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TERMS OF TRADE AND CLASS CONFLICT IN A COMPUTABLE GENERAL EQUILIBRIUM MODEL FOR MÉXICO

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DOCUMENTO DE TRABAJO

Núm. VI - 1982

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Abstract:

A computable general equilibrium model for Mexico is constructed in which class conflict over the distribution of the surplus is the principal determinant of the terms of trade. The model consists of seven social classes and eight productive sectors. Classes are distinguished as "fundamental" or "subsumed" according to whether their incomes are primarily determined by conscious class struggle or by the resulting system of relative prices. Flexible prices are assumed to clear markets for which nonproduced means of production, such as agricultural land, limit supply while output in the remaining sectors is determined by the level of effective demand. For the latter sectors, two theories of price formation are compared and are seen to differ radically in their implicit conception of the nature of class conflict. A "Keynes-Kalecki" closure is considered in which prices are determined by a fixed mark-up on costs. This enables capitalists to protect themselves from incursions on the rate of profit due to labor militancy or state-imposed terms of trade policy designed to favor peasants and/or the agrarian bourgeoisie. A second, "Marxian," price closure constrains the economy to a wage-profit-terms-of-trade surface; where the economy conjuncturally resides on this surface depends upon the level of effective demand, wages and terms-of-trade policy. Various scenarios are investigated under both closures including an increase in nonagricultural wages, a rise in investment and the introduction of a guarantee price for corn and beans, a policy implemented by the Lopez-Portillo regime.

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February 1983

I. Introduction

This paper discusses a computable general equilibrium model for Mexico and its behavior in response to a change in wages, level of investment and terms of trade policy.[1] Two variants of the model are studied. For the first, referred to a "Keynes-Kalecki" or "Keynesian" closure, nonagricultural prices are determined by fixed mark-ups on prime costs.[2] The profit rate is insulated from wage and commodity price increases which are fully passed along. A second "Marxian" closure employs Sraffian prices of production for nonagricultural sectors in which class conflict over the distribution of the surplus determines the system of relative prices.[3] Substantial differences emerge: In the Marxian closure, for example, unemployment and stagnation can be combated by maintaining aggregate demand, raising wages and controlling prices whereas in the Keynesian closure, increasing wages causes inflation, agricultural stagnation and a contraction in employment.

The paper is organized as follows: Section 2 discusses the basic components of the model in a simplified form. The following section describes the model in more detail and the final section presents the results of simulations in which nonagricultural wages and real investment are changed and a support price for the peasant agricultural sector is introduced. Appendices contain the full specification of the model and Social Accounting Matrices for the various simulations.

2. Structure of The Model

A general equilibrium model is employed in which prices and quantities are determined simultaneously. We distinguish sectors of the economy which employ nonproduced means of production (NPMP), such as natural resources and agricultural land, from those sectors which use only reproducible capital goods as means of production.[4] For convenience, sectors which employ nonproduced means of production will be referred to as "agricultural" sectors while the remaining sectors will be called "nonagricultural" or "urban" sectors. Prices of goods produced using NPMP are not necessarily equal to their costs of production, but fluctuate to

balance effective demand with an exogenously given supply. Prices in sectors which do not employ NPMP are equal to the sum of wage and intermediate costs plus profits. If profits depend upon a fixed mark-up, independent of the level of wages, the closure is Keynesian. If instead there is an inverse relationship between wages and the rate of profit, the closure is referred to as Marxian.

In both the Keynesian and Marxian closures, output in nonagricultural sectors is determined by the level of effective demand with real investment given exogenously. For the Marxian system, output of sectors which only employ produced means of production is not limited by any endowed magnitude other than labor inasmuch as capital is conceived as the accumulated surplus product of workers. Capitalists exploit workers by virtue of: (1) private ownership of the means of production; and (2) a surplus or reserve army of unemployed workers. Capitalists can, therefore, expand output to meet demand subject only to the social constraint that the rate at which surplus product is extracted is above some minimum acceptable level. For the Keynesian closure, output in the nonagricultural sectors is determined by the level of effective demand only if there is excess capacity with respect to the current level of output. With a fixed stock of capital equipment and a given level of money wages and agricultural commodity prices, output may adjust to effective demand with no accompanying change in price.

In neither closure is the labor market assumed to clear. Capitalists have available an arbitrarily large supply of labor at the institutionally determined money wage rate. There is no choice of technique and thus employment is determined by fixed and given labor coefficients once outputs are known. There is no money and, needless to say, no "capital" other than the heterogeneous vector of produced and nonproduced means of production.

2.1 Class Structure--Marxian Closure

The introduction of nonproduced means of production requires a more complex structure of classes than than the typical Marxian division into capitalists and workers. Owners of nonproduced means of production constitute what Resnick and Wolff call a "subsumed" class and are distinguished from "fundamental" classes by the following definitions:

> Marx's theory of the class process of extracting surplus labor involves the conceptual division of individuals in society into paired groupings occupying the positions of performers of such surplus labor, on the one hand, and extractors, on the other. These paired groupings we designate, with Marx, as fundamental classes. (emphasis added)

Subsumed classes, on the other hand, are defined as classes which:

> ...neither perform nor extract surplus labor. Rather they carry out certain specific social functions and sustain themselves by means of shares of extracted surplus labor distributed to them by one or another fundamental extracting class. (Resnick and Wolff 1982: 2,3)

The essence of the definition of subsumed class is taken here to be the distinction between "extract" and "distribute." By wresting title to and control over the disposition of the surplus product produced by workers, capitalists "extract" surplus from workers. The process is one of open and continuous conflict in which both workers and capitalists consciously pursue strategies designed to thwart their opponent's objectives. Fundamental classes exhibit what Jon Elster has recently termed "variational rationality" in which agents do not regard their environment parametrically, but are aware of the objectives, strategies and tactics of other agents (Elster 1982).

The outcome of conflict between fundamental classes determines a point on the economy's wage-profit or class-conflict line. [5] Associated with every such point is a vector of relative prices which "distributes" or transfers extracted surplus to various subsumed classes. In contrast to fundamental classes, subsumed classes are parametrically rational in that their behavior, while rational, is not strategically or interactively determined. Subsumed class incomes depend primarily upon terms of trade resulting from the struggle between fundamental classes, terms of trade which they regard as given parameters. Thus, subsumed classes neither perform nor extract surplus labor. Subsumed classes reduce the total quantity of surplus over which the fundamental classes struggle but the transfer is systemic in nature. The process occurs "behind the backs of the producers" in spite of rather than as a result of the intentions of agents. This is not to suggest that the income of fundamental classes is independent of the the structure of relative prices. It is

rather that without engaging in class struggle, fundamental class income would presumably fall to zero no matter what system of relative prices was in force. Subsumed classes, on the other hand, share in the total surplus as a matter of structural rather than strategic necessity.

Note that while all owners of NPMP are subsumed, not all subsumed classes need own nonproduced resources. Petty-commodity producers, for example, do not have access to NPMP means of production yet nevertheless qualify as subsumed under the definition cited above. Petty-commodity producers may be conceived as users of alternative production processes which are not operated by capitalists since these methods fail, at prevailing prices and wages, to return an average rate of profit. Petty-commodity producers are subsumed in that their incomes depend not on their own strategic behavior but on the existing system of relative prices. By operating alternative low- or no-profit processes, petty-commodity producers are able to capture a portion of aggregate demand that would otherwise accrue to capitalists selling the same good.

Competitive forces cannot eliminate petty-commodity producers from absorbing a share of aggregate demand. If capitalists attempt to increase their market share by lowering prices, petty-commodity producers must follow suit since they have no other means by which to reproduce themselves. If aggressive price competition causes petty-commodity incomes to fall below subsistence, they may shift from one branch of production to another; but the existence of a reserve army employed by noncapitalist processes always reduces the appropriable surplus for capitalists for any level of aggregate demand. Petty-commodity producers therefore take a "cut" from the total surplus and consequently qualify as subsumed.

2.2 A Simplified Model

In this section we discuss the logical structure and functioning of the model; the details of the empirical specification for Mexico are taken up in the following section. Consider now an economy with n commodities the production of which requires land or other resources as part of their means of production; in addition, there are m commodities which require only produced means of production. Let $P_1 = (p_{iL})$ and $X_1 = (x_{iL})$, $(i = 1,2,...,n)$ be the prices and quantities of commodities which use NPMP; $P_2 = (p_{2L})$ and $X_2 = (x_{2L})$, $(i = 1,2,...m)$ are the prices and quantities of the remaining sectors of the economy. $A = (a_{ij})$, $(i,j =$

1,2,...,m+n) is the matrix of input-output coefficients which indicate the amount of good i used in the production of one unit of good j. $A = (A_{ij})$, (i,j = 1,2) is the partitioned matrix with subscripts 1 and 2 referring to commodities which use and do not use nonproduced means of production respectively. The vectors of intermediate demands, $XD_1 = (xd_{i1})$, (i = 1,2,...,n) and $XD_2 = (xd_{i2})$, (i = 1,2,...,m) can be written as:

(1) $$XD_i = A_{i1} X_1 + A_{i2} X_2 \qquad \text{for } i = 1,2.$$

Worker income, Y^w, is defined as:

(2) $$Y^w = w_1 L_1 X_1 + w_2 L_2 X_2$$

where L_1 and L_2 are direct labor per unit of product and w_1 and w_2 are the wage rates for the agricultural and nonagricultural sectors respectively. Capitalist income, Y^c is given by:

(3) $$Y^c = r[P_1 \; P_2 \;][K_{12} K_{22}]'DX$$

where the prime denotes a vector or matrix transpose. $K_{12} = (k_{ij})$, (i = 1,2,...,n), (j = 1,2,...,m) is a matrix of agricultural capital stock coefficients describing the amount of agricultural commodities (good i) required as a stock for the production of one unit of nonagricultural goods (good j). $K_{22} = (k_{ij})$, (i,j = 1,2,...,m) is the analogous matrix for nonagricultural stocks required for nonagricultural goods. $D = (d_i)$, (i = 1,2,...,m) is a diagonal matrix of exogenously give profit rate differentials, d_i, such that the rate of profit on the value of invested capital in the ith sector is:

(4) $$r_i = r\, d_i$$

Here r is the (equalized) base rate of profit.

The capital stock matrix is related to the input/output matrix by turnover times, t_{ij} such that:

(5) $a_{ij}\, t_{ij} = k_{ij}$ $(i,j = 1,2,\ldots,n+m)$

Subsumed class income, Y^{s}, can defined as:

(6) $Y^{s} = (P_i - w_i L_i)X_i$

Demand is here assumed to depend upon the distribution of income between wages, profits and subsumed income. For the present, assume that workers do not save and there are no taxes or imported consumption. Let $\theta_1^w = (\theta_{i1}^w)$, $(i = 1,2,\ldots,n)$ and $\theta_2^w = (\theta_{2i}^w)$, $(i = 1,2,\ldots,m)$ be vectors of workers' subsistence requirement such that $h = Y^w - [P_1 \;\; P_2\;]\,[\theta_1^w \;\; \theta_2^w\;]'$ can be interpreted as the moral-historical element in wages. $C_1^w = (c_{i1}^w)$ and $C_2^w = (c_{2i}^w)$ are the vectors of worker consumption for agricultural and nonagricultural goods: We then have:

(7) $C_i^w = \theta_i^w + M_i^w\, h \qquad i = 1, 2$

where $M_1^w = (m_{i1}^w/p_i)$, $(i = 1,2,\ldots,n)$ and $M_2^w = (m_{2i}/p_i)$, $(i = 1,2,\ldots,m)$ are the marginal propensities to consume out of moral-historical income deflated by the relevant price.

θ for capitalists and subsumed classes is interpreted as autonomous consumption where consumption is a linear function of expenditure, E:

(8) $E^i = (1-s^i)Y^i$ i = capitalist, subsumed

where s^i is the savings propensity for capitalists and the subsumed class. We can then write:

(9) $C_i^j = \theta_i^j + M_i^j E^j$ i = 1, 2 and j = capitalist, subsumed.

The effective demand equations can now be expressed as:

(10) $$X_i = \bar{X}D_i + C_i^w + C_i^c + C_i^s + I_i + Z_i \qquad i = 1, 2.$$

where Z_i is (given) exports net of competitive imports.

2.3 Marxian Closure

Given X_1, equations (1)-(10) determine P_1 and X_2 as a function of P_2. [6] To close the model, an equation for P_2 is required. For the Marxian closure, P_2 is determined by the Sraffian price of production equations:

$$P_2 = P_1 A_{12} + P_2 A_{22} + w_2 L_2 + r(P_1 K_{12} + P_2 K_{22})D$$

If, for simplicity, we assume that all turnover times of eq. (3) and profit rate differentials of eq. (4) are unity, the price determining equations can be written:

(11) $$P_2 = (1+r)(P_1 A_{12} + P_2 A_{22}) + w_2 L_2$$

Eqs. (11) are m equations in n+m+2 unknowns; if the wage rate w_2 is given, and the n prices P_1 are known, the model consisting of eqs. (10) and (11) still has one degree of freedom. To close the system, we must choose a numeraire. Let $Q = \{q_i\}$, $(i = 1,2,\ldots,m)$ be an arbitrary normalizing vector such that:

$$P_2 Q = 1$$

Eqs. (11) can then be written:

(12) $$(vP_1 A_{12} + w_2 L_2)(I - vA_{22})^{-1} Q - 1 = 0$$

in which $v = (1+r)$ for convenience.

Eq. (12) describes a wage-profit-terms-of-trade surface in m+2 dimensions which is the locus of possible outcomes of the struggle between fundamental classes and the associated transfers to subsumed classes. By the Perron-Frobenius theorems for nonnegative matrices, $(I-vA_{\alpha})^{-1}$ is strictly positive for v less than the inverse of the maximal eigenvalue of A [7]. An increase in any element of P must then bring about a fall in either the wage rate or the profit rate in order to continue to satisfy (12). Thus, not only is the wage-profit line always downward sloping for any numeraire, but also any wage-p_{α} or profit-p_{α} line is negatively inclined as well. These relationships are depicted in Figure 1 for n = 1.

Where the economy happens to reside on its wage-profit-tot surface depends upon the effective demand equations (10). Macroeconomic consistency requires that P_1, P_2 and X_2 must adjust until real savings, forthcoming at given savings propensities, is just sufficient to balance the given volume of real investment. As investment demand changes autonomously, the distribution of income shifts through movement in the terms of trade and outputs until the appropriate amount of forced savings is generated. [8]

The wage-profit-tot surface of Figure 1 characterizes the environment in which fundamental classes struggle over the distribution of income and the subsequent impact of this struggle on the income of subsumed classes. Only if the prices of commodities which employ nonproduced means of production remain constant, will the simple Sraffian inverse relation between wages and profits obtain. Indeed, if the "cut" of the surplus taken by subsumed classes can be somehow reduced, wages and profits could rise simultaneously. On the other hand, with subsumed classes, a higher rate of explotitation need not correspond to higher rate of profit.[9] Class conflict is a complex process in this model in that the terms are modified according to the share of the surplus absorbed by subsumed classes. The latter is determined by the level and composition of effective demand over which no class exercises complete control.

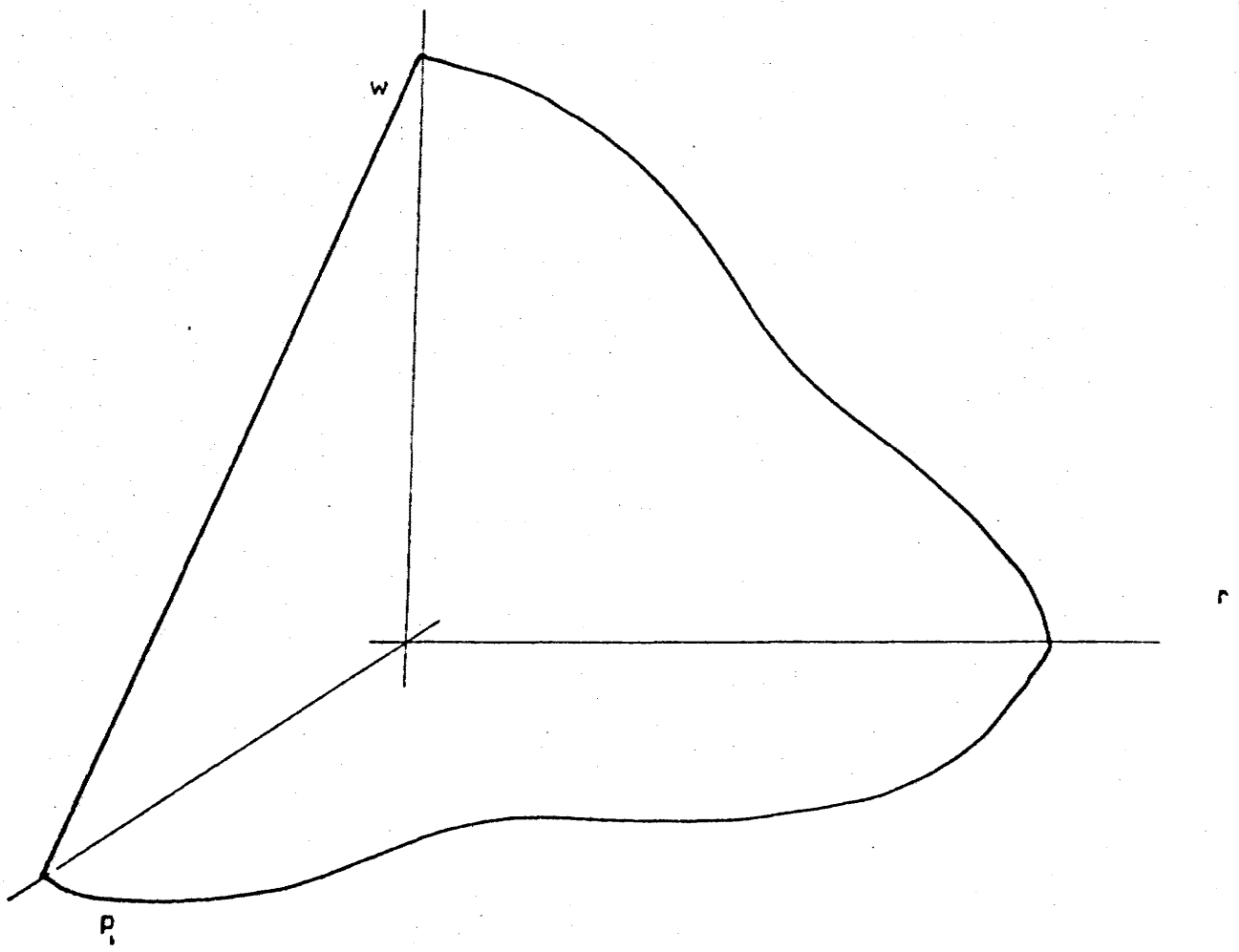

Figure 1: The Wage-Profit-Terms of Trade Surface

2.4 Keynesian Closure

In the Marxian price of production system, competition between capitalists is assumed to bring about an equalization of the rate of profit on the value of invested capital (suitably adjusted to reflect permanent profit rate differentials). If this assumption is suspended, the model may be closed by specifying a Keynes-Kalecki mark-up pricing rule in place of the Sraffian system of reproduction prices. Let $R = (r_i)$, (i = 1,2,...,m) be a diagonal matrix of given mark-ups on prime costs. The nonagricultural price equation for the Keynesian closure can then be expressed:

$$P_z = (P_1 A_{1z} + P_2 A_{2z} + w_z L_z)(I+R) \tag{13}$$

where I is an m-dimensional identity matrix. Given the wage rate and the mark-ups, eqs. (13) determine nonagricultural prices, P_z .

It is the portrait of class conflict which serves to distinguish the Keynesian from the Marxian variant of the model under discussion. From a comparison of eqs. (11) and (13), it is obvious that mark-up pricing allows capitalists to fully protect profits by passing along wage or agricultural commodity price increases. Movements in the profit rate are not constrained to any particular wage-profit-tot surface; indeed, no such surface is even defined under the Keynesian mark-up pricing closure. Prices of production ,on the other hand, describe an economy in which capitalists are not in full control. The bourgeoisie must not only struggle with workers but also pay off owners of nonproduced means of production along a wage-profit-tot surface.

3. Mexico

3.1 Sectors

The model estimated for Mexico is a slightly more elaborate version of the model discussed in the previous section; in this section, we consider the specification of the empirical model in more detail.

ıble 1 lists the sectors and social classes employed in the model. Output in sectors one and two is limited
' the existence of noproduced means of production while output in the remaining sectors adjusts to the level
effective demand. Corn and beans is disaggregated from other agriculture in order to consider the impact
a guarantee price introduced by Mexican government under the Lopez-Portillo regime. Petroleum and ferti-
:er are the two major state-owned enterprises and profits in these sectors accrue to the state in the form
general revenue. Petroleum is shown separately in order to isolate the effect of the large internal oil
ice subsidy. Processed foods is broken out of industry to study the impact of various scenarios on the
ice and consumption of food. Services aggregates business, personal and government services while commerce
:ludes wholesale and retail trade. Input-output data for these sectors was aggregated from the 45-sector
exican matrix for 1975. A reference social accounting matrix is shown as Table 1 of Appendix 2.

! Classes and Incomes

The classes distinguished in this study are also shown in Table 1. Fundamental classes include
·icultural workers, urban workers and urban capitalists; the remaining classes, the agrarian bourgeoisie,
rchant capitalists, and urban marginals are considered subsumed for reasons discussed in the continuation.
Consider first the case of the agrarian bourgeoisie. In Mexico, as in most countries, the agrarian
ırgeoisie consists of an amalgam of agricultural capitalists and landlords. To the extent that they hire and
)loit labor-power, agrarian capitalists need not be distinguished from urban capitalists. Landlords, on the
ıer hand, are clearly subsumed in that as owners of NPMP, their incomes are determined entirely by the
ıtem of relative prices resulting from fundamental class struggle. While it is theoretically possible to
)arate landlords and agricultural capitalists, it is a data-intensive procedure; in what follows, we assert
t the preponderance of agrarian bourgeois income derive not from extraction but from a transfer of surplus
ected by their control over NPMP. [10]
Campesinos stand in the same relation to the agrarian bourgoisie as petty-commodity producers do to urban
italists in that they operate processes which do not return the average rate of profit when wage costs and

Table 1

sectors	classes
1. corn and beans	1. campesinos
2. other agriculture	2. agricultural workers
3. petroleum	3. agrarian bourgeoisie
4. fertilizer	4. urban workers
5. processed foods	5. urban capitalists
6. industry	6. merchant capitalists
7. services	7. urban marginals
8. commerce	

Table 2

Terms of Trade and the Urban Profit Rate

		10% ΔW		10% Δl		GP = 1.15	
	base	Keynes	Marx	Keynes	Marx	Keynes	Marx
urban rate of profit	18.20	18.40	15.93	18.15	15.75	18.21	17.95
terms of trade	1.00	0.978	1.193	1.235	1.433	1.031	1.051
rate of output growth	-	-.005	0.017	0.041	0.053	0.003	0.005
gnp deflator	1.00	1.058	1.000	1.042	0.986	1.006	1.000

source: Appendix 2

land rent are imputed at their average, economy-wide values. Campesinos are here assumed to neither hire labor, nor hire themselves out as agricultural workers and, thus, do not produce or extract surplus. The first part of the definition of a subsumed class is therefore satisfied. Real income accruing to this class is clearly governed by terms of trade over which campesinos have no control. Like petty-commodity producers, campesinos absorb a share of aggregate demand that would otherwise by satisfied by the agrarian capitalists and thus it can be said that they sustain themselves by way of transfers from fundamental classes. Accordingly, campesinos qualify as a subsumed by the definition cited above.[11]

With respect to the empirical formulation, campesinos are assigned a fixed proportion of total value added in the agricultural sectors. From the remaining value added, the income of the rural proletariat is subtracted leaving the income of the agrarian bourgeoisie as a residual.

Merchant capitalists, like the agrarian bourgeoisie, are a mixture of fundamental and subsumed elements. Resnick and Wolff believe merchants to be subsumed on the grounds that their most important role is to facilitate the realization of surplus value (Resnick and Wolff 1982:4). If the role of merchant capitalists were limited to providing money capital in order to speed up realization, there could be no quarrel with with his contention. On the other hand, it is quite clear that merchant capitalists perform services of storage, ransportation, information gathering, etc., and, furthermore, these services are provided by workers hired nd thus exploited by merchant capitalists.[12] Why then are merchant capitalists classified as subsumed? Merchant capitalists are here conceived as owners of NPMP, specifically their spacial location from which they rovide their services. Capitalists themselves could market their own output, but presumably at a higher cost han is incurred by merchant capitalists, owing to spacial economies. The cost differential appears as a nt, that is, a deduction from the total surplus, which is appropriated by merchant capitalists.

As in the case of the agrarian bourgeoisie, merchant rents can be separated from the profits of merchant pitalists but only at the cost of substantial empirical complexity. Consequently, we allow merchant pitalists to claim a residual after commercial workers have been paid and adjustments for urban marginals ee next paragraph) have been made. But unlike the the agricultural sectors, the price of commercial rvices is <u>not</u> allowed to fluctuate with demand. The output of the commerce sector is not in any meaningful nse limited by the existence of NPMP as in the case of agriculture. For this reason the price of commerce

is determined in the Keynesian closure by multiplying costs of production by the base mark-up. For the Marxian closure, however, the commercial sector is not assumed to participate in the equalization of the rate of profit due to the existence of NPMP. The price of commerce is held at unity to reflect the fact that commercial activities constitute, at least in part, a deduction from the aggregate surplus.

Urban marginals are also considered a subsumed class in that, as petty-commodity producers who absorb aggregate demand which would otherwise be satisfied by capitalists, they are analogous to campesinos but have no access to NPMP. Urban marginal incomes depend primarily upon the system of relative prices, which they regard as given, rather than strategic class conflict. Empirically, urban marginals receive a fixed proportion of total value added in food processing, industry services and commerce. The technology of the input-output matrix is assumed to represent a weighted average of capitalist and urban marginal production processes.

4. Results

In this section we examine some empirical results for both the Marxian and Keynesian closures under three different scenarios of strategic class behavior: (1) an increase in urban wages by 10%; (2) an increase in real investment by 10%; and (3) the introduction of a guarantee price for corn and beans of 1.15. For each simultation, we investigate effects upon the average rate of profit for nonagricultural sectors and the terms of trade, defined as the ratio of the agricultural to nonagricultural deflators and the rate of growth of sectors 3 through 8.[13] We shall also be concerned with changes in the distribution of income across social classes and the associated structure of private, government and foreign savings. Full Social Accounting Matrices (SAMs) for each of the simulations are shown in Appendix 2.

The numeraire for the Marxian closure is chosen such that the gross value of production is equal to the gross value of production in the base SAM. Base profit rate differentials are also maintained so that changes in the surplus are distributed in proportion to existing differentials. The net effect of this choice of numeraire and profit rate differentials is that the base SAM is the same for both Keynesian and Marxian closures. Investment is fixed in real terms for both closures.[14]

In the Marxian regime the price of oil is held constant since it is clearly regarded by the Mexican

government as a policy variable. It is, moreover, unreasonable to assume that the petroleum sector participates in the equalization of the rate of profit (even after profit rate differentials are taken into account). The price of fertilizer, on the other hand, is allowed to vary according to the closure employed. In the Marxian closure, the price of commerce is held constant to reflect the subsumed status of merchant capitalists while in the Keynesian closure, merchant capitalists are allowed to pass along cost increases in the same way as do other nonagricultural sectors. [15]

4.1 Wages, Profits and the Terms of Trade

Consider first an increase in nonagricultural wages by 10%. The first row of Table 2 shows the change in the average profit rate for the nonagricultural sectors (3-8). For the Marxian closure, the rate of profit falls by 2.27 percentage points relative to the base. Urban workers' share in income rises from 35.9 to 40% while capitalists' share falls by more than 6 percentage points. (See Table 3) In clear contrast is the Keynesian closure for which the average urban profit rate rises by 0.2 percentage points with an increase in urban wages. Urban workers', urban marginals' and merchants' share rises slightly at the expense of agricultural workers whose incomes are fixed nominally. Capitalists' income, on the other hand, is fully protected by mark-up pricing.

Observe that income shares reported in Table 3 refer to classes as a whole. In addition to the contraction and subsequent loss in employment, real wages per worker are lower in the Keynesian than in the Marxian closure. From the last row of Table 2, it is apparent that real wages per worker rose by only 4.2% in the Keynesian v. 10% in the Marxian closure.

The wage-induced inflation in nonagricultural sectors causes the terms of trade to turn against agriculture in the Keynesian closure even though real demand for agricultural goods increases. (See Table 4). The terms of trade turn in favor of agriculture in the Marxian closure, however, since a large redistribution

of income from capitalists to workers and peasants drives up the relative price of "wage" v. "luxury" goods. Moreover, the existence of the numeraire prevents capitalists from transferring the burden of urban class conflict to subsumed agricultural classes. Indeed, the precipitous decline in the rate of profit in the Marxian variant is due in part to the improvement in the terms of trade as higher wages cause the economy to move in the northwest direction on the surface of Figure 1. The agrarian bourgeoisie and merchant capitalists also benefit from the improvement in the terms of trade and increased volume of retail sales respectively. The income share of subsumed urban marginals, however, depends primarily upon the terms of trade and thus rises slightly under the Keynesian and falls under the Marxian closure.

In the Keynesian closure, the rise in profits initially causes aggregate savings to exceed investment. Real savings is then reduced by a combination of the deterioration in the terms of trade, which reduces agricultural savings, and a contraction in nonagricultural output. In the Marxian closure, on the other hand, the fall in the profit rate is compensated by an improvement in the terms of trade as well as an expansion in output. An increase in wages apparently reduces employment in the Keynesian case (!), but by squeezing savings, causes employment to rise if capitalists cannot raise prices. Total private savings in the Keynesian closure (see Table 5) rises relative to government and foreign savings owing primarily to the contraction in output and lower imports and the decline in the share of campesinos and agricultural workers who save nothing. Government savings remains constant since the contraction in output is just balanced by the change in the tax base brought about through the redistribution of income.

What is most striking is the failure of nominal wage increases as an urban working-class strategy since the net income transfer is only among segments of the working class itself. If capitalists are able to pass along rising wages in the form of higher prices, urban class conflict is effectively displaced to agriculture. High urban wages in the Keynesian closure causes the terms of trade to deteriorate, shifting surplus from agriculture to urban sectors. Real consumption of campesinos falls with the terms of trade (see Table 4) and the agricultural bourgeoisie and improves its standard of living at the expense of agricultural workers whose

Table 3

Income Shares

		10% ΔW		10% ΔI		GP = 1.15	
class	base	Keynes	Marx	Keynes	Marx	Keynes	Marx
urban workers	35.91	35.99	40.01	34.51	38.52	35.61	36.05
ag workers	3.08	2.84	3.10	2.83	3.13	3.04	3.07
capitalists	31.95	31.98	25.42	31.42	22.94	31.79	30.85
ag bourg	4.90	4.95	6.62	6.81	8.30	5.26	5.43
campesinos	4.04	3.97	4.82	5.02	5.80	4.35	4.43
merchants	14.46	14.59	14.60	13.93	15.98	14.35	14.58
urban marg	5.64	5.68	5.48	5.49	5.33	5.61	5.59

source: Appendix 2

Table 4

Consumption in Real Terms
(Mark-up Prices with 10% Increase in Nonagricultural Wages)

	Camp	Ag Wrks	Ag Bour	Urb Wkrs	Urb Caps	Merch	Urb Marg	Tot Con
1. Corn and Beans	3756	1720	265	2055	1316	640	2242	11995
2. Other Agriculture	3769	2100	2101	17699	11023	5515	5104	47309
3. Petroleum	379	169	1051	3759	3504	1397	351	10609
4. Fertilizer	0	0	0	0	0	0	0	0
5. Food Processing	11278	7751	6713	64929	39466	20309	17690	168137
6. Industry	6491	3830	4730	49693	30487	13324	7874	116429
7. Services	7183	7611	10369	99496	75788	32702	13269	246419
8. Commerce	7946	5947	6613	64067	44011	19972	11829	160374

source: Table 2 of Appendix 2

income is nominally fixed.

If capitalists cannot protect themselves through inflation, however, a strategy to increase urban wages is much more successful. A worker-peasant alliance organized around a demand for price controls would be effective in capturing a larger share of income for poorer classes. Nominal wage increases would then translate into real wage increases, turning the terms of trade in favor of agriculture and thereby sharing the gains with peasants and agricultural workers. Of course the incomes of the agricultural bourgeoisie would rise along with the terms of trade; but this surplus could be taxed and recycled as insurance against a "capital strike" by urban capital. Note that lower nonagricultural prices would reduce the real consumption of urban marginals; (see Table 4) but as output and employment expanded in urban sectors, part of this reserve army of urban marginals could be absorbed by the working class.

4.2 Investment, Profits and the Terms of Trade

We next consider whether an increase in the level of real investment by 10% might bring about similar changes in the distribution of income, savings and level of output. Augmenting the level of real investment in either closure requires that nonagricultural output must expand and/or the terms of trade must turn in favor of the agricultural sectors in order to restore macroeconomic equilibrium. Table 2 confirms that this occurs under both closures. But while in the Keynesian case increases in agricultural input prices are passed along in the form of higher urban prices, improved agricultural terms of trade lowers the urban profit rate in the Marxian closure. In terms of Figure 1, an increase in real investment moves the economy in the r-p plane toward the p axis. A lower profit rate implies that the output of nonagricultural sectors must show a higher rate of increase and the terms of trade must move more favorably to agriculture in a Marxian v. Keynesian regime.

In the Keynesian closure, a real expansion in investment forces a redistribution of income which is similar to the first scenario of increasing nonagricultural wages. Incomes of the urban working class rise through higher employment and the rise in demand causes the terms of trade to improve. Capitalists' ability to pass along higher commodity prices implies that urban workers gain again at the expense of agricultural workers. The improvement in the terms of trade shifts income to campesinos and the agrarian bourgeoisie but urban marginals are worse off. Merchant capital also suffers, largely through changes in the structure of relative prices.

Table 3 reveals the familiar pattern of "forced savings" brought about by an increase in investment demand under the Keynesian regime. With the exception of the campesinos, the share of all low-income, low saving classes declines as income is shifted to classes capable of financing the rise in real investment. But observe that while urban workers' share deteriorates in the Keynesian closure, urban workers are actually better off under the Marxian closure in terms of share, employment and real wages per worker. The forced savings which does occur is through the effect of the terms of trade on agrarian bourgeois incomes, tax revenues and the expansion of noncompetitive imports. (see Table 5). Capitalists' share falls precipitously under the Marxian system and this is responsible for the rapid expansion in output and employment and the improvement in the terms of trade. The agricultural sector captures a large share of the total surplus in this scenario; agricultural workers' incomes rise and peasant and agrarian bourgeois improve, with respect to the Keynesian closure, due to favorable terms of trade.

Should workers be content to demand of the state that higher rates of real investment be undertaken rather than struggle for wage increases? It is obvious that if employment is the principal objective, demand stimulus will improve workers' real position more effectively than bargaining for higher wages. Moreover, rapid growth tends to redistribute income more equally between the rural and urban proletariat, especially if inflation can be controlled. Of course the agricultural bourgeoisie reaps huge benefits from the shift in the terms of trade but this surplus can either be taxed or reinvested, possibly to expand exports and reduce the level of foreign dependence. Note that since higher levels of investment cause the rate of profit to fall and

Table 5

Distribution of Savings (%)

		10% ΔW		10% Δl		GP = 1.15	
class	base	Keynes	Marx	Keynes	Marx	Keynes	Marx
cap/merch	.578	.584	.508	.547	.465	.580	.571
ag bourg	.061	.062	.084	.082	.099	.066	.068
workers	.184	.186	.209	.173	.190	.184	.186
total private	.823	.833	.800	.801	.754	.831	.826
government	.061	.061	.079	.078	.112	.054	.057
foreign	.115	.106	.121	.121	.134	.115	.117

source: Appendix 2 (percentages may not sum to one due to rounding.)

subsumed incomes to rise, one might then expect lower rates of accumulation in following periods when capitalists cannot defend themselves through inflation and/or subsumed classes controlling NPMP are prominent. Apparently, a working class strategy which relies on demand management as a mechanism to appropriate a larger share of the surplus will require substantial state participation. Not only must prices be controlled to deflect forced savings, but given the disincentive to invest in industry, the state must have the political power to tax the agrarian bourgoisie in order to maintain the rate of accumulation.

4.3 Direct State Intervention

The lesson of the previous two scenarios is that an expansion in aggregate demand will improve terms of trade and reduce urban unemployment. An increase in the foreign deficit, however, appears to unavoidable. Foreign borrowing can be politically costly and in a country with more that a third of its labor force in agriculture, a secular increase in food imports is difficult to justify. Under the Lopez-Portillo regime, a comprehensive system of agricultural price supports, credit, fertilizer and other input subsidies was introduced by the Sistema Alimentario Mexicano. The objectives of these policies were to first raise yields for corn and beans on peasant plots, reduce food imports and to improve the rural distribution of income.

This strategy undertaken on behalf of subsumed peasant producers is similar in effect to stimulating aggregate demand through an expansion in investment. The scenario is expansionary in both closures, but again, the rate of profit moves in opposite directions for the Keynesian vs. Marxian variants. Note that as in the case of a change in the level of investment, urban workers' share falls under the Keynesian and rises with the Marxian closure. In both cases, the guarantee price imoroves the terms of trade and is expansionary but the impact is greater if inflation can be contained. As a class strategy, the guarantee price is successful in redistributing income toward the peasantry; but as in the first scenario, the Keynesian closure ensures that the transfer will be between segments of the working class inasmuch as capitalists are able to maintain their share. Real wages per worker fall for both urban and agricultural workers while worker incomes in the Marxian system remain intact.

As purchasing power is shifted from the government directly to the agrarian bourgeoisie and campesinos, government savings predictably falls for both closures. (See Table 5) Private savings rise while foreign savings remains approximately constant. This contrasts with the other two scenarios in which government savings rises under both closures. As in all scenarios, the Marxian closure gives rise to higher foreign savings due to its more expansionary character.

5. Conclusions

The model presented in this paper is nonneoclassical in the sense that class conflict rather than marginal productivities, factor endowments, or what have you, determines the distribution of income. In both closures the levels of investment and money wages are taken as historically given data rather than attempting to (falsely) attribute their determination to parameters of an essentially static model. The Keynes-Kalecki variant tends to limit the scope of class conflict to a struggle between fundamental and subsumed classes, while the Marxian formulation allows a more complex redistribution of income to follow parametric changes in the model. As we have seen, there are substantial differences the qualitative properties of the model depending upon which approach is adopted.

The difference in properties of the two closures hinges on the ability of capitalists to pass along cost increases initiated by workers or a change in the terms of trade caused by an expansion in effective demand for agriculture. In the Keynesian closure, price movements cause workers to release more surplus than under the Marxian system. The adjustment in output and the terms of trade needed to recoup total savings is therefore less violent under mark-up pricing than in the Marxian closure. The choice of closure is obviously not arbitrary; it must reflect the historical reality of the economy for which the model is constructed. On the other hand, there are some clear policy implications which may be drawn from the comparison of the two closures. If the ability of capitalists to protect their incomes through inflation can be restrained, the government can reduce unemployment by stimulating aggregate demand, either directly or through subsidy programs and price supports. Increasing wages would then expand employment and improve the terms of trade for agriculture. If price controls are politically infeasible, however, there is much less scope for progressive

overnment intervention. Industrial wage increases will be accompanied by a reduction in employment in ndustry, terms-of-trade induced stagnation in agriculture and inflation. Stimulating effective demand will educe unemployment and improve terms of trade but at the cost of inflation, eventual devaluation and possible oss of political autonomy.

Notes

. The literature on computable general equilibrium models is burgeoning; See Taylor (1980), Dervis et al. 1982), Taylor et al. (1980), Adelman and Robinson (1977), Taylor and Lysy (1979) and Waelbrock (1982). For analytical approaches to Marxian economic theory see Roemer (1981), Roemer (1982), Morishima (1973) and Brody (1960). See also Taylor (1982).

. The word "closure" may be somewhat misleading given its prevalence in recent literature. Sen (1963) usefully distinguishes Keynesian, Neoclassical, Cambridge and Johansen "closures" for a simple system of national income accounting identities. Generically, "closure" refers to the equality of independent equations and unknowns and it is this more prosaic usage we employ here.

. By "surplus," we mean a heterogeneous vector of commodities; "surplus-value" is then the inner product of some vector of exchange ratios with the vector of surpluses while "surplus labor" is the product of the labor coefficients with the vector of surpluses. The use of the term "surplus-value" therefore does not imply that it is necessarily denominated in terms of embodied labor times. See Steedman (1977) for evidence that none of Marx's crucial insights depends upon the labor theory of value.

. See Gibson and McLeod (1981), Gibson and McLeod (1982), Gibson and Esfahani (1981), Montani (1975) and Kurz (1978) for details of the theory of nonproduced means of production.

. See Pasinetti (1977), Chapter 5.

. One could also conceive of a system of supply response equations to determine X, but no attempt to extend the model in this direction is made here.

. See Pasinetti (1977), appendix.

. Note that the level of real wages in terms of the numeraire is held constant for a given money wages. But as investment increases, the terms of trade turn in favor of agricultural sectors which causes the real wage in terms of these commodities to fall.

. More formally, let $P = [P_1\ P_2]$; $X = [X_1\ X_2]'$; $C = [\tilde{C_1}\ \tilde{C_2}]$ and $XD = [XD_1\ XD_2]$. The price-denominated rate of exploitation, e, can then be written as:

$$e = \frac{PX-PXD-PC}{PC}.$$

10. See McLeod (1983), for an empirical attempt to separate rent and profit in a Sraffian model.

11. In addition to their role as petty-commodity producers, campesinos also own nonproduced means of production the return on which may be positive, negative or zero when computed at the going profit and wage rate. If the rental value is greater than or equal to the rent obtained by owners of land of comparable quality, it is no longer possible to refer to this class as campesinos, in that they are indistinguishable from the agrarian bourgeoisie. Land ownership, of course, compounds rather contradicts campesinos' subsumed status.

12. As purely financial intermediaries, merchant capitalists take a cut of the surplus in the form of interest rather than profits. There will be no independent role for the rate of interest in the model considered below.

13. The 1975 SAM is used as the base to compute all deflators. All data discussed in this section is drawn from the eight social accounting matrices shown in Appendix 2. For the full specification of the model and data sources employed see Appendix 1.

14. Fixing investment in nominal terms is more contractionary in the Keynesian closure but the effect on the Marxian closure depends upon the numeraire and changes in the structure of relative prices.

15. With the exception of fixing the price of oil at unity, the assumptions discussed in this paragraph do not affect the qualitative nature of the results discussed below.

B1

References

Adelman, I. and S. Robinson, 1977, Income Distribution Policies in Developing Countries: A Case Study of Korea. Stanford: Stanford University Press.

Bowles, S. and H. Gintis, 1982, "On the Class-Exploitation-Domination Reduction," Politics and Society.

Dervis, K., J. de Melo and S. Robinson, 1982, Planning Models and Development Policy. London: Cambridge University Press.

Brody, A., 1960, Proportions, Prices and Planning. Amsterdam: North-Holland.

Chichilnisky, G. and L. Taylor, 1980, "Agriculture and the Rest of the Economy: Macro Connections and Policy Restraints," American Journal of Agricultural Economics 62, 303-309.

Elster, J., 1982, "Marxism, Functionalism and Game Theory: A Plea for Methodological Individualism."

Johansen, L., 1960, A Multi-Sectoral Study of Economic Growth. Amsterdam: North-Holland.

Gibson, B. and D. McLeod, 1981, "Non-produced Means of Production in Sraffa's System: Basics, Nonbasics, and Quasibasics," Cambridge Journal of Economics (forthcoming).

Gibson, B. and H. Esfahani, 1982, "Nonproduced Means of Production: Fundamentalists v. Sraffians," Review of Radical Political Economics (forthcoming).

Gibson, B., N. Lustig and L. Taylor, 1982, "Impactors distributivos de las politicas del Sistema Alimentario Mexicano en un marco de equilibrio general." Mexico, D.F.: Subdireccion de Investigacion Economica del Banco de Mexico, S.A.

Kurz, H., 1978, "Rent Theory in a Multisectoral Model," Oxford Economic Papers 30.

Lustig, N., 1982, "Politicas de precios y subsidios del Sistema Alimentario Mexicano y distribucion del Ingreso," Mexico, D.F.: SINE/SAM, Segundo Reporte.

McLeod, D., 1983, "Price Policy, Profits and Land Rents in Flex-Fix Price Model of the U.S. Economy," Ph.D. Dissertation, Depeartment of Agricultural and Resource Economics, University of California, Berkeley.

Morishima, M., 1973, Marx's Economics: A Dual Theory of Value and Growth. London: Cambridge University Press.

Pontani, G., 1975, "Scarce Natural Resources and Income Distribution," Metroeconomica 27, 68-101.

Pasinetti, L., 1977, Lectures on the Theory of Production. New York: Columbia University Press.

Resnick S. and R. Wolff, 1982, "Classes in Marxian Theory," The Review of Radical Political Economics 13:4,1-18.

Roemer, J., 1982, A General Theory of Exploitation and Class. Cambridge Mass: Harvard University Press.

_____, 1981, Analytical Foundations of Marxian Economic Theory., London: Cambridge University Press.

Secretaria de Programacion y Presupuesto, 1981a, Sistema de Cuentas Nacionales, Vols. 1,7. Mexico, D.F.: Coordinacion General del Sistema Nacional de Informacion.

----------, 1981b, Encuesta Nacional de Ingresos y Gastos e los Hogares: 1977 Mexico, D.F.: Coordinacion General del Sistema Nacional de Informacion.

en, A., 1963, "Neo-Classical and Neo-Keynesian Theories of Distribution," Economic Record 39, 53-64.

raffa, P., 1960, Production of Commodities by Means of Commodities. London: Cambridge University Press.

teedman, I., 1977, Marx After Sraffa. London: New Left Books.

aylor, L., 1980, Macromodels for Developing Countries. New York: McGraw-Hill.

---------, 1983, Structuralist Macroeconomics New York: Basic Books (forthcoming).

aylor, L., et al. ,1980, Models of Growth and Distribution for Brazil. London: Oxford University Press.

aylor, L. and F. Lysy, 1979, "Vanishing Income Redistributions: Keynesian Clues about Model Surprises in the ıort Run," Journal of Development Economics 6, 11-29.

Appendix 1

1.1 Model Specification

Variables

p	price
x	output
r	profit rate/mark-up
p′	retail price
E	expenditure
Y	income
c	consumption
s_g	government savings
s_f	foreign savings

Parameters

t	direct tax rate
a	input/output coef.
w	domestic wage
l	labor coefficient
I	investment
ds	change in stocks
g	government expenditure
z	exports
m	competitive imports
θ	subsistence consumption
M	marginal prop. to consume
p*	guarantee price
s	savings propensity
u	proportion of value added accruing to campesinos
v	proportion of value added accruing to urban marginals
p^e	international price for exports
q	direct tax rate
b	commercialization margins
e	exchange rate
w_g	government wages
m_c	consumption imports (non comp)
m_I	investment imports (non comp)
m_g	goverment imports (non comp)
k	capital stock coefficients (including profit rate differentials)

Equations

Marxian

$$p_j = (1+t_j)\left(\sum_{i=1}^{9} p_i a_{ij} + w_j l_j + r \sum_{i=1}^{9} p_i k_{ij}\right) \qquad j=4,5,\ldots,8$$

Keynesian

$$p_j = (1+t_j)(1+r_j)\left(\sum_{i=1}^{9} p_i a_{ij} + w_j l_j\right) \qquad j=3,4,\ldots,8$$

$$x_i = \sum_{j=1}^{8} a_{ij} x_j + c_i + I_i + ds_i + g_i + z_i - m_i \qquad i=1,2,\ldots,8$$

$$c_i = \sum_{j=1}^{7} [\theta_{ij} + M_{ij} / p_i'(E_j - \sum_{i=1}^{7} p_i' \theta_{ij})] \qquad i=1,2,\ldots,7$$

$$E_i = (1-s_i)(1-q_i)Y_i \qquad i=1,2,\ldots,7$$

$$Y_1 = \sum_{j=1}^{2} (p_j - \sum_{i=1}^{9} p_i a_{ij}) x_j \; u_j$$

(p* = p_e: guarantee price not in effect)

$$Y_2 = \sum_{i=1}^{2} w_i l_i x_i$$

$$Y_3 = \sum_{j=1}^{k} [(1-u_j)(p_j - \sum_{i=1}^{9} p_i a_{ij}) - w_j l_j] x_j$$

$$Y_4 = \sum_{i=1}^{3} w_i l_i x_i (1-v_i)$$

Marxian

$$Y_5 = \sum_{j=5}^{7} r\left(\sum_{i=1}^{9} p_i k_{ij}\right) x_j \ (1-v_j)$$

Keynesian

$$Y_5 = \sum_{j=5}^{7} r_j\left(\sum_{i=1}^{9} p_i a_{ij} + w_j l_j\right) x_j \ (1-v_j)$$

Marxian

$$Y_6 = \left(1 - \sum_{i=1}^{9} p_i a_{i8} - w_8 l_8\right) x_8 \ (1-v_8)$$

Keynesian

$$Y_6 = r\left(\sum_{i=1}^{9} p_i a_{i8} + w_8 l_8\right) x_8 \ (1-v_8)$$

$$Y_7 = \sum_{i=5}^{8} [v_i / (1-v_i)] \ Y_i$$

$$p_i' = p_i + p_8 b_i \qquad i=1,2,\ldots,7$$

$$c_{8i} = \sum_{j=1}^{7} b_j c_{ji} \qquad i=1,2,\ldots,7$$

Marxian

$$s_4 = \sum_{j=5}^{8} t_j \left(\sum_{i=1}^{9} p_i a_{ij} + w_j l_j + r \sum_{i=1}^{9} p_i k_{ij}\right) x_j + r \sum_{i=1}^{9} p_i k_{i4} x_4 + \left(1 - \sum_{i=1}^{9} p_i a_{i3} - w_3 l_3\right) x_3 + \sum_{i=1}^{7} q_i Y_i - \left[\sum_{i=1}^{8} (p_i - ep_i^{\circ}) z_i + (p^* - p_1) x_1 + \sum_{i=1}^{8} g_i + w_9 + m_9\right]$$

Keynesian

$$s_4 = \sum_{j=5}^{8} t_j (1+r_j)\left(\sum_{i=1}^{9} p_i a_{ij} + w_j l_j\right) x_j + \sum_{j=3}^{4} r_j \left(\sum_{i=1}^{9} p_i a_{ij} + w_j l_j\right) x_j + \sum_{i=1}^{7} q_i Y_i - \left[\sum_{i=1}^{8} (p_i - ep_i^{\circ}) z_i + (p^* - p_1) x_1 + \sum_{i=1}^{8} g_i + w_9 + m_9\right]$$

$$s_F = \sum_{i=1}^{8} p_9 a_{9i} x_i + m_2 + m_I + m_9 - \sum_{i=1}^{8} p_i^{\circ} z_i$$

1.2 Data Sources:

The input/output matrix is an agregation of 72-sector matrix for 1975 in Secretaria de Progamacion y Presupuesto, 1981a. The disaggregation of agriculture into corn and beans and other agriculture is taken from the CHAC model and was compiled by Maria Bassoco of the Division of Macroeconomic Analysis of the Systema Alimentario Mexicano. Dr. Horacio Santamaria of the Coordinacion del Sistema Nacional de Informacion (SPP) assisted in the disaggregation. The consumption functions were estimated using an extended linear expenditure system using data from a 1977 budget survey conducted by Secretaria de Programacion y Presupuesto, 1981b. The authors had access to the orginal computer tapes of this study from which the class structure was determined. Direct tax rates were taken from Reyes-Heroles, 1980 as were the proportions of value added accruing to urban marginals. Capital stock coefficients were taken from Banco de Mexico 1978. A detailed description of sources and methods can be found in Lustig, 1982.

Appendix 2

TABLE 1: BASE SOCIAL ACCOUNTING MATRIX
MILLIONS OF 1975 PESOS

MEXICO	CORN	OTHER AG	PETRO	FERT	FOOD	INDUSTRY	SERVICES	COMMERCE	TOTAL	CAMPESINO AG WRKS	AG BOUR	URB WRKS	URB CAPS	MERCH	URB MARG	TOT CON	GOVT	EXPORTS	INVEST	INVEN	TOT INJ	TOT FND	TOTAL
1. CORN AND BEANS	667	1760	0	0	5555	0	0	0	7982	3762	1731	262	2054	1316	641	2217	11983	0	7	0	3123	3123	15113	23095
2. OTHER AGRICULTURE	0	11159	2	6	20431	7658	593	0	39789	3793	2290	2047	17595	10974	5430	5042	47170	140	3192	2689	5310	5949	56501	148290
3. PETROLEUM	71	2656	21494	817	3128	13494	10073	3144	54888	406	260	1051	3754	2506	1377	341	10694	1718	5785	0	570	570	18766	73554
4. FERTILIZER	958	3138	0	24	0	109	7	0	4228	0	0	0	0	0	0	0	0	14	399	1	225	226	638	4866
5. FOOD PROCESSING	0	11363	7	6	32433	2734	889	0	47431	11472	8554	5667	64715	39354	20131	17531	169466	177	7379	196	2630	2826	172847	226279
6. INDUSTRY	166	6667	3437	1071	13131	171011	28214	5462	229158	6659	4231	4692	49057	30638	13196	7822	116993	5122	17359	173042	9837	182899	322372	551530
7. SERVICES	542	1595	4628	257	9120	33940	56294	21880	128257	7352	8050	10371	99839	76272	32693	13250	247867	64390	2106	5013	0	5013	319366	447623
8. COMMERCE	462	5701	1032	339	10378	42473	11265	1973	73622	8097	6436	6583	64137	44160	19827	11755	161046	971	2555	30673	0	30673	195245	268867
TOTAL	2857	44040	30510	2520	144175	271418	107275	32459	635254	41539	31593	31674	301891	206220	93343	57958	764217	72522	38780	211634	21694	233329	1106848	1744102
VALUE ADDED BY CLASS																								
1. CAMPESINOS	14056	27147							41204															41204
2. AG WORKERS	4280	27057							31338															31338
3. AG BOURGEOISIE	1561	48427							49989															49989
4. URB WORKERS			13678	645	19034	113493	134971	43644	325466								40264							365730
5. URB CAPITALISTS					40910	110458	174052		325460															325460
6. MERCHANT CAPITAL								147317	147317															147317
7. URBAN MARGINALS					4832	14162	21503	16993	57490															57490
PRIVATE VALUE ADDED	19898	102632	31381	1541	64776	238153	330525	207954	978263								40264							1018528
SUBSIDIES	56	287	2760	78	347	5396	7649	5312	21845															
EXPORT SUBSIDY	0	0	0	0	0	0	0	0	0															
GUARANTEE PRICE SUB	0								0															
INDIRECT TAX	158	810	10648	23	10327	15731	13147	33765	84609															
SURPLUS PROFITS			17703	896					18599															
NET TAX	102	522	25591	840	9980	10375	5498	28453	81362	0	0	2784	18826	18125	8204	0	47939							129301
IMPORTS	237	1895	3775	860	7348	31584	4324	0	49223	-335	-255	-407	-2975	-2647	-1198	-468	-8284	536	16260	27286		27286		85020
SAVINGS										0	0	15937	47988	103762	46967	0	214655	15979	29680				26615	
TOTAL	23095	148290	73554	4866	226279	551530	447623	268867	1744102	41204	31338	49989	365730	325460	147317	57490	1018528	129301	85020			26615		
REAL OUTPUT	23095	148290	73554	4866	226279	551530	447623	268867																
PRICES	1	1	1	1	1	1	1	1																

TABLE 2: MARK-UP PRICES WITH AN INCREASE
IN NONAGRICULTURAL WAGES OF 10%

MEXICO	CORN	OTHER AG	PETRO	FERT	FOOD	INDUSTRY	SERVICES	COMMERCE	TOTAL	CAMPESINO AG WRKS	AG BOUR	URB WKRS	URB CAPS	MERCH	URB MARG	TOT CON	GOVT	EXPORTS	INVEST	INVEN	TOT INV	TOT END	TOTAL
1. CORN AND BEANS	720	1900	0	0	5985	0	0	0	8605	4054	1857	286	2218	1420	691	2420	12947	0	7	0	3371	3371	16325	24930
2. OTHER AGRICULTURE	0	11837	2	6	74581	8108	563	0	95098	3998	2227	2228	18774	11692	5850	5414	50184	149	3192	2852	5633	8495	62010	157108
3. PETROLEUM	77	2875	23096	885	3380	14580	10860	3393	59146	410	183	1138	4070	3793	1512	380	11485	1859	5785	0	617	617	19746	78892
4. FERTILIZER	1016	3357	0	25	0	116	0	0	4523	0	0	0	0	0	0	0	0	15	399	1	240	242	655	5177
5. FOOD PROCESSING	0	12176	0	7	34694	2924	948	0	50756	12085	8304	7194	69577	42291	21763	18957	180172	190	7379	210	2818	3028	190769	241525
6. INDUSTRY	180	7225	3712	1160	14205	184969	30449	5901	247801	7034	4151	5126	53852	33039	14440	8533	126174	5550	17359	187548	10660	198208	347291	595092
7. SERVICES	593	1745	5048	282	9962	37066	61345	23868	139909	7860	8328	11346	108870	82929	35783	14519	269637	70446	2106	5485	0	5485	347674	487583
8. COMMERCE	507	6252	1128	372	11360	46483	12301	2157	80558	8713	6521	7251	70251	48249	21899	12970	175855	1065	2555	33634	0	33634	213108	293667
TOTAL	3092	47368	32994	2736	154168	294246	116474	35319	686397	44153	31573	34570	327612	223414	101938	63194	826454	79274	38780	229730	23339	253069	1197578	1883975
VALUE ADDED BY CLASS																								
1. CAMPESINOS	15182	28643							43824															43824
2. AG WORKERS	4281	27057							31338															31338
3. AG BOURGEOISIE	2029	52585							54613															54613
4. URB WORKERS			14998	710	20901	124603	147856	47861	356929								40264							397193
5. URB CAPITALISTS					43762	119518	189666		352946															352946
6. REPLACMT CAPITAL								161040	161040															161040
7. URBAN MARGINALS					5213	15435	23486	18590	62723															62723
PRIVATE VALUE ADDED	21491	108285	34101	1668	69876	259555	361008	227490	1063413								40264							1103677
SUBSIDIES	60	305	2978	83	372	5793	8335	5897	23733															
EXPORT SUBSIDY	1	194	477	28	528	1453	198	247	3126															
GUARANTEE PRICE SUB	0								0															
INDIRECT TAX	170	859	11490	24	11047	17015	14326	36910	91842															
GOVERNMENT PROFITS			19103	958					20061															
NET TAX	109	360	27137	871	10147	9769	5793	30857	85044	0	0	3041	20446	19656	8968	0	52112							137155
IMPORTS	237	1895	3762	860	7335	31523	4307	0	49120	-329	-235	-410	-2981	-2649	-1209	-471	-8284	536	16260	27286		27286		84916
SAVINGS										0	0	17412	52117	112525	51342	0	233396	17081	29877					280354
TOTAL	24930	157108	78892	5177	241525	595092	487582	293666	1883973	43824	31338	54613	397193	352946	161040	62723	1103677	137155	84916			280356		
REAL OUTPUT	23092	148289	73318	4865	225885	550471	445779	268039																
PRICES	1.07938	1.06078	1.08253	1.06981	1.07158	1.0837	1.09422	1.09653																

TABLE 3: PRICES OF PRODUCTION
WITH A 10% INCREASE IN WAGES

MEXICO	CORN	OTHER AG	PETRO	FERT	FOOD	INDUSTRY	SERVICES	COMMERCE	TOTAL	CAMPESINO	AG WRKS	AG BOUR	URB WKRS	URB CAPS	MERCH	URB MARG	TOT CON	GOVT	EXPORTS	INVEST	INVEN	TOT INV	TOT FND	TOTAL
1. CORN AND BEANS	737	1945	0	0	6197	0	0	0	8880	4199	1908	398	2289	1593	713	2178	13188	0	7	0	3452	3452	16647	25527
2. OTHER AGRICULTURE	0	12957	3	7	82543	9030	633	0	105172	4660	2477	3135	20952	11317	5894	5417	53853	163	3192	3122	6165	9288	66496	171667
3. PETROLEUM	71	2656	21665	817	3157	13702	10312	3206	55588	667	263	1071	4559	2555	1389	288	10792	1718	5785	0	570	570	18864	74453
4. FERTILIZER	912	3015	0	23	0	106	7	0	4064	0	0	0	0	0	0	0	0	13	399	1	216	217	629	4692
5. FOOD PROCESSING	0	11565	0	6	33317	2825	926	0	48647	13820	8702	8184	72055	32897	20417	17162	173237	180	7379	199	2677	2876	183672	232320
6. INDUSTRY	159	6390	3334	1026	12701	166418	27681	5337	223046	7998	4151	7262	58039	18820	13270	7315	116848	4908	17359	165853	9427	175280	314394	537440
7. SERVICES	501	1476	4334	238	8516	31883	53316	20240	120905	8240	7618	13320	103930	60213	31411	12148	236892	59560	2106	4637	0	4637	303194	424099
8. COMMERCE	462	5701	1044	339	10475	43129	11532	2012	74694	9605	6483	9079	72549	35757	20360	11413	165266	971	2555	30673	0	30673	199465	274159
TOTAL	2843	45705	30387	2457	156907	267093	104408	31196	648995	49181	31594	42450	334372	163062	93475	55941	770076	67513	38780	204486	22507	226993	1103362	1744357
VALUE ADDED BY CLASS																								
1. CAMPESINOS	15278	33004							48782															48782
2. AG WORKERS	4280	27057							31338															31338
3. AG BOURGEOISIE	2277	64713							66990															66990
4. URB WORKERS			15238	710	21133	126778	151994	48954	364792									40264						405056
5. URB CAPITALISTS					32426	87160	137743		257329															257329
6. MERCHANT CAPITAL								147513	147513															147513
7. URBAN MARGINALS					4317	13526	20141	17483	55487															55487
PRIVATE VALUE ADDED	22335	124775	32268	1412	57876	227456	309898	213950	972231									40264						1012496
SUBSIDIES	62	334	2794	75	357	5212	7244	5416	21494															
EXPORT SUBSIDY	1	514	0	-16	131	-723	-158	0	-250															
GUARANTEE PRICE SUB	0								0															
INDIRECT TAX	175	940	18778	22	10609	15309	12451	34429	84713															
GOVERNMENT PROFITS			17030	702					17732															
NET TAX	111	92	25014	465	10121	10820	5365	29013	81202	0	0	3731	20850	14331	8215	0	47127							128329
IMPORTS	237	1895	3821	861	7416	32871	4427	0	49929	-399	-256	-548	-3314	-2105	-1207	-454	-8284	536	16260	27286		27286		85725
SAVINGS										0	0	21358	53148	82041	47030	0	203577	20016	30486					254278
TOTAL	25527	171667	74453	4692	232320	537439	424099	274159	1744356	48782	31338	66990	405056	257329	147513	55487	1012496	128329	85725			254279		
REAL OUTPUT	23095	148289	74453	4867	228393	560048	458255	274159																
PRICES	1.10535	1.16112	1	.96079	1.01777	.95834	.92512	1																

TABLE 4: MARK-UP PRICES WITH A 10%
INCREASE IN REAL INVESTMENT

MEXICO	CORN	OTHER AG	PETRO	FERT	FOOD	INDUSTRY	SERVICES	COMMERCE	TOTAL	CAMPESINO	AG WRKS	AG BOUR	URB WKRS	URB CAPS	MERCH	URB MARG	TOT CON	GOVT	EXPORTS	INVEST	INVEN	TOT INV	TOT FND	TOTAL
1. CORN AND BEANS	526	2443	8	0	7681	0	0	0	11049	5258	2372	467	2809	1860	906	2552	16225	0	7	0	4768	4768	21000	32049
2. OTHER AGRICULTURE	0	13902	3	7	87420	10270	690	0	112292	5167	2444	3600	20824	13200	6201	5900	57336	175	3192	3685	7277	10962	71664	183956
3. PETROLEUM	71	2661	22427	824	3122	14552	10488	3295	57441	832	209	1082	3856	3710	1434	363	11486	1721	5785	0	628	628	19619	77060
4. FERTILIZER	953	3150	0	24	0	118	8	0	4253	0	0	0	0	0	0	0	0	14	399	1	248	249	662	4914
5. FOOD PROCESSING	0	12961	9	7	36858	3356	1054	0	54245	16075	8669	9365	71346	43832	22123	19332	190743	202	7379	246	3300	3545	201870	256114
6. INDUSTRY	168	6732	3629	1088	13210	185866	29607	5768	246067	9117	4034	8417	51077	33165	13714	8006	127531	5171	17359	192219	10926	203145	353205	599272
7. SERVICES	544	1600	4854	260	9112	36636	58671	22948	134625	9425	7838	15233	101251	79132	33352	13462	259694	64563	2106	5530	0	5530	331892	466517
8. COMMERCE	463	5710	1081	342	10355	45789	11725	2067	77531	10109	6006	9612	64124	45369	19941	11609	166770	973	2555	33793	0	33793	204091	281621
TOTAL	3124	49159	32003	2551	167758	296588	112243	34077	697502	55984	31572	47776	315288	220268	97672	81225	829784	72819	38780	235473	27146	262619	1204003	1901505
VALUE ADDED BY CLASS																								
1. CAMPESINOS	20168	35401							55569															55569
2. AG WORKERS	4280	27057							31338															31338
3. AG BOURGEOISIE	4101	71378							75479															75479
4. URB WORKERS			14306	649	18964	122165	140271	45645	342000									40264						382264
5. URB CAPITALISTS					46492	120098	181401		347991															347991
6. MERCHANT CAPITAL								154307	154307															154307
7. URBAN MARGINALS					5276	15317	22383	17793	60770															60770
PRIVATE VALUE ADDED	28549	133836	32855	1554	70732	257580	344055	217745	1067453									40264						1107717
SUBSIDIES	78	358	2892	79	395	5921	7972	5564	23158															
EXPORT SUBSIDY	3	785	11	2	1038	169	6	4	2016															
GUARANTEE PRICE SUB	0								0															
INDIRECT TAX	219	1009	11157	23	11736	17098	13702	35367	90311															
GOVERNMENT PROFITS			18549	905					19454															
NET TAX	136	-134	26804	847	10303	11108	5724	29799	84591	0	0	4204	19677	19380	8594	0	51854							136445
IMPORTS	237	1095	3948	866	7321	33997	4494	0	51958	-416	-234	-564	-2859	-2603	-1154	-454	-8284	536	16260	27286		27286		87754
SAVINGS										0	0	24064	50158	110946	49196	0	234363	22826	32715					289904
TOTAL	32049	183956	77060	4914	256114	599272	466517	281621	1901503	55569	31338	75479	382264	347991	154307	60770	1107717	136445	87754			289906		

REAL OUTPUT	23095	148289	76927	4897	225444	593670	465201	281190
PRICES	1.38783	1.24582	1.00187	1.00386	1.14065	1.00972	1.00284	1.00155

TABLE 5 PRICES OF PRODUCTION WITH
A 10% INCREASE IN REAL INVESTMENT

MEXICO	CORN	OTHER AG	PETRO	FERT	FOOD	INDUSTRY	SERVICES	COMMERCE	TOTAL	CAMPESINO AG WRKS	AG BOUR	URB WKRS	URB CAPS	MERCH	URB MARG	TOT CON	GOVT	EXPORTS	INVEST	INVEN	TOT INV	TOT FND	TOTAL
1. CORN AND BEANS	907	2394	0	0	7595	0	0	0	10896	5190	2333	538	2771	1882	881	2240	15836	0	7	0	4673	4673	20516	31411
2. OTHER AGRICULTURE	0	14543	3	7	92264	10781	733	0	118332	5567	2635	4189	22227	12076	6695	5725	59116	183	3192	3855	7612	11467	73957	192290
3. PETROLEUM	71	2656	22165	822	3144	14576	10636	3322	57394	978	265	1091	4266	2185	1625	237	10647	1718	5785	0	627	627	19776	76170
4. FERTILIZER	864	2654	0	22	0	107	7	0	3853	0	0	0	0	0	0	0	0	12	399	1	225	226	637	4490
5. FOOD PROCESSING	0	11758	0	6	33734	3055	971	0	49532	14613	8785	9642	70374	30570	22008	16797	174790	183	7379	223	2934	3216	185598	235101
6. INDUSTRY	147	5906	3153	954	11692	143644	26390	5113	216999	9445	3989	9598	53259	14421	15223	6696	112631	4537	17359	168640	9595	178225	312752	529751
7. SERVICES	449	1322	3971	215	7595	30376	49247	19156	112330	9175	7018	15784	93555	51265	31894	10913	219605	53341	2106	4568	0	4568	279620	391950
8. COMMERCE	462	5701	1868	341	10431	45880	11894	2085	77863	11572	6573	11817	71760	33081	23020	11152	168974	971	2555	33741	0	33741	206241	284103
TOTAL	2900	47134	30368	2368	166457	268419	99878	29676	647199	58540	31598	52659	318214	145480	101346	53761	761598	60946	38780	211028	25715	236743	1098367	1745266
VALUE ADDED BY CLASS																								
1. CAMPESINOS	19877	38182							58059															58059
2. AG WORKERS	4281	27058							31338															31338
3. AG BOURGEOISIE	3980	79109							83089															83089
4. URB WORKERS			14165	650	19133	122597	142511	46118	345173								40264							385438
5. URB CAPITALISTS					28187	79905	121455		229548															229548
6. MERCHANT CAPITAL								159910	159910															159910
7. URBAN MARGINALS					3815	12803	18368	18334	53320															53320
PRIVATE VALUE ADDED	28138	144348	33725	1270	51134	215306	282334	224362	960437								40264							1000701
SUBSIDIES	76	374	2858	71	361	5125	6691	5613	21171															
EXPORT SUBSIDY	2	968	0	-36	256	-1981	-361	0	-1152															
GUARANTEE PRICE SUB	0								0															
INDIRECT TAX	215	1055	11827	21	10741	15054	11501	35678	85292															
GOVERNMENT PROFITS			19560	620					20180															
NET TAX	134	-287	27728	606	10124	11909	5171	30065	85452	0	0	4627	19841	12784	8906	0	46157							131609
IMPORTS	237	1895	3909	866	7386	34117	4566	0	52176	-481	-259	-688	-3191	-1900	-1324	-441	-8284	536	16260	27286		27286		87973
SAVINGS										0	0	26490	50574	73184	50982	0	201230	29864	32933					264028
TOTAL	31412	192290	76170	4489	235100	529751	391949	284103	1745265	58059	31338	83089	385438	229548	159910	53320	1000701	131609	87973			264029		
REAL OUTPUT	23096	148290	76170	4897	227453	595771	472630	284103																
PRICES	1.36014	1.30324	1	.90935	1.03475	.88984	.82853	1																

TABLE 6: MARK-UP PRICES WITH
A GUARANTEE PRICE OF 1.15

MEXICO	CORN	OTHER AG	PETRO	FERT	FOOD	INDUSTRY	SERVICES	COMMERCE	TOTAL	CAMPESINO	AG WRKS	AG BOUR	URB WKRS	URB CAPS	MERCH	URB MARG	TOT CON	GOVT	EXPORTS	INVEST	INVEN	TOT INV	TOT FND	TOTAL
1. CORN AND BEANS	689	1818	0	0	5743	0	0	0	8250	3906	1785	295	2118	1362	663	2243	12373	0	7	0	3226	3226	15606	23856
2. OTHER AGRICULTURE	0	11544	2	6	72934	7956	554	0	92995	4084	2316	2303	18024	11277	5531	5155	48689	145	3192	2782	5493	8275	60392	153297
3. PETROLEUM	71	2657	21514	817	3132	13553	10123	3159	55026	527	254	1056	3752	3524	1380	341	10832	1718	5785	0	570	570	18905	73931
4. FERTILIZER	950	3140	0	24	0	109	7	0	4230	0	0	0	0	0	0	0	0	14	399	1	225	226	638	4869
5. FOOD PROCESSING	0	11578	7	6	33078	2797	910	0	48376	12628	8619	7095	65482	39887	20373	17742	171826	181	7379	199	2680	2879	182265	230641
6. INDUSTRY	166	6676	3458	1072	13161	171947	28385	5493	230358	7350	4209	5319	49754	30853	13223	7827	118535	5129	17359	173296	9850	183146	324169	554526
7. SERVICES	542	1596	4653	257	9133	34093	56581	21982	128836	7938	8027	11191	99877	76521	32732	13253	249538	64406	2106	5015	0	5015	321064	449[illegible]0
8. COMMERCE	462	5702	1037	339	10390	42657	11320	1982	73889	8723	6379	7112	63981	44223	19846	11711	161975	971	2555	30680	0	30680	196181	270070
TOTAL	2881	44710	30671	2522	147521	273111	107879	32615	641961	45156	31589	34370	302987	207647	93747	58271	773768	72563	38780	211973	22044	234017	1119128	1761089
VALUE ADDED BY CLASS																								
1. CAMPESINOS	16477	28319							44796															44796
2. AG WORKERS	4281	27057							31338															31338
3. AG BOURGEOISIE	2567	51685							54253															54253
4. URB WORKERS			13745	645	19053	113968	135604	43830	326839									40264						367103
5. URB CAPITALISTS					41724	111102	174936		327763															327763
6. MERCHANT CAPITAL								147977	147977															147977
7. URBAN MARGINALS					4899	14238	21609	17069	57806															57806
PRIVATE VALUE ADDED	23326	107061	31539	1542	65676	239292	332149	208876	990772									40264						1031036
SUBSIDIES	64	297	2774	78	354	5385	2688	5335	21977															
EXPORT SUBSIDY	0	110	2	0	139	23	1	1	276															
GUARANTEE PRICE SUB	2704								2704															
INDIRECT TAX	182	838	10703	23	10533	15817	13214	33916	85224															
GOVERNMENT PROFITS			17794	896					18690															
NET TAX	-2587	430	25721	841	10039	10408	5525	28580	78957	0	0	3021	18897	18253	8241	0	48413							127370
IMPORTS	237	1095	3793	860	7355	31714	4345	0	49399	-360	-252	-436	-2950	-2634	-1189	-464	-8284	536	16260	27286		27286		85196
SAVINGS										0	0	17297	48169	104497	47178	0	217139	14007	30156					261303
TOTAL	23856	153297	73931	4869	230641	554525	449899	270071	1761089	44796	31338	54253	367103	327763	147977	57806	1031036	127370	85196			261303		
REAL OUTPUT	23096	148287	73913	4866	226590	553801	449724	270012																
PRICES	1.0329	1.03453	1.00026	1.00054	1.0189	1.00135	1.00039	1.00022																

TABLE 7: PRICES OF PRODUCTION WITH
A GUARANTEE PRICE OF 1.15

MEXICO	CORN	OTHER AG	PETRO	FERT	FOOD	INDUSTRY	SERVICES	COMMERCE	TOTAL	CAMPESINO AG WRKS	AG BOUR	URB WKRS	URB CAPS	MERCH	URB MARG	TOT CON	GOVT	EXPORTS	INVEST	INVEN	TOT INV	TOT FND	TOTAL
1. CORN AND BEANS	489	1818	0	0	5753	0	0	0	8260	3912	1787	304	2120	1369	663	2211	12365	0	7	0	3227	3227	15599	23859
2. OTHER AGRICULTURE	0	11434	2	4	73618	8023	559	0	93844	4148	2339	2380	18205	11170	5591	5142	48967	146	3192	2804	5537	8341	60646	154490
3. PETROLEUM	71	2656	21487	817	3136	13557	10138	3162	55023	547	260	1057	3799	3353	1401	327	10744	1718	5785	0	570	570	18816	73839
4. FERTILIZER	940	3185	0	23	0	108	7	0	4184	0	0	0	0	0	0	0	0	14	399	1	222	223	636	4820
5. FOOD PROCESSING	0	11441	7	6	32735	2765	901	0	47855	12722	8629	7144	65368	38401	20357	17456	170077	178	7379	197	2648	2845	180480	228335
6. INDUSTRY	164	6520	3404	1056	12990	169542	28022	5420	227178	7414	4203	5497	50026	28718	13403	7677	116939	5054	17359	170785	9707	180492	319844	547022
7. SERVICES	531	1563	4553	252	8958	33410	55517	21558	126343	7937	7931	11323	99016	73294	32577	12959	245036	63084	2106	4912	0	4912	315138	441481
8. COMMERCE	462	5781	1036	339	10403	42669	11337	1984	73931	8884	6444	7338	64788	42943	20167	11659	162223	971	2555	30673	0	20673	196423	270354
TOTAL	2856	44501	30489	2501	147593	270074	106481	32124	636619	45556	31593	35043	303321	199249	94159	57431	766352	71166	39780	209322	21911	231283	1107581	1744200
VALUE ADDED BY CLASS																								
1. CAMPESINOS	16493	28696							45189															45189
2. AG WORKERS	4280	27058							31338															31338
3. AG BOURGEOISIE	2574	52732							55306															55306
4. URB WORKERS			13732	445	19080	114819	135840	43886	327202									40264						367467
5. URB CAPITALISTS					39549	106727	148187		314463															314463
6. MERCHANT CAPITAL								148605	148605															148605
7. URBAN MARGINALS					4726	13957	21155	17129	56968															56968
PRIVATE VALUE ADDED	23348	108486	31642	1509	63355	234703	325182	209620	979071									40264						1019335
SUBSIDIES	64	300	2721	77	351	5310	7543	5341	21757															
EXPORT SUBSIDY	0	136	0	-4	51	-228	-42	0	-88															
GUARANTEE PRICE SUB	2699								2699															
INDIRECT TAX	182	844	10689	22	10423	15596	12965	33952	84674															
GOVERNMENT PROFITS			17910	864					18774															
NET TAX	-2582	408	25829	813	10022	10514	5465	28610	79080	0	0	3080	18915	17513	8276	0	47784							126864
IMPORTS	237	1095	3789	860	7366	31730	4352	0	49430	-367	-255	-449	-2986	-2556	-1208	-463	-8284	536	14240	27286		27286		85227
SAVINGS										0	0	17633	48216	100256	47378	0	213483	14898	30187					258568
TOTAL	23860	154490	73839	4819	228335	547821	441490	270354	1746898	45189	31338	55306	367467	314463	148605	56968	1019335	126864	85227			258569		
REAL OUTPUT	23095	148292	73839	4866	226930	554085	450506	270354																
PRICES	1.03313	1.04272	1	.98958	1.00686	.98684	.97997	1																

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