Other Titles of Interest

BALASSA, B.
Policy Reform in Developing Countries
COLE, S.
Global Models and the International Economic Order
JOLLY, R.
Disarmament and World Development
LASZLO, E.
The Inner Limits of Mankind:
Heretical Reflections on the Predicament of Mankind
LASZLO, E. & BIERMAN, J.
Goals in a Global Community, Volume 1
Goals in a Global Community, Volume 2
MENON, B. P.
Global Dialogue:
The New International Economic Order
PECCEI, A.
The Human Quality
TICKELL, C.
Climatic Change and World Affairs
WENK, E.
Margins for Survival:
Political Limits in Steering Technology

The World Employment Programme (WEP) was launched by the International Labour Organisation in 1969, as the ILO's main contribution to the International Development Strategy for the Second United Nations Development Decade.

The means of action adopted by the WEP have included the following:

—short-term high-level advisory missions;

—longer-term national or regional employment teams; and

—a wide-ranging research programme.

A landmark in the development of the WEP was the World Employment Conference of 1976, which proclaimed inter alia that "strategies and national development plans should include as a priority objective the promotion of employment and the satisfaction of the basic needs of each country's population". The Declaration of Principles and Programme of Action adopted by the Conference have become the cornerstone of WEP technical assistance and research activities during the closing years of the Second Development Decade.

This publication is the outcome of a WEP project.

REDISTRIBUTIVE EFFECTS OF GOVERNMENT PROGRAMMES

The Chilean Case

by

ALEJANDRO FOXLEY

Corporation for Latin American Economic Research (CIEPLAN), Santiago, Chile

in collaboration with

EDUARDO ANINAT

Boston University, Boston, USA

J. P. ARELLANO

Corporation for Latin American Economic Research (CIEPLAN), Santiago, Chile

A study prepared for the International Labour office within the framework of the World Employment Programme

PERGAMON PRESS

Oxford · New York · Toronto · Sydney · Paris · Frankfurt

U.K.	Pergamon Press Ltd., Headington Hill Hall, Oxford OX3 0BW, England
U.S.A.	Pergamon Press Inc., Maxwell House, Fairview Park, Elmsford, New York 10523, U.S.A.
CANADA	Pergamon of Canada, Suite 104, 150 Consumers Road, Willowdale, Ontario, M2J 1P9, Canada
AUSTRALIA	Pergamon Press (Aust.) Pty. Ltd., P.O. Box 544, Potts Point, N.S.W. 2011, Australia
FRANCE	Pergamon Press SARL, 24 rue des Ecoles, 75240 Paris, Cedex 05, France
FEDERAL REPUBLIC OF GERMANY	Pergamon Press GmbH, 6242 Kronberg-Taunus, Pferdstrasse 1, Federal Republic of Germany

First Edition 1979

British Library Cataloguing in Publication Data

Foxley, Alejandro
Redistributive effects of government programmes.
1. Income distribution – Chile
2. Chile – Economic policy
I. Title II. Aninat, Eduardo III. Arellano, J P
IV. International Labour Office.
World Employment programme
339.2.0983 HC195.15 78–41098

ISBN 0–08–023130–6

The responsibility for opinions expressed in signed articles, studies and other contributions rests solely with their authors, and publication does not constitute an endorsement by the International Labour Office of the opinions expressed in them.

The designation employed and the presentation of material do not imply the expression of any opinion whatsoever on the part of the International Labour Office concerning the legal status of any country or territory or of its authorities, or concerning the delimitation of its frontiers.

Printed in Great Britain by
Biddles Ltd, Guildford, Surrey

Preface

The most striking feature of economics today is the increasingly dominant position of distributional aspects in the discussion of almost any issue. Concern with income distribution in developing countries, which started in the 1960s, represented a reaction to the growth-oriented development theory of earlier days. The present upsurge of interest in distributional problems in industrialised countries has started a little later – perhaps as a consequence of the decline in the rate of economic growth which began in the early 1970s. But it is an upsurge almost without precedent – as witnessed by the flow of reports emanating, e.g. from the Royal Commission on the Distribution of Income and Wealth, or from the Australian Commission of Inquiry into Poverty (the Henderson Commission), and by the numerous studies appearing in the United States, France, Scandinavia, etc. For developing countries most studies of income distribution are due mainly to the work of the World Bank and of the International Labour Organisation's Programme on Income Distribution and Employment, but purely national studies are also becoming more frequent.

Within the broad field of income distribution one particular area has so far not received the attention it deserves – the area of redistributive effects of fiscal policy. There are a number of such studies for developed countries, beginning with the classical study of Tibor Barna on redistribution in Great Britain in 1937 and leading to the present appearance of a number of studies on redistribution in the United States and some other industrialised countries. Systematic attempts to examine redistributive effects of government expenditure and taxation in developing countries are, however, very few. The present study by Alejandro Foxley and his collaborators should take pride of place as one of the most systematic and comprehensive examinations of redistribution in a developing country.

The authors of this book make a thorough examination of government redistributive policy in Chile over the period 1964 until 1973. They examine the incidence of taxation, government expenditure and social security operations on different income groups and note the critical factors which limited vertical redistribution effects of fiscal policy. Their analysis, however, is not confined to evaluation of the distributional effects of the traditional fiscal instruments. They conclude their study by examination of the redistributive effectiveness of two non-traditional policy instruments, of the land-reform programme and of nationalisation of industrial enterprises. Their work is a pioneering exercise in an important field of economic policy and can be recommended not only to those interested in Chile but to the wider audience concerned with economic development in general.

FELIX PAUKERT
Chief Income Distribution
and International Employment
Policies Branch,
International Labour Office

Geneva, November 1978

CHAPTER 1

State and Redistribution

The intervention of the State in economic life is a topic of permanent controversy. In every modern society the State is a fundamental agent in the functioning of the economy. A growing proportion of national income is channelled through the State or is generated in state-controlled productive units. Particularly since the so-called Keynesian revolution in economic thought, the State has come to control and manage a broad set of economic policy instruments, by means of which it intervenes, defines and modifies the rules of the economic game and the relations between the various productive and consuming agents. These mechanisms in turn invest the State with the ability to generate benefits for and impose losses on the various social groups. The State is not a neutral entity from the point of view of distribution. It extracts and reorients resources in various directions, strongly influenced by the economic and political forces which provide its support and basis of action. The outcome could be to accentuate spontaneous tendencies originating in the free play of the market, or to correct distortions, even to radically change the distributive content of the process of economic growth. This is one of the characteristics that renders the role of the State a controversial one and explains why the discussion about its action in the economy is already quite old and charged with ideological content.

The topic takes on special relevance in developing economies. The low levels of *per capita* income in these economies and its unequal distribution are conducive to greater dissatisfaction with the functioning of the economic system in these societies. The State, then, takes on a greater importance as the centre of power and as the point at which these problems can be solved.

In a mixed economy, the State controls or directly participates in the process of capital accumulation. The nature and interests of the groups with access to the State may influence the form that capital accumulation takes (public, private or collective), therefore indirectly conditioning the development pattern.[1] The development pattern, in turn, provides the framework within which the economic policies and the instruments to carry them out are specified. Policies may be exclusively growth-oriented or they may have a redistributive character, according to the development strategy chosen.

Recent attention in economic thinking has shifted towards redistribution-oriented development, and one of the topics that clearly emerge from this new concern is how can the government influence the way income and welfare is distributed in society? The study of this topic necessarily involves the identification of the beneficiaries of state action and of those who have paid its cost, of the pattern of income distribution that results from state action and of the relation between the pattern of distribution and the type of development being applied.

A thorough analysis of these matters would probably require an interdisciplinary approach and the incorporation of a large number of variables. Economists have provided partial contributions in the form of studies of public finance and fiscal incidence.[2] In this book, we intend to take up the incidence approach and place it in the broader perspective of the problem described above. Our effort is partial and tentative. It does not go beyond the undisciplinary framework, but we hope it will serve to provide some clarifying insights and open the way for future studies of an interdisciplinary nature.

The empirical part of this study is focused on several features of state action in Chile between the years 1964 and 1973. In particular, we will

[1]For a discussion of this relation, see F. H. Cardoso, *Estado y sociedad en América Latina*, Ediciones Nueva Visión, Buenos Aires, 1972.

[2]For Latin American countries, see Urrutia and Sandoval, "Fiscal policy and income distribution in Colombia", in A. Foxley (ed.), *Income Distribution in Latin America*, Cambridge University Press, 1976; R. Webb, "Government policy and the distribution of income in Peru", Princeton University Discussion Papers No. 39, 1973; and a survey in L. de Wulf, "Fiscal incidence studies in developing countries: Survey and Critique", IMF Staff Papers, March 1975.

examine the impact on various socio-economic groups of economic policy instruments with redistributive potential. The empirical analysis should lead to tentative conclusions about the interrelations between the nature of the State and the pattern of development chosen.

STATE REDISTRIBUTIVE ACTIVITY IN CHILE

The Chilean economy offers an interesting opportunity to study the use of redistributive instruments and to analyse their potential and limitation in advancing toward a more egalitarian growth process. This country was one of the pioneers in Latin America in the search for greater equality of incomes and opportunities. State intervention, which has been quite significant during the past 50 years, has not been neutral from the point of view of income distribution.

At the beginning of the 1970s, Chile had the highest level of state participation in the economy of any of the Latin American countries. The coefficient of public spending to GNP in Chile was higher than the Latin American average.[3]

The Chilean state apparatus consists of a centralized or fiscal sector and a decentralised sector composed of agencies that are autonomous but administrative and usually financially dependent on the central government. By 1970 fiscal expenditures represented 24 per cent of GNP, whereas the public sector as a whole – the sum of centralised and autonomous institutions – totalled 46 per cent.[4] The present study covers the entire public sector.

The situation observed at the beginning of the 1970s is the result of a long, growing process of state intervention. The process had its roots in the changes occurring in Chile in the nineteenth century, but did not achieve breadth until the first decades of the present century. Perhaps the

[3] For country figures, see ECLA, *Economic Survey of Latin America, 1970,* Santiago, 1971.

[4] These coefficients are provided only as an illustration. Strictly speaking, the numerator and the denominator are not comparable. The definition of public expenditure in the numerator includes transfers which are consolidated in the definition of GNP. Thus the measure overestimates the real participation of the government in economic activity. The State was directly responsible for somewhat more than 14 per cent of domestic production and 16 per cent of employment.

first initiatives of a purely redistributive nature took place in the 1920s, as will be described below. The following period, from 1938 to 1955, was one of consolidation and extension of the policies envisaged in the previous years, with significant advances for the middle sectors. After an intervening decade in which egalitarian efforts were restricted in order to pursue price stabilization, the period of greatest emphasis on redistribution in the country's history was begun in 1965. Not only is the sector to be benefited more numerous – encompassing now the peasants and the marginal urban groups – but the quantity of resources to be transferred and the gamut of instruments used is also greater. It is this period that is the object of the analysis in the following chapters.

The background of the process begun in the 1920s is to be found in the prior trajectory of the Chilean economy. During the nineteenth century and up to the great crisis of 1930, the "engine" of national development was external demand. The dynamic sectors of the economy until the last third of the nineteenth century were the mining of high-grade metals – copper, silver and gold – and agricultural exports. Social structure was dominated by an oligarchy whose control was unchallenged and whose use of the state apparatus was oriented to the building of infrastructure for export activity.

Nitrate mining assumed the central role in the economy in the last two decades of the nineteenth century and lasted until shortly after the First World War. The nature of the nitrate mining and the foreign control of mine ownership had much to do with what happened later on. The labour needs in the mines were met by a heavy migration from the central zone of the country and created a worker proletariat hitherto unknown in Chile. This generated the groundwork for an organised workers' movement that soon became an important factor in the social process.

The foreign ownership of the nitrate mines encouraged the growth of the State in response to the need to develop mechanisms to capture part of the export earnings and channel them into internal economic development. The construction of the first railways was speeded up and additional infrastructure works were financed with taxes levied on the export sector. Policies to increase the participation of non-oligarchical groups in the fruits of development continued to be absent. The government budget barely provided for scant funds for education and for charitable works organised by the Church.

The kind of state intervention, together with the diversification of the economy and the expansion of services as a result of urbanisation, set the stage for the rise of a middle sector whose influence in subsequent periods of social development would be significant.[5]

This process of rapid urbanisation accompanied by the rise of a strong proletariat and the emergence of the middle sectors has its only parallel in Argentina among the Latin American countries of the era.

The emerging groups made their presence felt in the social sphere by organising themselves in labour unions[6] and expressing their demands in various ways, including violent strikes.[7] The degree of social tension brought about by this process caused the State to be more receptive to social demands. Significant changes occurred in the administration of Arturo Alessandri in the first half of the 1920s. The new attitude toward urban workers led to the adoption of the first genuinely redistributive measures. The group of "social laws" promulgated in this period is an example of these measures. The most important were the creation of social-security programmes for blue-collar workers (1924) and non-government white-collar employees (1925), the implementation of the income tax (1924) and of the progressively scaled Global Complementary Tax (1925), and the adoption of the Labour Code (1931).

The policies were oriented to the defence of wage earners in the process of collective bargaining and provided for a system of free medical attention, sick pay and disability and old-age pensions. The programmes were financed by the State but were of limited coverage. Only a small portion of workers actually had access to their benefits, which in some cases, such as retirement pensions, involved extremely small amounts of money.

While the tax measures of the period were not of great significance in terms of providing additional revenues for the public budget, they introduced progressivity for the first time into Chilean tax levies.

The process of state intervention for redistributive motives was in large measure interrupted by the 1930 crisis, which severely affected the

[5]See A. Pinto, "Desarrollo económica y relaciones sociales en Chile", *Un Caso de desarrollo frustrado,* Ed. Universitario, Santiago, 1973.

[6]By 1920 there were more than 100,000 workers affiliated to labour unions.

[7]See C. Pizarro, "Hacia una interpretación global de la evolución de la huelga y del sindicato en Chile, 1890–1970", CEPLAN, 1975.

Chilean economy. State action was redirected to face the emergency. The crisis did serious damage to the economy because of its extreme dependency on foreign trade. At the same time, a new style of development, based on import substitution with strong state support, was adopted in response to the crisis.

During the 1938–55 period, most of which was under Radical Party governments, the import substitution process was promoted by protectionist policies for domestic industry and direct state intervention to stimulate the development of the manufacturing sector. Public funds were chanelled through the Development Corporation (CORFO), which was established for that purpose in 1939. During those years the State undertook major direct investments in energy (electricity, oil), iron and steel works, which were indispensable for industrial development. The development of private industry was also backed by state financing. It was thought that these measures would benefit all social sectors and constituted, therefore, an effective measure to improve the standards of living of the middle- and low-income groups.

Nevertheless, the governments had to respond to the pressures from the middle sectors, which constituted the bulk of their support. The result was the establishment of more directly redistributive measures encompassing wage and social-security policies, public spending and subsidisation of basic consumer products.

The wages policy, aimed at defending the purchasing power or workers' earnings against inflation, provided for obligatory wage readjustments. In order to protect workers with less bargaining power, minimum wages were established first for white-collar workers (1937) and later for farm workers (1953) and urban workers (1956). Although wage statistics for this period are of doubtful reliability, they indicate a relative improvement for the white-collar sector.

Social-security changes were designed to increase the coverage of the system and to improve its benefits. This also brought about a relative advance for white-collar workers.

Price policy was a widely used instrument to protect the buying power of the urban consumers. Controlled prices were applied to basic consumption agricultural products, to rents, and to other products considered to be essential. By means of exchange policy, certain consumer items such as gasoline were subsidised. The public budget provided subsidies for urban mass transit and for transportation in general.

State revenues and expenditures showed a continuous growth trend. The collection of revenues had to depend increasingly on internal sources due to the reduced weight of foreign trade in the economy and the new commitments assumed by the State. Tax rates were raised and coverage was extended, with emphasis on indirect taxes. The new expenditures were oriented to financing works of development promotion and social programmes. Outlays for education and social security were increased while at the same time new government-financed programmes appeared in the fields of public health and housing construction.

The demands made on the State by the principal pressure groups were so strong that they led to the acceleration of inflation. On the one hand, the middle sectors strongly pushed their demands for higher real wages (wage readjustments and price controls) and public benefits (social security, housing, health and education). On the other hand, the entrepreneurial sector exerted no less pressure to increase real profits (through price readjustments, wage controls, and resistance to tax increases) and to expand the volume of credits – subsidised as a rule – channelled to the private sector by the State.

Since the power of the various pressure groups was relatively equivalent, and because their demands contradicted one another, the State was unable to resolve the conflicts satisfactorily on a permanent basis. The course taken by the State frequently was to provide temporary satisfaction to the demands of the various groups by going beyond the limits imposed by available resources, thus building up inflationary pressure.

The years after 1955 are characterised by the persistence of what came to be known as the "social draw" among the various groups and by the attempts of a state apparatus representing various power coalitions to resolve the impasse.

In summary, the years 1938–55 were for the middle sectors – white collar and skilled workers – a period of extension of benefits channelled through the public budget and of improvement of wage levels. The decade after 1955 saw redistributive policies relegated to a very secondary plane as the emphasis of the economic programme shifted to price stability.[8]

[8] For an analysis of the decades of the 1950s and 1960s, see R. Ffrench-Davis, *Políticas económicas en Chile, 1952–70*. Ediciones Nueva Universidad, Santiago, 1973.

The anti-inflationary measures imposed often implied wage readjustments below inflation rates and attempts to reduce government spending. The main source of improvement of poorer groups income was considered to be the economic growth that would be achieved as one of the natural effects of halting inflation. Meanwhile, the stimulation of growth – which depended fundamentally on private initiative – was undertaken by granting privileges and tax exemptions to attract private investment from national and foreign capital.

A plan for construction of low-cost housing supported by state funds was an exception to the general policy. The programme was developed in the years 1959–62 as an attempt to stimulate the depressed level of economic activity of the previous years.

The failure of the stabilisation programmes and the losses in real wage levels suffered by wage earners led the great majority of the electorate to support programmes offering a more egalitarian distribution of the fruits of development. From 1965 on, the idea that the improvement of living standards of low-income groups was based exclusively on economic growth gave way to renewed emphasis on redistributive policies. Indeed, it was now postulated that the reduction of inequalities constitutes a requisite for economic growth.

The redistribution process thus emerged again with even greater intensity than in prior periods. The volume of resources to be transferred and the number of instruments to be employed for this purpose were greater than in previous years. Non-traditional mechanisms such as land reform were included. Moreover, the policies adopted reached all social groups. Groups such as peasants and certain urban sectors that previously had been on the fringe of state action began in this period to be involved as beneficiaries of important public programmes.

The economic programme carried out during the last 6 years of the 1960s had among its explicit objectives the redistribution of income in favour of workers, and in particular in favour of the peasants. The traditional wage readjustment policy was used for this purpose. In addition, a tax reform was carried out to introduce greater progressivity in the system and provide revenue to finance the increased spending. Tax revenues increased 140 per cent during the 6 years, from both direct and indirect levies. The new direct taxes, especially the property tax and the readjustability of previous year taxes, contributed to the progressivity of the system. Public expenditures registered increases in practically all government departments during the period, with the greatest rises in educational programmes, housing and agrarian reform. Government spending rose 125 per cent in real terms between 1964 and 1970.

A programme of agrarian reform which included the expropriation of 15 per cent of agricultural land was started. At the same time, unionisation was promoted, especially among farm workers, and neighbourhood organisations were set up among popular urban sectors in order to redistribute power towards the weaker groups.

A triennium of even greater redistributive emphasis began in 1970. Along with redistribution, the government's highest priority was the transformation of economic and social structure. Worker and peasant sectors were the principal beneficiaries of state action, which was carried out mainly through changes in the system of ownership. The agrarian reform was speeded up until large land holdings were eliminated. In 2 years, expropriations reached 35 per cent of total agricultural land. Parallel to the agrarian reform was the creation of the area of social property, which came to encompass 360 manufacturing enterprises under state ownership. In this way, the State obtained the control of over 60 per cent of the capital in the industrial sector. The purpose of the nationalisations was to lay the foundation for a socialist economy that would allow the State to secure control of resources in order to channel them to the priority social sectors.

Wage policy, which provided readjustments higher than inflation rates, and the sharp increase in public spending were also oriented to benefit workers while at the same time seeking to expand employment. Prices of essential products and many inputs were subsidised and/or controlled, in an attempt to alter the structure of relative prices in favour of increasing consumption among low-income sectors.

The mechanics of the process of changes undertaken in these 9 years required a broadening of low-income groups' organisational base and of their participation in the state apparatus. The political activation and increase in real power among the poorer groups led them to intensify their demands on the State. Since the State could not in the short term abandon its traditional commitments, it was confronted with demands that exceeded by far its possibilities of action. The result was acute inflation.

The disproportion between response capability and demands that characterised the situation of the State and the struggle for power at all institutional levels were particularly acute in the 1972–73 biennium. The political-social tension and the loss of efficiency in the economy that were the result of these distortions explain at least in part the institutional crisis that led to the end of the Allende government and to the establishment of an authoritarian military régime.

In the new economic scheme defined at the end of 1973, improvements for low-income sectors are basically made dependent on the benefits received from growth – based on private initiative – expected once high inflation was reduced.

As can be seen in this brief overview, the Chilean experience in redistribution is rich in intensity and in the variety of mechanisms utilised.

CRITERIA FOR EVALUATING STATE ACTION IN CHILE

In order to judge the action of the State in Chile it is necessary to propose – explicitly or implicitly – some objective or goal of economic activity. Likewise it becomes necessary to evaluate the relative efficiency of the various economic agents in the accomplishment of the goal. Within the context of the capitalist market economies the predominant position in this respect has been an explicit preference for the "non-intervention" by the State.

This view assumes that the free play of private interests through the market leads to the best allocation of resources and maximum growth. Thus state intervention is justified only in very specific areas and in exceptional situations. It encompasses the function of distribution of public goods (defence, justice, etc.) which cannot be efficiently produced in private form and consequently should be provided by the public sector. It also includes intervention in the presence of distorted market prices due to the absence of competitive conditions (monopoly, oligopoly, etc.). These in turn could be derived from inadequate information, the existence of various externalities, and of economies of scale. Some of the latter have been called "natural monopolies", as is the case with public services such as railway transportation, telecommunications, etc.

The basic assumptions behind this model are that the productive structure is homogenous, that resources and factors are perfectly mobile, that information flows without restrictions and that the decision-making units (families, enterprises) enjoy symmetrical positions in the socio-political system so that accumulation of power is effectively prevented. Under these assumptions, no distortions occur in resource allocation. Moreover, the efficiency of the latter is measured in terms of the maximisation of national income.

The validity of the approach is obviously influenced by the reliability of its assumptions. If distortions in the economic structure are the rule rather than the exception – an empirically verifiable question – then the potential for broader state action is much greater. In the Latin American economies in particular, there are two characteristics that seem to directly contradict the assumptions of the competitive model. One is the tendency toward concentration of income and therefore of power, with all the detrimental consequences for resource allocation and maximisation of collective welfare. The other is the heterogeneity of the productive apparatus and its pronounced monopolistic and oligopolistic nature. In such circumstances, it is difficult to speak solely in terms of small corrections or doing away with distortions.

Nor is it likely that the same conclusions will be reached about the role of the State if the principal objective posited for economic activity is not only the maximisation of national income but encompasses, for example, an improved distribution of income and opportunities. In that case the action of the State must be logically judged according to the objectives really being pursued by society and not only in terms of national income and output levels.

The strongly redistributive orientation of social demands in Chile conditioned the type and intensity of public action in Chile. The measurement of results in terms of efficiency, then, should not only encompass the achievement of traditional goals such as output and price stability but also take into account a redistributive objective which was the result of the pressure for greater social equality exerted by social forces on the State.

CONTENTS OF THE BOOK

What type of state intervention is required to implement a redistributive objective? There is a wide gamut of instruments that in theory are capable of achieving redistribution. The instruments range from traditional mechanisms such as the public budget, wage policy and social security to more radical measures that imply changes in the ownership of the means of production or direct alterations of the productive structure.

The purpose of this book has been to examine the behaviour of the State when redistribution has been given high priority. A comparative analysis will also be carried out as to the various redistribution instruments in order to determine which of them is most efficient in accomplishing the goals established by the governments.

With this in mind, four redistributive instruments have been examined: the tax system, government expenditures, the social-security system and redistribution of property. The study is based on the Chilean experience of the past decade. Data for the measurement of the distributive effects of fiscal policy and social security are from 1969. The analysis of the effects of ownership redistribution programmes is based on the 1964–70 period in the case of the Agrarian Reform, and 1970–73 for the study of the distributive effects of the expropriation of industrial enterprise.

The first chapter in the book is the present one. It has discussed the role of the State as an economic agent and particularly with respect to its potentiality and limitations for implementing redistributive objectives. The chapter has also given an historical background to state intervention in Chile and criteria to evaluate government performance when redistribution is a high priority target.

The second chapter of the book will examine the tax system. One of the purposes of the tax system is to capture resources that could be oriented to redistribution. Thus, at least theoretically, a greater volume of tax revenues can generate higher capacity for redistribution. It is of interest, then, to determine the margin of available economic surplus that can be extracted by means of the tax system and to ascertain the most effective use of this capability.

The quantity of resources that is extracted, however, is not the only determinant of redistributive potential. The kind of levies chosen and the form in which they are applied are also important. The same quantity of resources can be obtained by levying tax burdens on distinct socio-economic groups and thus produce different effects on the welfare of each group and on the equity of the system of the whole. In order to measure the effect of the tax system on the welfare of each group a "tax incidence" study is carried out.[9] Such incidence studies have had a long trajectory in economic literature.[10] The chapter will go beyond the so-called legal incidence to determine the real economic incidence of the assumptions. A tax burden destined legally for a particular economic agent can follow three possible paths: it may fall on that agent, it may be shifted to other agents with whom the first conducts transactions, or it may be evaded.

The distribution of the burden depends on the economic base upon which it is imposed – personal income, property, profits, sales, etc. – and on the kind of transaction affected by the tax-goods and services, payrolls, labour, etc. The fundamental factors determining the destination of the tax burden are the structure of the market, the behaviour of the economic agents and the macroeconomic context.

The structure of the market indicates the relative power of the various economic agents and their capability to impose decisions in their favour. Under certain conditions, an oligopolistic market, for example, the producers are better able to shift the tax burden to consumers than is the case under competitive conditions. Market structure also includes the characteristics of demand for goods and factors. For example, a levy applied to a product that is difficult to substitute and for which, therefore, demand is very inelastic falls in greater proportion on the consumer than would be the case if the taxable item had a large number of substitutes.

[9]The incidence of a tax indicates the economic agents bearing the tax burden and the magnitude of the burden on each agent. The law itself may determine that the burden falls on a particular agent (legal incidence). But this agent may be able to pass on the burden to other agents and ultimately bear only a portion of it or even evade its effects entirely. The net effect on an agent after partial, total or no transfer to other agents is what is normally called economic incidence (in contradistinction to legal incidence).

[10]The first calculations go back to the beginning of the century: H. Samuel, "The taxation of the various classes of people", *Journal of the Royal Statistical Society,* March 1919. A review of these studies for underdeveloped countries is found in L. de Wulf, *op. cit.,* and in R. M. Bird and L. de Wulf, "Taxation and income distribution in Latin America: a critical review of empirical studies", mimeo, IMF, 1973.

The behaviour of economic agents in the determination of price is another indispensable element in understanding the process of tax shifting. the producer's action with regard to tax shifting will vary according to whether he bases his prices on marginal costs or on net profit margins over average costs. In the latter case, a tax on profits will probably be transferred completely to the consumer.

Finally, the macroeconomic context, especially an inflationary situation, will allow the tax burden on a productive unit to be shifted to a greater or lesser extent via prices.

This study of incidence proposes first of all to identify the economic agents upon which each tax levy falls. Then the socio-economic characteristics of the members of the tax-paying group will be described. This description is based on family income. In this way we can establish the magnitude of the tax burden borne by the families at the various income levels. We can then use these findings to analyse the conditions under which the tax system could better fulfil its redistributive role. These are some of the topics we will take up in the second chapter.

The next two chapters (third and fourth) will examine the distributive effects of public expenditures and will identify the real beneficiaries of state-financed programmes. Like taxes, these benefits can be shifted to agents other than the direct recipient. This is the case, for example, with most subsidies and loans granted to enterprises. This situation presents an additional difficulty for our analysis, since it is necessary to calculate the value of the benefits. The problem has not been adequately resolved in the literature on the subject. The present work is no exception to traditional methods in considering state expenditures as an approximation of the value of benefits. A more detailed discussion of these and other methodological problems is contained in Chapters 3 and 4.

The method of setting values according to costs is useful, despite its deficiencies, for identifying beneficiaries of expenditure programmes. How can the distributive impact be assessed? The criterion is to compare the distribution of expenditures with family income. Public expenditures are said to be progressive if they make the distribution more equal neutral, if they do not change; or regressive, if they make it worse.

The chapters focus special attention on the effect of expenditure programmes on low-income groups. We will examine in particular the possibilities of reallocating expenditures toward programmes that have greater impact on the poorer groups. This reallocation faces certain obvious limitations: general expenditures essential for the functioning of the State (justice, police, foreign relations, defence, etc.) can be reduced only partially. Moreover, a major portion of spending on productive infrastructure and promotion of development is fairly rigid.[11] Second, expenditures of a specifically redistributive nature, as are the majority of social programmes and certain development expenditures, involve leakage of benefits towards non-priority groups. The varied nature of these programmes and the differentiated demands made on the State by the various social groups prevent the totality of these expenditures from being directed exclusively to the most needy families. All above observations show that the margin of reallocation of spending is necessarily restricted. This margin can be broadened by capturing new resources through the tax system or by gradually reducing over time the relative importance of non-redistributive expenditures, and controlling the leakage in the redistributive programmes as such.

From another point of view, not only the behaviour of the State in one moment of time but also the dynamic effects produced by its activity are important in achieving efficient state action. For this reason expenditures whose effects are long range deserve special treatment. On the one hand are those expenditures in programmes which constitute investments in human capital – education, nutrition and health. On the other hand are those oriented to augment physical capital, which include direct state investment in transportation, irrigation and communications, in public utilities and energy. In our work, we distinguish between this kind of programme and those whose main effect is to increase present consumption of the beneficiaries. Public expenditures also include credits to the private sector. Finally, cursory treatment of these aspects is undertaken by the present study, but we have indicated their principal distributive effects.

Given the wide variety of topics included in the study of public expenditures we divided the presentation of the subject in two chapters as we have mentioned before. Chapter 3 concentrates on a discussion of the

[11] Expenditures in productive sectors are destined in large part to public workers and – especially when the State is promoting industrialisation – to investment in energy. Among these activities there are few projects whose benefits reach poorer groups preferentially.