

CEPAL Review

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UNITED NATIONS
ECONOMIC COMMISSION FOR LATIN AMERICA
SANTIAGO, CHILE/ FIRST HALF OF 1978

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Informal-formal sector interrelationships

An exploration
into their nature

*Victor Tokman**

The essential object of this article is to put some order into the discussion of the informal sector. Since the ILO adopted the new term, there has been a spate of somewhat entangled discussion which has at least served to reanimate the debate on underdevelopment and give a better grasp of the relevant problems and solutions. The aim here is to study the limited but crucial question of the relations maintained by the informal sector with the rest of the economy.

The analysis of these relationships is very useful as a point of departure, since it permits a more orderly marshalling of the various theories propounded on the informal sector. They can be distinguished by the type of links they establish between the informal and the formal economy. Thus, in the first section, the author presents, with their different variants, the contrasting approaches which envisage these relationships as 'benign' or as characterized by exploitation, and outlines a view of his own, maintaining that they are relationships of 'heterogeneous subordination'.

In the second section he attempts to estimate, for Chile, the 'balance of payments' of the informal sector in relation to the rest of the economy, on the basis of information obtained from the national accounts; ending, in the third section, by interpreting the data from surveys carried out in Santiago on the characteristics and performance of informal commerce.

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A.

The theoretical discussion*

Although somewhat beyond the proposed scope of the present paper, I consider it important to describe at the outset what is understood by the informal sector. No universally-accepted definition of it exists, since, as will be seen later, the assumptions introduced with respect to its operation are diverse. There is, however, a measure of consensus to the effect that one general characteristic of the activities constituting the urban informal sector is the possibility of obtaining entry to them more easily than to those of the formal sector, owing both to technological factors and to the structure of the market. Predominant in the informal sector are activities structured on the basis of very small production units with low levels of technology, implying very modest capital requirements, both human and physical. The structure of employment in these activities is characterized by the identification of the enterprise with the individual, and if by any chance other labour is brought in, it is unpaid family help. In production units of this kind there is no marked division between the owners of capital and of labour such as exists in the formal sector, and, therefore, wages are not the most usual mode of remuneration, despite the fact that production is mainly for the market. From the foregoing features it can be deduced that

*This paper was largely written at the Institute of Development Studies (IDS) of the University of Sussex, where the author was a Visiting Fellow from October to December 1976. It is part of a broader programme of academic essays on employment which is supported by the Ford Foundation. The author wishes to thank IDS for the intellectual and material support received during his stay.

informal activities are carried on in competitive markets.

The question posed by Hart (1973), who asked whether the reserve army of unemployed and underemployed really constitutes a passive, exploited majority or whether its informal economic activities possess some autonomous capacity for generating growth in the incomes of the urban poor is very relevant, since the answer to it will shed light on the nature of the sector, on anticipated trends and on policy requirements. To provide this answer an analysis of the accumulation process is required, and the discussion of that subject approaches it in two different ways.

On the one hand, it is argued that informal-sector activities generate a surplus, or can do so, provided that the policy environment does not discriminate against them. On the other, the opposite is sustained and it is argued that the main characteristic of informal activities is their incapacity for accumulation, which, in turn, is determined by the process of accumulation outside the sector and, in the last analysis, at the world level. The first approach assumes that the relationships between the informal sector and the rest of the economy are 'benign', while the latter allocates a subordinate or dependent character to informal activities.

Within each of these approaches, there is no agreement as to the degree of integration of the informal sector, and hence no single interpretation of the process exists. The closed or autonomous nature of the informal sector or its integration will imply different modes of insertion and will affect the accumulation process in a different manner.¹

¹ For a survey of the literature on the informal sector, see Tokman (1977).

1. *The benign relationship approach*

Those who introduced the discussion of the informal sector (Hart, 1970 and 1973; ILO, 1972), saw in it the potential for a more adequate pattern of growth with a more equalitarian distribution of income. For them, working in the informal sector was the way in which those who could not obtain a well remunerated job managed to produce or sell something which generated an income. Their ingenuity in making a living out of a situation of lack of access to resources and to markets and their capacity for survival under unfavourable conditions were for these authors the proof that they have the potentiality for developing their activities further. However, questions such as where this potential growth is located, what are the expected trends and what are the areas to which policies should be directed are closely linked to the question of whether the informal sector is envisaged as an autonomous self-contained segment of the economy or as a sector integrated with the rest of the economy in a complementary and hence benign manner.

(a) *Under conditions of autonomy: the duality approach*

The informal sector is seen by several authors (the ILO, 1972; Oshima, 1971; Sethuraman, 1975) as an autonomous segment characterized by providing employment and goods and services for the lower income groups of the urban population. As Oshima (1971) clearly explains, "proprietors and their family help and employees work for each other and buy each other's products" (p. 170). This, of course, implies that the sector is

also characterized by lack of links with the rest of the economy.

The autonomous informal sector is economically efficient and has comparative advantages in relation to similar activities developed in the formal sector. Its main advantage lies in the socially justified factor proportions used in the process of production, since labour is used to the maximum without exerting heavy pressures on capital or on foreign exchange. The latter is possible because, owing to the technology applied, only a small amount of capital is required and, in addition, second-hand or (judged by formal-sector criteria) obsolete machinery is generally used.²

The efficient use of the factors available generates an economic surplus which, if properly reinvested, can foster further growth. Most of the surplus is reinvested within the sector to minimize risks, while part of it is channelled through an informal financial system, usually at high rates of interest, or directly invested in relatives' businesses (Hart, 1970). Personal savings are indeed small³ and are largely devoted to house improvements and new constructions. This type of investment is not recorded in national accounts, but examples such as that given by Frankenhoff (1967) of

capital formation in housing in 'favela' communities of Rio valued at more than 50 million dollars as of June 1966 give the impression that it reaches significant values and that the rehabilitation of such communities can constitute an economically more feasible alternative than their eradication and subsequent resettlement.

(b) *Under conditions of integration:
the complementarity approach*

The growth potentiality of the autonomous informal sector is reinforced when the sector is integrated with the rest of the economy, since the linkages are assumed to be complementary. The informal sector is envisaged within this analytical context as an 'exporter' of all types of products, but mainly services.⁴ It plays a crucial role in the circulation process by being located near to the consumers, by providing credit, by selling in as small units as required, and by keeping adequate stocks (Weeks, 1971; McGee, 1974). As McGee (1973) notes, informal traders are engaged in the vertical exchange of goods, either in selling foodstuffs to the urban population in upward vertical exchanges or selling urban-produced goods in what are often systems of downward vertical exchange, as in the case of textiles. The informal sector is also seen as supplying important services, such as transport and communications, in countries where those basic services are insufficient (Hart, 1970).

² This does not imply inefficiency, since it is explicitly argued both by Oshima (1970) and, especially, by the ILO (1972) that there is a wide range of operations in which the informal sector uses less capital per unit of production or can be made to do so through upgrading of techniques.

³ Oshima (1970) explicitly disagrees with this observation, since he considers that most of the persons within the informal sector are usually forced to dissave to survive. He further maintains that one of the positive effects of a policy in favour of the sector will be the elimination of dissavings.

⁴ Hart (1973) suggests that illegitimate services are the main export of the informal sector. The terms importing and exporting are used with reference to inter-sectoral relationships, i.e., to the informal sector's purchases and sales from and to the rest of the economy.

The informal sector is then highly integrated with the rest of the economy, 'exporting' three-quarters of its production and 'importing' a similar proportion of its consumption. In addition, such integration is benign, since most of the exports are service activities—commerce and domestic services—which are complementary to formal production and are, only gradually affected by technological change (Webb 1974). The sector's capacity for accumulation is then enhanced by its access through these trade flows to the expanding markets of the rest of the economy.

(c) *Anticipated trends*

Those who visualize the informal sector as a source of potential growth, whether autonomous or integrated, argue that such growth can be evolutionary in the sense that an increasing labour force can be incorporated at higher average income levels.⁵ These trends cannot be anticipated *a priori* if the sector is autonomous, since although it is recognized that a capacity for accumulation exists within it, its rate of expansion is independent of the growth in the formal sector and of the increases in the labour supply of the informal sector. It is possible to imagine different types of situations which could imply, under autonomous conditions, either involutionary or evolutionary growth.

Under integration conditions, in contrast, it can be anticipated that the

size of the informal sector will expand *pari passu* with the size of the formal sector, since complementary relationships prevail. This is consistent, however, with different patterns of growth within each sector, since it is more likely that productivity and average income in the informal sector will remain constant, while employment expands rapidly, whereas productivity per worker is rising faster than employment in the formal sector (Webb, 1974). Mazumdar (1976) develops this approach further and concludes that given stable propensities to consume informal-sector goods in the informal and in the formal sector, both can be expected to grow at the same rate. If a downward trend is anticipated because of the greater integration of the informal sector into the rest of the economy and the existence of a bias against the consumption of informal-sector goods within the formal sector, the rate of growth of the former will lag behind that of the latter.

The formulation of policies in favour of the informal sector is seen in the light of this approach not only as feasible, but also as highly necessary. As the ILO (1972) points out, "although the informal sector has potential for dynamic, evolutionary growth, under the existing nexus of restrictions and disincentives, the seeds of involutionary growth have been sown" (p. 505). Since it is argued that the informal sector presents structural disadvantages⁶ because it has developed not only without the support of State policies but even in spite of

⁵ Weeks (1973) maintains that there is no doubt that the informal sector will grow: the only question is whether the growth will be involutionary or evolutionary. In the first case a larger labour force is accommodated at a stagnant or declining level of real income, while in the second, the absorption is at higher income levels.

⁶ Emmerij (1974) uses the term 'inherent disadvantage', where it is assumed that the informal sector is always less efficient, as opposed to 'structural disadvantage', where the advantage of the formal sector is a consequence of the privileges it enjoys.

continuous harassment, an improved policy environment will shift resources towards the informal sector, allowing it to absorb the increasing labour force at higher levels of productivity (ILO, 1972; Weeks, 1973; Sethuraman, 1976). Policies can then be devised either within a framework of autonomy, as for instance, for technological improvement in the informal sector (Oshima, 1970), or in the context of a more integrated sector, with a view to strengthening its links through subcontracting with the public and the formal private sector, to increasing the sales of informal products (such as tools and equipment) to the agricultural sector, and to redistributing income in favour of the lower income groups (ILO, 1972; Weeks, 1972).

2. *The subordination approach*

The majority of the authors who conclude that informal activities are subordinated analyse the accumulation process at the world level and take the existence of the informal sector as the national counterpart of the prevailing unequal international system. The analysis of such relationships has been based on consideration of trade and price relationships (Prebisch, 1963; Amin, 1973), the transfer and incorporation of technology (Pinto, 1965; Quijano, 1974), and the role of transnational capital in the process (Arrighi, 1970; Sunkel, 1973; Bienefeld, 1975). The main thrust of the argument is that the process of accumulation in the developed countries is such that productivity gains are retained within the centres, while simultaneously, the gains in productivity registered on the periphery are appropriated through different mechanisms. Such mechanisms vary from international price determination and

market controls to institutional arrangements fostered by transnational capital.

As a result, the accumulation process on the periphery is subordinated and gives rise to a heterogeneous structure because technical progress does not penetrate uniformly but concentrates on the modern segments of the economy without destroying the old techniques, thus generating an overlapping process rather than one of substitution. The capacity for diffusion of such technical progress is in turn restricted by the low income-elasticity in respect of food products characterizing those who benefit from it, and by the bias of such technological change against the production of capital goods and the use of raw materials and in favour of using more capital-intensive techniques. The economic surplus is concentrated in the oligopolistic —mostly foreign-owned— firms, whose propensity to invest is mainly determined by the availability of foreign exchange for profits realization.⁷ The outcome of this accumulation process is a slow growth of labour demand and an upward shift in the labour-skill profile required. Both elements are combined with a rapid increase in the urban labour supply, creating an informal sector or marginal pole. In this sense, the relationships between the informal and formal sectors should be analysed as a component of a

⁷ Arrighi (1970) estimates that to ensure that foreign exchange is available to allow foreign corporations to repatriate profits and capital, gross foreign investment in tropical Africa should grow at an annual rate higher than 10-12 per cent. As such rates are unlikely according to historical records, it may be concluded that a downward accumulation process of falling propensity to invest and growing shortage of foreign exchange will take place.

subordinated system of interrelationships at the international level, and the transfer of the economic surplus generated within the informal sector to the rest of the economy should be viewed as an intermediate step in the transfer of the surplus from the periphery to the centre countries.

The mechanism of surplus transfer from the informal sector will be different, however, depending on whether the sector is autonomous or integrated into the rest of the economy.

(a) *Under conditions of autonomy: the marginality approach*

Several authors who maintain the thesis of the subordinated role of the informal sector, and especially those writing about marginality in Latin America (Quijano, 1974; Nun, 1969; Santos, 1972), implicitly assume that the informal sector is autonomous, i.e., independent of the rest of the economy. The mechanisms by which surplus extraction operates and by which the capacity for accumulation is thus restricted are mainly the effects of the existence of surplus labour, both in the formal sector and within the informal sector, and of the restricted access to modern inputs and to product markets.

The first classical mechanism is the depressing effect of the existence of a labour surplus on wages outside the informal sector. In Marxian terms this argument is similar to that of the industrial army reserve. Are the people employed in the informal sector playing the role of an industrial army reserve? Quijano (1974), Nun (1969) and Villavicencio (1976) deal directly with this question, differentiating the informal and marginal population from the industrial army reserve in the sense that

they are not temporarily but permanently excluded from that reserve, that they are not temporarily but permanently excluded from the formal sector, and that, owing to the nature of technical progress, the labour surplus is not needed for capitalist production and hence no longer constitutes a condition of existence of the system of production.⁸ On the other hand, the empirical evidence available suggests that technical progress in the formal sector has been followed by wage increases rather than price reductions. With capital mobility, increases in productivity should be absorbed by wage increases or price reductions: otherwise, the raising of the rate of profit will attract capital, in line with the known trend towards profit rate equalization. Under oligopoly conditions, rates of profit can be different, but even in this case the data show that increases in the productivity of the formal sector have been partly passed on in the form of higher wages.⁹

To explain why this situation prevails in contradiction with the existence of a labour surplus, several arguments have been presented. First, institutional factors, mainly trade union action but also government intervention, determine labour market segmentation in which labour mobility is restricted (Harberger, 1971; Nelson, 1971; Reynolds, 1965;

⁸ Cardoso (1971), discussing Nun's paper, does not accept this point and argues that the marginal population should be considered as part of the industrial army reserve.

⁹ The intensification of unequal exchanges between sectors within the developed economies with capital mobility gives rise to pressures for their elimination which are released mainly through inflation or more usually through transfers that lead to internationalization. This argument is clearly discussed by Bienefeld (1974).

Kerr, 1954; Doeninger and Piore, 1971; Gordon, 1971; Watchel and Betsey, 1973). This argument usually allocates the main responsibility for market imperfections to labour aristocracy, but obviously it overlooks the fact that monopoly power exercised by trade unions follows and does not precede the present labour market situation, or, in other words, is an effect of it and not its cause.¹⁰ A second argument, which is mainly used in neoclassical analysis, is that wage differentials are due to different skill requirements (Becker, 1964 and 1967; Mincer, 1970). However, empirical analyses show that income differentials between the informal and formal sector are only partially explained by differences in human capital, and that for equal skills sectoral differentials are around 50 per cent (Souza-Tokman, 1976; Merrick, 1976; Webb, 1974).

The main causes of such differentials are to be found within the formal sector. For the firms operating in it, the main consideration as regards labour is the stability of a large part of their working force, for which they are willing to pay higher wages. This willingness is combined with their ability to pay, since the highly capital-intensive technologies they use in their production processes reduce the share of labour in total income. There are additional secondary reasons which influence wage behaviour in the formal sector, connected with the fact

that price reductions could lead to instability in product markets under oligopoly conditions, to the political advantage of having good industrial relations, and to the upward bias introduced by the greater international mobility of the hierarchical personnel (Arrighi, 1970; Bienefeld, 1974). Although the labour force employed in the informal sector does not play a role as an industrial reserve army for the formal sector, it can still play it within the sector by depressing labour incomes below the level that would otherwise prevail if a labour surplus were not present. This argument has been developed by Quijano (1974), who sees the marginal segment of the population playing such a role for the remaining segments under competitive capitalism and thus depressing wages within the sector and creating a surplus which will be transferred to the formal sector through financial mechanisms. Quijano, however, fails to see that demand for the informal sector's products is also restrained because of market subordination.

The second mechanism for subordination under conditions of autonomy is the lack of access to certain inputs and to product markets. The impossibility of obtaining stable access to basic production resources because these are monopolized by the formal sector means that informal activities can only operate on the basis of residual resources and are thus excluded from the possibility of technological improvement. The oligopolistic organization of product markets leaves for informal activities only those segments of the economy where the conditions of minimum size or stability are not attractive for oligopoly firms because they do not permit economies of scale and do not guarantee

¹⁰ Indeed, as Arrighi (1970) points out, although trade unions will play a role of this kind in the future, the main cause lies in the structure of the labour market rather than in institutional factors. Mazumdar (1975) maintains the same argument on the basis of his study of the Bombay textile industry, where he found a segmented labour market well before the era of trade unions and government intervention.

adequate capital utilization. The possibilities of expansion of the informal sector are thus subordinated to product market access which, in turn, is determined by the oligopoly firms operating in the formal sector. In these conditions, growth is limited and can only be of a temporary nature, since after a certain minimum market size is reached, oligopoly firms will take over (Labini, 1966; Bienefeld, 1975; Souza-Tokman, 1976).

To sum up, the subordination of an autonomous informal sector operates mainly through the lack of access to resources of production and product markets. The industrial army reserve argument does not appear to hold good either intersectorally or within the informal sector. The outcome is that informal activities do not generate surplus and that their expansion does not depend on accumulation capacity within the sector, but rather on the size of the labour surplus which cannot be absorbed in the rest of the economy and on the market possibilities left by the formal sector. In this sense, subordination operates through lack of access and not through economic surplus extraction.¹¹ This subordination is reinforced through various mechanisms when the informal sector is integrated into the rest of the economy.

¹¹ This conclusion differs from that reached by Quijano (1974), who contends that the subordination operates through surplus extraction. He argues that the marginals contribute to the capital accumulation of the intermediate level not only as an industrial reserve army but also as exploited consumers. If capital accumulation at the intermediate level were reinvested at that level, it would not experience a tendency towards relative deterioration but, on the contrary, would have every possibility of developing in the same way as in the pre-capitalist period (p. 425).

(b) *Under integrated conditions of integration: the exploitation approach.*

Market subordination and lack of access to basic resources are reinforced by several other mechanisms when the informal sector is integrated into the rest of the economy in such a way that the surplus produced, if any, is extracted from it. These mechanisms are related to the higher prices paid for its purchases and the lower prices obtained for its output, the difference being reaped by the large-scale sector (Bose, 1974; Gerry, 1974; Bienefeld-Godfrey, 1976). The main purchases of an integrated informal sector are inputs, capital goods and final products for retailing while the output sold outside the sector consists of wage goods, intermediate products and personal services.

Gerry (1974) argues that there is an overwhelming degree of dependence upon capitalist industry for the provision of essential raw materials (both national and, mostly, imported). However, his data for informal manufacturing activities in Dakar (Senegal), where a bias in favour of closer integration is expected, show that the degree of dependence in respect of input supply varies with the type of product. Around 80 per cent of furniture producers, the majority of plastic shoemakers and most of the vehicle repairmen and metal workers using iron or steel depend on the formal sector for the supply of their inputs, whereas most of the shoe repairers and sandal-makers and the majority of those working with glass and aluminium obtain their supply from the informal sector, through the recovery or conversion of discarded materials.

A similar argument of dependence has been developed as regards the provision of capital goods, the depen-

dence being direct when new equipment is bought or indirect when it is a question of second-hand equipment. In both cases, it is agreed that the sector is dominated by a virtual monopoly of supply, repair and maintenance on the part of another form of production (Gerry, 1974). As in the case of inputs, the very scarce data available relate only to informal manufacturing activities and show that those using machinery and equipment are a small part of the total (13 per cent of furniture-makers and 31 per cent of shoemakers) and that the proportion of new machinery (generally paid for cash down) in relation to second-hand machinery varies with the type of product, although the former is always smaller than the latter, except in the case of metal transforming activities (Gerry, 1974). In informal commerce, the main part of the capital is kept as stocks (McGee, 1973), and in this case the interrelationships with the rest of the economy are to be found in the purchase of final goods for retailing.

Another subordination link through purchases from the formal sector is found in informal commerce, where it is argued that these activities are dependent for their supplies upon the formal sector, usually having to pay high prices which they cannot transfer to the consumer because of market constraints. In this sense, they serve as a cheap-labour commercial outlet for the formal production sector, whose firms appropriate the surplus generated at the production level (Marulanda, 1976). A distinction should be made between the types of goods traded, since the degree of dependence and the direction of the links will vary accordingly. For those who trade in raw foodstuffs, the main supplier is the agricultural sector, either directly through open market operations

or through wholesalers; while for those who trade in textiles and processed foods, the links are generally direct with the formal producers or with wholesalers. This pattern can be clearly seen in the case of hawkers in Hong Kong, where 70 per cent of those trading in textiles buy their goods direct from the factory or wholesale, as compared to 36 per cent of those operating in processed foods and to 15 per cent of raw-foodstuffs traders (McGee, 1973).

On the output side, the subordination links can operate through the sale of wage goods, through the subcontracting system, and through the supply of personal services. In the first case, it is argued that the sale of low-priced wage goods to the workers of the formal sector helps to generate a higher degree of exploitation in that sector by depressing wages (McGee, 1973; Leys, 1973; Bienefeld-Godfrey, 1976). This low price of wage goods is in turn made possible by the existence of a labour surplus within the sector and of market restrictions.

The previous discussion of the validity of the industrial reserve army argument is also relevant here, since if wages in the formal sector are benefiting from the productivity growth in that sector, the transfer of surplus will occur at least in part within the labour force. On the other hand, the fact that a large proportion of wage goods are raw foodstuffs makes the urban informal sector activities an intermediary rather than the main source of cheap food.

A similar argument applies in the case of subcontracting, since the sale of cheap intermediate products permits the formal enterprise to enlarge its profit rate by exploiting labour in some parts of the production process. Informal activities which sell their output to large

firms are then subordinated to them for prices and quantities and generally receive a smaller income than permanent workers within the formal sector for performing the same function. This type of activity is not very important within the informal sector, however, and it is concentrated in the clothing industry (Servicio del Empleo, Mexico-UNDP-PREALC, 1975; Gerry, 1974).

Finally, subordination also appears in the sale of personal services, where the labour surplus, lack of alternative job opportunities and low income-elasticity combine to determine small and rather stagnant returns.

On the whole, dependency in the case of an integrated informal sector affects both the sources of supply and the markets for the sector's products, as well as prices. Prices of purchases are generally higher because those in the sector can buy only small quantities and they do not have access to credit facilities, while the prices for their products, mostly services, are lower because of the market they depend on. In both cases prices tend to be fixed and markets controlled outside the sector. This subordinative relationship is, however, concentrated on the importing of goods for retailing and on the exporting of personal services (Frankenhoff, 1967; Bienefeld, 1974).

(c) Anticipated trends

The mechanisms through which the subordination of the informal sector operates depend on its degree of autonomy, but the outcome is always the same. In both situations, the prediction is that growth will be involutory, since either the market share will decrease or else it cannot expand permanently and the pressure of

an increasing labour supply will force average income downwards. This involution is inevitable, since informal activities present inherent disadvantages in comparison with formal activities (Quijano, 1974; Bienefeld, 1974; Arrighi, 1970). Room for policy formulation within this approach is indeed very narrow, since the main causes of underdevelopment lie not within the informal sector, not even within the peripheral economies, but in the accumulation process of the centre countries.

3. A third approach

(a) The conceptual framework

In this section a conceptual framework will be proposed which might allow adequate discussion of the informal sector. This framework is not entirely different from the two approaches discussed, since it presents common features with both of them, but it is much closer to the subordination approach than to the benign relationship approach.

Subordination at the international and national levels is a characteristic of underdevelopment, and the informal sector analysis is only one way to look at a much more comprehensive phenomenon. Internal subordination is expressed in lack of access to resources and markets, resulting in a limited capacity for accumulation and hence for expansion of the sector. The dependence nexus found in an integrated informal sector generally involves price differentials against the sector, but in the last analysis these are merely reflections of the said lack of access. The existence of subordinate relationships would be accepted even by those who support the

view that benign relationships predominate. The problem is to determine how strong is the subordination and whether there is room left for evolutionary growth. The informal sector should be seen neither as a completely integrated nor as an autonomous sector, but rather as one which has significant links with the rest of the economy but simultaneously presents a considerable degree of self-containment. Exports are mostly constituted by personal services, while the main imports are raw foodstuffs from the agricultural sector and processed foods and inputs from the urban formal sector. Subcontracting links will not generally be significant and will be restricted to clothing. For these operations to be important, a more integrated industrial structure than that which prevails in most of the less developed countries would be required. The installation of new industries generally implies the inauguration of national production of previously imported products or confrontation with an incipient industry which proves unable to survive. The possibilities of complementarity or survival in a competitive framework are higher in those cases where informal manufacturing activities are already well advanced.¹²

It is expected, however, that the informal sector will possess some degree of autonomy, not only because it internally supplies its own demand for most of the industrial goods, but mainly because of the influence of informal commerce activities and the importance of second-hand goods. The addition of

informal commerce mark-ups to practically all imports from outside the sector will accordingly reduce the value transferred outside the sector, and the existence of a widespread second-hand market for durable consumer goods and machinery will diminish direct dependency while minimizing import expenditure.

(b) *A heterogeneous subordination*

Although a subordinated relationship with the rest of the economy prevails for the informal sector as a whole, this is the result of different processes occurring within it. In this sense, it is necessary to distinguish those groups of informal activities which are currently operating under oligopoly conditions from those where that is not the case. This dividing-line will generally coincide, though not always, with the breakdown of informal activities by type of product (manufacturing goods, personal services and services connected with distribution and finance) (Souza-Tokman, 1976; Bienefeld, 1975; Godfrey-Bienefeld, 1976; Tokman, 1976).

Those informal activities already operating under oligopoly conditions cannot be expected to expand permanently. The evolution of this type of market passes through different phases where informal activities will expand or contract depending on the rate of expansion of demand, minimum scale of operation for different sizes of establishments, economies of scale, etc. Although they may benefit from short-term profits, in the long run they will tend to lose markets. This is the case for most of the informal manufacturing activities.

The above argument does not necessarily imply that the informal activities operating under these conditions will

¹² This was seen to be the case when the industrial structures of Ecuador, Peru and Venezuela were compared. The degree of structural heterogeneity found was inversely related to the level of industrialization. See Tokman (1975).

disappear, nor that they will do so in a fixed period of time. On the contrary, there are several factors which could produce a less pronounced trend or even an opposite one (Tokman, 1976, Steindl, n.d.). These factors are mainly related to the constraints on the expansion of the oligopolistic firms and to the existence of imperfect competition in product and especially in factor markets. Clientèle relations, location, and minimum size of sales are among the factors which operate within the former, while the predominance of family labour makes wages more flexible and allows for greater social security evasion.

In addition, there are political factors, such as the convenience for the large firms of not being presented to the government and public as monopolies, which lead them to tolerate the existence of informal activities. Finally, those employed in the sector are reluctant to leave their present jobs and are willing to take high risks at a very low level of income, especially when job opportunities outside the sector are limited.¹³ These economic causes are also associated with structural factors, which are specially important in the case of low-skill activities such as those of hawkers. In these cases, their location close to their home and public make them reluctant to move, and this in turn is linked to age, education and the non-existence of employment opportunities (McGee, 1973).

¹³ This reluctance to change activities is explained in economic terms. As family labour predominates within the sector, workers are willing to accept an income reduction rather than to reduce employment, since, given the lack of job opportunities outside the sector, this would imply open unemployment for those members of the family leaving the informal productive unit.

Within those informal activities which do not currently confront an oligopoly market, a distinction must be made between those cases where a trend in such a direction can be anticipated and those where that situation appears unlikely. The former possibility seems to apply to most of the manufactured products which are still entirely supplied by the informal sector, as in the case with shoe production in many developing countries. However, such a situation will prevail only until the size of the market justifies the establishment of an oligopoly firm, whereupon analysis under oligopolistic conditions will be applicable.

There are other informal activities, mainly personal services, where a trend to oligopolization seems unlikely over the medium term. Technological change in these activities is more gradual, and their subsistence in economies with higher income levels gives grounds for anticipating their expansion. Given their low income-elasticity, however, the expansion of such activities will not be rapid, and this is combined with the fact that income improvements based on productivity changes are not likely to occur. Under these conditions, as Bienefeld (1975) notes, if other activities do not pass on to prices the benefits of productivity gains, a form of 'unequal exchange' will then develop against the service workers.

An intermediate case which should be discussed further is that of informal commerce activities. Technological change within these is also gradual and oligopoly trends are slower. In addition, the factors which determine the survival of informal units under oligopoly conditions are very much present in this case. Market imperfections (especially demand behaviour at low income levels) intro-

duce a sort of product differentiation which ensures the permanence of these activities for longer periods than can be expected for, say, informal manufacturing activities. Location, personal owner-customer relationships, credit, infinite possibilities of product subdivision, permanent availability because of the inexistence of 'business hours', etc., are factors which allow them to maintain a share in the overall market. It is true that many of these factors are linked to insufficient purchasing power, and in the long run the introduction of supermarkets will imply much the same conditions as in the case of oligopoly markets. They are, however, entangled with cultural patterns which make changes in consumption patterns more difficult, as is well illustrated by the development of these activities in economies with higher levels of income.

(c) *Anticipated trends: some tentative conclusions.*

In conclusion, it would seem that we should expect a declining trend in the share of income for the sector as a whole, but this does not imply that the informal sector will disappear, not only because the pattern of development followed by the present developed countries has shown that informal activities subsist at very high income levels (Hobsbawn, 1969), but also because the resistance factors, together with market evolution, will allow their survival (Souza-Tokman, 1976; Bienefeld, 1975; Arrighi, 1970).

Given the composition of the informal sector's balance of payments, there are also grounds for expecting a declining trend in its terms of trade. This aspect should, however, be a matter of

further discussion, since the international dependence analysis cannot be automatically transplanted to the internal level. Although it is clear that both prices and markets are determined outside the sector, hence implying a dependence relationship, its balance-of-payments composition is diversified and mostly constituted by low income-elasticity goods. The prices of exports of personal services are not expected to grow at a rapid rate, but that rate should be mainly compared with price changes in foodstuffs (both processed and unprocessed), which are also characterized by their low income-elasticity. Weights, elasticities and prices of these balance-of-payments components should be further subjected to empirical analysis before trends can be anticipated.

The anticipated smaller share in total income, together with the expansion of the labour supply for the sector, give grounds for forecasting that if no measures are taken, involutionary growth will occur. Informal-sector activities may display inherent disadvantages, if judged by formal-sector criteria, but they, in turn, depend on policy decisions, and in this sense the disadvantage of the informal sector should be considered structural. Evolutionary growth should then be feasible, but that implies going much further than providing a 'favourable policy environment' to avoid discrimination against the sector or supporting informal activities without attacking the causes of underdevelopment. Indeed, a substantial change in the prevailing international economic order is required, but this will not in itself be sufficient. Neither should national institutional changes alone be expected to change the observed pattern of growth. For such measures to be effective, they should be complemented with changes in

surplus distribution and allocation and with changes in the pattern of growth.¹⁴ This means that measures should be taken not only to favour informal activities but to affect directly formal-sector activities as well.

B.

The informal sector's balance of payments

1. *Objective*

In this section an attempt will be made to estimate the informal sector's balance of payments with the rest of the economy. Much of the theoretical discussion reviewed above 'assumes' different degrees of interrelationships between sectors, but very few data are supplied to test the alternative hypotheses presented. The quantification of the informal sector's balance of payments will enable us to analyse the degree of openness of the sector, if any, and the characteristics of the intersectoral links, and it will also provide some basis for exploring the behaviour of the terms of trade and market possibilities. The analysis will refer to the case of Chile.

2. *Sources and methodology*

In order to estimate the informal sector's balance of payments, a prerequisite is to calculate the complete set of production and income accounts of the sector. This task, in turn, makes it necessary to work with the national accounts of the country to avoid inconsistencies. In short, a disaggregation of the national accounts is needed, and, given the information available, such a task is

confronted with a number of problems. For this reason, the figures presented in this section should be considered as illustrations of a methodology and the conclusions reached should be carefully qualified.

No attempt will be made to describe in great detail the methodology and sources used. However, it is important to mention briefly the principal sources which were drawn upon, as well as the principal methodological steps followed. The national accounts served as the point of departure. To disaggregate the informal sector from the rest of the economy, several sources were used, mainly the population census of 1970 and the manufacturing industry census of 1967; the unpublished pre-census of manufactures in 1967, which made it possible to analyse the industrial establishments with fewer than five employees that were not included in the census; a national survey of small industrial establishments and artisan workshops (1967); a Greater Santiago household budget survey (1968); a national household income survey (1969); the periodical national survey of commercial and service activities; an input-output table for 1962 disaggregated by 54 sectors and its new 1965 version prepared by the RAS method; and additional unpublished information supplied by the Planning Office for this study.

The information was worked out at

¹⁴ This conclusion is also reached by Arrighi (1970) for tropical Africa.

the maximum level of disaggregation that the sources allowed. This implied working with manufacturing industry at three digits, construction, commerce divided into wholesale and retail, transportation divided into passenger, goods and means of transport, and services divided into nine different categories.

The first step was to estimate employment, production and value added in the informal sector, by branches. For this purpose, employment was estimated with the total labour force broken down by subsectors and by occupational position. In addition, the population and industrial censuses were

also used. Production and value added per employed person in each informal activity were then estimated on the basis of industrial pre-census and census data, the national survey of small industrial establishments, and the national survey of commerce and service activities (see table 1).

The second step was to estimate total consumption of the informal sector. Savings and direct taxation were assumed to be nil, since family savings are negative in the case of Chile, especially in the lower income brackets, and payments of direct taxes are also negligible at those income levels. Hence,

Table 1
CHILE: EMPLOYMENT, PRODUCTION AND VALUE ADDED IN THE
INFORMAL SECTOR, 1967
(Percentages)

	Employment ^a	Production ^b	Value added ^c
Foodstuffs, beverages and tobacco	(21.2)	(4.0)	(6.2)
Textiles, footwear, clothing and leather	(47.8)	(18.8)	(20.4)
Wood, cork and furniture	(44.4)	(15.9)	(19.2)
Non-metallic minerals	(15.7)	(2.0)	(2.0)
Metal products, machinery and transport equipment	(28.0)	(12.0)	(14.0)
Other industries	(37.9)	(22.3)	(20.4)
Total manufacturing industry	32.3	9.7	12.0
Construction	29.4	17.6	17.6
Personal services	44.9	20.8	24.8
Commerce	57.3	42.9	34.4
Transport	20.0	11.3	11.2
Housing	—	27.9	26.3
Total informal sector	757.5 ^d	7 395 623 ^e	4 876 489 ^e
Percentage of urban total	39.9	17.6	19.7
Percentage of total for country	27.5	14.7	15.7

Sources: Employment: ODEPLAN (1973); production and value added: INE (1971), DEC (1969) and unpublished data from INE and ODEPLAN.

^aAs percentages of total employment in each sector.

^bAs percentages of total production in each sector.

^cAs percentages of total value added in each sector.

^dIn thousands of persons.

^eIn thousands of escudos.

consumption was equal to net value added after deducting indirect taxes. The consumption of the informal sector by sector of origin was estimated by grouping the items which constitute the household expenditure of the lowest income bracket (those earning less than twice the minimum legal wage) into those goods and services produced and marketed outside the sector (electricity, gas, kerosene, etc.), those produced and marketed within the sector (bread, shoes, clothing, etc.), those produced by the rural sector and marketed by the informal sector (fruits and vegetables, milk, etc.) and those produced by the formal sector and marketed by the informal sector (processed foodstuffs, tobacco, beverages, appliances, etc.).

The third step was to estimate the intermediate production of the informal sector by sector of destination. For this purpose, the input-output tables of 1962 and 1967 were used. The fourth step was to allocate final demand between consumption and investment uses. Value added in informal construction activities was considered the only investment component, and consumption was estimated as a residual, assuming that no exports outside the country were made from the sector. As the amount of informal sector consumption supplied through goods and services generated within the sector was known from the second step, the remainder constituted sales of consumer goods and services to the rest of the economy.

Finally, the inputs of the informal sector were estimated by deducting the value added from total production. The allocation of inputs by sector of origin was effected by assuming that intermediate sales to the informal sector itself were known from step three, and by allocating the balance between the rural

and formal sectors on the basis of the input-output tables.

The basic information estimated with the methodology outlined above made it possible to estimate the balance of payments of the informal sector with the rest of the economy for 1967. Furthermore, intersectoral balances of payments between the informal and rural sectors and between the informal and formal sectors were also constructed (see table 2).

3. Findings

No attempt will be made to analyse the size and characteristics of the informal sector, though in fact this can be done with the information presented in the tables. It is worth noting, however, that employment in informal activities represented around 40 per cent of total urban employment and 27 per cent of national employment, while in urban production the sector's share was 18 per cent and in urban value added 15 per cent. The data also show that informal-sector employment and value added are highly concentrated in personal services and commerce, which account for 70 per cent of employment and 72 per cent of value added. Manufacturing accounts for 23 per cent of employment and 21 per cent of value added.

(a) *The balance-of-payments position*

The balance of payments of the informal sector with the rest of the economy registers a surplus equivalent to about 20 per cent of its exports. This implies that the sector is contributing that amount of resources to the expansion of the other sectors. However, the situation is not homogeneous, since

Table 2
CHILE: INFORMAL-SECTOR BALANCE OF PAYMENTS, 1967

	Thousands of escudos	Percentages
1. With the formal sector		
Exports	2 581 245	100.0
Intermediate goods	614 661	23.8
Consumer goods	1 877 874	72.8
Investment goods	88 710	3.4
Imports	1 795 039	100.0
Inputs	344 303	19.2
Consumer goods	1 450 736	80.8
Surplus	786 206	30.5 ^a
2. With the rural sector		
Exports	456 774	100.0
Intermediate goods	339 276	74.3
Consumer goods	117 498	25.7
Imports	642 237	100.0
Raw materials	93 310	14.5
Consumer goods	548 927	85.5
Deficit	-185 463	-40.6 ^a
3. Overall balance of payments		
Exports	3 038 019	44.7 ^b
Imports	2 437 276	35.9 ^b
Balance	600 743	19.8 ^a

Source: For the methodology used, see text. The main sources used were as follows: (i) the informal-sector production accounts by sector of origin were calculated on the basis of ODEPLAN (1973, 1965) and M. Gómez (1969); (ii) the uses of informal-sector income by sector were allocated by applying coefficients calculated on the basis of the DEC household budgets survey (1968-1969); (iii) the informal-sector production accounts by sector of distribution were calculated by disaggregating the input-output tables presented by ODEPLAN (1965) and M. Gómez (1969); (iv) the balance of payments was calculated from the three main accounts mentioned above.

^aAs percentages of exports.

^bAs percentages of available goods and services (production minus exports plus imports).

the breakdown of intersectoral trade flows clearly shows that while the informal sector transfers resources to the formal sector corresponding to around 30 per cent of its exports to the sector in question, it is in turn receiving transfers from the rural sector amounting to 41 per cent of its exports to that sector.

These results suggest that the informal sector is playing an intermediary role in the transfer of resources between the rural and the formal sector, but they also show that it is contributing in net terms to the resource availability of the latter (see again table 2).

Investment, mostly in housing, plus

the existence of a positive balance on the current account with the rest of the economy, indicates that the informal sector is generating a surplus of around 20 per cent of its income.¹⁵ This surplus coincides with the difference in the level of consumption per family between the population employed in the informal sector and the total urban population earning less than twice the nominal minimum wage. It seems difficult to explain this high propensity to save in a situation of underconsumption, but several hypotheses can be advanced for further research.

First, the accumulation process in the informal sector is greatly biased towards housing, both of the low-cost type and for the open market. The direct link between savings and either direct construction or the financial market acts as a strong incentive to sacrifice present consumption. In this sense, the payment of a house mortgage or the deposit made in order to be entitled to a subsequent loan constitutes a financial investment that could be consistent with the surplus registered in the balance of payments.¹⁶ The same argument can be applied in the case of vehicles, especially taxis, trucks and small buses. Secondly, the role of the State in this context should be

carefully analysed. The majority of the surplus generated by the sector is extracted by the State, mainly through indirect taxation; but it can also return directly tied to investment. Such is the case, for instance, with the net subsidy component of public housing programmes and with the replacement of vehicles for public transport. In this respect, the State will be directly financing all, or at least part, of the physical and financial investment made by the sector.

The results also suggest that the informal sector is in an intermediate position as regards to its degree of openness, since, contrary to the assumptions of numerous authors, it is neither completely self-contained nor closely integrated with the rest of the economy. The export share of the available goods and services within the informal sector (informal sector production minus its total exports plus its total imports) comes to 45 per cent, while the import share is around 36 per cent.

Analysis of the import structure by sector of origin and by type of goods shows that while the informal sector is relatively autonomous on the inputs side, supplying around 82 per cent of its requirements from within, it registers a greater degree of dependency on the consumption side. Around 51 per cent of total consumption is supplied from outside sources, especially the formal sector, which satisfies 37 per cent of total consumption (processed foodstuffs, basic services, durable goods, etc.).

The export structure reflects a mixed situation as regards the importance of the other sectors' markets as outlets for informal-sector production. Around 80 per cent of the investment made by the informal sector, mostly in construction, is placed within the sector, while

¹⁵ Given the difficulties of estimating investment in machinery and vehicles, total investment of the sector is taken as being equal to construction. However, a positive investment in vehicles or machinery will only affect the share of physical and financial investments, since an increase in imports of capital goods will reduce the balance-of-payments surplus.

¹⁶ This seems to be especially true of domestic services, which account for half of the balance-of-payments surplus. In this case, the very partial evidence available suggests that most of the savings are channelled through the low-cost housing market or through the public savings and loan system.

one-third of the informal intermediate products sold are exported to the rest of the economy, mainly commercial and transport services to the rural sector and all types of intermediate goods and services to the formal sector. The importance of markets outside the sector is greater in the case of consumer goods and services, since more than half of its total production of this type is sold to the formal sector, and comprises mainly commerce and personal services, but also a significant amount of informal manufactured goods (see table 3).

Table 3
INCOME-ELASTICITIES OF INFORMAL-SECTOR EXPORTS AND IMPORTS

	Percentages	Elasticities
<i>Exports</i>	100.0	1.943
Commerce and transport	34.4	1.446
Personal services	35.9	3.253
Construction	4.6	1.050
Manufactured goods	25.1	0.915
<i>Imports</i>	100.0	0.923
Rural inputs	3.8	0.446
Manufactured raw materials	14.1	1.171
Rural final goods	22.5	0.446
Processed foodstuffs	29.6	0.694
Basic services	17.9	0.806
Durable goods	12.1	2.414

Sources: Structure of exports and imports from table 2.
Elasticities from R. Roldan (1974).

To sum up, the balance-of-payments position of the informal sector shows that the sector is relatively integrated into the rest of the economy and that its main links are with the formal sector. Such links are mostly concentrated in exports of consumer goods and services (mainly commerce, personal services and some manufactured goods) and in imports of goods and services, also for consumption purposes (mainly processed foodstuffs, durable manufactured goods and basic services). On the other hand, it also shows that the formal sector receives resources from the informal

sector but that, in part, those resources are only channelled through the latter, since they originate primarily in the rural sector.

(b) *The balance-of-payments outlook*

Given the structure of the intersectoral trade flows, some exploration can be made of anticipated trends and historical price evolution. The first of these areas can be approached, very roughly, by analysing the income-elasticities for the different tradeable products, while the second can be

studied by analysing the changes registered in the terms of trade.

The study made by Roldan (1974) on consumption functions for Greater Santiago gives information on expenditure-elasticities by sector of origin and by income level for 1969. He presents two sets of elasticities: one for those families receiving less than twice the minimum wage, and the other for families with incomes higher than that limit. The first set of data can serve as a proxy for expenditure-elasticity of the persons employed in the informal sector and hence can provide an idea of changes in demand for imports on the part of the informal sector. The second set of data can be used to estimate the expected behaviour pattern of market possibilities for exports from the informal sector.

If the elasticities are weighted by the share of each type of good or service in total exports and imports, it can be seen that the average elasticity for exports of the informal sector is more than double the average elasticity of its imports. This is explained by the structure of imports and exports, since the former are concentrated on foodstuffs (processed and unprocessed), which are characterized by very low elasticities, while the latter are concentrated on commerce and personal services (mostly domestic services), which both show high elasticities (see table 3).¹⁷ This suggests that, if the distribution of income does not change significantly, one would expect an increasing surplus transfer from the informal to the formal sector. However, the trend followed will largely depend on the situation of the personal services

market, since although the elasticity suggests a growing demand for such services, the net contribution will depend on the income paid, which, in turn, will be closely linked to labour force availability.

Finally, a terms-of-trade index comparing the changes in export and import prices during the 1960s can be constructed in order to analyse whether the surplus is being extracted from the sector through the same mechanism as is observable at the international level between peripheral and centre countries. For this purpose, different indexes were applied for each export and import component. On the export side, changes in commerce returns were calculated on the basis of the changes in retail prices of foodstuffs, assuming that margins were constant; changes in personal services incomes, on the basis of an index of domestic servant's wages; changes in construction returns, on the basis of an index of wages of unskilled construction workers; and changes in manufactured goods exports, on the basis of an index of prices of shoes and clothing. On the import side, the indexes used were: for unprocessed foodstuffs, an index of prices of ten fruits and vegetables; for processed foodstuffs, an index of prices of 14 goods; for public services, an index of electricity tariffs; and for durable goods, an index of electric iron prices (see table 4).

The resulting terms-of-trade index shows that the export and import prices of the informal sector changed at practically the same rate during the 1960-1970 period. If anything, the data suggest that the prices paid by the informal sector for its imports grew at a slower rate than the prices received for its exports, the result being an improvement in the terms of trade of around 12

¹⁷ Even if domestic services are excluded, the elasticity of exports is still 36 per cent greater than that of imports.

Table 4
CHILE: INFORMAL-SECTOR TERMS OF TRADE, 1960-1970
(1967=100)

	Export prices					Import prices					Terms of trade
	Commerce and transport	Personal services	Construction	Manufactured goods	Total exports	Rural goods	Manufactured goods	Basic Services	Durable manufactured good	Total imports	
1960	19.0	13.3	13.7	21.7	17.3	17.5	17.9	17.4	18.5	17.7	97.7
1961	20.9	17.7	14.4	21.9	19.8	19.8	19.1	21.7	19.0	19.7	100.5
1962	24.5	20.3	18.0	24.0	22.5	24.5	22.2	21.7	21.6	22.6	99.6
1963	36.6	25.0	26.4	33.2	31.1	32.0	31.7	26.1	31.4	30.8	101.0
1964	55.0	36.3	41.1	45.6	45.2	48.8	44.2	39.1	43.6	44.4	101.8
1965	71.3	52.7	56.6	59.9	61.0	65.0	65.6	65.2	58.8	64.6	94.4
1966	87.4	78.3	79.3	77.2	81.2	85.6	83.7	87.0	73.3	83.6	97.1
1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968	125.5	166.7	124.8	131.0	141.6	112.2	131.3	134.8	133.4	127.1	111.4
1969	163.9	227.0	153.5	175.2	189.0	185.3	170.5	191.3	172.3	178.2	106.1
1970	221.9	297.7	212.3	258.8	258.0	228.0	235.4	247.8	229.6	235.1	109.7

Sources: *Export prices:* Commerce and transport and food prices component of cost-of-living index for Greater Santiago, from Banco Central de Chile (several issues); personal services, domestic servants' wages from Superintendencia de Seguridad Social (several issues); construction, unskilled construction workers' wages, unpublished data from Cámara de la Construcción; manufactured goods, footwear and clothing prices, from INE (several issues).
Import prices: Rural goods, prices of 10 fruits and vegetables, from INE (several issues); manufactured goods, prices of 14 processed foodstuffs, from INE (several issues); basic services, electricity tariffs from INE (several issues); durable manufactured goods, changes in electric iron prices from INE (several issues).
Terms of trade: Export price index divided by import price index.

per cent in the course of the whole decade. The improvement is, however, concentrated in domestic services, and if these are excluded, the terms of trade deteriorate by about 8 per cent. The data should not be taken at face value, but they do shed some doubt on the significance of the deterioration of the terms of trade of the informal sector as a mechanism of surplus extraction.

At the beginning of this section, it was mentioned that employment and output of the informal sector are mainly concentrated in personal services and commerce. Although, as shown above, an expansion in the market for the former type of activities is reasonably

likely if growth and concentration of income are combined, the income differentials and the semi-feudal working relationships prevailing in this market (especially in domestic services) will not allow such a development to contribute to the improvement of incomes of those employed in the informal sector. A different situation may prevail in the case of commercial activities, which account for 26 per cent of employment in the informal sector and almost half of its output. The special characteristics of activities of this type and the scant empirical knowledge of their operation call for a more thorough analysis. This will be attempted in the next section.

C.

Competition in retail services: the case of Greater Santiago

The evolution of the share of the informal sector in total income will largely depend on the anticipated changes in service activities. A large proportion of informal-sector employment is concentrated in 'traditional' services, such as those provided by domestic servants and street vendors, and its inverse relationship with development gives grounds for anticipating a declining trend in the long run. The problem arises, however, in trying to forecast the informal sector's share in 'complementary' services. For these activities a high correlation between its total output share and growth has been found (Katousian, 1970; Sabolo, 1975). This question has been analysed for Chile by Sansone (1977), who found an income-elasticity for commercial activi-

ties of around 0.80, and anticipated an expansion of commercial output practically *pari passu* with that of total income.

The main question, however, is what will happen within the sector, since competition between different production units could lead to a decrease in informal commercial activities in spite of an increasing market share for the sector as a whole. Indeed, this is the conclusion reached by Sansone, who anticipates a reduction of the present level of employment in petty commerce of around 33 per cent in the next two decades, while the share of modern units (supermarkets) in total sales will increase from 35 to 82 per cent during the same period. His conclusion is mainly based on the assumption that demand substitu-

tion within the sector will follow the present correlation observed between higher income levels and greater preference for buying in modern units (supermarkets).

This linear extrapolation of present behaviour should be carefully analysed, since many factors complicate the functioning of this particular market, making prognostication a difficult and risky task. Although a single rather homogeneous market can be distinguished for commercial services, imperfections in both product and factor markets may affect the competitive position of the different units, the result being that the declining trend of informal-sector commercial activities does not occur at the anticipated rate or may even not occur at all in the medium term.

For the sake of simplicity, we will deal only with established commerce, since street vendors can be included within the 'traditional' services group. Furthermore, the analysis will be mainly restricted to the established commerce of processed and unprocessed foodstuffs.¹⁸ On the other hand, the information available will further bias the analysis towards the Greater Santiago area, on which the few studies already undertaken shed most light (Collins-Garrod, 1971; Sansone, 1977; PREALC-SENDE, 1976).

1. Competition in the foodstuffs trade

The first factual question which should be answered in order to evaluate the degree of competition in this particular market is whether there is a single set of

prices for similar products sold by informal units (small shops) and modern units (supermarkets). The data available (see table 5) show that the same products, when bought in informal units, cost on average around ten per cent more than if bought in supermarkets. The price differentials are not homogeneous but vary with the type of products, being practically nil in the cases of sugar, detergent, tea and soap, while they are concentrated in rice, oil, beans and eggs. Some products, such as flour and spaghetti, are found at lower prices in small stores (see table 6).

Three factors should be considered when analysing price differentials. The first is that part of the differentials are normal deviations in commercial activities. This can be clearly shown by

Table 5
PRICE DIFFERENTIALS IN THE FOOD
TRADE
(Percentages)

Years	Price differentials
1966	11-20
1969	24
1970	30
1975	14
1976 ^a	7
1976 ^b	3

Notes and sources: 1966, P. Barahona: this study refers to a large low-income sector of Santiago (Manuel Rodríguez); the 11-per cent differential does not include quality differences while the 20-per cent figure does.

1969 and 1970, Collins and Garrod: this refers to a sample survey of Greater Santiago. 1975: case studies made by UNICOOP in several medium- and low-income sectors of Santiago. 1976:^a joint PREALC-SENDE survey of small commercial establishments in Nuñoa, a middle- and low-income district of Santiago. Meat products are not included. 1976:^b estimates made on the basis of 8 in-depth case studies undertaken for the aforesaid survey.

¹⁸ Unfortunately, the information available did not allow us to analyse informal commercial activities in markets, especially in those dealing with fresh fruit and vegetables.

Table 6
PRICE DIFFERENTIALS BY MAIN PRODUCTS
(Percentages)

	Between small shops and supermarkets		Differences between supermarkets
	A	B	
Rice	14.0	9.0	-3.0
Oil	7.0	5.0	-1.0
Eggs	5.0	8.1	-30.0
Sugar	1.0	-0.5	0.0
Tea	-5.0	0.0	2.0
Detergent	1.0	—	-2.0
Soap	-2.0	-3.4	-5.0
Chicken	—	-6.2	-4.0
Beans	27.0	17.5	35.0
Lentils	—	-16.3	12.0
Potatoes	13.0	7.1	26.0
Onions	—	54.9	87.0

Sources: A: PREALC-SENDE survey of small shops, 1976, and prices collected directly on the same date at UNICOOP and ALMAC supermarkets. B: Case studies of small shops.

comparing the prices for the same products in the two largest supermarket chains of Santiago (UNICOOP and ALMAC), where the price differential found is around 3 per cent. In this case, however, the largest price differentials are concentrated in vegetables and beans and lentils, and are partly offset by small differences from 1 to 5 per cent between different brands in most of the other products; whereas in the case of small stores the majority of the prices were at least equal to those registered by the supermarket. The second factor which makes price comparisons difficult consists in quality differentials. The study undertaken by Barahona (1966) shows that if quality differentials are taken into account, price differentials practically double, while Collins and Garrod (1971)

show that the products considered, although apparently homogeneous, are not found in both types of establishment. If the product bought in the small stores is replaced by the nearest substitute, the price differential changes from 24 to minus 17 per cent in 1969 and from 30 to minus 8 per cent in 1970. Finally, the question of location and vicinity of competing units becomes important for evaluating price differentials. In the study made by UNICOOP (1975) it is shown that price differentials increase with the distance between the small shop and the supermarket, reaching their maximum at three or four blocks from the supermarket. The data also show that even the small shops located in the same block as the supermarket charge between 8 and 10 per cent more than the supermarket for the same products.

Considering all the factors mentioned above, it can be safely concluded that the small stores sell their products at least at the same price as the competitive unit and that, most likely, price differentials are around 7 to 10 per cent.¹⁹ With these price differentials one would expect that demand for food-stuffs would shift from small shops to supermarkets. This, however, has not happened in the case of Chile, where, on the contrary, UNICOOP has recently (March 1977) closed all its branches in low-income sectors of Santiago after more than ten years of unsuccessfully trying to break the competition of the small shops.²⁰ The survival of small

¹⁹ This gives little support to the argument that the surplus of the informal sector is transferred through lower prices to other sectors.

²⁰ In a recent public announcement (March 1977) UNICOOP notified the closure of five supermarkets operating in San Joaquín, La

shops in the face of competition and their capacity to retain demand even at higher prices than are charged by their competitors can be explained by the existence of imperfections in both the product and the factor markets.

2. Imperfections in the product market

Imperfections in the product market are the consequence of demand segmentation caused by different factors which sometimes require certain characteristics in the production unit that are more easily found in small shops than in supermarkets. The small purchasing power of the majority of consumers, combined with their income instability and the need to consume a fairly diversified basket of goods, results in a pattern of demand characterized by daily purchases of small quantities of different products.

This hypothesis can be confirmed from the data available, since a high correlation is found between low income levels and greater preference for buying in small shops (see table 7). Between 72 and 81 per cent of total expenditure on foodstuffs of the lower income levels is effected in small shops, whereas the proportion decreases to 16-21 per cent in the higher income strata. Furthermore, the persons with lower income levels show greater income instability and shorter periods between paydays. In the Las Condes district 51 per cent of the lower income groups received unstable incomes, while at the higher income levels the proportion dropped to 26 per cent (Sansone, 1977). In addition, a third of the persons in the

Table 7
PREFERENCE FOR BUYING FOODSTUFFS IN
SMALL SHOPS, BY INCOME LEVELS

Income levels	Small shops' sales as percentages of total demand	
	A	B
High	16	21
Medium	59	35
Low	81	72

Sources: A: Collins and Garrod (1971);

B: Instituto de Administración, Universidad Católica (1974), cited by Sansone (1977).

lower income strata received their income fortnightly or weekly, while all the persons in the higher income levels were paid monthly (see table 8). These income characteristics²¹ result in a high prevalence of daily purchases in the lower income groups, where around 50 per cent of the people go to the market daily and 37 per cent go weekly; at the higher income levels nobody goes to the market daily, while half of the persons concerned make their purchases monthly (see table 8).

Consumption diversification, due not only to habit but also to nutritional and standard-of-living requirements, leads to the limited daily average purchase being spread over some 18 uses, thus resulting in a demand for very small units of each product. According to several studies made by Aldunate (1974, 1975) a daily

²¹ In addition, and also as a consequence of their low income level, they have limited storage capacity. For instance, only 2 per cent of the families with lower incomes have refrigerators, while in the 20 per cent of families located in the top income bracket the corresponding proportion rises to 87 per cent (Sansone, 1977).

Pincoya, Peñalolén, Pudahuel and Villa O'Higgins: all sectors where the lowest-income population of Santiago is concentrated.

Table 8
DEMAND PATTERN BY INCOME LEVEL

Period Income level	Income received		Frequency of purchases	
	High	Low	High	Low
Daily	0	0	0	47.4
Weekly	0	22	41.7	36.8
Fortnightly	0	11	8.3	10.5
Monthly	100	67	50.0	5.3

Source: Instituto de Administración, Universidad Católica (1974), cited by Sansone (1977).

basket for five persons purchased by the lowest income groups is composed of five non-foodstuff products and 13 foodstuffs, most of them bought by the quarter-kilogramme (tea, rice, beans, spaghetti, onions), by one unit (eggs), or by one-sixteenth of a litre (cooking-oil).

This pattern of demand imposes special characteristics on the production unit, namely, capacity to sell in small amounts, little product-mix diversification and accessibility in terms both of location and of business hours. All these factors reduce the return of modern units (supermarkets), since technological change in commercial activities is closely linked to scale and product diversification, and in order to ensure the former—especially in markets characterized by a low per capita income level—the distance between establishments should be maximized.

Small shops, however, are able to fill the requirements imposed by the consumer. As may be seen in table 9, they usually sell in whatever small quantities are required. About 80 per cent of the establishments sell sugar, rice, spaghetti and tea by 1/8 or 1/4 of a kilogramme,

60 per cent sell beans and lentils by 1/4 of a kilogramme, 82 per cent sell oil by 1/8 of a litre, 88 per cent sell potatoes by the half-kilogramme, and almost all of them sell onions, eggs, detergent (1/4-kilogramme package), soap, chicken and bread by one unit.²² The opposite occurs in supermarkets, where the minimum sale quantities are two kilogrammes for sugar, one kilogramme for rice, spaghetti, beans and lentils, three kilogrammes for potatoes, five units for onions and one dozen for eggs.

The question immediately arises of why the supermarkets cannot reduce their minimum sales units to attract customers. The answer is related to technological constraints, since a large part of the supermarket profit is made by buying in bulk and packing mechanically in standard units. In addition, this method makes it possible to minimize labour use in the sales stage. A clear example of this constraint is given by

²² Product divisibility sometimes reached such lengths as in the cases of sugar and spaghetti, which were sold by 100 grammes, and oil, sold by 1/10 of a litre.

Table 9
MINIMUM SALE UNITS, BY TYPE OF PRODUCT AND ESTABLISHMENT

Product	Small shops					Supermarkets (minimum unit)
	1/10	1/8 (percentage of establishments)	1/4	1/2	1	
Sugar (kg)	2	37	54	2	5	1
Rice (kg)	—	17	60	9	13	1
Beans (kg)	—	2	62	33	2	1
Lentils (kg)	—	—	62	33	5	1
Spaghetti (kg)	2	27	67	2	2	1/2
Potatoes (kg)	—	—	—	88	12	3
Tea (kg)	—	100	—	—	—	1/8
Oil (lt)	2	82	14	—	2	1/8
Onions (units)	—	—	—	—	100	5
Eggs (units)	—	—	—	—	100	12
Detergents (unit 1/4 kg)	—	—	—	—	100	1
Soap	—	—	—	—	100	1
Chicken (unit) ^a	—	—	—	—	70	1
Bread (unit of 100 grammes) ^b	—	—	—	—	80	1/2 kg ^c

Sources: Small shops: PREALC-SENDE (1976). Supermarkets: direct observation.

^a10 per cent of the establishments sell chicken by the 1/4 kg and 20 per cent by the 1/2 kg.

^b3 per cent of the establishments sell bread by 1/10 of a kg, 2 per cent by the 1/4 kg, 9 per cent by the 1/2 kg and 6 per cent by the kilogramme.

^cUntil very recently only wrapped bread of different quality and higher price was sold at supermarkets.

Sansone (1977) in the case of sugar, where the supermarket (UNICOOP) minimum sale quantity used to be five kilogrammes. To reduce the minimum sale quantity to two kilogrammes, the supermarket had to close its packing plant and buy sugar already packed from a larger plant which operated at lower average costs. The two-kilogramme package constituted the minimum limit in view of the technology available and the price of paper and other inputs.

The second factor is the limited product-mix diversification required, in terms of number of products, brands and qualities. Most small shops operate on the basis of 15 main products of a single

quality, while product differentiation constitutes an important way for supermarkets to compensate for those products where profit margins are small. All the small shops interviewed in Nuñoa (PREALC-SENDE, 1976) sell processed foodstuffs (grains, oil, eggs, etc.), 76 per cent also sell non-alcoholic beverages, 67 per cent sell bread and 63 per cent fruit and vegetables. According to the cases studied, half of their sales are concentrated in three products: bread, sugar and oil.

Finally, the short purchasing frequency requires that shops be accessible, since time and transport costs influence consumer decisions. The majority of

supermarkets tend to be concentrated in higher-income sectors, while the opposite occurs with small shops, which are largely located in lower-income sectors. Eighty per cent of the supermarkets of Santiago in 1975 were located in the high-income districts, while 60 per cent of the small shops were concentrated in the lowest-income districts. Moreover, all supermarkets are located on main street or in shopping centres, while, for instance, the survey of Nuñoa shows that 56 per cent of the small shops interviewed were located in secondary streets or dead-ends without public transport and 65 per cent of them were isolated from other shops. The requirement of accessibility also imposes long and flexible business hours. Because of labour costs and regulations, supermarkets work 70 hours per week, while small shops open every day, including Sundays, totalling in the lower-income sectors about 80 hours per week.²³

Finally, there is an additional factor which also introduces imperfections in the product market: i.e., that linked to the special relation which is developed between customer and owner of the small shop. This relationship affects the functioning of the market in different ways, which range from helping the consumer to buy the right products to offering the possibility of sending children to shops, meeting the neighbours and reading the newspapers there. The most important consequence of this relationship, however, is that it provides the owner of the small shop with a mechanism for evaluating the creditworthiness of his customers, so that he is in

a position to give credit on a personal basis and thus bolster up the low purchasing capacity of his clientele. More than 41 per cent of the small shops of Nuñoa gave credit to their customers in 1976, and the proportion rises to 50 per cent if the shops serving the lower-income districts are considered.²⁴

3. Imperfections in the factor market

The higher prices charged by the small shops should ensure a larger gross margin, provided that they pay much the same prices as the supermarkets for their purchases. The evidence available suggests, however, that the extra amount paid by the small shops on their purchases exceeds the price differential they are able to pass on to the consumer.

The Nuñoa survey reveals that direct purchases from producers account for only 13-19 per cent of the small shops' total purchases and are predominantly of bread and chicken (see table 10). The main source of supply for the small shops is located in La Vega (the largest wholesale market of Santiago)²⁵ where they make about half of their purchases. In some cases (around 10 per cent) they even buy from supermarkets or other retailers, the gross margin in these cases being limited to the price differentials. In addition, the majority of the small shops (69 per cent of them) have to pay delivery charges, since they do not own

²⁴ It must be noted that at the time of the survey, Santiago was registering a 10-per-cent monthly rate of inflation coupled with demand contraction. Hence, in normal times a much larger coefficient should be expected.

²⁵ La Vega constitutes the main entry to the Santiago market for fruit and vegetables, and it also concentrates a large number of wholesalers of all kinds of foodstuffs who sell in large and small quantities.

²³ A recent change in regulations and the demand recession affecting this particular chain of markets has led UNICOOP to open on Sundays and to lengthen business hours.

Table 10
SOURCES OF SUPPLY, BY PRODUCTS

Products	Informal establishments ^a				Supermarkets ^b	
	La Vega	Wholesaler	Producer	Super-market or other retailer	Producers	Wholesalers
Sugar	55	31	2	7	15	85
Oil	63	15	13	3	80	20
Rice	49	36	7	8	90	10
String beans	37	12	7	21	100	—
Lentils	29	14	9	33	100	—
Spaghetti	24	24	33	8	94	6
Potatoes	67	—	—	—	100	—
Onions	77	3	—	3	100	—
Eggs	37	14	39	7	100	—
Tea	56	28	2	5	78	22
Detergents	63	15	8	4	92	8
Soap	50	22	9	9	—	—
Chicken	—	10	90	—	100	—
Bread	—	2	89	2	—	—

Sources: SENDE-PREALC Survey, 1976, and information given by UNICOOP for 1976-1977.

^aAs percentages of establishments. The figures include double counting in those cases where an establishment stated that it buys the same product from more than one supplier.

^bAs percentages of total purchases of each product.

means of transport; 55 per cent pay cash for their purchases, while those who buy on credit are charged 7 per cent per month for an average credit of 19 days. In sum, these data clearly suggest that the small shop has to pass through a chain of middlemen in the marketing, transport and financial circuits.

The opposite occurs with the supermarkets, which possess enough bargaining power to obtain discounts for large quantities and credit facilities on better terms. In addition, they own their means of transport, thus reducing expenses under this head. The data available on the sources of supply of UNICOOP clearly show that approximately 86 per cent of the purchases are

made directly from producers, while the remainder are made from large wholesalers. In the former case, the savings made through bypassing some of the middlemen are added to the discounts obtained for buying in large quantities (see table 10).

It is difficult to estimate the differentials in the prices paid, because data on the supermarkets' real cost are not available. Studies made on the marketing process of rice, potatoes and tomatoes (Fletschner, 1971) and on fruit and vegetables (Programa Chile-California, 1965; ECA, 1966, 1968) illustrate the order of magnitudes involved in the different stages. In the case of rice, a product subject to price control, the

distributor margin found was between 6.5 and 13 per cent; while the wholesale and auction expenditure margins on potatoes and tomatoes were 31 and 32 per cent, respectively. For the ten main vegetables consumed in Santiago, the average wholesale margin was 21 per cent if no allowance is made for damaged goods,²⁶ while for the 12 staple fruits, the wholesale margin was 16 per cent, and that charged by the middleman between the wholesaler and the retailer amounted to 5.5 per cent.²⁷ This evidence suggests that through savings on their purchases supermarkets are able at least to absorb the lower final price received. This, in turn, would imply that gross margins are larger for the supermarkets. How, then, can the small shops survive with a lower rate of return?

Apart from the imperfections already mentioned in the product market, there are also imperfections in the factor market which are mainly related to the type of organization and mode of production of the small shops. Thus, the most common form of organization of production for the latter is on a family basis. Those operating such shops are generally self-employed and the shop constitutes a unit where the productive function is very loosely linked with the consumption function. In this sort of unit, implicit factor prices are determined in a different manner from those prevailing for the production factors used in the rest of the economy. It can be postulated that the implicit price for labour is lower than the price the

supermarkets have to pay because of the existence of family labour and the restricted opportunities for outside employment. Moreover, although the implicit price of capital relative to the price of labour may be larger because of capital scarcity, the low capital requirements of this activity, together with the dual use of capital for both production and consumption, could result in a lower implicit price for this factor too.

(a) *Imperfections in the labour market*

The information available for 1969 (Collins-Garrod, 1971) and 1976 (REALCSENDE, 1976) shows that the average income received by the owner of an informal-commerce unit was 2.12 and 2.33 times the minimum legal wage paid in each year. Total income received by the owner was equivalent to 2.6 and 3.2 times the minimum wage in each year, but allowances have to be made for unpaid family members working in the shop. If the 25 per cent constituted by the largest shops were excluded from the 1969 sample, owner income would decrease to 1.02 times the minimum wage and if family members incomes were imputed the owner's net income would fall below that minimum. The 1976 survey also shows an income decrease when the largest units are excluded, but its magnitude is smaller. In this case, the owner's income after deducting incomes imputed to family members is 1.9 times the minimum wage.²⁸

The income received by paid workers and that imputed to unpaid family

²⁶ The vegetables included were: lettuces, potatoes, tomatoes, carrots, onions, squash, spinach, celery, beet, cauliflowers.

²⁷ The fruits included were: apples, pears, lemons, oranges, avocados, bananas, peaches, apricots, grapes, watermelons, melons, plums.

²⁸ This suggests that the 1976 survey is biased towards average-sized establishments, a slant which, in turn, is the result of the district chosen for the sample (Ñuñoa).

members is similar to what they could obtain as unskilled workers in modern commercial establishments. The alternative income for the owner is larger, since white-collar employees in supermarkets earned on average around 3.2 times the minimum wage and the self-employed in other commercial activities received 2.52 minimum wages in 1969 as compared to 2.12 received by the owners of informal units.²⁹ Part of the differentials could be attributed to differences in human capital, since the owners are older people, less educated and with less than average previous experience. Collins and Garrod (1971), who analysed the influence of personal characteristics on income differentials, found that even when sex, age, education and hours worked are identical, the difference between the income received by informal-unit owners and that obtained by the self-employed in the rest of the economy is still 19 per cent, or 7 per cent if compared to the incomes of the self-employed in services.³⁰

The question which immediately arises is why the informal shop owners continue their operations when they could obtain a larger income by working as employees in modern establishments. Apart from the limited occupational opportunities available and the unfavour-

able personal characteristics which restrict mobility, the organization of production on a family basis also helps to keep them in their present position, generating a sort of labour market segmentation. We have shown that the income received by the owner is lower than the alternative income if allowances are made for unpaid family members. If such deductions are not made, their income is similar to the alternative income. To move out of their present activity would imply closing job opportunities to the other members of the family, who would have difficulty in finding new jobs and who are frequently not available for full-time jobs, as is usually the case with housewives and school-age children, who share their time between the shop, the housework and the educational system.

This organization of production can be clearly seen by analysing the employment structure. Forty per cent of the self-employed of Greater Santiago were engaged in commercial activities in 1969, and three-quarters of those employed in the food trade were family members. Furthermore, the proportion of family members increases as the size of the establishment decreases, reaching 97 per cent in the smallest shops. It may be noted that while the informal shop-owner works more intensively than the supermarkets both in terms of hours worked and days open, unpaid family members work only about 56 per cent of the hours worked weekly by the owner and 84 per cent of the hours worked at supermarkets.

(b) *Imperfections in the capital market*

The organization of the establishment on a family basis is also reflected in the capital market, and this in turn

²⁹ Confirmation of these data is found not only in the sample analysed by Collins and Garrod, 1971, but also in the periodic survey on commercial activities published by the Instituto de Estadística. Both samples refer to Greater Santiago.

³⁰ Differences are also found between incomes of white- and blue-collar workers when personal characteristics are identical. In these cases the differentials are 12 and 31 per cent, respectively, in relation to the same occupational position in the rest of the economy, and 7 and 16 per cent, respectively, in comparison with services.

restricts capital mobility. Around 70 per cent of the total capital in informal-commerce units is constituted by buildings, vehicles and machinery.³¹

Eighty-two per cent of the owners live in the same building in which the shop operates, and 85 per cent of them own their house. Only 12 per cent possess a vehicle, and in all these cases the vehicle is a car or station-wagon. Hence, both capital components serve also a dual purpose by filling welfare needs (housing and transport) and simultaneously playing a productive role. Returns on capital obtained from operating the shop are thus only a part of the total implicit return: in other words, the actual business capital is smaller than it nominally appears.

Assuming that the total income of the owner of an informal commercial establishment in Nufloa was 2,094 Chilean pesos in September 1976, and deducting the wages imputed both to unpaid family members (equivalent to the minimum wage) and to his entrepreneurial function (equivalent to 1.25 times the minimum wage),³² a net return on capital of 770 Chilean pesos can be estimated. Since according to Sansone (1977) the capital of small shops amounted on the average to 30,627 Chilean pesos at the same date, a capital return of 2.3 per cent monthly is obtained by the owner.

If this rate of return is compared with the 1.9 per cent estimated for UNICOOP, it can be seen that capital is used efficiently in the informal sector.

³¹ The equipment usually found in small shops is limited to one manual pump for the sale of oil, one scale and (not always) one refrigerator.

³² This is equal to the minimum wage legally fixed for white-collar employees.

On the other hand, if the owner decided to close his shop he could invest his capital either in the financial market (at 2 per cent monthly in real terms)³³ or in other modern commercial ventures (at about the same rate). This investment would give him a monthly income of 612 Chilean pesos, and he would have to obtain a job paying the equivalent of 2.5 times the minimum wage to reach the same income that he is earning by operating his own establishment.

However, as noted above, not all his capital can be transferred, since its dual purpose (welfare and production) implies that he cannot sell his house unless he can find alternative accommodation and he cannot sell his car unless he is prepared to sacrifice comfort and defray additional expenses for transport. If these two factors imply that the capital available for outside investment is restricted to, say, 50 per cent of the total, he would have to obtain a job for himself at 2.9 times the minimum wage in order to supplement his capital returns and reach the same income level that he is attaining at present. This, in turn, would confront him with the difficulties of finding a suitable job at that level of income and simultaneously it would restrict job opportunities for the rest of the family. In short, the labour market problems already analysed would make themselves felt.

4. Summary

To sum up, the evidence analysed in this section suggests that the informal-sector food shops are able to compete with the

³³ It should be noted that this real rate of interest is exceptionally high, owing to the special conjuncture affecting the Chilean economy, where interest rates on savings are inflated.

modern units. Indeed, not only can they survive but they can even, as in the recent case of UNICOOP, push the latter out of the market.

Secondly, the analysis of income differentials and returns on factors of production also suggests that this informal-sector activity represents an efficient use of resources, given the overall framework of job scarcity in the modern sector, the low purchasing power which characterizes the market, and the organization of production in the informal units.

Finally, trends are difficult to anticipate because competition between

units can be diminished by imperfections in the product and factor markets. Although the general behaviour anticipated for informal units in concentrated markets can be predicted for the long term, the rate is difficult to forecast and the trend might differ in the medium term. In addition, changes in the market will probably occur discontinuously rather than following a smooth path. Until substantial changes have come about in the purchasing capacity of the majority of the population and the prevailing mode of production of these units, it is highly likely that their ability to compete will ensure their survival.

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