the assumption of $M^d = M^s$, the model determines the reaction of a change in either (1) the money multiplier, (2) CPI, (3) RNI, (4) domestic credit or INFLA. For our study, the most interesting variable is domestic credit.

Domestic credit may be viewed as the creation of new money. Given the reaction of foreign reserve flows to the four variables, one may more clearly understand the impact of a change in any one of these variables on the balance of payments.

To digress, it should be noted in the analysis that this model deals only with the overall balance of payments, not the balance of trade. Often these concepts are confused and the terms used interchangeably. This is not the case within the monetary model: one is dealing only with the balance of payments. This study makes no statement about the impact of credit creation on the balance of trade, but does try to examine the effect of any credit creation on the overall balance of payments.

Empirical Specification for the Balance of Payments

Given the aforementioned data constraints, we analyze the balance of payments using a money demand model where real money is a function of real income measured as RNI:

$$\frac{M^d}{P^{\alpha 2}} = \frac{(RNI)^{\alpha 1}}{V^{\alpha 5}}.$$

Following the theoretical specifications of equations (1) through (8), the

estimating equation for El Salvador is

$$\left(\frac{R}{H}\right)gR = \hat{\alpha}_1 gy + \hat{\alpha}_2 gp - \hat{\alpha}_3 ga - \hat{\alpha}_4 \left(\frac{D}{H}\right) gD - \hat{\alpha}_5 gV$$

where
- R = International Reserves,
- H = High powered money,
- p = CPI ,
- y = RNI ,
- a = Money Multiplier (M_1),
- D = Domestic Credit,
- V = INFLA,
- gx_i = percentage change in x_i, where x_i = R, y, p, a, D, and V respectively, and α_i are the estimated coefficients of the regression.

The most important coefficient for the purposes of this study is $\hat{\alpha}_4$. $\hat{\alpha}_4$ is indicative of the constraint placed upon expansion in the money supply (for any purpose) by the balance of payments.

Regression Results:

The regression for the reserve flow equation of El Salvador is:

$$\frac{R}{H}gR = \underset{(1.22)}{1.09}gy + \underset{(0.68)}{0.51}gp + \underset{(0.49)}{0.08}ga - \underset{(-4.82)}{0.34}\frac{D}{H}gD - \underset{(0.67)}{0.47}gV$$

R^2 = .65
F = 5.67
DW = 2.057
RHO= -0.362.

The coefficients all have the correct sign except $\hat{\alpha}_3$; however, this appears to be of little consequence considering the relative size of the coefficient and the insignificance of its t-statistic. The sizes of the various coefficients are interesting and are in keeping with a priori values, again with the exception of $\hat{\alpha}_3$.

The two most important values for our study are 1.09 for $\hat{\alpha}_1$ and -0.34 for $\hat{\alpha}_4$. $\hat{\alpha}_1$ is consistent with the anticipated value of the coefficient given the results of the money demand estimations. This indicates that a one percent growth in RNI, ceteris paribus, leads to a one percent inflow of foreign reserves. Clearly, the implication is obvious that continued growth in the country's economy should not lead to foreign reserve outflows, but rather to inflows. Though theoretically contrary to Classical and Keynesian analysis, this concept is empirically correct for El Salvador. The other interesting variable is domestic credit. An increase in domestic credit implies an outflow of foreign reserves. According to our results, an expansion of the money supply or domestic credit by 3 percent leads to a one percent outflow of foreign reserves. Though this elasticity coefficient is smaller than expected, it has the highest accompanying t-value and appears to be statistically correct. The other variables have reasonable estimates for their coefficients and, as expected, there are foreign reserve inflows as the price level rises, but outflows as the rate of inflation increases. The t-values associated with INFLA and CPI are, however, poor.

The summary statistics are acceptable with the R^2 = .65 and F = 5.67. The size of the F-value was low because of the lack of statistical significance for INFLA, CPI, and the money multiplier. The structure of the appropriate variable for measuring anticipated rates of inflation are open to debate. The variable used herein leaves something to be desired as to its empirical and theoretical purity; however, its illustrative value is evident if only from the sign and magnitude of $\hat{\alpha}_5$.

The incorrect sign of $\hat{\alpha}_3$ and the low t-value for CPI do not pose serious problems for this study. We are mainly interested in the effect of credit creation on the balance of payments via domestic credit expansion and the anticipated rate of inflation due to the type of financing. To the extent that credit expansion effects changes in real income, there will be an affect on the balance of payments through this channel. It is clear that financing of agricultural credit through domestic credit expansion will lead to an outflow of foreign reserves.

Macroeconomic Conclusions

Six basic conclusions may be drawn from the macroeconomic analysis:

(1) An increase in the rate of growth of the money supply, much above the rate of growth in real income, will create an excess supply of money. The outlets for these funds are either excess demand generated inflation or (with the assumption of fixed exchange rates) an outflow of foreign reserves.

(2) Credit creation via domestic resources will have an expansionary influence on the money supply. Financing of credit expansion directly by the BCR will have a greater expansionary effect than via bond distribution. Bond distribution for credit creation will have an expansionary effect through the money multiplier unless the bonds are not used as official reserves by the banking community.

(3) Nominal money demand for transactions purposes is real income inelastic. The percentage change in the money stock needed for transactions purposes is historically less than the percentage change of real income. The demand for money, as defined in the broader sense, is real income elastic, suggesting a maturation of the financial community and the expanded use of its services by the populace.

(4) The level of prices (CPI) has a positive relation to the nominal

money supply; however, the relationship is not necessarily homogeneous of degree one. Inflation has a negative effect on money demand indicating an awareness of the people in adjusting their wealth portfolios to compensate for anticipated losses due to increased rates of inflation. Working through money demand, the price level and inflation have a positive and inverse effect, respectively, upon foreign reserves flows.

(5) The coefficient of domestic credit in the balance of payments equation, $\hat{\alpha}_4$, is smaller than would be anticipated; however, it corresponds with similar empirical work at the BCR. The barriers to capital flight would tend to make $\hat{\alpha}_4$ less than the free market level. Though the response of foreign capital movements will be fully utilized in the long run, short run barriers could exist which would mean foreign reserves are a lagged function of domestic credit. The implication is clear, however, for small farmer credit creation: if the government's resources for providing credit to the small farmers are financed via expansion of domestic credit, there will necessarily be negative pressure on foreign reserves. The ratio, on the basis of the 1950 - 1973 experience, of domestic credit creation to foreign reserves is approximately a negative three to one.

(6) A growth in real income need not have the Classical and Keynesian result of a decrease in the balance of payments. Though contrary to Hume's price specie - flow mechanism and also to much of the neo-Keynesian development literature, a growth in real income will imply foreign reserve inflows. This is logical given the assumption of foreign reserve adjustment to excess money demand directly. One need not explore a price or relative wage adjustment argument to arrive at equilibrium as price arbitrage supercedes the possibility of price adjustment given the historical parity system. To the extent that this parity is disturbed by recent international monetary

events, price-level adjustments are possible. The implication for El Salvador is that an increase in real income will help, not hurt, their long run balance of payments, irrespective of the movement of the balance of trade.

CHAPTER 4

COMMMERCIAL AND HIPOTECARIO BANKS AND AGRICULTURAL CREDIT

Commercial and Hipotecario Bank Agricultural Credit

The percentage of commercial and hipotecario bank credit allocated by major economic sectors is shown in Table 1 for 1970-74. Agriculture claimed 24 percent of total credit from these financial intermediaries, up from 21.4 percent in 1970. Coffee and cotton, the two major export crops, received 19.3 percent of the total credit extended by the banking system in 1974, with cotton receiving a larger amount (9.8 percent of total credit extended) and coffee the smaller amount (9.5 percent). At the same time, corn, beans and rice received only 1.2 percent of total credit extended by commercial banks in 1974, and it is doubtful that much of this credit was extended to the small farmers as defined by the AID target group in El Salvador. Observation of the last category in Table 1 (Otras Actividades) shows an additional amount of credit extended in 1974 to coffee and cotton of 3.6 percent to refinancing of old loans. As a result, total credit extended to coffee and cotton alone amounted to around 23 percent of the banking system loan portfolio, while the traditional crops of beans, corn and rice received only 1.2 percent of the total.

Table 1 also shows that manufacturing industry received 12.5 percent of credit, while almost one-half of the credit in 1974 was directed to financing of imports, exports, and commerce in general.

Table 2 gives the contribution of various economic sectors to G.D.P., and their claim to commercial and hipotecario bank credit for the year 1973. Agriculture contributed 28.6 percent of G.D.P., and received an almost equal percent of total credit at 28.4. The largest

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MONTOS OTORGADOS Table 1 88

ESTRUCTURA EN CIFRAS ABSOLUTAS Y EN PORCENTAJES

SECTORES DE DESTINO	1970		1971		1972		1973		ENE./DIC. /74	
	Miles Colones	%	Miles Colones	%	Miles Colones	%	Miles Colones	%	Miles Colones	%
I.- ROPECUARIO	136,150	21.4	155,413	23.1	191,484	23.4	272,960	22.9	352,963	24.4
1. Agricultura	128,495	20.2	147,456	21.9	180,035	22.1	252,650	21.2	327,148	22.6
a) Café	58,498	9.2	70,841	10.5	85,627	10.5	115,843	9.7	137,602	9.5
b) Algodón	47,824	7.5	54,327	8.1	63,866	7.8	84,786	7.1	141,743	9.8
c) Caña de azúcar	12,029	1.9	9,880	1.5	15,231	1.9	24,603	2.1	15,530	1.1
d) Maíz	3,202	0.5	3,077	0.5	2,801	0.3	3,325	0.3	8,221	0.6
e) Frijol	352	0.1	516	0.1	207	—.—	1,132	0.1	1,345	0.1
f) Arroz	2,011	0.3	2,543	0.4	3,399	0.4	2,782	0.2	6,602	0.5
g) Otros productos agrícolas	4,589	0.7	6,272	0.9	8,904	1.1	20,179	1.7	16,099	1.1
2. Ganadería	5,853	0.9	6,461	1.0	8,317	1.0	17,834	1.5	19,945	1.4
3. Avicultura	1,330	0.2	1,144	0.2	2,812	0.3	1,760	0.1	4,245	0.3
4. Pesca, apicultura y otros	472	0.1	352	0.1	320	—.—	716	0.1	1,625	0.1
II.—MINERIA Y CANTERAS	479	0.1	765	0.1	964	0.1	383	—.—	1,614	0.1
III.—INDUSTRIA MANUFACTURERA	86,556	13.6	75,203	11.2	90,471	11.0	130,606	11.0	180,981	12.5
1. Productos alimenticios	48,284	7.6	32,574	4.8	50,541	6.2	55,362	4.7	68,592	4.7
2. Bebidas y tabaco	2,561	0.4	2,474	0.4	1,321	0.2	2,263	0.2	8,231	0.6
3. Textiles y vestuario	18,043	2.8	17,157	2.5	17,438	2.1	25,632	2.2	48,353	3.3
4. Fabricación de muebles y accesorios	1,086	0.2	1,721	0.3	3,947	0.5	6,404	0.5	3,818	0.3
5. Papel y cartón y prod. de papel y cartón	1,774	0.3	2,559	0.4	1,999	0.2	9,751	0.8	6,651	0.5
6. Productos químicos	6,040	0.9	7,189	1.1	4,883	0.6	10,133	0.9	16,917	1.2
7. Productos derivados del petróleo	3	—.—	2	—.—	4	—.—	20	—.—	5	—.—
8. Productos minerales no metálicos	800	0.1	465	0.1	353	—.—	644	0.1	1,125	0.1
9. Industrias metálicas básicas	818	0.1	621	0.1	788	0.1	4,248	0.4	4,267	0.3
10. Productos metálicos	1,398	0.2	4,712	0.7	3,603	0.4	7,160	0.6	13,073	0.9
11. Otros	5,749	0.9	5,729	0.9	5,094	0.6	8,989	0.8	9,949	0.7
IV.—CONSTRUCCION	33,177	5.2	35,372	5.3	42,047	5.2	59,670	5.0	76,623	5.3
1. Viviendas	12,805	2.0	10,885	1.6	9,130	1.1	16,375	1.4	24,950	1.7
2. Construcciones agropecuarias	1,200	0.2	1,332	0.2	1,564	0.2	2,862	0.2	2,832	0.2
3. Edif. industriales, com. y de servicio	3,392	0.5	4,381	0.7	5,798	0.7	13,238	1.1	22,510	1.6
4. Hoteles y similares	876	0.1	881	0.1	761	0.1	1,575	0.1	1,957	0.1
5. Urbanización de terrenos y otras	14,898	2.3	17,893	2.7	24,794	3.0	25,620	2.2	24,364	1.7
V.—ELECTRICIDAD, GAS, AGUA Y SERVICIOS SANITARIOS	183	—.—	341	0.1	644	0.1	1,400	0.1	1,086	0.1
VI.—COMERCIO	285,719	44.9	305,524	45.4	372,184	45.6	572,981	48.1	680,414	47.1
1. De importación	61,818	9.7	77,360	11.5	83,829	10.3	138,366	11.6	175,633	12.2
2. De exportación	114,820	18.0	110,273	16.4	143,114	17.5	202,718	17.0	270,881	18.7
3. Interno	63,164	10.0	76,166	11.3	71,656	8.8	88,163	7.4	96,457	6.7
4. Otros comerciales	45,917	7.2	41,725	6.2	73,585	9.0	143,734	12.1	137,443	9.5
II.—TRANSPORTE, ALMACENAJE Y COMUNICACIONES	1,268	0.2	1,378	0.2	3,060	0.4	3,587	0.3	5,734	0.4
1. Transporte por carretera	923	0.1	974	0.1	1,097	0.1	2,203	0.2	2,491	0.2
2. Servicio de comunicaciones	6	—.—	46	—.—	965	0.1	524	—.—	173	—.—
3. Otros	339	0.1	358	0.1	998	0.1	860	0.1	3,070	0.2
III.—SERVICIOS	4,381	0.7	6,694	1.0	6,394	0.8	8,902	0.7	11,873	0.8
1. Establecimientos de enseñanza	133	—.—	28	—.—	195	—.—	342	—.—	394	—.—
2. Servicios médicos y sanitarios	493	0.1	605	0.1	679	0.1	969	0.1	892	0.1
3. Otros	3,755	0.6	6,061	0.9	5,520	0.7	7,591	0.6	10,587	0.7
X.—OTRAS ACTIVIDADES	88,392	13.9	92,546	13.7	108,595	13.3	139,669	11.7	134,179	9.3
1. Refinanciamiento	88,365	13.9	92,543	13.7	102,833	12.6	137,044	11.5	134,004	9.3
a) Café	19,204	3.0	38,573	5.7	47,093	5.8	58,029	4.9	48,895	3.4
b) Algodón	3,7	0.6	1,493	0.2	1,725	0.2	1,664	0.1	2,193	0.2
c) Cereales	957	0.2	924	0.1	904	0.1	739	0.1	713	—.—
d) Caña de azúcar	169	—.—	1,656	0.2	144	—.—	244	—.—	272	—.—
e) Otros agropecuarios	3,895	0.6	5,759	0.9	5,287	0.6	5,163	0.4	4,896	0.3
f) Industria manufacturera	20,992	3.3	16,093	2.4	10,223	1.3	17,677	1.5	18,899	1.3
g) Construcción	6,932	1.1	4,579	0.7	5,227	0.6	8,281	0.7	6,712	0.5
h) Transporte, almacenaje y comunic.	1,529	0.2	364	0.1	392	—.—	724	0.1	113	—.—
i) No clasificados	30,891	4.9	23,102	3.4	31,838	3.9	44,523	3.7	51,330	3.6
2. Otros créditos	27	—.—	3	—.—	5,762	0.7	2,625	0.2	175	—.—
TOTAL	636,305	100.0	673,236	100.0	815,843	100.0	1,190,158	100.0	1,445,467	100.0

Revista Mensual, December, 1974

Table 2

CONTRIBUTION OF ECONOMIC SECTORS TO G.D.P. AND CLAIM TO COMMERCIAL AND HIPOTECARIO BANK CREDIT IN EL SALVADOR. 1973

ECONOMIC SECTOR	1973 % CONTRIBUTION G.D.P.	1973 % CLAIM ON CREDIT
Agriculture	28.6	28.4
Mining	--	--
Manufacturing Industry	18.1	12.5
Construction	3.3	5.7
Electricity, Gas, Water	1.4	--
Commerce	21.6	48.1
Transportation, Communications	4.4	.4
Cotton	22.6	4.7

Source: Revista Mensual and CONAPLAN

Derived from data in the Revista Mensual, January, 1975 and CONAPLAN, Indicadores

Table 3

COMMERCIAL AND HIPOTECARIO BANKS: COMPARATIVE DATA ON G.D.P., TOTAL CREDIT, AND AGRICULTURAL CREDIT, 1969-74

Year	(1) Agricultural Output as % of G.D.P.	(2) Agricultural Credit as % Total Credit	(3) Agricultural Credit as % Agricultural G.D.P.	(4) Total Credit as % Total G.D.P.
1969	25	28	24	22
1970	27	27	21	22
1971	27	27	23	23
1972	25	28	27	25
1973	28	28	26	27
1974	25	32	33	27

Source: Derived by authors from Indicadores Economics y Sociales, CONAPLAN, various sources and Revista Mensual, various issues.

recipient of commercial credit is the financing of commerce (imports and exports) which received 48 percent of total credit extended in 1973, but which contributed only 21.6 percent to total G.D.P. The manufacturing industry category contributed 18 percent to G.D.P., in 1973 but received only 12.5 percent of credit extended through the commercial banks, relying without doubt upon the internal capital and private funds and from international sources. In short, the agricultural sector receives as a claim upon commercial bank credit by approximately the same proportion that the sector contributes to G.D.P.

G.D.P., Total Credit and Agricultural Credit 1969/74

Table 3 gives contribution of the agricultural sector to G.D.P. from 1969 to 1974 and agricultural credit as a percentage of total commercial banking credit extended in that period. Agricultural G.D.P., remained relatively constant at around 25 to 27 percent of total G.D.P., while agricultural credit has represented around 27 to 32 percent of total credit extended by the commercial banks during the same period. Column 3, Table 3 gives data on agricultural credit as a percentage of agricultural G.D.P., and shows that credit extended to agriculture represents around 23 to 30 percent of total agricultural output. In short, around 25 percent of the value of agricultural output is financed in the form of short-term credit through the commercial banking system. Reflective of apparent policy change, this figure increased to 33 percent in 1974. Commercial bank credit has represented during the past six years, between 22 and 27 percent of total G.D.P. (Column 4, Table 3). In short, the data show that the agricultural sector as a whole received credit in some rough proportion to its contribution to G.D.P., and that credit extended to the agricultural sector represents around one-fourth to one-third of total agricultural G.D.P. For every one dollar in agricultural G.D.P. generated in El Salvador between 1969-74, on average around 25 to 33¢ of credit has been extended to the sector through the commercial banking and hipotecario system.

Long-Term Trends in the Commercial Banking System Agricultural Portfolio

Table 4 summarizes the agricultural credit portfolio of the commercial banking system in El Salvador from 1960 through 1974. It shows that the portfolio increased substantially over the fourteen year period from ¢86 million in 1960 to ¢336 million in 1970 for an increase of over 290 percent during the period while G.D.P. was rising by 179 percent. The quadrupling of agricultural credit during the fifteen-year period (current prices) resulted in portfolio of approximately $134 million (U.S.) in 1974 for agricultural institutional credit. A.I.D., F.A.L., and I.D.B. capital assistance for agricultural credit in El Salvador during the 1960-72 period contributed approximately one-sixth of the total portfolio* It is estimated that approximately 85 percent of the portfolio was lent by the commercial banks and Banco Hipotecario, five percent by the predecessor institution of the Banco de Fomento (ABC), and five percent by the Compañia Salvadoreña de Café and the rest to various other agencies (Operación de Cajas de Crédito, FEDECACES, Cooperativa Algodonera).

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*Dale W. Adams, USAID/El Salvador Report, 1972.

Table 4

Gross Product and Credit in El Salvador Total and Agricultural, 1960-74

Year	Gross Product [a] Total	Gross Product [a] Agriculture	Year End Balances of Credit Total	Year End Balances of Credit Agriculture	Ratios 3/1	Ratios 4/2
	In Current Million Colones					
1960	1420	449	344	86	.24	.19
1961	1446	466	312	66	.22	.14
1962	1616	537	307	80	.19	.15
1963	1694	523	339	83	.20	.16
1964	1867	570	393	103	.21	.18
1965	1992	580	417	118	.21	.20
1966	2110	574	448	129	.21	.22
1967	2216	600	457	128	.21	.21
1968	2292	603	464	133	.20	.22
1969	2382	607	515	143	.22	.24
1970	2538	691	554	148	.22	.21
1971	2703*	729	610	168	.23	.23
1972	2882	728	714	197	.25	.27
1973	3364	964	904	255	.27	.26
1974	3965*	1005*	1067	336	.27	.33

*Estimates from SIECA, Anexo Estadistico II: Centroamerica: Estadisticas Macroeconomics 1971-74, Guatemala City, February, 1975

[a] Various issues of the International Monetary Fund, International Financial Statistics and various issues of Consejo Nacional de Planificacion y Coordinacion Economica (CONAPLAN) Indicadores Economicos y Sociales.

The last column of Table 4 shows El Salvador's low ratio of credit-to-output in agriculture in the early 1960s. Credit expansion in agriculture through the late 1960s and into the 1970s increased the portfolio considerably, as indicated by a substantial increase in the ratio to .26 and .33 between 1973 and 1974. While it is difficult to determine an "adequate" level of credit for agriculture in El Salvador (such questions are a function of input mix, technology, development level, and the relative share of traditional versus technologically efficient sectors) it is certainly low by most standards. In the U.S., operating credit for agriculture amounts to 55 to 60 percent of total value output of the sector, while in Brazil and Taiwan the ratio is .40, and for Colombia .35. However, given the fact that over 75 percent of agricultural output in El Salvador are technologically advanced, export items not associated with the "primitive or traditional" sector, it would appear that the output-to-operating-credit level could increase considerably, perhaps to .40 or .45. Certainly, given the extremely low credit-to-output ratio of traditional crops such as corn, beans, sorghum, and rice, it appears that the ratio could be raised substantially for these basic grains if the mechanism or vehicle exists to channel and supervise same.

Table 4 also gives the ratio of total G.D.P. to agricultural G.D.P. for the 1960-74 period, and the data show that ratio has remained relatively constant throughout the fifteen-year period (.24 in 1960 and .27 in 1974). While the ratio of total G.D.P. to total credit has remained almost unchanged over the period, the ratio of agricultural

credit to agricultural output has trended upwards slightly, with the most dramatic increase in the credit allocation to the agricultural portfolio occurring between 1970 (.21) and 1974 (.33).

Table 5

EL SALVADOR: PERCENTAGE AGRICULTURAL CREDIT ALLOCATED TO MAJOR CROPS THROUGH COMMERCIAL AND HIPOTECARIO BANKS 1969 - 1974

Year	Coffee (1)	Cotton (2)	Sugar Cane (3)	1/2/3 (4)	Corn, Beans Rice
1969	32	25	5	62	5
1970	36	24	6	66	5
1971	39	24	5	68	5
1972	40	27	5	72	4
1973	40	28	4	72	3
1974	37	35	4	76	4

Source: Derived from data in Revista Mensual, December, 1974.

Agricultural Credit Extended by Commercial Banks to Major Crops

Table 5 gives the percentage of agricultural credit allocated to major crops through the commercial banking system from 1969 through 1974. Coffee has consistently claimed the lions share of credit, ranging from 32 to 40 percent over the past six years. Cotton credit has rapidly become a major part of the commercial bank agricultural portfolio rising from 25 percent of total agricultural credit in 1969 to 35 percent by 1974, while sugar cane, the third major El Salvadorean export, has claimed around five percent of credit. Table 5 shows that coffee, cotton and sugar cane have accounted for an increasing percentage of agricultural credit, rising from 62 percent in 1969 to 76 percent by 1974 - due almost exclusively to the dramatic rise in operating credit for cotton. Thus one concludes, that, during the 1969-74 period, (1) agricultural credit increased its relative share of total commercial bank credit, and (2) the pattern of credit extension has become more concentrated in favor of the three major export crops.

The traditional crops - corn, beans and rice - claimed only 5 percent of total commercial bank credit in 1969, 1970, and 1971 (Table 5), and the figure has trended down to 3 percent in 1973 and 4 percent in 1974. While data are not available to disaggregate the 5 percent of credit extended to basic grains, it is doubtful that over one percent is directed to those rural families that fall within the AID target group for the proposed loan. Indeed, one percent would probably be quite generous an estimate.

Table 6

EL SALVADOR'S COMMERCIAL AND HIPOTECARIO BANKS: AGRICULTURAL G.D.P.,CREDIT, BY MAJOR CROP, 1969 - 1973 (millions of colones as of December, 31, each year)

Crop	1969			1970			1971			1972			1973		
	GDP	Credit	%	GDP	Credit	%	GDP	Credit	%	GDP	Credit	%	GDP	Credit	%
Coffee	217	46	21	302	54	18	284	65	23	274	79	28	356	102	28
Cotton	51	36	71	57	36	63	63	40	63	82	54	65	117	73	62
Sugar Cane	17	7	41	20	9	45	29	8	28	32	9	28	35	11	31
Corn, Beans, Rice	64	9	14	80	7	9	81	8	10	48	7	14	130	8	6

Source: Derived by authors from Revista Mensual, various issues and Indicadores Economicos, CONAPLAN, various issues.

Table 6 lists (1) the major crops and their contribution to G,D.P. from 1969 through 1973, (2) the amount of credit extended to each crop during the period, and (3) the ratio of G.D.P. contribution to credit extended. It therefore disaggregates the overall agricultural G.D.P./ agricultural credit ratio given in Table4 into the major crops, and permits examination of the ratio of operating credit per colón of G.D.P. Of the three major exports, cotton has, for the past six years been the favored credit risk of commercial banks with a ratio of .71, .63, .63, .65, and .62 for each year 1969-73. This extremely high operating credit-to-output ratio compares with the following series of corn, beans, and rice during the same period: .14, .09, .10, .14, and .06. Indeed, by 1973 only six cents of operating credit was extended through the commercial and hipotecario banking system for each $1 of corn, beans, and rice produced. Reference to Table 6 indicates that the coffee ratios were, for each year 1969-74, .21, .18, .23, .28, and .28 while the same figures for sugar cane were .41, .45, .28, .28, and .31. Clearly the export crops are heavily supported by the commercial banking system for operating credit - indeed above the average of the U.S. in many cases - while the crops typical of the rural traditional sector receive almost no operating credit support.

Table 7 gives the contribution of each major crop to G.D.P, from 1966-74, and the percentage of total commercial bank credit allocated to each crop. Coffee contributes approximately 9 to 11 percent of total G.D.P. in El Salvador, and the percentage of credit derived from the commercial bank portfolio is approxiamtely the same

Table 7

EL SALVADOR: CONTRIBUTION OF SELECTED CROPS TO G.D.P. AND PERCENTAGE OF TOTAL CREDIT ALLOCATED TO EACH CROP, 1966-74, COMMERCIAL BANKS

Year	Coffee		Cotton		Sugar Cane		Corn, Beans & Rice	
	%GDP	% Credit	% G.D.P.	% Credit	% G.D.P.	% Credit	% G.D.P.	% Credit
1966	8.3	NA	2.5	NA	.7	NA	3.6	NA
1967	9.4	NA	1.9	NA	.7	NA	3.4	NA
1968	8.9	8.1	1.8	7.0	.7	1.5	3.7	1.9
1969	9.1	8.9	2.1	7.0	.5	1.4	3.5	1.7
1970	11.7	9.7	2.2	6.4	.6	1.6	4.1	1.3
1971	10.5	10.7	2.3	6.7	.6	1.5	3.9	1.3
1972	9.9	11.2	2.9	7.6	.7	1.3	2.8	1.1
1973	10.6	11.3	3.5	8.0	.8	1.1	4.6	.9
1974		12.0		11.4		1.2		1.4

Source: Central Bank, CONAPLAN, data. Table derived from data made available in Revista Mensual and Indicadores Economicos y Sociales.

ratio (9 to 11 percent). Cotton has claimed a disproportionate amount of credit during the 1968-73 period with its contribution to G.D.P. in the neighborhood of 2 percent to 3.5 percent and its claim on commercial bank credit ranging between 7 and 11 percent. The ability of cotton producers to obtain operating credit their production is nothing short of phenomenal. As discussed earlier, cotton producers have managed to obtain operating loans as high as 70 percent of the cash value of the product during the past six years (Table 6). As indicated in Table 7 sugar cane is the third crop in which a substantial credit per dollar of output has been obtained over the period. For example, in 1968, sugar cane contributed .7 percent of G.D.P. but obtained 1.5 percent of total credit, while by 1973, it contributed .8 percent of G.D.P. and claimed 1.1 percent of total credit. The last two columns on Table 7 indicate the contribution of corn, rice and beans to agricultural output and the percent of total credit allocated to them through the commercial banks. In 1968 these crops contributed 3.7 percent to G.D.P., but received only 1.9 percent of total commercial bank credit while, by 1973, they contributed 4.6 percent to G.D.P. but received only .9 percent of commercial bank credit. The data thus reaffirm the paucity of credit available through the commercial banking system to those commodities which are produced in the traditional agricultural sector. There is, of course, nothing particularly startling in the allocation of agricultural credit by commercial banks in El Salvador as reflected in the foregoing data.

Tools for Credit Allocation for Commercial Banks

Given the sectoral credit priorities established by the Central Bank, the commercial banks are led to maximize profits by loaning within the sector to those entities in which the rate of return for equal credit risk is minimized. Given that maximum interest rates are rates established by the Central Bank below equilibrium, the remaining variable available to the commercial banks to maximize the return to their investors is to minimize credit risk, i.e., to make collateral loans to those with the best credit ratings. Clearly, given the interest rate structure established by the Banco Central, the real cost of borrowing for operating capital is negative, i.e., the nominal interest cost has been less by a considerable amount than the inflation rate over the past three years. As a result, any rational profit maximizer would, if possible, borrow from commercial banks pledging whatever collateral is required under the assurance that the funds could be relent elsewhere in the system at something above the inflation rate. One would expect, under these circumstances, that the demand for agricultural credit is perfectly elastic at a going rate of interest less than the inflation rate. Given what must be substantial demand for credit in general and agricultural credit in particular, the primary concern of bank portfolio managers is which applicant to service. The freedom having been reduced to differential risks, the commercial banks clearly select those applicants with greatest security. In short, the interest rate since it is an artificial, not market rate, does not perform the function of allocating scarce capital in El Salvador. One should not expect the commercial banking system to behave in a manner other than its current policy

unless there is incentive to alter the policy. The incentive would come largely from (1) giving commercial banks the authority to set rates on the basis of demand and supply thus permitting interest rates to perform the allocation of resources function, or (2) providing explicit subsidy to the commercial banks to handle high risk small farmers. The subsidy would of necessity take the form of (a) guaranteeing losses for high credit risks, and (b) providing grants sufficiently high to raise the effective rate of return on loaned funds. Since neither option appears to be viable in El Salvador at this time, it is doubtful that the commercial banking system can play a very important role in the financing of credits to the AID target group.

Commercial Banks and Small Farms: Selected Interviews

In an effort to determine the perception of the commercial banks towards the feasibility of credit to the small farmer, four interviews were held with representative commercial banks. The interviews were designed to determine (1) the flexibility of commercial banks in terms of loan policy, (2) the collateral requirements for loans to agriculturalists, (3) the commercial bank view as to the best vehicle to serve the financial needs of the poor farmer, (4) the view of the commercial bank towards its potential participation in a credit program to the rural small agriculturalist, and (5) the demand for agricultural loans from commercial bank sources. Four representative banks were interviewed, including one foreign-owned bank, two El Salvadorean-owned banks, and a savings and loan institution. The point of departure for discussions was a questionnaire.

One should recognize at the outset that commercial banks in El Salvador, as in most of the western world, are in business to maximize profits for their stockholders. If they are not serving a segment of the population with credit facilities, it is probably because it is not profitable to do so. Not only are small farmers high credit risks, but the paper work for small loans is expensive. Further, most El Salvadorean banks are controlled largely by families traditionally known as the famous "fourteen."

It is probably unprofitable to make loans to the rural farmer, and it may not be to the interest of the stockholders (the fourteen) to provide credits that increase the productivity of the small farmer, and therefore the need for enlarged holdings of land. The conflict between large landholdings of the very wealthy and the demand for increased farm size by small farmers with improved productivity (which may be obtained through credit) is clearly one which may influence the credit decision-making process.

The Interviews

The following is a summary of conversations held with each of the four representative El Salvadorean commercial banks. The names of individuals, as well as those of specific banks, are omitted. The summaries are based upon responses during the interview process utilizing the guidelines of the questionnaire.

Bank One: Foreign Owned

The interviewee said that the Bank does not make agricultural loans of the type we have in mind. In fact, their loan portfolio for agricultural crop production does not typically exceed five or six loans a year, and these are made largely to individuals who are already known to the Bank and can by no means be considered small farmers. The Bank does have a strong lending program for cattle raisers, he said, which also falls under the general heading of "Agropecuario."

It was stressed that the Bank, because it is foreign-owned, has many restrictions imposed on it and must operate differently from the Salvadorean Banks. Under the "Ley de Bancos of 1970," the Bank is not allowed to have any branch offices nor is it allowed to offer savings accounts. This forces the Bank away from the retail side of banking, into the industrial and large scale commercial field. It was felt that this Bank cannot really ever hope to serve the small (3 hectares or less) farmer. His position is that far more harm than good would come from a program which allowed for largely unsupervised lending (as it would have to be because of the expense), to small farmers in El Salvador. The problem also has sociological underpinnings having to do with farmers'

education and basic approach to life; "Is there any benefit to the small farmer if he's lent ¢200 for seed and fertilizer if instead he buys a horse or a pistol?" This sort of person, he feels, requires close guidance and supervision, something the Bank is not equipped to do. Because it's not allowed to have branch offices, there is the problem of accessibility - a lending program of this nature cannot be operated from one single office far removed from the field. There's also a staffing problem: to do the necessary counseling and supervising would require the hiring of quite a few agronomists.

This Bank, then, does not consider itself able to help the small farmer directly with the restrictions under which it must operate. Other banks, lacking such impediments, can and do. There's also the unsaid matter of profitability. Banks are not charitable institutions, and the management of the Bank is apt to think hard and long before venturing into what - from the standpoint of profits - a marginal operation.

Another matter dealt with concerned collateral. A unique feature of collateral for this Bank relates to mortgages; if an agricultural loan is secured by a mortgage, say, and the Bank should ever attempt to foreclose, the legal implications could be horrendous. First, matters would become difficult owing simply to the fact that the Bank would appear as a foreign litigant in a fight against a Salvadorean. Then such a lawsuit may cause the Bank unfavorable publicity and public ill will, something a foreign institution operating here does not exactly need. Mortgages as collateral, then, are generally in second plane.

In discussing the agricultural credit situation, it was noted that there might be many small farmers who were credit-worthy but did not seek to borrow on the mistaken assumption that they were getting all they could from their land, when in fact the land's potential was much greater and could be realized with only a small increment of capital.

A second representative of the Bank discussed its aggressive philosophy, and said that some previously ultra-conservative Salvadorean banks were now being less so. He specifically mentioned "Banco Cuscatlán" as a new bank here with new and dynamic ideas. He said that he felt his bank's influence had had a lot to do with the changing of attitude among the other bankers. He feels that the 1970 "Ley de Bancos" makes it now totally unprofitable for foreign banks to set up commercial offices here and must limit themselves to small secondary offices dedicated mainly to provide overseas contacts and to the sale of Eurodollars.

The commercial banking system, this Bank's official believed, could best help the small producer - be he a farmer or a fisherman - through the sponsorship of "cooperativas." Local community efforts are easier to fund and supervise. He mentioned the "Cooperativa de Pescadores" en La Libertad as a very successful example of such an effort. It was funded by the Bank, the staff was trained and guided by bank employees, and help also came from a Peace Corp Operative assigned to the project.

The Bank has been active in helping the small industrial entrepeneur, and not long ago had a program which, unfortunately, failed when 60 percent of the borrowers defaulted on their payments. The outlook for a similar program in the agricultural sector is viewed as hopeless in light of this experience.

Bank Two: Salvadorean Commercial Bank

The Bank makes about 125 agricultural loans each year, none of which is made to the small (3 hectares or less) farmer. The reasons why the small farmer is not directly helped by this bank are largely the same the other two banks: it is too expensive, leaves little or no profit to the bank, and is something that other agencies are already doing in ways better than the Bank (this has to do with the fact, for instance, that BFA can get money very cheap for the purpose, and its management does not have the answer to stockholders for losses incurred).

Of the agricultural loans made, only 3 out of 125 went to coffee growers. Most of the loans by far (70) went for the cultivation of basic grains and cereals. Like the other banks it does not have a "soft window" for loans at a lower rate than the usual.

As far as whether the small farmer has any other credit sources, the answer is that he has not, though here this bank gave the answer a somewhat different twist: he hasn't, they state, except through BFA and some "cooperativas", but even there he's often found lacking and not really creditworthy.

Rates of interest at which the Bank lends its money are within the guidelines imposed by the "Junta Monetaria."

Like banks in the States, this institution lends money on the basis of a person's credit rating and personal reputation. This, according to the Bank's official, was really the only criterion. Once a loan is made, though, the collateral becomes in effect a "garantía prendaria". The Bank is guaranteed against total loss because it can claim the collateral. A different twist also: not a single one of the agricultural loans now on the books was backed up by a mortgage.

This Bank's officials agreed that it was pointless for the commercial banking system to try to provide the small farmer with greater credit facilities, because the small farmer was simply not equipped to make proper use of the money in any event. What was needed, they said, was an education program that would eventually enable him to best benefit from increased credit facilities. Educate him in family planning, for instance. You're kidding yourselves, they stated, if you think that a farmer who's raising a family of ten on two manzanas of land can indeed be helped in a meaningful way! Another consideration relates to work. It's one of the functions of the banking system to provide for an atmosphere of greater productivity to benefit not only the farmer, but also those who do not own land -- "We can't all be landowners".

Bank Three: El Salvadorean Commercial Bank

This interview was easily the least productive of the four in the commercial bank survey. The attitude of the bank official toward the small farmer and his credit problems were reflected in the fact that he indicated no knowledge of, nor ability to find out, any important factual data requested, such as the percentage of agricultural loans for coffee, cotton, etc. In order to obtain the information a "Memoria" was requested, but unfortunately this Bank publishes no "Memorias."

The bank official did state that the bank was, of course, concerned with the plight of the small farmer since they had agricultural loans on the books for as little as ¢3,000! This comment may well summarize the Bank's policy vis a vis the small farmer.

This Bank indicated that preferred collateral was a mortgage. This fact contrasts with the three banks which relegated mortgages to last place and, indeed, in one of the other banks there were no mortgage loans on the books for the agricultural loan portfolio. This Bank follows interest rate guidelines established by the Junta Monetaria, as do all the other banks interviewed. Indeed, little flexibility for independent interest rate decisions exist in the El Salvadorean banking structure. Interest rates are define for almost every conceivable type of loan by the Junta Monetaria through the Central Bank.

Bank Four: El Salvadorean Bank

This bank does not as a rule make loans to the small (3 hectares or less) farmer because, (1) the small farmer does not usually come to them for a loan; and (2) there are other agencies that can best serve the small farmer's needs. He did emphasize that they have no policy against such loans, and that these, though rare, are still made.

The Bank official was careful to point out that the institution held to the letter of the guidelines set up by the "Junta Monetaria". A publication of the "Junta Monetaria - Normas para Créditos Agropecuarios" serves as the Bible for credit guidelines.

For collateral, this Bank prefers a chattel mortgage. In order of preference this collateral is followed by a co-signed agreement, and then by a "Hipoteca Abierta". "Hipoteca Abierta" is a type of collateral through which property is mortgaged for a given number of years after a loan principal is agreed upon. What makes this type of mortgage unique is that the farmer can use any or all of the funds on a revolving basis depending on his needs without bothering with specific loan approval every time. Another form of collateral, and one now applied only to cotton production is what's called a "Orden Irrevocable", and which works this way: a cotton cooperative makes a deal with the farmer which will direct all the profits from the harvest to the bank itself. The bank will then subtract what the farmer owes, and promptly refunds the balance to the farmer.

The official stated it is impractical and unprofitable for the Bank to make agricultural loans below ₡1,000. Still the best place for a small farmer is the "Banco de Fomento Agrícola". Commercial banks can best help here, indirectly, through work with cooperatives.

Summary of Commercial Bank Views on Agricultural Credit for the Small Farmer as Revealed by Interviews

The following is a summary of the concensus views of the commercial and hipotecario banking system in El Salvador as it relates to small farmer credit.

1. The credit needs of the small farmer (3 hectares or less) are not being met by the commercial banking system, largely because it is unprofitable to do so under existing legislation. Poor risk, high cost of supervising and monitoring small loans, (neither of which may be offset by higher interest charges to small farmers) and low real interest rates (negative, in the past two years) requires that available credit be disbursed on credit worthiness, a criterion by which the rural small farmer is least eligible.

2. Guidelines imposed by the Monetary Board (Junta Monetaria) determine interest rates charged on agricultural loans. These generally range in the area of 9 to 13 percent depending upon type and amount of loan. For example, maximum rates for short-term loans range from 11 to 12 percent depending upon amount borrowed, while similar rates for long-term loans are 12 and 13 percent. Loans classified as "economic development" vary between 10 and 12 percent, while loans for imports of capital are 10 to 11 percent normally.

3. Banks discount loans with the Central Bank at 2 percent.

4. A Chattel Mortgage is the preferred and most widely used collateral arrangement.

5. A "soft window" for agricultural loans does not exist in the commercial banking sector.

6. The Agricultural Bank is the best source of credit for the small farmer.

7. Banks have no trouble in disposing of any funds earmarked for the agrcultural sector since demand exceeds supply at existing interest rates.

8. The commercial banking system in El Salvador can best participate, if at all, in aiding the small farmer indirectly by sponsoring cooperative efforts.

9. Any major participation by commercial banks in loans to the small farmer would imply direct selective intervention by government authority through requiring a given percentage of the portfolio be in the form of such loans.

CHAPTER V

SMALL FARMERS AND INSTITUTIONAL CREDIT

Small Farms and Crops Cultivated

Small farmers in El Salvador grow predominately food crops including corn, beans, sorghum, and rice. The following table summarizes the total acreage in these crops, and the amount of acreage receiving some financing in 1973/74:

Basic Grains Financing in El Salvador, 1973/74

Crops	Total Area Planted in El Salvador Mz	Approximate area covered by the system (Mz.)				
		Total	B.C.R. and Commercial	B.F.A.	Fed.Caja de Crédito	HIPOCAFE
	(1973/74					
Corn	287.270		11.660	20,300	14,768	3,165
Beans	64,440		3,234	4,200	1,278	19
Rice	13,600		5,604	4,000	1,138	604
Sorghum	170,000			1,483		
TOTAL	535,310	71,453	20,498	29,983	17,184	3,788

Source: Each of the institutions for B.C.R. and Commercial Banks, estimates are based on credit requirements per manzana as recommended by MAG, Dirección de Planificación Agropecuaria. Total area planted is the final figure provided by the Dirección de Economía Agropecuaria, MAG.

As indicated in the table, about 71,000 of the 535,000 hectares, or only 13 percent, received institutional financing during 1973/74 while export crops acreage probably received close to 100 percent financing from commercial bank and hipotecario sources.

Credit and Small Farms

The income and employment problems of traditional agriculture are in part a function of insufficient credit and poor access to credit sources. There is practically no credit available to the target group for medium and long-term capital improvement loans and to purchase additional land, nor is there credit for operating capital. The supervised credit agency which preceded the Banco de Fomento (ABC) reached around 8,000 to 12,000 of the farmers in the target group in 1972 and FEDECACES is reaching an additional 2,500 farmers through loans to agricultural cooperatives and credit unions. The Cajas de Crédito have a small loan portfolio for small and medium-size farmers. According to reports from the Banco de Fomento Agropecuario, the Federación de Cajas de Crédito Rural, and the Federación de Cooperativas de Ahorro y Crédito (the three institutions charged with serving the credit needs of the medium and small farmer), these institutions assisted, during 1973/74 around 20,100 small farmers with loans for basic grains production as well as livestock, vegetables, and a few loans for export crops. Given the fact that there were, according to the 1971 agricultural census, about 252,000 operating units with less than ten hectares, the three institutions appear to be providing partial service to less than ten percent of this group. Further, the extent of the service in terms of the amount of loan granted per hectare is not known. The GOES reports that more than 80 percent of total credit from institutional services goes to export crops, and less than 5 percent go to basic grains, a statement which is corroborated on the basis of the commercial bank credit by crop.* The Plan

TABLE 1

Agricultural Credit from Commercial and Hipotecario Bank System 1/

(Amount actually used)

	1971		1972		1973	
TOTAL 2/	155,413	100.00	191,484	100.00	272,960	100.00
1. Agriculture	147,456		180,035		252,650	
a) Coffee	70,841	45.58	85,627	44.71	115,843	42.43
b) Cotton	54,327	34.95	63,866	33.35	84,786	31.06
c) Sugar Cane	9,880	6.35	15,231	7.95	24,603	9.01
d) Corn	3,077	1.97	2,801	1.46	3,325	1.21
e) Beans	516	0.33	207	0.10	1,132	0.41
f) Rice	2,543	1.63	3,399	1.77	2,782	1.01
g) Other	6,272	4.03	8,904	4.64	20,179	7.39
2. Livestock	6,461	4.15	8,317	4.34	17,834	6.53
3. Poultry and Egg	1,144	0.73	2,812	1,46	1,760	0.64
4. Fishery and other	352	0.22	310	0.16	716	0.26

Source: Banco Central de Reserva

1/ Includes: Banco Agrícola Comercial, Banco Capitalizador, Banco de Comercio, Banco de Crédito popular, Banco Cuscatlán, Banco Salvadoreño, Banco Hipotecario, First National City Bank and Banco de Londres y Montreal.

2/ Includes: Central Bank Funds.

Quinquenal points out that more than 90 percent is used for operating capital or short-term production credit, while less than ten percent is available for long-term investment.**

Table 1 gives agricultural credit from the commercial and hipotecario banking system for 1971-73, and shows that the system provided ¢272 million in credit to agriculture while Table 2 shows the credits extended by the Central Bank to all financial intermediaries for lending, including ¢115 million to the commercial banks. One concludes that around 42 percent of commercial bank credit was created by expansion of money stock by the Central Bank, while the remaining 58 percent was generated from the commercial bank own resources. Table ? shows the credit allocated by the Central Bank to all financial intermediaries for agricultural credit, including monies allocated to the Compañía Salvadoreña de Café, Cooperativa Algodonera, Federación de Cajas de Crédito, FEDECACES, (totalling ¢87 million) as well as the Banco de Fomento Agropecuario and I.R.A. (¢13 million). Table ? also indicates that only around 1.6 percent of new Central Bank credit was allocated to the traditional crops of corn, beans, and rice.

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* MAG "Plan Operativo del Sector Agropecuario, 1974", p.26

** "Diagnóstico de Crédito Agropecuario Plan Quinquenal de Desarrollo 1973-77" CONAPLAN - MAG. Unpublished.

TABLE 2

USE OF CENTRAL BANK CREDIT, 1973

(Amounts actually used, thousand colones)

	Commercial and Hipotecario Banks	Other Private Institutions 1/	Public Sector 2/	Total	%
Ag. Sector	115,513	87,355	13,040	215,908	100
Agriculture:	102,588	82,358	10,675	195,621	
Coffee	29,161	9,039	-	38,200	17.69
Cotton	62,826	71,509	7,019	141,354	65.46
Sugar Cane	4,248	14	833	5,094	2.35
Corn	1,854	-	-	1,854	0.85
Beans	391	-	-	391	0.18
Rice	1,305	-	20	1,325	0.61
Other	2,803	1,797	2,803	7,403	3.42
Livestock:	12,664	4,952	2,285	19,900	9.21
Poultry & eggs:	206	4	81	291	0.13
Fishing & other:	56	41	-	97	-

SOURCE: Banco Central de Reserva de El Salvador

1/ Compañía Salvadoreña de Café, Cooperativa Algodonera, Federación de Cajas de Crédito, FEDECACES.

2/ Banco de Fomento Agropecuario, IRA.

MAG Analysis of Credit Issues

The MAG "Plan Anual Operativo 1974" reports that agricultural credit faced, in 1973, more or less the same bottlenecks outlined two years earlier during the preparation of the "Diagnóstico del Plan Quinquenal 1973-77", including the following:*

(a) overfinancing of large export producers, and underfinance of institutions that assist small farmers;

(b) too little (or absence of) coordination among the public sector and credit institutions; and

(c) deficiencies in the processing of applications for credit, including slow classification of application forms and excessive centralization of decision-making vis a vis credit worthiness.

The Plan included specific objectives, including regulation of maximum amounts to allocate for each specific crop in order to balance the allocation of credit between export and domestic consumption crops.

Since the Central Bank provides about 50 percent of total institutional credit (discount and rediscount), better coordination was projected between MAG and Banco Central, so as to reorient public resources to harmonize with GOES development objectives. The Agricultural Development Bank was founded in 1973 to channel resources to medium and small producers.

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*"Plan Quinquenal de Desarrollo Agropecuario, 1974" MAG p. 216.

In 1973, the following important measures were implemented with Central Bank's resources: increase in the allocation of funds for basic grains production, setting a preferential interest rate for beans; creation of special (new) credit lines for potato, beef production (fattening), coffee planting in new areas; reforestation; and agricultural input imports*. Most of the resources were intended to benefit relatively small and medium farmers.

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*"Plan Operativo del Sector Agropecuario, 1974", p. 26

CHAPTER VI

THE AGRICULTURAL DEVELOPMENT BANK

Profit Maximization and Development Banking: An Analytical Redefinition of Goals

In the framework of utility maximization, profit maximization is only one alternative to attaining optimum social welfare. Indeed, the assumptions which allow profit maximization to lead to a Pareto optimal result may not exist in all economies. The stated AID goal of the Congressional Mandate suggests that profit maximization is not necessarily the method for the achievement of utility maximization. Most of the methods for ranking projects are the results of maximization analyses based on the concept of profit (social as well as personal) maximization, i.e. cost-profit analysis, social marginal productivity analyses, and Sen's time series.

Traditional profit maximization may lead one to describe the rural poor sector as a high risk, less productive, and highly unprofitable (in the sense of expected return) sector for investment. These conclusions are results of analyses which derive from the assumption that profit maximization yields social welfare maximization.

The conflict in twin objectives of profit maximization and development assistance is not new. Whether or not to establish a bank that continues to capitalize itself, or one which decapitalizes itself <u>efficiently</u> (and therefore requires additional doses of resources from the government from time to time) is a policy issue which the Mission and AID must consider if a small farmer credit loan is to be made. A development bank may, if its objectives are broadly defined to include the social benefits resulting from below-equilibrium interest rates to small farmers, maximize the appropriate objective function and still

decapitalize itself. In short, a development bank may do its job well and at the same time not earn a profit in the traditional sence. For example, one traditionally specifies profit as

$$\Pi = R - C \qquad (1)$$

where

R = PQ
C = Costs
P = Price of commodity q
Q = the number of commodity q sold

where

C = f (Q) and
P = f' (Q)

Maximization of the equation yields first order condition that marginal revenue is equal to marginal cost;

$$MR = MC \qquad (1a)$$

In discussing profitability most analyses either leave revenues as a nebulous term to be later quantified or it is reduced to its most basic formulation price X quantity or PQ.

One may include in the objective function a definition of "profit" that maximizes not solely revenue minus cost, but some social benefits. Inclusion of social benefits (income redistribution, reduction of intranquility in the rural sector) may permit the maximization of the function at an economic loss. That is, marginal cost may exceed marginal revenue as traditionally defined if social benefits are included in the formulation. The call of the Congressional Mandate for resource allocation to the rural poor appears to suggest that certain non-economic objectives are now required by the U.S. Congress in its development policy. Those objectives may be included broadly

in the "social benefit" part of the objective function.

Thus, defining the objective function to be maximized to include both traditional profits and social benefits (S) we may specify $R = P \cdot Q + g(S)$ where S is social benefit. In the spirit of the Congressional Mandate the servicing of the rural sector should carry a positive reward, or alternatively, some disincentive in terms of revenue generated by social benefits. If we can find the proper $g(S)$ then profit maximization may yield some interior solution into the correct specifications of criteria for loan size.

Let $\pi = R' - C$ (2) $S = f(Q)$

where $R' = R + g(S)$ and then

$$\pi = R + g(S) - C \qquad (3)$$

The first order conditions for maximization are

$$\frac{dR}{dQ} + \frac{d\left[g(S)\right]}{dQ} - \frac{dC}{dQ} = 0 \quad (4)$$

Rewritten then

$$\frac{dR}{dQ} + \frac{d^1 g(S)}{dQ} = \frac{dC}{dQ} \qquad (4a)$$

and

$$\frac{dR}{dQ} - \frac{dC}{dQ} = -\frac{df_g(S)}{dQ}$$

Clearly if $\frac{d\,g(S)}{dQ} > 0$ then the marginal cost is greater than in equation (1a).

If a development loan is made to a small farmer then we may necessarily have a MC greater than under normal maximization conditions since we now must consider $g(S)$.

The result of this analysis suggests that any criterion which measures the success or failure of a development bank loan structure depends

upon the magnitude of g(S). Clearly a g(S) great enough would lead to a TR < TC implying a decapitalizing development bank.

Under traditional analysis where g(S) is not considered or even considered as a negative value few, or even in the extremes no loans would be made to the class "small farmer". Clearly the Mandate implies

$$g(S) \geq 0 \quad \text{and}$$

$$\frac{d[g(S)]}{dQ} \geq 0$$

Therefore profit maximization policy may very well lead to a Pareto optimal solution where "profitability" in the traditional sense is negative.

The Agricultural Bank's Predecessor:

The Administration of Campesino Welfare (ABC)

On the basis of a study undertaken by the government in 1961, it was estimated that a total of 174,200 agricultural farms existed in the country more than 90 percent having a size less than 50 hectares, and that these farms represented a one-third of the total land under cultivation in the country. Further, these 90 percent of farms in El Salvador produced only 25 percent of gross agricultural product. In 1973, the government created a legislative decree the "Administración Para el Bienestar Campesino"(ABC), for the purpose of (1) increasing agricultural output, (2) improving the level of economic well being of the campesino, and (3) developing a market for national industrial output. ABC was created as a unit of the Ministry of Agriculture and Livestock, and was charged with the responsibility of executing the programs in supervised credit and technical assistance in agricultural production.

Owing to its inexperience in activities related to development banking, and to the necessity to channel rapidly the available funds into the agricultural sector, ABC concentrated its efforts in the placement of funds in the rural sector without very much analysis of credit worthiness of its customers. As a result, in 1965, the bad debts increased to a sum equal to 27 percent of the total portfolio and even to 50 percent of the loans to cooperatives.

In order to improve this situation, more rigorous credit policies were established and credit was accompanied by an increased program

of technical assistance through supervised credit. As a result, in 1966, the ABC reduced its bad debt to only 6 percent. Ten years after its creation, ABC had authorized credit reaching a total of ¢82 million, and during the last five years of its operation it provided input benefits to the agricultural sector by achieving a substantial increase in the productivity of some basic crops.*

Nevertheless in 1972, although the ABC had accumulated a small deficit, the portfolio due for payment had reached 33 percent of the total portfolio. At the same time, ABC was limited in its ability to formulate plans for long-term credits and its long-term fiscal strategy was conditioned unfortunately upon the fiscal requirements of the central government which were subject to some substantial variation over the years. Recognizing the need to develop programs consistent with agricultural credit in short and long-run, the government decided to establish an autonomous financial institution for this function, and to transform ABC into a development bank, autonomous and decentralized. On this basis, the Agricultural Development Bank was created with resources independent of the national fiscal condition, whose basic objective would be to assume responsibility originally given to ABC, and to expand its participation process of agricultural development of the country to programs of direct agricultural loans of inputs and of bank operations.

Creation of the Agricultural Development Bank

In May, 1972, the law creating the Agricultural Bank was passed. During the first month of its creation, the administration of the

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*Conclusion reached by Peat, Marwick, Mitchell and Co., Banco de Fomento Agropecuario Informe Diagnostico, 24 Febrero, 1975.

Agricultural Bank concentrated its effort at improving its financial structure, in restructuring its portfolio, and in the formulating of credit programs, and procedures for direct agricultural input credit. As a result, in only two years the Bank experienced an explosive growth in the volume of operations, quadrupling its portfolio and assets, and reducing its loans due (lengthening the maturity of its portfolio). The alteration in the Bank portfolio structure is clearly seen in the following summary*

	(Millions of Colones)	
	1972	1974
Loan Portfolio	22.3	93.0
Assets	29.4	126.7
Agricultural Commodities	0.1	15.1
Loans Due	33%	7%
Number of Borrowers	10,753	14,500

The loan portfolio increased from ₡22 million in 1972 to ₡93 million in 1974. Assets rose from ₡29 million in 1972 to ₡126 million in 1974, while agricultural commodity inputs held by the Bank rose from less than ₡.1 million to ₡15 million in 1974. Perhaps most important of all, the portfolio structure changed such that by 1974 the loans falling due were only seven percent as opposed to 33 percent in 1972. The burgeoning of assets also impacted the larger number of clients, with the number of families served in the loan portfolio rising from 10,753 in 1972 to 14,500 in 1974.

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*Table taken from Peat, Marwick, Mitchell and Co., Banco de Fomento Agropecuario Informe Diagnostico, 24 Febrero, 1975.

The El Salvadorean Agricultural Development Bank (Banco de Fomento Agropecuario) was created by Legislative Decree 312; April 10, 1973, as an official decentralized credit institution with unlimited life, its own resources, and a corporation with autonomy in the administration of its goods and services. The Agricultural Bank was established with two objectives: (a) to create, develop, and maintain a financial facility and ancilliary services required to contribute to the development of agriculture, and (b) to serve as financial agent for the agencies charged with programs to effect rural agricultural reform and welfare.

Bank Organization

The Bank operates through 4 (or divisions: (a) Programs (Lending); (b) Economic and Social (Economic and Social Development).

The Division Programs finances working capital needs for commercial or industrial farms (large scale operating units). Preference is given to irrigation projects, soil conservation and agricultural diversification. The Division aids in the establishment of enterprises to produce pure breed cattle, and also provides short-term loans for export crops. Within this Division, the Bank charges the customer whenever technical assistance is provided.

The Division de Economia Campesina is oriented primarily to support financial and technical assistance needs of small and medium size farmers whose income is largely derived from agriculture. Insofar as is possible, the resources of this Division are channeled to the

production of food crops (basic grains, vegetables, fruits). Export crops and livestock development projects are excluded. Loans may be made to legalize titles of properties, or to help [illegible] tenancy problems but in practice very limited funds are available to buy lands. In terms of the volume of annual loans, this [illegible] is the most important credit institution serving [illegible] farmers in El Salvador.

At its creation the Bank received [illegible] operating funds from the Administración de Pensiones (now [illegible]) important transfers were to be made annually [illegible] including (a) the [illegible] of the previous [illegible] (this [illegible] loans improved); (b) all [illegible] credits loaned out of the [illegible] Central Bank up to May 4, 1973; and (c) [illegible] period the Bank acquire 50 percent of the funds [illegible] Central Bank to increase the amount of funds [illegible] loans.*

Capital structure at the end of [illegible]

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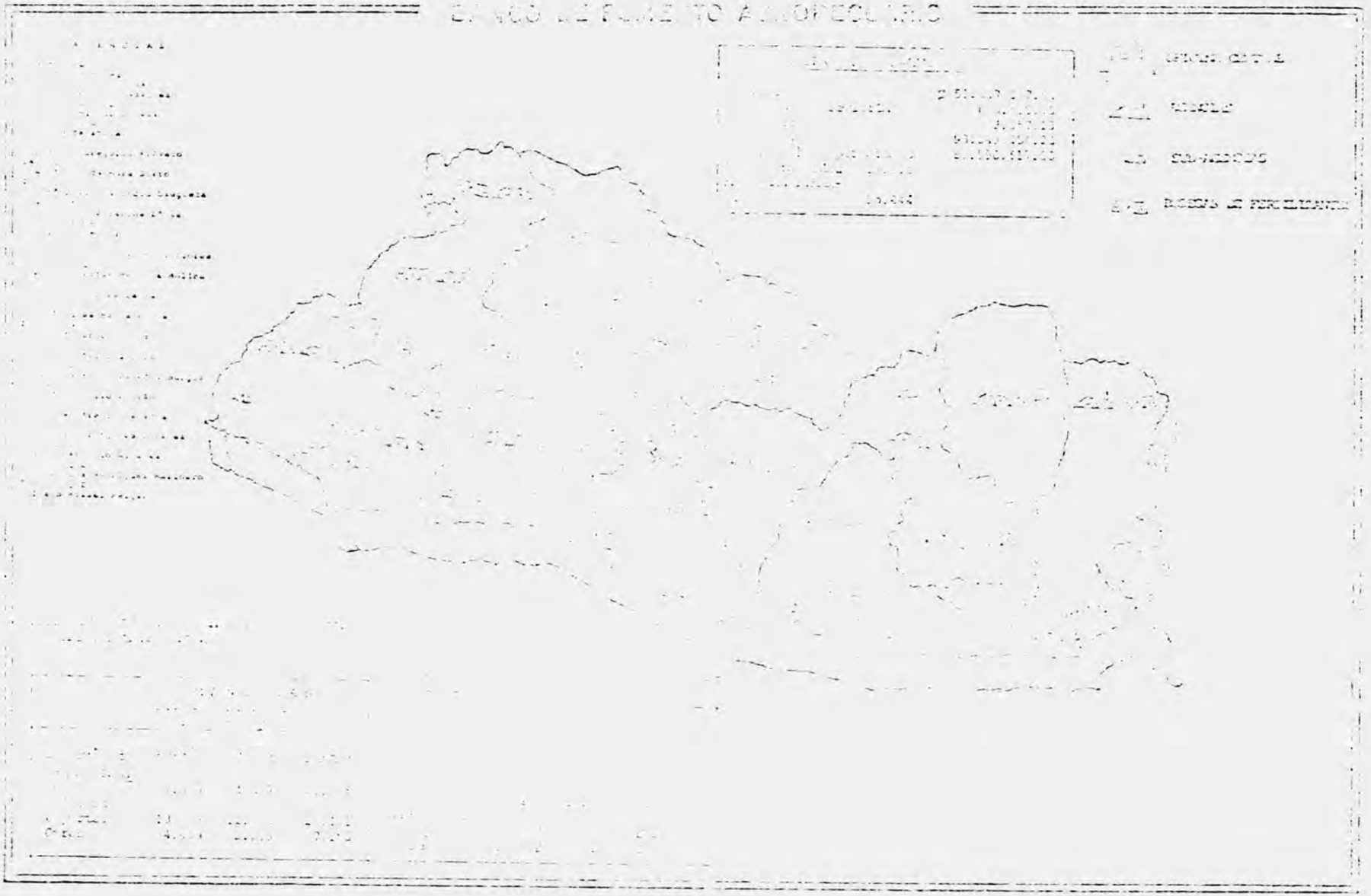
* Ley de Creación del Banco de Fomento Agropecuario, Articles 73, 74, 76, 77.

Capital and Reserves, December 31, 1974 *

Banking Division Capital	₡39,121,543
Economic and Social Development Fund	12,715,553
SUB-Total	₡51,837,097
Reserve for loss recuperation accounts	5,010,433.75
TOTAL: Capital and Reserves	₡44,131,976.00

The chart in the annex, presents a summary of capital, reserves, fixed assets of both of the two Divisions, also, with the financial corporative.

Source: "Memoria del Banco de Fomento Agropecuario, 1974", page 4



General Lending Policies

The Bank makes [illegible] short term (up to 18 months; chattel mortgage), medium term (1 1/2 to 5 years; real estate collateral), and [illegible] real estate collateral). [illegible] chattel [illegible] objects.

[illegible] by the [illegible] varied [illegible] percent for short term, 7 1/2 to 9 percent [illegible] and [illegible] 6 1/2 [illegible] [illegible]

[illegible] the [illegible] real estate [illegible] than [illegible] before, a [illegible] which was provided to [illegible] food crops.

Table de Tchebycheff-Lexis appliquée aux [illegible]

by division

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

Coverage 1972-1974

The following table summarizes the growth of loan activity 1972 - 1974.

Total Area Financed by B.F.A., División Bancaria, and División de Fomento Económico y Social 1972-74

Year	Number of Loans	Total Financed ₡	Total Area 1/ Mz.
1972 - ABL	7 591	₡ 16,722,685	42,734
1973 - BIA	9 497	29,699,088	56,472
1974 - BIA	10,920	67,432,932 2/	88,462

Source: Memoria, B.F.A., 1972, and First Semester 1974.

1/ IT INCLUDES IMPROVED GRASS LANDS.

2/ IT INCLUDES FERTILIZER IMPORTS.

By the end of 1974, 95,444 manzanas had been financed by the Bank, including 62,135 for basic grains, 26,151 export crops, and 7,158 miscellaneous. Of the 62,135 in basic grains, about 87 percent was financed through the Economic Development soft window.

Basic grains (corn, sorghum, beans and rice) financed by the Bank was 29,938 manzanas in 1973, rising to 62,135 manzanas in June 1974, as indicated in the following data.

Area Planted with B.F.A. Financing 1974

	Area Planted (Mz)		
	Banking Div.	Ec. D.Division	Total
C r o p s	25,470	69,974	95,444
Basic Grains	7,598	54,537	62,135
Export Crops	13,383	12,768	26,151
Other	4,489	2,669	7,158
T O T A L	50,940	139,948	190,888

Source: "Memoria B.F.A.", 1974

Agricultural Bank Loans, 1974

Tables 1 and 2 are presented on the following page, including (1) authorized loans for the Agricultural Bank during 1974, and (2) number of loans by sector. The Banking Division, which serves medium and large farmers, authorized over ¢56 million in loans in 1974, of which almost ¢20 million was for fertilizer imports and ¢17 million for other agricultural activities. At the same time the Economic and Social Development Division of the Bank (the soft window for small farmers) authorized over ¢30 million in loans of which ¢23 million was allocated to agricultural activities. The total loans authorized by the Bank as shown in the table was ¢86 million in 1974 with ¢41 million in credits to agriculture, ¢8 million to livestock, and almost ¢20 million to fertilizer imports.

The number of loans made by the Bank in 1974 increased measurably from the earlier period, reaching a total of 14,211 for the year. Of this total, 1,173 were made through the Banking Division, and 13,038 through the Economic and Social Development Division. It appears on the basis of the data given in these two tables that the average size loan for borrowers in the Banking Division was ¢23,835 per loan (¢17,447,828 divided by 732 loans). During the year 11,367 loans were made through the Economic and Social Development Division for a total loan portfolio of ¢23,519,250 or an average size loan of ¢2,070 per loan.

The Agricultural Bank exceeded its planned quota for investment during 1973 by 24 percent. The Agricultural Sector loans

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1- · LOANS AUTHORIZED - COLONES

	División Bancaria	División Fom.Ecn. y Soc.	TOTAL
1- Agricultura	₡ 17.447.828	₡ 23.519.225	₡ 40.967.053
2- Ganadería (Vacuno, porcino, avícola, apícola)	3.985.048	4.026.297	8.011.345
3- Otras inversiones de Capital	2.610.008	890.616	3.500.624
4- Pago de deudas y otros pre-agrícolas	1.598.242	1.611.453	3.209.695
5- Agro Industrias	2.220.000		2.220.000
6- Pre-Exportación	5.000.000		5.000.000
7- Importación Fertilizantes	19.679.100		19.679.100
8- Descuentos Agrícolas	3.800.000		3.800.000
9- Otros	202.600		202.600
T O T A L	₡ 56.542.826	₡ 30.047.591	₡ 86.590.417

2- NUMBER OF CLIENTS SERVED BY CREDIT USE

	División Bancaria	División Fom.Ecn.y Soc.	TOTAL
1- Agricultura	732	11.367	12.099
2- Ganadería (Vacuno, Porcino, Avícola,Apícola)	193	986	1.179
3- Otras inversiones de Capital	141	374	515
4- Pago de Deudas y otros pre-agrícolas	77	311	388
5- Agro-Industrias	3	-	3
6- Pre-Exportación	1	-	1
7- Importación Fertilizantes	3	-	3
8- Descuentos Agrícolas	2	-	2
9- Otros	21	-	21
TOTAL	1.173	13.038	14.211

Source: Memoria Anual, Banco de Fomento, February, 1975.

3 - QUOTAS ATTAINED FOR 1974 INVESTMENT PLAN, BANCO FOMENTO

	PLAN BFA 1974	-COVERAGE 1974	-INDEX %
Sector Agrícola	₡ 29.535.000	₡ 40.967.053	139 %
Sector Ganadero	8.455.000	8.011.345	95 %
Maquinaria Agrícola	1.985.000	2.504.208	126 %
Mejoras	1.915.000	996.416	52 %
Pago de deudas y otros pre-agrícolas	3.110.000	3.209.695	103 %
SUB-TOTAL	45.000.000	55.688.717	124 %
Importación Fertilizantes	25.000.000	19.679.100	79 %
Descuentos Agrícolas	-.-	3.800.000	
Agroindustrias	-.-	2.220.000	
Pre-exportación	-.-	5.000.000	
Otros	-.-	202.600	
SUB-TOTAL	-.-	11.222.600	
T O T A L	₡ 70.000.000	₡ 86.590.417	124 %

Source: Memoria Anual de 1974, Banco de Fomento, February, 1975.

exceeded the planned expenditures by 39 percent, while in agricultural machinery the actual loans were 26 percent above those planned. As indicated on the following table, the total Bank loan quota for 1974 was ¢70 million, while actual loans amounted to ¢86 million, for a 24 percent excess of actual over anticipated loans.(Table 3)

More impressive, however, was the willingness of the Bank to make loans on crops that are traditionally cultivated by the small farmer. For example, Table 4 shows the planned investment in the agricultural sector by major crop, and indicates that actual loans exceeded planned loans for corn production in 1974 by 89 percent, sorghum production by 235 percent, bean production by 41 percent, rice production by 47 percent, vegetables by 95 percent, and overall agricultural loans exceeded the planned investment by 47 percent. In short, the Bank has apparently moved more aggressively than anticipated in the financing of basic grains and other fruit crops which are traditionally cultivated by the small farmer.

Profit and Loss, 1974

The overall results of the financial operations of the Central Bank for 1974 reveal an interesting pattern which, upon reflection, is what one would expect in terms of profits and losses. These data are summarized in Table 5 which shows that the Banking Division (loans largely to medium and large farmers with good security) made a net return of ¢1,608,879 for the year, while the Economic and Social Development Division made a net loss of ¢1,106,522. On balance, therefore, the Bank made a net return of ¢502,357 for the year in which the losses

4 - COVERAGE OF INVESTMENT PLAN, 1974, BY CROP.

(M A N Z A N A S)

	PLAN DE INVERSION/ 74	COBERTURA PLAN 31 -XII/74	INDICE %
AGRICULTURAL SECTOR	64.910	95.444	147 %
Corn	24.000	45.389	189 %
Sorghum	1.000	2.352	235 %
Beans	5.000	7.065	141 %
Rice	5.000	7.329	147 %
Vegetables	710	1.390	195 %
Other Crops	3.500	5.429	155 %
Cotton	19.000	18.415	97 %
Sugar Cane	6.700	5.256	78 %
Perennial Crops	-.-	2.819	-.-

5 - PROFIT AND LOSS

	División Bancaria	División Fom.Ecn.y Soc.	TOTAL
REVENUES	¢ 4.373.976.31	¢ 2.084.415.90	¢ 6.458.392.21
EXPENDITURES	2.765.096.94	3.190.938.14	5.956.035.08
PROFIT	1.608.879.37	-.-	1.608.879.37
LOSS	-.-	1.106.522.24	1.106.522.24
NET RETURN	-.-	-.-	502.357.13

through the small farmer soft window were offset by profits made through the large farmer. The Agricultural Bank therefore, if it is to fulfill its mission as a creditor of last resort to small farmers, really has two basic options to maintain its long term mobility, including (1) to obtain grant funds on subsidies to absorb the losses in servicing the higher risk, low-income marginal credit applicant, or (2) to devote a considerable portion of its resources to making loans to medium and large farmers with a good collateral in order to internally generate sufficient profit to subsidize the Economic and Social Development Division. If one were to hypothesize the reason for the losses in the Economic and Social Development Division, it probably would be because of the paperwork required to process 13,000 loans (as opposed to 700 loans in the Banking Division) plus undoubtedly some higher rate of bad debt write-off.

Bank Financing of Marginal Farmers, 1974

The Agricultural Bank, as noted in the 1974 Memoria, has placed special attention on the weakest link of the agricultural community in El Salvador, those who are most affected by inadequate access to credit, varying market prices, and unemployment throughout much of the year. In 1974, the Bank established a new method of reaching this group through what it calls Grupos Solidarios. The Bank's initial evaluation of this new loan approach has been satisfactory, and they expect to increase considerably the number of small farmers reached through the Grupo Solidario. The process is to make working capital loans to small groups of farmers rather than to individuals, with the groups responsible

for credit approved (See memorandum of meeting with Dr. Rochac for explanation).

The activities in 1974 which reached the small farmer as indicated in the Bank's Memoria are the following:

Grupos Solidarios

A total of 158 agricultural groups received loans in 1974, comprising 963 individual farmers. The working capital loans were designed to finance the cultivation of 1,770 manzanas as follows: corn, 1,393 mz. sorghum 25 mz., beans, 275 mz., rice, 64 mz., and vegetables 13 mz. Total financing allocated to this group, ¢345,000, and the average size plot cultivated by members of the Grupos Solidarios were as follows: corn, 1 3/4 mz., rice 1 1/2 mz., beans 1 1/2 mz. As a result, it is clear that the Agricultural Bank through its Grupos Solidarios Program is reaching exactly the rural farmer that is congressionally mandated for AID assistance. In a meeting with Bank Advisor, Dr. Alfonso Rochac, (elsewhere in this report) the Bank's evaluation of the Grupo Solidario progress is outlined.

Individual Loans of Goods

The Bank also makes loans to individuals in kind. Usually such working capital loans do not exceed ¢1,000 and are authorized in the form of the following types of goods: fertilizer, improved seeds, and pesticides. In 1974, the Bank assisted 4,473 agricultural workers with loans of inputs.

Agricultural Cooperative Associations

As indicated in Table 6 the Bank also makes loans to agricultural cooperatives. The amount of financing made available in 1974 reached ₡4,428,355 as opposed to ₡1,294,900 in 1973, for an increase of ₡3,133,455 in one year. The number of cooperatives assisted increased from 16 in 1973, to 67 in 1974, and the number of members reached in 1973 was only 942 as compared with 5,292 in 1974. Table 6 gives information on the amount of credit extended for cereals and basic grains through cooperatives. Corn received the largest amount at ₡1,750,400, followed by cotton cooperatives with ₡1,345,295. The Table also gives data on the number of manzanas financed in 1973 and 1974 through agricultural cooperatives. In 1973, the Bank financed 2,721 manzanas for agricultural cooperatives, including 1,368 manzanas of corn (Table 6). By 1974, the figure had increased over three-fold to 12,448 manzanas, an increase of 9,727 manzanas over the year. The largest single crop financed in 1974 was corn (8,062 mz.) followed by cotton (1,298 mz), beans (1,350 mz), sorghum (1,226 mz), rice (301 mz.) and sugar cane (211 mz.)

Table 6

Agricultural Development Bank Loans to Cooperatives

	1973	1974	Increase
NUMBER OF COOPERATIVES ASSISTED	16	67	51
NUMBER OF MEMBERS	942	5.292	4.350
AMOUNT FINANCED	¢ 1.294.900	¢ 4.428.355	¢ 3.133.455
Corn	182.765	1.750.400	1.567.635
Sorgham	5.375	66.460	61.085
Beans	59.710	184.690	124.980
Rice	38.250	111.030	72.780
Cotton	348.000	1.345.295	997.295
Sugar Cane	53.270	142.000	88.730
Cattle	26.500	119.140	92.640
Machinery and Equipment	57.100	18.030	(39.070)
Other	523.930	691.310	167.380

AREA FINANCED
MANZANAS

Type of Cultivation	1973	1974	Increase
TOTAL	2.721	12.448	9.727
Corn	1.368	8.062	6.694
Sorgham	96	1.226	1.130
Beans	517	1.350	833
Rice	130	301	171
Cotton	490	1.298	808
Sugar Cane	120	211	91

Comparison of Basic Grains and Export Crop Financing

The Agricultural Bank has clearly directed special attention to stimulating the production of foods which provide the primary dietary intake for the Salvadorean population. This includes corn, beans, rice, milk and meat. The emphasis upon these crops may be measured by the amount of land which is being financed through the Bank for them. The following is a summary of manzanas financed for the period 1972 through 1974, including basic grains, export crops, vegetables, and others.

Year	Basic Grains	Export Crops	Vegetables	Others	Total
1972	24,597	16,334	790	1.016	42.737
1973	29.983	20.310	944	3.878	55.115
1974	62.135	26.151	1.390	5.768	95.444

The data show the rapid expansion of basic grains financing as compared with export crops and vegetables. For example, the increase in financing of basic grains was from 24,597 mz., in 1972 to 62,135 mz., in 1974, for an increase of 153 percent. At the same time, financing of export crops rose from 16,334 mz., to 26,151, for an increase of almost 62 percent.

The manzanas financed for cultivation of crops consumed internally in the country for 1973 and 1974 are as follows:

Item	1973	1974	Manzanas	%
Corn	21.608	45.389	23.781	110
Sorghum	883	2.352	1.469	166
Beans	4.422	7.065	2.643	60
Rice	3.070	7.329	4.259	139
T O T A L	29.983	62.135	32.152	107

Distribution of Fertilizer, Seeds and Pesticides

In 1974 the value of direct loans for fertilizers, improved seeds, and pesticides through the Bank reached ₡18,654,523. Through its Provisión Agricola Division the Bank maintains a warehouse of storage facilities for these inputs. BFA indicates in its 1974 Memoria that it has sufficient inputs for its customers throughout the agricultural cycle of 1975-76. In addition, the Bank assists other agencies such as the Federación de Cajas de Crédito, FEDECACES, Fundación Promotora de Cooperativas, providing them with fertilizers for distribution to small farmers who principally cultivate cereals.

The amount of fertilizer made available by the Bank during 1974 to these agencies were as follows:

	Formulas Sacks of 100 kgs.	Sulfate of Ammonium Sacks of 100 kgs.
FEDECACES	800	1,431
Federación de Cajas de Crédito	11.753	22.998
Fundación Promotora de Cooperativas	1.050	1.300
T O T A L	13.603	25.729

Bank Personnel

The personnel of the Agricultural Bank in 1973 included 355 employees, while by the end of 1974 it had reached a total of 462 distributed as follows:

Professionals	-	18
Technical	-	128
Administrative	-	189
Service	-	127

The available information thus suggests that the Agricultural Bank has utilized these resources during the past two years to achieve, within the requirements that it earn a return, the objective of maximizing service to the small farmer and counter-balancing these losses by gains from its loans to the large exporter.

Audit Report of the Agricultural Development Bank by Peat, Marwick, Mitchell and Company.

A diagnostic report on the Agricultural Development Bank was issued the 24th of February, 1975. The following discussion is a synopsis of some of the findings recorded by Peat, Marwick, Mitchell and Company on the basis of their analysis of the Banco de Fomento's financial condition in 1974. The report states that the conversion of the old ABC into a Development Bank created in El Salvador a significant increase in credit activity aimed at the low-income agricultural families. This is largely the result of Bank's more solid and flexible financial structure than its predecessor as well as the enthusiasm with which the Bank's administration implemented its new charge. During the first year of its existence, the planners of the Agricultural Bank dedicated themselves to developing a system of supervised credit for a substantially increased number of small farmers. As a result, in only two years the Bank quadrupled its loan portfolio from ¢22 million in December 1972 to ¢93 million in December 1974, while at the same time reducing the percentage of bad debts by more than 25 percent. At the same time, the Bank adopted an aggressive policy in the financing and commercialization of agricultural inputs which has contributed to the establishment of low-cost resource inputs for agricultural production in the country. As a matter of fact, the Bank now has investments of more than ¢15 million in inputs - fertilizers, seeds, etc. Further, through the Banking Division and its credit policies, the Bank was able to increase its net worth and support

the financing of its social and economic development operations.

The Peat, Marwick, Mitchell and Co., report indicates that, in order to achieve the dramatic growth in such a short time, the administration of the Bank found it necessary to adopt an informal bank structure, provide assistance to and reward meritorious service, enthusiasm and loyalty of its workers. At the same time the Bank implemented substantial modifications to the organization and management systems that were operative under the old ABC.

The report does recommend that the Bank improve its administrative and financial procedures, increase the internal audit function and the accounting systems relating to information control, the budget and credit system, and the portfolio budget, and introduce a system of electronic processing of data.

Memorandum of Conversation with Dr. Alfonso Rochac, Advisor, Agricultural Development Bank.

The meeting was held in Dr. Rochac's office June 16, 1975, with Dr. Wilford, Mr. Peña and Mr. Molina in attendance. Its purpose was to explore with Dr. Rochac the basic structural framework of the Agricultural Bank, to learn of its activity since having been consolidated with the old ABC, and to determine the extent to which the Bank has moved to accomplish in 1974 its mandate to provide credit and technical assistance to the small farmer.

Dr. Rochac began the discussion by revieving the organization of the Bank, which consists of the headquarters in San Salvador and 38 regional offices throughout the country. Functionally, the Bank is divided into two major divisions: the Economic and Social Development Division and the Banking Division. Dr. Rochac took great pride in indicating the success since 1972 in reaching the small farmer, and reviewed the programs undertaken by the Bank to provide financing for this economic group, including the cooperatives, individual credit, and Grupos Solidarios.

As regards interest rates, Dr. Wilford raised the question as to whether or not they are established by a legislative decree or by Bank policy. Dr. Rochac replied that the interest rates are variable depending upon the borrower, with the small farmer receiving concessionary rates, and the rate increasing for large borrowers. Interest rates are set by negotiation between various groups, including the Banco Central, the Agricultural Bank, the Junta Monetaria,

and the Ministries of Agriculture and Economy. While one would normally expect higher rates to be charged for small loans with higher credit risks, just reverse appears to be the case for Agricultural Bank. The current rate charged a small farmer begins at 6.5 percent for the production of basic foods, cereals and grains. An 8.5 percent rate is charged cotton and coffee growers, and when crop production exceeds an annual ¢500,000 higher interest rates are applied. Dr. Rochac indicated that he would provide us with a set of current data on the Bank, including the interest rate structure. Commercial paper obtained through loans for basic grains is discounted at the Central Bank at one percent, providing therefore a 7 percent spread on loans for the Agricultural Bank. This spread, however, is not sufficient to cover costs of the Economic and Social Development Division and, as was pointed out in the Memoria, its losses are compensated for by profits from the Banking Division.

Personnel

The Bank actively promotes the development of personnel, education and the implementation of policies which encourage the valuable employee to continue their banking careers with it. Most of the banks key employees are around 30 to 35 years of age, and therefore, Dr. Rochac feels that a young dynamic group has been marshalled who can be a long-term service with the Bank. An annual fund of ¢20,000 is available to cover scholarships to graduate and undergraduate students in the agricultural field. English classes are available to interested employees, since Dr. Rochac points out that

most of the good material on banking policies is written in English. Policy and operations manuals who helped it develop and are kept up-to-date, and the Bank publishes two Newsletters, one dealing with general economic trends, and the other related to matters of agricultural production. Rochac is concerned about the quality of skills possessed by the employees in the Research Division, and has requested specific assistance from AID for any materials relating to bank policies, supervised credit, and other areas in which Bank employees might improve their skills.

Political Stance

Political autonomy is a prerequisite for successful operation of the Bank according to Dr. Rochac. He suggests that, since the Bank is not politically aligned with any party, it is constantly being probed and placed in an unfavorable light by political parties, and it spends a great deal of time sidestepping political pressures. In short, the policy of neutrality, with its advantages, also means that the Bank has no political parties as allies, and is open to criticism by politicians in general. In spite of this consideration, he considers political neutrality as indispensible for a successful operation of the Bank.

Grupos Solidarios

Perhaps the most interesting part of the conversation with Dr. Rochac related to the new experiment of the Bank of lending funds to groups of families (usually in units of ten) to collectively insure a debt. While the Bank is mandated to work with cooperatives, and

has indeed increased its participation in financing of cooperatives from 16 in 1973 to 67 by 1974, Dr. Rochac was a bit doubtful as to the viability of credit to cooperatives. He indicated that the provision of credit to cooperatives has practical drawbacks, although theoretically appearing to be a good idea. Rochac, while not going into detail, left the impression that he was not entirely satisfied with the cooperative as a customer of the Bank. He was, however, extremely pleased with the new experiment which the Bank has identified as Grupos Solidarios. This loan procedure is to provide assistance to perhaps ten families who are willing, as a group, to make one loan from the Bank and to collectively pledge its payment. The advantage of this novel approach is that it permits small groups to band together (probably on the basis either of social, religious, or familial ties) in an economic unit. It also permits families with common interests and with some sense of group identity to create their own mini-cooperatives. The advantages clear: the Bank can make larger loans, transaction costs are lowered, the risk of non-payment is reduced because a larger number of families participate in guaranteeing one loan, and there is clearly group pressure (particularly for loans to family groups) for repayment. Dr. Rochac believes that while it is somewhat early to make a final evaluation of the success of Grupos Solidarios program, he left the distinct impression that preliminary evaluation has been extremely encouraging, and this probably is a more effective device for channeling credit than the cooperative.

Supervisory Credit

Dr. Wilford inquired as to the extent of the Supervisory Credit Program at the Agricultural Bank. Dr. Rochac replied that the Bank spends a good deal of time and effort in Supervisory Credit, and indeed when it makes loans of fertilizer, seeds, and pesticides it does so through a team of credit agents across the country who serve as technical assistance supervisors. Interestingly, Rochac pointed out that a number of the credit supervisors are members of the Peace Corps.

The meeting closed with a request from Dr. Rochac for assistance from AID in terms of any teaching aids and materials that might be available to improve the skills of the Bank employees, including slides or movie films that relate to agricultural issues. He pointed out that approximately five years ago AID had provided two technical assistance advisors to the predecessor of the Agricultural Bank (ABC) and that they had established the guidelines for issuance of credit that the Bank utilizes this time. He did not specify the names of the technicians, but was most complimentary in terms of the contribution of the advisors in establishing loan procedures for ABC.

In the discussion of interest rate policy for small farmers, Dr. Wilford observed that interest rates at the 6 1/2 percent level (or even at 8, 9, 10 or 11 percent) as required of coffee growers should result in a substantial unsatisfied demand for funds. Given the fact that the per annum inflation rate in El Salvador has been

at least 15 percent for the past two years, borrowing of funds at any rate of less than 15 percent suggests a negative real rate of interest, resulting in demand for as much credit as the system can provide. Dr. Rochac agreed, and replied by showing a series of photographs indicating long lines of individuals awaiting opportunity to make applications for credit at the various agencies of the Agricultural Bank. Clearly the demand for credit for agricultural or other purposes in the country (given the artificially low interest rates) should be infinite for rational entrepreneurs.

The meeting closed with an invitation by Dr. Rochac to visit with some bank officials the various agencies out in the field in order to get a better idea of the loan procedures and the types of loans with which the bank is involved.

CHAPTER VII

FEDERACION DE CAJAS DE CREDITO

Organized in 1943 through legislative edict, and heavily backed by the government, "La Federación de Cajas de Crédito" is made up of 38 offices ("Cajas") sprinkled throughout rural El Salvador. The Agency's avowed purpose is to participate in financial lending programs that foster increased productivity and social well-being. As of May, 1974, the "Cajas" had 44,215 affiliated members.

A parent office, "La Federación", provides administrative support and supervision to each of the "Cajas". There are six divisions within this office, including:

1. The Financial Division

Handles the paperwork involved in the processing of over 25,000 loan applications every year.

2. The Administrative Counseling Division

Besides the obvious counseling and overseeing functions, this division is charged with the collection of overdue loan payments, handling about 2,400 cases and conducting over 1,000 home interviews with individuals each year. Through its efforts, the yearly non-payment rate has been reduced (in 1973-74) to about 8.4 percent.

3. The Appraisal Division

Carries out above 900 urban and rural real estate appraisals, with an appraised worth of over ¢14 million.

4. The Auditing Division

Performs needed auditing functions within the system.

5. The Technical Division

Charged with promoting and implementing agricultural programs, it usually carries out the following activities:

a. Makes "in person" visits to promote the use of credit;

b. Holds seminars among farmers to explain and promote the use of credit;

c. Makes "in person" visits to promote sugar cane cultivation techniques;

d. Makes "in person" visits to promote cereal and grain cultivation techniques;

TABLE I

"FEDERACION DE CAJAS DE CREDITO" - 1973-74

AMOUNT OF LOANS BREAKDOWN*

AMOUNT OF LOAN	NO. OF BORROWERS	%	TOTAL CREDIT	%
¢ - 500.	7,192	35.48	¢2,626.288	9.44
501.- 1,000.	6,595	32.53	5,336.439	19.17
1,001 - 2,000.	3,892	19.20	5,847.700	21.01
2,001 - 5,000.	1,862	9.18	6,133.874	22.04
5,001 - 10,000.	544	2.68	4,111,252	14.77
10,001 - 15,000.	97	.48	1,264.133	4.54
15,001 - 20,000.	32	.16	572.042	2.06
20,001 - 25,000.	18	.09	402,700	1.45
25,001 - 30,000.	14	.07	397.500	1.43
30,001 - 35,000.	6	.03	198,145	.71
35,001 - 40,000.	12	.06	450,000	1.62
40,000 and up	9	.04	490,535	1.76
T O T A L	20,273	100.0	¢27,830,608	100.0

*Source: "Memoria Federación de Cajas de Crédito" - 1973-74

TABLE II

"FEDERACION DE CAJAS DE CREDITO" - 1973-74

LOAN TERM BREAKDOWN*

TERM OF LOAN	NO. OF BORROWERS	%	TOTAL CREDIT	%
Up to 1 year	6,373	31.44	¢5,767.555	20.72
1 year to 2	3,669	18.10	3,200.655	11.50
2 - 3	5,294	26.11	5,469.331	19.65
3 - 4	521	2.57	812.365	2.92
4 - 5	1,696	8.37	3,010.431	18.10
5 - 6	1,449	7.15	3,137.983	11.28
6 - 7	131	.65	529.019	1.90
7 - 8	374	1.84	1,543.389	5.55
8 - 9	14	.07	62.200	.22
9 - 10	737	3.64	4,079.019	14.66
more than 10	15	.07	218.661	.79
T O T A L	20,273	100.0	¢27,830.608	100.0

*Source: "Memoria Federación de Cajas de Crédito" - 1973-74

e. Makes "in person" visits to promote the use of agricultural tools;

f. Conducts feasibility studies relating to agricultural production and other programs;

g. Conducts feasibility studies sponsored by "FDE" ("Fondo de Desarrollo Económico");

h. Conducts inspections of on-going projects financed by the "Programa de Fomento Agropecuario" in order to insure proper implementation or provide counseling.

5. Legal Division

Handles legal matters for the system.

Funds for the "Federación" come largely from "Banco Central". Listed among the system's long term creditors, besides Republic National Bank of New York, are "BCR - Fondo BID","BCR - Fondo de Desarrollo Económico", BCR - Fondo de Garantía", and other unnamed banks and credit institutions. As of May, 1974, the long term debt exceeded ¢17 million. Short term obligations are mainly "Créditos Bancarios" owed Banco Central and amounting to just over ¢5 million.

Also during that year, the aggregate financial assistance provided by the system came to almost ¢28 million, of which ¢11 million went to the agricultural sector. Funds for "complementary services" (mainly fertilizer supplies and sugar cane pre-marketing) raised the agricultural assistance figure to just over ¢14 million, and the percentile share of the whole from 38 percent to 45 percent.

As determined by the "Junta Monetaria", the "Federación" lends money to the "Cajas" at 7 percent annual interest. The "Cajas" in turn charge borrowers between 10 and 11 percent, to which is generally added a one percent surcharge to defray the cost of processing the loan papers.

The "Fomento Agropecuario" program, as the system's agricultural credit program is called, is directed in particular to the small farmer. Most of its loans are designed to fill the farmer's working capital needs. Of the ¢11 million that went to the agricultural sector, the greatest amount (¢4 million) went to corn production. This was followed by cotton (¢2.8 million), and sugar cane (¢2.2 million). A distant fifth was coffee for which just over half a million colones were loaned (see Table V).

Of 20,273 loans made between the first of June 1973 and the 31st of May 1974, 13,787 (68 percent), were for ¢1,000 or less, with most of these given out as personal unsecured loans. The greatest number of loans, 7,192 (35 percent), was in the ¢500 or less category. This is not to say that loans for sizeable amounts were not made. During this period also (see Table I), 188 loans were made in excess of ¢10,000 each, amounting to over 10 percent of the money lent. With the addition of 544 who borrowed at least ¢5,000, these borrowers accounted for fully a third of the loaned funds.

TABLE III

"FEDERACION DE CAJAS DE CREDITO" - 1973-74

TYPES OF COLLATERAL*

TYPE OF COLLATERAL	NO. OF BORROWERS	%	TOTAL CREDIT	%
PERSONAL	13,261	65.41	¢10,704.802	38.46
CHATTEL	126	.62	353.573	1.27
REFACCIONARIA	504	2.49	1,355.060	4.87
MORTGAGE	6,382	31.48	15,417.173	55.40
T O T A L	20,273	100.0	¢27,830.608	100.0

*Source: "Memoria Federación de Cajas de Crédito" - 1973-74

In general, it is considered that loans over ¢1,000 can be profitable, and it is these profits which help offset the losses incurred through the thinly supervised smaller loans. This balancing factor appears to be built into the system; quite likely, without it, lending programs to the very small farmer could not be made viable. It may well be that very small loans cannot ever be made profitable because if losses are now incurred through lack of proper supervision, proper supervision would lessen this type of loss but its own cost might then plunge this loan category back into the red.

Collateral requirements are not stringent. In fact, fully 65 percent of all the loans made were classified as "personal" (see Table III). When a collateral was required, though, mortgages were by far the preferred type. During the year ending in May 1974, for instance, 6,382 of all the loans, or 32 percent, were backed up by mortgages. But even this figure appears low when related to the number of loans made at long term (2 years or more) which was 10,231, loans which by their very nature would require a stronger collateral. Over half (55 percent) of the money lent went for loans secured by mortgages, and invariably these were long term loans.

As shown on Table IV, the great majority of the agricultural loans (88 percent) were used for working capital. These also account for three-fourths of the money borrowed for agricultural purposes. It is significant that in the 8,095 loans used for working capital the average size of each loan was less than ¢1,000.

TABLE IV

"FEDERACION DE CAJAS DE CREDITO" - 1973-74

USES OF AGRICULTURAL CREDIT*

	Number of Loans	%	Total ¢	%	Size of Average Loan
Working Capital	8,095	87.50	7,780,267	74.22	973.00
Fixed Investment	493	5.32	1,173,767	11.06	2.380
Debt Refinance (working capital)	208	2.24	408,076	3.84	1.961
Debt Refinance (Fixed Investment)	160	1.72	529,220	4.98	3.307
Home and Family Needs	19	0.22	6,912	0.06	363
Fixed Investment (Home Improvement)	165	1.79	400,596	2.78	2,427
Debt Refinance (home needs)	37	0.39	71,424	0.68	1,930
Debt Refinance (home improvement)	75	0.82	147,111	1.38	1,961
SUB-TOTAL	9,252	100.00	10,617,373	100.00	
Complementary Services:					
Fertilizer Supplies			1,831,827		
Sugar cane pre-marketing			1,595,094		
			¢ 14,044,294		

Source: "Memoria Federación de Cajas de Crédito" - 1973-74

TABLE V

"FEDERACION DE CAJAS DE CREDITO" - 1973-74

CROP BREAKDOWN*

TYPE OF CROP	SURFACE (HECTARES)	CREDIT TOTAL
Cotton	9,042	¢ 2,779,587
Rice	1,627	696,634
Coffee	2,455	570,580
Sugar Cane	3,050	2,213,304
Beans	1,827	427,393
Sorghum	813	46,199
Corn	21,118	3,972,782
Fruit and Other Vegetables	1,022	215,920
T O T A L	40,954	¢10,922,399

*Source: "Memoria Federación de Cajas de Crédito" - 1973-74

CHAPTER VIII

THE INTEREST RATE STRUCTURE AND SMALL FARMER CREDIT

Interest Rate Policy

If we assume that the current interest rate structure in El Salvador continues, and that the real costs of borrowing capital are negative for the foreseeable given an inflation rate of 15 - 20 percent per year, we may further assume that the demand for loanable funds is perfectly elastic at the current subsidized rates. Given the limited credit availability and perfectly elastic demand at the current price (interest rate) it is not reasonable to expect that financial resources will be channeled in to the traditional, technologically backward sector through commercial banks. At best, considering the cost of handling small loans, the risk involved in low or noncollateral loans, it is difficult at best to channel resources to the small noncapitalized farmer even if the interest rate structure were flexible, i.e., such that it could serve the rationing function. In short, given the high risk and cost of managing small operating loans for rural farmers, the cost of borrowing would be prohibitive compared with the expected return on crops. Compound these problems of high service cost with the interest rate ceiling below equilibrium and one recognizes the impossibility of the commercial banking system or Hipotecario Bank to serve as a useful channel for small farm credit. Indeed, if one wishes to assure credit to rural farmers, who by their very nature are high risk, the first assumption must be that for social (not necessarily economic) reasons it is desirable to provide the additional resources. Therefore, it

becomes necessary to subsidize credit through a special institution whose function is not to maximize profit but to assure that the loans made to small farmers either individually or through cooperative are efficiently utilized. Further, one should recognize that efficient utilization of a loan through subsidized interest rates does not necessarily imply that the lending institution must be profitable, or even that it should maintain capital over time. It all too often the tendency on the part of AID and international development agencies in general is to measure success of financial intermediaries involved in development on the basis of ability to maintain and increase capitalization over time. The dual objectives of (1) maintaining capital profitability, and (2) serving a sector in which credit does not normally flow because of the high risk and low rate of return, and by their nature in conflict. We are not saying that development can be an excuse for making bad loans, for not having internal and external audit policies to maintain efficiency in the achievement of social goals, and to attempt to obtain repayment where feasible, but we are suggesting that a development bank may require, over time, infusions of capital from most government or international agencies even if it is performing its job diligently.

It is possible, however, if the interest rate structure were determined by the market rather than ceilings, that some more funds would flow into the rural sector although the cost of borrowing would be high. Professor Robert Sammons, in a March, 1974 USAID/El Salvador memorandum makes the following observations on artificially low

interest rates which reinforces our judgment that, under current conditions of monetary policy, one cannot expect effective channeling of resources to the rural traditional sector.

"There are at least three reasons for believing that the general level of interest rates in El Salvador is "too low", and that, contrary to popular theology, higher rates of interest would be conductive to economic growth. The following observations, none of them new, I am sure, seem pertinent.

a. El Salvador, like most LDCs, is a country in which labor is cheap and plentiful, but capital (savings) is relatively scarce. Keeping the price of a scarce resource artificially low leads to rationing by personal judgment (or worse, favoritism), to the use of capital in relatively less productive forms (resources misallocation), and to investment in relatively capital-intensive enterprises.

b. Current rates of interest seem to be below those prevailing abroad, tending to induce Salvadoreans to put their money abroad, and to reduce incentives for foreign investment in the country. If one assumes that capital flows are, sooner or later, translated into flows of goods and services, this means that the country could obtain more real sources from abroad, and thus enhance economic growth, if interest rates were higher.

The recent increases have obviously been in the right direction, but fall well short of the recent acceleration of inflation and, at least in some cases, leave Salvadorean rates well below those prevailing in international markets. Although I understand a detailed study of the subject was recently made by the Central Bank, much more could profitably be attempted, including an effort to measure the effects of interest rates on investment, consumption, and international capital flows in the past, with a view to making such further changes as would appear economically helpful. One change that might be studied would be the abolition of ceilings on bank lending rates.

If profit levels in private industry are high, as I suppose they are in El Salvador, it seems likely that the availability of credit rather than its cost is the principal credit variable affecting the volume of private investment. In other words, higher interest rates might

not reduce the total demand for credit by potential investors, but could serve to induce a more rational allocation of resources.

I realize of course, that interest rates are a politically sensitive issue all over the world, but the present seems to be one of the best opportunities in a long time, with rapid fluctuations of rates in major financial markets, to introduce more flexibility into systems long characterized by excessive rigidity, and to allow rates to rise to levels that will clear the market.

c. As is well known, inflation reduces the real rate of interest in relation to the nominal rate, thus discouraging saving in financial form (bonds, deposits) and accentuating the unfavorable effects of "low" interest rates on investments described in (a). While it is probably wrong to expect that an increase of one percentage point in the rate of inflation ought always to be (or will always be, in a free market) accompanied by a similar increase in the nominal rate of interest, there should obviously be some movement in the same direction.

d. The maintenance, by official action, of different rates of interest on different instruments or on loans to particular sectors is a common practice in El Salvador and elsewhere and undoubtedly has some of the desired effect on the direction of credit and investment. But the fungibility of money militates against the effectiveness of such measures, particularly in a country like El Salvador, where a single economic unit (say, a family) is engaged in many lines of enterprises. In this connection, the rediscount programs of the Central Bank apparently operate to produce significantly lower rates for some borrowers at commercial banks than others, giving a strong incentive to funnel as much of the total credit demands as possible into favored channels."

While our philosophic bias in terms of the market determination of prices, including the cost of capital or interest, is evident from the foregoing comments, the matter more directly at hand is the issue of how to channel financial resources to the AID target group. Even under a strict market interest rate structure, given the scarcity of capital in El Salvador and therefore the relatively high

price (interest) associated herewith in a free capital market, the lower productive, technologically primitive agricultural subsector would fail to attract credit simply because it could not afford market-set rates. As a result, if we deem it desirable for whatever reason social, political, or because of the Congressional Mandate - to provide resources to the rural farmer special institutions must be established. The only major potential institution in El Salvador to distribute such credit currently is the Banco de Fomento (Agricultural Development Bank), and therefore it is important that we review its performance to-date and look at its potential ability and willingness to serve this income group.

Market Rate of Interest for El Salvador, 1973-75: Some Estimates

Conceptually one may distinguish four factors which influence the market interest rates on agricultural credit loans (1) the opportunity cost of capital or the average return on investment on equal risk in the economy at large; (2) the costs of administering a loan, which are inversely related to loan size; (3) a premium for average delinquency or default on loans with this risk factor and (4) a premium for the interest rate.

Let us hypothesize various rates for each of these factors in El Salvador. The opportunity cost of capital (the average return on capital) in an emerging country is usually considerably higher than in a developed country because, among other things, capital is relatively more scarce in LDCs. A real rate return of 12 percent on invested capital is probably a conservative figure for foreign investors. Institutional overhead costs will vary with loan size, but they may be expected to be relatively high for the type of production credit loans usually required by small farmers. We estimate these costs, on the assumption of an overall ¢1,000 loan, at a minimum of five percent per year, a figure which is probably relatively low considering the fact that most loans to small farmers are associated with some technical assistance and loan monitoring which raises real costs. The premium for risk delinquency or default depends again upon real factors but, at a minimum, one can estimate this at approximately seven percent for the poorest of the rural farmers which are the AID target group. Finally, in El Salvador inflation rate for the past two

years has been at 15 percent per annum. Summing, a market interest rate for El Salvador's small farmers would be at least 12 + 5 + 7 + 15 or 39 percent per annum. While one expects market set rates for risky borrowers to be considerably higher than good credit risks, the Agricultural Development Bank in El Salvador (the primary supplier of institutional production credit to small farmers) gives preferential subsidies by charging interest for these loans at 6.5 percent per year, as compared with 11 percent per year on cotton and coffee loans. Regardless of 6.5 or 11 percent rates, the fact still remains that the subsidized interest rate structure in El Salvador does not reflect the cost of capital, and the rate differentials between various types of borrowers do not represent market differentials.

Indeed, in some cases the differentials are just the opposite of what one would theoretically expect. For example, the small farmer is paying an absolutely lower interest rate for production loans than the more secure commercial coffee and cotton producer on loans from the Agricultural Development Bank. One could certainly make the argument that all borrowers, commercial and small farmer, can afford to pay higher rates than currently extant in El Salvador. In a period in which inflation is at 15 percent per annum both the small farmer who is borrowing from the Agricultural Bank at 6.5 percent, and the commercial borrower at 11 percent, find that the real cost of borrowing is negative. Indeed, for the small farmer fortunate enough to get an Agricultural Bank loan, the real rate is a negative 8.5 percent with a 15 percent inflation rate. It is difficult to understand

why both commercial and development banks indicate a strong unfulfilled demand for credit in El Salvador. The demand for credit should be perfectly elastic at negative real rates.

While there are strong theoretical arguments in favor of market set interest rates, it is also important that we recognize at this point that the government of El Salvador, through its Monetary Board, its Central Bank, its financial intermediaries (both public and private) is not going to alter substantially its interest rate structure. Under these circumstances, while we shall posit below the theoretical justification for such a policy, it is well to realize that policy recommendations on credit should, as a matter of pragmatism, be based upon the assumption of subsidized interest rates.

We recognize the merit of market set rate structures for a number of reasons, including (1) they serve to allocate scarce capital among its competing uses, (2) they permit higher interest payments on savings deposits, thus theoretically marshalling additional voluntary savings for the development process; (3) they stimulate the inflow of foreign capital if rates are sufficiently high. Further, increasing the interest rate structure in El Salvador would probably not reduce investment demand in the country, i.e., the marginal efficiency of capital function is more than likely interest inelastic within the ranges of 0 to 20 percent interest. We hypothesize this on the assumption

that for most investment activities the nominal rate of return expected on scarce capital in El Salvador is probably closer to 35 to 45 percent, and the demand for funds would probably exhaust available credit even at rates considerably in excess of the inflation rate, perhaps up to a 20 - 25 percent rate.

As economists we would make the strong case for the freeing of the capital structure to permit interest rates to be reflective of demand and supply conditions in the various capital markets. Even under this circumstance, however, it is probable that the small farmer, as a relatively inefficient, low-productivity unit, could afford to borrow at interest rates set for his particular capital market.

It is doubtful that a small farmer could reasonably be expected to pay 35 to 45 percent for production loans unless the inputs were combined with other delivery systems so as to substantially increase marginal productivity of labor.

Given the fact that the interest rate structure as a whole is too low, the selective raising of interest rates for small farmers (be it the commercial sector, through commercial banking structure or through the Agricultural Development Bank) would be discriminatory. As a result, it is not clear that more resources would automatically be channeled to the small farmer - already a poor credit risk and suffering from low productivity - even if the rate structure were adjusted. It might be possible for a market set interest structure to exist if rural farmers were subsidized by grant assistance in the form of extension services, marketing assistance, etc.

Market Set Interest Rates, and AID Policy: An Empirical Estimate

It is worthwhile noting that AID/Washington also concurs in the theoretical advisability of permiting the market to establish the rate structure. In AIDTO Circular No. A418 dated June 6, 1974, and titled "AID Guidelines on Project and Programming Planning for Small Farmer Credit" the following statement is made (page 24):

> Today, in many programs, interest rates are negligible or even negative in real terms, that is after correcting nominal rates for inflation. Such low rates are economically unjustifiable, and AID/Washington believes strongly that in most programs interest rates should be higher. A reasonable initial target might be to raise the interest charge to 12-15 percent in real terms.....

Application of this criterion to El Salvador would imply the following nominal interest rate structure for small farm loans. The general price and debt for El Salvador, based year 1955 = 100, stood at 127.4 in January, 1974 and reached 146.2 by December, 1974, for an increase of 14.7 percent. The nominal interest rate therefore required for a 15 percent real rate would have been 29.7 percent for agricultural loans in El Salvador during 1974, compared to the actual rate charged by the Agricultural Development Bank of only 6.5 percent.

According to the Revista Mensual of the Central Bank, the general price index stood at 115.7 in 1973, and 145.0 in 1974, which suggests that prices rose between 1973 and 1974 by 25.5 percent, and using the guidelines suggested by AID/W this would imply a rate of 40 percent for loans regardless of risk differential.

While commercial banks have no incentive to make loans to the traditional agricultural sector in El Salvador with the current established maximum rate structure clearly to the extent that they could be

permitted to make loans at higher rates some additional resources would flow into the small farmer market. One step, therefore, that AID might wish to pursue as a long-run objective in El Salvador, is to support, (a) increasing the maximum permissible interest rate for in more risky loan operations by ending usury laws, (b) permit the commercial banks to finance money lenders, in order to encourage liquidity among these groups who can in turn, at a price, channel resources to the rural sector. The primary benefit, of course, of higher rates is that the banks are then permitted to pay higher deposits rates on savings, which may increase the absolute level of savings. The assumption of interest-elasticity of savings deposits is one which we have not quantified for El Salvador, but one would expect that the rates on savings and time deposits would have to be raised considerably to increase measurably the supply of savings. This is, of course, because the real rate of interest, even with a doubling of the amount paid on savings and time deposits in El Salvador would remain negative at current inflation rates.

Perhaps one of the most important procedures by which the borrowing cost could be reduced is through decreasing the risk of non-payment. Group credit, whether through a cooperative arrangement, or through other procedures may assist in reducing the administrative cost and the risk premium on defaults. While the Agricultural Bank is not entirely pleased with the performance of its portfolio loans to Cooperatives, the Grupo Solidario experiment is a most promising avenue of reducing cost of borrowing through group credit.

CHAPTER IX

PREVIOUS DATA ON RURAL CREDIT IN EL SALVADOR: WILFORD COMPUTATION AND ANALYSIS OF COMPUTER OUTPUT DATA ON CREDIT FROM DR. A. MADSEN SUR-SURVEY; OBSERVATIONS ON THE LEBARON REPORT; ANALYSIS OF DATA IN CENSUS AVANCE, 1970-71, ON AGRICULTURAL CREDIT IN EL SALVADOR

In 1974, Dr. Albert Madsen surveyed the small farmer in El Salvador. While the primary interest of his survey was vegetable production, the sample from which he derived the statistics also serves as a reliable sample for the rural poor farm family in El Salvador. Madsen, in a January, 1975 article titled "Methodology Use in Collecting Data for the Economic Studies of the Vegetable Marketing System in El Salvador, 1974", makes the following statement on sample procedure:

> From the 1971 Census, 8,432 producers constituted the census generated universe. Of this total, 6,390 fell into strata #1 (.01-.50 mz.) 1,266 comprised the strata #2 (.51-1.0 mz.) Almost 91 percent of the total growers produced on 1 manzana or less. Strata #3 (1.0-5.0 mz.) and #4 (5.01 + mz.) each had 694 and 82 producers, respectively. It can thus be seen that the "small farmer" was the representative producer of vegetables in 1971 and any policy changes should be directed at this sub-sector representative.*

Not only were the overwhelming majority of those interviewed cultivating plots of less than five manzanas (Madsen makes the point that 91 percent of the sample universe work one manzana or less) but he reports that 391 out of the 428 families interviewed also grow corn and/or other basic grains. As a result, his sample represents a valid cross-section of the agricultural rural families in El Salvador working farms of 3.5 hectares or less.

The sample in the Madsen study classified growers into four

*See "Situación del Cultivo de Hortalizas", October, MAG, 1974.

TABLE A

IS CREDIT UTILIZED

(Responses classified by size of farm)

	Frequency		Percentage	
FARM SIZE	Yes	No	Yes	No
.01-.35 Hectares	24	87	22	78
.351-.7 Hectares	16	75	18	82
.71-3.5 Hectares	51	116	30	70
3.51 and Up Hectares	16	43	27	73
T O T A L	107	321	25	75

groups: strata 1, producers with less than .5 manzanas; strata 2, growers with .51 to 1 manzana; strata 3, growers with 1.01 to 5 manzanas; and strata 4, growers with 5.01 and above manzanas. Sampling percentages for each stratum were then divided taking into consideration the total number of growers within each stratum. The total number in the sample was kept to a level of 5 percent or less of the total vegetable growers population. For each zone, the number of growers which fell into each strata was listed, and the sampling percentages were 3%, 8%, 30%, and 100% for strata 1, 2, 3, and 4 respectively. These percentages were then multiplied against the number of growers in each strata, resulting in the desired sampling number. Madsen reports that on this basis a total of 428 questionnaires were completed, including the following distribution:

Strata 1 - 111 producers
Strata 2 - 91 producers
Strata 3 - 167 producers
Strata 4 - 59 producers
Total - 428 producers

While the Madsen sample may be slightly biased in terms of the rural poor farmer, it is a minimal bias. Even though the survey related to vegetable production, it turned out that of the 428 interviewees, 391 also grew corn. One might argue that the vegetable growers have incomes slightly above the poorest of the rural agricultural families in that they are producing a largely cash crop in addition to basic grains. However, for purposes of the credit analysis the

sample appears to be quite satisfactory. The tables that follow are derived by the authors from the Madsen survey computer printout data on credit questions. The questions on credit directed to the sample groups by Dr. Madsen were as follows:

1. Questions asked in Madsen study

    1. Do you use credit?
    2. For what purpose do you use credit (fertilizers, insecticides, labor, rent, etc.)
    3. Source of credit (Banco de Fomento, otros bancos, intermediarios, particulares, otros.)
    4. Credit conditions
        A. Interest per year
        B. Term of loan
        C. Total borrowed
    5. Credit availability
        A. the quantity necessary?
        B. the length of time required?
        C. available for desired objective?
        D. at interest you can afford?
        E. Explain others problems with credit
        F. What problems have you encountered with the credit sources?
        G. Do you utilize the same credit source?

The analysis of these tables as they relate to credit conditions as perceived by the rural farmer in 1974 accompanies the tables.

Tables A through N give the statistcal data on credit collected in the Madsen study. Table A shows the statistical response to the question: is credit utilized? Of the 428 families interviewed, 107, or 25 percent, indicated that they did receive some form of credit. Thus three out of each four families interviewed indicated that they did not utilize any credit. Table A also identifies the response by farm size. Only 22 percent of the farms of one-third hectare or less

TABLE B

SOURCE OF CREDIT *

SOURCE	Freq.	%
Agricultural Development Bank	46	42
Other Banks	12	11
Intermediaries	4	4
"Caja de Crédito"	8	7
Cooperatives	7	6
"INSAFOCOOP"	2	2
Individuals	10	9
Other	21	19
T O T A L	110	100

*Some respondents listed more than one source. All responses are tabulated in this table.

TABLE C

USES OF CREDIT

USES	Freq.	%
Fertilizer	60	27
Pesticides	57	25
Labor	58	26
Rent	28	12
Irrigation	13	6
Other	8	4
T O T A L	224	100

received any credit, with the remaining 78 percent responding that no credit was utilized. Only 18 percent of farms in the .35 to .7 hectare category received credit, while the percentage increased to 30 percent for farms of .71 to 3.5 hectares. Of the 43 farms in the sample above 3.51 hectares approximately 27 percent received some credit. In short, the survey suggests that around 20 percent of the farms in the .01 to .7 category received some credit during the year, while 80 percent do not.

Table B identifies the source of credit for those rural farmers responding affirmatively to the question on use of credit. Table B shows that there were 110 responses as to the source of credit, some responded listing more than one source. By far the most important single source of credit used by small farmers in El Salvador, as reflected in Table B, is the Agricultural Development Bank. Forty-two percent of responses indicated that the Agricultural Development Bank was the credit source. Other banks accounted for 11 percent of the responses, the Caja de Crédito 7 percent, cooperatives 6 percent, individuals 9 percent, intermediaries 4 percent, and INSAFOCOOP 2 percent. Approximately 19 percent listed credit sources other than those options indicated in Table B, suggesting that at least a portion of the credit is extended by families and/or by local stores.

Table C shows the use of credit for agricultural borrowers. Since the respondents often listed more than one credit use, Table C shows a total of 224 responses. The uses are arrayed from the most used (fertilizer), to the least used (irrigation). Twenty-seven percent of responses indicated that the credit used was for fertilizers, followed

TABLE D

PERCENTAGE OF LOANS FINANCED BY

SOURCE AND FARM SIZE

	FARM SIZE*							
	1		2		3		4	
SOURCE	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Agricultural Development Bank	6	13	10	22	22	48	8	17
Other Banks	3	25	-	-	5	41	4	34
Intermediaries	2	50	-	-	-	-	2	50
"Caja de Crédito"	3	38	2	24	3	38	-	-
Cooperatives	1	14	1	14	5	72	-	-
"Insafocoop"	2	100	-	-	-	-	-	-
Individuals	2	20	2	20	6	60	-	-
Other	6	29	2	10	10	47	3	14

*Farm size by stratum includes:

1. - .01 - .35 hectares
2. - .351 - .7 hectares
3. - .71 - 3.5 "
4. - 3.51 hectares and up

by labor (26 percent), pesticides (25 percent), rent payments (12 percent), irrigation (6 percent), and other uses (4 percent). If the respondents answered honestly, one must conclude that agricultural credit in the rural sector finds its way in the purchase of legitimate resource inputs, with fertilizer, pesticides, and labor payments constituting around 78 percent of the total use of credit in the rural sector.

Table D shows the percentage of loans financed by each major rural credit source on the basis of farm size. The Agricultural Development Bank, which, as we have seen, provided 42 percent of total rural loans, loaned most frequently to farms in the .7 to 3.5 hectare range, with 48 percent of all agricultural bank loans being directed to this group. Thirteen percent of Agricultural Development Bank loans, according to this survey, went to farms of .35 hectares or less, while 22 percent were directed to farms of .35 to .7 hectares. Larger farm units, those of 3.51 hectares and up, constituted 17 percent of Agricultural Development Bank loans in the sample.

Table D suggests that the most frequent farm size for almost all sources was the .71 to 3.5 hectare plot, with 48 percent of Agricultural Development Bank loans in this category, 41 percent of loans in the other bank category, 38 percent of loans in the Cajas de Crédito, 72 percent of cooperative loans, 60 percent of individual loans, and 47 percent of other.

Table E shows the responses to the question on credit availability as regards the adequacy of loan funds for the required purpose. That is, the respondents were asked to indicate whether or not they received credit for the purpose for which it was required. Almost

TABLE E

AVAILABILITY OF CREDIT:

LOAN ADEQUATE FOR REQUIRED PURPOSE?

	FREQUENCY		PERCENTAGE	
FARM SIZE	YES	NO	YES	NO
.01 - .35 hectares	25	-	100	-
.351 - .7 hectares	14	1	93	7
.71 - 3.5 hectares	48	-	100	-
3.51 hectares and up	15	-	100	-
T O T A L	102	1		

TABLE F

AVAILABILITY OF CREDIT:

AMOUNT NECESSARY?

	FREQUENCY		PERCENTAGE	
FARM SIZE	YES	NO	YES	NO
.01 - .35 hectares	21	4	84	16
.351 - .7 hectares	13	2	87	13
.71 - 3.5 hectares	41	7	85	15
3.51 hectares and up	11	3	79	21
T O T A L	86	16		

complete unanimity in the affirmative is recorded in Table E. Practically all respondents who received credit were so granted for the purpose for which they applied.

Table F reveals the responses to the question: did you receive the amount of credit necessary? It suggests that those rural farmers who did receive credit, were overwhelmingly provided with an amount sufficient to meet their needs. Interestingly, 84 percent of the farms of .01 - .35 hectares or less indicated that they received credit in the required amount, 87 percent of families with .35 to .7 hectares responding affirmatively, 85 percent of those in the .71 to 3.5 hectare category, and 79 percent of those with 3.51 and above hectares responding that they received credit in the amount necessary.

Table F shows that an overall affirmative response of 86 percent was recorded for rural farm families on the basis of the inquiry as to whether or not credit was received in the required amount, while only 15 percent responded that they did not receive the desired or necessary credit. Thus it appears that when a decision is made to grant credit to the rural farmer from whatever source, the borrower may expect to receive the amount of credit that he perceives is necessary.

Table G shows responses to the question: was the loan period adequate? Again, the data suggest an overwhelming affirmative response ranging from a "yes" answer for 92 percent of those who received credit in the .35 or less hectare category, 93 percent for those in the .35 to .7 hectare category, 94 percent for those in the .71 to 3.5 hectare grouping, and 100 percent for those in the 3.51 hectares and above

TABLE G

AVAILABILITY OF CREDIT:

WAS THE LOAN PERIOD ADEQUATE?

	FREQUENCY		PERCENTAGE	
FARM SIZE	YES	NO	YES	NO
.01 - .35 hectares	23	2	92	8
.351 - .7 hectares	14	1	93	7
.71 - 3.5 hectares	45	3	94	6
3.51 hectares and up	15	-	100	-
T O T A L	97	6		

TABLE H

NUMBER PAYING INTEREST

FARM SIZE	FREQUENCY	PERCENTAGE
.01 - .35 hectares	23	24
.351 - .7 hectares	14	14
.71 - 3.5 hectares	46	48
3.51 hectares and up	14	14
T O T A L	97	100

category. Again, the data suggest that once the decision to grant credit has been made from whatever source, be it institutional or non-institutional, not only is the required amount of credit granted but the maturity of the loan is also perceived to be acceptable by the borrower.

Table H shows the response to the question: do you pay interest? As expected, practically all loans carry an interest charge. This question appears, at first glance, to be redundant as one would expect a priori that once a loan is granted it carries interest. It is interesting to note, however, that while 110 respondents indicated that they had received loans from some source, Table H shows only 97 responding affirmatively to the question as regards of whether or not interest is paid. In short, 13 of the respondents, while they did receive credit, did not perceive that interest was being paid. It is possible, of course, that family friends made some loans at nominal interest rates. It is probably, however, more realistic to assume that a number of those who borrowed did not realize that an interest charge was included in the repayment. It is quite possible that the terms of repayment were indicated in terms either of pledging of product for repayment or a monthly amortization payment, neither of which would necessarily make explicit the financial costs reflected by interest rates.

Table I identifies the interest percentage by interest rate, paid for the 97 families responding affirmatively to the question: do you pay interest? The table lists annual rates of interest from .1 percent to 100 percent as well as the frequency and percentage responses for each of the four farm-size stratum. Perhaps the most significant feature of the table is that there were practically no interest charges

TABLE I

PERCENTAGE INTEREST RATE*

ANNUAL RATE OF INTEREST	1 Freq.	1 %	2 Freq.	2 %	3 Freq.	3 %	4 Freq.	4 %	Sample Freq.	Sample %
.1 - 4.9%	1	4	-	-	1	2	1	7	3	3
5 - 6.9	3	13	3	21	4	9	1	7	11	11
7 - 9.9	8	35	6	43	15	33	6	43	35	36
10 - 11.9	1	4	2	14	2	2	-	-	5	5
12 - 13.9	7	31	3	21	19	41	3	21	32	33
14 - 15.9	2	9	-	-	-	-	-	-	2	2
16 - 19.9	1	4	-	-	-	-	1	7	2	2
20 - 29.9	-	-	-	-	4	9	2	14	6	6
30 - 49.9	-	-	-	-	-	-	-	-	-	-
50 - 74.9	-	-	-	-	1	2	-	-	1	1
75 - 99.9	-	-	-	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-
T O T A L	23	100	14	99	46	98	14	99	97	99

*Farm size by stratum includes:

1. - .01 - .35 hectares
2. - .351 - .7 hectares
3. - .71 - 3.5 hectares
4. - 3.51 and up hectares

Note: Percentage totals for the various categories do not all add up to 100%; this is due to the rounding off of decimals prior to addition.

of 30 percent or more per annum with only one respondent of the 97 indicating that an interest rate above 30 percent was paid. As indicated in the final two columns of Table I, the annual rate of interest perceived by borrowers ranged in the neighborhood of 7 to 14 percent. Thirty-six percent of all respondents who paid interest listed their annual rate at 7 to 9.9 percent, with 38 percent of respondents listing the effective rate between 10 and 13.9 percent. Indeed, 88 percent of those in the sample indicated that they paid an interest rate of 13.9 percent or less. On the basis of this response it does not appear that rural farmers in El Salvador are making loan applications to, or are being exploited by, loansharks. Further, it seems clear that the interest rate charged for rural agricultural loans to small farmers is much <u>below</u> that which one would expect the free market to set. The latter would have to be considerably in excess of 14 percent to make it attractive for financial intermediaries to profitably lend to the higher risk small farmer. What little credit is being directed to the rural sector appears to be offered on concessionary terms. This conclusion may be verified both by the interest rate ceilings established by the Monetary Board, by the comments of the Agricultural Bank and commercial banks as regards the interest rate which they charge for agricultural loans, and finally by this sample survey which indicates the effective interest rate placed in the hands of the small farmer. If one conclusion can be made from the study <u>vis a vis</u> interest rates to the rural farmer, it is that the funds which do find their way to that sector are subsidized one way or another below the free market rate. The process of subsidy does have the advantage of rationing existing agricultural credit at concessionary terms, but it

TABLE J

LENGTH OF CREDIT TERM*

	1		2		3		4		Sample	
LOAN TERM	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
1 month	-	-	-	-	-	-	-	-	-	-
2 months	-	-	-	-	-	-	-	-	-	-
3 months	-	-	1	7	1	2	1	8	3	3
4 months	-	-	-	-	1	2	1	8	2	2
5 months	1	5	-	-	1	2	1	8	3	3
6 months	4	19	3	21	9	21	2	15	18	20
7 months	1	5	-	-	1	2	-	-	2	2
8 months	4	19	4	29	4	9	1	8	13	14
9 months	2	9	-	-	3	7	-	-	5	5
10 months	-	-	-	-	2	5	1	8	3	3
11 months	1	5	-	-	-	-	1	8	2	2
12 months	8	38	6	43	22	50	5	38	41	45
T O T A L	21	100	14	100	44	100	13	101	92	99

*Farm size by stratum includes:

1. - .01 - .35 hectares
2. - .351 - .7 hectares
3. - .71 - 3.5 hectares
4. - 3.51 hectares and up

Note: Percentage totals for the various categories do not all add up to 100%; this is due to the rounding off of decimals prior to addition.

has perhaps the most important disadvantage in that subsidized interest rates preclude the ability of the financial market to direct resources into the rural farm sector simply because the institutions are not permitted to charge a price (interest) which covers their cost and risk. The subsidized interest rate procedure therefore limits the flow of credit into the rural small farm sector.

As indicated earlier in Table G, the respondents overwhelmingly felt that the loan repayment period was adequate for their needs. Table J identifies the length of credit terms from one to twelve months for each of the farm size groups, and for the sample as the whole. The table shows that the most often used loan period for agricultural credit is twelve months, with 45 percent of all loans being made for that period. The second most frequent length of credit was for six months (20 percent of sample), followed by 8 months (14 percent). Indeed, 92 percent of all the loans were for a period of 6 months or more. It therefore appears that almost one-half of those who receive credit do so on a continuing basis. Since 45 percent indicated that they received credit for a twelve-month period, one may assume that most of these respondents use the credit facilities regularly. Indeed, it appears that 45 percent of the respondents have maturity terms of 12 months or more, which suggests that they pay off debts once each year only to reapply very quickly for another loan. More than likely, a number of these borrowers have continued in lines of credit with financial institutions.

Tables K, L, M, and N disaggregate the source of credit for respondents by farm size. Table K shows the most often used credit

TABLE K

SOURCE OF CREDIT

FARM SIZE .01 - .35 HECTARES

	FREQUENCY	PERCENTAGE
Agricultural Development Bank	6	24
Other Banks	3	12
Intermediaries	2	8
'Caja de Crédito'	3	12
Cooperatives	1	4
"INSAFOCOOP"	2	8
Individuals	2	8
Others	6	24

TABLE L

SOURCE OF CREDIT

FARM SIZE .351 - .7 HECTARES

	FREQUENCY	PERCENTAGE
Agricultural Development Bank	10	58
Other Banks	-	-
Intermediaries	-	-
"Caja de Crédito"	2	12
Cooperatives	1	6
"INSAFOCOOP"	-	-
Individuals	2	12
Others	2	12

facility for farms between the .01 and .35 hectares size. The Agricultural Bank is the most often cited source of credit for very small El Salvadorean rural farms, providing 24 percent of the number of loans obtained in the sample by this farm size group, while "other banks" and the "Caja de Crédito" were the second and third most important categories for the very small farmer (Table K). It therefore appears that the Agricultural Bank does reach some very small farmers, and if the Agricultural Bank is not available the smallest of farm entrepeneurs in El Salvador turn either to "other banks" or to the "Caja" (24 percent) or other non-institutional sources (24 percent).

The small farmer with a family plot of .35 to .7 hectares relies heavily on the Agricultural Development Bank. As indicated in Table L, the Agricultural Bank provided loans for 58 percent of those who received credit in this farm size category, followed by "Cajas de Crédito" (12 percent) individuals (12 percent) and other (12 percent). Only one of the respondents in this group indicated that credit from cooperatives was received. The pattern is repeated for farm size of .71 to 3.5 hectares, as indicated in Table M. Forty-three percent of those who received credit in this farm size relied upon the Agricultural Development Bank, with 32 percent relying either upon individuals (12 percent) or other non-institutional sources (20 percent). Finally, Table N reaffirms the trend showing that the Agricultural Bank was responsible for 47 percent of the total number of loans in this farm category. As would be expected, the second most important single source for the relatively large farms is other banks - largely commercial and hipotecario banks. For the three smaller farm sizes the "other bank" category provided credit for around

TABLE M

SOURCE OF CREDIT

FARM SIZE .71 - 3.5 HECTARES

	FREQUENCY	PERCENTAGE
Agricultural Development Bank	22	43
Other Banks	5	10
Intermediaries	-	-
"Caja de Crédito"	3	6
Cooperatives	5	10
"INSAFOCOOP"	-	-
Individuals	6	12
Others	10	20

TABLE N

SOURCE OF CREDIT

FARM SIZE 3.51 HECTARES AND UP

	FREQUENCY	PERCENTAGE
Agricultural Development Bank	8	47
Other Banks	4	24
Intermediaries	2	12
"Caja de Crédito"	-	-
Cooperatives	-	-
"INSAFOCOOP"	-	-
Individuals	-	-
Others	3	17

10 percent or less of loans, while the category increased significantly its financing of loans for the larger farm category. Indeed, the "other banks" category financed 24 percent of the number of loans for sample farms 3.51 hectares and above.

Dr. Madsen summarized his findings on rural credit in his Project Report to USAID/El Salvador dated June, 1975 (pages 72, 73, and 74) as follows:

> Credit Use by Vegetable Producers (Table No. 46)
>
> PURPOSE AND AVAILABILITY
>
> Twenty-five percent of the producers said that they used credit. Credit was used with about equal frequency for purchase of fertilizer, purchase of insecticides, herbicides, etc. and to pay labor. There did not seem to be a large scale lack of credit available since 84% of the users indicated that they could obtain the quantity of money required at interest rates they could afford. However, 15% of the producers could not get the credit they required. Most (94%) could borrow for the length of time they needed money and for the purpose they requested money.
>
> CREDIT PERIOD AND INTEREST RATE
>
> Somewhat less than half of the credit users borrowed money for 12 months or more.
>
> The most usual interest rates paid ranged from 7% to 9.9% and from 12-13.9% which are not usury levels in todays money markets. This may be due to the governments direct participation in making agricultural loans.
>
> SOURCE OF CREDIT
>
> Twenty six percent of the responses identified the development bank as the supplier of credit and 12 percent said they received credit from other sources not specifically identified in the questionnaire. Thirty eight percent of the respondents did not reply to the question asking for identification of suppliers of agricultural credit.
>
> Most (48%) of the credit users indicated that usually they deal with the same credit source.

TABLE No. 46 CREDIT USE BY VEGETABLE PRODUCERS, EL SALVADOR, 1974

Use credit	Yes Number	Yes %	No Number	No %
	107	25	321	75

For what is credit used	% of response frequency	Credit Availability	Yes %
Not identified	15.8	Credit available in quantity needed	84.3
Not fertilizer	22.6	" " for time "	94.2
Buy insecticides, herbicides, etc.	21.4	" " for purpose "	99.0
To pay for labor	21.8	" " at interest rate can afford	84.0
Land rental or purchased	10.5		
Irrigation	4.9		
Other	3.0	Deal with the credit source	83.5

Credit period Months	% of users	Interest rate Rate paid	% of users
1	0		
2	0	0 - 4.9	3.1
3	3.3	5 - 6.9	11.3
4	2.2	7 - 9.9	36.1
5	3.3	10 - 11.9	5.2
6	19.6	12 - 13.9	33.0
7	2.2	14 - 15.9	2.1
8	14.1	16 - 19.9	2.1
9	5.4	20 - 29.9	6.2
10	3.3	30 - 49.9	0.0
11	2.2	50 - 74.9	1.0
12	44.6	75 +	0.0
	100.0		100.0

Sources of credit (% of responses)

	No.	%
Not identified	66	37.5
Banco de Fomento	46	26.1
Other banking	12	6.8
Intermediaries	4	2.3
Individual	10	5.7
Other	21	11.9
Cajas de Crédito	8	4.5
Cooperative	7	4.0
INSAFOCOOP	2	1.1

Deal with the same credit source: percent yes 83.5

Credit Institutions: The LeBaron Report

The preliminary draft of the report by Allen LeBaron and Associates titled "Investigation of the Social and Economic Aspects of the Proposed Tenure and Production Program, Report #1: Findings of Field Survey and Productivity of Target Families" dated June 15, 1975, gives the following brief summary of their interview findings on credit institutions in El Salvador.

Our survey revealed that most families understood the role credit might play in seasonal farming operations. Some families were happy that they did not have to rely upon credit, others complained that they could not get credit as long as they raised basic food crops. This is due to the fact that collateral is often asked and many, many families who are nominal owners of land do not have clear titles to pledge.

Undoubtedly all kinds of credit institutions play some kind of role. However, we did not hear as much about private credit from millers and wholesales as we would have expected cf 4 . The most mentioned source of credit is "ABC" (Banco Fomento Agrícola). Our survey did not go into questions of credit effectiveness, need for supervision or loan policies.

Some credit can be obtained by a few persons banding together (Asociaciones Comunales) and two members, having land or other security can sign for the rest. Everyone is responsible for everyone else's payment so the "friendship" bonds must be strong. Members of coops can get credit, if the coop is strong and organized. In some cases, this source is flexible enough to partially finance new land purchases or will support rent payments on additional land. Persons of more than one tenure class may be in a coop. Coop managers and active members prefer to have especially enterprising and capable farmers as members. One coop we know of mainly arranges credit and its membership increased from a few to over 150 farmers in 4 years; membership is now closed. Ownership or production of livestock is often used to secure credit; some small farmers use livestock credit to support their basic grains operations.

We do not foresee, at present, any great requirement for changing the credit sources, the current ones should work. Simple cooperative arrangements on the parcelled lands may provide adequate security.

ANALYSIS OF CREDIT DATA FROM AGRICULTURAL CENSUS ADVANCE STATISTICS DIRECCION GENERAL DE ESTADISTICA Y CENSO

The Census Advance undertaken by the Ministry of Economics for the Agricultural year 1970-71 identified 272,432 pieces of land of various sizes totally on partially utilized for agricultural production. Of these, 17,300, or 6 percent had been granted credit by some type of lender or institution. In aggregate, these lands had been extended credit totalling ¢170,920,070. From the 17,300 farms that had received credit, 961 (6 percent) listed a commercial bank as the source - six percent, then, of the six percent who had received credit, obtained it at a commercial bank. Based on the total number of farms identified by the census, commercial banks had extended credit to 0.4 percent of them.

By far the most important source of farm credit during that period was the "Administración de Bienestar Campesino" (known as ABC), and which today is the Agricultural Development Bank. According to the census advance, ABC accounted for 5,694 loans or 4,733 more agricultural loans than all the commercial banks put together. To be sure, they cater to a different type of customer. This can be inferred from the fact that the aggregate loaned sum by the commercial banks based on 961 loans came to ¢86,670,421, whereas ABCs total credit was just ¢31,845,060, based on 5,694 loans. In percentage terms, ABC accounted for 33 percent of the 17,300 agricultural loans made (versus 6 percent by the commercial banks), and when combined with the 2,210 loans made

Table 0

NUMBER OF FARMS, CREDIT AND AMOUNT BY SOURCE, BY DEPARTMENT AND SIZE OF FARM, AGRICULTURAL YEAR 1970-71

No. de línea	Departamento y tamaño de la explotación (En hectáreas)	Total de explotaciones	Total de explotaciones con crédito	Monto total de los créditos en colones	Explotaciones según fuente y monto de los créditos	
					Banco	
					Explotaciones	Monto en colones
1	TOTAL	272 432	17 300	170 920 070	961	86 670 421
2	Menores de 1.	132 907	2 894	3 524 721	70	20 704
3	De 1 a 1.99	59 842	3 974	9 329 214	40	12 617
4	" 2 " 4.99	44 002	4 807	21 307 066	99	605 028
5	" 5 " 9.99	15 730	2 210	9 125 667	100	489 562
6	" 10 " 19.99	8 977	1 430	11 171 342	151	4 191 724
7	" 20 " 49.99	6 772	1 129	14 016 796	130	1 697 278
8	" 50 " 99.99	2 241	416	32 621 184	129	18 543 015
9	" 100 " 199.99	1 115	226	19 798 930	99	17 018 178
10	" 200 " 499.99	640	184	29 357 000	94	25 597 355
11	" 500 " 999.99	141	40	11 756 000	33	11 376 550
12	" 1 000 y más	65	20	8 711 800	16	7 208 400

Source: Agricultural Census Advance Statistics, Dirección General de Estadisticas y Censos

Table P

NUMBER OF FARMS, CREDIT AND AMOUNT, BY SOURCE,
BY DEPARTMENT, AGRICULTURAL YEAR 1970-71 (colones)

No. de línea	Departamento	Total de explotaciones	Total de explotaciones con crédito	Monto total de los créditos en colones	Explotaciones según fuente y monto de los créditos	
					Banco	
					Explotaciones	Monto en colones
1	TOTAL	272 432	17 300	170 920 070	961	86 670 421
2	Ahuachapán	18 848	1 114	11 026 150	48	4 126 052
3	Santa Ana	24 595	1 368	48 202 528	81	26 899 433
4	Sonsonate	17 895	846	9 757 684	85	7 001 716
5	Chalatenango	21 226	2 026	7 955 735	12	255 000
6	La Libertad	20 165	2 233	30 173 176	45	3 213 397
7	San Salvador	14 731	524	4 988 917	68	2 995 838
8	Cuscatlán	17 555	964	947 679	31	537 068
9	La Paz	15 118	1 094	14 937 806	102	12 827 652
10	Cabañas	15 494	1 001	1 481 499	23	125 849
11	San Vicente	13 089	903	9 929 451	53	9 280 246
12	Usulután	20 605	2 634	16 318 311	177	11 084 771
13	San Miguel	29 057	1 565	10 742 235	157	6 373 419
14	Morazán	19 291	435	1 093 621	23	114 800
15	La Unión	24 763	593	3 365 278	56	1 835 180

Source: Agricultural Census Advance Statistics, Direeción General de Estadisticas y Censos,

by the Sistema de Cajas de Crédito, together accounted for 46 percent of these loans during that period. In real terms, the percentage of loans these two institutions made to the small farmer is much greater than this, because the 17,300 figure includes farms of every size, and also because included in it are cattle ranches.

Of the 961 loans made by the commercial banks, 752 (78 percent) went to farmers with at least 5 hectares of land, with the greater number, 151, going to farms in the 10-20 hectare range. In marked contrast, ABC made 4,002 of 5,694 loans (70 percent) to farmers with less than 5 hectares, with its greatest number of loans, 1,959, going to farms in the 2-5 hectare range. The Cajas de Crédito Rural, made over half of their loans (1,139 out of 2,210) to farmers with less than 5 hectares to their name. The next greatest source of credit were the intermediaries. From them the farmer having less than 5 hectares received 2,375 loans out of a total of 3,300 (72 percent).

In the categories just examined, the total number of loans made to farmers with less than 5 hectares was 7,725. Of this total commercial banks made 209 (3 percent), ABC 4,002 (52 percent), Cajas de Crédito 1,139 (15 percent), and intermediaries 2,375 (31 percent).

We have noted that the Census Advance identified 272,432 farms in the country. Of these, 236,751 (87 percent) were farms of less than 5 hectares. From within this farm size a total of 11,675 farms received credit out of a population of 236,751, indicating that no more than 4.9 percent of all the farms in the country having less than 5 hectares make use of credit.

Table 9

NUMBER OF FARMS, CREDIT AND AMOUNT BY SOURCE, BY DEPARTMENT AND SIZE OF THE FARM. AGRICULTURAL YEAR 1970-71

Explotaciones según fuente y monto de los créditos										No. de línea
Administración del Bienestar Campesino		Caja de Crédito Rural		Compradores e intermediarios		Otra fuente		Fuente mixta		
Explotaciones	Monto en colones	Explotaciones	Monto en colones	Explotaciones	Monto en colones	Explotaciones	Monto en colones	Explotaciones	Monto en colones	
5 694	31 845 060	2 210	15 751 956	3 300	14 500 619	4 986	11 167 416	149	10 984 589	1
717	1 117 138	189	1 203 136	682	188 321	1 236	995 422	-	-	2
1 326	4 734 995	310	2 527 358	763	300 657	1 515	1 941 355	20	12 232	3
1 959	11 088 911	640	3 739 690	930	1 853 580	1 159	3 960 987	20	61 900	4
630	3 997 606	463	1 215 057	409	1 274 583	578	1 748 336	30	409 413	5
471	1 946 111	396	3 598 978	190	559 266	200	728 236	20	237 025	6
419	4 488 443	99	442 627	231	6 589 876	220	702 246	30	96 326	7
109	1 810 799	68	2 600 820	55	1 469 425	42	502 186	13	7 686 939	8
40	1 172 717	33	326 612	16	351 360	28	526 199	10	403 861	9
21	1 480 340	8	40 688	19	1 323 466	8	62 449	4	859 992	10
1	1 500	1	27 000	4	340 000	-	-	1	11 000	11
1	1 500	1	30 000	1	250 000	-	-	1	1 221 900	12

Source: Agricultural Census Advance Statistics, Dirección General de Estadisticas y Censos

Table R

NUMBER OF FARMS, CREDIT AND AMOUNT, BY SOURCE,
BY DEPARTMENT, AGRICULTURAL YEAR 1970-71 (colones)

Explotaciones según fuente y monto de los créditos										No. de línea
Administración del Bienestar Campesino		Caja de Crédito Rural		Compradores e intermediarios		Otra fuente		Fuente mixta		
Explotaciones	Monto en colones	Explotaciones	Monto en colones	Explotaciones	Monto en colones	Explotaciones	Monto en colones	Explotaciones	Monto en colones	
5 694	31 845 060	2 210	15 751 966	3 300	14 500 619	4 986	11 167 415	149	10 984 588	1
386	2 727 351	148	1 723 300	424	1 978 509	103	389 938	3	81 000	2
339	4 062 141	52	2 462 324	297	5 972 799	588	1 573 171	11	7 212 660	3
287	874 535	129	275 296	212	659 594	122	700 771	11	245 772	4
572	3 810 192	207	1 289 523	213	785 626	1 019	1 788 782	3	26 612	5
815	13 555 874	275	7 120 476	270	1 976 308	796	4 006 898	32	298 223	6
144	634 748	30	11 454	126	464 603	153	801 274	3	81 000	7
346	146 244	178	149 849	20	9 824	379	66 339	10	38 355	8
492	824 866	115	504 283	174	332 030	189	246 049	22	202 926	9
459	859 353	155	336 791	149	19 880	213	87 826	2	51 800	10
430	422 170	76	97 440	142	35 780	202	93 815	-	-	11
670	1 887 843	541	844 901	636	1 184 085	587	515 340	23	801 371	12
396	607 215	158	430 089	432	635 532	408	689 650	14	1 806 330	13
129	175 050	121	436 500	64	174 750	95	114 840	3	75 661	14
227	1 057 478	25	47 740	141	269 299	132	92 723	12	62 858	15

Source: Agricultural Census Advance Statistics, Dirección General de Estadisticas y Censos

CHAPTER X

THE WILFORD SURVEY

Between July 15, 1975 and July 25, 1975 a survey team consisting of four interviewers undertook an agricultural credit survey in the fourteen Departments of El Salvador. The results of that survey are reported in this Chapter.

The Structure of the Credit Survey

On the basis of the assignment outlined in the Scope of Work for this study a rural small farmer credit survey was undertaken during the ten day period July 15 - July 25, 1975. Four interviewers collected random sample questionnaire results from 184 small farmers who worked plots of four manzanas or less. The sample number was based upon minimal required response from each Department as outlined in Table 1. The sample was constructed so that the required number from each Department represented a percentage of the farms of two hectares or less size according to the 1970-71 Census Advance (Dirección de Estadística y Censos). For example, as indicated in Table 1, Ahuachapan had, on the basis of the 1970-71 Census Advance, 15,447 farms of two hectares or less which represented eight percent of total such farms in the nation. Assuming a required sample size of 150 nationwide, the required eight percent sample for Ahuachapan was twelve. Table 1 shows the distribution of sample size by Department. The actual survey resulted in 184 interviews, with at least the minimal number of responses from each Department as indicated in Table 1.

TABLE 1

AGRICULTURAL CREDIT SURVEY

SAMPLING BREAKDOWN

DEPARTMENT	FARMS * (2 hectares or less)	%	Sample Size from 150
AHUACHAPAN	15,447	8.0	12
SANTA ANA	18,726	9.7	15
SONSONATE	14,366	7.5	11
CHALATENANGO	14,229	7.4	11
LA LIBERTAD	15,030	7.8	12
SAN SALVADOR	11,345	5.9	9
CUSCATLAN	13,749	7.1	11
LA PAZ	10,661	5.5	8
CABAÑAS	10,408	5.4	8
SAN VICENTE	9,288	4.8	7
USULUTAN	13,427	7.0	10
SAN MIGUEL	19,709	10.3	15
MORAZAN	11,260	5.8	9
LA UNION	15,104	7.8	12
T O T A L	192,749	100.0	150

*Based upon the Agricultural Credit Survey, Ministerio de Economia - Dirección General de Estadística y Censos for the agricultural year 1970-71 (Census Advance).

In addition to small farmer responses, the survey included a representative sample of fifteen "tiendas" located in areas servicing the small farmers interviewed.

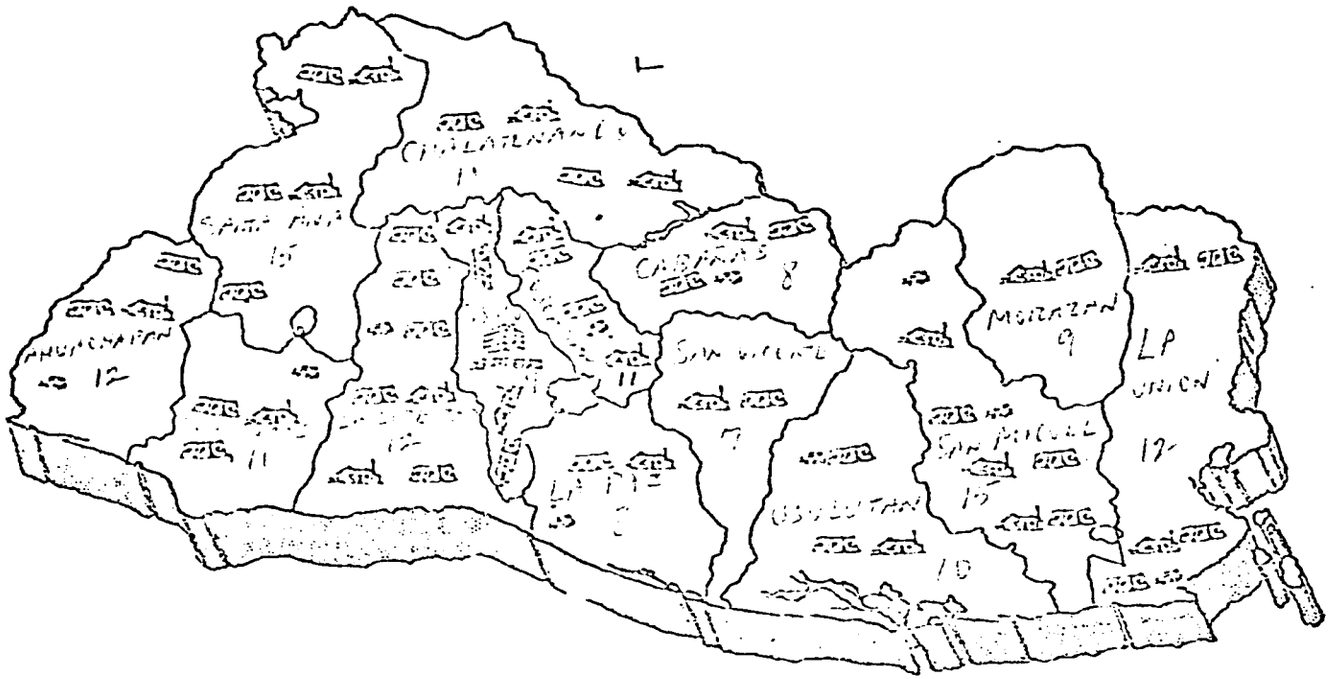
The Chart on the following page shows graphically the Departments in El Salvador, and the number of interviews included in the sample from each region.

The Questionnaires

A copy of the questionnaires utilized in the study is included in this chapter. The one-page "tienda" questionnaire is titled "Cuestionario para tienda," while the four-page credit questionnaire follows the "tienda" questionnaire.

All respondents in the survey (1) work land less than three hectares, and (2) grow at least some basic crops. The results of this random sample may be considered a scientific set of judgments for the universe of such small farmers in El Salvador, and may be used along with the Madsen and census studies to draw specific conclusions on the extent of credit utilization in the nation.

CHART: Sample for Credit Survey by Department, El Salvador



CUESTIONARIO PARA TIENDAS

Departamento_____Municipio_____Cantón_____

1. ¿Le fían ustedes a alguien?

   Si_____ No _____

2. ¿A quiénes les fían?

   1. Parientes___; 2. Vecinos ó amigos ____;

   3. Agricultores ____.

3. ¿Qué es lo que dan al fiado?

   1. Víveres___; 2. Insumos para producción agrícola como:

   Semilla___; Fertilizante___: Insecticida____.

   3. Herramientas_____.

4. ¿A qué plazo fía?

   1. Mensual___; 2. Trimestral____; 3. Semestral___;

   4. Anual___; 5. Por cosecha____.

5. ¿Cobran interés?

   Si_____ No _____

6. ¿Cuánto cobran de interés al mes?_____

7. ¿Cuánto cobran de interés al año?_____

8. ¿Cuánto cobran de interés por cosecha?_____

9. ¿Cómo aceptan pago? .

   1. En dinero solamente___; 2. Frutos de la cosecha____;

   3. Ambos_____.

Enumerador_____ _____
(f) Fecha

Departamento _____ Municipio _____ Cantón _____

1. ¿De qué tamaño es su finca? _____

2. ¿Es usted el dueño? _____

   Si no es el dueño, ¿Cómo paga el alquiler?

   1. Dinero; 2. Cosecha; 3. _____

   ¿Cuál es el alquiler por manzana? _____ Al año _____

   Por cosecha _____

   ¿Ha pedido alguna vez dinero prestado para el alquiler?

   Sí _____ No _____

3. ¿Qué cultiva usted aquí?

   1. Granos básicos; 2. Hortalizas; 3. _____; 4. _____

4. ¿Cuántos miembros de su familia viven aquí? _____

5. ¿Cuántas personas adultas o niños mayores de 12 años trabajan aquí con usted? _____

6. ¿Cuánto tiempo lleva usted o su familia cultivando estas tierras?

   1. Año o menos; 2. Uno a 3 años; 3. Más de 3

7. ¿Le ayuda su señora con el cultivo o la cosecha? _____

8. ¿En qué mes siembra?

   1. Granos básicos _____ 2. Hortalizas _____

   3. _____

9. ¿En qué mes cosecha?

   1. Granos básicos _____ 2. Hortalizas _____

   3. _____

10. ¿Qué parte (%) de sus cosechas consume usted y qué parte vende?

    Vende ____%; Consume ____%

11. ¿Cuánto dinero le dió su tierra el año pasado? _____

12. ¿A quién le vende usted lo que cultiva?

    1. _____; 2. _____; 3. _____; 4. _____

13. ¿Le ayuda su señora con las ventas? _____

14. ¿Dónde vende usted lo que cultiva?

    1. Aquí mismo; 2. Mercado; 3. Tiendas; 4. _____

15. ¿Cómo le pagan por lo que vende?

    1. Dinero ____; 2. _____; 3. _____

16. ¿Le fían (o tiene crédito) en un almacén o tienda? _____

    ¿Qué es lo que usted compra al fiado?

    1. Implementos o herramientas; 2. Bienes de consumo;
    3. Insumos para producción

17. ¿Ha solicitado alguna vez crédito para producción? Sí ___ No ___

    Si no lo ha hecho, ¿por qué? _____

18. ¿A quién le ha solicitado crédito para producción?

    1. Banco de Fomento Agropecuario; 2. Otros bancos; 3. Intermediarios; 4. Cajas de Crédito; 5. Cooperativa; 6. Particulares; 7. Otros

19. ¿Le dieron el préstamo? Sí ___ No ___

    ¿A qué plazo? _____

    ¿Quién se lo dió?

    1. Banco de Fomento Agropecuario; 2. Otros bancos;
    3. Intermediarios; 4. Cajas de Crédito; 5. Cooperativa;
    6. Particulares; 7. Otros

    ¿Fue el préstamo suficiente o tuvo que usar sus ahorros?

    1. Suficiente; 2. Usó ahorros

20. ¿Para qué ha usado el dinero del préstamo?

    1. Semillas; 2. Herramientas; 3. Insecticidas; 4. Mano de Obra; 5. Fertilizantes; 6. Otros

21. ¿Cuánto fue el préstamo? _____

22. ¿Cuánto tuvo que pagar de vuelta para cancelar la deuda? (Monto más intereses) _____

23. ¿Le han negado alguna vez un crédito para producción? _____

    ¿Quién se lo negó?

    1. BFA; 2. Otros bancos; 3. Intermediarios; 4. Cajas de Crédito; 5. Cooperativa; 6. Particulares; 7. Otros

    ¿Por qué le negaron el préstamo? _____

24. Aparte de un préstamo en efectivo, ¿ha recibido usted alguna otra ayuda del Banco de Fomento Agropecuario? Sí ___ No ___

    ¿Qué fue esa ayuda?

    1. Fertilizantes; 2. Semillas; 3. Herramientas; 4. Consejos

25. ¿Ha solicitado alguna vez crédito para inversión a mediano o a largo plazo para mejorar la finca? Sí ___ No ___

    Si la respuesta es sí, ¿de quién obtuvo el crédito? _____

    ¿Monto? ¢ _____; Interés? ¢ _____; Plazo? _____

    ¿Cómo utilizó el crédito? 1. Cercos; 2. Pozos; 3. Bordas; 4. Sistemas de riego; 5. Otros _____

26. ¿Ha necesitado usted alguna vez la ayuda de algún "coyote" para conseguir un préstamo? _____

    ¿Para qué usó ese dinero?

    1. Cultivo; 2. Vivienda; 3. Personal

¿Cuánto le prestaron? _____

¿A qué plazo? _____

¿Cuánto tuvo que pagar de vuelta para cancelar la deuda?

(Monto más intereses) _____

¿Usa usted la ayuda de un "coyote"? A Menudo? ___ Siempre? ___

¿Por qué no le pide ese dinero a un banco? _____

27. ¿Pide usted préstamos casi cada año? _____

28. Cuando usted pide dinero prestado, ¿qué cantidad pide generalmente?

_____

29. ¿Cuánto se tarda en pagar el préstamo? _____

30. ¿Cuál plazo de préstamo preferiría usted?

1. 6 meses; 2. 9 meses; 3. 12 meses; 4. 18 meses; 5. 24 meses

31. ¿Qué le piden de garantía? _____

32. ¿Puede usted ofrecer los frutos de la cosecha como garantía? _____

33. ¿Pidió usted un préstamo para el cultivo de este año? _____

¿Piensa hacerlo? _____

¿A quién le va a pedir el préstamo?

1. BFA; 2. Otros bancos; 3. Intermediarios; 4. Cajas de Crédito; 5. Cooperativa; 6. Particulares; 7. Otros.

_____ Enumerador (f)

_____ Fecha

A STATISTICAL PROFILE OF THE EL SALVADOREAN SMALL FARMER: OBSERVATIONS BASED UPON WILFORD SURVEY

The nebuluous small farmer in El Salvador has, on the basis of the Wilford survey, an interesting composite life style. Below is a word picture of the typical small farm family on the basis of the composite data generated from the survey.

1. He cultivates land that measures .8 hectares.
2. He's likely to own the land he works (58% do).
3. He plants corn as his main crop (90% do).
4. He lives on the farm with six additional members of his family.
5. Is helped at least on occasion by two members of his family who are over twelve.
6. Has lived on the farm over 3 years (49%).
7. Is helped by his wife with farm chores (65%).
8. Derives a gross yearly income on crop sales amounting to ¢294.80. These are his total cash earnings from the farm.
9. Has no credit at the local "tienda".
10. Has never requested a loan for agricultural production.
11. He gravitates to corn as his main crop
    --because he grew up with corn
    --because corn is easy to plant
    --because it can readily be turned into filling food (tortillas, tamales)
    --because it keeps well (farmer has no electricity)
    --because once it is planted it leaves him free for other jobs
12. He's trainable only up to a point
    --he is not literate
    --he can understand only the simplest language

Credit Data on Farmers Responding Affirmatively to Questions Relating to Requests for Credit

Analysis of the Data Relating to Those Who Have Requested Credit

Perhaps the most important single statistic from the survey is reproduced in the accompanying Table 0 titled REQUESTS FOR AGRICULTURAL PRODUCTION CREDIT. The table shows that, of the 184 interviewees, only 37 (20%) had ever asked for credit, and only 32 (17%) had ever received credit. The seventeen percent figure identifies those families who have, perhaps, had only one exposure to credit, along with the substantial number who are receiving credit for the first time this year. It is somewhat lower than the Madsen figure of 25 percent of the vegetable farmers who received some credit. However, Madsen's study was, for our purposes, slightly biased in that it included some farms above three hectares and that it was specifically directed to vegetable growers who, as a matter of fact, were found to grow corn as well.

One would expect the larger number of rural families producing only corn and beans to have access to less credit facilities than the more technologically advanced (even though slightly) vegetable farmer.

The 1970-71 Census Advance estimates that, of the total number of farms in the country of 272,432, only 17,300 received some credit financing. While it is safe to assume that seventeen percent of the rural farmers have had access to credit, one may not conclude that 17 percent are currently receiving such credit, since a number of those interviewed preferred not, for various reasons, to again request credit the following season.

The El Salvadorean Small Farmer
Survey Results

The survey results provide an insight into the life of the small farmer in El Salvador. Tables A through N present questions pertaining to the small farmer, his livelihood, his farm, his family, and his farm finances. The tables are designed to offer some basic information about the small farmer to facilitate decision-making with respect to this group.

Size of Farms and Farm Ownership

Table A presents data which conform to a J-shaped frequency distribution. Those individuals interviewed with less than one manzana of land far outnumbered any other category. Sixty percent of the interviewees had less than one manzana (.7 hectares) while a full 83 percent worked less than or equal to two manzanas of land. However, the grimness of the picture is not fully presented since many of the farmers in the .01 - .7 hectares interval work much less than one-half manzana. A few individuals interviewed had less than a tarea of land. The average farm size, based on our interviews, is .83 hectares. The average small farmer in El Salvador has less land than many of our backyards.

Table B shows that 58 percent of the farmers interviewed owned their own farm. This figure is encouraging especially in light of the aim of this study. Most of the credit agencies require solid collateral for making loans. Land ownership provides the small farmer with leverage which is not otherwise available.

TABLE A

SIZE OF FARMS

FARM SIZE	FREQUENCY	PERCENTAGE
.01 - .7 hectares	110	60
.71 - 1.4 "	43	23
1.41 - 2.1 "	9	5
2.11 - 2.8 "	22	12
T O T A L	184	100

TABLE B

FARM OWNERSHIP

	YES	NO
Own farm	107	58
Do not own	75	41
No answer	2	1
T O T A L	184	100

TABLE C

LENGTH OF TIME ON FARM

	FREQUENCY	PERCENTAGE
One year or less	39	21
One to three years	54	29
More than three years	90	49
No answer	1	1
T O T A L	184	100

TABLE D

DOES WIFE HELP ON FARM?

	FREQUENCY	PERCENTAGE
Yes	120	65
No	56	30
No answer	8	4
T O T A L	184	99*

*Relative frequency column does not add up to 100% due to the rounding off of decimals prior to addition.

Length of Time on the Farm

Approximately half (49%) of the interviewees indicated that they had worked this land more than three years. The question is stated so that the family unit, not the individual, is considered. Twenty-one percent answered that this was their first year of presence. Two alternate speculations can be made: (1) there exists a high degree of mobility -- forced or voluntary, or (2) movement is indicative of increased land availability to the small entrepreneur.

Does Wife Help on Farm?

Table D indicates that 65 percent of the interviewees answered affirmatively concerning the assistance of women on the farm. The role of the woman in the campo cannot be underestimated. Sixty-five percent work directly on the farm. However, one can be sure that more than 60 percent of the women hold responsibilities in rural production. Some researchers feel that the financial structure in the El Salvadorean campo is matriarchal. Women are important in directing and controlling much of the family wealth. They traditionally have helped in distribution, as well as production, of the food. The wife is an integral part of the rural household. Any impact that rural credit may have on the farming family will be felt equally by men and women.

Crops Cultivated

As Table E shows, the small farmer almost exclusively cultivates corn. Ninety percent of those interviewed grew corn as their basic crop. The remainder either grew different vegetables, produced coffee, or did not respond to the question. Several respondants cul-

TABLE E

CROPS CULTIVATED

MAIN CROP	FREQUENCY	PERCENTAGE
Corn*	165	90
Other	17	9
No answer	2	1
T O T A L	184	100

*Fourteen of these respondents cultivate other crops simultaneously.

TABLE F

FAMILY MEMBERS LIVING ON FAR''

	FREQUENCY	PERCENTAGE
Uninhabited farms	4	2
One member	2	1
Two members	8	4
Three members	16	9
Four members	16	9
Five members	23	13
Six members	29	16
Seven members	23	13
Eight members	19	10
Nine members	11	6
Ten members	14	8
Eleven members	6	3
Twelve members	6	3
Thirteen members	2	1
Fourteen members	1	
Fifteen members	2	1
No answer	2	1
T O T A L	184	100

tivated two or more crops simultaneously. Most of these individuals concentrated on corn, but made some allocation for another money crop.

Family Members Living on Farm

A discrete frequency distribution of Table F would yield a perfectly normal distribution of family size. Disregarding those who answered that the farm was uninhabited, family size ranged from one to fifteen members. The mode and the median of the distribution is six members. The average family contained 6.17 members. The variance of the distribution is (approximately) 8.61. The average El Salvadorean small farmer raises six children on less than one acre of ground. The correlation of land size and family size is not high. Tertiary examination shows that increased land size does not mean increased family size. More than one of the larger families owns less than one-half manzana of land. The population density among the rural poor is a sociological question not addressed in this study. Rather, the high population density reflects the gravity of the short term needs among the El Salvadorean rural poor.

Family Members over the Age of Twelve Helping on Farm

Table G shows the number of workers (over age twelve) on the farm. The mode is two members while the median is slightly greater than one. The average number of helpers is 1.72. Since the average family size is 6.17, one can assume that three of these members are under the age of twelve. The table does not indicate the real circumstances of some of the larger families who report 8 to 12 children, but name only the wife as a co-worker on the farm. Again, the size of the family need not be strongly correlated with the number of helpers on the land. Further, the size of the land is not highly corre-

TABLE G

FAMILY MEMBERS OVER THE AGE OF TWELVE HELPING ON FARM

INDIVIDUALS HELPING	FREQUENCY	PERCENTAGE
None	22	12
One member	72	39
Two members	45	25
Three members	22	12
Four members	15	8
Five members	2	1
Six members	2	1
No answer	4	2
T O T A L	184	100

lated with the number of helpers over twelve years of age.

Percentiles of Market Sales to Onfarm Consumption

Only 98 persons, or 53 percent, of the small farmers interviewed sold any of their production. Of these, about 50 percent sold less than half of their crop. Only 2 individuals interviewed sold all of their crop and only 12 percent sold 90 percent of their crop. These data suggest that most of the small farmers interviewed live at the biological level of subsistence. The interviewers reported that a number of people are literally starving to death as crops fail or are spread thinly among burgeoning families. Though this is only a visual and not a scientific observation, the high percentage of total crop consumption indicates a hand to mouth existence.

Among those families who are fortunate enough to be able to sell any part of their crop, the highest frequency is at 50 percent consumption. Thirty-two percent sold more than 50 percent of their crop (this amounted to only 17.4% of the total number interviewed). The percentage of the crop sold was related positively to land size and inversely related to family size.

Gross Yearly Income

Table I reports only the income derived from crop sales. Forty-five percent of those interviewed reported no income while 5 percent did not respond. Of those who reported income from crop sales, the interval containing the mode was between ¢250.1 and ¢400. The range is from ¢0.00 to over ¢3000. Only one individual (he owned 4 manzanas, had credit, and a smaller than average family) reported an income over ¢3000. The average reported income per crop sold (given

TABLE H

FARM PRODUCTION

PERCENTILES OF MARKET SALES TO ONFARM CONSUMPTION

SALES	CONSUMPTION	FREQUENCY	PERCENTAGE
10%	90%	13	13
20	80	13	13
30	70	12	12
40	60	4	4
50	50	23	23
60	40	1	1
70	30	13	13
80	20	6	6
90	10	10	10
100	0	2	2
No answer	--	1	1
	T O T A L	98	98*

*Relative frequency column does not add up to 100% due to the rounding off of decimals prior to addition.

TABLE I

GROSS YEARLY INCOME*

INCOME PER FARM	FREQUENCY	PERCENTAGE
No income	83	45
1.0 to 50 colones	2	1
50.1 to 100	10	5
100.1 to 150	10	5
150.1 to 200	9	5
200.1 - 250	1	.5
250.1 - 400	25	14
400.1 - 500	4	2
500.1 - 600	1	.5
600.1 - 750	2	1
750.1 - 1000	13	7
1000.1 - 1250	4	2
1250.1 - 1500	4	2
1500.1 - 2000	1	.5
2000.1 - 2500	3	2
2500.1 - 3000	1	.5
Over ¢3000	1	.5
No answer	10	5
T O T A L	184	98.5**

*Includes only cash income derived from crop sales.

**Relative frequency column does not add up to 100% due to digit rounding off prior to addition.

TABLE J

LOCATION OF FARMERS' SALES

	FREQUENCY	PERCENTAGE
Town food market	56	51
At own farm	30	27
At wholesalers or agency	16	15
At neighborhood store	8	7
T O T A L	110	100

TABLE K

MODE OF PAYMENT TO FARMER

	FREQUENCY	PERCENTAGE
Cash	93	100
Other	--	
T O T A L	93	100

equal land sold) varied greatly from farm to farm. The discrepencies are due largely to variances in land productivity, though some of the variance is due to the incomplete knowledge of those interviewed. The key point, however, is not how much income (whether it is ₡550 or ₡1000 per manzana), but the reality that 80 percent of the cases responding reported income was ₡400 or less.

Location and Mode of Payment of Farm Sales

Over 50 percent of those interviewed (see Table J) reported that their outlet for production sales is the town market. Another 27 percent sell directly from their farms while 15 percent go to wholesalers. Only 22 percent of the total enter the market via developed produce marketing services (neighborhood stores, wholesalers, or agencies). Of the total interviews, 88 percent reported no part of their produce entering through normal (wholesale-retail) channels. However, it is encouraging that 100 percent of those selling produce receive cash for their sales. This fact indicates that all of those who do sell are within the monetized sector of the economy.

Does Wife Help with Sales

It is clear from the sample that the El Salvadorean woman is an active participant in the economic activity of the family. As indicated in Table D, the wife assists as a productive laborer in 65 percent of the families interviewed. It is undoubtedly true that a far larger percentile perform productive chores as mothers in addition to working in the fields. Table L shows that the overwhelming

TABLE L

DOES WIFE HELP WITH SALES?

	FREQUENCY	PERCENTAGE
Yes	72	77
No	19	20
No answer	2	2
T O T A L	93	99*

*Relative frequency column does not add up to 100% due to the rounding off of decimals prior to addition.

majority of women (77%) answered "yes" to the question: does the wife help with the sales? Visual observation of the small farm market process suggests that women are agents for transporting the goods that enter the monetary sector and that they also are the sellers and/or traders. Only twenty percent responded that the wife did not help with sales, while two percent did not respond. Indeed, the wife, in most small farm families, appears to be the major dynamic force for decision-making, since she enters as a planner of familial activities, as a partner in the production cycle, and as the major vehicle for market sales.

Mode of Payment and Credit for Tenant Farmer Rent

Of the 184 interviewees, 75 indicated that they were basically tenant farmers, i.e. rented land as opposed to land ownership. In an effort to determine the form of rental payment to the landowner, the families were asked to respond as to form of rent payment - cash, crops, or labor. Seventy-five responses were received, and the overwhelming majority of 58 (77%) responded that payment was made in cash, while eight respondants (11%) indicated that payment was principally in crops.

The second half ot Table M shows responses to the question: did you borrow to pay rent? The considerable majority of tenant families do not borrow for rent payment. Sixty-three of the 75 tenant respondants indicated that they had not borrowed (85%), while only 6 indicated that they had borrowed to pay rent (8%).

TABLE N

TENANT FARMERS -

MODE OF PAYMENT FOR RENT

	FREQUENCY	PERCENTAGE
Cash	58	77
Crop	8	11
Labor	6	8
No answer	3	4
T O T A L	75	100

DID YOU BORROW TO PAY THE RENT?

	FREQUENCY	PERCENTAGE
Have not borrowed	63	84
Have borrowed	6	8
No answer	6	8
T O T A L	75	100

The remaining six (8%) did not respond. The picture is clear: the typical El Salvadorean tenant family is expected to pay in cash (as opposed to labor or crops) for land rent, and does not utilize credit to rent land during the crop season. This latter situation may be the result of (1) unawareness of credit availability where it might exist (the failure of the market information process); (2) the absence of credit availability; or (3) desire not to risk the consequences of failure to repay in the event of crop failure.

Annual Rent Payments Per Manzana

Table N identifies the range of annual rent payments per manzana from ¢40 to ¢200. The most frequent responses are grouped in the ¢80 to ¢ 150 per manzana categories, with 69 percent of the 46 families indicating that their annual rent fell into this range. The annual rent of ¢175 to ¢200 is at the upper end of the range, with only five respondants (11%). The median rent listed was ¢80 with only one rural families paying less than ¢60 per manzana per year. As indicated in the table, only 46 responses were deemed clear and unambiguous as to the annual rent payment, although 58 attempted to respond to the question.

TABLE N

ANNUAL RENT PAYMENTS PER "MANZANA"*

ANNUAL RENT	FREQUENCY	PERCENTAGE
¢40	1	2
50		
60	5	11
70	3	7
80	11	24
100	7	15
125	7	15
150	7	15
175	1	2
200	4	9
T O T A L	46	100

*One "manzana" is equal to .7 hectare.

NOTE: This table includes only those responses of the 58 dealing with annual cash rent payments, deemed by the author to be clear and unambiguous.

TABLE 0

REQUESTS FOR

AGRICULTURAL PRODUCTION CREDIT

	FREQ.	%
Have requested such credit	37	20
Have never requested it	145	79
No answer	2	1
T O T A L	184	100

Have received such credit	32	17
Were denied credit	5	3
Never requested credit	145	79
No answer	2	1
T O T A L	184	100

Tables 0 through 17 are arranged in a logical pattern of response. The individuals whose answers are tabulated here can be considered the successful few of the survey; they constitute the group who have at least known to request credit. In analyzing this group, it is important to remember that they are likely to be the best informed and more responsible segment of the total survey.

Requests for Agricultural Production Credit

Table 0 does indicate that approximately 79 percent of the rural small farmers in El Salvador have never requested credit, and that approximately three percent have requested and been denied same. The picture of the small farm in El Salvador is, for all practical purposes, one of a creditless, self-reliant, economically and biologically marginal subsistence unit.

Requests for Credit

Table 1 lists the sources of credit requests. The Agricultural Development Bank is, by far, the source of credit most frequently requested. This fact indicates that the small farmer is aware of one of two conditions: (1) the Banco de Fomento has resources available for the rural poor, or (2) other sources of credit are less accessable. There probably exists a combination of the two. Table 1 shows that availability of credit information corresponds with earlier findings. It should be noted that the Banco de Fomento and the cooperatives are mutually exclusive. The small number of requests for aid from coop-

TABLE 1

REQUESTS FOR CREDIT

WHERE APPLIED	FREQ.	%	% OF TOTAL SAMPLE
Agricultural Development Bank	26	70	14
Other Banks	1	3	1
Intermediaries			
"Caja de Crédito"	7	18	4
Cooperatives	2	6	1
Individuals	1	3	1
Other			
T O T A L	37	100%	---

TABLE 2

FARMERS RECEIVING CREDIT

	YES	NO	%	% OF TOTAL SAMPLE
Received Credit	32		86	17
Denied Credit		5	14	3
T O T A L	32	5	100%	--

eratives is surprising since many of the areas surveyed were focal points of this type of program. It is also interesting to note that the Cajas de Creditos rank second (18%) in the number of requests; this indicates an awareness on the part of the small farmer of the function of various financial institutions. The lack of requests to intermediaries demonstrates that the "loan shark" type of operation is not active in the campo; possibly even their activities are non-profitable in the campo.

Farmers Receiving Credit

Table 2 explicitly shows that 86 percent of those individuals requesting credit actually received it. This is a surprising figure by most standards. However, one must remember that 70 percent of the requests for credit went to the Banco de Fomento whose business is subsidizing non-profitable loans. On the other hand, 100 percent of the loans refused were denied by the Banco de Fomento.

Length of Last Loan

Table 3 presents a rightwardly skewed frequency distribution. The mode is 12 months and the median is 9 months. The average loan period is 10.13 months (the row of more than 24 months is ignored). These summary statistics indicate that only a short term loan structure is in operation with emphasis upon 9 - 12 month loans. The degree of profitability would justify short term loans, as does the nature of most small farmer loans (i.e., to improve crop production).

Last Source of Credit

The most recent source of credit is described in Table 4. The Agricultural Development Bank provided 66 percent of the loans. The Agricultural Development Bank handled 70 percent of the credit requests and

TABLE 3

LENGTH OF LAST LOAN TERM

LOAN TERM	FREQUENCY	PERCENTAGE
3 months		
6 months	6	19
9 months	10	31
12 months	12	38
18 months		
24 months	1	3
More than 24	1	3
No answer	2	6
T O T A L	32	100

TABLE 4

LAST SOURCE OF CREDIT

SOURCE	FREQ.	%	% OF TOTAL SAMPLE
Agricultural Development Bank	21	66	11
Other Banks	1	3	1
Intermediaries			
"Caja de Crédito"	7	22	4
Cooperatives	2	6	1
Individuals	1	3	1
Other			
T O T A L	32	100	--

TABLE 5

LOAN AMOUNT SUFFICIENT?

YES	NO	NO ANSWER	%	% OF TOTAL SAMPLE
23	7	2	72	13

were responsible for all five of the requests denied. On the surface, it seems surprising that all of the loans denied were refused by the Banco de Fomento. However, it appears that the amount of information among the small farmer group is quite high since even the most marginal would approach the Banco de Fomento for funds. The remainder of the figures correspond closely to those of Table 1. Again, the percentage of loans granted by the savings banks is high (22%) and indicative of a more normal financial system. Since 18 percent of those receiving credit approached the Cajas and 22 percent of the last credits received were issued by these institutions, it is hopeful that a program of small farmer loans through the existing private financial community is possible.

Last Loan Sufficient

Table 5 shows that 72 percent of those responding to the interview said the last loan received was sufficient to satisfy their demands for funds. This is a high rate of satisfaction among those who many have thought would not be servicable.

Uses of Credit

As is apparent in Table 6, the credit was clearly earmarked for production investment. Ninety-eight percent of the funds was allocated for improvement of the crop. Thirty-five percent of the funds was used for fertilizer, 48 percent was utilized in land improvement expenditures, and 40 percent was designated for the purchase of seed. Since the agents filling most of the Banco de Fomento loans closely control the disbursement of funds, it could be assumed that the purchase of new seed carries increased productivity.

TABLE 6

USES OF CREDIT

USES	FREQUENCY	PERCENTAGE
Seeds	24	40
Fertilizer	21	35
Pesticides	6	10
Labor	6	10
Tools	2	3
No Answer	1	2
T O T A L	60	100

TABLE 7

SIZE OF LOANS

AMOUNT (Colones)	FREQUENCY	PERCENTAGE
.01 - 100	3	9
101 - 250	3	9
251 - 500	11	34
501 - 750	2	6
751 - 1000	6	19
1001 - 1500	4	13
1501 - 2000	1	3
2501 - 3000	2	6
T O T A L	32	99*

*Relative frequency column does not add up to 100% due to the rounding off of decimals prior to addition.

Size of Loans

Table 7 deals with the size of loans. The mode of the distribution is between ¢251 and ¢500; the median also lies within this interval. The average loan is ¢726.56. The variance in loan size is somewhat correlated with the variance in land size. Referring to our interviews with the commercial banks, the minimum loan size for these institutions is approximately ¢2000 before it is deemed profitable. Most of the small farmer loans were well below this value. The lack of consumption type loans (see Table 6) is verified by the small frequency of loans less than ¢250.

Interest Rate

Table 8 indicates that the rate of interest varied greatly. A frequency distribution of Table 8 would have a mode of 6.1 - 7.0 percent. The median rate of interest is between 8.1 and 9.0 percent while the mean is 7.98 percent. The distribution is rightwardly skewed indicating that the bulk of the rates charged were below the mean rate. It is our belief that the high number of "no responses" does not bias the summary statistic of the distribution, but rather indicates two things: (1) some small farmers were unaware of the meaning of the interest rate, and (2) many of those who knew they were paying a particular rate of interest had no concept of its relative size and, consequently, its importance. Given the rate of inflation in El Salvador and the nature of risk involved with the small farmer, a 7.98 percent average rate is extremely low. Further noting the elasticity of demand for money at less than equilibrium rates of interest, it is surprising to find the average rate below the maximum allowable rate. This may be attributed to the Banco de Fomento's policy of loaning to small farmers at much less than maxi-

TABLE 8

INTEREST RATE

ANNUAL RATE OF INTEREST	FREQUENCY	PERCENTAGE
.1 - 5.0%	1	3
5.1 - 6.0	2	6
6.1 - 7.0	10	31
7.1 - 8.0	3	9
8.1 - 9.0	2	6
9.1 - 10.0	2	6
10.1 - 11.0	1	3
11.1 - 12.0		
12.1 - 13.0	1	3
13.1 - 24.0		
24.1 - 25.0	1	3
No answer	9	28
T O T A L	32	98*

*Relative frequency column does not add up to 100% due to the rounding off of decimals prior to addition.

TABLE 9

NUMBER REFUSED CREDIT

	FREQUENCY	PERCENTAGE
Refused	5	14
Not refused	31	83
No answer	1	3
T O T A L	37	100

REASON FOR REFUSAL

	FREQUENCY	PERCENTAGE
Lack of Proper Collateral	3	60
Not enough Collateral	1	20
No answer	1	20
T O T A L	5*	100

*All respondents in this category indicated having applied at the Agricultural Development Bank.

mum allowable rates.

Numbers and Reasons for Credit Refusals

According to Table 9, only 14 percent of those requesting credit were refused credit with one individual not responding. Of the five persons who were refused credit (all by the Agricultural Development Bank), three denials were on the grounds of improper collateral and one rejection on the grounds of not enough collateral. This fact has two possible explanations: (1) the Banco de Fomento maintains some of the rigorous standards of the commercial banking system, or (2) the Bank used the lack of collateral reasons for not granting loans, though there may have been other reasons as well. Although the total picture of loan refusal cannot be drawn from Table 9, the important thing about this table is the low rate of refusal it reflects.

Assistance Other Than Funds from the Agricultural Development Bank

Tables 10 and 11 indicate the degree to which loans are made in some form other than money from the Banco de Fomento. Only 27 percent received assistance other than money. This percentage is surprisingly low given the Bank's insistance that it actively seeks to tie loans to non-monetary forms of assistance. It is our observation that the success of the Banco de Fomento in increasing its available funds to the small farmer is dependent upon its lowering of the costs of this type of loan. Therefore, to lower costs, we suggest that the percentage of loans tied to technical advice or loans in the form of physical aid be increased. The type of assistance most often received was advice. This implies that an even greater percentage (than 70 percent) of the loans were in cash.

Farm Improvement Loans

Table 12 shows that 94 percent of those responding to the inter-

TABLE 10

ASSISTANCE OTHER THAN FUNDS FROM

AGRICULTURAL DEVELOPMENT BANK

	FREQUENCY	PERCENTAGE
Received such assistance	10	27
Did not receive it	26	70
No answer	1	3
T O T A L	37	100

TABLE 11

TYPE OF

ASSISTANCE OTHER THAN FUNDS FROM

AGRICULTURAL DEVELOPMENT BANK

TYPE OF ASSISTANCE	FREQUENCY	PERCENTAGE
Advice	8	62
Seeds	3	23
Fertilizer	2	15
T O T A L	13	100

TABLE 12

FARM IMPROVEMENT LOANS

	FREQUENCY	PERCENTAGE
Have requested such a loan	2	5
Have never requested it	31	84
No answer	4	11
T O T A L	37	100

TABLE 13

LOANS FROM "COYOTES"*

	FREQUENCY	PERCENTAGE
Have requested loan	3	8
Have never requested it	33	89
No answer	1	3
T O T A L	37	100

*"Coyote", one of a variety of loan sharks.

view never requested farm improvement loans. Most of the loans were made only for variable factors of production (seed, fertilizer, labor, etc.). However, it is questionable whether fertilization of the soil is considered a variable or a capital expenditure for all operations. The two individuals who requested capital improvement loans were both land owners who had reasonable incomes from larger size farms. Interestingly, one of the requests was for fencing. Perhaps the small farmer is too uncertain of the future to ask for credit to finance long range plans. His marginal subsistence probably will not permit him to think in those terms. Again, this is a problem which will have to be tackled by the educational programs if credit services are to have major long range effects.

Loan Sharking

As can be seen in Table 13, loan requests for "coyote" loans are only 8 percent of the total loan requests. The "coyote" does not appear to be a major factor in the campo, or the small farmer is wary of his services.

Frequency of Borrowing

Table 14 concerning frequency of borrowing is extremely enlightening. Thirty-two percent of those requesting loans do so on an annual basis. This figure is very high, but represents rational behavior given the present rates of interest and inflation. The individuals requesting loans have the best credit references (assuming the percentages for having received loans remain unchanged) and information about credit sources. Only 29 percent of the respondents said this was their first year to receive a loan. Sixty-six percent of those receiving credit said they are

TABLE 14

FREQUENCY OF BORROWING

	FREQUENCY	PERCENTAGE
Every year	12	32
Not every year	22	60
No answer	3	8
T O T A L	37	100

NOTE: It may be significant that 10 of the 34 respondents (29%), indicated that this was the first year they borrowed.

	YES	%	NO	%	NO ANSWER	%
Loan requested this year	23	66	8	23	4	11
Loan will be requested	5*	71	1	14	1	14

*Respondents in this category all named the Agricultural Development Bank as their next source of Agricultural Production Assistance.

TABLE 15

AMOUNT USUALLY BORROWED

AMOUNT (Colones)	FREQUENCY	PERCENTAGE
.01 - 100	3	8
101 - 250	4	11
251 - 500	10	29
501 - 750	1	3
751 - 1000	8	23
1001 - 1500	2	6
1501 - 2000		
2501 - 3000		
No answer	7	20
T O T A L	35	100

requesting a loan this year. The 66 percent figure is encouraging and indicative of increased utilization of available resources. Only 23 percent gave negative responses to the question of loan requests for this year. Another 14 percent said they plan to request loans this year. All of those loan requests would be directed to the Banco de Fomento.

Amount Usually Borrowed

Table 15 corresponds closely to Table 7. The distribution is distinctly bi-modal at the ¢251 - 500 and the ¢751 - 1000 intervals. The median is in the ¢501 - 700 interval and the mean is ¢525.89.

Loan Term

The term of loan, as shown in Table 16, corresponds closely to the time desired. Forty percent preferred 12 month loans and 37 percent received 12 month loans. The differential is only at the upper end of the loan period where more people preferred longer loans than were received. The overall desire for short term loans corresponds to the nature of the loan most frequently needed by small farmers. Further, the brevity of the loans would indicate that they are for variable costs of crop production. Since only one loan preference was for more than 18 months, it follows that earlier conceptions concerning the nature of the small farmer's horizon are somewhat justified.

Collateral Required

Table 17 shows that the most widely accepted form of collateral is title to the property. This requires that the loan recipient be the owner of the property. Alternate securities, such as crops and co-signed notes, accounted for only 22 percent of the type of collateral accepted. However, 73 percent said their crop was an acceptable security. The high desirability of property for collateral is not encouraging when one

TABLE 16

LOAN TERM

	USUAL TERM OF LOAN	%	TERM PREFERRED	%
6 months	6	17	5	14
9 months	5	14	9	26
12 months	13	37	14	40
18 months	1	3	5	14
24 months			1	3
No answer	10	29	1	3
T O T A L	35	100	35	100

TABLE 17

COLLATERAL REQUIRED

COLLATERAL DEMANDED	FREQUENCY	PERCENTAGE
Title to Property	23	62
Crop	5	14
Co-signer	3	8
Other	2	5
No answer	4	11
T O T A L	37	100

Is crop acceptable as collateral?

	FREQUENCY	PERCENTAGE
Yes	27	73
No	8	22
No answer	2	5
T O T A L	37	100

realizes that many of the poor are landless. However, the willingness to accept a crop as collateral provides an alternate security for credit allocation.

The Tienda Perception of Small Farmer Credit

Table 1T includes a number of subsections, including the available data on questions relating to goods sold on credit, recipients of credit, items sold on credit, repayment period, interest charged, and repayment mode.

Of the sixteen stores responding in the survey, thirteen or 81 percent, indicated that they did extend some limited credit, while the remaining three (19%) indicated that they did not. When asked whether credit was extended primarily to relatives, friends, or farmers, the owners responded in nine (50%) of the cases that farmers were the users of credit, while three (33%) mentioned friends, and three (17%) relatives. It is, of course, possible that relatives and friends or neighbors could also be farmers, and the figure on that basis might be somewhat above 50% for farmers.

The items for which credit is provided at the small country store is overwhelmingly for food (Table 1T). Food accounted for the sole credit use for 12 tiendas (86%), while seeds, insecticides, and fertilizer were bought on credit from only two stores. The latter sold only seeds as productive inputs. In general, the small store does not find it profitable nor does there appear to be sufficient demand to stock significant inventories of productive agricultural inputs. Further, as we shall see, the farmer does not, in general see a need for such inputs. And finally, the store appears no to be the appropriate vehicle to

TABLE 17

"TIENDAS" CREDIT SURVEY

GOODS SOLD ON CREDIT

	FREQUENCY	PERCENTAGE
Stores granting credit	13	81
Stores not granting credit	3	19
T O T A L	16	100

RECIPIENTS OF CREDIT

	FREQUENCY	PERCENTAGE
Relatives	3	17
Friends or neighbors	6	33
Farmers	9	50
T O T A L	18	100

ITEMS SOLD ON CREDIT

	FREQUENCY	PERCENTAGE
Food	12	86
Seeds, insecticides, fertilizer	2	14
Tools	-	
T O T A L	14	100

REPAYMENT PERIOD

	FREQUENCY	PERCENTAGE
Monthly	13	100
Other		
TOTAL	13	100

INTEREST

	FREQUENCY	PERCENTAGE
Do not charge interest	13	100
Charge interest		
T O T A L	13	100

REPAYMENT MODE

	FREQUENCY	PERCENTAGE
Cash	13	100
Crop byproducts		
Both		
T O T A L	13	100

*"Tienda", a very small dry goods store where a farmer may buy such items as soap, beans, rice, aspirin, candy and cigarettes.

extend credit since its historic practice has been to limit credit (if it is offered) to around ¢3 - ¢5 per family.

Table 1T also shows the repayment period for tiendas. Of the thirteen responding, all replied that the duration of credit was monthly. No tienda indicated willingness to finance beyond the one month period. Neither did the tiendas overtly charge interest to borrowers. While none indicated an interest charge, it would be interesting to determine whether or not those substantial credit also had higher prices. It is possible that the higher cost of credit operations is amortized through a higher general price level for those stores offering credit. Such a question would have to be empirically evaluated. Further, it is possible that stores, desirous of maintaining good customers, provide selective credit to the long-term neighbors who have established a good credit rating. In short, they may be willing to carry good customer credit facilities simply to maintain the account.

In all cases in which there was a response to the question "do you receive repayment in cash or crops, or both" the store owner responded that he accepted only cash in payment of debt. No crops are accepted by the sample tienda in payment of debt.

The Farmer Perception of Credit from Tiendas

How does the small farmer view the tienda as a source of credit? Of the 184 farmers responding to the question as to the availability of credit at the neighborhood tienda, 33, or 18 percent, of the

TABLE 2T

AVAILABILITY OF CREDIT AT NEIGHBORHOOD "TIENDA"*

	FREQUENCY	PERCENTAGE
Credit granted farmer	33	18
Credit not available	127	69
No answer	24	13
T O T A L	184	100

*"Tienda", a very small dry goods store where a farmer may buy items such as soap, beans, rice, aspirin, candy and cigarettes.

number of 127 the response was that credit was not available from the local tienda (69% responding negatively) while there were no answers from 24 families. In short, the tienda clearly gives credit, selectively, but the impression of the small farmer that it is (1) not universally available, and (2) it is not adequate.

Small Farmer Credit and the Local Store

The small farmer does not appear to have ready access to credit at tiendas in his neighborhood. Though of sixteen stores polled thirteen claimed to grant credit, only nine said that they granted credit to farmers. Farmers themselves, when questioned, claimed overwhelmingly (69%) not to have tienda credit. To be sure, credit, when extended, is minimal. The items small farmers buy on credit such as sugar, beans, rice, etc., must be stretched to last over a long period, and so the bill at the end of the month does not normally amount to more than C4 or C5.

Credit, when extended, goes to just about anybody deemed credit-worthy. Exact criteria for credit-worthiness cannot be spelled out, however, since a store arrives at its decision on an individual trial and error basis. None of the stores in the survey charged interest on goods given out on credit. However, one would suspect that the price for most items in which the store is principally a credit store would be somewhat higher than a competing store offering no credit. In short, higher prices in stores providing credit may be the means of recuperating interest, although this is a hypothesis only.

As to length of term, it can go from a few days to several months. What happens most often is that someone runs up a bill

throughout the month and pays towards the end. It happens too that he may not be able to pay when he'd like to because of crop failure and the like. In this case, he will probably be allowed to continue drawing on his account and make settlement when he's able to. Why this understanding on the part of the store owner? Probably because he himself cultivates a small piece of land, and because he too is out there in the country and needs the farmers' good will in order to stay in business.

Payment for due bills is accepted in cash only. Again, because what the farmer grows the store owner himself also grows and, since so does everyone else, these particular goods have no purchasing power in the area.

The Small Farm Tienda and Non-use of Production Credit

Why so many "tiendas" grant credit and why so little of it goes to the small farmer probably relates to the selectivity exercised by the "tiendas" as much as it does to the relative lack of credit-worthiness store owners see in the small farmer. The farmer may be of good character and known to the store owner, but his earning power is at best so small and he's subject to the vagaries of weather conditions and unforeseen crop-destroying calamities, that how dependable an individual is helps him not at all when it comes to getting goods on credit.

"Tiendas" themselves do not go out of their way to cater to farmers' needs. Only two of the 16 tiendas sold anything directly relating to farming, and that was only seeds. Neither fertilizer nor insecticides could be had at any of the stores.

Why couldn't a store in a farm area sell some of the things farmers must have? This question might have two answers. The first deals with poverty, the second with the general amateurishness permeating both the farming activities at this level and the store operations. But why should things in the small farmers' world be done inefficiently? Because he's ignorant and because store owners are also ignorant. Perhaps one of the worst kinds of ignorance is ignorance of potential - no one there knows how things might be if resources were available, few would be able to take advantage of opportunities. They're ignorant because they're poor, most of them living just above starvation levels. Their concerns are primary: how do we survive today. Tomorrow and the next day they'll have the same fixed focus. That's why they plant their corn and hope worms will not infest it, rather than buy insecticides to be ready should they be needed. That's why they'll postpone getting fertilizer till the following year - after all, the soil looks dark and rich. And that also is why "tiendas" would be foolish to stock up on expensive items they may never sell.

PROPOSAL 1: BANCO DE FOMENTO

The present structure of the Agricultural Development Bank could very easily lend itself to allocation of credit to the small farmer. The program for allocation of small farmer credit was devised in the economic development section of the bank. In discussing the proposed method of allocation, it is assumed that Chapter 6 is understood.

Groupos Solidarios

Presently, according to Dr. Rochac, the bank is successful in making loans to Groupos Solidarios. We propose that this type of loan be continued. There are several reasons this type of loan is superior to individual loans. (1) Under the assumption of non-perfect information, the bank can cut its transactions costs by reducing the time needed in spreading information about loans, whether cash or material loans. (2) Transactions costs are shifted from the bank to the group by the very nature of a group loan. This shift in responsibility for individual credit allocation is, in essence, a way of raising the cost (interest) to the farmer. (3) Transactions costs are lowered as the [illegible] number of people per loan processing increases. Again, this is a shift [illegible]. (4) Since bank officials occasionally have some bias about granting loans below a certain amount, the size of the loan would now be sufficiently large to overcome "psychological," as well as, economic barriers to grant [illegible] loans. (5) The group has a higher probability of repayment than the individual as risk is diluted among the members of the group, thereby lowering individual risk. (6) Contact costs can be lowered for the bank and the individual. The Bank can more effectively monitor its loans through use of its field agents. Once the group is established, availability of information to the Bank would be more easily obtained.

The problem with this type of loan arrangement, however, is the need for groups. The organization of groups could present difficulties though there are natural groups which are now not being serviced. For example, the church constitutes a natural gathering place and is already organized among the small farmers. Family and extended family ties also present possibilities. The mobility among this income group is limited; consequently there exists a greater likelihood that natural and enduring associations are formed. The same forces which diminish the probability of freely flowing information build natural social groupings.

The major problem, however, is the dissemination of information concerning the availability of credit to groups or individuals. As our survey has indicated a low percentage of small farmers take advantage of existing credit. It is improbable to assume that all of these people are irrational or were turned down for credit. It is more likely, as substantiated by our interviews, that many people are unaware of the possibility of obtaining credit, much less the process by which one obtains such credit. One would certainly find an increase in the expected return of the bank from a small farmer loan as the information gap is closed. The increase in information would provide a larger group from which the bank may choose recipients for available funds. The process of spreading information about the availability of loans to small farmers need not be the responsibility of the bank alone. The agricultural extension worker for each area could act as a financial as well as an agricultural advisor. The local agencies would require little time or training to acquaint themselves with the Agricultural Bank's program of loans to small farmer groups. The utilization of this group would provide a "free

good" to the bank. The service merely acts as a library of information or advertisement agency for the bank and not as loan officers. The field extension service would be able to direct groups of small farmers to the field representatives of the bank who would continue to act as disbursement agents.

Bank Credit Subsidy

No matter what type of allocation procedures are used in providing credit to the small farmer, this phase of the Agricultural Development Bank's operation will have to be subsidized. The subsidy to this sector will exist until it is economically profitable to loan to the small farmer. Since the bank is encumbered with less than equilibrium rates of interest and thus perfectly elastic demand, the small farmer is surely the last to receive allocation. Therefore, any loan to small farmers requires some type of reallocation of funds from more profitable to less profitable operations. There are ways by which this subsidy can be maintained. (1) The present procedure may be continued whereby the development bank may subsidize the development operations from its other banking sector. This indicates that only a certain percentage of the total portfolio will be allocated to the rural poor. (2) The "Junta Monetaria" could subsidize the loans via continual direct subsidy. This policy would have to be maintained until either the rural poor were no longer an uneconomic group to serve or the financial markets were allowed to work without controls.

It is convenient to allow this subsidy to be made by the profitable sector of the bank's operation, but in doing so one must realize any increased capitalization of the bank will help the rural poor only in conjunction with the economically viable sector. Any aid toward increased

capitalization of the bank would only be successful if the bank itself were allowed to maintain this sectoral approach to agricultural development. Therefore, not all aid would go to the poorest of the poor. As the loss in servicing small farmers diminishes, a larger percentage of small farmers may be serviced.

Interest Rate Recommendations

Clearly the easiest way to allocate resources most efficiently is to allow the financial markets to work unencumbered at an equilibrium rate of interest. As this is not permissable under present economic policy, alternate procedures to increase the interest rate or to lower costs are needed. Specifically, a program for lowering the costs of loans to the small farmer would enable the amount of resources of the economic development sector of the Agricultural Bank to increase from its present 33 percent of total bank resources. The goal must be to lower the amount of subsidy needed to finance development operations. Following are suggestions for making rural development loans less costly for the Development Bank:

(1) The Agricultural Bank presently gives credit at a rate of interest less than the rate being applied to large profitable operations. Since the risk of default is much greater for the small farmer, the rates are just the opposite of the natural course. As the interest rate is set at artificially low rates, it would be to the Bank's benefit to loan to small farmers at the maximum allowable rate. Clearly, this higher rate would allow more funds to be moved from the subsidizing to the receiving sector.

(2) The purpose of the Bank in charging a low rate of interest

to the non-profitable sector is understandable. A program needs to be developed tying concessionary rates of interest to farmer education. The interviews indicate that something beyond credit is needed by these "poorest of the poor." The Bank could encourage extension-tied credit and cost of credit. Already many loans are in the form of seed and fertilizer. The next step is to coerce the recipients of credit to meet regularly with available extension or Bank agents. The program of education is not dealt with here, but rather the method of coercion and result. Economic coercion has traditionally been effective in obtaining positive responses. The realization of a small farmer that his loan payments decrease as he sees his agent is certainly recognizable. A program could be initiated whereby the highest rate of interest is charged to the individual who does not utilize extension services, while lower interest rates are charged for those taking advantage of the service. The number of meetings with the agent and the implementation of his advice by the small farmer is inversely proportional to the rate of interest received. The Bank is the beneficiary in two respects. First, the individual is now better able to repay the loan as he has increased information; therefore, the Bank's expected rate of return is increased. Second, the rate of interest is not discounted for those who do not better themselves by utilizing extension services. Clearly, the Bank is in a better position for collection and control of loans.

(3) The field agents could work more closely with extension service officials to take advantage of existing contacts with small farmers. This would allow costs to be shifted from the Bank to the Ministry of Agriculture without the Bank sacrificing its control of the loan program or its political autonomy. The utilization of the field service is

necessary in the above proposals for reducing costs and for effectively lowering the necessary rate of interest for the Bank.

The Central Bank and the Banco de Fomento

The BCR presently has facilities for discounting services. The Agricultural Development Bank's utilization of this service for small farm loans would enable a direct credit expansion. This type of loan, however, implies a direct government subsidy to the small farmer since the rate of default would in no way be altered. The disadvantage of the use of the discount window for the Agricultural Bank is the increased dependence upon the BCR and, therefore, the "Junta Monetaria." The disadvantage for the Banco de Fomento is the shifting of responsibility, at least in part, to the BCR.

AID and the Banco de Fomento

The Agency for International Development should contribute to the Banco de Fomento by aiding in the spread of information. Working through CENTA, the agency is in position to expand the amount of information concerning the financial, as well as, technical assistance available to the farmer. AID and CENTA would collectively educate the field agents as to the availability of credit and to the specific controls which would reduce farmer costs, increase productivity, and, thereby, lower the costs for the Banco de Fomento. The cycle would result in increased credit in the development sector of the Agricultural Bank.

Education of the extension agent would be the necessary first step in the process since most of the agents' backgrounds are technical, not financial. This program would be relatively inexpensive and would provide a necessary link in extending credit to the rural sector. The extension agent would then be able to inform his constituency of the

availability of education-tied loans, the education-tied interest rate structure, and general credit conditions. More importantly, CENTA and AID can provide the information through the extension service on how to contact the Banco de Fomento's field agents.

Banco de Fomento: Concluding Remarks

The use of the Banco de Fomento for small farmer credit creation has both advantages and disadvantages. The advantages are mainly in the existence of necessary infrastructure of the Bank. The Bank presently has the apparatus and philosophy necessary for the subsidy mechanism to operate. There exist experienced field operators who can facilitate direct Bank contact with the small farmer. The Bank currently has a program of small farmer credit which deals in commodity loans, i.e. fertilizer, seed, and implements. Also, the Bank is using already the Grupos Solidarios approach.

The Bank's position as the main supplier of credit to the small farmer is well established. The survey shows that 66 percent of the loans received by small farmers are from the Bank. The greatest advantage of the Bank over most types of allocation procedures is its infrastructure. Under the assumption that the aforementioned proposals are adopted, the Bank's existing capabilities for small farmer credit services far exceed other alternatives.

There are also disadvantages in using the Bank as the main source of small farmer credit allocation. The very nature of the Bank implies that these farmers are not within reach of the normal financial markets. Even if the Banco de Fomento were successful in reaching the small farmer, improving his productivity, and making him a better risk, the nature of the aid does not enlighten the farmer to natural credit

sources. The Agricultural Development Bank is a short-run solution. The nature of subsidy can be a disadvantage as well as an advantage. The diverting of funds from profitable to non-profitable operations is a necessity for this type of service and has political advantages over direct subsidy; however, 67 percent of any loan or grant allocated to the Bank will necessarily arrive in the hands of large farmers or other profitable operations. It would be only a short-run solution if the funds were used to subsidize the small farmer loan program directly.

PROPOSAL II: FINANCIAL INTERMEDIARIES

Small farmer credit allocation through financial intermediaries (hereafter, the commercial banking system) is paradoxical in many respects. First, the optimal system for credit allocations in any country is through its commercial banking system. Second, commercial banks already have an established infrastructure. Third, the commercial banking system is devoid of government subsidy. On the other hand, given the perfectly elastic demand for loans at the less than equilibrium rates of interest set by the "Junta Monetaria," the commercial banking system would be irrational to direct their services to the small farmer. Further, the stockholders, as well as the directors, might find small farmer loans to be politically and economically undesirable. Also, much of the sociological attitudes exhibited by the bankers interviewed (See Chapter 4) indicate possible social barriers to proper functioning of the banks in this kind of situation.

Credit Allocation

There presently exists a set of credit allocation controls in El Salvador. The "Junta Monetaria" through the BCR has a set of guidelines for sectoral credit allocation. The monetary board, according to Ley #407, is responsible for the

> establishment of regular and special quotas for Central Bank credit on the basis of resources available to satisfy the financial needs of the different economic sectors of the economy.

This ley follows the tradition of the Central Bank (since 1965) in applying limits to the commercial loan portfolio of the credit institution. Portfolio controls are typical of most banking systems. In developing countries where direct sectoral allocation is usually the rule, the mech-

anisms for directing credit to various sectors have been thwarted by alternate mechanisms so that the total effect permits market forces to work.

Credit Allocation Controls

Sectoral credit allocation with its appropriate portfolio controls is an accepted government responsibility though such restrictions do not produce optimal production allocation. These controls are usually justified on economic grounds, but are admittedly less than economically efficient. Most allocation programs are aimed at developing one sector at the cost of another. Therefore, the idea of the commercial banking system subsidizing particular sectors at the expense of other sectors is not new. The practice of Central Bank forced credit allocation is generally sectoral allocation and rarely crosses class lines. Therefore, the commercial banking system chooses the optimal loan portfolio given the sectoral allocation controls. Because of the existing interest rate constraints, this process makes the possibility of small farmer loans unlikely. Further, the interviews with the commercial banks indicate that existing guidelines are not followed. It is inferred that the banks feel little or no restriction upon their loan portfolio as to its distribution.

Assuming that a credit allocation program could and would be enforced, one may use portfolio controls to allocate credit to the small farmer. The "Junta Monetaria" can set allocation guidelines and enforce those guidelines under Ley #407. Small farmer credit allocation, as well as sectoral credit allocation, requires BCR or governmental supervision and strong enforcement.

The nature of the banking system is to minimize risk and maximize profit. As the allocation program itself is less than optimal requiring the commercial banking system to divert funds from more profit-

able loans to small farmers, it is in the interest of the banks to circumvent the law. Since the small farmer is one of the least productive groups, the commercial banking system would service them to the smallest possible extent. The degree to which government constraints are binding is dependent upon economic and political factors. If the cost of not following allocation guidelines is great enough, then they will be followed. If costs associated with loaning to small farmers are greater than the costs of not loaning (fines, bribery, political pay-offs, etc.), then the banks will not loan. However, if the costs of avoiding allocation guidelines are greater than those associated with loaning to small farmers, then the banks will maximize profits (under the constraints) by loaning to small farmers.

Allocation Controls: Two Alternatives

A whole range of credit controls for the purpose of credit allocation are available for consideration. The harshest forms of control are obviously physical enforcement. The weakest forms are simple governmental guidelines. Somewhere within these boundaries lies the proper combination of credit allocation controls.

We propose that the "Junta Monetaria" provide the Central Bank with the authorization to enforce small farmer credit allocation through the commercial system. The focal point of this program is to provide commercial bank subsidized small farmer credit. Assuming the BCR can enforce small farmer credit, the commercial bank will have to reallocate funds from more profitable to these less profitable loans. The incentives for the commercial bank to loan with a less than optimal portfolio structure are related to the degree to which the BCR enforces controls.

The Central Bank can enforce the controls using either one of two methodological avenues: "penalties" or "subsidies." Choosing the former, the "Junta Monetaria," given its capabilities for bank chartering, credit allocation, foreign reserve control, etc., can establish a set of credit allocation guidelines and "game rules." The "game rules" must be such that the costs to the commercial bank of not properly following the guidelines will be greater than the costs of adhering to those guidelines. The "Junta Monetaria," through the BCR, would necessarily maintain surveillance of the individual commercial bank. Once deviations from the guidelines occur, the BCR must enforce penalties. This type of coercive action is usually ineffective and costly to central banks. The most likely outcome of this theoretical approach is little or no enforcement of guidelines inspite of a monumental bureaucracy whose purpose is to enforce said guidelines. The resulting costs to the government and to the BCR are high and the costs to the commercial banking system are low. Where justice is parcelled to commercial bank offenders, the justice is usually piecemeal and, therefore, susceptible to graft and corruption.

As the premise that commercial bank costs of not following the guidelines must be greater than the costs of following the guidelines is held, it is in practice impossible, though theoretically possible, to allocate credit using the "penalty" approach.

The second method of guideline enforcement is through economic subsidy. The government's responsibility is not to enforce strict guidelines by punishing bank officials who simply maximize profit for the stockholders. Rather, the government's responsibility is to ensure a reasonable profit while directing funds to the small farmer. The "Junta Monetaria" can use present capabilities of the BCR to enforce those guidelines

not through theoretical and impotent rules, but rather through the absolute lowering of bank costs. At a certain cost to the commercial bank, it becomes more profitable to make the loans than to circumvent the system of guidelines. This subsidy can be in many forms. No matter the form of the subsidy, its purpose must be to lower the economic cost of serving the rural poor.

We do not propose that direct economic payments be made by the government to the people via the BCR and the commercial banking system. However, it is maintained that the combined program of credit allocation guidelines under BCR control and the economic subsidy to the commercial bank would realign costs such that the commercial banking system would follow those guidelines. It is left to outline a program of allocation control which combines the proper proportions of bureaucratic direction and economic subsidy.

The Discount Mechanism as a Control

The present system of credit allocation is apparently ineffective. A directive from the "Junta Monetaria" which would only place small farmer credit allocation under the existing set of "rules" would be futile. However, there exists a mechanism which could provide economic subsidy, maintain BCR supervision, and enforce proper credit allocation. This instrument of monetary policy is the discount window at the Central Bank. Selective credit allocation to small farmers necessitates economic subsidy. The discount window can provide the subsidy and, therefore, the impetus for the commercial banking system to make small farmer loans. Commercial paper which is rediscounted by the BCR is controllable. That is, the loan's final destination (sector, large or small farmer, large or small industry, etc.) is obvious to the BCR officer handling the discount-

ing. Providing discounts on small farmer loans ensures that most of the small farmer loan portfolio of the individual bank will be visible to the BCR. Therefore, the use of the discount mechanism provides an effective control over the bank's small farmer credit allocation.

Control and subsidy can now be complementarily handled by the BCR with existing bureaucracies. Guidelines which the "Junta Monetaria" chooses to establish can be enforced with small cost to the government. The options for circumventing governmental control are now lessened; therefore, costs of attempting to circumvent controls by the commercial banking system are increased.

Conclusions

Direction of small farmer credit through the commercial banking system requires both economic controls and subsidies. The "Junta Monetaria" may set guidelines. It must recognize, however, that it is in the interest of the commercial banking system to disregard their guidelines unless the cost of doing so is quite high. As the cost of disregard increases and finally exceeds the cost of adhering to those guidelines, the "Junta Monetaria's" policy will be followed. The "Junta Monetaria" must provide a mechanism to ensure that funds allocated to the small farmer, in fact, reach the small farmer.

The best method of credit allocation enforcement incorporates existing agencies within the BCR. It is our suggestion that credit allocation guidelines be formulated only when the discount window is used to supervise and subsidize the operations.

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A P P E N D I C E S

Appendix 1: A Humorous Aside

IN EL SALVADOR THE COYOTE IS ALIVE AND PROSPERING

"THE COYOTE"

There exists in El Salvador a unique kind of person known almost exclusively by the nickname "coyote". Unlike in Mexico, where the term is applied to stockbrokers, "coyote" in El Salvador is used in general to mean anyone who makes his living from commissions rather than salary. Professional salesmen, however, though they may live from commissions, are rarely called "coyotes." Since the term is hardly a precise one, being used to cover so many people doing many different things, perhaps an example of what is meant by the verb "coyotear" will best explain the function.

Suppose that your old aunt Rosita has fallen on hard times (disregard for a moment that you played no small part in bringing on these hard times), and that she is now forced to raise a little cash for her frijoles and tortillas. Aunt Rosita, after much soul searching, reluctantly decides to sell an antique gold bracelet of hers for ¢300. Now, aunt Rosita is old and decrepit and does not know anyone who may want to buy her bracelet. This rules out her going out to sell it. Besides, she must sell it and have the money without anyone finding out about her hard times. Hard times are bad enough to suffer without others hearing about them, on top of all. Of course, there is you. Why can't she give you, her favorite nephew, the bracelet and have you sell it? Well, she could, but she knows that a long spell is apt to go by before she sees either you or the money again. No, there's only one person who can handle this delicate assignment: Don Chon, the "coyote".

Don Chon is sent for and agrees promptly to sell the bracelet to the first person who will pay the ¢300; from this Don Chon will keep ¢30 as his commission. The assignment is an easy one for him, because in the many years that he's been "coyoteando" he's developed quite an extensive network of contacts, knows at once where he can best find a buyer for whatever it may be that he's been asked to sell. In this case your aunt Rosita will never meet the buyer or learn his name. Of course that doesn't matter, what does matter is that her need has been satisfied. Don Chon also, having successfully "coyoteado" the bracelet, can move on to another assignment.

"Coyotes", then, bring buyer and seller together, and are often the court of last resort when more traditional means (adds in the paper, etc.) have failed. On this theme, a multitude of variations are possible, and a "coyote" can be useful whenever someone needs a client, a customer, or a buyer for almost anything. A "coyote" is a generalist; an exception to the rule is the real estate salesman, who operates here in pretty much the same way as his counterpart in the States, and is called "coyote". Car salesmen are sometimes called "coyotes", though not always.

The "coyote" function extends beyond the "pawn broker" operation identified above, and includes the bringing together of a money lender and a borrower. The match is augmented, in El Salvador, by a "black market" in credit, the difference between the real rates of interest and those which are charged by the financial system generates gives rise to placement of funds at market rates to higher risk borrowers through the services of the "coyote". The rate, according to undocumented assertion, will range from 3 qercent per month up to 10 percent per month depending upon risk, with 6 percent monthly not an unusual rate. The coyote may also be the money lender, i.e., he brings the cash - and makes it available at the right price.

GLOSSARY OF AGRICULTURAL TERMS ASSOCIATED WITH CENSUS TABLES in APPENDIX 3

Appendix 2

Data culled from National Census Stadistics of 1971 (Third Agricultural Census), published November, 1972 by the Ministry of Economy - "Dirección General de Estadística y Censos" of El Salvador.

AGRICULTURAL CONCEPTS AND DEFINITIONS

1. "Explotación Agropecuaria con Tierra"

   Any piece of land regardless of size utilized totally or partially for agricultural production by one person alone or with the aid of others.

2. "Producción Agropecuaria"

   Meant to be any crop cultivation - be it open air or greenhouse and including the raising of livestock, poultry, etc.

3. "Productor"

   Any individual responsible for the agricultural production on a given piece of land, regardless of whether he's personally involved or delegates direct production duties to an administrator.

4. "Regimen de Tenencia"

   Breakdown of agricultural production systems.

   a) "En Propiedad," Land owned by the productor.

   b) "En Arrendamiento Simple", Land rented or leased to the "productor".

   c) "En Propiedad y en Arrendamiento". A hybrid form of tenancy involving two or more pieces of land, at least one of which is "en propiedad."

   d) "En Otras Formas de Tenencia". Any other form of tenancy such as: Renters with a commitment to buy, rent-free tenants, tenants under "Colonía", uses of land under probate, or any combination of these.

5. "Aprovechamiento de la Tierra"

   Use given to "Explotación" land during the agricultural year:

   a) "Tierra de Labranza". Land under temporary cultivation largely by means of plowing.

      i. "Cultivo Temporal." Cyclical cultivation whose cycle lasts less than one year, with the cycle

ending totally after harvest.

ii. "Tierra en Descanso". Land left unused ("at rest") for some time before replanting. The "at rest" period must not exceed five years. Included in this category are any lands which, having been planted but not harvested during the agricultural year, were damaged totally by floods, pestilence or disease and not replanted again during that year.

iii. "Superficie Bruta." Land surface made up of the total land area used to grow maize, beans, rice and sorghum during the agricultural year.

iv. "Superficie Neta." Land surface made up of the total tand area used to grow maize, beans, rice and "maicillo", but counting only once those land surfaces on which more than one crop was cultivated during the agricultural year.

b) "Tierra con Cultivo Permanente." Land cultivated with crops not requiring yearly planting after harvesting.

c) "Tierra con Pasto Sembrado." Land on which only grasses are grown. It also includes land on which corn is grown solely for cattle feed purposes.

d) "Tierra con Pasto Natural." Land used for shepherding.

e) "Tierra con Montes y Bosques." Woods for lumber production. Does not include land on which trees are grown for shading purposes.

f) "Otras Tierras". Land occupied by buildings, stockyards and pens, stables, roads, rivers, swamps, lava beds, etc.

6. "Cultivo Solo."

Land used only for one type of crop.

7. "Cultivo Asociado."

Two or three different types of crop sown one next to the other in adjacent furrows, and which thus occupy the same general land area during their growth period.

8. "Cultivo Industrial."

Group of crops made up of sesame seed, cotton, peanuts, sugar cane, henequen, "kenaf", tobacco and yucca plant.

9. "Otros Cultivos Temporales".

Any temporary crop not yet named, such as watermelon, melon, tomatoes, and garden produce in general.

Appendix 3

Tables Derived from Census Avance, 1970-71

Number of Farms and Hectares Worked, by Tenancy form and Department

Number of Farms by Land Tenancy Form and Department, 1970-71

Number of Farms and Type of Land Use, By Department, 1970-71

Number of Farms, by Tenancy Form, Department, and Size of Farm, 1970-71

Number of farms and superficie worked, by Form of Tenancy, Department, and Size of Farm, 1970-71

Number of Farms and Classification of Land Use, By Department and Size of Farm, 1970-71

Plowed Cultivation by Classification of Use, Department and Size of Farm, 1970-71

NUMBER OF FARMS AND HECTARES WORKED, BY TENANCY FORM AND DEPARTMENT, EL SALVADOR, 1970-71*

(hectares)

Departament	Total Farms	Land Area Worked						
		Total	Owned	Simple Lease	owned and leased			Other Tenancy Forms
					Total	Owned	Leased	
TOTAL	272 432	1 463 859	1 118 080	108 841	137 697	82 284	55 413	99 241
Ahuachapán	18 848	75 915	58 389	5 354	4 235	2 631	1 604	7 937
Santa Ana	24 595	162 572	140 288	7 740	9 241	6 269	2 972	5 303
Sonsonate	17 895	98 824	66 324	6 732	4 875	2 628	2 047	20 893
Chalatenango	21 226	135 424	106 538	8 637	16 571	10 952	5 619	3 678
La Libertad	20 165	131 714	110 104	7 542	5 930	3 502	2 428	8 138
San Salvador	14 731	59 369	48 120	2 790	4 126	2 601	1 525	4 333
Cuscatlán	17 555	51 361	38 740	1 801	8 417	4 443	3 974	2 403
La Paz	15 118	91 712	68 884	11 528	8 278	4 426	3 852	3 022
Cabañas	15 494	57 514	39 674	5 670	9 826	6 217	3 609	2 344
San Vicente	13 089	72 447	54 603	6 702	8 041	4 817	3 224	3 101
Usulután	20 505	125 541	88 994	12 793	11 975	5 639	6 336	11 779
San Miguel	29 057	162 498	107 485	17 774	21 045	11 879	9 166	16 194
Morazán	19 291	97 500	80 692	3 242	10 744	7 272	3 472	2 822
La Unión	24 763	141 468	109 245	10 536	14 393	8 808	5 585	7 294

*Agricultural Census Advance, 1970-71. Direccion General de Estadisticas y Censos.

CHAPTER XI

SUMMARY AND CONCLUSIONS

NUMBER OF FARMS BY LAND TENANCY FORM AND DEPARTMENT, AGRICULTURAL YEAR 1970-71*

Departament	Number of Units	Form of Tenancy			
		Owned	Simple Lease	Leased and Owned	Other Forms
TOTAL	272 432	107 450	80 547	38 433	46 002
Ahuachapán	18 648	6 067	4 819	1 252	6 710
Santa Ana	24 595	9 615	8 686	1 619	4 675
Sonsonate	17 895	6 001	5 805	1 033	5 056
Chalatenango	21 226	7 769	7 581	3 950	1 926
La Libertad	20 165	6 510	6 465	1 757	5 433
San Salvador	14 731	7 568	2 842	1 976	2 325
Cuscatlán	17 555	10 110	2 321	3 500	1 624
La Paz	15 118	6 723	3 914	2 509	1 972
Cabañas	15 494	5 132	5 016	3 425	1 921
San Vicente	13 089	4 779	4 148	2 172	1 990
Usulután	20 605	7 729	6 261	3 476	3 139
San Miguel	29 057	10 001	11 016	4 436	3 604
Morazán	19 291	10 372	2 980	3 896	2 043
La Unión	24 763	9 054	8 693	3 432	3 584

Source: Agricultural Census, 1970-71, p. 1.

NUMBER OF FARMS AND TYPE OF LAND USE, BY DEPARTMENT: AGRICULTURAL YEAR 1970-71

(hectares)

Departament	Total Farms	Superficie Planted in						
		Total	Cult. Part Year	Permanent	Pastures		trees & mount.	Others
					natural	seeded		
TOTAL	272 432	1 463 859	488 211	163 468	448 539	107 361	175 170	81 110
Ahuachapán	18 848	75 915	20 518	16 828	18 478	4 995	10 999	4 097
Santa Ana	24 595	162 572	33 038	33 721	54 080	8 831	25 798	7 104
Sonsonate	17 895	98 824	25 977	20 319	23 396	15 720	6 843	6 569
Chalatenango	21 226	135 424	36 414	838	57 820	11 609	23 901	4 842
La Libertad	20 165	131 714	34 153	29 545	40 733	3 371	15 773	8 139
San Salvador	14 731	59 369	18 467	11 646	16 804	1 088	7 000	4 364
Cuscatlán	17 555	51 361	25 540	3 627	14 252	568	3 896	3 478
La Paz	15 118	91 712	41 938	7 532	20 341	7 322	6 642	7 937
Cabañas	15 494	57 514	23 978	872	21 848	927	5 112	3 777
San Vicente	13 089	72 447	25 686	2 088	27 508	3 555	9 653	3 957
Usulután	20 505	125 541	53 736	20 607	26 029	10 055	8 650	6 464
San Miguel	29 057	162 498	64 439	10 323	42 939	22 166	12 506	10 125
Morazán	19 291	97 500	32 275	4 076	31 447	9 536	15 018	5 148
La Unión	24 763	141 468	52 052	1 446	52 864	7 618	22 379	5 109

*Agricultural Census Advance, 1970-71, Dirección General de Estadisticas y Censos.

NUMBER OF FARMS, BY TENANCY FORM, DEPARTMENT AND SIZE OF FARM
AGRICULTURAL YEAR: 1970 - 1971

Departamento y tamaño de la explotación (En hectáreas)	Total de explotaciones	Régimen de tenencia en:			
		Propiedad	Arrendamiento simple	Propiedad arrendamiento simple	Otras formas de tenencia
TOTAL	272 432	107 450	80 547	38 433	46 002
Menores de 1.	132 907	37 659	52 647	11 576	31 025
De 1 a 1.99	59 842	18 532	19 911	12 596	8 803
" 2 " 4.99	44 002	22 841	6 822	9 511	4 828
" 5 " 9.99	15 730	11 234	693	2 986	817
" 10 " 19.99	8 977	7 459	260	1 019	239
" 20 " 49.99	6 772	6 083	80	509	100
" 50 " 99.99	2 241	1 957	52	141	91
" 100 " 199.99	1 115	974	43	58	40
" 200 " 499.99	640	532	36	30	42
" 500 " 999.99	141	124	3	5	9
" 1 000 y más	65	55	-	2	8

Source: Agricultural Census Advance Statistics, Dirección General de Estadisticas y Censos

NUMBER OF FARMS AND SUPERFICIE WORKED, BY FORM OF TENANCY, DEPARTMENT, AND SIZE OF FARM: AGRICULTURAL YEAR 1970-71

(superficie in hectares)

Departamento y tamaño de la explotación (En hectáreas)	Total de explotaciones	Superficie trabajada en:						
		Total	Propiedad	Arrendamiento simple	Propiedad y arrendamiento simple			Otras formas de tenencia
					Total	Propiedad	Arrendamiento	
TOTAL	272 432	1 463 859	1 118 080	108 841	137 697	82 284	55 413	99 241
Menores de 1.	132 907	70 568	17 091	29 701	7 955	2 721	5 234	15 821
De 1 a 1.99	59 842	83 084	26 079	26 973	17 829	7 561	10 268	12 203
" 2 " 4.99	44 002	134 163	73 007	18 334	29 109	15 955	13 154	13 713
" 5 " 9.99	15 730	112 590	81 271	4 853	20 815	14 863	5 952	5 651
" 10 " 19.99	8 977	126 566	105 464	3 715	13 950	9 847	4 103	3 437
" 20 " 49.99	6 772	213 067	192 459	2 606	14 856	10 523	4 333	3 146
" 50 " 99.99	2 241	154 840	135 343	3 645	9 474	6 191	3 283	6 378
" 100 " 199.99	1 115	153 514	133 823	6 332	8 019	5 134	2 885	5 340
" 200 " 499.99	640	192 250	159 288	10 732	9 391	6 467	2 924	12 839
" 500 " 999.99	141	96 547	85 653	1 950	3 030	1 491	1 539	5 914
" 1 000 y más	65	126 670	108 602	-	3 269	1 531	1 738	14 799

Source: Agricultural Census Advance Statistics, Dirección General de Estadísticas y Censos

NUMBER OF FARMS AND CLASSIFICATION OF LAND USE, BY DEPARTMENT AND SIZE OF FARM, AGRICULTURAL YEAR 1970-71

(superficie in hectares)

Departamento y tamaño de la explotación (En hectáreas)	Total de explotaciones	Superficie aprovechada en:						
		Total	Tierra de labranza	Cultivo permanente	Pastos		Montes y bosques	Otras tierras
					Naturales	Sembrados		
TOTAL	272 432	1 463 859	488 211	163 468	448 539	107 361	175 170	81 110
Menores de 1.	132 907	70 568	56 183	4 390	983	325	749	7 938
De 1 a 1.99	59 842	83 084	65 638	5 201	3 128	242	1 774	7 101
" 2 " 4.99	44 002	134 163	84 625	12 331	19 229	1 315	6 539	10 124
" 5 " 9.99	15 730	112 590	50 334	10 391	31 141	2 867	11 165	6 692
" 10 " 19.99	8 977	126 566	43 141	15 064	42 843	4 807	13 926	6 785
" 20 " 49.99	6 772	213 067	43 476	27 905	84 930	14 658	33 454	8 643
" 50 " 99.99	2 241	154 841	28 405	24 808	60 227	16 168	19 087	6 146
" 100 " 199.99	1 115	153 515	25 357	23 821	61 522	16 857	20 072	5 886
" 200 " 499.99	640	192 248	36 608	23 716	72 400	24 025	27 602	7 897
" 500 " 999.99	141	96 547	22 831	8 721	34 246	12 534	13 623	4 592
" 1 000 y más	65	126 670	31 613	7 119	37 890	13 563	27 179	9 306

Source: Agricultural Census Advance Statistics, Dirección General de Estadisticas y Censos

PLOWED CULTIVATION BY CLASSIFICATTION OF USE, DEPARTMENT AND SIZE OF THE FARM. AGRICULTURAL YEAR 1970-71

(Superficie in hectares)

Departamento y tamaño de la explotación (En hectáreas)	Total tierra de labranza	Cereales y leguminosas para granos						Cultivo industrial	Otros cultivos temporales	Tierra en descanso
		Cultivo solo					Cultivo asociado			
		Maíz	Frijol	Arroz	Trigo	Maicillo				
TOTAL	488 211	106 232	17 551	13 139	-	7 451	132 443	98 860	5 298	107 237
Menores de 1.	56 184	21 571	2 476	572	-	933	28 638	720	373	901
De 1 a 1.99	65 638	20 024	3 993	1 332	-	1 474	33 085	2 275	482	2 973
" 2 " 4.99	84 627	24 178	4 653	2 892	-	1 673	32 258	5 043	702	12 228
" 5 " 9.99	50 332	11 626	2 545	1 729	-	985	13 799	5 000	613	14 035
" 10 " 19.99	43 141	7 712	1 435	882	-	545	8 823	5 768	975	17 001
" 20 " 49.99	43 475	5 952	1 220	1 004	-	536	7 512	6 433	604	20 214
" 50 " 99.99	28 404	3 922	480	1 064	-	310	2 881	7 684	582	11 481
" 100 " 199.99	25 357	3 216	240	520	-	165	1 895	9 931	530	8 860
" 200 " 499.99	36 609	3 579	241	1 548	-	334	1 530	21 245	248	7 684
" 500 " 999.99	22 831	1 931	62	1 354	-	102	544	13 720	94	5 024
" 1 000 y más	31 613	2 521	206	242	-	394	478	21 041	95	6 636

Source: Agricultural Census Advance Statistics, Dirección General de Estadisticas y Censos