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Development of Small-Scale Industries During the New Order Government in Indonesia

Tulus Tahi Hamonangan Tambunan



DEVELOPMENT OF SMALL-SCALE INDUSTRIES DURING THE NEW ORDER GOVERNMENT IN INDONESIA

**For my mother, my wife Maudy
and our sons Bonar and Adriel**

Development of Small-Scale Industries during the New Order Government in Indonesia

TULUS TAHI HAMONANGAN TAMBUNAN

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Contents

<i>List of tables</i>	<i>vi</i>
<i>List of figures</i>	<i>ix</i>
<i>Abbreviations and glossary</i>	<i>x</i>
<i>Acknowledgements</i>	<i>xii</i>
<i>Preface</i>	<i>xiv</i>
1 Pattern of Development of SSIs: A survey of literature	1
2 The Importance and Development of SSIs in Indonesia	26
3 Production Linkages and Development of Small-Scale Supporting Industries	64
4 Strategic Alliances	94
5 Development of SSI Cluster	111
6 The Effect of the Economic Crisis and the Likely Impact of the IMF Agreement on SSIs	141
7 Main Problems of SSIs and the Role of Government	167
<i>Bibliography</i>	<i>192</i>

List of tables

1.1	Cross-sectional distribution of workers in manufacturing by scale of industry from 34 countries, 1985-1988	6
1.2	Data on the structure of manufacturing employment by size groups of establishments from selected cross-country studies	6
2.1	Total units of SEs by sector, 1992 and 1996	28
2.2	Total units, GDP share and labour productivity of SEs by sector, 1994	28
2.3	Total units of MEs by sector, 1992 and 1996	29
2.4	Number of workers and employment share in the manufacturing sector by size group, 1974-1997	31
2.5	Number of persons engaged in SIs, CHIs and MLSIs, 1994 and 1997	34
2.6	Value added contribution of SIs, CHIs and MLSIs in the manufacturing sector, 1994 and 1997	35
2.7	The growth of number of SSIs, MSIs and LSIs, 1991-1995	35
2.8	The growth of value added (VA) in the manufacturing sector by scale of production unit, 1991-1995	36
2.9	Total SIs by subsector , 1989-1994	37
2.10	Percentage distribution of employment in CHIs and SIs by selected province in Indonesia, 1986	39
2.11	Regression analysis results	42
2.12	Analysis of variance (ANOVA)	43
2.13	Poverty line, percentage, and number of population below the poverty line before the crisis, 1976-1996	49
2.14	The incidence of poverty by sectors, 1990 and 1993	50
2.15	ILO estimates of poverty incidence, 1998-1999	51
2.16	The employment structure of rural areas by important sectors in Indonesia and Java, 1971-1996	52
2.17	ILO estimates of changes in employment by sectors and urban-rural location, 1986-1998	53

2.18	Percentage of units of CHIs by subsectors of manufacture and urban/rural area, 1993 and 1995	55
2.19	Number of units of CHIs in rural areas by source of main income, 1993-1995	56
2.20	Percentage of units of rural CHIs by monthly industries income group, 1993 and 1995	57
2.21	Number and percentage of the producers surveyed by the main primary occupation of their fathers	59
2.22	Number and percentage of the producers surveyed by their prior occupation	60
3.1	Input structure of SSIs and MLSIs by sector, 1985	72
3.2	Output structure of SSIs and MLSIs by sector, 1985	75
3.3	Total BPL, FPL, and TPL coefficients by sector, 1995	78
3.4	The CPI by scale of establishment, 1995	82
3.5	Subcontractor, vendor and supplier of the Astra Group by scale of establishment, 1996	88
3.6	The importance of SSIs and MSIs in business linkages with the Astra Group, 1994 and 1996	89
4.1	Alliance participation by number and percentage of the firms in the sample	97
4.2	The relationship between strategic behavior and market orientation	98
4.3	Use of SAR	99
4.4	Frequency of alliance use by sub-types of long-term marketing, outside contracting and technology alliances	100
4.5	Types of SAR that the firms expect to use in the next year	100
4.6	Opinion about alliances	102
4.7	The personal opinions about alliances	103
4.8	Alliance success factors	104
4.9	Opinions of strategic alliance partner(s)	105
4.10	The performance and other benefits from SAR	107
4.11	Kinds of assistances received by the firms from their alliance partners	107
4.12	Information sources about formation of SAR	108
4.13	Sources facilitating SAR	108
5.1	Number of clusters supported by the government, 1992 and 1994	116
5.2	Number of foster parents (MLSIs) and their partners (SSIs) established in as well as outside clusters established until 1993	124
5.3	Clusters of small rattan industries in West Sumatera, 1996/1997	128

5.4	Enterprise level variables and indicators of flexible specialization	134
5.5	Percentage of CHIs by subsector and educational attainment of producers/holders, 1995	135
5.6	Number of SIs by type of skill received by the producers/owners and subsector, 1993	136
5.7	Some parameters of flexible specialization in rattan industry cluster in Tegalwangi (West Java)	137
5.8	A comparison of flexible specialization features and those found in Jakarta's clusters	137
6.1	Several macro economic indicators of Indonesia, 1994-1998	143
6.2	Theoretical hypothesis about the impact of income decline on demand for SSIs goods by differences in the income group and nature of the goods	148
6.3	The observed impact of the current economic crisis on SEs in some sectors of the economy, April 1998	150
6.4	The observed increases of import costs experienced by SSIs in the sample in selected subsectors caused by the rupiah depreciation	152
6.5	Power of resistance of SSIs in the sample in selected subsectors during the crisis	152
6.6	Strategy/response of the individual producers in the sample by size	153
6.7	Summary of the IMF economic reform policies which are expected to have impact on SSIs	155
6.8	Percentage of intermediate costs for SSIs by subsector, 1992-1993	156
7.1	Percentage of CHIs by type of industries and type of difficulties, 1993	168
7.2	Percentage of SIs by type of industries and type of difficulties, 1993	169
7.3	Different levels of economic policies affecting SSIs	177
7.4	Inventory of policies affecting SSIs development and growth	178
7.5	Impact of factor and output market policies on SSIs development and growth	180

List of figures

1.1	Changes in the size structure of industry over time	5
1.2	Two factors and their effects on the transformation process of SSIs	13
2.1	Growth of units of production by scale in the manufacturing sector, 1994-1997	32
2.2	The growth of shares of VA of SSIs, MSIs and LSIs, 1991-1995	36
3.1	Intermediate input structure of SSIs and MLSIs	73
3.2	Intermediate output structure of SSIs and MLSIs	76
5.1	The output and input market networks of the rattan clusters	131
5.2	The evidence of business linkages of small producers	132
5.3	Overall networks of the clusters	133
6.1	A theoretical framework in assessing the impact of the crisis on SSIs	145
7.1	Policies affecting SSIs	176
7.2	Joint venture between SSIs and MLSIs in the form of equity share	187

Abbreviations and glossary

ADB	Asian Development Bank
AFTA	Asian Free Trade Area
Als	Assembling Industries
AOIs	Automotive Industries
APEC	Asia-Pacific Economic Co operation
ASEAN	Association of Southeast Asian Nations
BI	<i>Bank Indonesia</i> (Central Bank of Indonesia)
Bulog	<i>Badan Urusan Logistik</i> (government logistic body)
CBS	Central Bureau of Statistics
CHIs	Cottage and Household Industries
CKD	Completely Knocked Down
CPIs	Component Industries
DCs	Developed Countries
Depkop and PKM	<i>Departemen Koperasi dan Pengusaha Kecil dan Menengah</i> (Department of Co operative and Small and Medium Entrepreneurs)
Depnaker	<i>Departemen Tenaga Kerja</i> (Department of Manpower)
Depperindag	<i>Departemen Perindustrian dan Perdagangan</i> (Department of Industry and Trade)
DP	Deletion Program
EC	European Community
EIs	Engineering Good Industries
ELIs	Electronics Industries
GDP	Gross Domestic Product
GNP	Gross National Product
GRDP	Gross Regional Domestic Product
IMF	International Monetary Fund
ILO	International Labor Organization
IPB	<i>Institut Pertanian Bogor</i> (Bogor Institute of Agriculture)
KIK	<i>Kredit Usaha Kecil</i> (Credit for Small-Scale Investment)

KMKP	<i>Kredit Modal Kerja Permanen</i> (Credit for Permanent Working Capital)
KOPINKRA	<i>Koperasi Industri Kecil dan Kerajinan</i> (Small-Scale Craft Industry Co operative)
LC	Local Content (Chapter 3) or Letters of Credits (Chapter 6)
	LDCs Less Developed Countries
LEs	Large Enterprises
LSIs	Large Scale Industries
MCIs	Motorcycle Industries
MEs	Medium Enterprises
MIIs	Machinery Industries
MLSIs	Medium and Large Scale Industries
MSIs	Medium Scale Industries
NGO	Non Government Organization
Pertamina	<i>Perusahaan Tambang Minyak Negara</i> (State Oil Company)
PLN	<i>Perusahaan Listrik Negara</i> (State Electricity Company)
VAT	Value Added Tax
SAR	Strategic Alliance Relationship
SC	Subcontracting
SEs	Small Enterprises
SI	Supporting Industry
SIs	Small Industries
SMEs	Small and Medium Enterprises
SMIs	Small and Medium Scale Industries
SSIs	Small-Scale Industries
UNDP	United Nations on Industry and Development Organization
UNIDO	United Nations Industrial Development Organization
UPT	<i>Unit Pelayanan Teknis</i>
WTO	World Trade Organization (Technical Service Unit)

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Preface

A not inconsiderable part of the literature on economic development addresses the role and importance of Small Scale Industries (SSIs) within the economy of less developed countries (LDCs). This growing attention for SSIs in development studies is strongly associated with the recognition of several economic and social problems currently confronting these countries. These problems include the continuing imbalance in the labour market leading to high unemployment rates, especially for the category of low educated people; the persistence of large intra- and inter-regional socio-economic inequalities and the consolidation of extremely concentrated patterns of urbanization.

In Indonesia, during the economic crisis, SSIs as many other small-scale informal economic activities in the country have become more important not only as an employer of last resort for millions of workers that have been displaced from formal sectors or big companies, but also as a provider of cheap consumption goods for low income or poor households.

It is often suggested in the literature that SSIs are very important for the economy in LDCs especially due to their characteristics,¹ which include the following ones. First, they are highly labour intensive. So, given these two characteristics, the development of SSIs can be seen as an important element of economic policy to create employment and hence to generate income within the economy. Second, the majority of SSIs in LDCs are mainly agriculturally based activities. This fact may explain the growing emphasis on the role of SSIs in the rural areas. Agriculture has been proven to be unable to absorb the increasing population in the rural areas. Unfortunately, rural non-farm activities together are not able to cope with the rural labour force explosion, neither the most employment creating parts like trade, services, transport and construction, nor the rural industries. As a result rural migration increased dramatically, causing high unemployment rates and related socio-economic problems in the urban areas. Therefore, rural industries being a potentially quite dynamic part of the rural economy have been looked at for their potential to create rural employment. Third, SSIs use technologies that are also in a general sense more "appropriate", as

compared to modern technologies usually used by medium- and large-scale industries (MLSIs) to factor proportions and local conditions in LDCs, i.e. quite a few raw materials being locally available and scarcity of capital, including human capital. Fourth, SSIs is important sector providing an avenue for the testing and development of entrepreneurial ability. Fifth, SSIs are financed overwhelmingly by personal savings of the owners, supplemented by gifts or loans from relatives or from local informal moneylenders, traders, input suppliers, and payments in advance from consumers. In this regard, the SSIs must be seen, potentially, as an important instrument to allocate savings optimally, especially in rural areas, which would otherwise not be spent or used productively. In other words, if productive activities are not available locally (in the rural areas), rural or farm households having money surplus might keep or save their money without any interest revenue inside their home because in most rural areas there is a lack of banking system, or, use their extra money to buy unnecessary luxury consumption goods which is often considered by the villagers as a matter of prestige. Finally, although there are many types of goods produced by SSIs (even those located in the rural areas) for the middle and high income groups of population, it is generally presumed in the literature that the primary market for the SSIs' products is overwhelmingly simple consumer goods, such as clothing, furniture and other articles from wood, footwear, household items made from bamboo and rattan, and metal products, which cater to the needs of the local low income population. SSIs are also important for securing the basic needs goods for this group of the population. But there are also many SSIs engaged in the production of simple tools, equipments, and machines for the demands of small farmers and small producers in the industrial, trade, construction, and transport sectors.

The development of SSIs and changes over time in terms of their number of production units, employment share, output share and composition, management and organization, division of labour, market orientation and location are usually thought to be related to many factors. The factors include the level of and changes in real income per capita, population density, progress or change in technology, regional economic development, and changes in regional or global economy. Several factors in several combinations may play a more important role than other factors. The impact of these factors may also differ for different size groups of manufacturing establishments, or even for individual enterprises within the same size category or in the same subsector of manufacturing. The impact may also differ in different locations.

Despite this growing attention to the role of SSIs in economic development in LDCs, knowledge on the transformation process of the employment in SSIs over time in the course of economic development is still limited.

Thus, the major concern of this book is to examine this issue. This particular issue is indeed important to be studied in order to understand the continuing presence and the relative performance of SSIs in a growing economy or a country undergoing a process of economic development or industrialization, or in country as Indonesia experiencing a big economic crisis. Based on existing empirical evidence,² questions may arise such as why in many countries such as in Latin America and Asia the employment shares of SSIs have been decreasing or begun to decrease? Will all activities of SSIs in these countries disappear in the long-run as the countries reach the Anderson's (1982) "later" stage of development? Is this transformation process, observed in many other countries, also valid for the SSIs in Indonesia? Will SSIs in Indonesia survive during the economic crisis?

In addressing this important issue, the book is divided into 7 chapters. Based on a huge number of literature and empirical data from many countries on the relative importance of SSIs in different stages of economic development, Chapter 1 discusses the pattern of development of SSIs within a broader theoretical framework. This theoretical framework provides further a basis for the empirical analysis in Chapter 2. For the empirical analysis, it uses secondary data from the Indonesian Central Bureau of Statistics (CBS) on the manufacturing sector by size categories for the period between the mid. 1970s to the mid. 1990s. In this chapter, the discussed hypothesis in Chapter 1 on the importance of income level and population density as two determinant factors of the development and growth of SSIs is tested for the Indonesian case with a simple model. The importance of SSIs for the rural economy is also discussed in this chapter.

Chapter 3 deals with production linkages of SSIs with other industries and sectors, and development of supporting industries. First, production linkages of SSIs in many LDCs such as Africa and Asia are discussed. Second, by using a National Input-Output Table 1985 of Indonesia this chapter examines the magnitude of both backward and forward production linkages of SSIs with agriculture, MLSIs, and other sectors of the economy. Also, in this chapter, present status and prospect of small-scale supporting industries in Indonesia is discussed.

Chapter 4 analyses the importance of strategic alliance for the SSIs. Based on a survey conducted in Indonesia during 1997-1998, this chapter shows the level of alliance participation of SSIs and MLSIs in Indonesia. Several related issues are discussed in this chapter, such as the role of business related associations, trade

groups and government in facilitation and information on strategic alliances; the individual expected outcomes of forming an alliance such as profitability and **ability to compete; and success factors and trust issues are all important and** provide a basis for building more effective alliances.

Chapter 5 examines with the importance of cluster for the development of SSIs. For this purpose, a case study has been conducted and its evidence is shown and discussed in this chapter. Also, based on literature on cluster development in both LDCs and developed countries, main factors affecting the process of cluster development in Indonesia are analysed.

Chapter 6 examines the effect of the economic crisis on SSIs, and assesses the likely impact of the IMF Agreement on the industries. Although the effect of the crisis on SSIs can be expected to be varied among different individual producers which is associated with different products, raw materials and market orientations, this chapter aims to examine whether the capability of export-oriented and/or less import dependent SSIs to cope with the crisis is in general better than that of domestic market-oriented and/or highly import dependent SSIs.

Finally, Chapter 7 deals with main problems of SSIs and the role of government in supporting the development of the industries.

Notes

- 1 There are many studies on the nature or characteristics and types of SSIs in LDCs. See, among others, Anderson (1982), Hansohm (1991, 1992), Liendholm and Chuta (1976), Page and Steel (1984), Rietveld (1989), Staley and Morse (1965), Stearns (1985), and Wickramanayake (1988).
- 2 See Chapter 1 for empirical studies on development of SSIs in many other countries.



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1 Pattern of Development of SSIs: A survey of literature

Introduction

The purpose of this chapter is to discuss the pattern of development of Small-Scale industries (SSIs) within a broader theoretical framework. This theoretical framework provides further a basis for the empirical analysis in Chapter 2. The framework outlined in this chapter has been drawn from empirical as well as theoretical literature on the issues above.

The development of SSIs and changes over time in e.g. their employment share, output share and composition, market orientation and location are usually thought to be related to many factors, including the level of and changes in real income per capita and population density. In the framework of this study, the main question in this respect is whether or not there is a general or systematic pattern of the transformation of the employment of SSIs over time in the course of the development process.

This chapter is organized as follows. First, some theories identifying the overall pattern of change and development of SSIs are discussed. On the basis of data collected from a number of studies, the relative importance of SSIs in terms of manufacturing employment share with respect to different levels of development is presented in tables and discussed. Second, some main factors affecting the pattern are discussed. Theoretically, the overall pattern of change and development of SSIs is the outcome of a complex economic process, in which several factors in several combinations play a role (Biggs and Oppenheim, 1986). The impact of these factors may differ for different size groups of manufacturing establishments and for individual enterprises within them. Amongst these factors, changes in the level of real income per capita and population density are often mentioned in the literature on rural industries or SSIs as two important factors. The study in this chapter deals only with the importance of these two factors. Third, as a further exploration of the relationship between the level of real income per capita and the level of employment in SSIs through the labour market,¹ this chapter discusses the phenomenon of people being pushed as well as pulled into SSIs.² Fourth, government policies which affect, directly or indirectly, the development of SSIs are discussed briefly.

Patterns of change and development of SSIs

In discussing industrial systems and the role of SSIs within the systems and their pattern of overall development, attention is usually focused on seminal articles by Hoselitz (1959), Staley and Morse (1965), and Anderson (1982), among yet many others. Their works are often classified as the "classical" theories on SSIs' development. While the "modern" theories on it which explicitly place emphasis on the importance of subcontracting networks and the economic benefits of agglomeration and clustering for the development of SSIs include the works of Berry and Mazumdar (1991) and Levy (1991) in the Newly Industrialized Countries (NICs) like Taiwan and South Korea, and the flexible specialization literature.

The "classical" theories

a. Staley and Morse's thesis

May be it can be said that the literature on SSIs in less developed countries (LDCs) started with the 1965's article of Staley and Morse. In their substantial study, based on the experience of the developed or industrialized and less developed countries they identified three categories of conditions for the predominance of SSIs: locational, manufacturing process, and market or type of product. Factories which process a dispersed raw material (mainly rural industries), products for local markets and with relatively high transport costs, and service industries are three main important locational conditions. Seperable manufacturing operations, craft or precision handwork, and simple assembly, mixing, or finishing operations are three main important conditions for the predominance of SSIs with respect to production processes. While, the market conditions are in terms of differentiated products with low scale economies and industries serving small total markets. The significancy of these influences may be different for SSIs in different subsectors. For instance, the industries serving small total markets condition is considered a particularly important influence for the dominance of SSIs in the wood and furniture subsector. Because total demand for such products is usually limited as compared to other consumer goods. While, the condition of factories which process a dispersed raw material is considered as a significant explanation for the dominance of small-scale food industries in rural areas.

Amongst these conditions, Staley and Morse (1965) argued that particularly seperable or specific manufacturing operations (e.g. SSIs produce only a certain component(s) for large-scale industries) and differentiated products having low scale economies are the most important explanatory factors for the presence of SSIs in less developed countries.³

b. Stages of development's thesis

- *Employment share*

Although the relationship between the size of manufacturing establishments and the process of economic development has been explored by some authors through the analysis of historical stages of development, the theoretical literature on the issue of how SSIs would be influenced by increases in per capita real income (as a proxy of economic development) is still rather limited. The attention on this particular issue was given first by Hoselitz in his study (1959) on industrialization in Germany. His study indicates that in the "early" stage of development the manufacturing sector in the country was predominated by artisans or craftsmen and as the process proceeded many of them grew later on into large sized establishments of industry.

However, Hoselitz (1959) did not study explicitly the nature of the relationship between the increase of the level of industrialization and the structural change within the manufacturing sector. He emphasized more on the characteristic of low costs of production which he concluded as the key to the success of SSIs. The low cost of production is attributed mainly to the use of unpaid family workers.

Following Hoselitz's work, Parker (1979) and Anderson (1982) have developed general growth phase typologies based on the experience of the industrialized countries to explain changes in the size structure of industry by region and over time in LDCs. According to this approach, in the course of economic development, the composition of manufacturing activities, if classified according to scale, appears to pass through three phases. In phase one, at the "early" stage of industrial development which may be characteristic of predominantly agrarian economies, cottage and household industries (CHIs), i.e. non-factory or craft-based enterprises (this can be marked as the most traditional type of SSIs), are predominant in terms of their total number of production units and share in total manufacturing employment. This is a stage of industrialization in which a large number of CHIs, mainly in rural areas, coexist with a quite limited number of larger scale, mainly foreign or state-owned firms located in urban areas or large cities. In this stage, CHIs are predominant in activities such as garment-making, smithy, footwear, handicrafts, masons, industries making simple building materials and various crop processing industries. They are closely related to agricultural production, as providers of rudimentary inputs to and of processing services for output from agriculture, and of the non-food needs of the rural population. In LDCs these subsectors are characterized by substantial ease of entry. Particularly for clothing, food and handicraft industries, initial capital requirements are very low and for the producers involved no high skills and no special separated workshops are really needed to carry out those

activities. Perhaps for this reason these activities are undertaken mostly by women and children as a part-time job or secondary source of family income; and most enterprises in these activities are self employment or one person units in which the owner undertakes all activity.⁴

In phase two, in more developed regions with higher incomes per capita than in regions in phase one, more small industries (SIs)(often marked as the modern or factory type of SSIs) and medium-scale industries (MSIs) have been found to emerge and increase at a comparatively rapid rate, and act to displace CHIs in several subsectors of manufacturing. There are a number of factors which might explain the expansion of these industries in this particular stage of development. Steel (1979), for instance, emphasizes the importance of a growing cash market for the expansion of SIs and MSIs (p.9):

Increased urbanization and expanding cash markets give rise to a shift from traditional household activities to complete specialization of the entrepreneur in small scale production and increased use of apprentice and hired labour.⁵

In phase three, at the "later" stage of development, large-scale industries (LSIs) become predominant, displacing the remaining CHIs and also SIs in some activities (see Figure 1.1).⁶ According to Anderson (1982) this phase is partly a product of phase two, since the recorded growth of output and employment in LSIs can be divided into (p.914):

a) the growth of once small firms through the size structure, and b) the expansion of already large domestic and foreign concerns.

However, the expansion of LSIs in this particular stage of development might also be caused, to a certain extent, by new large-scale entrants, which is not explicitly taken into account by Anderson.

In this final phase factors such as greater use of economies of scale with respect to plant, management, marketing and distribution (depending on types of products and flexibility in production), superior technical and management efficiency, better productive coordination and access to supporting infrastructure services and external finance, and concessionary finance along with investment incentives, tariff structures, and government subsidies are powerful causes and incentives for firms to grow larger. In practice it is often found that these factors are more favourable for large or modern industries than for small and traditional ones and so they may explain the eventual better performance of Medium-and Large-Industries (MLSIs) than SSIs in advanced stages of industrialization.⁷

The empirical evidence on systematic pattern of structural change in SSIs, though still limited, is richer than the corresponding theoretical literature. Studies from Snodgrass dan Biggs (1996) and Tambunan (1994) may provide a

general picture about the relative importance of SSIs in different countries with different levels of development (income).⁸ As shown in Table 1.1 and Table 1.2, the figures suggest that there is a systematic trend that in higher income countries the employment share of CHIs, which in these studies are classified as units with 1 to 9 workers, tends to be lower than in lower income countries.⁹

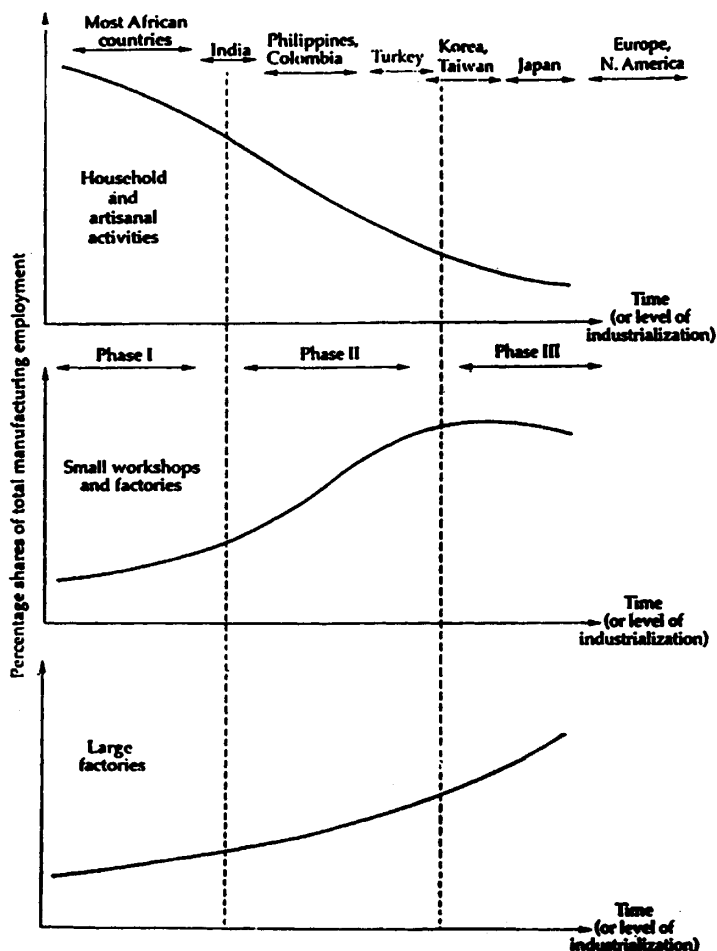


Figure 1.1 Changes in the size structure of industry over time
Source : taken from Figure 2 in Anderson (1982).