

Working Paper Series No. 43

**SMALL IS SMALL: THE ROLE AND FUNCTIONS
OF SMALL SCALE INDUSTRIES**

I. Smyth & A. Lyberaki
September 1988

This paper has been submitted as a Chapter in a forthcoming publication by the EADI Working Group on Industrialization in the Third World, to be edited by Meine Pieter van Dijk and Henrik Secher Marcussen.

Small is Small: The Role and Functions of Small Scale Industries

A Lyberaki and I Smyth

| | |
|---|----|
| Introduction | 1 |
| Part I - Approaches to the Nature of Small Scale Firms | 3 |
| The Evolutionarist Approach | 3 |
| Modern and Dynamic/Anachronistic and Residual..... | 4 |
| Marginal/Integral..... | 4 |
| Autonomous/Dependent..... | 4 |
| Capitalist/Non-Capitalist..... | 5 |
| Part II - Approaches to the Role and Functions of Small Scale Firms | 5 |
| Employment Creation and Earning Opportunities..... | 5 |
| Patterns of Integration into the Socio-Economic System..... | 7 |
| Types of Technologies Employed and their Effects | 9 |
| Flexibility and Responsiveness | 10 |
| Part III - Underlying Assumptions about Small Scale Enterprises | 11 |
| Constraints to Growth..... | 12 |
| Employment in Small Scale Industries | 14 |
| Conclusions..... | 15 |
| Bibliography | 18 |

Small is Small: The Role and Functions of Small Scale Industries

A Lyberaki* and I Smyth**

Introduction

The study of small scale industries and their place in the process of industrialization of developing economies is a relatively new area of concern. This does not mean that, as such, it is poor in contributions and debates. The contrary is true, and the field has already attracted many and varied opinions¹. We wish to provide some comments and tentative reflections on certain pervasive attitudes, shared by many of the participants to the discussions. We believe that these attitudes create obstacles to the assessment of the concrete conditions under which such enterprises exist and to the formulation of relevant and effective policies.

We have condensed such attitudes into three main points. The first is that small scale industries are often treated as a unified and clearly identifiable analytical category. The second is that there is a great deal of confusion between abstract and empirical analysis and, within the latter, a lack of differentiation between the national, regional, sectoral and enterprise level. The final point is that there is an excessive preoccupation with the scale of the enterprise and that this has prevented a more comprehensive analysis which takes into account both the internal configuration of the enterprise and the economic and social context in which it is located.

We present our ideas mostly in the form of a review of what we believe to be relevant literature. However, it is not our objective to provide a thorough critique of individual approaches or to point to the merits of adopting one of such approaches. What we wish to stress is that, in spite of different views, the literature as a whole suffers from some common indiscriminacies and weaknesses. As already said, these lead to considerable problems in the analysis of small scale industries, which account for the scarcity of useful insights for policies.

The paper is divided in four parts. In the first and second parts we deal briefly with the most popular approaches to the study of small scale enterprises: the first contains those which look at the nature of such firms from an abstract point of view; in the second we summarize those theorizations which are more concerned with concrete issues and address more directly the question of the function of small scale industries for the industrialisation process.

* Institute of Development Studies (IDS), University of Sussex, Brighton, England.

** Institute of Social Studies (ISS), The Hague, Netherlands.

¹ The literature we survey consists of strands within different perspectives, draw respectively from: the informal sector debate (concerned primarily with urban employment), the petty commodity approach (a more theoretical stance, concerned with the spread of capitalist relations), and the more general arguments about industrialisation.

In part III we return to the three attitudes summarized above and show that they lead to a widespread concern with an unspecified idea of *growth* of small scale enterprises and of the *constraints* to such growth. In this part we also try to link such problems to a common background, which relies heavily, if not consciously, on an evolutionary view of industrialization and development. The final part contains a summary of the ground covered and some tentative conclusions.

In the paper we give more consideration to issues concerning the employment potential of small scale industries. This is partly to reflect the considerable space given to such topics in the relevant literature examined. It is also a deliberate choice, which exemplifies our opinion that the study and understanding of economic structures and the changes they undergo are not simply an intellectual exercise. They are justifiable if their ultimate aim is to make sense of them in terms of the benefits people can draw from them. Levels of industrialization have long become the abstract measure of success and prestige among countries, regardless of their meaning in terms of the welfare of real people. Notions of employment and levels of remuneration, on the other hand, do go some way in assessing such welfare, particularly in developing countries where underemployment and poor earnings are at the roots of many of the problems besetting such countries. It is for this reason that such issues are given more space in our present work.

In the paper we make occasional reference to examples drawn from the experience of two countries: Indonesia and Greece. We chose these for a number of reasons. The first, and very simple, reason is that each country represents our individual field of expertise, thus the use of information and ideas drawn from their context provides us with a degree of confidence in the validity of the material presented.

Secondly, both are countries where the small scale manufacturing sector is large. The obvious problem with the exercise is the different definitions adopted in official statistics. In Greece different definitions are adopted, both in academic and policy documents, but the most widely accepted definition includes firms employing up to 10 workers. In Indonesia the 1974-75 Census divided the manufacturing sector in: Large Firms (employing 100 or more people); Medium Firms (employing 20 to 99 people); Small Firms (employing 5 to 19 people) and Cottage Firms (employing fewer than 5 people and including those with no paid workers) (McCawley 1979).

Because of the disparities in definitions, it is not possible to make a direct comparison between the two countries, but an impression of size of the small scale manufacturing sector in each of them can be gained from the following information. In Greece, among the 20 branches in which the manufacturing sector is divided, in 14 the average size of firms in terms of employment is between 2 and 9 employees (National Statistical Service of Greece, Industrial Census 1978). For the case of Indonesia it is hard to give similar statistical accounts, as data on small scale manufacturing are poor. It is however known that while large and medium firms

account for almost 80% of manufacturing value added, they provide only 1/5 of manufacturing employment. On the contrary, over 80% of workers in the sector are within small industries which, however, account for only 1/5 of manufacturing value added (Kuyvenhoven and Poot 1984).

Another reason for using examples drawn respectively from the case of Greece and that of Indonesia, lies in the realization that putting alongside a developing and a developed (albeit not to the same degree of other western countries) may reveal some interesting differences and similarities in the presence and characteristics of small scale industries.

Part I - Approaches to the Nature of Small Scale Firms

This part contains brief descriptions of some views on the nature of small scale industries. These views are grouped together here because to differing degrees many share a dualistic stance. They show how, by focusing exclusively on scale, it is possible to view small scale industries from diametrically opposed points of view. Furthermore they help to reveal the strength of the influence of an evolutionary idea of development, even among those theorizations which are alien or even opposed to it.

The Evolutionarist Approach

This is not strictly a separate form of categorization, rather a pervasive influence common to many approaches. Those who embrace this view explicitly adopt a historical perspective which analyses small scale industries in terms of a trajectory valid for all industrialisation processes regardless of the latter's timing and location. At particular times in this trajectory (commonly in the early stages) the existence of small scale production is legitimised with reference to small market size, poor infrastructure, low mechanization and very poor division of labour. In the later stages of development, the contribution of small firms decreases as large capitalist firms become the dominant form in the industrial structure. The emergence of large firms is associated with increases in market size, economies of scale, changing factor proportions and better infrastructures (Nanjundan 1986).

This is a rigid and linear notion of both industrialisation and development, which does not allow for the very obvious co-existence of large and small scale industries in both developed and developing countries. Furthermore it does not address the question of the transformations that large and small firms undergo during the industrialisation process.

Despite its problems, this approach remains influential. It is the point made in this paper that it has penetrated much of the literature dealing with the subject of small scale industries, even when the latter belongs to alternative traditions. It is from this influence that, as we will show later, comes the confusion over growth and its constraints.

Modern and Dynamic/Anachronistic and Residual.

Perhaps the most common picture drawn of small scale industries in the Third World is one of the traditional family workshop, characterized by elementary division of labour, simple technology and bad work conditions. Such workshops are seen as based on the extraction of absolute surplus value and as destined to be driven out of business as soon as big capital enters their line of production and competitive pressures become intolerable for them. On the other hand, there are abundant accounts of situations in which small firms are viewed as playing a crucial and complementary role in the production network of the manufacturing system (in the Japanese context, for example). Here small, dynamic and technologically advanced firms operate as specialized suppliers in the subcontracted manufacturing process. The main problem with such views is that in most cases studies are purely descriptive and make little attempt at developing theoretical explanations. As a result, their predictive value is limited.

Marginal/Integral

According to the marginality approach, located in the Latin American theoretical tradition (Quijano 1974, Nun 1962), small producers are part of the marginal pole of the economy destined to subsist at its margins. Contrary to this gloomy scenario, the alternative one argues that small scale industry is in many respects functional to the prevailing system, with the characters of the functional links varying greatly among theorists (see also Part II of this paper). Both approaches are undermined by the fact that each consistently ignores the realities which would contradict the stated perception of small scale industries.

Autonomous/Dependent

The debate which revolves around the autonomous/dependent controversy evolved in some sense out of the previous one and address the question of the relationship between small and large units of production. The first stance represents a pure dual sector model and, because of its lack of strong links between the two self-contained segments, is able to focus on either segment without dealing with the overall trends of the economy as a whole. In fact, each sector (traditional/modern: Lewis, Fei, Ranis; formal/informal²: Hart, ILO Kenya report, Weeks; upper/lower circuit: Santos) is seen as operating independently through its own dynamism.

One of the strongest criticisms of such a dualistic notion has come from what is usually called 'the petty commodity production approach', which regards any notion of independence and autonomy as misleading since in any socio-economic formation there is a continuum of productive activities rather than a two sector division. Thus one should concentrate on the relationships between the different elements of the ensemble, which is viewed as a highly differentiated and hierarchically structure.

In the real world the dependent status of petty commodity producers appears in a wide variety of shapes. There are indeed various degrees and patterns of dependent relations. In other words, the degree of 'relative autonomy' varies according to the branch of activity and the

² This characterization gives the name to the separate, full-blown debate of the informal sector.

nature of the production process - among other things (sub-contracting relations, dependence on merchants or large firms for raw material/technical assistance, on the State for credit etc).

Another effective criticism comes from the 'historical' approach which belongs to the broader framework of peripheral capitalism conceptualisations (Bienefeld 1975, Bienefeld and Schmitz 1976). Contrary to the classical dual model, the 'peripheral capitalism' approach treats the development of different productive activities as part of a unified process, the extension of capitalism in the periphery. Working within this framework, enables the complex relationships between different levels of production to be historically examined and the resulting pattern of labour utilisation to be comprehensively analysed. As part of this, it is clear that the nature of small scale production can be identified only if light is shed on the specific patterns associated with the development of industry in the periphery.

Capitalist/Non-Capitalist

Related to the above, but working at a much more concrete level, this dichotomy is used as an attempt to identify the nature of small firms by way of examining the relations of production that prevail within small manufacturing units. The adoption of broad or narrow definitions of the terms becomes the decisive element for analysing and classifying small scale manufacturing activities, but leaves untouched the huge grey area of production which falls in between the two.

As we said in the Introduction to this paper small scale industries are easily referred to as a global, unified category able to embrace very varied and even contradictory elements. The views just outlined are an exemplification of the problem as extremes are seen as part of the same broad category under the heading 'small scale industry'.

Part II - Approaches to the Role and Functions of Small Scale Firms

In this section we attempt to summarize the approaches that are concerned with concrete issues and focus on some crucial aspects of the contribution of small scale manufacturing to the industrial process. The following themes are chosen:

- Employment creation and earning opportunities effects of small scale firms;
- The latter's relation to capitalism and their integration into the overall socio-economic system;
- The type of technology used and its implication;
- The alleged flexibility and responsiveness of small firms to changing economic conditions as a vehicle to industrialisation.

Employment Creation and Earning Opportunities

The widely accepted argument that surfaces in the relevant literature is that small scale industry, being labour intensive and using relatively simple technology has the potential of contributing much more substantially to employment creation, when compared to large firms. It follows

that, in terms of policy prescriptions, small firms should be encouraged in the interest of enhancing the employment effects of industrialization.

Despite the apparent and superficial soundness of the argument, the hypothesis that small firms use simpler technology and rely heavily on labour utilization may hold in many cases, but it is not the rule. In fact, the degree of labour intensity is conditioned by the very nature of the productive process and the branch of economic activity (i.e. the degree of divisibility of production into independent tasks performed by independent units). Even in this case of increased divisibility, there is no apparent reason why the labour intensive parts of the production process can always be performed more efficiently and less costly in small firms. There is plenty of evidence in the literature of small firms using capital intensive production techniques and advanced technologies, as is the case with subcontracted firms in the electronics sector, for example (Murray 1983; Watanabe 1983).

Examples from Greece are interesting. Here the clothing industry is characterized by labour intensity in small firms, but this is however typical of all clothing firms, irrespective of size. Also in Greece, the example of the metalworking and engineering sector is representative with respect to the wide variety of degrees of labour intensity in small firms. The majority of such firms use traditional machinery and labour intensive techniques, but others have computerised machinery producing spare parts for the Greek armament industry.

In Indonesia, it is known that sectors of industrial production tend to be either predominantly composed of large, or small scale firms, with some overlap. In the small scale sectors are most of the resources-based industries processing food, wood and other natural inputs, as well as textiles, printing and chemical industries (Kuyveenhoven and Poot 1984).

Another point frequently made is that small firms provide an outlet for the energies of enterprising and independent people and thus are means of entry into business for new entrepreneurs and the seed-bed for development (Birch 1979, Bolton Report 1971). With respect to this argument, it has rightly been pointed out that the wish and opportunity of one individual to run a business is no insurance that the same will have beneficial effects for the social economy (GLC 1983). The point is whether the individuals capacity (both in terms of skills and capital) is socially more useful and hence more desirable.

To return to the Greek metalworking and engineering example, labour intensive small firms are now tending to reduce the number of people employed as an attempt to cut cost. In Indonesia, on the contrary, there has been some expansion in some sectors, such as textiles, but this has interested primarily rural areas and has been more a result of a reduction in agricultural employment than of an expansion in rural manufacturing.

The view presenting small firms as the prime generators of jobs has been challenged on other points, directly relevant to policy implications:

- Large establishments still account for a much greater proportion of job creation and job loss compared to small firms, thus the scope for policy intervention is wider;

- During the current crisis large firms have tended to shed labour in an attempt to increase productivity and enhance competitiveness; small firms, on the other hand, have maintained employment levels more or less stable and this could be seen as a sign of backwardness. In the conventional progressive/backwards scheme, large firms are progressive and small ones are backwards in economic terms;
- New employment depends to a large extent on investment, which, in its turn, depends on capital accumulation and profits. As growth relies on the re-investment of economic surplus, if that surplus is small, then investment is also small and employment creation will be restricted as a result (GLC 1983).

None of these statements can be accepted or refused in abstract. Each may have some validity when applied to specific concrete cases, against which it has to be tested.

To conclude this part, we intend to make two points. Firstly, that a systematic shortcoming of the debate on employment generation potential of small scale industry is related to the single dimension notion of employment in quantitative terms, a point to which we will return in the next section of this paper.

Second, it is important to stress that the problem in respect to the issue of employment generation potentials of small scale industry, is the terms in which the question has been frequently posed. We believe that what is important is not so much to establish whether in absolute sense small scale industries generate employment in developing or developed countries, but to identify the conditions under which it is possible for such firms to do so. It is also essential to remember that such conditions are liable to vary not only according to country, but also according to sector and branches of industrial production and to their location, the latter referring both to effects of regional economic and social characteristics but also to those of firms being based in rural or urban areas.

Patterns of Integration into the Socio-Economic System

There is a common assumption that small scale producers contribute to an increase in surplus value and the accumulation of capital in industry, through helping to keep the price of labour low. Portes argues that:

'the fundamental point is that the informal sector subsidises part of the costs of formal capital enterprises in peripheral capitalist countries enabling them to reinforce comparatively low wages on their own labour. The basic needs of formal sector workers are partially met by goods and services and produced using paid or more cheaply paid informal labour.'

(Portes 1978:37)

The wage subsidy argument has been challenged (Schmitz 1982) in many respects:

- There is not enough empirical evidence suggesting that the composition of expenditure of the working class is met primarily by small scale production;
- If subsidy is conceived in terms of very poor remuneration of the 'informal' workforce, then it is not clear the extent to which this reflects wide efficiency differentials, in which case clearly there is no subsidy;
- In cases where no productivity differentials exist among small and large firms, the poor remuneration of the informal workforce does not necessarily result in cheap goods for the 'formal' workers, since it is likely that the surplus is creamed off by other mechanisms, such as the parent firm in subcontracting or wholesale merchants and intermediaries.

Another framework within which small scale industry and its relation to capitalism is examined is that which considers the recent changes in production. In this context are studied the effects of the recession which, since the early 70s, has given rise to significant alterations in the organization of production and of the labour process. Obviously, the recession takes diverse forms and characteristics in different countries, sectors and branches. However, there appears to be an increasing concern in the relevant literature with highlighting the links between the recession and small scale industry. So, in a relatively new and quickly expanding body of literature.³

These trends are often termed 'the decentralization of production' and they challenge the idea that the centralisation of capital necessarily leads to the physical concentration of production. A growing body of evidence from the developed and developing world suggests that large firms tend to reduce plant size, split up production cycles between plants and increase the putting out of work to a network of small firms, workshops and domestic outworkers. The trend is a response to declining profitability, is made possible by the development of new technologies (Kaplinsky 1986) and must be located within the wider context of the restructuring of production aimed at reducing labour costs and increasing labour control and exploitation.

More in detail, decentralisation refers mainly to two processes. First, the farming out of the most labour intensive parts of the production process to small workshops and/or domestic outworkers (mainly women) using traditional techniques of production. Here increased profitability for the parent firms lies in the extraction of absolute surplus value through the lengthening of the working day and poor remuneration (Young 1981). Second, the subcontracting of parts of the production process is accompanied by a trend towards a replacement of the electromechanical parts of the means of production with microelectronic components, leading from worker control of the machine to the installation of units of control in the machine (Murray 1983). Here increased profitability stems from an increase in the extraction of the relative surplus value and better control of the scattered labour force.

What should be made clear is that the choice of techniques of production in subcontracting and decentralisation is not the direct result of availability of technologies, but the reflection of the conditions of profitability that prevail. In other words, whether decentralisation

³ Alternative theorisations seeking to examine the current transformations in the industrial organisation patterns include the Paradigm Change literature (Perez 1983 and 1985; Freeman and Perez 1986), the French Regulation School formula of changing Regimes of Accumulation and Modes of Regulation (Aglietta 1979; Lipietz 1987; Leborgne and Lipietz 1987; Boyer and Coriat 1987) and the Flexible Specialisation literature (Sabel 1982; Piore and Sabel 1984; Sabel and Zeitlin 1985; Sabel 1986; Murray 1985 and 1987; Storper 1988). In this body of experimental theorisations we should also include the concept of Disorganised Capitalism (Lash and Urry 1987), the Diffuse Industrialisation School (Garofoli 1983 and 1984), Harvey's analysis of Post-Modernisms as the cultural expression of the Flexible Regime of Accumulation (Harvey 1987; Foster 1985) and last, but not least, the analyses of the spatial and regional implications of the emerging regime of accumulation and the emphasis on the politics of place (Harvey 1987; Janssen and Hoogstraten 1987; Storper and Scott 1988).

is followed by technological upgrading or not is, to a large extent, a matter of the general economic factors prevailing, linked to the profitability of each option.

Evidence from Greece suggests that in a number of manufacturing branches there has been an increase in sub-contracting and putting out as a response to the crisis. This has been dictated both by the drive to suppress labour costs and to enhance flexibility and responsiveness to changing market trends. The decentralisation trend has very rarely been accompanied by technological upgrading. Furthermore, it can be argued, on the basis of empirical work for the period 1979-84, that the recession in Greece has primarily hit large manufacturing firms, while smaller firms have proved to be more resistant to the worsening economic climate (Lyberaki 1988).

The experience of Indonesia would suggest that the preoccupation with the negative impact of restructuring on small scale industries is well founded. Recent analyses point to a decline in employment in small scale industries for the period 1974-85 (Hasibuan 1987), and list '...a consolidation towards larger industrial units, as indicated by the average size of firms' (Hill 1987) among the main changes in the Indonesian economy in the 1980's.

These negative changes are attributed both to import substitution policies, which are considered unfavourable to the creation of industrial employment in general, and to weaknesses specific to the sector (such as lack of capital, lack of human resources and adequate information) (Hasibuan 1987).

However, such conclusions are not entirely convincing, for a number of reasons. Firstly, the same sources of information (the 1986 Industrial Census) have been used to substantiate entirely contrasting conclusions, which indicate a growth in employment levels in small scale industries as well as an expansion in the number of small firms (Rahardjo 1987). Furthermore, recent research at the micro level has shown that in some branches of the small scale sectors, local conditions have favoured the expansion of employment as well as the marketing scope for the firms involved (Smyth 1988).

The above discussion should have shown that the preoccupation with crisis and restructuring has contributed to a revival of interest in small firms. However, the links between the two are not easy to trace. The underlying theme of this paper has been that generalisations can be misleading, and this holds for the recession and its impact. Wholesale optimism or exaggerated pessimism concerning the potential role of small firms in helping to overcome the crisis should be replaced by detailed analyses of the new opportunities but also the new problems arising for small scale industries within a specific context (Murray 1987; Williams et al. 1987).

Types of Technologies Employed and their Effects

Despite what has just been said, the question of technology remains important when dealing with the role and functions of small scale industry. In the literature, technology has been looked

at from different points of view. Within the 'informal sector' approach small scale industries are said to use simple, labour intensive technologies, hence suitable to the sector.

Technology, looked from a different angle, also concerns the 'intermediate technology' (or appropriate) lobbyists and the 'small is beautiful' theorizations (Schumacher 1973, McRobie 1981). Here, modern technology is branded as guilty of many sins: the proliferation of large and inhuman patterns of economic and social organization; a deteriorating effect on the environment and the exhaustion of natural resources. The alternative is not one of mass production but of 'production by the masses' (according to Gandhi's saying), based on the use of simple, cheap and easily manageable tools. The proposed solution for small scale industries is to downgrade technology to an 'intermediate' level, between the primitive and the advanced. While this approach deserves credit for its focus on ecological considerations, it is not very valid from an analytical as well as policy point of view, since the notion of 'intermediate' and that of 'appropriate' remain highly ambiguous.

More recently, the debate has shifted towards analysing the importance of the transfer of technological know-how from large to small firms, especially in studies of the Japanese case (Watanabe 1978). This view has been questioned by research carried out in other areas (Schmitz 1980 for Brazil), where subcontracting links have not resulted in any significant technological transfer between firms of different size.

Flexibility and Responsiveness

The final issues to be examined is that of the assumed flexibility of small scale industries. Proponents of small scale firms have argued that small units are inherently more flexible and responsive to market signals than their larger counterparts. This flexibility and responsiveness make them the seed-bed for new successful industries (Bolton Report 1971). This alleged strength of small scale industries has been questioned. It has been argued that small firms play a less significant role in innovation, since they lack the financial resources and marketing skills required for the purpose (Freeman, GLC 1983).

Furthermore, it is open to question whether small firms have the information about new products, markets and other conditions to which they are supposed to react with such promptness and flexibility, especially when compared to larger firms. This deficiency must at least partly destroy the advantages stemming from the proximity of small firms to consumers and do not compare favourably with the ability of larger firms to co-ordinate a wide range of information, to switch production accordingly and to predict future trends.

Again, it must be stressed that the focus of a useful approach should be to consider sectors and branches of activity separately, rather than the mere size of the firms involved. In those sectors where small firms are found to be more flexible and more responsive (as surely is the case for many branches of production), there is ample scope to develop promotion policies based on meaningful criteria such as performance, rather than on descriptive ones, such as scale.

Part III - Underlying Assumptions about Small Scale Enterprises

In the Introduction to this paper we stated briefly that three main attitudes can be identified among many of the approaches just cited. They were expressed in terms of: a treatment of small scale enterprises as a unified and distinct category, a confusion in analytical levels and an overrating of the importance of the actual scale of the enterprises under scrutiny.

In this part we do not try to solve the question of the position of the small scale firm as an analytical category, not to unravel the tangle of levels of analysis. We only point to the fact that - as Kaplinsky found in his study of the relation between unemployment and the diffusion of microelectronics based technologies, '...many of these studies float across different levels of discourse' (1985:86). Kaplinsky also finds that, for example, macro and micro studies of the subject reach vastly differing conclusions.

Following this, we stress the necessity for being systematic and explicit when tackling issues concerning small scale manufacturing, particularly because conclusions which can be reached about this or that aspect cannot be transferred across levels of discourse. The same applies to policy recommendations (on employment, for instance) drawn from the study of small scale industries at whatever level.

To return to the main argument, we believe that the three attitudes mentioned stem from a common tradition which, though not explicitly embraced, indirectly informs many of the views on the subject. This refers to the historical/unilinear view of development which we have mentioned earlier in the paper and which has its roots in the early sociological evolutionary theories. To quote Roxborough '...watered down versions [of such theories] exist in the form of theories of stages of growth and developmental or modernization theory in general' (1979:15). That these theories are not the prerogative of traditional sociological and developmental thought (as in the Rostow tradition) is clear, for example, from the lively debates surrounding Warren's ideas.

This tradition is akin to that which gave rise to the earlier neglect of issues concerning small scale enterprises, since the latter can be explained by the consideration that it must have seemed irrelevant to dedicate too much attention to the study of phenomena destined to disappear very quickly (Curtis 1980). Later in the paper we investigate briefly some of the reasons behind institutional neglect on the part of governments.

Within this scheme, small scale industries are seen as part of the initial steps which lead industrial production from subsistence form of manufacturing, to home-based and cottage industries, through small and medium scale ones, to their ultimate incarnation as large, modern industrial units. To quote from a recent paper

'Empirical studies, covering both developed and underdeveloped countries, and several decades indicate that in the course of economic growth, the size-structure of manufacturing enterprises passes through three broad phases.'

(Nanjundan 1986:3)

The author then proceeds to describe the inevitable path from the home-based processing of agricultural in-puts, to cottage industries, small scale factories and workshops, finally to large-scale production units.

Obviously studies do exist which escape the influence of this tradition and most are much more sophisticated than we give them credit here. For example, Anderson believes that there has been a too unconditional acceptance of the process of firm expansion and believes that

'The evidence on this...is not as forthcoming as one would wish; there is still much to be ascertained, for instance, about the ownership of manufacturing establishments by already large domestic and foreign corporations'

(Anderson 1982:32)

All the same the trend is present. We have said that within this framework, small scale manufacturing enterprises are transitional, thus their persistence easily becomes the anomalous result of a stoppage or malfunction in the chartered course of their development. The next step is to identify the problems or *constraints* to the proper development, i.e. to the *expansion and growth*, of such industries.

The first problem we encounter here is with the definition of *growth and expansion*. Growth is often seen as simply the transition of individual units into big units (Anderson 1985), once again concentrating on scale to the exclusion of any other element which characterizes such enterprises. Others look at growth as the expansion of employment opportunities in the sector as a whole. We consider the latter a more valid issue, though there are still problems in the way it is usually tackled, as we show below. Furthermore, it is often unclear which of the two aspects of expansion is being examined, and the unspoken assumption is that the two are necessarily concomitant. That this is not necessarily the case should have been clear from our discussion of the employment generating potentials of small scale firms.

Constraints to Growth

We now turn to the constraints which are seen to prevent such growth. Schmitz (1982) summarizes the literature on the subject in those approaches which emphasize constraints internal to the enterprise and those which stress obstacles external to it. Among the external constraints he lists the cheap wage subsidy mechanism, which supposedly contributes to the accumulation of capital in industry; the dependence of small firms on large ones through subcontracting and the inability of small firms to adopt new technologies. These issues have already been examined in the earlier part of the paper, where in fact we tried to show how, from different perspectives these characteristics were considered advantages, rather than constraints, to the existence and functioning of small scale industries.

It is also common to include among the external constraints, the neglect and even discrimination of governments and institutions within them. On this point it is undeniable that, despite many pronouncements in their favours, national economic policies have often relegated small scale firms at the bottom of their priorities.

In Greece, previous governments did focus their attention on incentives for large scale industry. The present government, however, has an explicit policy which aims to revise this and provide support for small firms. In their implementation, however, such policies have suffered from the poor definition of the target groups, which have resulted in interventions of poor, if not counterproductive, results.

In Indonesia, industrial policy is contained in the Five Year Plans (Repelita) which outline the overall development strategy for the country. All the plans since the first in 1969, have stressed the need to create jobs, using locally available raw materials and generally to support the small scale sector (McCawley 1979). In practice however, small scale manufacturing is treated with what has been termed 'benign neglect' and is attributed to the fact that

'...partly it is in the modern, large scale sector where the most growth is taking place and which is regarded as representing successful development, partly because the traditional sector is seen by policy makers as "backward" and presenting intractable problems, and partly because of lack of information.'

(McCawley 1979:32)

That the neglect is somewhat worse than benign appears clear from Repelita III (March 1984), which centres the new industrial strategy on the development of 52 key projects, most of which concern large, capital intensive industries. Programmes aimed at small scale industries do exist, but too often they are designed and implemented in isolation from the overall economic policy of the country.

At a general level there are reasons which can help explain the neglect of small scale industries on the part of institutions. The structure of social classes - which is historically determined - and their relation to the State are relevant issues here. One reason could in fact be that within individual countries while at certain levels entrepreneurs (in medium industries and the more 'progressive' small ones) represent social classes strong enough to attract to themselves financial and other resources (for example loans, or special credit), at the same time they are rarely in a position to influence decisions at the level of national economic policy. Those involved in smaller, cottage and home-base industries are even less powerful. Another reason is that State intervention in favour of small scale industries is not considered prestigious enough to serve political purposes useful to the State in its internal as well as external dealings.

For what the internal constraints to the expansion of the small firm are concerned, Schmitz concentrates mainly on the presumed poverty of organizational and entrepreneurial skills. We have dealt with this aspect briefly before, noting how again from an alternative perspective small firms are believed to be the seed-bed for development because they provide an opportunity for new entrepreneurs to enter into business. This leads us directly to the

question of employment generation in small scale industry, some aspects of which we have already discussed.

Employment in Small Scale Industries

As we have said, expansion is viewed in terms of the increased employment potential that increased scale can create. But it is primarily in relation to employment generation that the dangers resulting from an uncritical 'constraints to growth' line, appear clear. Even ignoring the fact that the reality of industrialization in most developing countries is a glaring demonstration of the fallacy of equating scale of production with employment generation, other problems exist.

Firstly there is a tendency to look at the employment of 'entrepreneurs' or owners of small firms (see above) and much less at the work force (paid or unpaid). Here the cause lies with methodological choices, in the sense that micro-studies are usually based on interviews with the owners of firms, and with methodological problems, particularly in gathering reliable information on a fluctuating and often unpaid labour force. The other problem lies with the restriction of the employment generation issue to a narrowly quantitative one. Exceptions do exist. For example, Schmitz (1982) is concerned with levels and regularity of earnings of owners and workers of small scale enterprises, in comparison to the wages of those employed in the large-scale sector.

The relations between expansion and employment have qualitative aspects, which must be investigated as they may not be as immediately apparent as qualitative ones and they will vary according to the type of enterprise as well as to the social context in which the latter operates. Expansion of operations - with variations according to different sectors and branches - of necessity involves alterations in the structure of the labour process, in work organization, in relations of production and thus in the control individuals are able to exercise over the productive process. More formalized types of work organization, a fragmented labour process, the inability to control the times and intensity of production, can create problems for those already involved in the sector as well as for potential entrants. For example, such conditions make employment in small scale industries less compatible with other income generating activities (in agriculture, for instance) and with other forms of productive work (such as housework).

The same alterations may restrict access to employment for certain sectors of the labour force which include people who for social and cultural reasons must remain within more informal, individualized forms of work relations. A good example is that of women, who in many developed and developing countries suffer from limitations to their mobility and exclusion from the more public social spheres. The same conditions may affect the acquisition of skills which, following the formalization of productive relations and the fragmentation of the labour process, may be accessible only to people with certain characteristics.

Considerations focussing on the skills and gender composition of the workforce are largely absent or only superficially dealt with. The same applies to a large extent to the issue of labour remuneration. While earning opportunities and levels of revenues concerning the petty entrepreneurs (the firm owner) have been researched into (Schmitz 1983), little is known about the workforce and the family labour (the latter is unpaid but we know little else). Other elements influencing the employment potentials of small scale industries are the regional specialization of certain activities (recorded, for example, for Indonesia) and the different situation created by the rural and urban location of firms.

Clearly, a qualitative analysis of employment in small scale industry, by sector and branch, would help shift the question from one posed in terms of whether small scale industries create jobs, to one which looks at how this can be so, because it makes it possible to identify those concrete conditions which enable small scale industries to create work opportunities.

In taking a critical attitude here we are not returning to the view dear to the proponents of the informal sector outlook, for whom small scale enterprises possess characteristics which are inherently positive because, in abstract, they are seen to use resources available in developing countries and are a seemingly an infinite source of employment opportunities. Rather, we wish to highlight that posing the question in terms of a failure of small scale industries to expand, creates the risk of obliterating the possibility of realizing that what is branded as constraints (internal or external), are also the conditions that ensure the survival of individual enterprises and, in the long term, of the sector as a whole (though the two are not necessarily concomitant).

To summarise what has been said in this section, we would repeat that there is a tendency to look at employment in small scale manufacturing exclusively from the perspective on numbers of people involved. This is obviously an important consideration, but a partial one. We believe that at the core of this partial view there is the fact that, generally, concern about the viability of small scale industries is worded in terms of (lack of) *expansion and growth* too vaguely defined. This, in its turn, is a direct consequence of the influence of evolutionary ideas on contemporary development thought, to which we referred earlier in the paper. We feel that it is necessary to transcend such ideas. To do this, it may be useful to leave aside the excessive preoccupation with expansion, and scale, and with quantitative aspects of employment, and to start considering the specific conditions which prevent or permit the very existence of small scale industries and their ability to reproduce themselves.

Conclusions

It is not easy to deal satisfactorily with the issues concerning small scale industries. In terms of theoretical issues, in this paper we have tried to outline some of the more obvious problems with the existing classifications and theorizations of small scale industries.

Firstly, the multiplicity of approaches concerning the nature of small scale industries (outlined earlier) makes it evident that the latter cannot be considered as a unified and distinct analytical category in any meaningful sense. It consists of such diversified lot of components (often contradictory and mutually exclusive as far as categorisation and classification are concerned) that its use becomes meaningful only with respect to a particular context: historical, country specific and branch specific. We have also pointed to attitudes often connected with a misplaced concern with scale of enterprises and with a too vague notion of growth.

At the level of empirical study, there are problems too. Firstly, there is little consistency on what it is that one is referring to. The definition of what consists a small scale enterprise varies from country to country (see Greece and Indonesia) and within the same country at different times (In Indonesia, official definitions of firm size were reviewed and changed for the 1974-75 Census, creating serious problems for the longitudinal study of trends in the sector). Statistics too are less than comprehensive and accurate.

Furthermore, at both the empirical and theoretical level there are great gaps in analysis. One such gap concerns rural enterprises, which are often ignored as a consequence of a skewed concern with urban employment (many of the debates revolving around the issues were in fact sparked off by the preoccupations with the levels of urbanization and urban unemployment in developing countries) on one side, and with agricultural development on the other. From the point of view of policy, this results in prescriptions which not only can disregard the needs of those already involved in the sector in rural areas, but which also fails to take advantage of existing structures and linkages in rural manufacturing and between this sector and the rest of the rural economy. Suffering from a degree of neglect (at least until very recently) are also the very small enterprises, those which are commonly termed cottage or home-based industries. Methodological problems are a partial explanation of this, as we have already said, but do not obviate to the need for more systematic studies.

In this paper we have offered some suggestions, which may contribute to overcome some of the problems we have outlined. We have pointed out that steps in the right direction would involve: 1. more focused studies, which look separately at different branches and sectors of production, for different countries, at different points in time. In this way the historical, geographical and sectorial specificities of small scale industries in all their aspects can come to the fore; 2. more attention to the qualitative aspects of growth and unemployment (in terms of gender, skills and levels of remuneration as well as conditions of work). Above all, as we stress later, there is a need for placing any understanding of small scale industries in the context of an integrated view of individual economies in their totality.

For what policy is concerned, it is interesting to note that both in the case of Greece and Indonesia there is a tendency towards a lack of an organic policy for small scale industry, in spite of the rhetoric. This is one of the several common aspects between the two countries with respect to small scale manufacturing, the others being the poor definitions, and undifferentiated

policy measures. These reveal a much higher degree of similarity between a developing and developed country than it is usually assumed, at least in this context. It is not in our intention or in our capacity to go into details about what we envisage to be adequate and effective policy recommendations, and some of the policy implications should have emerged from earlier arguments. Rather, we wish to point to the need to clarify all issues concerning small scale industries: this involves revalidating some concrete areas for intervention which are too often neglected (for instance rural enterprises and home based ones) and shifting the emphasis from too abstract concerns (that of scale) to more relevant issues.

The panacea of industrialisation problems is not found in the question of scale of production units. Small-scale industry promotion is not an end in its own right. Furthermore, nothing like a uniform policy towards small firms seems convincing from an industrialisation/development angle. Policies towards small firms should form a continuum with national industrialisation policies and general economic policy measures to promote development with regard to the particular country's economic goals. Compartmentalisation and a rigid set of policy measures fail to capture the links within the various components of the productive ensemble, and are inherently susceptible to degenerating into ineffectiveness or support for those to whom the latter was not intended in the first place.

Bibliography

- Aglietta M, 1979: *A Theory of Capitalist Regulation: The US Experience*, New Left Books.
- Boyer R and Coriat B, 1986 'Technical Flexibility and Macro Stabilisation', Paper for the Conference on Innovation Diffusion, Venice March.
- Anderson D, 1982: 'Small Industries in Developing Countries', *World Bank Staff Working Paper*, N° 518.
- Bienefeld MA, 1975: 'The Informal Sector and Peripheral Capitalism; The Case of Tanzania', *IDS Bulletin*, Vol 6 N° 3.
- Bienefeld MA and Schmitz H, 1976: 'Capital Accumulation and Employment in the Periphery - A Programme of Research', *IDS Discussion Paper*, N° 98.
- Birch DL, 1979: *The Job Generation Process*, Cambridge Mass.
- Bolton Report 1971: *Report of the Committee of Enquiry on Small Firms*, HMSO
- Browett J, 1985: 'Industrialization in the Global Periphery: The Significance of the Newly Industrialized Countries', *CDS Discussion Paper*, N° 10.
- Curtis D, 1980: 'Small Scale Industry Promotion: Report on a Field Project', *DAG Occasional Paper*, N° 7.
- De Vries BA, 1979: 'Industrialization and Employment: The Role of Small and Medium Sized Manufacturing Firms', *World Bank Reprint Series*, N° 116.
- Freeman C and Perez C, 1986: 'The Diffusion of Technical Innovation and Changes of Techno-Economic Paradigm', Paper for the Venice Conference, March.
- Foster H (Ed), 1985: *Post-Modern Culture*, Pluto Press.
- Garofoli G 1983: 'Areas of Specialised Production and Small Firms in Europe', *Economia Marche*, 11(1), June.
- Garofoli G, 1984: 'Uneven Regional Development and Industrial Restructuring: the Italian Pattern in the 1970s', *City and Region* N° 8, January/April.
- Gerry C, 1978: 'Petty Production and Capitalist Production in Daker: The Crisis of the Self-Employed', *World Development*, Vol 6 N° 9/10.
- GLC 1983: Economic Policy Group, Strategy Document N° 4, Small Firms and the London Industrial Strategy.
- Hart K, 1971: 'Informal Income Opportunities and Urban Employment in Ghana', Paper Presented at IDS Conference on Urban Employment in Africa, University of Sussex.
- Harvey D, 1987: 'Flexible Accumulation through Urbanisation: Reflexions on "Post-Modernism" in the American City', Paper presented to a Symposium at the Yale School of Architecture on Developing the American City-Society and Architecture in the Regional City, February.
- Hasibuan Sayuti, 1987: 'Small Scale Industry Development in Indonesia', Paper presented at the Policy Workshop on Small Scale Industrialisation, ISS, June 1983.

- Hill H, 1987: 'Concentration in Indonesian Manufacturing', *Bulletin of Indonesian Economic Studies*, Vol. 23 Nº 2.
- ILO 1972: *Employment, Incomes and Equality: A Strategy for Increasing Productive Employment in Kenya*, Geneva.
- Janssen B and Hoogstraten P van, 1987: 'New Infrastructure Requirements for Regional Development', Paper presented at the International Conference Regional Policy at the Crossroads, April.
- Kaplinsky R, 1985: *Microelectronics and Employment Revisited: A Review*, mimeo.
- Kaplinsky R, 1986: *Changes in Economy of Scale: The Implication for Appropriate Technology*, mimeo.
- Kitching G, 1982: *Development and Underdevelopment in Historical Perspective*, Open University.
- Lash S and Urry J, 1987: *The End of Organised Capital*, Polity Press.
- Leborgne D and Lipietz A, 1987: 'New Technologies, New Modes of Regulation: Some Spatial Implications', Paper presented at a Seminar on Changing Labour Processes and New Forms of Urbanisation, Samos, Greece, August.
- Lipietz A, 1987: *Mirages and Miracles: The Crises of Global Fordism*, Verso.
- Lipton M, 1980: 'Family, Fungibility and Formality: Rural Advantages of Informal Non-Farm Enterprises versus the Urban Formal State', Paper presented at The Conference of International Economic Association, Mexico City.
- Lyberaki A, 1987: 'The Relevance of Flexible Specialisation for Small Scale Manufacturing in Greece', Paper presented at the International Symposium on New Approaches to Industrialisation, Tunis, December.
- Leys C, 1975: *Underdevelopment in Kenya - The Political Economy of Neo-Colonialism*, London
- Mattera P, 1980: 'Small is not Beautiful', *Radical America*, Vol 14 Nº 5.
- McEwen Scott A, 1979: 'Who are the Self-Employed?', in Bromley and Gerry (Eds), *Casual Work and Poverty in the Third World Cities*
- McRobie G, 1981: *Small is Possible*, Abacus.
- Moser C, 1978: 'Informal Sector or Petty Commodity Production: Dualism or Dependence in Urban Development?', *World Development*, Vol 6 Nº 9/10.
- Murray F, 1983: 'The Decentralization of Production -The Decline of the Mass-Collective Worker?', *Capital and Class*, Nº 19.
- Murray R, 1985: 'Benetton Britain', *Marxism Today*, November.
- Murray R, 1987: 'Ownership Control and the Market', *New Left Review*, Nº 196, July/August.
- Murray F, 1987: 'Flexible Specialisation in the "Third Italy"', in *Capital and Class*, Nº 33, Winter.
- Nanjundan S, 1986: *Small and Medium Enterprises: Some Basic Development Issues*, UNIDO
- Nun J, 1962: 'Superpoblacion Relativo, Ejercito Industrial Reserva y Masa Marginal', *Revista Latino Americana de Sociologia*

- Perez C, 1983: 'Structural Change and Assimilation of New Technologies in the Economic and Social Systems', *Futures*, Vol 15 Nº 5, October.
- Perez C, 1985: 'Microelectronics, Long Waves and World Structural Change: New Perspectives for Developing Countries', *World Development*, 13(3).
- Piore M and Sabel C 1983: 'Italian Business Development: Lessons for US Industrial Policy', in Zysman J and Tyson L (eds.), *American Industry in International Competition*, Cornell University Press, Ithaca.
- Piore M and Sabel C 1984: *The Second Industrial Divide: Possibilities for Prosperity*, Basic Books.
- Portes A, 1978: 'The Informal Sector and the World Economy: Notes on the Structure of Subsidised Labour', *IDS Bulletin*, Vol 9 Nº 4.
- Quijano A, 1974: 'The Marginal Pole of the Economy and the Marginalized Labour Force', *Economy and Society*, Vol 3 Nº 4.
- Roxborough I, 1979: *Theories of Underdevelopment*, The MacMillan Press, London.
- Rahardjo M Dawan, 1987: 'The Development of Small Scale Industry in Indonesia', Paper presented at the Policy Workshop on Small Scale Industrialisation, ISS, June 1983.
- Sabel C, 1982: *Work and Politics: The Division of Labour in Industry*, Cambridge University Press.
- Sabel C and Zeitlin J, 1985: 'Historical Alternatives to Mass Production: Politics, Markets and Technology in 19th. Century Industrialisation', in *Past and Present*, Nº 108.
- Sabel C, 1986: 'Changing Models of Economic Efficiency and their Implications for Industrialisation in the the Third World', in Foxley A, McPherson M and O'Donnel G (eds.), *Development, Democracy and the Art of Trespassing*, University of Notre Dame Press.
- Santos M, 1975: 'L'Espace Partage, les Deux Circuits de l'Economy Urbain Des Pays Sous-Developpes'.
- Schmitz H, 1980: 'Accumulation and Employment in Small Scale Manufacturing: Case Studies from Brazil', mimeo.
- Schumaker EF, 1974: *Small is Beautiful*, Abacus.
- Smyth I, 1988: 'Differentiation Among Petty Commodity Producers: The Effects of a Development Project on Handicrafts Production in a Sundanes Village (West Java - Indonesia)', Working Paper for the PSP-IPB, ISS, PPLH-ITB Project on West Java Rural Non-Farm Sector (forthcoming).
- Storper M and Scott A, 1988 (forthcoming): 'The Geographical Foundations and Social Regulation of Flexible Production Complexes', in Wolch J and Dear M (eds.), *Territory and Social Reproduction*, Allen and Unwin, London and Boston.
- Storper M, 1988 (forthcoming): 'Flexible Specialisation and Industrial Development', *Cambridge Journal of Economics*
- Watanabe S, 1971: 'Subcontracting, Industrialization and Employment Creation', *International Labour Review*, Vol 104 Nº 1/2.
- Watanabe S, 1978: *Technological Linkages between Formal and Informal Sector of Manufacturing Industry*, ILO, WEP.

Watanabe S, 1983: *Market Structure, Industrial Organisation and Technological Development: the Case of the Japanese Electronics Based NC Machine-Tool Industry*, ILO, WEP.

Williams K, Cutler T, Wuilliams J and Haslam C, 1987: 'The End of Mass Production?', *Economy and Society*, 16(3), August.

Zeitlin J, 1985: 'Markets, Technology and Collective Services: A Strategy for Local Government Intervention in the London Clothing Industry', in Greater London Council, 'Strategy for the London Clothing Industry: A Debate', Economic Policy Group Strategy Document, N° 39, May.

Zeitlin J, 1987: 'The Third Italy: Inter-Firm Cooperation and Technological Innovation', Paper presented in the South East Economic Development Strategy (SEEDS), Brighton, March.