

FINANCING LOW INCOME HOUSING PROJECTS THROUGH
DEBT CONVERSION IN INVESTMENT

by

Leopoldo Pérez-Lavaud
Ingeniero Civil, Universidad Católica Andrés Bello
(1984)

Submitted to the Department of
Civil Engineering in Partial Fulfillment of
the Requirements for the
Degrees of

CIVIL ENGINEER

and

MASTER OF SCIENCE IN CIVIL ENGINEERING

at the

Massachusetts Institute of Technology
September 1991

© Leopoldo Pérez-Lavaud

The author hereby grants to MIT permission to reproduce and to
distribute copies of this thesis document in whole or in part.

Signature of Author _____
Department of Civil Engineering
August 15, 1991

Certified by _____
Professor Fred Moavenzadeh
Director, Center for Construction Research and Education
Thesis Supervisor

Accepted by _____
Professor Eduardo Kausel
Chairman, Departmental Committee on Graduate Studies

FINANCING LOW INCOME HOUSING PROJECTS THROUGH
DEBT CONVERSION IN INVESTMENT

by

Leopoldo Pérez-Lavaud

Submitted to the Department of Civil Engineering
on August 15, 1991 in partial fulfillment of the
requirements for the Degrees of Civil Engineer
and Master of Science in Civil Engineering

Abstract

This research focuses in a problem facing today many heavily indebted developing countries, among them Venezuela: to find alternative ways to cope with the debt problem and, at the same time, to find ways to restart their development. It is well known that the debt problem has constrained the so much needed financing for the development of those countries. Also, one of the most critical issues in their development is to meet the demand for low income housing. Appropriate policies can be set in such a way that both government and investors/lenders objectives be met.

The debt problem is reviewed, as well as the low income housing problem. Proposed solutions to the debt problem are analyzed, with more emphasis on the debt conversion mechanism and its innovative use to finance investments on those countries, specially low income housing. Study cases from Venezuela are reviewed.

Thesis Supervisor: Professor Fred Moavenzadeh
Title: Director, Center for Construction Research
and Education

To my wife

To my parents

CONTENTS

Abstract	2
Contents	4
1 Introduction	5
2 The Low Income Housing Finance Problem	11
Rationale	11
Housing Markets' Structure	13
Alternative Solutions	14
Housing Finance Policy in Venezuela	18
Resources	20
Stimulus	21
3 External Debt and Developing Countries	25
Rationale	25
The Debt Crisis	27
Facing the Crisis	32
4 Debt Conversion in Investment	38
Rationale	38
Venezuela's Debt-Equity Swap Program	43
Results	49
5 Debt Conversion and Low Income Housing Finance	56
Rationale	56
Examples in Venezuela	58
Case Analysis	63
6 Conclusions	70
Bibliography	74

CHAPTER ONE

INTRODUCTION

The 1980's has been a difficult decade for the world and specially for developing countries: debt crisis, recession, slowdown in growth, worsening of terms of trade. Many countries, such as Venezuela, have found difficulties in servicing increasing debts at times when interest rates has been at a peak and the prices of their exports have plummeted; they have had to face increasing inflation, increasing deficits in their current accounts, slowdowns and even negative growth of their economies.

Among the sectors more adversely affected in the economy of developing countries is the housing construction sector. Even in better times, developing countries have focused their attention to investments in industry and agriculture, rather than housing, because of their importance in order to become less dependent and to generate more income. Housing, and particularly low cost housing, has tended to be left aside, and indeed much more in difficult times.

Traditionally, housing has been and continues to be a significant problem in developing countries. The growth of the population in conjunction with the lack of planning, control and resources have widened the deficit of housing in almost every developing country. Moreover, as the real income of the vast majority of the population in these countries has not grown as it should, their ability to afford housing has been reduced.

We will look at these two important problems that many developing countries face today: the debt problem and the housing problem, specifically the financing of housing. In order to restart the development in these countries it is necessary to find ways to ease the debt burden that constrains their economies. However it is not necessary nor even wise to solve first the debt problem, then promote again industry and agriculture and leave only for a final stage the tackling of the housing problem. We will see that there are ways to help reducing the debt burden and at the same time promote investments, including housing investment, through mechanisms such as debt conversion in investment which we will review later. We will see also how important it can be for these countries to promote the housing industry.

In order to set a frame for our analysis, we will look closer the case of Venezuela: its debt problem and its housing problem. Let us start by reviewing some characteristics of its housing problem.

Venezuela has undergone a large increase in population in the last forty years. A population of 5 million (47.9% urban) in 1950 has grown to almost 20 million (83.9% urban) in 1990. It has been very difficult to provide housing through the years, specially since the late 70's: inflation in the housing construction sector has made less affordable the acquisition of housing; the proportion of income that a family has to set apart for housing has been getting bigger and bigger; free market interest rates for non-subsidized housing

mortgage loans have increased in the last three years from 13-15% to 36-42% and therefore are much too high for the great majority of the population, and above all for those most in need; the financing period is much too short: in the last three years the situation has worsened as from the previously short period of 10-15 years, non-subsidized housing financing went to the even far shorter period of 7-10 years; the number of units constructed each year has not been enough to cope with the housing deficit and much less with the population growth; and financial institutions have not been able to attract enough resources to finance housing.

The construction sector has been very negatively affected by the crisis. After experiencing annual growth of 18.5% between 1974 and 1978, there were seven years of declining being the construction GDP in 1985 36.8% of what it was in 1978. Between 1986 and 1988 there were increases and decreases, and in 1989 there was a decrease of 30%.

In Venezuela the housing market can be divided into four segments according to the participation level of the government. The first segment is housing built by the public sector through the National Institute for Housing (INAVI) and the Health Ministry (MSAS). It is aimed to the lowest income sector of the population that is not able to afford housing at market prices, and therefore it is subsidized. The second segment is marginal housing self constructed by the low income sector of the population that is built without any previous urban planning and/or zoning regulations; this

is some rather forced support by the government after the haphazard communities are built in the way of providing municipal services and infrastructure as well as some financing for enlargements. The government gets involved through the INAVI, the Urban Development Ministry (MINDUR), the Community Foundation (FUNDACOMUN) and local governments. The third segment is social interest housing built by the private sector under a scheme of regulated selling prices and favorable conditions of financing so that medium income and low-medium income sectors may afford them. The fourth segment is the non-regulated market of housing built by the private sector for the medium-high and high income sectors.

The XI Census of population and housing performed in 1981 in Venezuela showed that there was a gross housing deficit of 859,169 units, which represented 33% of the total existing stock by the time and affected 4,295,845 persons or 30% of the total population. This deficit involved a structural deficit of 423,712 units affecting 2,245,673 persons, being the difference a functional deficit. The structural deficit is composed of units that have to be replaced because of their unacceptable physical conditions, while the functional deficit is related to overcrowding in acceptable units due to the shortage of housing and to the low capacity of payment in relation to the cost of housing.

Since 1981 and until 1988 the increase of the population was such that to provide housing for that increase more than 820,000 new units should have been built, however only about 585,000 were

actually built (see Table 1.1). The level of construction, at a rate of around 100,000 units a year, has not increased lately, therefore the cumulative current deficit is over 1 million units. It would be necessary at least 10 years at the current rate of construction to close the current cumulative deficit. On the other hand, the current rate of construction is barely enough to keep up with the increase in population. Therefore, the deficit would keep increasing permanently unless the rate of construction be increased significantly. Indeed it is a problem whose solution requires not only a large amount of resources but also much ingenuity, good thinking and deft planning in order to solve a problem that so far has eluded all succeeding Administrations and entrepreneurs alike.

Table 1.1 - Housing Units Built in Venezuela, 1978-1988

Year	Public Sector			Private Sector			Combined Sectors		
	Total	Single-Family	Multi-Family	Total	Single-Family	Multi-Family	Total	Single-Family	Multi-Family
1978	23,583	16,582	7,001	49,975	3,563	46,412	73,558	20,145	53,413
1979	32,279	17,317	14,962	50,427	2,675	47,752	82,706	19,992	62,714
1980	32,243	25,730	6,513	51,012	15,067	35,945	83,255	40,797	42,458
1981	42,744	30,605	12,139	48,552	14,182	34,370	91,296	44,787	46,509
1982	35,719	28,970	6,749	56,293	13,598	42,695	92,012	42,568	49,444
1983	28,154	22,817	5,337	28,574	11,915	16,659	56,728	34,732	21,996
1984	17,943	16,808	1,135	21,682	6,918	14,764	39,625	23,726	15,899
1985	23,155	21,390	1,765	21,817	8,657	13,160	44,972	30,047	14,925
1986	91,666	74,446	17,220	23,713	10,299	13,414	115,379	84,745	30,634
1987	96,265	84,230	12,035	30,169	12,851	17,318	126,434	97,081	29,353
1988	84,279	77,344	6,935	25,708	10,933	14,775	109,987	88,277	21,710

Source: MINDUR, INVAI and FUNDACONSTRUCCION

CHAPTER TWO

THE LOW INCOME HOUSING FINANCE PROBLEM

Rationale

The design of a housing finance system is a difficult task because it has to address objectives that are partially conflicting. The households demand, being the reason for such a system, is conditioned by the income of the family heads and by their possibility of obtaining financing at affordable terms. The size and composition of the demand requires public housing programs which in turn require scarce resources to carry them out. Financing programs for housing contribute to the expansion of the construction sector and of the national economy, but there is also the need for preventing financial instability and for maintaining confidence in the financial system. Bankers have to expand the scope of their financial services, and at the same time maintain a viable institution; their main problem is the generation of long-term loans through short-term deposits in an inflationary environment.

To make housing more affordable, many developing countries (or less developed countries - LDC) have focused their efforts in either lowering interest rates, lengthening maturities of mortgages, using graduated payments, increasing the equity base through various subsidies or cross-subsidies, reducing the cost of houses by lowering standards or a combination of them. However, little has been done to remove the constraints that financial institutions find

to provide the type of financing that households need; being these institutions the natural intermediaries between housing and capital markets, it is important to set conditions that let them be viable institutions. Attempts from authorities to direct credit and force arbitrarily low interest rates usually result in the contraction of the activity level of financial intermediaries.

At the very bottom of the income scale are those who are subsidized entirely by LDC governments. Their limited income makes them unable to participate even in a financial market regulated to offer favorable conditions to buyers. Besides, these subsidies impose a restraint to the development of a housing finance system.

In most LDC the majority of residential investment is done directly by individuals without the support of financial institutions, which only serve a minority at high costs and with limited results. The narrow reach of the existing institutions and the characteristic fragmentation of informal financial services reduce the mobilization of domestic savings toward financial assets that would strengthen the housing finance system. Households are net savers whose first priority usually is housing investment, however they tend to save in the form of real rather than financial assets. Rapid demographic growth usually makes the housing sector the largest single one in investment in LDC economies, nonetheless the level of financial intermediation tend to be very small, and housing conditions are very poor because of the low income of the households. There are also difficulties for developers who must face

inadequate land registration systems, inappropriate land use laws, inefficient planning, rent control, excessive tenure protection laws and excessive land development and construction standards, which limit their investments in spite of a strong demand.

Housing Markets' Structure

Housing markets in LDC have a three-tier structure. At the top are high-income households able to afford the best housing. Their financial needs are met either by specialized housing finance institutions or by their own substantial resources. In the middle are middle-income households which constitute the main users of those institutions, specially the public ones. They are also the main beneficiaries of public subsidies and are civil servants or employees of large private companies or public sector corporations.

At the bottom is the largest, by far, group composed of low-income households whose needs, for housing construction and financing, are served haphazardly and usually by themselves, most of the time ignoring the law. This group tends to develop progressively very dense residential zones and without any infrastructure or community facilities on land either owned by the government, or whose title is unknown, or in forcibly occupied land belonging to well-known owners. Minimum resources are necessary, and a household may have enough as to afford the structure but not the

land, and therefore may be willing to accept uncertain tenure over the land, which prevents the use of the property as collateral for institutional financing. Many individual families build their own dwellings, mostly from current income. It is common that small contractors provide the more difficult services such as foundation and structural elements construction, even offering short-term financing. Financing is also complemented through mutual aid financing schemes or even local moneylenders. In most cases the interest charged is larger than the one that a formal financial institution would have charged. Likewise, charges paid for potable water to private suppliers usually exceed those that a municipal authority would have charged. It is clear that the capacity to pay for housing and municipal services exists; what is needed are formal financial intermediaries so that a larger part of the population may enjoy also the benefits of their services, such as risk reduction through diversification, maturity (or term) intermediation, reduction in the cost of contracting, information production, management of payment systems and the provision of insurance.

Alternative Solutions

To make progress regarding the problem of financing low income housing it is necessary to provide affordable standards of construction and infrastructure, to ensure the financial viability of the institutions involved and the replicability of the operation, to reduce subsidies through improvements in cost recovery and to improve the domestic mobilization of resources for the sector. On

the other hand, it is important to find ways to make financing more affordable. Many times financing is difficult to obtain because of the income qualifications required, such as an adequate level of income, regular stable employment, verifiable income and satisfactory collateral. Also, loan terms may restrict the access to financing, for example: minimum sizes of loans that are too large, high downpayments, small loan-to-house ratios, rigid schedule of payments, high costs, etc.

Economic resources must be mobilized in order to finance the housing sector. Sources such as public sector savings through taxes and savings by public enterprises or private corporations, are not enough because of their rather small surplus in LDC if any. Inflationary financing discourage financial savings, and low-interest rate ceilings on loans prevent mobilization. Foreign borrowings are almost impossible in practice due to the already heavy debt burden of LDC. The key is to mobilize savings from the household sector. Low-income households may have irregular income, but when they are given the opportunity of owning a house they increase their savings. In fact many self-employed workers who show even higher irregularity in their income, and therefore are less considered by housing banks, tend to save more precisely because they realize this irregularity, however they don't do it in the form of financial assets because they have little hope of getting a mortgage.

Positive real interest rates are required. Policies forcing low interest rates result on less funds available to lend and an excess demand for them which prevents those more necessitated from getting a loan. Also, these people are discourage from financial saving because they realize that not only it will be difficult to get a loan, but in the meantime their deposits will lose purchasing power due to inflation. As a consequence their savings are non-productive investments in real assets. On the other hand, financial institutions tend to rely on government or foreign loans, therefore by not having contact with a large depositors and borrowers base, they don't have an accurate knowledge of the market, are less efficient in their loan origination and service procedures, and are more likely to incur in default.

Consistent policies should be proposed that lead to the development of viable institutions that can serve the majority of the population, including those self-employed. Only the worse-off segment of the informal sector should be helped with public resources. These institutions can also help to direct the investment to the more desirable projects, to encourage technical innovations as well as to provide the resources needed to finance the required infrastructure and services that the informal sector cannot provide.

Besides facing constraints in LDC, such as the level of development of their capital markets, housing financial institutions must confront specific problems related to the nature of their operations, such as dealing with households as depositor and

borrowers whose collaterals have such variations in liquidity that imply substantial risks and high transactions costs compared to the size of the loans. They are expected to lend long even though they borrow short, and therefore they are very sensitive to inflation and loan origination costs are high. Public confidence is a must, and it depends on the level of capitalization and loan recovery effectiveness of these institutions. In LDC there is a low degree of mobility and people tend to own their houses and self-finance them.

In mobilizing resources for housing finance, LDC rely on voluntary schemes, mandatory schemes, government transfers or a combination of them.

Voluntary schemes, to be successful, must provide positive real interest rate on deposits and must offer savings vehicles able to cope with inflation through for example indexation of assets and liabilities so as to protect both individuals and institutions. To keep interest low without discouraging savings, they should rely on contractual savings schemes such as those used in Germany, where by guarantying future loans at low cost, personal savings at low rates are attracted. They should also attract long-term deposits from institutions and corporations by offering competitive rates and exploiting the interest that they may have in developing housing for their employees. Finally, financial services must improve in quality, for example, opening more branches, something desirable to reach a large enough base of depositors.

When domestic savings have been considered insufficient and financial intermediation has not succeeded, LDC have tended to implement mandatory schemes for mobilizing resources to housing finance. They may target individuals, business or both, and also they may impose regulations on other financial institutions requiring them to invest in housing debentures a proportion of their resources. The typical way to target individuals and business is through retentions on salaries and wages, and employer contributions that must be deposited in a housing finance institution.

Finally, government transfers may be through inexpensive borrowing from the Central Bank by the financial institutions, explicit subsidies through budget allocations to those institutions or implicit subsidies through tax exemptions to either the financial institutions, the depositors or the developers.

Housing Finance Policy in Venezuela

On September 14, 1989 the Congress of Venezuela sanctioned a Housing Policy Law to set the basis of a national housing program to be developed on the medium and long-term. The objective for the next 15 years is to assist households in their housing needs according to the following schedule: 700,000 households between the year 1989 and 1994, 1,000,000 between 1994 and 1999 and 1,300,000 between 1999 and 2004. Both the public and private sector will share the responsibility, being a priority for the public

sector the assistance of those households with the lowest monthly income (below 3 minimum monthly salaries).

The housing programs to be developed shall have priority if they are located in those regions and cities considered important for decentralization and population and economic deconcentration, and/or if they have a housing deficit. These programs shall be coordinated with the development, when non-existent, of primary infrastructure and the supply of public services (mainly financed through the government budget).

There are four areas of assistance:

- I) Main responsibility of the public sector, for the financing of housing for up to 65 minimum monthly salaries.
- II) Financed with funds originated from mandatory savings, for the financing of housing for up to 180 minimum monthly salaries.
- III) For the financing of housing for up to 300 minimum monthly salaries. This area can not be financed with funds originated from mandatory savings, nonetheless, profits made with part of those funds kept as reserve at the Central Bank (90% of idle funds) or as a Guarantee Fund may be used, as well as other sources such as funds from the social security system and from the public sector pension fund. In the metropolitan area of Caracas the assistance may be for up to 400 minimum monthly salaries.

IV) For the assistance above the limits set for the area III. This area shall be assisted exclusively by the private sector.

The programs to be developed may include new units or enlargement of existing ones, and may be executed progressively. They may be of the following types:

- 1.- Lots with basic services.
- 2.- Expandable housing units.
- 3.- Credit for housing construction, acquisition, enlargement and remodeling.
- 4.- Housing for renting with or without a purchase option.
- 5.- Housing for selling.
- 6.- Subsidy for housing rents.
- 7.- Technical and legal assistance.

The beneficiaries of funds for the financing of housing must be depositors of the mandatory saving system and not own a dwelling if they are opting for a new one.

Resources

The public sector will provide funds to public organisms for these programs in an amount that shall be 5% of the National Budget each year after deducting amounts allocated to states, the Venezuela Investment Fund and the Severance Social Benefits Fund; this amount doesn't include funds allocated for infrastructure and

public services. These funds must be used for the assistance of the area I, however the National Council of Housing (organism established to help in the definition and administering of the housing policy) may authorize its use for programs above the limits of area I when funds from mandatory savings are not enough and the program has priority for the Council.

According to the mandatory housing savings system, public and private sector employers will make a monthly retention of 1% on the employees salaries and will contribute an additional 2%, to be deposited in individual accounts on mortgage banks and S&L institutions. These funds will not earn any interest. Self-employed persons may join the system by depositing each month 3% of their average monthly income to be certified in writing to the financial institution, being the deposit not less than 3% of the minimum monthly salary. For the computations, the base for the salary shall not exceed 10 minimum monthly salaries. Each individual may only use the savings for his or her housing financing needs (downpayments and amortizations) or those of a relative which also contributes to the system, or for any purpose after reaching the age of 60. Upon the death of a depositor, his or her heirs may mobilize the deposits for any purpose.

Stimulus

As stimulus, the National Council of Housing may authorize subsidies for households under the area I of assistance, set

preferential interest rates for borrowers (including developers), and transfer the use of land acquired and prepared by national organisms for the development of housing projects. Also, the Executive branch may authorize total or partial exoneration: of tax on revenue of developers and landlords, and on interest revenue of financial institutions; of rent control of new housing; of tax on housing savings upon death of depositor; and of tax on any taxable profit to be invested in housing projects within the objectives of the housing policy law.

Borrowers shall pay an insurance premium to be placed in a Guarantee Fund. This fund will be used to cover any balance of capital and interest, and some expenses upon default on a loan, or to pay for losses on the property due to fire or earthquake.

The annual interest rate charge on loans will be the followings for each area of assistance:

- I) For long-term financing 3% if it is for rural housing or housing in poor neighborhoods when the loan is for up to 40 minimum monthly salaries, otherwise 5.25%; for short-term financing for developers 6.5% plus a flat commission of 2%.
- II) For long-term financing 5.25% ; for short-term same as in I.
- III) For long-term financing 12% plus a flat commission of 1%; for short-term 12% plus a flat commission of 2%.

Financial institutions will retain 7% of the total income generated by loans under the area III of assistance, being the remaining allocated for use in new loans to this area.

Every loan must have as collateral a first mortgage on the land and edification, and only by exception on just the edification. The borrower must reimburse the loan plus interests in not more than 25 years, or 30 years by exception, when public sector resources are used; 20 years otherwise. Monthly payments may be constant, increasing or decreasing and not more than 12% of the average monthly income of the borrower under the area I of assistance, or not more than 25% for area II, and not more than 30% for area III. The loan may be for up to 100% of the price for rural housing and improvement or enlargement of housing, and 90% otherwise for the area I; not more than 85% of the minimum between price and appraisal for area II and not more than 75% for area III. The maximum term for construction loans is 3 years; advances may be given for up to 20% of the loan; and the loan may cover up to 85% of the appraisal value of the project when public sector resources are used, or up to 70% otherwise.

Currently, and according to the Decree 240 issued on May 24, 1989, developers of housing with value of up to 135 minimum monthly salaries are 100% tax exempt on their profit; 70% if the value is up to 170 minimum monthly salaries; and 40% if the value is up to 200 minimum monthly salaries.

Unfortunately, however, as can be seen, there is a glaring and huge difference between this forcibly law-regulated financial framework and financial terms and conditions in the free market for non-regulated, non-subsidized housing, all of which has consequently resulted in most financial institutions evading by all means their involvement in financing under the Housing Policy Law and its associated Rules and Regulations.

CHAPTER THREE

EXTERNAL DEBT AND DEVELOPING COUNTRIES

Rationale

There are common characteristics among developing countries that help to understand the external debt problem that the majority of them have been facing. To start with, their financial markets are very limited: stock markets are very small when they exist, and so are markets for long-term debt. These markets are heavily controlled by governments, usually setting low interest rates for loans, which as a consequence are rationed and directed to certain sectors of the economy and even more to finance government budget deficits. In these circumstances, it is difficult for financial institutions to grow, they can't attract domestic savings that can get higher yields when invested abroad. Domestic economic and political instability also prompts these capital flights. All this makes very difficult the financing of private corporate investment. It is important also to note that government's firms represent a large share of the economy, and they tend to be managed inefficiently.

Being so difficult for governments to finance their deficits through their small financial markets, they rely extensively in direct external borrowing. In addition, their reluctance to raise taxes has resulted in obtaining more funds through the increase of the money supply which has led to high rates of inflation. Sometimes

wage indexation is used to protect real wages, but this can create more problems such as making it difficult to adjust the wages in order to remain competitive when the terms of trade deteriorate. In these circumstances, key export firms may be forced to reduce their operations, and unemployment increases.

Exchange rates are usually controlled by governments, and the flow of funds across borders is heavily regulated; as a consequence their currencies are often inconvertible. Different rates are used to favor some sectors, for example a favorable rate is given for imports of capital goods but not for consumption goods. In some cases, these fixed rates, when overvalued, have prompted additional capital flight.

A large share of developing countries exports comes from natural resources or agricultural products which have highly variable prices. Being most of the trade toward industrialized countries, developing countries are very vulnerable to macroeconomic policies of industrialized countries, specially when they reduce aggregate demand.

Developing countries have low levels of domestic savings and a lack of capital. Because of that, many profitable investment opportunities remain to be exploited. This explains why those countries rich in capital and with high level of savings are attracted to finance those investments; the returns of the remaining opportunities in capital rich countries are not as good.

The Debt Crisis

Capital inflows that have financed the deficits that developing countries have incurred as a consequence of their investments have taken several forms: sale of bonds to foreign citizens, which was important in the past (before 1914 and the period 1918-1939), but not now; direct borrowings from commercial banks of industrialized countries, being the main source of funds since 1970; direct foreign investment which played an important role in the period 1945-1970, declining substantially afterwards; and official lending by the IMF, World Bank and governments of other countries, sometimes at interest rates below the market (concessional basis).

Except for direct foreign investment (an equity finance mechanism), the other forms of finance (debt finance mechanisms) expose the developing countries to the risk of having to meet their interest and capital amortization obligations in any circumstance, even when they face recessions or worsening of the terms of trade. Most of the debt is incurred by the governments or their state-owned enterprises. They also have tended to guarantee the debt incurred by the private sector, therefore lenders are very vulnerable to problems that governments may face in their budgets, and they are at disadvantage as long as these sovereign governments can opt to delay or even not to meet their obligations.

Commercial bank lending surged after the 1973 oil shock. A big share of the large surplus in the current account of OPEC countries was placed with financial institutions of developed countries. Recession and adjustments in developed countries kept their interest rates low, while other developing countries kept growing and therefore increasing their deficits. Bankers found attractive to lend to these countries at higher rates, which were rather at a low level for them. This recycling happened again when the second oil shock in 1979 took place.

By 1982 the indebtedness of developing countries was at a high, and increasing, due to persistent and increasing deficits. But this time the OPEC countries were also running deficits and therefore it was difficult for developing countries to borrow. Since a large portion of the debt was at floating interest rates and denominated in dollars, the sharp increase of interest rates that accompanied the U.S. anti-inflation monetary policy adopted in 1979 and the 1981-1983 world economy recession, as well as the dollar's appreciation combined ruinously for the LDC to make things worse. Moreover, this recession drove down the price of developing countries exports due to a reduction on aggregate demand and the dollar's appreciation, and in addition some developed countries responded with protectionist measures which made it difficult to sell in their markets. Latin American countries were hard hit: their GNP growth rate, which averaged 5.9% during the 1970's fell to 0.3% in 1981, -0.8% in 1982 and -2.7 in 1983; unemployment went up, real wages went down and political unrest increased.

Mexico announcement on August 1982 of its inability to meet scheduled payments on its debt due to an almost run out of reserves made it explicitly clear that a crisis was underway. The case of Mexico, to be revived later by Venezuela, was one in which oil revenue, which represented a large share of export revenues, was used by the government (owner of the oil industry) to finance subsidies, public work and social programs. As government spending rose over oil revenues, external borrowing and money supply were increased to finance the deficit, and inflation picked up. Fixed exchange rates, devaluation expectations and high interest rates abroad prompted capital flight, reducing therefore foreign reserves. As oil demand decreased and prices went down in 1981 the deficit increased, and so the external borrowings. Currency devaluation in 1982 (in Venezuela the adoption of a multiple exchange rate system in 1983) prompted additional inflation. Facing an increasing debt service burden, and not having made cuts in public and private consumption, commercial banks stopped extending credit. By August 1982 Mexico had to seek the support of the IMF, agree to its macroeconomic stabilization plan and negotiate with commercial banks to reschedule the principal of the debt coming due soon.

In the case of Venezuela, the crisis finally emerged in 1986. The government announced a moratorium on payments of interest until a rescheduling of principal with commercial banks was reached, but it was able to postpone seeking the conditioned support of the IMF. However by 1989, as Tables 3.1 and 3.2 show, its large

Table 3.1 - Debt Service in Severely Indebted Latin Countries

Country	Debt outstanding in 1989		Debt service in 1989		Debt indicators in 1989 (%)	
	Total (US\$)	Private Sources (%)	Total (US\$)	Interest (US\$)	Debt/GNP	Interest/ exports
Argentina	64.7	81.4	4.4	2.1	119.7	17.7
Bolivia	4.4	18.3	0.3	0.1	103.1	14.3
Brazil	111.3	73.0	11.6	5.7	24.1	15.5
Chile	18.2	67.1	2.7	1.6	78.3	16.8
Costa Rica	4.5	47.4	0.4	0.2	91.2	10.5
Ecuador	11.3	61.4	1.0	0.5	112.9	17.1
Honduras	3.4	18.6	0.1	0.1	72.5	6.2
Mexico	95.6	79.1	14.4	9.3	51.2	25.5
Nicaragua	9.2	17.7	0.0	0.0	623.6	7.7
Peru	19.9	53.3	0.3	0.2	70.8	3.6
Uruguay	3.8	76.8	0.6	0.3	46.5	15.3
Venezuela	33.1	96.8	3.9	3.2	79.9	20.3
Total	379.4	73.7	39.7	23.3	45.8	18.6

Source: DRS (Debt Report System) and World Bank data

Table 3.2 - Growth in Severely Indebted Latin Countries

Country	Average annual growth rates 1982-89 (% p.a., based on \$)					Per capita consumption*
	GNP	Exports	Imports	Investment*		
Argentina	0.5	3.1	1.4	-2.7	-0.1	
Bolivia	4.4	-0.4	2.1	-5.0	-2.7	
Brazil	8.7	6.7	-1.4	2.6	2.4	
Chile	0.5	9.5	5.3	15.4	0.4	
Costa Rica	12.3	7.5	7.7	9.1	3.5	
Ecuador	-2.0	0.7	-1.7	-20.0	-1.5	
Honduras	8.1	5.0	4.9	7.7	-1.0	
Mexico	1.9	4.0	3.0	-5.0	-1.5	
Nicaragua	-6.0	-5.3	2.9	2.0	-1.5	
Peru	1.8	1.4	-4.7	-2.4	0.6	
Uruguay	-1.7	3.9	0.9	-4.0	1.3	
Venezuela	-8.6	-3.5	-8.2	2.1	-2.1	

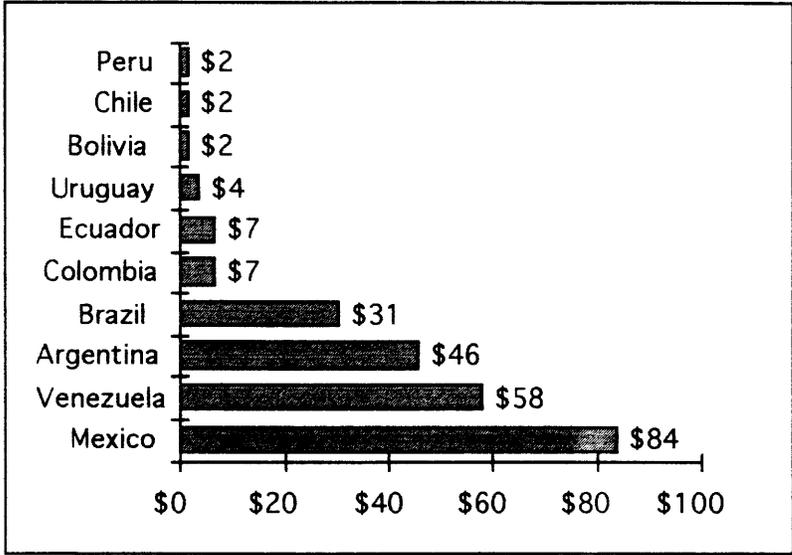
* 1982-88

Source: DRS and World Bank data

debt burden and continuous worsening of economic conditions, including large capital flights (see Figure 3.1), inflation of more than 80% and negative growth which prompted bloody riots, resulted in Venezuela finally accepting to follow a macroeconomic stabilization plan in return for a loan of the IMF.

Figure 3.1 - Flight Capital

Estimated assets held abroad by Latin American at year end 1987* in billions of dollars



*Excludes assets taken abroad before 1977

Source: Morgan Guaranty Trust Co.

Certainly, a developing country is facing a risk if it decides to default: its assets abroad may be seized, it won't be able to get new

loans needed to finance its development, its international trade may be affected. However, by 1982 the burden of the debt and the internal economic problems of the debtor countries were so great that a widespread default was possible, which would have had devastating consequences for the world financial system. No bank was willing to extend more credit, moreover they were trying to reduce their developing country assets. These countries were running deficits, and therefore couldn't repurchase their liabilities; on the contrary, they needed more financing.

Facing the Crisis

Concerted or involuntary lending was the first approach to ease the crisis. New lending was required to avoid immediate default and although banks were not willing to do so, they had to in conjunction with the IMF and developed country governments. Rescheduling or roll over of maturing debts, and extension of new credits were used to help debtor countries. Negotiations between debtors and government creditors, handled through the Paris Club, usually resulted in IMF loans conditioned to the acceptance of macroeconomic stabilization plans designed by the IMF, and to the approval of new lending by reluctant commercial banks. Initially the banks cooperated because the stabilization plans, aimed to cut consumption and raise exports, were supposed to improve the situation even to the point where lending could become voluntary. There was a recovery in 1984. However, by 1985 although interest rates were declining, the terms of trade worsened again for

developing countries due to a reduction of aggregate demand and restrictive trade measures in industrialized countries. The Baker Plan, which assumed that the debt would be repaid in full thanks to reschedulings and new loans, was in danger. Commercial banks were unwilling to lend new money because the risk of default was increasing; even more, they were securitizing and selling off debt on a secondary market in which its value was falling, and they increased their reserves against possible losses. Among others, Peru, Venezuela, Brazil and Argentina went into trouble serving their debts. By 1989, the secondary market price for developing country loans was at about 31 cents on the dollar in average.

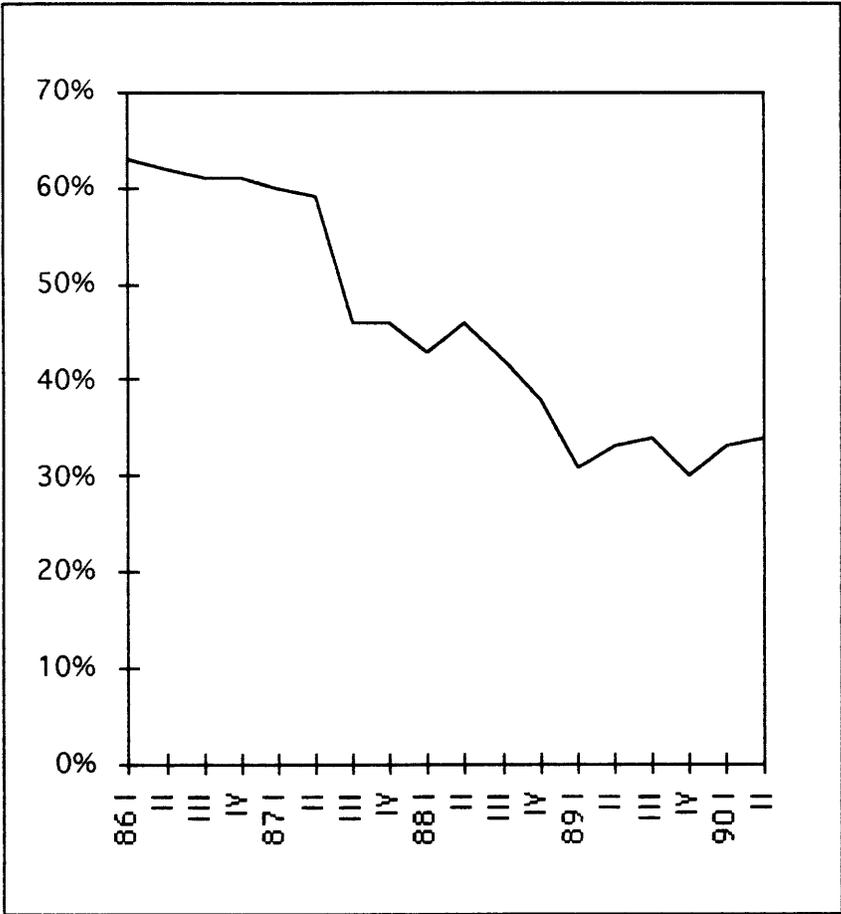
In early 1989, the Brady Plan was proposed: countries with sound adjustment programs should get access to debt and debt reduction facilities, supported by international financial institutions and official creditors. The IMF and the World Bank were urged to provide funding for those purposes, and without conditioning to commercial bank agreements with debtors. Market-based transactions to reduce debt were also encouraged. Restrictions for negotiations between individual banks and debtor countries were called for a waiver.

Being the secondary market price of debt so low (see Figure 3.2), an alternative to reduce debt has been debt buybacks by debtors either using their own resources or resources provided by new multilateral loans or indirectly through debt for equity swaps. As a consequence, in practice these transactions have tended to raise the

secondary market price of debt, implying maybe more benefits for creditors than for debtors. However, in the long run debtors may be better off paying more than less, because this should generate some goodwill that would help them to return sooner to the international capital market.

Figure 3.2 - Secondary Market Prices of Developing Country Debt

(% of face value for debt quoted below par)



Source: World Bank estimates

Debt forgiveness by banks would help debtors and would cost less for creditors than the amount forgiven, due to the increase in the price of the remaining debt; in extreme cases of heavily indebted countries this forgiveness could even be beneficial for creditors that could end up expecting a larger repayment than before by reducing the burden of debtors, which give them an incentive to adjust their economies. However, banks prefer to hold on their claims as long as buybacks are taking place, because they get the benefit of the price increase in all of their claims.

Debt for debt swaps may be the more advantageous instrument for debtors if they are able to issue new senior debt to retire old debt; in this case the secondary price of the remaining old debt would be expected to decline. However, credibility and legal problems are an obstacle.

Some innovations in debt conversions are debt for nature swaps which are expected to be used increasingly to preserve the environment, and debt for health swaps to support health programs.

During 1990 the Brady initiative was implemented in countries such as Mexico, Philippines, Costa Rica and Venezuela. In the case of Mexico, the debt and debt service reduction agreement covered \$49 billion. Creditors were offered three choices: exchanging loans for dollar-denominated 30 years bonds at 35% discount and bearing a market interest rate of LIBOR+13/16, exchanging loans for dollar-denominated 30 years par bonds at a fixed interest rate of 6.25% or

providing new money equal to 25% of their exposure at LIBOR+13/16. The principal of the bonds was collateralized with U.S. government 30 years zero coupon bonds, and an escrow account was set to service interest payments for up to 18 months if Mexico fell short of contractual payments. \$19.7 billion were exchanged for discount bonds, \$22.8 billion for par bonds and creditors holding \$6.4 billion opted to provide new money. Also a clause was provided that links debt service payments to oil prices, this way creditors could be able to recover more of the face value of their claims. Banks participating in the initiative were eligible to participate also in a new debt-equity swap program of \$3.5 billion linked to privatization.

In the case of Venezuela, very similar to Mexico, creditors were offered the following options: new money, 30% discount bonds, par bonds with reduced fixed interest rates (6.75%), par bonds with temporarily lower interest rates (step-down, step-up bonds: 5% years 1-2, 6% years 3-4, 7% year 5 and LIBOR+7/8 thereafter), and buybacks (at 55% discount). Non-dollar denominated bonds were also offered. Only the discount and par bonds will have the principal collateralized by U.S. government 30 year zero coupon bonds. All bonds will have enhancements collateralizing 12 to 14 months of interest. There is also a value recovery clause that will come into effect in 1996 if the price of oil exceeds \$26 per barrel. Buybacks of debt at 55% discount were collateralized by 91-days bills. The new money option let the creditor exchange existing loans for bonds at par in an amount equal to five times the new money provided. By

August 1990 \$6.7 billion were exchanged for par bonds with reduced interest, \$2.9 billion for step-down, step-up bonds, \$1.4 billion were retired through buybacks and \$1.98 were exchanged for discount bonds. Up to \$20 billion are expected to be covered by the initiative.

Outside the Brady initiative, debt for equity swaps have helped to reduce the debt of several countries. The most notorious case is Chile which has reduced its debt by \$8.8 billion through the end of 1989 (see Table 3.3).

Table 3.3 - Debt Equity Swaps, 1985-89
(US\$ millions)

Country	1985	1986	1987	1988	1989	Total
Argentina	467			1,354	514	2,335
Brazil	530	206	300	5,115	4,724	10,875
Chile	332	981	1,950	2,782	2,784	8,829
Costa Rica			145	100	46	291
Ecuador			127	259	32	418
Guatemala				152	20	172
Honduras				10	34	44
Jamaica				9	24	33
Mexico		363	1,786	2,919	2,547	7,615
Nigeria				40	257	297
Philippines		11	353	826	474	1,664
Uruguay			36	144	50	230
Venezuela				51	547	598
Total	1,329	1,561	4,697	13,761	12,053	33,401

Source: DRS and World Bank data

CHAPTER FOUR

DEBT CONVERSION IN INVESTMENT

Rationale

Debt conversion in investment is an international finance mechanism which allows for the investors an attractive return on their investments; at the same time it allows for the debtor countries a reduction on their external debt, a slow down of the reduction of external reserves due to payments of external debt and an increase of foreign investment in the debtor countries. This new investment in turn generates employment, exports and other internal economic activities in those countries.

The basic mechanism is as follow: the investor, usually foreign, purchases in the secondary market sovereign debt at a discount from a bank holding it and willing to write it off its books. The issuing country then buys back the debt in local currency at a lower discount with the condition that the investor spend the proceeds within the country in an approved way, usually financing an equity investment. The spread between the buying and selling discount can give to the investor an immediate and significant gain, becoming a powerful incentive for foreign investment or even investment by nationals returning flight capital. On the other hand, the debtor country converts a debt obligation, which required interest and amortization payments in foreign currency, into an equity obligation. There is effectively a debt reduction as long as

the debtor country buys back the debt at discount; therefore, interest and amortization payments of the portion reduced are eliminated completely. The equity obligation eventually will imply that capital and earnings will be taken out of the debtor country by the investor. However, capital repatriation and profit remittance are restricted.

Debt conversion is primarily a mechanism which converts foreign debt into internal debt, rather than a mechanism of debt cancelation. No new money is brought to the debtor country, which still may need to borrow more money. The conversion from foreign to internal debt eases the pressure on foreign reserves, but the increased domestic debt can create problems with monetary policy and local credit availability. Debt conversion programs attract much needed foreign investment. Varying the discount level, debtor countries can direct the foreign investment to preferred areas. One risk however, is to benefit investments that would have been done even without debt conversion. On the other hand, potential new investments and expansion of current investments would not be possible without this program.

Monetary expansion due to debt conversion is a real problem; however, it can be controlled through, for example, monthly quotas. Roundtripping arbitrage is also a risk, specially by nationals with flight capital; nevertheless, it can be limited as long as the country enforces the use of the money in the approved investments, as well as imposing limits to the amount of proceeds from the investment

that can be reconverted to foreign currency for export. Programs that restrict participation by nationals can cause negative reaction by local investors.

For banks holding debt, debt conversion provides the opportunity to get out of some debt and possibly realize profit from fees for financial advice and intermediation. Indeed, the sale of these assets are at a steep discount, but may be the only way to discharge debt. Banks may also benefit from converting debt into investment for their own account as long as the investment turns to be a good one.

The most common format of the mechanism is the conversion of debt into an equity investment in the debtor company. However, debt conversion can be used in other ways: to fund stock mutual funds and venture capital funds, debt-for-debt swaps, debt for goods, official purchase of external debt, and securitization.

Stock markets in LDC have been growing. Notwithstanding their thinness and volatility, their liquidity and profitability are improving. If institutional investors with high-risk segments in their portfolios are willing to invest in those markets for diversification and long term return purposes, an appropriate vehicle could be a closed-end stock mutual fund using debt conversion to provide the initial capital for investment. Such a fund can provide professional management and diversification for the investor, which is specially important for one investing in LDC markets. The funds

could be used either to invest only in listed stocks or to finance startup businesses whose stocks are not yet listed. The latter case would provide a venture capital function not well developed and certainly needed in LDC.

In a debt-for-debt swap a bank holding sovereign debt sells it to a company at a discount. The bank realizes a loss and writes the debt off its books. The company converts the debt in local currency and then sells it back to the bank making some profit. The bank pays to the company in foreign currency in order to receive the local currency which can then be lent out at high local interest rates. The earnings should offset the initial losses and even the foreign exchange risk. This way the bank is able to resume lending in that country without committing new funds, and the country reduces its foreign currency liability, injecting liquidity into its local credit markets and allowing growth to restart. In a variant to this alternative, the bank could do the conversion itself of either external loans from its own portfolio or of debt bought in the secondary market, and then use the proceeds to finance a long term project of a multinational company facing a tight market for credit. The company would guarantee a dollar-equivalent return in local currency in return for access to credit. Assuming that the bank converts the debt at a discount lower than the secondary market discount of it, the interest rate on the loan can be lowered. Therefore, the multinational company would get a favorable loan, and the bank would have a guaranteed return.

Debt for goods has been also proposed as an alternative. A multinational company would buy external debt at a discount in the secondary market, and then would convert it to local currency. The local currency would be used to purchase goods for export. This countertrade transactions have as a problem the valuing of the products to be exchanged.

Official purchase of external debt takes place when the issuing country buys its debt at a discount in the secondary market. However, this alternative needs the consent of the creditors, which are unlikely to give it because this would imply the waiving of other alternatives that may let them recover their losses. On the other hand, those countries using it would loose ability to obtain new loans because of their reputation: they would be seen as defaulters.

Securitization involves the conversion and combination of existing loans into new instruments producing a better return and having a different clientele. An investment group would buy debt of some country at a discount. Then, it will issue a security (high yield, high risk bond, for example) selling it to investors at a lower discount to obtain a profit. The shares of the security would have as a collateral the sovereign debt paper. The country would continue to service its obligations based on face value, therefore the return for the security holders (who bought it at discount) is higher.

Venezuela's Debt-Equity Swap Program

In Venezuela, debt-equity conversions are ruled by Decree 86, issued on March 15, 1989, and Resolution 2401, issued on September 6, 1989. Decree 86 sets general guidelines for the conversion of foreign debt to investment, and Resolution 2401 regulates in detail some aspects of Decree 86.

There are three ways to convert debt in investment: capitalization of foreign private debt of debtor companies, conversion of foreign public debt to foreign investment and conversion of foreign public debt to national investment. In the first case, the owners of credits contracted in foreign currencies may wholly or partially capitalize them in the debtor companies . The debt is converted into shares representing an equity interest in the debtor companies according to that agreed in the restructuring of the companies' foreign debt (for more detail see the Decree 727, Common Code for the Treatment of Foreign Capitals, issued on January 18, 1990). The second and third case are alike except for the origin of the investor, which may be a foreigner or a national. In both cases there are three alternatives: direct capitalization in a public entity with foreign debt, indirect capitalization in a private company of public foreign debt and investment in a new project of public foreign debt.

Direct capitalization in a public entity with foreign debt involves an investor buying from the creditor bank of a public entity

all or part of the debt of the entity. If the entity agrees to the transaction, it shall issue shares on behalf of the investor upon request by the bank.

Indirect capitalization in a private company of public foreign debt involves an investor buying the debt from the creditor bank and negotiating with a private company the capitalization of claims representative of foreign public debt. The government's central bank grants an amount in local currency equivalent to the discounted value of those claims to the investor. Finally, the company to be capitalized issues shares, with value equal to the conversion proceeds, on behalf of the investor who gets an equity interest in the company.

Investment in a new project of public foreign debt involves an investor buying the debt from the creditor bank and selling it at discount to the government's central bank which grants an equivalent amount in local currency. This currency is then used to finance the new investment project, which has to be approved by the government.

The solicitor, national or foreign investor, has to submit an application to a Commission composed of the Minister of Finance, the Minister of Development, the Minister of State - President of the Venezuelan Investment Fund and the President of the Central Bank of Venezuela. The Commission, based on the reports presented by its executive secretariat (the Superintendency of Foreign Investment -

SIEX), may authorize conversion of foreign public debt to investment when the object of said investment is import substitution, exportation of goods, avoidance of the bankruptcy of companies, or in the following sectors:

- 1.- Agriculture and the providing of related services.
- 2.- Agroindustry, pulp and paper.
- 3.- Construction or maintenance of highway, waterway or railway infrastructure projects.
- 4.- Construction of hotels and infrastructure for tourism activities, as well as the providing of related services.
- 5.- Construction of social interest housing.
- 6.- Services of air, ground, sea and river transportation in the country, or related activities.
- 7.- Production of capital goods.
- 8.- Chemical, pharmaceutical, chemical mechanical and petrochemical.
- 9.- Electronics and data processing.
- 10.- Biotechnology.
- 11.- Aluminum and its transformation.
- 12.- Metallurgical.
- 13.- Mining.

Other sectors may be authorized by the Commission upon the prior opinion of the Economic and Social Cabinet. When the conversion is authorized for the creation or expansion of investment funds to be used in eligible development projects, the currency to be granted must remain in deposit or be placed with the Central Bank of

Venezuela or in a national bank or credit institution until it is actually invested. The investment shall be initiated within 6 months of the conversion authorization. The fiduciary institution is in charge of supervising and controlling the execution of the project and the correct application of the resources generated by the conversion in the terms and conditions agreed in a trust agreement.

It may be possible also to get authorization for conversion operations in which the proceeds are used in the purchase of stock in the securities market by private investors.

In any conversion, the investors must agree not to remit abroad, with respect to the part of the investment capitalized through conversion, during a period of three years from the date of registration, dividends or earnings corresponding to stock, quotas, participations or rights in an amount exceeding 10% per year of the respective investment. The amounts paid by the investor for taxes on these earnings are not computed for this purpose. In addition, the investors must agree not to repatriate the capital provided through conversion during the first five years, and during the eight subsequent years the maximum percentage of capital that may be repatriated is 12.5% per year. Amounts not repatriated during one of these years may be accumulated with those of the following years. After thirteen years from the date of registration of the investment capital repatriations may be effected without limitation. Prior to that, and in the event of a liquidation of the company receiving the investment, the capital originating from it may only be used for

investment in another company or for the acquisition of portfolio development securities.

Upon the authorization for the conversion operation, the Central Bank of Venezuela purchases at discount from the investor the credits representing foreign public debt, providing to said investor the local currency (bolivars) necessary to finance the investment. The discount is set either by the Commission or through a public auction procedure which will be described afterward. In the latter case the Commission's executive secretariat (SIEC) issues a qualification certificate which grants to the investor a non-transferable right to participate in subsequent auctions within one calendar year (extendable an additional year).

Instead of an exchange of debt for printed money, the Central Bank may exchange the foreign public debt for domestic public debt securities -with the same or improved terms for the debtor- whose market value equals the total local currency to be invested in the project. The amounts in bolivars received from conversion operations may only be used to finance the national component of the respective investment projects, while the cost of the imported component must be covered by external sources of finance such as a new direct foreign investment, capital increase with private resources generated abroad or foreign commercial or financial credits (with an amortization period lower than 2 years).

According to the monetary policy of the Central Bank, a maximum annual amount for conversion is set. That quota is to be distributed in public auctions performed not more than once a month. Currently, and in accordance with the IMF, the conversion of up to \$3 billion (after discount) in five years is expected, at a rate of \$600 million per year. As previously stated, in order to participate in the auction the investor has to get a qualification certificate from the SIEX, which will issue it if the application complies with all the requisites; in addition to that, the investor has to make a pledge in local currency in favor of the Central Bank for an amount equivalent to 0.5% of the face value of the debt proposed to conversion. The pledge is foreclosed only if the conversion is approved and the investor fails to present within 60 days the credits representing foreign public debt, otherwise it is released.

For each auction, the Commission will set a minimum acceptable discount. The participants submit their bids in sealed envelopes, indicating among other things the discount of the face value of the credits to be converted that they are willing to give to the Central Bank. A conversion certificate -document authorizing the conversion operation- is issued to those solicitors with the larger discounts until the whole quota is allocated (and then their qualification certificates automatically expire).

Conversions may be total or partial. In the first case the solicitor delivers to the Central Bank in one opportunity all the credits representative of debt to be converted for the execution of

the project. Conversions for \$2 million or less must be total. In the second case the solicitor delivers the claims in several conversion operations, with the amount offered in each operation being not less than 20% of the amount of the investment to be financed with the proceeds of the conversion, and not higher than 50% of the quota to be awarded in the respective auction. Subsequent conversion operations in a partial conversion need not go to auction; they will be assigned the average discount of the most recent auction; and the required pledge mentioned before has to be made at the time of each subsequent conversion (if not, the right is lost), and is based on the face value of the partial amount of debt to be converted.

Only those claims representative of restructured foreign public debt may be used in a conversion operation. The conversion will be done based on the net value of the debt acquired by the Central Bank at the free exchange rate.

Results

Since the Decree 86 implementation, three auctions have been held successfully. Table 4.1 shows the results: \$177 millions were awarded in 1989 and \$80 millions in 1990, for a total of \$257 millions awarded. Once the partial conversions are completed the total amount converted will be \$536 millions for investments approved in those three auctions. The discount offered by investors has been in the range of 35.5% to 57.5%; the average for each auction has been between 43.1% and 46.8%. This means that the country will

Table 4.1 - Investments Authorized in Auctions

First Auction (11/3/89)

Investor	Amt. Awarded (US\$)	Tot. Amount (US\$)	% Discount	Sector
Lafarge Coppee	9,619,155.70	47,979,407.98	46.26	Cement
M.H. Panamá	7,738,329.60	38,610,038.61	46.26	Cement
Roussel Uclaf	4,961,581.00	9,866,402.12	46.00	Chemistry
Morgan Grenfell Co. Limited	34,255,000.00	34,255,000.00	45.10	Pulp & Paper
The Chase Manhattan Bank, N.A.	10,000,000.00	10,000,000.00	45.06	Pulp & Paper
Americeramic Corp.	18,694,999.87	18,694,999.87	42.11	Ceramic
Dilek, A.V.V.	10,962,383.12	40,397,673.00	42.05	Tourism
Org. Inmobiliaria De Andrade	1,169,354.81	1,169,354.81	41.08	Tourism
Country Internat. Grand Hotel	22,217,741.19	22,217,741.19	41.08	Tourism
Fibras Limited	4,948,717.95	4,948,717.95	41.06	Pulp & Paper
International United Shrimp, N.V.	2,359,992.00	11,512,135.14	41.00	Agroindustry
Soc. D'Etudes Fin. et Techniques	2,537,000.00	5,100,000.00	41.00	Housing
R.J. Mc Cormack Architect Inc.	4,600,012.50	22,972,972.97	40.65	Tourism
Promotora Internac de Turismo	8,280,000.00	41,400,000.00	39.63	Tourism
C.A. Venezolana de Pulpa y Papel	2,000,000.00	10,000,000.00	39.06	Pulp & Paper
Morgan Grenfell Co. Limited	2,096,246.75	8,050,000.00	35.50	Agroindustry
Subtotals	\$146,440,514.49	\$327,174,443.64	43.07%	

Second Auction (12/7/89)

Investor	Amt. Awarded (US\$)	Tot. Amount (US\$)	% Discount	Sector
Guido Fontanella Catella	4,000,000.00	7,599,000.00	38.00	Tourism
Productora Hernández	1,739,000.00	1,739,000.00	42.03	Agroindustry
Caribbean Investment	10,713,093.00	12,000,000.00	43.62	Tourism
Posadas del Caribe N.V.	2,050,000.00	10,000,000.00	45.00	Tourism
Alfredo Behrens	3,249,999.64	3,249,999.64	45.19	Chemistry
Carlos Behrens	3,249,999.64	3,249,999.64	45.19	Chemistry
Prestige Beverage Company Ltd.	2,301,496.21	2,301,496.21	46.55	Agroindustry
The Dow Chemical Company	3,700,000.00	18,486,000.00	57.50	Plastic
Subtotals	\$31,003,588.49	\$58,625,495.49	45.10%	

Third Auction (3/7/90)

Investor	Amt. Awarded (US\$)	Tot. Amount (US\$)	% Discount	Sector
Cemco	15,000,000.00	75,000,000.00	48.01	Cement
Socimer	10,454,545.45	15,800,591.00	47.68	Pulp & Paper
Sidetur	22,857,100.00	22,857,100.00	47.10	Metallurgy
IFH Internationale	12,642,857.14	14,047,619.00	46.18	Agroindustry
Martín Fernando Ugarte	7,234,895.04	7,234,895.04	46.00	Agroindustry
Marcelo Spiller	5,807,411.39	5,807,411.39	46.00	Agroindustry
Veninvestment Limited	6,000,000.00	9,000,000.00	44.00	Aluminum
Subtotals	\$79,996,809.02	\$149,747,616.43	46.79%	
Totals	\$257,440,912.00	\$535,547,555.56		

Source: SIEX

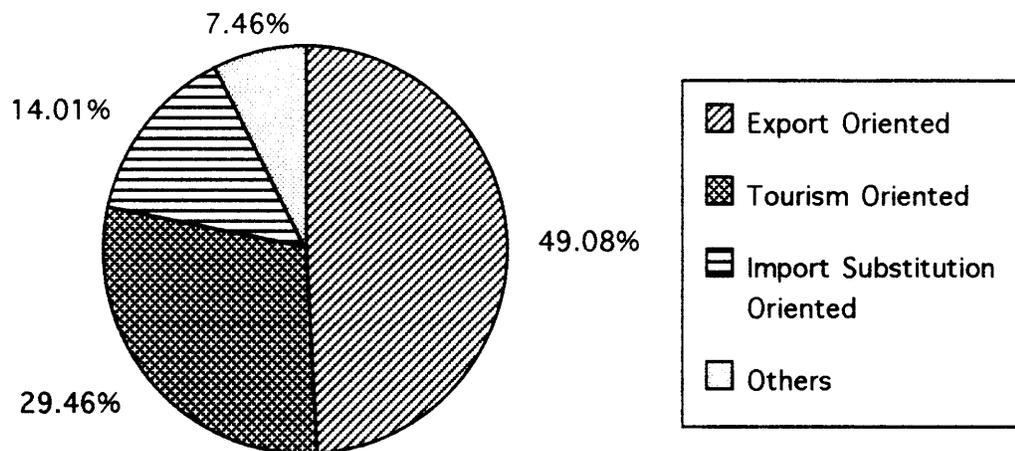
be able to effectively reduce its debt burden in around \$240 millions. Investments oriented to exports in the cement industry and to the tourism industry have gotten 30% each of the total approved, as it is shown in Table 4.2. Re-arranging the data, Figure 4.1 shows that investors are preferring investments oriented toward exports (49% of the total approved) and tourism (29%) which give them access to foreign currency, reducing their exposure to local currency. This type of investments are also a benefit to the country because they tend to improve its balance of payments and to increase its foreign currency reserves. The next category, import substitution account for 14%, and their benefit is that these investments reduce the need for imports that consume foreign currency, therefore they tend to ease the pressure on the country's foreign currency reserves as well as to improve the balance of payments. Finally, there are investments without a direct relation with the country's foreign currency reserves, nonetheless they are promoted by the country because they fulfill important needs and they also help to reactivate the economy generating employment (which, of course, is also a benefit derived from the other types of investments).

In these two first years of the program, the yearly quota of \$600 million hasn't been achieved. Even more, the auctions have been suspended. The auction mechanism has proven to be effective and even beneficial to the country, because the average discount has increased with each auction. However, the so called "megaprojects" (those projects in the aluminum and petrochemical sectors requiring

Table 4.2 - Investments Authorized by Sector

Sector	Total Amount (US\$)	% of Total
Cement	161,589,446.59	30.17
Tourism	157,756,741.97	29.46
Pulp and Paper	75,004,308.95	14.01
Agroindustry	50,692,556.78	9.47
Metallurgy	22,857,100.00	4.27
Ceramic	18,694,999.87	3.49
Plastic	18,486,000.00	3.45
Chemistry	16,366,401.40	3.06
Aluminum	9,000,000.00	1.68
Housing	5,100,000.00	0.95
Total	\$535,547,555.56	100.00%

Figure 4.1 - Investments Authorized by Type



very large investments) have not been able to participate in auctions due to the requirement already mentioned regarding the minimum and maximum amounts that any single investor may solicit in an auction. The government is negotiating with the IMF to increase the yearly quota at least to \$1 billion. There have been also some concern from the part of the Central Bank regarding the inflationary impact that those conversions may have. However, no conclusion can be drawn at this moment. In any event, the money is going to industrial investment, not to consumption or trade, and also partial conversion and the mechanism of control mentioned before help to prevent inflation.

The trend toward investments in the aluminum and petrochemical sectors can be seen already in projects (not as big as the "mega" ones) that are ready to go to auctions and have been qualified for that (see Table 4.3). The total investment that could result amounts to \$1,731 millions and could represent an additional reduction of debt in the order of \$780 millions. If the IMF accepts the yearly quota of \$1 billion for 5 years, the country's \$33 billion foreign debt could be reduced in around \$2.3 billion (7% of total). Indeed, this is not the final solution for the country's debt, but it helps and does it in a way that promotes foreign investments, exports and employment.

Prior to the Decree 86, the conversion program was started (ruled by Decree 1521, issued on April 14, 1987) in a more restricted way. Table 4.4 shows those investments that were

Table 4.3 - Investments Qualified not yet Authorized

Investor	Amount Solicited (US\$)	Sector
Tutsi	2,550,000.00	Agroindustry
Wetherby Inc.	4,030,000.00	Agriculture
Associated Brands Limited	4,329,626.00	Agroindustry
The First National Bank of Chicago	278,452,000.00	Aluminum
I.M.B. Limited	105,000,000.00	Aluminum
Devonsille	369,300,000.00	Aluminum
The Chase Manhattan Bank, N.A.	228,000,000.00	Aluminum
Sweddeal Limited	138,700,000.00	Aluminum
Aluminum Co. of America	105,000,000.00	Aluminum
Morgan Grenfell Co. Limited	19,000,000.00	Cement
Fudena	3,500,000.00	Environment
Debt Investments Co.	200,000,000.00	Petrochemical
Mitsui & Co.	5,400,000.00	Petrochemical
Salomon Bros. Inc.	115,000,000.00	Petrochemical
Banque Paribas	75,000,000.00	Petrochemical
Rhone Poulenc	210,000.00	Chemical
Eduardo Rojas Pieretti	1,487,457.00	Tourism
Interunion Bank	22,500,000.00	Tourism
Posadas del Caribe	54,000,000.00	Tourism
Total	\$1,731,459,083.00	Source: SIEX

Table 4.4 - Investments Authorized prior to Auction System

Investor	Amount Awarded (US\$)	Discount (%)	Sector
Pfizer Corp.	5,930,774.90	0.00	Pharmaceutical
The Chase Manhattan Bank, N.A.	41,400,725.00	0.00	Cement
Guardian Industries Corp.	13,524,236.00	35.00	Glass
Eka Nobel AB	15,000,000.00	35.00	Pharmaceutical
Eba Resort Development Co.	20,000,000.00	35.00	Tourism
Morgan Grenfell Co. Limited	13,790,000.00	35.00	Metallurgical
Banque Paribas	49,000,000.00	35.00	Tourism
Morgan Grenfell Co. Limited	35,000,000.00	35.00	Cement
Armco Inc.	1,000,000.00	35.00	Metallurgical
Abitib Price Inc. & Bowater Inc.	180,000,000.00	Shared	Pulp and Paper
Marubeni Corp. & others	10,518,756.76	Shared	Metallurgical
NEC Corp.	540,540.54	Shared	Communications
Tropical Fruit Exporting Co.	8,648,648.65	Shared	Food
Banque Paribas	33,445,945.95	Shared	Metallurgical
R.J. McCormack Architect	28,552,432.43	Shared	Tourism
Paris Suisse Investment Corp.	22,972,972.97	Shared	Food
Playa el Agua Hotel Limited	14,562,132.43	Shared	Tourism
Total	\$493,887,165.63	Source: SIEX	

Note: these authorizations were given between 2/88 and 6/89

authorized under that regime. In all those cases, the Commission set directly the discount. As mentioned before, Decree 86 allows for this way to set discounts. Even though it has not been done this way since Decree 86 implementation, it may be the way to go with the "megaprojects", which find it difficult to compete with smaller and maybe more profitable investments in auctions. However the government is interested in maintaining the opportunity to attract such investors, and a way to do it is negotiating the discount directly with them.

The conversion program has definitively helped the country to attract direct foreign investment. As of 1989 the direct foreign investment registered in Venezuela amounted to \$2.2 billion, most of it coming from reinvestment of profits. The investment coming through the conversion program may surpass this figure very soon. However, the issue of Decree 737 on January 18, 1990, is expected to result in an increase of direct foreign investment (without conversion) because for the first time it will be possible to invest in Venezuela in almost every sector of the economy, being possible to repatriate all the profits and capital without restrictions, or to reinvest them if desired.

CHAPTER FIVE

DEBT CONVERSION AND LOW INCOME HOUSING FINANCE

Rationale

As shown in the previous chapter, the debt conversion mechanism may be used to finance a variety of investments. Debtor countries with conversion programs have sought to direct investors to specific sectors of their economies. Exports and substitution of imports activities are encouraged because of their favorable impact on foreign reserves. However, there are other sectors without a direct impact on foreign reserves but that have priority in the development of those countries. Investments in those sectors generate employment, contribute to build so much needed infrastructure, and indirectly promote additional economic activities related to them.

Heavily indebted countries tend to have also large social interest housing deficits and it is difficult in those countries to finance large scale social interest housing programs. From a socio-political and economic point of view, housing programs have priority for them. Workers with better housing are prone to be more healthy and more efficient on the job, as well as their families. Housing is practically not exportable, and may require directly or indirectly some amount of imported components; therefore, investments in this industry may not have a favorable impact on external accounts. However, there is a favorable impact as long as one realizes the

indirect contribution of housing to export and import substitution industries through the improvement of labor productivity. Additionally, this industry promotes the growth of the local building materials industry, thus saving imports. In turn, the growth of the building material industry may improve its productivity to the point where it can become also a factor of exports.

Housing construction is a low-technology, labor-intensive activity that can generate employment for many unskilled and semiskilled workers. Capital requirements are rather low, so it is easy for local companies to enter and participate in this activity. The import component is low, specially at lower cost housing; and this industry generates demand for locally produced building materials promoting a further expansion of the domestic economy. In turn, the building materials industry is a low-technology one, with rather small capital requirements which facilitates entry by local firms; it also provides employment opportunities for unskilled and semiskilled workers. Once in place, new housing generates demand for the domestic furnishing industry and other domestic services related to housing.

Therefore it is clear that the benefits of investing in housing remain within the domestic economy, that this industry has a multiplier effect in employment, that the technology, labor and supplies required are for the most part available within every country, and that it may even have a positive impact on external accounts.

When an economy is so depressed, like in many of these debtor countries, it is important to promote first those industries able to generate more activity as quickly as possible, as is the case of the housing industry. This explains why social interest housing is among the sectors favored in debt conversion programs.

Examples in Venezuela

Venezuela's debt conversion program clearly states social interest housing among those sectors favored. As shown previously, only one project to date has been authorized for conversion. The investor in this case is Societe D'Etudes Financieres et Techniques which is investing in a social interest housing development an amount of \$5,100,000. The proceeds from conversion are being used to finance the construction of 400 units. Buyers will have to find their own financing, probably through the new law of housing policy. The investor, having a close relationship with an experienced local developer which is actually in charge of the development, is expected to reinvest its capital in subsequent developments at least as long as it is required by Decree 86 not to repatriate its capital. It is important to highlight that investments in social interest housing have tax advantages, being this an additional incentive to investors.

This example shows an innovative way of financing housing; however, at least until now it has been a very limited way to help in the solution of the Venezuela's housing problem. This case does not

address the buyers financing problem. It only represents 1% of the total amount awarded to date for debt conversion in investment.

Even though the investor is doing a profit on the conversion operation, it has to face a buyers market heavily regulated through the new Housing Policy Law. It also faces competition from investors with good terms of financing as provided by the new Law. However it has not been easy to get financing through this Law because of the resistance of many people to contribute their share to the mobilization of resources and the liberalization of interest rates for the rest of the economy. In the short run, the banks has been able to restrict lending the money mobilized through this Law to finance housing, specially those in the areas I and II of assistance, because even though they can not lend it for other purposes, they can place it at the Central Bank earning market interest rates, a very profitable investment vis-à-vis the regulated and limited profit that they can make on housing loans. As mentioned, those profits may be used to finance the area III of assistance, in which case the banks may keep 7% (instead of 3-5.25% that they may charge for areas I and II) of the total income generated from these loans and reinvest the remainder (6-7%) on new loans for this area.

Another example is a proposal that was presented in 1989 but not yet approved by the Multinacionalbanc, a real estate investment bank in promotion. The idea is to create an investment bank which will get medium and long term resources through foreign and

national investment. The bank will be capitalized with cash coming from conversion of foreign debt in investment in those American countries where the bank will operate. The resources will be used to promote and to give technical and financial support in urban and suburban developments as well as in housing projects. The projects portfolio will concentrate in housing developments oriented to the middle income class and tourist developments oriented to foreigners.

The bank, as an off shore fund, will allow national and foreign institutional investors to place funds denominated in the currency preferred by them. This will shift the foreign exchange risk from the investor to the bank, which will be in a better position to reduce it through diversification across countries of its portfolio of investments.

There will be three mechanisms to attract resources: (1) cash investment involving the issuing of investment fiduciary participations; and investment using claims representatives of Latin countries external debt, which will be used either to (2) guarantee the investment fiduciary participations or (3) for debt conversion in investment as long as the investment is in a sector with enough internal market in the country to be performed, or if it generates foreign currency through the sale of goods or services to foreign countries; this way the chances of success of the investment are better and the risk of exposure to domestic currencies is reduced.

The resources will be placed in the market directly and/or in mortgages banks and saving and loan institutions with a solid position. In addition to that, the bank will participate in the financing of real estate developments through the acquisition of claims, preferred shares or obligations, issued by public companies dedicated to the real estate development business, as long as those claims have real guarantees backing them.

The portfolio of financing resources will be divided into two classes: credits to buyers and credits to developers. Initially, it is expected that the credits to buyers of middle income class will carry an interest rate of 15% when given directly by the bank, or up to 20% when given through a financial intermediary, having a flat commission of not more than 3%. Credits to developers will carry an interest rate of 10 points below the maximum average rate authorized by the Venezuela's Central Bank, as long as this maximum is above 30%; if the maximum falls from 30%, the rate will be 20% as long as the Central Bank regulations allow it. Flat commissions will be 4%.

In Venezuela, this bank will make emphasis in the financing of housing developments to be leased, an alternative almost non existent in this country. The purchase option will require an initial down payment which will be as low as possible, and the option could be exercised in 10 to 30 years.

In a first phase, the bank is interested in capitalizing up to \$150,000,000 to be used during the first two years. Eventually, capital can be re-exported, however it is foreseen that part of it will be kept as a fix capital to finance new investments indefinitely.

Among the initial investments proposed to use debt conversion are two housing projects. The first one will use the conversion of \$16,500,000 to finance 55% of the development of the first phase of a housing complex in Los Teques (30Km from Caracas), Venezuela. The investment will be undertaken 30% by national investors and 70% by foreign investors. It will consist of 2,000 social interest apartments with two rooms and two baths oriented to the middle income class of the population, and it will include also commercial space. The internal rate of return of the investment is expected to be 26.66% in local currency over a period of 3 years; the expected number of direct and indirect employment during construction is 1,500 and 4,500 respectively, and upon conclusion will be 300 and 1,500.

The second housing project being proposed will use \$20,100,000 to finance 67% of the development of the first phase of a housing complex 8Km from Caracas via El Junquito , Venezuela. The investment will be undertaken 30% by national investors and 70% by foreign investors. In the first phase 1,200 social interest apartments with three rooms will be built out of a total of 3,289. The internal rate of return of the investment is expected to be 18.07% in local currency over a period of 4 years; the expected

number of direct and indirect employment during construction is 900 and 2,900 respectively, and upon conclusion will be 210 and 1,100.

The main problem facing the Multinacionalbanc is that the current regulations in Venezuela still does not allow the participation of foreigners in banking activities. However this is something expected to change in the short term.

Also, these projects will have to face difficulties mobilizing resources from investors in a current environment where returns are higher in other investments possible in Venezuelan financial markets. They should also have to face competition generated by buyers that have access to get better terms of financing and buy units on other developments. However, a careful analysis of the returns obtained through debt conversion may allow them to offer more competitive terms of financing vis-à-vis those of the new Law. On the other hand, a market with such a large deficit of housing may put so much pressure that financing through the Law could become insufficient soon, therefore allowing for additional sources of financing more expensive for buyers and more profitable for investors.

Case Analysis

In order to show what the benefits may be of using debt conversion to finance a low-income housing project we will do an hypothetical exercise using the data summarized on Table 5.1. The

project we will look at will be based on the first example previously mentioned. The data used for this project is either: real, as for example amount converted, conversion price of debt, number of units; or assumed according to conditions of the market at the dates considered, as for example secondary market price of debt, exchange rate, markup; or required by regulations, as for example for taxes; or projections (as for example inflation rate, appreciation of the dollar, interest rates). A summary of the data follows in Table 5.1.

Table 5.1 - Case Analysis Data

Secondary mkt. price of debt 11/89	35%
Conversion price of debt 11/89	59%
Amount converted in 11/89	\$5,100,000
Exchange rate (Bs/\$) 11/89	40
Amount to invest	Bs204,000,000
Duration of investment in years	2.5
Number of units	400
Cost per unit	Bs510,000
Cost per m2	Bs7,300
Area per unit (m2)	70
Max. price in min. monthly salaries	180
Minimum monthly salary	Bs4,600
Maximum price per unit (area II)	Bs828,000
Markup	50%
Price per unit	Bs765,000
Price in minimum monthly salaries	166
Maximum tax rate	50%
Tax exemption	70%
Effective tax rate	15%
Market interest rate	30%
Inflation rate	30%
Appreciation of the dollar	25%
Exchange rate (Bs/\$) 5/92	70

Based on the information presented, an after tax cash flow pro-forma was developed and the after tax internal rate of return calculated on Table 5.2. Key assumptions on the cash flow are: the proceeds from conversion are kept at the Central Bank of Venezuela (BCV); costs are covered from the balance at the BCV; the balance at the BCV earns a market interest rate of 30%; the interest (exempt from taxes) is redeposited at the BCV or can be used only to cover costs of the project; sales are spread over 6 months per phase after each one is completed, buyers are supposed to get their financing, and the revenue is available for reinvestment in other projects; construction costs were split according to a typical cost structure for this type of project in Venezuela; construction costs were not inflated because prices are regulated if you want to take advantage of tax exemptions and buyers using the affordable financing provided by the Law; therefore it is assumed that any inflation on the cost side would be absorbed by lowering the quality, however, it is expected an increase of 35% on the minimum salary which would allow an increase on the sale price.

The annual after tax internal rate of return (based on the monthly IRR) for these assumptions is 32.5%, slightly above the market interest rate (for comparison, a deposit for more than 91 days is exempt from taxes). On the other hand, assuming an exchange rate of Bs70/\$ in May 92 and a reinvestment of sale revenues at the market interest rate (which would earn Bs 53,550,000 by May 92) the total proceeds of the investment would be Bs432.22 millions (or

Bs 378.67 + 53.55 millions) or \$6.175 millions, i.e. 21% more than the original investment of \$5.1 millions over 2.5 years, which when compounded monthly results in an annual rate of return of 7.7%. However, the main incentive to do an investment through debt conversion in a housing project under these conditions is the profit due to the conversion itself, which in this case is 68.5% (59%/35%-1) up front but only realizable after 2.5 years, or if compounded monthly, an annual rate of return of 21%.

The total amount in dollars required to convert \$5.1 million once taken into account the discounts involved should have been \$3.025 million representing \$8.644 million of debt at face value. Therefore, the total profit would be \$3.149 million or 104% over 2.5 years, which when compounded monthly results in an annual rate of return of 28.9%, indeed a very good investment.

An additional benefit to consider is that although there are restrictions regarding the remittance of earnings (10% limit on the first 3 years, no limit thereafter) and capital (not possible until the sixth year) abroad, the funds might be reinvested in more profitable local investments.

Table 5.2 - Part 1 - Case Analysis After Tax Cash Flow & IRR

	Dec-89	Jan-90	Feb-90	Mar-90	Apr-90	May-90	Jun-90	Jul-90	Aug-90
Balance at BCV		204,000,000	179,826,000	176,654,650	175,495,016	174,306,392	169,533,351	164,640,985	161,717,310
Construction costs:									
Land purchase (12%)		24,480,000							
Design costs (6%)		2,040,000	2,040,000	2,040,000	2,040,000	2,040,000	2,040,000		
Permits (2%)		2,040,000	2,040,000						
Urbanism (10%)			3,400,000	3,400,000	3,400,000	3,400,000	3,400,000	3,400,000	
Phase 1 (100 units; 17%)						3,468,000	3,468,000	3,468,000	3,468,000
Phase 2 (100 units; 17%)									3,468,000
Phase 3 (100 units; 17%)									
Phase 4 (100 units; 17%)									
Sales commissions (2%)									
Phase 1 (100 units)									
Phase 2 (100 units)									
Phase 3 (100 units)									
Phase 4 (100 units)									
Total costs		28,560,000	7,480,000	5,440,000	5,440,000	8,908,000	8,908,000	6,868,000	6,936,000
Interest on balance at BCV		4,386,000	4,308,650	4,280,366	4,251,375	4,134,960	4,015,634	3,944,325	3,869,533
Sales Revenue									
Taxes		0	0	0	0	0	0	0	0
Cash Flow	(204,000,000)	0	0	0	0	0	0	0	0

Internal Rate of Return	32.59%
-------------------------	--------

Table 5.2 - Part 2 - Case Analysis After Tax Cash Flow & IRR

	Sep-90	Oct-90	Nov-90	Dec-90	Jan-91	Feb-91	Mar-91	Apr-91	May-91	Jun-91	Jul-91
Balance at BCV	158,650,843	155,507,714	152,286,007	145,429,057	138,400,683	131,196,600	120,257,715	112,425,808	104,398,103	96,169,706	91,116,048
Construction costs:											
Land purchase (12%)											
Design costs (6%)											
Permits (2%)											
Urbanism (10%)											
Phase 1 (100 units; 17%)	3,468,000	3,468,000	3,468,000	3,468,000	3,468,000	3,468,000					
Phase 2 (100 units; 17%)	3,468,000	3,468,000	3,468,000	3,468,000	3,468,000	3,468,000	3,468,000	3,468,000	3,468,000		
Phase 3 (100 units; 17%)			3,468,000	3,468,000	3,468,000	3,468,000	3,468,000	3,468,000	3,468,000	3,468,000	3,468,000
Phase 4 (100 units; 17%)						3,468,000	3,468,000	3,468,000	3,468,000	3,468,000	3,468,000
Sales commissions (2%)											
Phase 1 (100 units)							170,000	170,000	170,000	170,000	170,000
Phase 2 (100 units)										170,000	170,000
Phase 3 (100 units)											
Phase 4 (100 units)											
Total costs	6,936,000	6,936,000	10,404,000	10,404,000	10,404,000	13,872,000	10,574,000	10,574,000	10,574,000	7,276,000	7,276,000
Interest on balance at BCV	3,792,871	3,714,293	3,547,050	3,375,626	3,199,917	2,933,115	2,742,093	2,546,295	2,345,603	2,222,343	2,096,001
Sales Revenue							12,750,000	12,750,000	12,750,000	25,500,000	25,500,000
Taxes	0	0	0	0	0	0	0	0	0	0	0
Cash Flow	0	0	0	0	0	0	12,750,000	12,750,000	12,750,000	25,500,000	25,500,000

Table 5.2 - Part 3 - Case Analysis After Tax Cash Flow & IRR

	Aug-91	Sep-91	Oct-91	Nov-91	Dec-91	Jan-92	Feb-92	Mar-92	Apr-92	May-92	Total
Balance at BCV	85,936,050	80,626,551	78,739,015	76,804,290	74,821,197	74,252,227	71,986,033	69,663,184	69,343,513	70,902,851	70,902,851
Construction costs:											
Land purchase (12%)											24,480,000
Design costs (6%)											12,240,000
Permits (2%)											4,080,000
Urbanism (10%)											20,400,000
Phase 1 (100 units; 17%)											34,680,000
Phase 2 (100 units; 17%)											34,680,000
Phase 3 (100 units; 17%)	3,468,000										34,680,000
Phase 4 (100 units; 17%)	3,468,000	3,468,000	3,468,000	3,468,000							34,680,000
Sales commissions (2%)											
Phase 1 (100 units)	170,000										1,020,000
Phase 2 (100 units)	170,000	170,000	170,000	170,000							1,020,000
Phase 3 (100 units)		170,000	170,000	170,000	170,000	170,000	170,000				1,020,000
Phase 4 (100 units)					170,000	170,000	170,000	170,000	170,000	170,000	1,020,000
Total costs	7,276,000	3,808,000	3,808,000	3,808,000	340,000	340,000	340,000	170,000	170,000	170,000	204,000,000
Interest on balance at BCV	1,966,501	1,920,464	1,873,275	1,824,907	1,862,030	1,847,806	1,791,151	1,737,330	1,729,338	1,768,321	84,027,172
Sales Revenue	25,500,000	25,500,000	25,500,000	25,500,000	25,500,000	25,500,000	25,500,000	12,750,000	12,750,000	12,750,000	306,000,000
Taxes	0	0	0	0	2,091,000	3,774,000	3,774,000	1,887,000	1,887,000	1,887,000	15,300,000
Cash Flow	25,500,000	25,500,000	25,500,000	25,500,000	25,500,000	25,500,000	25,500,000	12,750,000	12,750,000	85,421,172	378,671,172

CHAPTER SIX

CONCLUSIONS

We have seen that developing countries face two important problems: large external debts that impose a burden that constrain their economies and large housing deficits. The dimensions of the debt crisis that finally emerged in 1982 after several years of building up, has made it clear that only through complex negotiations between debtors and creditors involving reschedulings and several forms of debt relief, it will be possible to help debtors to meet their obligations. These measures are needed to produce the required incentive to restart economic growth, a necessary condition to be able to meet the remaining obligations. These countries lack the resources required to exploit their economic potential and therefore they need the financial support of industrialized countries. There is no doubt that by adjusting their economies, cutting consumption and promoting exports, they will be able to repay their debt and even attract new investment from industrialized countries where new profitable opportunities are not so abundant.

We have also shown that many developing countries have centered their action in promoting exports and substitution of imports to achieve economic development. The low level of income of their population has meant small markets. To overcome this, efforts have been made to produce for more affluent markets, exporting mostly raw materials and agricultural products in order to raise their income level. Their growing populations have been

increasingly migrating from rural areas to urban centers. In the mean time, housing deficits have been increasing because this sector never has been a priority.

Increasing social pressure has resulted in governments having to face this housing problem. With large deficits the problem gets more complex, but even other characteristics of developing countries make it difficult to cope with. Limited financial markets makes it difficult to mobilize the required resources. In many cases there is a lack of a well developed financial system for housing. Even though there exists a demand by the majority of the population, in many cases they can't afford housing because of their income and the terms of the financing.

However it has been shown that in many cases those people are able to build their houses by themselves and are supported by an informal system of finance which tends to be more costly. We have seen also how, by promoting the housing sector, other benefits may be obtained: more efficiency at work by people living in better conditions, work for many unskilled and semiskilled people, demand for the local building materials industry which in turn may grow to become a factor of exports, demand for the domestic furnishing industry. Being a low-technology industry with small capital requirements, there is a big potential for entry by local firms in this industry. A study performed by a graduate business school in Caracas (IESA) shows that historically in Venezuela a 1% increase in the activity of the construction industry has led to an increase of 0.53%

on consumption goods, 0.529% on intermediate goods, 0.487% on services, 0.86% on employment in this industry and 0.46% on manufacturing employment.

The big problem is financing, how to get the resources necessary for this investment. We have seen that in these countries personal savings is a source that has not been tapped properly. Several countries, among them Venezuela, have tried to tap this source through mandatory saving. However, others sources of finance should be attempted because of the magnitude of the problem.

We have shown how developing countries have been able to generate additional investment financed from abroad through the debt conversion mechanism, one of the instruments that have been used to reduce the external debt in those countries. An innovation has been its use to favor some sectors of the economy and at the same time give incentive to investors through discounts. One of those sectors that are of interest, specially in the case of Venezuela, is social interest housing. This way the country is able to cope at the same time with two important problems: reducing its external debt and reducing its housing deficit.

In Venezuela it is very attractive to invest in this way because although there are some restrictions when doing conversions, the outlook for the country is good. The worse of the crisis seems to be over, a large demand for housing exists. A housing policy has been set in place and is likely to be a fundamental support for

investments in this sector. In any event, there is always the chance for diversifying the initial investment in a housing project by reinvesting the proceeds in other approved sectors of the economy more related to exports. However, recent events (oil prices going up) has resulted in an increase of the secondary market price of Venezuelan debt, therefore reducing the potential benefit of the conversion mechanism.

Further investigation should be done based on the information collected and new information not yet covered or available. An interesting addition could be a comparative analysis of housing investment with and without conversion.

BIBLIOGRAPHY

Business International Corporation, *Debt-equity swaps: how to tap an emerging market*, New York, 1987.

Central Office of Statistics and Information, *Housing Situation in Venezuela*, Caracas, Venezuela, 1986.

Central Office of Statistics and Information, *Statistical Abstract of Venezuela*, Caracas, Venezuela, 1989.

Christian, James W., *Housing Finance for Developing Countries*, International Union of Building Societies and Savings Associations, Chicago, Illinois, 1980.

Dooley, Michael P., Folkerts-Landua, David, Haas, Richard D., Symansky, Steven A. and Tryon, Ralph W., *Debt Reduction and Economic Activity*, International Monetary Fund, Washington, D.C., 1990.

Jorgenson, Niels O., *Housing Finance for Low Income Groups*, General Printers Ltd., Nairobi, Kenya, 1977.

Krugman, Paul R. and Obstfeld, Maurice, *International Economics*, Harper Collins Publishers, New York, 1991.

Layman, Thomas A. and Kearney, Timothy F., "Debt for Equity: A Solution to the LDC Debt Crisis? Part 1 (& 2)", *The Journal of Commercial Bank Lending*, Vol. 70, Issue 5, pp. 33-46 & Issue 6, pp. 33-43, 1988.

Lessard, Donald R., *Beyond the Debt Crisis: Alternative Forms of Financing Growth*, Massachusetts Institute of Technology, Working Paper WP#1921-89, Alfred P. Sloan School of Management, Cambridge, Massachusetts, 1989.

Lessard, Donald R. and Williamson, John, *Capital Flight and Third World Debt*, Institute for International Economics, Washington, D.C., 1987.

Lessard, Donald R. and Williamson, John, *Financial Intermediation Beyond the Debt Crisis*, Institute for International Economics, Washington, D.C., 1985.

Popular Housing Foundation, *Housing in Venezuela*, Caracas, Venezuela, 1989.

Renaud, Bertrand, *Housing and Financial Institutions in Developing Countries*, International Union of Building Societies and Savings Associations, Chicago, Illinois, 1984.

Republic of Venezuela, "Central Bank of Venezuela, Resolution N° 89-08-04", *Official Gazette of the Republic of Venezuela*, N° 34,298 , September 5, 1989.

Republic of Venezuela, "Decree N° 86", *Official Gazette of the Republic of Venezuela*, N° 34,179 , March 15, 1989.

Republic of Venezuela, "Decree N° 240", *Official Gazette of the Republic of Venezuela*, N° 34,230 , May 30, 1989.

Republic of Venezuela, "Decree N° 727", *Official Gazette of the Republic of Venezuela*, N° 34,397 , January 26, 1990.

Republic of Venezuela, "Decree N° 1,521", *Official Gazette of the Republic of Venezuela*, N° 33,699 , April 14, 1987.

Republic of Venezuela, "Housing Policy Law", *Official Gazette of the Republic of Venezuela*, N° 4,124 Extraordinary, September 14, 1989.

Republic of Venezuela, "Housing Policy Law Reform", *Official Gazette of the Republic of Venezuela*, N° 4,153 Extraordinary, December 28, 1989.

Republic of Venezuela, "Housing Policy Law Operation Rules", *Official Gazette of the Republic of Venezuela*, N° 4,154 Extraordinary, December 29, 1989.

Republic of Venezuela, "Ministry of Finance, Resolution N° 2.401", *Official Gazette of the Republic of Venezuela*, N° 34,299 , September 6, 1989.

Republic of Venezuela, "Ministry of Urban Development, Resolution N° 211", *Official Gazette of the Republic of Venezuela*, N° 34,418 , February 28, 1990.

Sachs, Jeffrey, *Developing Country Debt and the World Economy*, National Bureau of Economic Research, Chicago, Illinois, 1989.

United Nations (CEPAL), *Latin America and the Caribbean: Options for Reducing the Burden of the Debt*, Santiago de Chile, 1990.

Williamson, John, *Voluntary Approaches to Debt Relief*, Institute for International Economics, Washington, D.C., 1988.

The World Bank, *Dealing with the Debt Crisis*, Washington, D.C., 1989.

The World Bank, *World Debt Tables 1990-91*, Washington, D.C., 1990.

The World Bank, *World Development Report 1991*, Oxford University Press, New York, 1991.