The Private Manufacturing Sector in Vietnam: An analysis of the winners

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Abstract

Vietnam has witnessed a dynamic restructuring of its non-state enterprises since the initiation of market reforms in the late 1980s. Based on the results of 371 private sector enterprises surveyed in 1991 and 1997, this paper analyses the transformation of one category of resurveyed enterprises with the highest growth - the fast growing in the period 1991-97. The performance of these fast growing enterprises are examined, separately for urban and rural, in terms of various internal and external determinants to the survival and growth of firms. These include organisational form, line of activity, enterprise history, entrepreneurial characteristics, scale of operations, employment, linkages - forward, backward and horizontal; production relations, continuity of operations, government assistance etc. in 1990-91 and 1996-97 and the changes in the intervening period. It is found that the fast growing enterprises have undergone enormous changes and displayed remarkable flexibility in facing the challenges of uncertainty in the changing economic environment of Vietnam.

Keywords: small scale industries, private sector development, Vietnam

JEL-Classification: J31, L11, L60

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Preface

The origin of the present study goes back to 1991 when the first major survey ever of the non-state manufacturing sector in Vietnam was undertaken as a collaborative effort between the Asian Regional Team for Employment Promotion of the International Labour Organisation (ILO-ARTEP), Institute of Labour Studies and Social Affairs (ILSSA) of the Ministry of Labour, Invalids and Social Affairs in Vietnam and the Department of International Economics and Geography at Stockholm School of Economics, with generous funding from the Swedish International Development Authority (SIDA).[1]

Apart from providing a wealth of information on this sector, the survey also provided a benchmark against which subsequent development could be judged. In 1996, on the initiative of SIDA, it was decided to repeat the survey undertaken in 1991. The new survey was designed and undertaken jointly by a team at ILSSA led by Dr. Do Minh Cuong and by Dr. Per Ronnås at Stockholm School of Economics. The new survey had two components: (i) a repeat survey of the same enterprises that had been covered by the 1991 survey, and; (ii) a survey of a random sample of not previously surveyed enterprises in the same locations as in 1991, and using the same methodology and questionnaire.

The present study is the second in a series, presenting the results from this survey.[2] Its focus is on the development and transformation of the non-state manufacturing sector in the 1990s.

A result of collaborative work, the present study incorporates contributions from a wide range of people in varying, but equally vital capacities. The research team at the Institute of Labour Studies and Social Affairs in Hanoi had the main responsibility for the implementation of the survey. The high quality of the survey data is a testimony of the professionalism and dedication which characterised all aspects of their difficult work. The many discussions held with individual members of this team in the course of the preparation for the survey and the editing of the data greatly contributed to our understanding of the nature of the private manufacturing sector in Vietnam. Equally important was the generous financial support provided by the

[1] The survey results were published in Per Ronnås, *Employment Generation through Private Entrepreneurship in Vietnam* (New Delhi: ILO-ARTEP/SIDA, 1992), subsequently also published in Vietnamese under the title *Doanh Nghiep Nho o Viet Nam* (Hanoi: Nha Xuat Ban Khoa Hoc Va Ky Thuat, 1993).

[2] For a previously published study focussing on the results of the survey of not previously surveyed enterprises, see Maud Hemlin, Bhargavi Ramamurthy and Per Ronnås, *The Anatomy and Dynamics of Small Scale Private Manufacturing in Vietnam*, Working Papers Series in Economics and Finance No. 236 (Stockholm: Stockholm School of Economics, 1998).

Swedish International Development Authority (SIDA) and the enthusiastic support of many of its staff members.

Introduction

The economic structure of the Republic of Vietnam has been undergoing a sea change since the initiation of *doi moi*, the winds of change, which sought to herald a new era of market economy, in the late 1980s. In the framework of the reforms, a major role was assigned to the infant non-state industrial sector in generating employment, incomes and growth for the whole nation. Development of the non-state manufacturing sector, particularly small scale industries, was imperative since the state industries were deemed both inefficient and ill-equipped to assume the role of growth engines, and for the modernisation of the economy as a whole.

Statistics relating to the performance of the non-state sector outside agriculture, however, reveal mixed results, and on the whole describe a sector that has not met the high expectations of the reforms, in its role as a growth engine. In the 1990s, the increase in their numbers is quite impressive[3]. So is the 65 percent growth of the output of non-state manufacturing sector, between 1990 and 1995. However, the growth in their numbers has not entirely occurred among manufacturing units, an estimate holds only a third of the household enterprises (amounting to about 600,000 units) and between 10,000 and 15,000 of other non-state forms were involved in manufacturing[4]. Further, the growth in output among the non-state manufacturing units has not been uniform. The output value of collective manufacturing units fell from 1,279 billion dong in 1990 to 216 billion dong in 1995 while that of household enterprises increased from 3,120 billion to 5,504 billion dong in the same period, the latter largely due to the proliferation of their numbers. The new ownership forms such as private and share holding companies, registered by far the fastest growth[5]. Next, in terms of their contribution to employment, the labour force in the non-state manufacturing sector has increased by a mere 11 percent between 1990 and 1996, falling very short of expectations.

The relative infancy of the non-state manufacturing sector is a reasonable argument for its unsatisfactory performance. The economic environment in Vietnam is

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[3] Household enterprises have more than doubled from 840,000 in 1990 to 2.2 million in 1996, while the number of private enterprises increased from a very small base to 20,000. In the same period there has been a net establishment of some 8,300 limited liability companies and 190 joint stock companies. (Raymond Mallon. 1997. *Mapping the Playing Field: Options for reducing Private Sector Disincentives in Vietnam.* Mimeo.)

[4] Nien Giam Yhong Ke 1995 (Statistical Yearbook 1995). (Hanoi Publishing House, 1996) Pp.201-202; Nien Giam Yhong Ke 1996 (Statistical Yearbook 1996). (Hanoi Statistical Publishing House, 1997). P.111, quoted in Per Ronnås 1998. *The Transformation of the Private Manufacturing Sector in Vietnam in the 1990s*. Working Paper Series in Economics and Finance No. 241 (Stockholm, Stockholm School of Economics) p.1.

[5] Their output value increased from 137 billion dong to 1,783 billion dong in the period 1990-95. These and other output values are taken from Per Ronnås, *ibid*. P.2

weighed down by large, inefficient and declining collective enterprises, on the one hand, and a multitude of small household enterprises characterised by capital shortages and low productivity, on the other. Further, this sector is extremely heterogeneous; apart from differences in size, ownership form and scale of operations, there are numerous regional differences across urban-rural and north-south industries, reflecting the more general regional differences in their level of economic development. The interplay of these numerous variations characterise their dismal performance at the aggregate level.

However, at the micro level, there is a vast amount of dynamism and consolidation occurring in the non-state sector. In an attempt to characterise the sector and capture some of the dynamism, keeping in mind the regional and ownership form differences, three comprehensive surveys were conducted, in 1991 and 1997[6]. The surveys consisted of (i) a survey of some 1,000 enterprises in Hanoi, Ho Chi Minh City and in the provinces of Ha Son Binh, Vinh Phu, Quang Ninh, Long An and Cuu Long in 1991, (ii) a repeat survey in 1997 of some 371 of the enterprises surveyed in 1991 in Hanoi, Ho Chi Minh City, Haiphong, Long An and Ha Tay (previously Ha Son Binh) (as presented in Table 1), and (iii) a survey in 1997 of some 500 not previously surveyed enterprises in Hanoi, Ho Chi Minh City, Haiphong, Long An and Ha Tay.[7] As the sampling and stratification procedures as well as the questionnaires were virtually identical in the two surveys, data from surveys (i) and (ii) can be used to examine the development of a randomly selected cohort of enterprises in the period 1991-97[8].

The repeat survey in June 1997, of enterprises surveyed in 1991, in selected urban and rural areas brought out several of the changes that these enterprises underwent in the intervening period. Based on their performance, the enterprises were classified into deceased, stagnant, declining, growing and fast growing categories. Apart from the enterprises that closed down, the surviving categories were based on average annual rates of growth of value added in the period 1990-97. The rates were -2.6 percent or more, -2.5 to +2.5 percent, 2.6 to 10 percent and more than 10 percent respectively for the stagnant, declining, growing and fast growing categories. Tables 1 and 2 present the performance of the whole cohort of enterprises resurveyed in the period 1991-97 by location and form of ownership in 1997. It is clear from the tables

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[6] In collaboration with the Institute of Labour Studies and Social Affairs (ILSSA) of the Ministry of Labour, Invalids and Social Affairs, in Hanoi.

[7] For details on the survey designs, see Maud Hemlin, Bhargavi Ramamurthy and Per Ronnås. 1998. *The Anatomy and Dynamics of Small Scale Private Manufacturing in Vietnam*. Working Papers Series in Economics and Finance No. 236 (Stockholm, Stockholm School of Economics).

[8] Data from surveys (i) and (iii) allow the analysis of developments in the sector as a whole, see *ibid* for this analysis.

that a vast majority of enterprises fall into two distinct categories; those which have grown at a very rapid pace (by more than 10 percent per year in real terms) and those which have closed down or suffered a pronounced decline.[9] This is true both across ownership forms as well as regions.

Table 1
Distribution of resurveyed units by location and performance in 1991-97.
Average annual percentage change of value added.

	Total	Urban				Rural		
		Hanoi	Ho Chi Minh City	Haiphong	Total	Ha Tay	Long An	Total
Total	356	57	76	80	213	71	72	143
Closed down	129	18	17	38	73	26	30	56
Declining	80	7	27	15	49	14	17	31
Stagnant	25	5	4	3	12	7	6	13
Growing	29	6	8	5	19	5	5	10
Fast growing	93	21	20	19	60	19	14	33

Note 1: Declining, stagnant, growing and fast growing enterprises are classified according to the annual average rate of growth of value added, which is -2.5% or more, -2.5 to 2.5%, 2.6 to 10% and more than 10% respectively in the period 1991-97.
Note 2: The number of resurveyed enterprises was 371, but data for computing value added was not available for fourteen urban and one rural surviving units; hence the total number of enterprises came down to 356.

Table 2
Development of resurveyed enterprises between 1990 and 1996 by ownership form.
Average annual percentage change of value added.

	Urban enterprises					Rural enterprises			
	A	B	C	D	E	A	B	C	D
Closed down	35.7	24.6	31.6	39.2	(100.0)	38.4	32.8	(83.3)	(100.0)
Decline over 2.5%	19.6	31.1	34.2	11.8	(0.0)	17.8	29.5	(0.0)	(0.0)
-2.5% -- 2.5%	3.6	8.2	2.6	7.8	(0.0)	11.0	8.2	(0.0)	(0.0)
2.5% -- 10.0%	8.9	8.2	5.3	13.7	(0.0)	4.1	9.8	(16.7)	(0.0)
Growth over 10.0%	32.1	27.9	26.3	27.5	(0.0)	28.8	19.7	(0.0)	(0.0)

A Household enterprises C Partnership enterprises E State enterprises
B Private enterprises D Co-operatives
Remark: There were only six state enterprises in the sample. All closed down during the period.

[9] Value added was chosen as the key indicator of growth as it was perceived to be more relevant than alternative indicators, such as total income, assets or employment. As shown below value added generally also has the highest positive correlation with other relevant indicators.

Correlation of average annual rate of change between 1990 and 1996 of key economic indicators

	Value added	Assets	Labour	Wage labour
Urban areas				
Income	0.85**	0.49**	0.55**	0.42**
Value added		0.57**	0.64**	0.48**
Assets			0.49**	0.40**
Labour				0.79**
Rural areas				
Income	0.85**	0.55**	0.52**	0.54**
Value added		0.51**	0.48**	0.41*
Assets			0.51**	0.33
Labour				0.44**

** Significant at the 0.001 level
* Significant at the 0.01 level

A detailed analysis of the pattern of growth of all the enterprises is the subject matter of another study[10], so is that of the enterprises that closed down[11]. In the present paper, we are concerned with only one category of enterprises, viz., the *fast growing enterprises*, whose value added has grown in excess of 10 percent per year in the inter-survey period. The following sections of this paper contain an examination of the characteristics and behaviour of the fast growing enterprises (both urban and rural), and their changes, in terms of various internal and external determinants of survival and growth of enterprises. Wherever possible, data on the entire set of resurveyed, surviving (not closed down) enterprises will be presented too, in order to give the reader a perspective of the place of fast growing enterprises in relation to all surviving enterprises[12]. Unless otherwise specified, the reference group is "fast growing enterprises", throughout this entire paper. Further, analysing the differences in performance between fast growing and other categories of surviving enterprises is beyond the scope of this paper. From the present analysis, we hope to identify some crucial determinants and behaviour of successful enterprises and obtain pointers for policy making at local and national levels.

Among the enterprises resurveyed in 1997, about 65 percent were still in operation while 35 percent closed down in the period 1991-97. As seen from Table 1, the fast growing enterprises accounted for 26 percent of the whole resurveyed sample, 41 percent of the surviving enterprises (that did not close down) and 76 percent of enterprises which recorded average annual growth rates of value added in excess of 2.5 percent. We proceed with the analysis separately for urban and rural enterprises.

A Note on the Terminology

We use the term 'fast growing enterprises' to refer to enterprises whose annual average growth in value added was in excess of 2.5 percent in the inter-survey period. The term 'surviving enterprises' refers to the whole set of units that were resurveyed in 1997 and had not closed down, including the fast growing enterprises. In the section on urban enterprises, it refers to surviving urban enterprises and in the section on rural enterprises, it refers to the surviving rural numbers.

The following types of 'non-state' enterprises are distinguished in the study: household enterprises (*Ho gia dinh*), private enterprises (*Tu nhan*), partnership (*Hop*

[10] See Per Ronnås 1998. *The Transformation of the Private Manufacturing Sector in Vietnam in the 1990s*. Working Paper Series in Economics and Finance No.241 (Stockholm, Stockholm School of Economics)
[11] Forthcoming.
[12] We have excluded data from state enterprises in all the tables, since we are interested in the behaviour of non-state enterprises only.

doanh), co-operative (*hop tac xa,* also *Tap te* which means collective) and limited liability company (*Cong ty trach nhiem huu han*).

Urban enterprises

The urban surveys in 1991 and 1997 were held in the three major cities in Vietnam - Hanoi and Haiphong in the north and Ho Chi Minh City in the south. The sample is, therefore, reasonably representative of the urban scene in Vietnam. Among the enterprises resurveyed, 34 percent had closed down by 1997 and 37 percent grew in excess of 2.5 percent a year. The fast growing enterprises accounted for 28 percent of the whole sample and 43 percent of the surviving enterprises (Table 1).

Location and organisational structure

The number of urban fast growing units was 60, almost equally distributed among Hanoi, Ho Chi Minh City and Haiphong (see Table 1). In 1997, 37 percent of these units were household enterprises, 25 percent co-operatives, 17 percent were private, 8 percent partnership units and 13 percent were limited liability companies[13]. Compared to 1991, 70 percent of the fast growing enterprises retained their original ownership forms, while 30 percent changed. Table 3 shows, as far as transformation is concerned, that the private and partnership enterprises have been most dynamic - more than 44 percent of private and 57 percent of partnership enterprises changed ownership forms. However, 11 percent of private and 14 percent of partnership enterprises moved to lower categories in the hierarchy of organisational forms; they have become household enterprises. In the short run, as their growth record shows, this change does not seem to have been for the worse. However, in the long run, as formality, size and benefits from external sources could go hand in hand, this move might have to be reversed. Household enterprises and co-operatives dominated Hanoi and Haiphong, in Ho Chi Minh City it was household and private enterprises. Five of the eight limited liability companies were located in Haiphong; eight of the ten private enterprises were located in Ho Chi Minh City. There were no partnership units in Haiphong, there were four in Hanoi and one in Ho Chi Minh City.

Table 3
Change in ownership forms 1991-97. Urban enterprises. Percentages.

1997 1991	Household	Private	Partnership	Co-operative	Limited liability
Household	90.0	0.0	5.0	5.0	0.0
Private	11.1	55.6	5.6	0.0	27.8
Partnership	14.3	0.0	42.9	28.6	14.3
Co-operatives	7.1	0.0	0.0	78.6	14.3

[13] The last category is the latest addition to the Vietnamese private sector since 1991.

Nature of activity

In 1991, the distribution of fast growing enterprises by activity was as follows: agro processing - none, manufacturing - 87 percent and trading - 14 percent. This distribution altered to 3, 77 and 20 percent respectively by 1997, mainly due to the 19 percent enterprises that shifted their main area of activity in the intervening period. Table 4 shows that about 4 percent of the manufacturing enterprises moved to agro processing, 12 percent from manufacturing to trading and about 38 percent of the trading enterprises moved to manufacturing. Since the number of trading units was small in 1991, in percentage terms it appears that a lot more than actual have moved. The 37.5 percent amounts to only three enterprises. In fact, more manufacturing units have moved into trading than vice versa, which has also contributed to the reduced percentage of manufacturing units in 1997.

Table 4
Change in main area of activity 1991-97. Urban enterprises. Percentages.

1997 1991	Agro processing	Manufacturing	Trading & Services
Manufacturing	3.9	84.3	11.8
Trading	0.0	37.5	62.5

This transformation has been most characteristic of Haiphong. In Hanoi, all 21 units were manufacturing in 1991 but four of them moved into trading by 1997; in Ho Chi Minh City, all the eighteen manufacturing units retained their forms while the two trading units moved into manufacturing; and in Haiphong one of the twelve manufacturing units moved into trading and two into agro processing, while the seven trading units retained their 1991 forms. As a result, in 1997, Ho Chi Minh City had only manufacturing units, Hanoi accounted for seventeen manufacturing and four trading units and Haiphong was the most diversified city in terms of nature of activity, with both the agro processing units, eight of the trading units in addition to nine manufacturing units. While this is a comparative static presentation, we must bear in mind that it is possible that units have changed forms of ownership multiple times in the intervening period, of which we are unable to comment on, using the data in its present form. It is clear that Hanoi and Ho Chi Minh City have seen lesser transformations than Haiphong.

Across ownership forms, in 1991, household enterprises followed by private enterprises dominated manufacturing activity, accounting for 34 and 32 percent respectively. However, in 1997, with the movement of eight units out of private ownership forms (into five limited liability companies, two household enterprises and one partnership), the share of private manufacturing units decreased but was compensated by the entry of limited liability units. In 1997, the order of constitution was household enterprises, co-operatives and private enterprises for manufacturing activity, with approximately 35, 24 and 20 percent respectively. On the whole, with all the transformations, manufacturing activity has reduced by the movement of five units, agro processing has made its appearance in the sample and the trading units have increased by three numbers.

Enterprise history

The stability of an enterprise and the industrial sector as a whole depends on how long the firms stay in operation. Particularly in the case of small entrepreneurs, being in the same or similar lines of activity fosters development of a lot of useful linkages with other firms, government etc., not to speak of the benefits of entrepreneurial experience in dealing with production as well as organisational matters in the long run. Table 5 presents the age distribution of urban fast growing enterprises by year of establishment. It is very clear from the table that a majority of enterprises were set up in the *doi moi* era; close to 60 percent of the enterprises were set up after 1985. Since the surveys were conducted in 1991 and 1997, the youngest enterprise in the sample was at least 7 years old by the latter date. As the second half of the table shows, a little more than half of the enterprises fall in the category of five to ten years of age, which means an equal amount were very young at the time of the survey in 1991. However, the proportion of older enterprises is not insignificant, with almost a quarter being in operation (and doing well) for more than fifteen years. Most of these older enterprises were located either in Hanoi or Ho Chi Minh City, whereas the youngest enterprises were in Haiphong. Ho Chi Minh City was host to the middle range of enterprises in terms of age, it had 53 percent of the enterprises between eleven and fifteen years old and 80 percent in the age group sixteen to twenty years. The oldest enterprises (older than 25 years) were mainly in Hanoi. On the other hand, Haiphong accounted for 42 percent of the enterprises less than five years old, followed by 35 percent in Hanoi and 23 percent in Ho Chi Minh City.

Table 5
Year of establishment and age of urban enterprises

Year of establishment	Percent	Age in 1997	Percent
Before 1976	11.7	Less than 5 years	0.0
1976 - 80	8.3	5 - 10 years	51.7
1981 - 85	21.7	11 - 15 years	25.0
1986	6.7	16 - 20 years	8.3
1987	6.7	21 - 25 years	5.0
1988	5.0	More than 25 years	10.0
1989	30.0		
1990	10.0		

Household enterprises constitute a significant proportion of every age category, except for the oldest units where the co-operatives, for historical reasons, dominate. All the other ownership forms are less than 20 years old, with most units being established in the period 1981-85. None of the partnership and limited liability companies were older than fifteen years, except for one which transformed from a co-operative (established in 1973) to a limited liability company in the 1991-97 period. A surprising finding is that the number of co-operatives set up after 1985 is almost equal to all other forms, except the household enterprises, which are slightly higher. It is thus clear that the success of the urban fast growing enterprises is not linked to the form of ownership per se (that household enterprises dominate this category might, if at all, convince us otherwise - that they are the best bets for success). Only six enterprises[14] (constituting 10 percent of the sample) had changed owners since 1990; the current owners of all these six units inherited the unit from its previous owner. They were distributed equally between the pre-1985 and post 1985 period, two household enterprises and one co-operative were established before 1985 and two co-operatives and one partnership enterprise were established after 1985. Further, of the six units that changed owners, only one co-operative changed ownership forms too, to a household enterprise. The other five continued operations under their previous ownership form.

Further, about 22 percent of the enterprises had changed location of their enterprises (within the same city) since 1990; 46 percent of them were in Haiphong, 31 percent in Hanoi and the remaining 23 percent in Ho Chi Minh City. The reasons for changing locations were the requirement for larger premises (46.2 percent), better equipped premises (15.4 percent), less expensive premises (7.7 percent) and no choice (31 percent). A majority of the units that changed location of premises were involved in manufacturing (77 percent) and were limited liability companies (38.5 percent). This finding indicates that with transformation of ownership form, the scale and hence the requirement for larger premises also became greater.

[14] They included four collectives, one partnership and one household enterprise; two each in Hanoi, Ho Chi Minh City and Haiphong.

Entrepreneur characteristics

Data regarding owner characteristics of enterprises were collected only from household and private enterprises. In the urban sample, male entrepreneurs were more common in both 1991 and 1997. The percentage of women entrepreneurs increased from 24 to 30 percent (from 1991 to 1997)[15]. Table 6 presents the entrepreneurial profile in 1997, of fast growing enterprises as well as the entire cohort of surviving enterprises. The age distribution, of fast growing enterprise owners, has altered since 1991, mainly due to the additional six years in the intervening period and the transformation of ownership which caused the number of household and private enterprises to change from 20 and eighteen in 1991 to 22 and ten in 1997. Even with these changes, most entrepreneurs in 1997 belonged to the category 40 - 49 years, as in 1991. The percentage in the category 50 years and older changed from 21 to 35 in 1997, indicating that a significant number of entrepreneurs were in their mid 40s in 1991 and have now moved to the age group 50 years and older[16]. The average age in 1997 was 47 years compared to 43 years in 1991, and this is because of the time gap and the fact that previous owners of household and private enterprises have not handed over ownership to younger entrepreneurs. (As Table 6 shows, there were no entrepreneurs younger than 30 years owning a household or a private enterprise). The change of owners has not altered the age distribution at all; of the six units that changed owners, only one was a household enterprise (in 1991) which continued its ownership form, to which the question was applicable, and the new owner was a woman entrepreneur (aged 42 years) previously working as a wage employee. A majority of household and private enterprises were established in the 1981-85 period, and in 1991, the typical owners of these units were in the age group 40 - 49 years. A significant percentage of these owners, while still managing the same units, have moved to the next age category by 1997, increasing the percentage of household units under the management of entrepreneurs over 50 years of age in 1997. Most entrepreneurs older than 50 managed household enterprises while private enterprises were managed by those in their 40s.

[15] All the eight women entrepreneurs in 1991 continued managing their enterprises in the 1991-97 period and one woman took over as a new owner, bringing the total number of women entrepreneurs to nine (30 percent) in 1997.

[16] Data on age and education for owners in both 1991 and 1997 survey were available for 29 units only in 1997. The remaining units had either changed ownership forms or the respondents in 1997 were only managers (not owners) and so were excluded from this question in 1997.

Table 6
Characteristics of urban owner-managers in 1997

Characteristics	% all surviving enterprises	% fast growing enterprises
Male	71.8	70.0
Female	28.2	30.0
Age		
Mean	45.59	47.17
-29 years	4.7	0.0
30 - 39 years	28.2	20.7
40 - 49 years	35.3	44.8
50 - years	31.8	34.5
Education		
Up to four years	2.4	0.0
Up to seven years	18.8	30.0
Up to ten years	31.8	20.0
More than ten years	47.1	50.0
Prior Experience		
Local cadre	2.5	0.0
War veteran	2.5	12.5
State enterprise employee	5.0	0.0
Other position of responsibility	90.0	87.5
Other	0.0	0.0

In terms of education, we find that half the entrepreneurs of household and private enterprises had more than ten years of education. Reflecting the change in ownership forms and owners, this distribution has only slightly altered from 1991. Comparing the same set of enterprises from both years (20), the percentage in 1991 was 33.3 in each of the educational categories listed in Table 6. Even if we relax this condition and compare the education of household and private enterprise owners in 1991 and 1997, we find the category with more than ten years of education is still high at 30 percent. The experience of entrepreneurs prior to starting the enterprise was also recorded, of owners of household and private enterprises only. It is clear from the table that 88 percent of the entrepreneurs in 1997 were previously employed in a position of responsibility - including state and other enterprises - compared to 84 percent in 1991. About twelve percent were war veterans in both years and the remaining 4 percent of entrepreneurs from the 1991 data were employed in village cadres. The difference in percentages (in this and other parameters of entrepreneurial characteristics) may be attributed to two factors: first, the number of household and private enterprises have varied in the two surveys (due to change in ownership and/or owners); second, the respondents have been different in some cases, even though the same units have been resurveyed. Our data tabulation takes into account only the "owner" characteristics in both years, excluding the manager, and hence the difference.

Across regions, the number of women entrepreneurs (managing household and private enterprises only) was equally distributed between Hanoi and Ho Chi Minh City (four in each), while only one woman entrepreneur was located in Haiphong. In relative terms, Hanoi fared best as far as gender distribution is concerned - the male-female entrepreneur ratio was one there; in Ho Chi Minh City, women accounted for 40 percent of the entrepreneurs and in Haiphong, the lowest at 14 percent. Further, in terms of age of entrepreneurs, Hanoi accounted for the highest percentage of entrepreneurs older than 50 years in 1997 (50 percent), followed by Ho Chi Minh City (30 percent) and Haiphong (20 percent). Most entrepreneurs in their 30s and 40s were located in Ho Chi Minh City (54 percent). On the whole, it appears that the typical entrepreneur representing the fast growing urban enterprises was male, between 40 and 49 years with more than ten years of education and previously employed in a position of responsibility. The characteristics of owner-managers of fast growing household and private enterprises are not noticeably different from those of all surviving enterprises. As Table 6 shows, the typical entrepreneur, of a resurveyed surviving enterprise in 1997 was also male, between 40 and 49 years, with more than ten years of education and previously employed in a position of responsibility.

Primary Income Source

Data on income sources of the entrepreneur household were collected from household and private enterprises only. All the enterprises were reportedly the primary income sources to the entrepreneur household. As Table 7 shows, in 1996, the enterprise was the only source of income to 70 percent of the (fast growing) entrepreneur households. The remaining 30 percent had at least one other wage earner, 3 percent of them even had additional income from other household member(s) in self-employment elsewhere. This pattern is significantly at variance from the situation six years earlier, when only 31 percent had the enterprise as the sole income source of the entrepreneur household. Almost 45 percent of the household had at least one other wage earner and close to a quarter had household members who worked elsewhere. Changes in the family structures in the intervening period are the most likely cause for the changed scenario. Also, in 1996, 56 percent of the household and private units had other household members working in the enterprise, compared to 81 percent in 1990. This trend towards increasing reliance on enterprise as sole income source is true of all surviving categories, as seen in Table 7. Income from farming disappeared for all surviving enterprises, while wage employment as a second income source declined only marginally. The fast growing enterprise households had a greater incidence of a second source from wage employment in both years, when compared to the whole cohort of surviving enterprises. This might have resulted in a better ability to plough back enterprise earnings into the unit itself, avoiding major diversions into household expenses.

Table 7
Sources of household income in 1990 and 1996. Urban enterprises.

Income source	% all surviving enterprises		% fast growing enterprises	
	1990	1996	1990	1996
Enterprise as sole source	52.4	76.2	31.6	70.0
Wage employment	20.7	19.6	44.7	30.0
Farming	0.7	0.0	0.0	0.0
Others	26.2	4.2	23.6	3.3

Even though the number of fast growing household and private enterprises has changed in this period from 38 in 1990 to 32 in 1996, the changes in household income patterns override the changes in their numbers. Therefore we see that in the intervening period, substantial changes have occurred, such that the household involvement in the enterprises has reduced, while the importance of the enterprise itself to the household (as the sole income source) has increased by an equally significant measure. Reflecting the growing importance and the performance of the enterprises, we find that 90 percent of the household and private enterprise owners report that their household incomes have increased since 1990. This percentage has risen since 1990 when only 41 percent felt that their household incomes had increased since 1989.

Scale of operations

A detailed analysis of the scale of operations (in terms of growth in income, assets, employment, productivity) of fast growing urban enterprises vis-à-vis all other categories of resurveyed enterprises is found in another study[17]. In this section, we describe the scale of operations of fast growing enterprises using only their investment and asset distribution, at establishment and in 1990 and 1996 respectively. We also present the distribution of annual average growth rate of assets from establishment to 1996. Table 8 presents the investment and asset distribution among the fast growing urban enterprises, as well as the distribution among the whole set of surviving, resurveyed enterprises. For purposes of comparison, all pre-1996 monetary values have been inflated to 1996 prices[18]. The average fast growing urban enterprise invested 126 million dong at establishment, its assets had grown to 310 million dong by end of 1990 and to 1.6 billion dong by the end of 1996. For the average surviving, resurveyed enterprise, these values were slightly different - 217 million dong of initial

[17] Per Ronnås 1998. *The Transformation of the Private Manufacturing Sector in Vietnam in the 1990s*. Working Paper Series in Economics and Finance No. 241 (Stockholm, Stockholm School of Economics).
[18] The effects on the real value of money is beyond the scope of this paper.

investment, reduced to 153 million dong in assets by end 1990 (mainly due to the declining and stagnant categories) and about a three-fold rise in assets by end 1996 to 657 million (mainly due to the fast growing enterprises). Table 8 also provides evidence of the growth in assets of the firms from establishment to 1991 and between 1990 and 1996.

The urban fast growing enterprises form a wide range in terms of most quantitative and qualitative criteria, including initial investments and assets. However, we see the largest percentage of enterprises invested between ten and 50 million dong, followed by 24 percent investing between 100 and 500 million dong, and 22 percent between one and ten million dong. Ho Chi Minh City accounted for most units in the first category, the other two were dominated by Haiphong enterprises. The not so insignificant 7 percent of enterprises investing in excess of 500 million dong were equally distributed among Ho Chi Minh City and Haiphong; no unit in Hanoi invested over 500 million dong. Most units investing between 10 and 50 million dong were established in 1981-85 (44 percent); majority in the category 100 to 500 million dong were established after 1989 (62 percent) while in the third most common category, they were almost equally distributed across these two dates. In short, we find that newer units were much larger at establishment than older units. Further, household enterprises and Hanoi enterprises were the smallest at establishment. By 1996, Hanoi enterprises had grown remarkably and had assets worth 1.7 billion dong on average. Haiphong led the regions with 2.4 billion dong but Hanoi enterprises were more successful. Ho Chi Minh City had lack lustre growth compared to the other two, increasing assets by less than six times between establishment and 1996 and averaging 15 percent growth rate in assets per year between 1990-96. The household enterprises also grew at a rapid pace and narrowed down the gap with other ownership forms, but remained the smallest in 1996.

Whatever the initial investment, we find that most units moved to the category 150 to 500 million dong in assets in 1990 and further to the more than 500 million dong in assets category by 1996, amply reflecting the rapid pace of capital accumulation in these units. The investment and asset distribution of fast growing enterprises corresponds, on the whole, to that of the entire group of surviving, resurveyed enterprises, as clear from Table 8. However, the percentage of enterprises moving to the last category in terms of value of assets end 1996 was higher when compared to the whole sample of surviving enterprises, indicating that capital accumulation has occurred at a faster pace among fast growing enterprises.

Table 8
Initial investment (at establishment) and total assets in 1990 and 1996.
Urban enterprises. Thousand dong.

Investment and assets	% all surviving enterprises	% fast growing enterprises
Initial investment at establishment		
1000 and less	2.2	1.8
1001 - 10000	31.1	21.8
10001 - 50000	28.1	32.7
50001 - 100000	5.9	12.7
100001 - 500000	25.9	23.6
More than 500000	6.7	7.3
Total assets in 1990		
1000 and less	0.7	0.0
1001 - 25000	14.9	16.9
25001 - 75000	12.8	10.2
75001 - 100000	4.3	8.5
100001 - 150000	14.2	8.5
150001 - 500000	29.8	32.2
More than 500000	23.4	23.7
Total assets in 1996		
1000 and less	0.7	0.0
1001 - 25000	3.5	3.4
25001 - 75000	4.9	0.0
75001 - 100000	7.6	6.8
100001 - 150000	7.6	5.1
150001 - 500000	34.7	28.8
More than 500000	41.0	55.9

In comparing the distribution of assets and initial investment, we examined two types of average annual asset growth rates:

- From establishment to 1991, in terms of gold ounces invested in that period; and
- From 1990 to 1996, in terms of monetary value of assets at the end of the two years.

In the first category, we find a wide range of annual growth rates among fast growing enterprises: from zero to 1546 percent. There were three units with growth rates in excess of 1000 percent; these were a private (which became a limited liability later) and two partnership units (one of which later turned into a co-operative) who invested more than 50 ounces of gold each for two years. If we include these units, the average annual growth rate of assets works out to be 195 percent; excluding these, it is still high at 87 percent per year. Next, the percentage of units with zero percent asset growth rates is very high at 39, half of them being units established after 1985. The fifteen units that make up the 39 percent of units with zero percent asset growth rates were almost equally distributed across the three cities; all but one were in manufacturing activity; and they represented widely varying categories of initial investment, thus proving that there is little correlation between size of initial investment and growth rate of assets. Across ownership forms, they were mainly household enterprises in 1996 (seven), followed by private (five), co-operatives (two) and one limited liability company. The range between these extreme performances was quite significant too, though co-operatives grew at a lower rate than other ownership forms. About 58 percent of enterprises with less than 100 percent growth rate in assets were co-operatives, while private enterprises dominated the category with more than 100 percent growth rates. In their 1990 ownership forms, households averaged the lowest growth rates at 20 percent, followed by co-operatives with 40 percent, private enterprises with 183 percent and partnerships with 446 percent[19]. In 1996, while the number of private enterprises dropped, they were compensated by the entry of four limited liability companies who averaged 220 percent growth.

In the second category, concerning growth between 1990 and 1996, as Table 9 shows, most fast growing units have either recorded negative growth or grown by leaps and bounds. Close to 14 percent of the enterprises have experienced negative growth rates; these amount to four units, one private turned household enterprise (in Hanoi), a co-operative (in Haiphong) and two private enterprises (in Ho Chi Minh City) and all were involved in manufacturing. Among those that registered positive growth rates, Haiphong had a larger percentage of its units with more than 50 percent growth rates (57 percent), while in Hanoi assets of 75 percent of the enterprises have grown by less than 50 percent. The performance in Ho Chi Minh City has been between 21 and 75 percent except for the two negative growth industries. Here again, there is no correlation between size of initial investment and growth rate of assets, except for the 2 units with more than 500 million dong, invested at establishment, registering negative growth rates. Further, there is no trend noticed between age of enterprises and asset growth rates. The co-operatives (in 1996) have seen the most diverse growth patterns, covering every category from negative to more than 100 percent growth rates of assets, on average being 21 to 50 percent.

[19] The high average growth rate among partnerships may be attributed to the fact that there were only two units, and they grew at phenomenal rates of 192 and 700 percent.

Table 9
Distribution of annual average asset growth rates.
Urban enterprises. Percentages.

Nature of growth rate	% all surviving enterprises	% fast growing enterprises
Growth rates from establishment to mid-1991		
Zero	34.4	38.5
1 to 10 percent	5.2	2.6
11 to 20 percent	4.2	7.7
21 to 50 percent	19.8	20.5
51 - 75 percent	8.3	2.6
76 to 100 percent	7.3	0.0
More than 100 percent	20.8	28.2
Growth rates 1990-1996		
Negative	27.7	13.8
Zero	0.0	0.0
1 to 10 percent	10.8	3.4
11 to 20 percent	10.8	13.8
21 to 50 percent	32.3	37.9
51 - 75 percent	12.3	20.7
76 to 100 percent	4.6	6.9
More than 100 percent	1.5	3.4

It is thus clear when we compare the value of initial investment and total assets in 1990 and 1996, that the capital accumulated (or the difference between the two) in the intervening period has been extremely high. When we consider asset growth in terms of either of the two approaches mentioned above, we find that irrespective of ownership form and size of initial investment, most units have grown. The zero and negative growth rates among close to 40 and 14 percent of the units, that too mainly among household and private enterprises, point out to the fact that high asset growth rates are but a necessary condition for high growth in value added. If these growth rates were found among co-operatives, we might have attributed it to the vigorous consolidation going on in the co-operative sector.

When we compare the performance of the fast growing enterprises with the entire set of surviving enterprises (for growth from establishment to 1991), we find two major differences: first, the percentage of zero growth enterprises (between establishment and 1991) is higher and second, the percentage of enterprises exceeding 100 percent growth rate is also higher among fast growing enterprises. The former is accounted for by the fact that many fast growing enterprises were very young in 1991; next, the older fast growing enterprises have grown faster than the average resurveyed enterprise, hence the second difference noted above. In terms of asset growth between 1990 and 1996, the distinctive characteristics of fast growing enterprises is much more clear. The major features setting fast growing enterprises apart from other surviving enterprises are the low incidence of negative growth rates, and conversely, the high incidence of growth rates in excess of 20 percent[20]. This finding underscores the fact that high rates of capital accumulation have been a pre-requisite for long run stability and growth of enterprises.

Related to capital accumulation and investments is the sources of finance for these, both at establishment and for expansion purposes. More than half of the fast growing enterprises financed their establishment investments with exclusively their own savings/resources (Table 10). Except for 15 percent of the enterprises which did not use any of their own resources, all other enterprises used a portion, though varying, of own resources. The other common sources were worker contributions (mainly co-operatives, 24 percent), interest free loans from friends and family (18 percent) and private money lenders (6 percent). Obviously, banks and other formal credit institutions have not been significant sources for establishment investment. Household enterprises, as expected, accounted for most units using 100 percent own resources (48 percent) followed by private enterprises (34 percent); this reliance on own resources was also observed most in Ho Chi Minh City and least in Haiphong. None of the household enterprises and co-operatives used private money lenders as a source, it was used mainly by private enterprises. Further, no unit in Ho Chi Minh City used money borrowed from private moneylenders, which explains why they relied more on own resources. This trend of very strong reliance on own resources was also found for financing investments between establishment and 1991. The second half of Table 10 records the distribution of sources for expansionary investment incurred between 1991 and 1997. About 66 percent of the units reported making major investments in machinery and equipment in this period and the sources of finance show a slightly altered pattern as far as formal financing sources are concerned. While a major chunk of the investment was done using capital generated from within the firm and the entrepreneur's own resources, the percentage of units availing bank finances rose sharply from those at establishment, from under 4 percent to 18 percent.

The improvement is found not only in the number of units availing this source, but also the share of banks in the total costs of improvement; 5 percent of the fast growing enterprises report availing between 76 to 99 percent of their investment from bank resources (Table 10). On the other side of the coin, reliance on loans from money lenders and friends and family has reduced noticeably. It is well known that banks require a track record to approve financing, and units (like our sample, between

[20] The average annual rate of growth of assets was 38.2 percent for fast growing enterprises, compared to 22.6, 11.3 and 3.0 respectively for growing, stagnant and declining categories. See Per Ronnås 1998. *The Transformation of the Private Manufacturing Sector in Vietnam in the 1990s*. Working Paper Series in Economics and Finance No.241 (Stockholm, Stockholm School of Economics), Table 21 for detailed analysis of growth patterns of assets.

1990 and 1997) which have been in operation for a reasonable number of years stand a better chance of securing funding than new units with no performance record. This throws a whole new light on the relationship of non-state units with the banking system. It is not only a problem of availability of bank funds, but also eligibility and access to it that determines the extent to which the banking sector is aiding private enterprises. The more the enterprise relies on internally generated capital, the greater the pressure on short term profits and capital accumulation. In the absence of a generous financial market, as our data show, firms with lower capital accumulation will meet an early demise or stagnation. Further, the data on expansionary investment sources show that formal financial assistance has been availed only by private enterprises and (one) partnership enterprise. None of the household enterprises and co-operatives have benefited from the increased share of banks in the investment sources. The former category continued to rely exclusively on own resources and the co-operatives borrowed funds on interest from other private sources. An interesting point is that most units availing bank assistance were located in Haiphong (71 percent); formal financing, contrary to our expectations, has not at all been a feature of the more developed southern Vietnam.

Table 10
Percentage distribution of investment finance by source. Urban fast growing enterprises.

Sources	0	1-25	26-50	51-75	76-99	100
Sources for investment at establishment						
Own resources	15.1	3.8	5.7	9.4	11.3	54.7
Friends and family	81.8	10.9	3.6	0.0	1.8	1.8
Banks	96.4	0.0	1.8	1.8	0.0	0.0
Credit co-operatives	98.2	1.8	0.0	0.0	0.0	0.0
Local authorities	100.0	0.0	0.0	0.0	0.0	0.0
Employees	75.9	3.7	9.3	0.0	0.0	11.1
Private moneylenders	94.5	3.6	1.8	0.0	0.0	0.0
Advance from sales	100.0	0.0	0.0	0.0	0.0	0.0
Others	100.0	0.0	0.0	0.0	0.0	0.0
Sources for investment finance 1990-97						
Own resources	2.6	5.2	5.2	7.8	2.6	76.9
Banks and other financial institutions	82.1	2.6	7.8	2.6	5.2	0.0
Loans from other sources	94.9	2.6	0.0	0.0	0.0	2.6
Interest free loans from friends and family	94.9	2.6	2.6	0.0	0.0	0.0
Other sources	100.0	0.0	0.0	0.0	0.0	0.0

Mechanisation

Investments on fixed assets among enterprises translates into purchase of machinery and tools used in the manufacturing process. The high volumes of investment and assets is reflected well in the degree of mechanisation among fast growing urban enterprises. Table 11 presents the distribution of fast growing enterprises as well as all resurveyed surviving enterprises in 1991 and 1997, according to the kind of machinery used. Fast growing enterprises account for a majority of the resurveyed enterprises (43 percent) using both power driven and manually operated machinery.

As Table 11 also shows, a clear majority of fast growing firms (61 percent) used both power driven and manually operated machinery in the manufacture of their product, in both 1991 and 1997. The percentage using hand tools only also continued, at 7 percent, while the power driven machinery using percentage climbed by 3.3 percent, compensating the corresponding fall among those who used manually operated machinery only. However, these 3.3 percent enterprises are not the only ones, who have changed (that too, for the better) as the numbers show. Far from it, 25 percent of the enterprises have changed the kind of machinery they used; those that increased mechanisation owe it to increased investments but the reasons for reduced mechanisation are not very clear. In other words, 75 percent of the enterprises maintained the same degree of mechanisation they used in 1991, in 1997. Of the four units that used only hand tools in 1991, one co-operative in Hanoi continued its use of hand tools, while the other three household enterprises (two in Haiphong and one in Hanoi) moved to manually operated machinery (one) and use of both power and manually operated machinery (two) in 1997. None of them changed lines of activity. However, among the 36 units that used both power driven and manually operated machinery in 1991, 24 (or 67 percent) continued doing so in 1997 while the remaining twelve (or 33 percent) reduced the extent of mechanisation in their units. Surprisingly, only two of the twelve units had changed lines of activity to commerce and one other unit had changed its ownership form, but half of them had zero percent growth rate in assets in that period. All units[21] that moved from this category to use of power driven machinery only were in Ho Chi Minh City, and so was one private enterprise that moved to use of manual tools only.

Table 11
Type of machinery used in 1991 and 1997. Urban enterprises.

Type of machinery	% all surviving enterprises		% fast growing enterprises	
	1991	1997	1991	1997
Only hand tools, no machinery	8.5	4.9	6.8	6.8
Manually operated machinery only	14.1	12.6	16.9	13.6
Power driven machinery only	16.9	15.4	15.3	18.6
Both manually operated and power driven machinery	60.6	67.1	61.0	61.0

[21] These include a limited liability company, a partnership, a household and a private enterprise according to their ownership forms in 1997.

Across cities, three of the four fast growing units using only hand tools in 1997 were in Hanoi, the other in Haiphong; most units using only manually operated machinery were also in Hanoi (75 percent); Ho Chi Minh City accounted for most units using power driven machinery while Haiphong had the largest number of enterprises using both power driven and manually operated machinery. On the whole, the extent of mechanisation was greatest in Haiphong, followed by Ho Chi Minh City and Hanoi in that order. Following the general trend, units using both power driven and manually operated machinery dominated every ownership form; none of the limited liability companies used only hand tools or only manually operated machinery. This distribution corresponds to the situation in 1991 also, except that Ho Chi Minh City had accounted for more units using both power driven and manually operated machinery (42 percent), indicating that most movement out of this category has occurred in Ho Chi Minh City.

All the fast growing units owned the machinery they used in 1997, and only 5 percent hired machinery for use, in 1991. Most machinery was purchased second hand in 1991 (50 percent), another 35 percent was purchased new and the remaining 15 percent of machinery was built in-house. This proportion changed to 33 percent, 53 percent and 14 percent respectively, which means that additional investments in machinery in the period 1990-97 have been in favour of new purchases. Surprisingly, in 1991, households had the greatest propensity to purchase new machinery, private enterprises bought used machinery, and co-operatives relied more on self constructed machinery. This situation changed slightly by 1997. More units in all ownership categories bought new machinery, but households replaced private enterprises in their tendency to buy used machinery and private enterprises used self-constructed machinery the most.

Employment

The growth trends in value added and assets have been accompanied by a net growth in wage employment among the fast growing enterprises. The average annual rate of growth of employment among fast growing enterprises was 8.6 percent. This growth in employment is not only reflected in the number of wage employees but also in the percentage of wage employees to the total labour force for the sample as a whole. However, this increase in employment has not been proportional to the rate of growth of assets with the result that the asset base per worker has doubled and the overall growth among fast growing enterprises has been attained through increased labour productivity rather than by increase in employment[22]. As far as individual

[22] See the section ‘On Accumulation, Growth and Employment’ in Per Ronnås 1998. *The Transformation of the Private Manufacturing Sector in Vietnam in the 1990s*. Working Paper Series in Economics and Finance No. 241 (Stockholm, Stockholm School of Economics) for greater details.

enterprises go, 23 percent of these units reduced their labour force between 1990 and 1996, and 12 percent did not change the number of wage employees but a majority of 65 percent of the enterprises increased their total (wage) labour force. The greatest increase is found among two units - a partnership turned co-operative in Haiphong and a private enterprise turned limited liability company in Hanoi - which increased wage employment by the addition of 182 and 290 workers, respectively. The average increase in number of workers, among firms that increased their employment since 1991 (excluding these two), is 21; slightly higher than the average reduction (among firms that reduced their labour force) of twelve employees, causing a net increase in the number of employees to 9, of a typical fast growing enterprise. Including the two units, as Table 12 shows, the average wage employees increased from 12 to 28 workers in a period of six years. In 1990, the maximum number employed by a fast growing enterprise was 50, and it increased to 300 by 1996. In percentage terms, while the value added of the average enterprise grew at 26 percent, its wage employment grew by 45 percent (excluding the outliers), indicating that employment elasticity has been very high (2.4) among fast growing units as a whole between 1990 and 1996.

However, a major factor responsible for this high employment elasticity is the change among the large number of units (27 percent) that did not use any wage labour at all in 1990, thus dampening any conclusion that there has been a very phenomenal effect on total employment. As mentioned earlier, the annual rate of increase of employment has been modest at 8.6 percent. It is clear from the table that fast growing enterprises were not much different from the surviving enterprises, as a group, in 1990; by 1996, the average fast growing enterprise employed only slightly higher than its counterpart among other surviving categories. Their contribution to increasing wage employment has, therefore, not been proportional to their increase in value added[23]. Not surprisingly, household enterprises accounted for 75 percent of the units without wage labour; the maximum wage employees was nine for this category. The co-operatives were the largest employers, their average wage employment was 28 workers. However, the unit with the largest number of wage employees was a private enterprise in Haiphong, employing 50 wage workers[24]. Thus household enterprises account for the largest percentage of units in the first category in Table 12, private enterprises for the second and third, and co-operatives for the fourth. Across cities, surprisingly, Ho Chi Minh City had the largest number of enterprises working without wage labour (35 percent) and the second category (one to ten wage workers),

[23] See Per Ronnås 1998. *The Transformation of the Private Manufacturing Sector in Vietnam in the 1990s*. Working Paper Series in Economics and Finance No.241 (Stockholm, Stockholm School of Economics) for a more detailed analysis of the relation between capital accumulation, growth and employment among various categories of resurveyed enterprises.

[24] This enterprise became a limited liability company by 1997.

Haiphong dominated the third and Hanoi had some of the largest employers. In 1996, limited liability companies along with co-operatives were the biggest employers, employing more than 70 workers while the other ownership forms continued their previous performances. The number of households without wage labour drastically reduced, as Table 12 shows, and these enterprises moved into the next category, employing between one and ten workers. The incidence of unpaid, household labour usage, correspondingly, has therefore reduced too. A major portion of this transformation has occurred in Ho Chi Minh City; in 1996, there was no unit there without wage labour, the least number employed was five and the highest was 78. The average number employed for wages in 1996 was sixteen, up from ten in 1990.

The percentage of wage employment is an important indicator of the contribution of private sector enterprises to employment generation. As a result of the increase in the number of wage employees hired between 1990-96, the percentage of wage workers to the total labour force rose from 62 percent in 1990 to 81 percent in 1996 among fast growing enterprises. Relative to the numbers employed, Haiphong had, on average, the highest percentage of wage employment in 1996, followed by Ho Chi Minh City and Hanoi. Co-operatives led the ownership forms in their contribution to wage employment; 73 percent of them used only wage labour, followed by partnerships and limited liability companies. Private enterprises were better than household enterprises; none of the non-household forms used only unpaid labour in 1996. This situation is not very different from 1990, except that private enterprises performed much better then. By 1996, since some of the private enterprises transformed into limited liability companies, their performance reduced by that extent.

Table 12
Wage employment in 1990 and 1996. Urban enterprises.

Number of wage employees	% all surviving enterprises		% fast growing enterprises	
	1990	1996	1990	1996
No wage labour	22.9	7.1	26.7	6.7
1 -10	34.3	54.3	35.1	43.3
11 - 25	25.0	21.4	16.1	18.5
26 - 50	16.4	10.0	22.1	13.6
51 - 70	0.0	0.7	0.0	1.7
More than 70	1.4	6.4	0.0	10.2
Mean	12.9	20.1	12.2	28.1

Only four fast growing units (6.7 percent of the sample) used some of its wage employees part time. Wage employees were usually full time employees for the rest. We also find a strong correlation between asset size and number of wage employees, enterprises with less than 25 million dong in assets in 1996 employed less than ten workers, those with 150 to 500 million dong in assets employed a maximum of 30 and those with 500 million dong in assets in 1996 employed the higher numbers. The average capital intensity (assets per worker) was 58 million dong - highest among limited liability companies and the lowest among co-operatives[25]. It is thus clear from the employment data that the co-operatives have fared best as far as employment generation is concerned, mainly on account of the large labour force they have inherited from their socialist past,. In general, non-household forms, have done much better in this regard than household enterprises.

Production flexibility

We describe the production flexibility among firms in terms of changes to their product mix in the two years prior to 1991 and since then - both improvements and introduction of new products. According to Table 13, measured in terms of changes, firms displayed more flexibility since 1991 than in 1991. However, it should be remembered that six years passed since 1991 and the latter time frame is longer. In 1991, 45 percent of the fast growing enterprises introduced some form of change (either in new product or improvements to existing products) and of these, 26 percent introduced new products only, 33 percent only made improvements to existing products and the remaining 41 percent introduced both types of changes. Introduction of changes was most common in Ho Chi Minh City and among private enterprises. By 1997, the percentage introducing either of the changes rose to 72, of which 51 percent made both changes, 16 percent introduced new products only and the remaining 33 percent only made improvements to existing products. Hanoi was most flexible, (Ho Chi Minh was least flexible) and the private enterprises were replaced by co-operatives and limited liability companies in terms of highest flexibility. In fact, household enterprises followed only slightly behind in introduction of new products, they led all the other ownership forms in terms of making improvements to existing products. It is also seen that firms established after 1985 (especially in 1989) have made the maximum changes to the product mix. Their percentage was somewhat lower in 1990, probably because the enterprises were too young in 1991 to be changing their products.

[25] It was, on average, 56 million dong for household enterprises, 55 for private, 63 for partnership, 51 for co-operatives and 123 million dong for limited liability companies. See Table 25 in Per Ronnås 1998. *The Transformation of the Private Manufacturing Sector in Vietnam in the 1990s*. Working Paper Series in Economics and Finance No. 241 (Stockholm, Stockholm School of Economics), for computations of absolute and relative capital intensity across regions and ownership forms.

Table 13
Product changes and their impact. Urban enterprises.

Nature of flexibility	% all surviving enterprises		% fast growing enterprises	
	1989-91	Since 1991	1989-91	Since 1991
Introduced new products	34.0	49.0	30.0	50.0
Made improvements to existing products	38.2	52.0	33.3	58.3
Reason for change				
Difficult to sell current product	37.5	31.1	48.0	34.5
Increasing competition from producers	30.6	18.9	24.0	13.8
Increasing competition from imports	5.6	6.8	4.0	0.0
Requested by purchasers	12.5	36.5	20.0	48.3
Other	6.9	6.8	4.0	3.4
Degree of success				
Unsuccessful	4.3	1.4	4.3	3.4
Not very successful	8.7	21.6	8.7	6.9
Quite successful	65.2	63.5	60.9	75.9
Very successful	21.7	12.2	26.1	10.3
Too early to tell	0.0	1.4	0.0	3.4

Compared to the performance of all surviving enterprises, we find the fast growing enterprises were actually behind the group as far as introduction and improvement of products were concerned, since 1991 (See Table 13). However, this trend changed by 1997 and by that date, not only had more fast growing enterprises displayed flexibility, the reasons for change also differed. As Table 13 also shows, the motivating factors for undertaking changes have altered significantly for all enterprises as well as fast growing enterprises. In 1991, most changes were due to difficulty in selling existing product whereas it shifted to changes in response to purchaser requests after 1991. Since many of the units were still young in 1991, they did not have a performance record at that time; since 1991, with six years passing by, they have probably established themselves in the market so that their product mix is steady and whatever changes will only reflect customer taste changes. If this is the case, then it is a very strong indicator of the improvement in the certainty and stability in the output markets for these enterprises. For mature, low-risk enterprises with a well established market, most changes will not be initiated to change this relationship with a stable market; unless the firms plan a drastic change in their line of activity. That the number of firms that felt increasing competition from domestic producers fell drastically in this period also strengthens our argument that most of these fast growing enterprises have established themselves in the output markets. The optimism surrounding these changes correlate well with the main reason for change. When customers request it, the degree of success is high; compared to changes initiated by the producer (where there could be greater uncertainty regarding the success). The optimism of entrepreneurs was slightly tempered, by 1997, though the number that believed the changes were unsuccessful dropped, among fast growing enterprises. For the surviving enterprises as a whole, the number of pessimists increased by 1997, owing to the declining and stagnant categories of enterprises.

Continuity of operations

The continuity in operations of an enterprise in a given year reflects stability in the functioning of the enterprise. For sustained profits in the long run and reliable employment generation, continuous functioning of an enterprise is of paramount importance. Discontinuous operations imply instability in both internal and external conditions and used in this sense, we find that the overall environment has been more stable in 1996 than in 1990, as Table 14 shows. The percentage of fast growing enterprises that operated throughout the year increased significantly from 59 in 1990 to 88 in 1996[26]. Though the average period of closure for the remaining enterprises has remained at 2.7 months in both years, we find the maximum period of closure has come down from six to four months. The lack of demand, however, narrowed down from being the "main reason" to the "only" reason in 1996. Comparing the 49 units for which data on continuity of operations were available for both years, we find that 53 percent of the units worked throughout the year in both 1990 and 1996 and 4 percent did not operate the whole year in both 1990 and 1996. Among the remaining 43 percent that changed performances, except for 14 percent (three units) that worsened in their performance (by operating throughout 1990 but not 1996)[27], the majority 86 percent improved their performance. Improved continuity in operations is true in the case of all surviving enterprises also (Table 14). The difference between fast growing enterprises and all surviving enterprises -significant in 1990- narrowed down by 1996.

[26] The higher percentage in 1990 may also be attributed to the fact that data on continuity of operations were not available for eleven units in the 1990 survey. If we exclude the answers of these eleven units in the 1996 survey (nine of them operated throughout 1996), the percentage of units that operated throughout 1996 is slightly higher, at 89 percent.

[27] These were two private enterprises in Ho Chi Minh City and one private enterprise turned limited liability company in Haiphong.

Table 14
Continuity of operations in 1990 and 1996. Urban enterprises.

Months operated and reasons for closure	% all surviving enterprises		% fast growing enterprises	
	1990	1996	1990	1996
Operated throughout the year	66.9	86.1	59.2	88.3
Closed for				
1 month	8.1	1.4	8.2	0.0
2 months	11.3	4.2	10.2	5.0
3 months	6.5	3.5	12.2	5.0
4 months	3.2	2.8	4.1	1.7
5 months	1.6	0.0	4.1	0.0
6 months	0.8	2.1	2.0	0.0
More than six months	1.6	0.0	0.0	0.0
Reasons for closure				
Lack of raw material	7.9	5.3	0.0	0.0
Lack of demand	60.5	89.4	70.0	100.0
Other reasons	31.6	5.3	30.0	0.0

Remarks: Percentages for reasons for closure are based on the number of units that did not operate throughout 1990. Enterprises established in 1990 have been excluded from calculations for 1990 only.

The seven fast growing units that closed during part of the year in 1996 were almost equally distributed across the three cities - three household enterprises, all in Hanoi; two private enterprises in Ho Chi Minh City and a co-operative and a limited liability company in Haiphong constitute the units that had discontinuous operations. In relative terms, household enterprises had the most tendency to temporarily close down, with the three accounting for 16 percent of the total household enterprises. In 1990, Ho Chi Minh City accounted for the most temporary closures - 40 percent, Hanoi had 35 and Haiphong, the remaining 25 percent of the enterprises. The co-operatives and partnerships fared the worst, with half of them closing down for part of the year. Household enterprises had the best performance, with only 30 percent enterprises having discontinuous operations. Overall it appears that co-operatives and Ho Chi Minh City enterprises have progressed the best in the intervening period. It is interesting to note that 43 and 60 percent of the enterprises that did not operate fully in 1990 and 1996 respectively, had zero percent growth rate in assets, indicating the close relationship between need for greater production, sales and internally generated capital accumulation, profits and, therefore, growth. It also confirms the hypothesis that stable growth is closely linked to continuous operations. If this is true, then the fact that most enterprises operated throughout 1996 is a welcome development in increasing the stability of the private sector enterprises.

Capacity Utilisation

Related to the extent of the problem of lack of demand is the extent of production capacity utilisation. As Table 15 shows, the percentage of fast growing units operating at full capacity has doubled in the period 1990-96. This is in conformity with the decrease in the number of units that reported lack of demand and consequently shut down operations temporarily in 1996. This growing percentage of enterprises operating at or near full capacity reflects better and more stable output market conditions. None of the industries reported input market problems in both surveys, indicating that stability in input markets has continued in the period 1990-96. The increasing capacity utilisation becomes even more significant when we recall that most units (66 percent) have made major additions to machinery and equipment and the annual average asset growth rate[28] has been 87 percent for a typical fast growing enterprise. Thus, it is clear that these enterprises attained capacity utilisation of machinery and equipment owned in 1990, as well as the additions since then. Despite this rising number, almost 36 percent of the (fast growing) sample report they could increase their production by 25 to 50 percent. The data imply that some of the units that reported underutilisation to the extent of 50 to 100 percent and more have moved to this category. Among the units that had full capacity utilisation in 1990, 60 percent reported underutilisation in 1996, most likely due to the additional capacity they created in the intervening six years. At the other end, most units which believed their capacity utilisation could be doubled, in 1990, improved their performance and 22 percent of them even reported full capacity utilisation in 1996. As Table 15 shows, the higher capacity utilisation, in 1996, is found among the entire set of surviving enterprises also, with minor differences in the numbers.

Table 15
Capacity Utilisation in 1990 and 1996. Urban enterprises.

Extent of utilisation	% all surviving enterprises		% fast growing enterprises	
	1990	1996	1990	1996
Operating at full capacity	9.9	13.3	8.9	16.4
If employing all machinery & equipment, can increase production by				
10 percent	10.7	14.1	10.7	14.5
10 - 25 percent	23.7	19.3	14.3	18.2
25 - 50 percent	26.0	34.1	28.6	36.4
50 - 100 percent	16.8	11.9	17.9	12.7
More than 100 percent	13.0	7.4	19.6	1.8

When we compare the size of fast growing enterprises and their capacity utilisation, we find that the smallest and largest enterprises are not working at full capacity. It is the middle ranges, with initial investments of ten to 50 million dong (in

[28] Asset growth rate here refers to annual average growth in investments on fixed assets, in gold ounces.

1996 prices) that are utilising their production capacities the best. However, when we compare the asset growth rates (in terms of investment on machinery between 1990 and 1996) with capacity utilisation, we find that units with growth rates higher than 20 percent have a better capacity utilisation than those under 20, leading us to believe that most of the expansionary efforts have been initiated by rising demand in the output markets, which has also improved capacity utilisation. This also explains why the capacity utilisation on the whole has risen. Across regions, Haiphong had the most varied performances; it had the largest number of enterprises operating at full capacity and also the one unit (a household enterprise) that reported working at only half its capacity, in 1996. The capacity utilisation was most homogenous (and efficient) in Hanoi, where 59 percent of the enterprises reported working at 50 to 75 percent of their capacity, and all the other units had still better utilisation. Ho Chi Minh City also had most units belonging to this category (35 percent), and the least percentage (5) operating at full capacity.

Across ownership forms, household enterprises and co-operatives had the best rates of capacity utilisation and the former were also the most diverse in terms of the rates. We find a representation of household enterprises in all the above mentioned categories, but mostly in the category that reported possibility of increasing production between 25 to 50 percent. None of the private and partnership enterprises operated at full capacity and the co-operatives had the best performance, on the whole, on this count. This situation is similar to 1990 except that Ho Chi Minh City enterprises and co-operatives have turned around the most. Haiphong had the most enterprises operating at full capacity even then, and Hanoi had the most homogenous and efficient enterprises (a fourth of its enterprises reported operating at a minimum of 90 percent capacity). At least a quarter of the Ho Chi Minh City enterprises improved their utilisation so that no enterprise worked at half its capacity in 1996, compared to three in 1990. It is clear that on the whole, that the urban enterprise in 1996 was operating closer to its capacity compared to 1990.

Forward linkages

Forward linkages of enterprises are measured here by the destination of main product sales, in terms of category and location of buyers. From the data on category of buyers in Table 16, the following observations may be noted. First, there is ample evidence of changes in the main category sold to between 1990 and 1996 - private enterprises replaced individual persons as the main buyers of the average fast growing urban enterprise in 1996. The percentage of sales of the main product (of the average enterprise) to individual buyers and private enterprises was 34 and 25 percent in 1990, and they changed to 28 and 44 percent respectively, in 1996[29]. Second, significant changes also occurred in the enterprises' linkages with the state sector - 53 percent of the enterprises sold a certain percentage of their main product to the state sector (including state enterprises and other state agencies) in 1990 and this reduced significantly to 40 percent by 1996. The percentage of enterprises selling exclusively to the state also halved in this period, from 18 to 9 percent. Third, while sales to tourists stopped by 1996 (only 2 percent of the enterprises sold between 25-49 percent in 1990), the share of exports has increased noticeably, from 2.6 percent to 4.4 percent of the main product sales, in the average enterprise. However, the 2 percent units that exported all of its main products in 1990 have diversified in favour of other domestic categories.

The significance of these linkages are clearer when we consider the nature of the main products. A majority of the enterprises dealt with light engineering and consumer goods (including spare parts, aluminium and glass items, detergents, electrical wires etc.); other products were medical equipment and devices, furniture, handicrafts, garments and construction materials. Since most of these are goods of everyday consumption by the population, we find that most sales are within the same town. However, as the second half of Table 16 shows, the linkages with the location of sales have also altered. The average enterprise sold 77 percent of its main product within the same city in 1990 and this dropped to 58 percent in 1996. Also, the number of enterprises selling exclusively within the same town dropped from 58 to 45 percent in the same period. The share of other rural and urban areas (in the sales distribution of the average enterprise) has correspondingly doubled; from about 9 percent each in 1990, to 18 percent each in 1996. Sales to other areas rose too, mainly reflecting the increased exports. On the whole, it is clear that the urban fast growing enterprises have displayed a significant amount of adaptability (especially with regard to state sector) and have diversified their sales not only in terms of selling to more categories of buyers, but also in terms of selling in outside locations as well. Their forward linkages have definitely diversified, and to that extent, improved in the period 1990-96.

[29] Also, there is a noticeable change in the percentage of enterprises selling exclusively to these two categories - compared to 20.4 and 12.2 percent in 1990, these percentages changed to 21 in each in 1996. The number of enterprises selling exclusively to individual buyers rose marginally from 20.4 to 20.8 in this period.

Table 16
Forward linkages of main product in 1990 and 1996. Urban fast growing enterprises. Percentages.

Destination and location	0	1-24	25-49	50-74	75-99	100	Mean
Destination of sales of main product 1990							
Individual persons	46.9	12.2	8.2	8.2	4.1	20.4	33.7
Private enterprise	57.1	2.0	20.4	4.1	4.1	12.2	25.3
State enterprise	59.2	2.0	10.2	4.1	6.1	18.4	29.3
Other state agency	87.8	4.1	2.0	2.0	0.0	4.1	6.3
Local authority	98.0	0.0	0.0	2.0	0.0	0.0	1.2
Tourist	98.0	0.0	2.0	0.0	0.0	0.0	0.9
Export	95.9	0.0	2.0	0.0	0.0	2.0	2.7
Other	98.0	2.0	0.0	0.0	0.0	0.0	0.5
Destination of sales of main product 1996							
Individual persons	49.1	22.6	3.8	0.0	3.8	20.8	28.2
Private enterprise	41.5	5.7	5.7	11.3	15.1	20.8	43.7
State enterprise	60.4	15.1	9.4	1.9	3.8	9.4	19.0
Other state agency	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Local authority	96.2	0.0	1.9	0.0	0.0	1.9	2.6
Tourist	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Export	92.5	0.0	3.8	1.9	1.9	0.0	4.4
Other	98.1	0.0	0.0	0.0	0.0	1.9	1.9
Geographical distribution of main product sales 1990							
Same town	6.3	6.3	8.3	14.6	6.3	58.3	76.7
Other rural	75.0	6.3	10.4	4.2	4.2	0.0	8.9
Other urban	75.0	8.3	12.5	2.1	0.0	2.1	9.5
Elsewhere	93.8	0.0	2.1	0.0	0.0	4.2	4.9
Geographical distribution of main product sales 1996							
Same town	26.4	7.5	1.9	17.0	1.9	45.3	58.1
Other rural	67.9	1.9	9.4	13.2	3.8	3.8	17.8
Other urban	67.9	5.7	7.5	7.5	3.8	7.5	17.8
Elsewhere	84.9	3.8	5.7	3.8	1.9	0.0	6.3

When we observe the linkages in more detail, we find definitive patterns in the distribution of sales categories across ownership patterns. The following observations stand out when comparing the average enterprise in each ownership category in 1990 and 1996, along with limited liability companies in 1996. First, the reduction in the share of individual buyers, noticed for the whole sample, between 1990-96, is mainly accounted for by partnership enterprises. Their share in the average partnership enterprise dropped drastically from 31 to 5 percent in that period. This fall, along with the decrease among co-operatives, overrode the increases noticed among household and private enterprises (of 7 percentage points in each). Second, the increase in the share of sales to private enterprises between 1990-96 is also due to the increases among partnership and co-operative enterprises. As before, they moved in opposite directions when compared to household and private enterprises. Third, the share of state sector increased among sales of private and co-operative enterprises, but the rate of increase was lesser when compared to the fall among household and partnership enterprises, as a result of which the overall share fell. Lastly, exports fell among all ownership categories except household enterprises, where the increase was enough to raise its share for the sample as a whole.

On the whole, we notice that household enterprises have displayed the most remarkable diversity in linkages in both years and their behaviour patterns have not changed much (except for the inclusion of exports in 1996). They sold to almost every category of buyers and the proportions have altered slightly in the six years. The co-operatives have undergone major adaptations, halving the share of exports and increasing sales to the state sector and private enterprises. Regarding the geographical location of sales, percentage sales in the same town of the average household and partnership enterprise declined, while that of the private and co-operative enterprise increased. The share of other rural areas increased among all categories, except co-operatives; those to other urban areas increased among all other categories, except private enterprises. It is, therefore, clear that the diversity in linkages has not only increased in terms of categories of buyers, but also in terms of increasing the reach of the products in terms of geographical location; and the performance of household and co-operative enterprises stand out, in this respect. This adaptation is seen in all the three cities. Ho Chi Minh City behaved a bit unlike the other two (it increased its sales to individual buyers[30] and reduced the share of private enterprises), all three reduced the share of state sector overall between 1990-96. All exporting units were located in Ho Chi Minh City in 1990, but were also seen in the other two by 1996. Linkages with the state were highest in Haiphong in both years, it was least in Hanoi in 1996 and in Ho Chi Minh City in 1990. The high growth of the urban fast growing enterprises has been accompanied by extending the reach of both buyers and their location.

Backward linkages

Backward linkages describe the role of enterprises in creating demand for inputs, which form the output of other supplying agents. The extent of backward linkages, thus, determines the usefulness of enterprises in creating income and employment among these supplying agents. The greater the linkages to the local economy, the greater is the symbiotic relationship between providers of inputs and outputs which help in their mutual growth. However, very high backward linkages to the local economy could also mean (national) markets are segmented with the result that the industries have no choice but to depend on the local suppliers, even though it means encouraging inefficient production. Typical factors causing segmented markets include poor infrastructure, information, high transport costs etc. The nature of the

[30] The rise was from 31 to 48 percent of its main product sales, and accounted for the highest share among the three cities.

inputs also determine the extent of backward linkages with the local economy. In our sample of urban fast growing enterprises the main raw material ranged from iron and steel, sand, paper, chemicals, rubber, timber, leather etc. to bread flour. Agro-processing industries were few, and so the share of manufacturing inputs was higher.

Table 17 presents the nature of backward linkages of fast growing enterprises in 1990 and 1996 in terms of the category of main input suppliers and their location. From this table, we find that the linkages have varied only slightly between 1990 and 1996 except for the drastic reduction in the share of households and a corresponding increase in the share of private enterprises. In 1990, households were the major providers of main inputs; 33 percent of the enterprises bought all of their main raw material from households while only 20 percent bought it from private enterprises. This proportion altered drastically by 1996, when only 5 percent relied solely on households and a majority 59 percent bought exclusively from private enterprises. Further, the number of enterprises buying from other private enterprises has increased from 39 percent to 86 percent between 1990 and 1996. These changes have not resulted from changes in the kind of inputs purchased; the main inputs listed above were common to both 1990 and 1996. Rather, it is reflecting the overall proliferation of private enterprises in the cities (true of all of Vietnam, too) and the possible transformation of many household sales into registered formal enterprise transactions. Also noticed from Table 17 is the reduced dependence on the state sector for main raw materials - the number of enterprises buying from the state sector reduced from 41 percent in 1990 to 26 in 1996, the major change is among units that bought solely from the state in 1990. These changes have altered the buying pattern of the average enterprises in 1990 and 1996 - mainly, private enterprises have replaced households as the major providers of inputs, the state's share has reduced, the collective farm's share has only slightly risen and other sources have been discontinued in 1996. While there is this noticeable change in the categories of input suppliers, their location has not significantly altered, strengthening our earlier statement that household sales might have transformed into private enterprise transactions. Even though the percentage of enterprises buying solely from the same town reduced from 88 to 81 percent between 1990 and 1996, the overall share of local suppliers in the purchases of the average enterprise dominated other locations in both years, falling by 4 percentage points.

An important development is the increase in the share of other rural suppliers, which implies that the success of these urban enterprises trickles down better to the rural areas. Their share has risen from 2.2 to 4.8 percent of the purchases of the average enterprise in the period 1990-96. Linkages with other urban areas have, on the other hand, reduced but only slightly. Other sources (including imports) have made their appearance in 1996. On the whole, the enterprises appear to be more reliant on a single source, but less reliant on a single location; they are buying more from fewer categories of input suppliers but the locations are more diverse. The reducing importance of households and state has increased the reliance on private enterprises, but the geographical reach has widened significantly.

Table 17
Backward linkages of main raw material in 1990 and 1996. Urban fast growing enterprises. Percentages.

Supplier and location	0	1-24	25-49	50-74	75-99	100	Mean
Main input supplier 1990							
Individual persons	50.0	3.7	1.9	7.4	3.7	33.3	42.2
Private enterprise	61.0	7.4	3.7	5.6	1.9	20.4	27.4
State enterprise	68.5	1.9	3.7	9.3	3.7	13.0	22.2
Other state agency	90.7	1.9	1.9	1.9	1.9	1.9	5.7
Collective farm	98.1	1.9	0.0	0.0	0.0	0.0	0.2
Other	96.3	1.9	0.0	0.0	0.0	1.9	2.2
Main input supplier 1996							
Individual persons	82.8	1.7	1.7	6.9	1.7	5.2	11.9
Private enterprise	13.8	5.2	5.2	12.1	5.2	58.6	72.7
State enterprise	74.1	5.2	6.9	5.2	0.0	8.6	14.9
Other state agency	100	0.0	0.0	0.0	0.0	0.0	0.0
Collective farm	96.6	3.4	0.0	0.0	0.0	0.0	0.4
Other	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Location of main input supplier 1990							
Same town	4.0	0.0	4.0	2.0	2.0	88.0	92.2
Other rural	96.0	2.0	0.0	0.0	0.0	2.0	2.2
Other urban	92.0	0.0	0.0	6.0	0.0	2.0	5.6
Elsewhere	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Location of main input supplier 1996							
Same town	5.2	0.0	5.2	6.9	1.7	81.0	88.3
Other rural	93.1	0.0	0.0	5.2	0.0	1.7	4.8
Other urban	87.9	3.4	3.4	3.4	0.0	1.7	5.2
Elsewhere	98.3	0.0	0.0	0.0	0.0	1.7	1.7

Across ownership forms, in 1996, household enterprises (especially in Ho Chi Minh City) had the greatest tendency to buy from other households, while non-household forms relied on private enterprises. Surprisingly, an equal number of private enterprises, limited liability companies and co-operatives bought from the state sector. However, relative to the total numbers in each category, limited liability companies accounted for the most number with linkages to the state sector, followed by private and lastly the co-operatives. They were mainly located in Hanoi and Haiphong. This scenario has changed a bit since 1990 - when household enterprises in Haiphong bought most from households, while non-household forms in Ho Chi Minh City and Haiphong bought most from private enterprises. The linkages of co-operatives and private enterprises, especially in Hanoi were greatest with the state sector.

Horizontal linkages

Subcontracting relationships were the only form of horizontal linkages measured, in both 1990 and 1996. Used synonymously here, the data on urban enterprises reveal very poor and reduced horizontal linkages from 1990 to 1996. The number of subcontracting units halved from fourteen to seven in this period, and only one of the fourteen units[31] continued subcontracting until 1996. However, a major reason for this drop is the narrower definition used for subcontracting, in 1997[32]. As a result of this, comparisons between the two years is not attempted. The units subcontracting in 1996 were three household enterprises (two in Hanoi and one in Ho Chi Minh City), two co-operatives (in Hanoi and Ho Chi Minh City) and one private enterprise (in Ho Chi Minh City) and a limited liability company (in Haiphong). The main subcontracting partner was a private enterprise in the same town for five units, the remaining two were linked to a state enterprise and a foreign company. All the subcontracting units had at least two partners, two units had three partners. The duration of the contracts in 1996 was one to twelve months. The effects of short term contracts seem to have been offset by increasing the number of partners. The major form of assistance availed from the parent unit were in procuring raw material with five units receiving it; one other unit received managerial assistance. From the above description, it is clear that subcontracting linkages were not significant in 1996.

Production relations

Production relations describe the client-producer contracts. Generally, the fewer the number of customers, the greater the incidence of producing on advance order. This is because of an inverse relationship between the number of customers and the value of a unit purchase. Hence, a trading unit (e.g. a repair shop) caters to a higher volume of customers because of the lower value of each customer's purchase when compared to a capital goods manufacturing unit - where the number of buyers might be limited, but the value of each product sold has to be high enough to cover the costs of production plus profits, therefore warranting an order secured by a cash advance. In our fast growing sample, as Table 18 presents, this relationship is brought out clearly. The number of annual customers has increased and so has the tendency to produce on advance order. Since the increase in annual customers has been in the more-than-ten category, it is reasonable that the frequency of always producing on advance order has fallen; and the units that occasionally produce on advance order

[31] A private enterprise in Ho Chi Minh City.

[32] The definition used in 1996 was more rigid in differentiating subcontracting from other forms of advance orders. It required a lasting buyer-seller contract based on advance orders, that the subcontracting firm's product should form part of the production process of the buyer and the buyer should provide the main input or other form of substantial assistance.

have increased. With increase in the volume of customers, the impact of a purchaser failing the contract is smaller on the producer; hence the lesser reliance on advance orders. Another factor in explaining this relationship is the size of the enterprise. If the productive capacity and working capital of the industry are quite high, it is possible to manufacture and create stocks such that production time is substantially reduced when the customer arrives. This practice also reduces the frequency of producing on advance order. Elsewhere (see Table 19), only a third of the units have mentioned problems with shortage of capital in 1996, which supports our conclusion that presence of stocks might have caused the lesser reliance on advance order. Further, subcontracting units had more than one customer in both years[33]; we know that all subcontracting units in 1996 had at least two partners, while nine (of fourteen) subcontracting units had only one partner in 1990. That all of these nine units mention dealing with more than one customer in both years implies that these units have not relied upon only the parent company for production orders, they have catered to customers outside too.

Confirming our earlier statement regarding nature of activity and number of customers, in 1996, almost all the fast growing trading and commercial units sold to more than ten customers[34], while manufacturing units had the greatest propensity to sell to under ten customers. This trend is similar to 1990 except for the larger percentage of manufacturing units selling to one customer only. Across cities, sales to one customer only was characteristic of Hanoi in 1990, but it reduced to one unit each in Hanoi and Haiphong in 1996. Sales to between two and ten customers was more predominant in Ho Chi Minh City in 1996, though almost equally distributed in 1990. Most units in 1996 sold to more than 10 customers, but in 1990, sales to under ten customers was more common among co-operatives and private enterprises. There are no noticeable differences between the fast growing enterprises, discussed so far, and the whole set of surviving enterprises. The latter exhibited the same increasing tendency toward selling to more than ten customers, except for the fact that the percentage of enterprises that never sold on advance order increased slightly, by 1996.

[33] Except for one subcontracting unit in 1990 which sold to only one customer.
[34] Only one transport unit reported dealing with only one customer.

Table 18
Production relations in 1990 and 1996. Urban enterprises.

Nature of relation	% all surviving enterprises		% fast growing enterprises	
	1990	1996	1990	1996
Number of annual customers				
One customer only	8.1	2.1	7.3	3.3
Two to ten customers	30.9	30.1	36.4	21.7
More than ten customers	61.0	67.8	56.4	75.0
Production on advance order				
No, never	18.8	22.7	20.8	18.6
Yes, sometimes	25.8	47.5	39.6	55.9
Yes, always or almost always	30.5	16.3	23.5	13.6
Subcontracting	25.0	13.5	27.5	11.9

Pursuing our reasoning that manufacturing units selling less frequently on advance order were presumably bigger and more successful, Ho Chi Minh City had some of the most successful units in both years - since it had the largest percentage of enterprises that never sold on advance order[35]. Hanoi was not far behind - most units sold occasionally on advance order, in both years; in Haiphong the percentage selling almost always on advance order replaced those selling to between two and ten customers in 1996 as the most common category. Across ownership forms, households never or sold occasionally on advance orders, while frequent sales on advance orders was more common among co-operatives in both years. Private enterprises and limited liability companies (in 1996 only), while selling to fewer customers, had the least propensity to sell on advance order.

Constraints

The respondents' perceptions of the main constraints to the growth of the enterprise were collected in both the surveys. The nature of growth of fast growing enterprises in the intervening six years has noticeably altered these perceptions by 1997. Shortage of capital leads the list of main constraints in both years but the number of enterprises mentioning it has reduced from 41 to 33 percent of the sample by 1997. This reduction has probably been the result of two developments: first, the rate of internally generated capital has increased significantly between 1991 and 1997; and second, the greater access and use of external formal financing for investments in the same period (see the section on scale of operations) has reduced the problem of capital shortage for many units. Enterprises, in 1997, no longer consider non-affordability of wage labour, lack of marketing and transport facilities and energy as main constraints, indicating improvements within the enterprises as well as the industrial infrastructure outside. On the other hand two new constraints have appeared

[35] The fact that it had only manufacturing units in 1996 strengthens our argument.

- lack of raw material[36] (1.7 percent) and lack of premises or industrial space (10 percent, equally distributed in Ho Chi Minh City and Haiphong, indicating growth pains).

Two units also mentioned no major constraint at all, in 1996. They were a co-operative in Hanoi and a household enterprise in Haiphong. The areas in which the frequency of main constraints have increased, between 1991 and 1997, relate to limited demand for products (a 3 percent increase) and too much competition (a significant 10 percent increase). As the enterprises have grown at high rates, their outputs have also risen correspondingly and hence the need for growing markets. The shortage of markets becomes more acute when the proliferation of private sector industries continues at the rate found in Vietnam. Hence it is understandable that markets and competition have become more serious constraints for enterprises; that their forward linkages are expanding is proof of their efforts at adapting to the changing situation. Lack of technical know-how, modern machinery and equipment and uncertain government policies are mentioned by very few units. While the impact of these constraints is very high on individual units, for the private sector as a whole, they are challenges for units to determine the survival of the fittest under changing circumstances.

As Table 19 shows, the nature of constraints and the direction of change between 1990 and 1996 are similar among fast growing and the whole set of surviving enterprises as a whole. Minor differences are found in the direction of change among some constraints - technical know-how, lack of raw materials have become major constraints to slightly higher number of enterprises among the survivors as a whole, compared to their reduction among fast growing enterprises.

[36] The unit mentioning the lack of raw material is a co-operative in Hanoi manufacturing traditional medicine products; therefore the lack of raw materials is probably due to the highly specialised nature of raw materials.

Table 19
Main constraint to enterprise growth in 1991 and 1997. Urban enterprises.

Nature of constraint	% all surviving enterprises		% fast growing enterprises	
	1991	1997	1991	1997
Shortage of capital	42.1	34.7	41.4	33.3
Cannot afford to hire wage labour	2.9	0.7	1.7	0.0
Lack of technical know-how	2.1	2.8	3.4	1.7
Limited demand for products	15.7	18.1	15.0	18.3
Too much competition	12.9	24.3	15.0	25.0
Lack marketing and transport facilities	5.0	0.0	3.4	0.0
Lack modern machinery/equipment	5.7	3.5	10.3	3.3
Lack of raw materials	1.4	0.7	0.0	1.7
Lack of energy	4.3	0.0	3.4	0.0
Uncertain government policies	2.1	2.8	1.7	1.7
Inadequate premises/space	0.0	8.3	0.0	10.0
Other	5.7	2.1	3.4	1.7
No constraint	0.0	2.1	0.0	3.3

Interestingly, the constraints mentioned by fast growing enterprises were more homogeneous in the south. No enterprise in Ho Chi Minh City mentioned shortage of capital as a main constraint; competition (55 percent) and limited demand (25 percent) were most frequently cited, in 1996. There is a significant change in the replies obtained in 1990 from Ho Chi Minh City entrepreneurs. Too much competition was, even then, the most common constraint (32 percent), but shortage of capital followed (21 percent) and the number of constraints mentioned were much higher than in 1996. It appears that Ho Chi Minh City entrepreneurs have found ways of overcoming capital shortages mainly through internal accumulations of the firms, since our analysis of investment financing (under scale of operations) showed that they relied most on own resources and least on bank financing. Haiphong continued to lead the cities in terms of the frequency of capital constraints (along with Hanoi, in 1996), even though it had the most assistance from formal financing institutions.

Across ownership forms, shortage of capital was felt by an equal number of household enterprises and limited liability companies in 1996. However, they were almost the only constraint mentioned by the latter and the number citing it was 75 percent of the total; competition was a greater constraint to household enterprises than shortage of capital. Too much competition was most commonly cited among private enterprises too, while partnership enterprises suffered more from shortage of capital. Among co-operative enterprises, inadequacy of industrial space was more common than shortage of capital. In 1990, on the other hand, shortage of capital was the most common constraint for all ownership categories, mainly for co-operatives, followed by private, household and partnership enterprises. The threat of competition was more among private enterprises. One co-operative mentioned uncertainty of government policies as a major constraint. Overall, we notice that contrary to expectations, the problem of lack of capital has been less common among household enterprises, and its severity has decreased in the last six years. Newer constraints in the form of lack of markets and too many suppliers have developed. While there is evidence of adaptability among all these urban units, more efforts are needed in order to break the interaction of extreme reliance on local markets and growing number of producers within the same markets.

Competition

Confirming the growing importance of competition as a constraint, data on perceptions of the number of competitors show that the number of fast growing enterprises that feel there are too many enterprises producing similar goods and services was high in both years at 58 and 60 percent of the sample in 1991 and 1997 respectively. The percentage that felt there were neither too many nor too few, was mostly unchanged at 32 percent. A minority of 7 percent in both years felt there were too few; and only one enterprise felt it was one of its kind. However, an interesting development between 1991 and 1997 is in the perception of the intensity of the competition - the percentage of enterprises that experienced "severe" competition actually reduced from 70 to 42[37]. Fifty six percent of the enterprises felt severe competition from private enterprises in 1990 but reduced drastically to 15 percent in 1996; state enterprises, on the other hand, posed severe competition to a larger number of enterprises - nine in 1996 compared to four in 1990. Severe competition from smuggling remained constant for four units while imports challenged three in 1996, compared to four in 1990. Across cities, Haiphong had the least incidence of severe competition; Hanoi and Ho Chi Minh City had an equal number of firms mentioning severe competition. In 1996, competition from private enterprises was felt most in Hanoi while competition from state enterprises was more common in Ho Chi Minh City. Interestingly, the most threatened by state enterprises were (four) co-operatives, followed by (three) private enterprises. Six household enterprises mentioned competition from all categories, but more from imports and smuggling. Limited liability companies mentioned severe competition the least among ownership categories. State enterprises posed less severe competition in 1990, when all ownership categories listed private enterprises as offering most severe competition. The incidence of severe competition was most in Hanoi, followed by Haiphong and Ho Chi Minh City.

[37] Also to be noted is the apparent lack of correlation between perceptions of too many competitors and severe competition. While only 58 percent felt there were too many enterprises, 70 percent experienced severe competition, implying that competition may be severe even with only a few competitors.

Government assistance

At the time of establishment, almost 67 percent of the fast growing enterprises received government assistance. Among them, the most common forms were fulfilling application procedures (70 percent), followed by tax exemptions (35 percent), recommendations on line of business (25 percent) and introductions to state enterprises or organisation for collaboration (18 percent). Other areas were assistance in organisation of the enterprise (13 percent) and help in procuring machinery (10 percent). Most units received assistance in more than one category. While some forms of assistance like tax exemptions, application procedures fall fully under the "formal" purview of the state, we do not know if informal ties with government officials played a role in getting their assistance in other areas. Whatever the mode of assistance, the number of enterprises that availed official assistance during the operation of the enterprises was significantly less. Further, the number of enterprises reporting government assistance in 1990 is far less than the number in 1997, indicating that many enterprises have benefited from government assistance in the intervening period. In 1990, only ten units reported availing assistance while this number rose to 26 in 1996. The most common form of assistance in 1990 was in solving managerial difficulties, procuring inputs and marketing. In 1996, however, legal advice topped the list, with 42 percent of the units availing assistance in this area. That most of this legal advice has been received by co-operatives and limited liability companies is, no doubt, related to the issues of transformation of ownership forms; this also highlights the role of the government in assisting private sector units in their transition process. The other common forms of assistance were in resolving managerial difficulties (35 percent), marketing (31 percent) and obtaining credit (23.1 percent).

The data on enterprises receiving assistance indicate that most units belong to two specific size categories: with ten to 50 million dong and 100 to 500 million dong in initial investment. Enterprises on either extremes of the scale had the lowest tendency toward availing government assistance. This is found true of both assistance at establishment and during the life time of the enterprise. Further, government assistance at establishment was most common in Hanoi, followed by Ho Chi Minh City and Haiphong. Hanoi continued to lead the other two with regard to assistance during other times, but Ho Chi Minh City entrepreneurs availed the least assistance. It is apparent that while legal and bureaucratic assistance in forming and establishing the enterprise was received, help with marketing, inputs, workers etc. have not been very significant. Either the enterprises did not approach or the officials had no way of helping them in these matters. Even when they did assist, slightly larger enterprises (not the largest) seemed to be in a better position to avail of government assistance.

Rural enterprises

The overall growth performance among rural resurveyed units in the period 1991-97 is quite polarised. By 1997, 40 percent of the enterprises surveyed in 1991 closed down and 30 percent of the enterprises grew at a rate over 2.5 percent per year (See Table 1). The category of 'fast growing' rural enterprises (which grew in excess of 10 percent a year), in fact, comprised 23 percent of the whole sample resurveyed in 1997, and an overwhelming 77 percent of the enterprises which grew over 2.5 percent a year between 1991-97.

Location and organisational structure

As shown in Table 1, the number of rural fast growing enterprises resurveyed was 33, slightly more concentrated in Ha Tay (19) than Long An (14). There was a clear dominance of household enterprises in 1997, non household forms accounted for only a third of the whole sample. Specifically, the share of household enterprises was 67 percent, followed by private enterprises (27 percent) and a partnership and a co-operative, accounting for 3 percent each. This lack of diversity in 1997 shows that the extent of change in the period 1991-97 in terms of organisational structure of firms has been very small. In 1991, the situation was even more polarised; there were only household (78 percent) and private enterprises (22 percent).

In the intervening period, about 21 percent (or seven enterprises) changed ownership forms, a majority (six) for the better. Four of them were located in Ha Tay and three in Long An. Four household enterprises became private enterprises, one became a partnership and one private enterprise transformed into a co-operative between 1991 and 1997. Much of these changes have occurred in Ha Tay; from only one private enterprise (the rest were household enterprises) in 1991, the distribution altered noticeably in Ha Tay by 1997 - to 78 percent household enterprises, 11 percent private and 5 percent each of partnership units and co-operatives (95 and 5 percent were household and private enterprises in 1991). All the new ownership forms were found in Ha Tay, while Long An continued to host only household and private enterprises[38] (50 percent each in 1996 and 57 and 43 percent respectively in 1990).

Nature of activity

Manufacturing industry dominated the activities of rural fast growing enterprises in both 1991 and 1997. In percentage terms, 60, 16 and 24 percent of the enterprises were involved in manufacturing, agro-processing and services in 1991 and this distribution altered to 67, 18 and 15 percent respectively by 1997. Ha Tay had

[38] Three units changed forms in Long An - two household enterprises became private enterprises and one private enterprise became a household enterprise.

only manufacturing (89 percent) and agro-processing units (11 percent) in 1997. Long An had more diversity in nature of activity in 1997, manufacturing and services (including repair shops, catering, transport etc.) accounted for 36 percent (each) of the enterprises and the remaining 28 percent were in agro-processing.

A total of eleven units changed their lines of activity between 1991-97, ten in Long An and one in Ha Tay. The total number of manufacturing enterprises increased by 1997, by three units,[39] in the intervening period. Agro processing units increased by two units, from the transformation of one manufacturing and one trading unit, both in Ha Tay. Except for one unit in Long An that changed both ownership form and line of activity, all other shifts in the line of activity have occurred retaining the previous ownership form. It appears that there were more changes in Ha Tay in ownership forms while Long An witnessed most changes in lines of activity. Across ownership forms, changes in both ownership form and lines of activity have been more common among household enterprises (in their 1991 form), reflecting their larger numbers in the sample. Overall, manufacturing and agro-processing activities have increased while trading units have decreased, though the magnitude of change is not great.

Enterprise history

The increasingly liberal environment for private sector in Vietnam, since the 1980s, is well reflected in the dates of establishment of rural enterprises. A large number of enterprises (34 percent) were set up in 1990 and were only a year old at the time of the survey in 1991 (Table 20). The table also shows that a majority of enterprises have been set up during the late 1980s. Correspondingly, the second half of Table 20 shows that close to 70 percent of the enterprises were less than 10 years old in 1997, indicating that they were at most 3 years old in 1991[40]. There is no representation from enterprises established in the period 1976-80 and the period before 1976 accounts for the establishment of nearly 13 percent of the enterprises. All of these older units were household enterprises. The oldest private enterprise was established as recently as 1986[41]. The only co-operative in the sample was formed by the transformation of a private enterprise in Ha Tay, and the household enterprises have historically been the oldest and most dominant form of organisation among fast growing rural enterprises. The important point to note is that their importance has not diminished even after other ownership forms emerged, in the 1980s. In our sample, a third of the household enterprises were set up in 1990.

[39] One was previously an agro processing unit and two were trading units, all in Long An.

[40] The youngest enterprise in 1997 was at least 7 years old since one of the criteria for the survey in 1991 was that enterprises should have operated for a year.

[41] Excluding the two household enterprises that transformed into private enterprises in the period 1981-85.

Since the presence of private enterprises is not very dominant, we might say that the most characteristic feature among even fast growing rural enterprises was household manufacturing. Across regions, Ha Tay had all the enterprises older than 25 years while the distribution of enterprises, established since, has been equal. The number of enterprises established in Ha Tay in 1990 is also slightly larger than in Long An. It is thus clear that most fast growing units were established in the *doi moi* era and were, typically, less than three years old in 1991 and between five and ten years old in 1997.

Table 20
Year of establishment and age of rural enterprises

Year of establishment	Percent	Age in 1997	Percent
Before 1976	12.5	Less than 5 years	0.0
1976 - 80	0.0	5 - 10 years	68.8
1981 - 85	12.5	11 - 15 years	18.8
1986	6.3	16 - 20 years	0.0
1987	6.3	21 - 25 years	3.1
1988	15.6	More than 25 years	9.3
1989	12.5		
1990	34.4		

Entrepreneur characteristics

Data on entrepreneur characteristics were collected from owners of household and private enterprises only, which covered all but two units among rural fast growers. The profile of entrepreneurs from the two surveys differ slightly because of two reasons: first, the number of household and private enterprises reduced from 33 to 31 units by 1997[42]. Second, the 1991 data covered all the units' owners while in 1997, some of the respondents of household and private enterprises were only managers and not owners; hence they were excluded from tabulations on entrepreneurial characteristics. These variations account for qualitative differences like gender, education and experience distribution across the two years as well as age in Table 21. Table 21 presents the entrepreneurial characteristics in 1997 for the fast growing enterprises as well as all surviving rural enterprises. The percentage of male entrepreneurs among fast growing enterprises increased from 76 to 85 in the period 1991-97. However the average age of these entrepreneurs fell from 49 years to 43 years, indicating that owners of units that changed ownership forms or were substituted by managers (as respondents) in 1997 must have been over 50 years old in 1991. This is confirmed by the data. Also, a significant percentage of owners were over 50 years in both 1991 and 1997. The youngest entrepreneurs owned only household enterprises in both years (all in Ha Tay), while most private enterprises

[42] A total of seven units changed ownership forms, but five of the transformations were between household and private ownership forms and so were included in entrepreneurial data in 1997, bringing about a net reduction of two units.

belonged to owners between 40 and 49 years of age (mostly in Long An). The oldest entrepreneurs, like the youngest, owned only household enterprises in both years too (almost all in Ha Tay), except for one household-turned private enterprise owner in Long An in 1997. Among all surviving rural enterprises, as Table 21 shows, the gender distribution is not very different; average age of entrepreneur is slightly higher and majority of entrepreneurs are over 50 years of age (40 percent).

Regarding the educational background of the fast growing entrepreneurs, as Table 21 shows, a majority of entrepreneurs had more than 10 years of formal education[43]. Most of these entrepreneurs, in Ha Tay, owned household enterprises while their counterparts in Long An owned private enterprises in 1997. On the other hand, most entrepreneurs with less than seven years of education ran household enterprises exclusively, in both regions, indicating a significant correlation between high education and non-household enterprise ownership in Long An only. This scenario was also true of household and private enterprise owners in 1991. Also seen in the table is the fact that most entrepreneurs of fast growing enterprises have prior experience in a position of responsibility, including the state sector. A minority also served as local or other cadres (10 percent) and a fifth were war veterans - all of them were in Ha Tay. Further, all the war veterans and most local cadre officials had gone into household enterprises. Most household and private enterprise owners had served in a position of responsibility earlier. Compared to the full set of surviving enterprises, more fast growing entrepreneurs were younger, had more years of education and prior experience in a position of responsibility..

[43] The four women entrepreneurs in 1997 belonged to each of the educational categories listed in Table 21.

Table 21
Characteristics of rural owner-managers in 1997

	% all surviving enterprises	% fast growing enterprises
Male	78.0	77.4
Female	22.0	22.6
Age		
Mean (years)	48.23	42.90
-29 years	13.8	15.4
30 - 39 years	13.8	19.2
40 - 49 years	32.2	42.3
50 - years	40.2	23.1
Education		
Up to 4 years	6.9	7.7
Up to 7 years	25.3	23.1
Up to 10 years	34.5	23.1
More than 10 years	33.3	46.2
Prior Experience		
Local or other cadre	10.0	10.0
War veteran	24.0	20.0
Other position of responsibility	66.0	70.0

Primary Income Source

Related to entrepreneurial characteristics is the structure of household income among household and private enterprises. Table 22 presents the distribution of all surviving and fast growing rural enterprises by source of primary income. As noted under the table, data on existence of direct income from farm sales and agricultural practices have not been included due to insufficient availability. Table 22 reveals some dramatic changes in the structure of household income between 1990 and 1996, especially among fast growing enterprises. The role of the enterprise in serving as the sole source of household income has risen, ten-fold, among fast growers. However, as cautioned earlier, we are not aware of land holdings and income from agriculture, among these enterprises, and thus, the percentages in both 1990 and 1996 might not be a true representation of the real structure.

While importance of the enterprise as main income source increased, involvement of unpaid, household members reduced in the period 1990-96. In 1990, 85 percent of the enterprises (fast growing as well as all surviving) used unpaid household labour (an average 2.5 relatives per unit) and it reduced to 74 percent (an average of 1.6 relatives). The extent of involvement of household labour was lower in Long An, where only 1.4 household members were unpaid labourers in the fast growing enterprises, compared to two in Ha Tay (in 1996).

Consistent with the reduction in other income sources, almost 23 percent of the entrepreneurs reported that their household income had declined since 1991. The excellent performance of the enterprise in terms of assets and value added (and therefore, income) has apparently compensated for any such reduction among 65 percent of the units that report an increased household income since 1991[44]. The remaining 12 percent had unchanged incomes.

Table 22
Sources of household income in 1990 and 1996. Rural enterprises.

Income source	% all surviving enterprises		% fast growing enterprises	
	1990	1996	1990	1996
Enterprise as sole source	9.1	36.7	6.1	63.6
Wage employment	5.7	26.4	12.1	6.1
Farming	25.3	14.9	33.3	24.2
Others	14.9	12.6	27.3	15.2

Remark: Data on income from family farm have not been included. The income from farming is calculated on the basis of the household members gainfully employed in agriculture.

Scale of operations

The scale of operations in terms of assets, income, employment, productivity and the like, of fast growing rural enterprises and other categories of resurveyed enterprises, is found elsewhere[45]. Here, we present the distribution of initial investment and assets (and their growth) in 1990 and 1996, of fast growing and other surviving rural units (Tables 23 and 24). As Table 23 shows, a majority of fast growing enterprises (65 percent) invested between one and ten million dong (in 1996 prices) at the time of starting the enterprise. The average amount invested by a fast growing enterprise, at establishment, was eight million dong; the average values of its assets by the end of 1990 and 1996 respectively, were 21 and 213 million dong. This phenomenal growth in assets between 1990 and 1996 is a striking feature among fast growing enterprises as well as for all surviving enterprises. The average surviving enterprise also invested eight million dong at establishment, its assets in 1990 were worth 33 million dong (slightly higher than among fast growing enterprises) and grew to 160 million dong (though lower than that of the average fast grower).

The difference in value of assets in 1990 between the average surviving and fast growing firm may be attributed to the fact that the latter was very young in 1990 and had not undertaken any additions to assets yet. However, much of its growth in investments on assets has occurred in the period 1990-96, with a ten-fold increase. The average surviving enterprise, on the other hand, experienced a five-fold increase in assets in that period, mainly due to 13 percent of the enterprises that experienced

[44] Of these, 30 percent each report increases upto 25 percent and 25 to 50 percent; 25 percent between 50 and 100 percent and 25 percent in excess of 100 percent in the period 1991-97.
[45] Per Ronnås. 1998. *The Transformation of the Private Manufacturing Sector in Vietnam in the 1990s.* Working Paper Series in Economics and Finance No. 241 (Stockholm, Stockholm School of Economics).

negative growth rates in assets (See Table 24). On the whole 16 percent of the fast growing enterprises moved to higher categories of assets (when compared to their initial investments) by 1990; and 87 percent had done so by 1996, indicating that 1990-96 has been a very successful period of growth for fast growing enterprises. A very small minority had moved to lower *categories* in both years (7 percent), although 13 percent reduced their asset value in absolute terms.

Across regions, the average fast growing Long An firm (with 11 million dong) was almost twice the size of its Ha Tay counterpart (with 6 million dong) at establishment. Its assets in 1990 were 35 million dong compared to 11 million dong in Ha Tay. This absolute difference in size became more conspicuous by 1996 when the average Long An firm was worth 272 million while the Ha Tay firm had 166 million in assets. Although this difference widened, Ha Tay has grown faster, in percentage terms[46]. The annual average growth of assets of the typical enterprise in Ha Tay between 1990-96 was 66 percent, compared to 44 in Long An. The growth rates between establishment and mid 1991 was also higher in Ha Tay (19 percent) than Long An (1 percent). The regional differences in the size of an enterprise at establishment were greater than differences across ownership forms. The average private enterprise was only slightly larger (8.3 million dong) than its household counterpart at establishment (7 million dong); its assets in 1990 were 26 million dong (compared to 16 million dong of the household enterprise), but by 1996, there was a clear difference in the size of firms across ownership forms. Assets of the average private enterprise were worth 370 million dong in 1996 compared to 101 million dong of the household enterprise. Even though the number of private enterprises is much less than household enterprises, the rate of growth in assets shows that the former have grown faster. Table 24 elaborates on the distribution of growth rates of assets among fast growing as well as all surviving enterprises.

[46] The value of assets of the average Ha Tay firm grew from 11 to 166 million dong between 1990 and 1996 causing a 1409 percent growth; in Long An, assets increased from 35 to 272 million dong - a 677 percent growth.

Table 23
Initial investment (at establishment) and total assets in 1990 and 1996.
Rural enterprises. Thousand dong.

	% all surviving enterprises	% fast growing enterprises
Initial investment at establishment		
1000 and less	9.5	9.7
1001 - 10000	67.9	64.5
10001 - 50000	19.0	22.6
50001 - 100000	3.6	3.2
100001 - 500000	0.0	0.0
More than 500000	0.0	0.0
Total assets in 1990		
1000 and less	4.6	12.1
1001 - 25000	58.6	60.6
25001 - 75000	24.1	18.2
75001 - 100000	4.6	3.0
100001 - 150000	4.6	6.1
150001 - 500000	3.4	0.0
More than 500000	0.0	0.0
Total assets in 1996		
1000 and less	1.1	3.0
1001 - 25000	23.0	6.1
25001 - 75000	27.6	30.3
75001 - 100000	10.3	12.1
100001 - 150000	10.3	9.1
150001 - 500000	20.7	30.3
More than 500000	6.9	9.1

Remark: All monetary values are in 1996 prices.

Table 24
Distribution of annual average asset growth rates.
Rural enterprises. Percentages.

Nature of growth rate	% all surviving enterprises	% fast growing enterprises
Growth rates from establishment to mid-1991		
Zero	51.3	63.0
1 to 10 percent	17.9	25.9
11 to 20 percent	7.7	0.0
21 to 50 percent	9.0	3.7
51 - 75 percent	9.0	3.7
76 to 100 percent	1.3	0.0
More than 100 percent	3.8	3.7
Growth rates 1990-1996		
Negative	12.8	0.0
Zero	8.1	3.1
1 to 10 percent	16.3	9.4
11 to 20 percent	34.9	37.5
21 to 50 percent	9.3	9.4
51 - 75 percent	14.0	28.1
76 to 100 percent	4.7	12.5
More than 100 percent	0.0	0.0

Remark: Data for computing growth rates from establishment to 1991 and 1990-96 are not available for six units and one unit respectively.

We have calculated two kinds of growth in assets, as clear from Table 24. The first kind measures the annual average percentage growth of assets from establishment to mid 1991, in terms of gold ounces invested since establishment upto mid 1991; the second is a calculation of annual average percentage growth of assets between 1990 and 1996 based on the data available for value of assets at the end of the two years (in 1996 prices). As the table shows, growth occurred at a slow pace between establishment to mid 1991, for both fast growing and all surviving enterprises. The average rate of growth is fairly low, at 10 percent, among fast growers. The reason is, about 63 percent of the fast growing enterprises did not increase their assets between establishment and 1991. This does not seem very surprising if we recall that 47 percent of the rural fast growing enterprises were established in 1989 and later (Table 20). The three enterprises that experienced more than 20 percent growth in assets were at least five years old in 1990[47]. More enterprises in Long An experienced zero percent growth (77 percent) compared to Ha Tay (50 percent). A majority of enterprises with zero percent growth (65 percent) also had between one and ten million dong in initial investment. Both the units with less than 1 million dong and 57 percent of units with more than ten million dong in initial investment also had zero percent growth.

With regard to growth between 1990 and 1996, the scenario is very different (Table 24). The rate of capital accumulation (growth of assets) was very high, averaging 56 percent per year. There is also a distinct difference between fast growing enterprises and all surviving enterprises. A majority of enterprises (both fast growers and all survivors) grew at a rate between 11 and 20 percent per year. However, the distinguishing features of fast growing enterprises are the 41 percent that grew in excess of 50 percent; and that none of the enterprises experienced negative growth. Further, only one household enterprise in Long An registered zero growth. Ha Tay presented a more diverse picture in terms of presence of a wide range of growth rates between 1990 and 1996 for fast growing enterprises. No unit registered zero percent growth, and an equal number of units experienced growth rates less and more than 50 percent. In Long An, the enterprises behaved more homogeneously - half the units grew at rates between 11 and 20 percent, a third grew between 51 and 75 percent. Of the remaining three enterprises, apart from the zero growth, two units had between 1 and 10 percent growth in assets per year. Most household enterprises experienced between 11 and 20 percent growth while their private counterparts had between 51 and 75 percent growth per year, among fast growing enterprises. Further, the best growers had invested between 1 and 10 million dong at establishment. Half of these

[47] Two household and one private enterprise, all in Ha Tay.

enterprises grew in excess of 50 percent per year. On the other hand, most units that invested more than 10 million dong grew at less than 20 percent per year.

Two points deserve mention in this context. One relates to the comparison of the two kinds of growth calculated and the other pertains to the correlation between growth in value added and asset growth between 1990 and 1996. For fast growing enterprises, we find that a majority (67 percent) of the units that grew in excess of 20 percent between 1990 and 1996 had zero percent growth between their establishment and mid 1991, thus implying that even modest absolute increases in assets appear impressive in percentage terms. Steady growth is observed among seven units that experienced 1 to 10 percent growth in assets (between establishment and 1991). One of those units maintained that rate while four moved to the category 11 to 20 percent growth and two moved to the category 51 to 75 percent growth in assets between 1990 and 1996. Next, taking the case of all surviving enterprises, we find a very high degree of correlation between growth in value added and assets in the period 1990-96[48]. This strong relationship leads us to believe that growth in assets was a prerequisite condition for growth in value added among fast growing enterprises; and that overall growth (in value added) has been capital intensive[49].

[48] The co-efficient of correlation between percent growth in value added and percent growth in assets between 1990 and 1996 works out to be 0.5, significant at 0.01 level.

[49] This point is also confirmed in the section On Accumulation, Growth and Employment in Per Ronnås. 1998. *The Transformation of the Private Manufacturing Sector in Vietnam in the 1990s*. Working Paper Series in Economics and Finance No.241 (Stockholm, Stockholm School of Economics). One of the findings mentioned here is that "growth requires very high levels of capital accumulation is supported by the fact that the declining enterprises too, generally registered net increases in capital, although at much lower rates". P.27. Also see Tables 25 and 26 in Per Ronnås, *ibid*, for calculations on relative and absolute capital intensity.

Table 25
Percentage distribution of investment finance by source. Rural fast growing enterprises.

Sources	0	1-24	25-49	50-74	75-99	100	Mean
Sources for investment at establishment							
Own resources	3.2	0.0	6.4	12.9	16.1	61.4	83.3
Friends and family	74.2	9.7	3.2	9.7	0.0	3.2	11.3
Banks	96.8	0.0	0.0	3.2	0.0	0.0	2.0
Credit co-operatives	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Local authorities	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Employees	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Private moneylenders	93.5	3.2	3.2	0.0	0.0	0.0	1.8
Advance from sales	96.8	0.0	0.0	3.2	0.0	0.0	1.6
Others	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Sources for investment finance 1991-97							
Own resources	0.0	0.0	6.2	12.6	0.0	81.3	91.9
Banks and other financial institutions	93.8	0.0	0.0	6.2	0.0	0.0	3.3
Loans from other sources	87.5	0.0	6.2	6.2	0.0	0.0	4.8
Interest free loans from friends and family	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Other sources	100.0	0.0	0.0	0.0	0.0	0.0	0.0

Closely linked to capital accumulation and capital intensive growth is the availability of capital. On the one hand, there is evidence of a very high rate of capital accumulation among rural fast growing enterprises. On the other, there is evidence of a major shortage of external sources for investment funding, both at establishment and for expansionary purposes. Table 25 presents the distribution of investment sources (at establishment and between 1991 and 1997) by the percentage of enterprises availing them. The importance of own resources - entrepreneurial savings and the firm's internally generated revenue - is very clearly brought out by the table. Only one unit (amounting to 3.2 percent) did not use own resources at establishment[50]. An astounding 61 percent of the units relied solely on entrepreneurial savings for investment needs at establishment. Borrowing from bank was conspicuous by its near-absence. Only one unit borrowed between 50 and 74 percent of its investment finance from banks, for start-up. Except for two units that borrowed from money lenders and one unit that used advance from sales, all other sources were not used by any of the rural fast growing firms. The average enterprise, as Table 25 shows, financed 83 percent of its investment amount from own resources, 11 percent from friends and family and a mere 2 percent from banks. Although the numbers of household and private enterprises are not comparable, the percentage of either ownership forms (relative to their total numbers) using own resources and from friends are about the same (65 and 25 percent respectively). The lone borrowers - a private enterprise in

[50] This household enterprise in Long An borrowed 100 percent from friends and relatives. Its investment at establishment was 15 million dong.

Long An from the bank and a household enterprise in Ha Tay as advance from sales - highlight the problem of scarcity and/or access to external credit sources. Even borrowing from private money lenders was found only among two units[51].

Further, although 97 percent of the fast growing enterprises registered positive growth in the value of assets between 1990 and 1996 (Table 24), only 48 percent report making additions to machinery and equipment since 1990. The sources for this investment are even less varied than at the time of establishment. Almost 81.3 percent of the enterprises financed 100 percent of their expansionary investment through own resources (Table 25). Only one private enterprise in Long An borrowed half of its investment amount from a bank and two units (one household enterprise in Ha Tay and one private enterprise in Long An) borrowed half and a quarter of their funds on interest from other sources. The average expanding fast growing enterprise depended on its internally generated revenue for covering close to 92 percent of its investment amount, and less than 5 percent from banks and other sources. It is very clear from this data that the high rates of capital accumulation achieved by rural fast growing firms between 1990 and 1996 have been funded predominantly by own sources. That this kind of a growth has occurred is very impressive and also offers clues to the non-viability of several others in the same period. It is possible that insufficient revenue generation for the much needed capital accumulation has caused many enterprises to close down.

Mechanisation

Capital accumulation, in terms of addition to existing assets, is reflected in the extent of mechanisation. Data on rural enterprises show that all units use machinery, though the type of machinery differs. Table 26 presents the extent of mechanisation among fast growing and all surviving enterprises, in 1991 and 1997. Since the rural fast growing enterprises had very high rates of capital accumulation, intuitive expectations prompt one to find a greater use of power driven machinery. Table 26 confirms that expectation, implying that much of the investment on assets has gone into purchasing power driven machinery. If we consider power driven machinery as a better mode of production than manually operated ones, we find that a majority of fast growing enterprises used better modes of production, and this change has occurred in the period 1991-97, coinciding with the high rates of capital accumulation. As Table 26 points out, 66 percent of the enterprises used power driven machinery in 1997 (47 percent used it along with manually operated machinery), and this percentage has more than doubled since 1991, when only 27.5 percent used power driven machinery. Correspondingly, the percentage using hand tools only has (approximately) halved in

[51] A collective in Ha Tay and a household enterprise in Long An.

that period, and the percentage using only manually operated machinery has also dropped. However, when compared to all surviving enterprises, we find that the fast growing enterprises lagged behind in 1991 on all counts[52]. In 1997, the fast growing enterprises continued their greater use of hand tools, but the percentage using manually operated machinery only dropped; the percentage using power driven machinery (66) was only slightly lower than the surviving enterprises (69 percent).

In greater detail, we find the following changes: First, 75 percent of the enterprises have changed the kind of machinery they used, between 1991-97. A majority of them (71 percent) have shifted to use of higher forms of machinery. Second, following from above, about a third (29 percent) reduced the extent of mechanisation. Third, most changes are found among the category that used only hand tools in 1991. Almost 82 percent of them increased the extent of mechanisation, most of them used power driven machinery in 1997. Fourth, more than half of the enterprises that used both manually operated and power driven machinery in 1991 have reduced the extent of mechanisation - most of them have reverted to use of hand tools only, in 1997. Lastly, about 47 percent of the manufacturing enterprises still used only hand tools in 1997; on the whole, this percentage remains unchanged since 1991. Interestingly, none of the 25 percent manufacturing units that experienced negative or zero asset growth rates (between 1991 and 1997) reduced their mechanisation in 1997; most of them were already using manually operated and power driven machinery in 1991.

On the one hand we have 97 percent of the enterprises reporting positive asset growth rates (58 percent per year on average) between 1990 and 1996 for rural fast growing enterprises; on the other, only 50 percent of the enterprises report making additions to machinery, thus implying asset growth has not come about entirely through increased use of machinery in these enterprises[53]. About 61 percent of the fast growing enterprises report investments in home construction. Since household enterprises (that operate out of the house of the entrepreneurs) dominate the rural fast growing sample, we can reasonably assume that asset growth has also come about by additions to building and land, not only machinery.

[52] The fast growing enterprises had a greater propensity to use only hand tools and manually operated machinery, and lesser use of power driven machinery in 1991.

[53] Also, as noted earlier, very low level of assets in 1990 made even small absolute increases very huge in percentage terms. While this does not make their growth rate any less impressive, it explains why some units have experienced high asset growth rates without major investments in machinery or building.

Table 26
Type of machinery used in 1991 and 1997. Rural enterprises.

Type of machinery	% all surviving enterprises		% fast growing enterprises	
	1991	1997	1991	1997
Only hand tools, no machinery	49.4	23.8	65.5	31.3
Manually operated machinery only	7.4	7.1	6.9	3.1
Power driven machinery only	8.6	17.9	3.4	18.8
Both manually operated and power driven machinery	34.6	51.2	24.1	46.9

Across ownership forms, household enterprises accounted for 70 percent of the fast growing enterprises using only hand tools in both 1991 and 1997, while most private enterprises (70 percent in 1997) used power driven machinery. Use of only hand tools was also more common in Ha Tay; only 53 percent of Ha Tay enterprises used power driven machinery, compared to 85 percent of Long An enterprises. However, Long An has seen major changes in the period 1991-97; more than half of the Long An enterprises used only hand tools in 1991, implying that much of the increase in use of power driven machinery has occurred in Long An. Most enterprises owned all their machinery and equipment in both years, purchased it new or second-hand. Only one household unit in Ha Tay used self-constructed machinery in 1997. It is thus clear from the data presented above, that overall, the extent of mechanisation has increased in the period 1991-97 and it has been more pronounced in Long An, yet many fast growing enterprises in manufacturing are still using only hand tools.

Employment

Total employment among rural fast growing enterprises increased from 176 in 1990 to 287 in 1996, a 63 percent increase. The annual average growth rate of total employment in the period 1990-96 is 6.6 percent, almost equal in Ha Tay and Long An[54]. The average number employed per enterprise correspondingly rose from five to nine, in that period. Most fast growing units employed wage labour, in varying proportions. Table 27 records the wage employment in 1990 and 1996, of both fast growing and all surviving rural enterprises. From the table, it is clear that wage employment has improved between 1990 and 1996 among fast growing enterprises, the average number of wage employees increased from less than two to over six, in 1996. The number of units employing wage labour has risen from 52 to 79 percent in the intervening six years. Overall seven units (21 percent) did not change the numbers of wage employees; two units (6 percent) reduced and 24 units (or 73 percent) increased their number of wage employees. Thus, on average, there was a net increase

[54] See Per Ronnås. 1998. Tables 22, 24, 30 and 32 for employment performance of fast growing enterprises by location, ownership form and vis-à-vis other categories of surviving enterprises in the period 1990-96.

of four wage employees per fast growing unit, from two to six between 1990 and 1996 (Table 27). Fast growing enterprises were behind all surviving enterprises in 1990, they employed a maximum of fifteen wage employees in 1990, compared to 67 among the latter; but they almost doubled it to 29 wage employees in 1990, compared to 33 among all the survivors[55]. Across regions, in both years, Ha Tay accounted for 66 percent of units without wage labour, but was more diverse in its representation among employment categories than Long An. However, in both regions and years, a majority of enterprises (with wage labour) belonged to the category with one to ten wage employees (Table 27). Further, household enterprises accounted for 84 and 100 percent of the units without wage labour in 1990 and 1996 respectively. In other words, all private enterprises used some percentage of wage labour, mainly in the category one to ten employees, in 1996.

Growth in employment is also reflected in the percentage of wage employees to total labour force among fast growing enterprises. This percentage, on average, rose from 25 to 55 percent in the period 1990-96. The corresponding percentages for all surviving enterprises was 32 and 44 in the two years. Interestingly, none of the fast growing enterprises used 100 percent wage labour, implying that they used some amount of unpaid (mainly household) labour full time, in both years. Across regions, the average percentage of wage employees to total labour force increased in both Ha Tay and Long An, slightly higher in the latter[56].

Table 27
Wage employment in 1990 and 1996. Rural enterprises.

Number of wage employees	% all surviving enterprises		% fast growing enterprises	
	1990	1996	1990	1996
No wage labour	43.7	32.2	48.5	21.2
1 -10	47.1	55.2	48.5	57.6
11 - 25	4.6	10.3	3.0	18.2
26 - 50	3.4	2.3	0.0	3.0
51 - 70	1.1	0.0	0.0	0.0
More than 70	0.0	0.0	0.0	0.0
Mean	4.51	4.72	1.82	6.18

Only seven fast growing units (21 percent) used part time wage employees, the remaining employed them full time. Comparing the average annual growth rate in value added (27 percent) and total employment (6.5 percent), the total employment elasticity of growth works out to be rather low, at 0.24 for fast growing enterprises. Wage employment elasticity was only slightly higher, at 0.78. This low elasticity

[55] The wage employment among all surviving enterprises declined mainly due to shedding of labour by declining enterprises. Almost 67 percent of the declining enterprises reduced their wage labour between 1990 and 1996 by 63 percent, on average.
[56] The average percentages of wage labour: 25 and 52 in Ha Tay; 27 and 60 in Long An, for 1990 and 1996 respectively.

confirms the hypothesis that growth has been capital intensive,[57] but the brighter side is that incremental employment takes the form of wage rather than unpaid household employment. A correlation between size of assets and propensity to employ wage labour was found, in 1996. The co-efficient of correlation worked out to be 0.24 in 1990 and 0.4 (significant at 5 percent level) in 1996. All units with assets in excess of 75 million dong used wage labour in both years. On the whole, the contribution of rural fast growing enterprises to total wage employment, though higher than 1990, was still limited in 1996. Much of the growth has been achieved by increasing labour productivity and not total wage employment, in these units. The absence of co-operatives in the rural sample has also contributed to absence of dramatic changes in employment, among rural survivors, since the co-operatives have traditionally been major employment sources and have been thinning since the initiation of market reforms in Vietnam.

Production Flexibility

Production flexibility is measured by the changes introduced to the product mix - introduction of new products or improvements to existing products. As noted earlier, this kind of flexibility is very important in the firm's adjustment to changing output markets. Changes to the product mix might be initiated as a response to purchaser demands or at the initiative of the entrepreneur, who sees greater marketing possibilities for the changed product. Lack of flexibility, however, could imply two things: a highly standardised product line with stable output markets (more common among large scale enterprises); or a rigidity in the production process, which might not always be advantageous. Hence, we cannot classify presence or absence of flexibility as good or bad, *per se*. However, in the case of our sample, with a predominance of household small scale manufacturing, and direct client-producer contracts, presence of production flexibility is a virtue.

Table 28 shows the nature of flexibility among fast growing and all surviving enterprises in two time periods - 1989-91 and since 1991. It is seen that the percentage of enterprises introducing new products/improvements has increased significantly since 1991, especially among fast growing enterprises[58]. In both time periods and categories of enterprises, improvements to existing products have been more common than introduction of new products.

Interesting developments in production flexibility are the changing reasons for initiating product mix changes and the perception of their success. Among fast

[57] See Per Ronnås, ibid, Tables 27 and 29 and their discussion, for a detailed analysis of employment elasticities.
[58] However, we should bear in mind that seven years have passed since 1991 while the pre-1991 period measured only two years.

growing enterprises, competition from other producers was the dominant reason for initiating change, in the 1989-81 period, followed by difficulties in selling existing products. Since 1991, the motivating factors have changed significantly - difficulty in selling products was not mentioned by any unit, and customer requests replaced the threat of competition as the dominant reason. Further, product changes in 1989-91 were mainly found among enterprises older than two years. Also, fast growing enterprises were less flexible compared to all survivors in 1989-91 but more flexible after 1991. A majority of declining enterprises (63 percent) mentioned difficulty to sell product as the reason for change, while fast growing enterprises, as Table 28 shows, considered competition as the motivating factor, in the 1989-91 period. Since 1991, customer requests have been dominant for all categories of enterprises.

There are significant regional differences in production flexibility. Almost 88 percent of all surviving units introducing new products and 89 percent units that made improvements to existing products since 1991, were located in Ha Tay. The corresponding percentages were 73 and 85 percent in Ha Tay, between 1989-91. The concentration in Ha Tay was also found among fast growing enterprises. On the whole, among fast growing enterprises that introduced changes between 1989-91, 13 percent introduced new products only, 75 percent introduced improvements only while 13 percent did both. Since 1991, the corresponding percentages are 7, 33 and 60 respectively, showing a noticeable change in the percentage of units initiating both kinds of changes.

Table 28
Product changes and their impact. Rural enterprises.

Nature of flexibility	% all surviving enterprises		% fast growing enterprises	
	1989-91	Since 1991	1989-91	Since 1991
Introduced new products	17.4	27.6	6.3	30.0
Improved existing products	30.2	40.2	25.0	42.4
Reason for change				
Difficult to sell current product	32.0	4.2	22.2	0.0
Increasing competition from producers	36.0	12.5	44.4	30.0
Increasing competition from imports	0.0	0.0	0.0	0.0
Purchaser requests	24.0	75.0	33.3	60.0
Other	8.3	8.3	0.0	10.0
Degree of success				
Unsuccessful	7.7	0.0	11.1*	0.0
Not very successful	23.1	8.3	11.1*	0.0
Quite successful	61.5	87.5	11.1*	100.0
Very successful	0.0	4.2	0.0	0.0
Too early to tell	7.7	0.0	0.0	0.0

* Data for the remaining 67 percent of units not available.
Remark: Data on reason and success of change are based only on those enterprises that initiated change.

Perceptions of the success of changes introduced have also altered. All fast growing units felt that the changes introduced since 1991 have been quite successful. Lack of data for all relevant units in the 1991 survey prevent a comparison with the period 1989-91. The number of optimists among all surviving enterprises has also increased, none of them felt the changes initiated since 1991 were unsuccessful. Overall, the increasing number of fast growing units changing product lines or improving existing products, more commonly in Ha Tay, point out to the continuing adjustments being made to changing output markets and/or tastes for rural products.

Continuity of operations

The ability of an enterprise to remain in operation throughout the year is an important indicator of its stability. Discontinuous operations are symptomatic of shortages or problems - lack of orders, labour, raw material etc. - and the length and reasons for closure for a whole cohort of enterprises go a long way in remedying problem areas commonly found in the group. Among rural enterprises, the nature of continuity of operations is presented in Table 29, for both fast growing as well as all surviving enterprises. Enterprises, on the whole, have improved performance in continuity of operations. The following observations are noted: first, the percentage of enterprises operating throughout the year has increased for both groups in the period 1990-96 (Table 29). Second, the average period of closure, however, increased from 3.3 months per year to 3.9 for all survivors and from 3.1 to 3.5 for fast growing enterprises between 1990-96. Among the latter, this increase in the length of discontinuity was mainly due to the 13 percent enterprises that had previously operated throughout the year but were closed for more than three months in 1996. Third, the percentage of units closing down temporarily from lack of raw material and product demand has increased between 1990-96 for both fast growing and all surviving enterprises. ‘Other reasons’ (including agricultural peak season and personal reasons) were the most common reasons for closure among fast growing enterprises in 1990 but reduced drastically by 1996, implying, among others, a more independent non-farm unit.

Table 29
Continuity of operations in 1990 and 1996. Rural enterprises.

Months operated and reasons for closure	% all surviving enterprises		% fast growing enterprises	
	1990	1996	1990	1996
Operated throughout the year	52.9	70.1	33.3	75.8
Closed for				
1 month	1.1	0.0	0.0	0.0
2 months	5.7	6.9	9.1	9.1
3 months	11.5	9.2	15.2	6.1
4 months	5.7	3.4	6.1	3.0
5 months	2.3	2.3	3.0	0.0
6 months	0.0	8.0	0.0	6.1
More than six months	1.1	0.0	0.0	0.0
Reasons for closure				
Lack of raw material	16.7	30.8	9.1	37.5
Lack of demand	29.2	34.6	45.5	50.0
Other reasons	79.2	46.2	90.9	25.0

Remarks: Percentages for reasons for closure are based on the number of units that did not operate throughout 1990. Enterprises established in 1990 have been excluded from calculations for 1990 only.

Most fast growing units with discontinuous operations were located in Ha Tay in 1990 (73 percent), and in Long An (75 percent) in 1996. The maximum period of closure increased from five to six months between 1990-96[59]. Household enterprises were more prone to shut down temporarily; but this is most probably due to their larger numbers in the fast growing sample. Most household enterprises that did not operate throughout 1990 attributed it to agricultural season, while in 1996, it was due to lack of raw material and demand. For private enterprises, it was agricultural peak season in 1990, but lack of demand and other reasons in 1996. On the whole, it appears that the impact of agricultural seasonality has reduced in the period 1990-96. When we combine it with our earlier finding that the importance of the enterprise as main source of income has risen (Table 22), it sounds plausible that the farming activities have either reduced among fast growing enterprise households or, even more likely, they no longer compete as strongly with the enterprise resources (money, labour etc.) as in 1990. The increased wage employment among these enterprises also might have reduced the impact of the diversion of unpaid household labour from the enterprise to the farm.

Capacity Utilisation

The extent of capacity utilisation is based on the respondents' perception of possible increase in production if all machinery and equipment is employed. The

[59] The units that shut down for six months in 1996 were: a household, agro-processing enterprise in Long An, due to lack of raw material; and a household manufacturing (carpentry) enterprise in Ha Tay, due to lack of demand.

percentage of fast growing and all surviving units that operated at full capacity increased significantly between 1990-96. However, lack of data for a large number of units in 1990 reduces the comparability of data in the two years. If we trace the changes among units for which data in 1991 are available, then the number of comparable fast growing units reduces to ten, of which three report operating at full capacity in 1996. A total of six units improved their capacity utilisation, including one that reported it could double production, in 1990. The significance of improved utilisation is greater when we recall that the improvements are not only to the capacity in 1990 but also the additional capacity created in the period 1990-96.

Table 30
Capacity Utilisation in 1990 and 1996. Rural enterprises.

Extent of utilisation	% all surviving enterprises		% fast growing enterprises	
	1990*	1996	1990^	1996
Operating at full capacity	12.2	23.8	0.0	22.7
If employing all machinery & equipment, can increase production by				
10 percent	17.1	11.1	9.1	13.6
10 - 25 percent	22.0	11.1	27.3	4.5
25 - 50 percent	24.0	25.4	27.3	27.3
50 - 100 percent	14.6	22.2	18.2	31.8
More than 100 percent	9.8	6.3	18.2	0.0

* Data for 53 percent of all surviving enterprises not included due to non-availability
^ Data for 67 percent of fast growing enterprises not included due to non availability.

In 1996, from Table 30, it is clear that the fast growing enterprises were working at least at half their production capacity, since none of them reported possibilities of increasing production by more than 100 percent. There were no noticeable regional differences across Ha Tay and Long An in terms of capacity utilisation; none of the private and partnership units reported working at full capacity. The lone co-operative and four household enterprises made up the 23 percent working at full capacity in 1996. On the whole it appears that there is a polarisation of units - they have either performed at full capacity or a little more than half the capacity (1996). Half the units that report possibility of increasing production by more than 25 percent have also had asset growth rates in excess of 20 percent, implying that the additional capacity created has not been fully utilised. In 1990, the number of fast growing units (for which data are available) was eleven, all of them household enterprises. Seven of them were located in Ha Tay and reported possibility of increasing production by a minimum of 10 percent. Overall, lack of comparable data hinders detailed analysis of capacity utilisation, but available data indicate an improved performance of capacity utilisation among fast growing units, a fact that correlates well with the improved performance in operating throughout the year.

Forward linkages

Forward linkages of rural fast growing enterprises are analysed in terms of destination and location of sales of main product. Table 31 presents the linkages in both 1990 and 1996 for fast growing enterprises. On the whole, the forward linkages have altered only slightly between 1990 and 1996 (Table 31). Some of the significant points to note on destination of sales are as follows. First, a majority of enterprises sold solely to individual buyers in both 1990 (45 percent) and 1996 (41 percent). Also, the share of individual buyers in the sales of the average fast growing enterprise continued to be the largest; it dropped only slightly from 50 to 49 percent in the period 1990-96. Second, correspondingly, the share of private enterprises in the average firm's sales increased while the percentage of enterprises selling solely to private enterprises dropped by 1996. Their share rose from 44 to 45 percent; the number of enterprises selling solely to private enterprises fell from 35 to 30 percent. Third, sales to state sector, already thin in 1990, reduced even further in 1996. Not only did the number of enterprises selling to state sector drop from 7 to 4 percent, they sold only between 1-24 percent of their main product to the state, by the latter date. Thus, poor linkages with the state sector continued. Fourth, the one household-turned-private unit in Ha Tay which exported between 25-49 percent of its main product (furniture) in 1990 became a 100 percent export unit. Hence the share of exports in the average firm sales rose from 1 to 4 percent between 1990 and 1996. Lastly, the percentage of enterprises selling solely to one category of buyers has reduced from 80 to 74 percent (Table 31); greater assets and production capacity probably have made it necessary to diversify the categories.

The main product manufactured and sold by the fast growing enterprises consisted mainly of carpentry and furniture, agricultural processing, arts and handicrafts, light engineering and consumer goods, construction and building materials and garments. Since a majority did not belong to the category of intermediate goods, sales to private enterprises have been low. The private enterprises mentioned in Table 31 probably refer to retail outlets for these finished goods. Given the household consumptive value of the goods produced, it is not a surprise that sales to individual persons have been high. The linkages in terms of destination of sales thus appear to be strong with individual buyers and private enterprises.

Table 31
Forward linkages of main product in 1990 and 1996. Rural fast growing enterprises. Percentages.

Destination and location	0	1-24	25-49	50-74	75-99	100	Mean
Destination of sales of main product 1990							
Individual persons	41.1	3.4	3.4	6.9	0.0	44.8	50.3
Private enterprise	51.7	0.0	0.0	10.3	3.4	34.5	43.5
State enterprise	96.6	0.0	3.4	0.0	0.0	0.0	1.4
Other state agency	96.6	0.0	0.0	3.4	0.0	0.0	1.7
Local authority	96.6	0.0	0.0	3.4	0.0	0.0	1.7
Tourist	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Export	96.6	0.0	3.4	0.0	0.0	0.0	1.4
Other	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Destination of sales of main product 1996							
Individual persons	40.7	11.1	0.0	0.0	7.4	40.7	48.7
Private enterprise	48.1	3.7	0.0	3.7	14.8	29.6	45.0
State enterprise	96.3	3.7	0.0	0.0	0.0	0.0	0.7
Other state agency	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Local authority	92.6	3.7	3.7	0.0	0.0	0.0	1.9
Tourist	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Export	96.3	0.0	0.0	0.0	0.0	3.7	3.7
Other	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Geographical distribution of main product sales 1990							
Same town	78.6	3.6	0.0	7.1	3.6	7.1	14.3
Same commune	75.0	0.0	10.7	3.6	0.0	10.7	16.4
Same rural district	64.3	3.6	3.6	10.7	3.6	14.3	24.5
Nearby town	82.1	7.1	3.6	3.6	0.0	3.6	8.0
Large city	75.0	0.0	0.0	0.0	0.0	25.0	25.0
Elsewhere	82.1	3.6	0.0	7.1	0.0	7.1	11.8
Geographical distribution of main product sales 1996							
Same town	88.9	7.4	0.0	3.7	0.0	0.0	3.3
Same commune	70.4	7.4	7.4	3.7	0.0	11.1	16.7
Nearby town	70.4	7.4	7.4	3.7	3.7	7.4	15.4
Large city	40.7	3.7	0.0	14.8	11.1	29.6	47.9
Elsewhere	70.4	7.4	3.7	11.1	0.0	7.4	16.7

Regarding the geographical distribution of sales, there are some noticeable changes, among fast growing enterprises, since 1990. As the second half of Table 31 shows, the share of large cities in the average firm's sales has almost doubled from 25 to 48 percent between 1990-96. The percentage of enterprises selling solely to large cities also increased, although by a lesser extent, from 25 to 30 percent (Table 31). Correspondingly, the share of rural areas (including same village, commune and district) in the average firm's sales dropped from 18 to 11 percent in the same period. The geographical proximity to Hanoi and Ho Chi Minh City probably account for the high shares of sales to large cities among fast growing enterprises. Especially in Ha Tay, the average share of large cities increased from 26 to 51 percent by 1996. In 1990, there was a clear dichotomy between firms that sold in the local area and those that sold entirely in cities and this distinction had fallen by 1996 constituting a major break in the level of operation of the units. Further, the percentage of enterprises selling solely in one geographical area or to one category of buyers has reduced; the enterprises were selling to more categories and in more locations in 1996, compared to 1990. Almost 68 percent of the enterprises sold exclusively in one location in 1990, this percentage fell to 55 by 1996. It is thus clear that the linkages with rural areas are weakening in favour of large cities and nearby towns (whose average share has risen from 8 to 15 percent between 1990-96).

Backward linkages

Backward linkages were measured in terms of category and location of main input supplier in 1990 and 1996. Table 32 presents the backward linkages for fast growing enterprises, in both 1990 and 1996. From the table it is clear that in both years, a majority of enterprises bought their main input exclusively from private enterprises; the percentages were 58 and 54 percent respectively in 1990 and 1996. This reduction has been compensated by an increase in the percentage of enterprises buying from households (35 to 36 percent) and the state sector (8 to 11 percent) between 1990-96. In the buying pattern of the average fast growing enterprise, private enterprises continue to account for the largest share, with a marginal decrease from 58 to 57 percent between 1990-96. This is due to, as noted above, the reduction in the number of enterprises that bought exclusively from private enterprises in that period. Although this percentage fell, the percentage of enterprises buying *some* portion of their main input from private enterprises increased from 58 to 61 percent. None of the units bought from collective farms, indicating low linkages between local farm and non-farm sectors.

The number of units that bought from households in 1990 were equally distributed between Ha Tay and Long An. However, Ha Tay had most enterprises buying from private enterprises (93 percent) and Long An had both the units (8 percent) buying from the state sector. In 1996, none of the units in Long An bought from private enterprises and one unit bought from the state sector.

Table 32
Backward linkages of main raw material in 1990 and 1996. Rural fast growing enterprises. Percentages.

Supplier and location	0	1-24	25-49	50-74	75-99	100	Mean
Main input supplier 1990							
Individual persons	65.4	0.0	0.0	0.0	0.0	34.6	34.6
Private enterprise	42.3	0.0	0.0	0.0	0.0	57.7	57.7
State enterprise	92.3	0.0	0.0	0.0	0.0	7.7	7.7
Other state agency	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Collective farm	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Main input supplier 1996							
Individual persons	64.3	0.0	0.0	0.0	0.0	35.7	35.7
Private enterprise	39.3	3.6	0.0	3.6	0.0	53.6	56.8
State enterprise	89.3	0.0	3.6	0.0	3.6	3.6	7.5
Other state agency	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Collective farm	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Location of main input supplier 1990							
Same village	91.7	8.3	0.0	0.0	0.0	0.0	1.3
Same commune	75.0	0.0	12.5	4.2	0.0	8.3	14.0
Nearby town	75.0	0.0	0.0	0.0	0.0	25.0	25.0
Large city	66.7	0.0	0.0	4.2	0.0	29.2	31.3
Elsewhere	66.7	0.0	0.0	12.5	4.2	16.7	28.5
Location of main input supplier 1996							
Same village	92.9	0.0	0.0	3.6	0.0	3.6	6.1
Same commune	67.9	0.0	3.6	3.6	0.0	25.0	27.7
Nearby town	57.1	0.0	0.0	3.6	0.0	39.3	41.2
Large city	78.6	0.0	3.6	3.6	0.0	14.3	17.1
Elsewhere	89.3	0.0	0.0	3.6	3.6	3.6	8.0

Regarding location of the main input supplier, there have been a few noticeable changes in the period 1990-96. The linkages with the local territory has grown, and the geographical reach has reduced in that period. This is evidenced in the doubling of percentage of enterprises buying from the same village or commune (15 to 34 percent) and reduction in the percentage of enterprises buying from large cities (31 to 17 percent) (Table 32). Also, the percentage of units buying from other locations not listed, including imports, has reduced from 29 to 8 percent in the period 1990-96. Added to the fact that almost 86 percent of the rural fast growing units mentioned sufficient availability of raw materials, it is possible that the increased backward linkages with local suppliers has been due to a greater availability of inputs. The main inputs, for the range of products mentioned in the previous section, include timber, cloth, paint, chemicals, fertilisers, dye powder, beverages, sugar etc. Timber was the most common input (mainly used by carpentry and furniture units) and were obtained mainly from non-household sources. Household sources provided dye powder, zippers and buttons, beverages and the like. The three units buying from the state sector in 1996 obtained timber and fertiliser from the state. On the whole, it appears that units were very specialised in the sources they bought from; all units in 1990 bought 100 percent from one or the other sources. There was some diversification by 1996 when 7 percent of the units bought from both private enterprises and the state. Further, the location of suppliers narrowed by 1996, indicating easier availability of inputs and closer location of suppliers, compared to 1990.

Horizontal linkages

Horizontal linkages were measured in terms of subcontracting relationships only. As noted in the discussion on urban fast growing enterprises, the data on subcontracting are not very comparable, since the definition used in 1996 was much more stricter than in 1990. Despite the narrower definition, the number of subcontracting units among rural fast growing enterprises was greater in 1996. A total of six units (18 percent) were engaged in subcontracting in 1996, four in Ha Tay and two in Long An. All of them had only one subcontracting partner, five with private enterprises and one with a state enterprise in the same locality. In 1996, only three out of the six units received any assistance from their subcontracting partner; in procuring raw material/fuel, obtaining credit and other areas. The duration of contracts was short and ranged from one to five months. Three of the six subcontracting units were household enterprises, two were private enterprises and the other was a co-operative. Most of them (five) had annual average asset growth rates of 51 to 75 percent in the period 1990-96. In 1990, five units, all in Ha Tay, were subcontracting, of which three continued to do so in 1996. The major form of assistance received from the parent unit, in 1990, was in procuring raw material (for two units) and obtaining credit (one unit). It is thus clear that subcontracting has not been a major feature among rural fast growing enterprises in both 1990 and 1996.

Production relations

Production relations were inferred from the number of annual customers and nature of the producer-client contract on advance orders. Table 33 presents the data for rural fast growing as well as all surviving enterprises. Lack of data for a number of units in both years, as noted under the table, hinders exact comparability. However, the data available are enough to show that the fast growing enterprises have not been very different from the surviving enterprises; the numbers of fast growing enterprises selling to more than ten customers per year has increased and so is the percentage that sometimes sell on advance order (Table 33). Among the fast growing enterprises, only one private enterprise (3 percent) sold to exclusively one customer in 1996 and it was not subcontracting then. Most enterprises in Ha Tay sold to between two and ten customers (53 percent), while most Long An enterprises sold to more than ten customers (90 percent). Across ownership forms, as expected, none of the household enterprises sold to only one customer, an equal number sold to the other two categories. Private enterprises had a greater tendency to sell to more than ten customers, in both places. In 1990 too, Ha Tay had most enterprises selling to between two and ten customers (68 percent) while most Long An enterprises (71 percent) sold to more than ten customers per year. The tendency across ownership forms in 1996 was true of 1990 also.

Production on advance order is usually very common among private manufacturing enterprises. In 1990 and 1996, more fast growing enterprises reported never selling on advance order. All of these were household enterprises, which implies that no private enterprise produced without an advance order, in both years. As discussed under urban enterprises, it is possible to envisage a close relationship between number of customers sold to and production on advance order; units with a greater tendency to produce on advance order sell to fewer customers. In our sample of rural fast growing enterprises in 1996, most private enterprises sold to more than ten customers and they reported producing on advance order sometimes, thereby confirming our statement on the relationship between the two. Ha Tay had all the enterprises that reported they only sold on advance order. Also, manufacturing units were more prone to produce on advance order while three of the four agro-processing units never produced on advance order.

Table 33
Production relations in 1990 and 1996. Rural enterprises.

Nature of relation	% all surviving enterprises		% fast growing enterprises	
	1990+	1996^	1990#	1996*
Number of annual customers				
One customer only	0.0	6.3	0.0	3.4
Two to ten customers	50.0	32.9	51.5	37.9
More than ten customers	50.0	60.8	48.5	58.6
Production on advance order				
No, never	32.2	42.9	39.1	34.5
Yes, sometimes	22.0	27.3	13.0	31.0
Yes, always or almost always	23.7	11.7	26.1	13.8
Subcontracting	22.1	18.1	21.7	20.7

Remark: Data on production on order not available for:
+ 28 units, including two subcontracting. ^ ten units, including one subcontracting
# nine units *four units, including one subcontracting

An interesting point emerges from the data on subcontracting units. All the five subcontracting units for which data are available, in 1996, sold to at least two customers annually[60] while they reported having only one subcontracting partner. This implies that (even with administering a stricter definition in 1996), the units have a very short duration of contracts with their subcontracting partner, so for the rest of the year, they have to sell on advance order. This is supported by the finding, presented

[60] Three of them sold to more than ten customers.

earlier, that contracts lasted for one to five months and four (of five) subcontracting units mentioned they produced on advance order. Overall, we find that the increased propensity to sell on advance order has been accompanied by an increase in the number of annual customers, both measures to reduce risk of non-compliance of contract partner as well as need to increase sales to more customers for greater revenue and profits.

Constraints

Data on respondents' perception of the main constraint to enterprise growth were collected in both 1991 and 1997. Table 34 presents the nature of constraints as perceived by rural fast growing as well as all surviving enterprises. Without exception, shortage of capital leads the list of constraints for both categories in both years (Table 34). The percentage of enterprises mentioning capital constraints has increased slightly among fast growing enterprises. Also, among all categories of surviving enterprises, the fast growing enterprises felt the shortage of capital most in both years (43 and 46 percent in 1990 and 1996). The only other major constraint was limited demand for products. Competition, lack of marketing and transport facilities and uncertain government policies were mentioned by a small minority and were less common in 1996. Wage labour affordability was not mentioned, most probably because many units used very limited wage labour. By 1996, inadequacy of premises emerged as a major constraint, indicating growing scale of operations; so did two units that mentioned they had no major constraint.

The perception of constraints was more diverse in Ha Tay than Long An. The most common constraint among fast growing enterprises in Ha Tay, in 1996, was limited demand for products (47 percent) followed by capital shortage (26 percent). The other constraints mentioned were lack of marketing/transport facilities, uncertain government policies and lack of raw material, in that order. In Long An, it was predominantly capital shortage (57 percent) followed by too much competition, inadequate premises and other factors. Both units reporting no major constraint were located in Long An. An equal number of household enterprises felt constrained by capital shortage as well as limited demand. Private enterprises, although very few in number compared to household enterprises, felt the lack of capital more. The regional peculiarity in constraints was also found in 1990. In the intervening six years between the two surveys, Ha Tay employers' perceptions of constraints have altered noticeably. Unlike in 1996, the most dominantly perceived constraint was lack of capital (42 percent) followed by limited demand for products (26 percent) in 1990. In Long An, the ranking was similar in both years. While it is essential to remember the difference between perceptions of constraints and actual constraints themselves, it is hard to ignore the fact that fast growing enterprises are restricted by lack of capital and the necessity of raising resources predominantly from within the firm.

Table 34
Main constraint to enterprise growth in 1991 and 1997. Rural enterprises.

Nature of constraint	% all surviving enterprises		% fast growing enterprises	
	1991	1997	1991	1997
Shortage of capital	32.9	32.2	38.7	39.4
Cannot afford to hire wage labour	0.0	0.0	0.0	0.0
Lack of technical know-how	0.0	0.0	0.0	0.0
Limited demand for products	19.5	31.0	29.0	27.3
Too much competition	6.1	13.8	6.5	6.1
Lack marketing and transport facilities	8.5	3.4	6.5	6.1
Lack modern machinery/equipment	2.4	0.0	0.0	0.0
Lack of raw materials	1.2	1.1	0.0	3.0
Lack of energy	1.2	0.0	0.0	0.0
Interference by local officials	2.4	1.1	3.2	0.0
Uncertain government policies	3.7	3.4	6.5	6.1
Inadequate premises/space	0.0	2.3	0.0	3.0
Other	22.0	2.3	9.7	3.0
No constraint	0.0	9.2	0.0	6.1

Competition

Respondents' perceptions of the existence of competition and nature of competitors were gathered in both the surveys. Among the fast growing enterprises, a clear majority (73 percent) felt there were too many enterprises in their area of operations, a significant increase from 36 percent in 1990. Much of the changed perceptions occurred among those that had felt there were neither too many nor too few enterprises, in 1990. Despite this difference in the number of enterprises acknowledging the existence of competition, the numbers that felt 'severe' competition was the same in both 1990 and 1996 (about 40 percent). Also, five units had felt no competition in 1990 but none of them did so in 1996.

The sources of severe competition in 1996 were as follows: private enterprises (27 percent), legal imports (12 percent) and state enterprises (9 percent). In 1990, private enterprises were the dominant source of competition, 36 percent mentioned it in addition to 9 percent from other sources (excluding imports and state enterprises). A few enterprises felt severe competition from more than one source as well, in both years. On the whole, the perception of increasing competition is consonant with the high degree of concern about limited demand for products.

Government assistance

The relationship between rural fast growing enterprises and the government was weak in 1990 and continued to be so in 1996, with only a slight improvement. Data on government assistance was collected at two levels, one during the time of establishment and the other during the life time of the enterprises. At the time of establishment, only a third of the fast growing enterprises received assistance from the government authorities, mainly in the form of fulfilling procedures for application (15 percent), obtaining credits (12 percent), tax exemptions (12 percent) and introduction for collaboration (3 percent). Very few units obtained assistance in multiple areas, and were almost equally distributed between Ha Tay and Long An. Despite their larger numbers household enterprises constituted only 30 percent of the units that received assistance at establishment.

During the course of their operation until 1991, 85 percent of the fast growing enterprises did not receive any assistance, probably due to the fact that a large portion of them were still young at that time. Of the four units that did obtain help, two were for obtaining inputs and two for marketing. By 1996, seven units obtained governmental assistance in securing credit while the remaining units did not avail any form of government assistance. The poor linkages with government are therefore borne out very clearly by the data. Combined with the fact that very few enterprises regard governmental interference and policies as constraints, the government on the whole seems to be a passive factor to the fast growing enterprises, without any significant positive or negative impact.

Concluding Remarks

So far, we have attempted to describe the characteristics and mode of operation of the fast growing urban and rural resurveyed enterprises, in 1990-91 and 1996-97, and their changes in the inter-survey period. In addition to fast growing enterprises, wherever possible, comparable data from the whole set of surviving enterprises have also been presented. By definition, all the fast growing units have performed remarkably in the period 1991-97, with annual average growth rates of value added being in excess of 10 percent per annum in that period. The discussion so far has recorded their performance according to various other variables, as well.

At the outset, two things are to be borne in mind. First, the sample from which they were drawn was stratified, across regions and ownership forms. This rules out regions and ownership forms as the determinants of their success. Second, the growth performance of resurveyed units shows a distinct polarisation of units between the closed down and fast growing categories. Since fast growing enterprises (both urban and rural) account form a majority of the surviving enterprises - 42 percent of the urban survivors and 77 percent of the rural survivors (see Tables 1 and 2) - it is seen that there are not many observable differences between all surviving enterprises and the fast growing enterprises. Hence, a restraint is warranted from concluding that they were no different from the other categories; on the contrary, fast growing enterprises have imparted their behaviour in good measure to that of the whole category of surviving enterprises, especially the rural units.

Data on various internal and external determinants of growth among fast growing enterprises were analysed and the most important finding is that there is no prototype of a successful enterprise. We can identify the most common trends in the behaviour pattern of fast growing enterprises, but cannot point out to the cause(s) of their excellent performance. This is because, while a large number conform to a particular behaviour pattern, a significant number of others fall out of the 'norm' and negate that behaviour as a possible cause. Thus, instead of regarding factors as either determinants or causes, it is better to interpret the behaviour pattern of the fast growing enterprises as the product of a healthy interaction between various factors. Attention can then be paid on how to groom this combination of factors at the policy level. Another major disincentive for listing the 'causes' of fast growth is the huge difference in the size of enterprises - both across locations, ownership forms and line of activity, as well as within the same locations, ownership forms and line of activity. There are no specific size related performance patterns either, among the fast growing enterprises, which makes it complicated to isolate one or the other factor as a cause of growth.

The one thing that stands out clearly from the data is the enormity of adjustments and change, reflecting the flexibility and adaptability, that have occurred among the fast growing enterprises, especially the rural units. Growth in value added has not only been accompanied by greater quantities of assets, employment etc.; more importantly, it has occurred along with changes in the entire mode and level of functioning of the enterprises. Specifically, this changing (or changed) face of the fast growing rural enterprises is a very big milestone in the transformation of rural industry in Vietnam. Even in the urban areas, the mode of operations has changed noticeably, although they are more impressive in their quantitative growth.

In the period between the two surveys, the following major changes have occurred among the urban and rural fast growing enterprises:

- They have changed ownership forms, lines of activity and location of enterprise, more noticeably among urban units. Limited liability companies have entered the scene;
- The importance of the enterprise to the owner-households has increased enormously, particularly among rural units;

- Assets have grown at remarkable rates, averaging 56 percent for the rural and 38 percent for the urban units. As a result, they have become more capital intensive;
- About 66 percent of the rural enterprises shifted from use of hand tools to power driven machinery;
- Wage employment has increased, both in numbers as well as proportion of total employment among both urban and rural units, particularly in the north, though not proportionately with the increase in value added;
- Production flexibility has increased, more urban and rural units have introduced new products and made improvements to existing products. This is especially true among rural enterprises;
- More units are operating throughout the year in both regions, the improvement is more impressive among rural units;
- More urban and rural units are working at full capacity, the improvement is once again more noticeable among rural units;
- Forward linkages of urban enterprises have altered significantly, they are selling more to private enterprises and have diversified the geographical location of sales. Rural units on the whole have had few changes, but Ha Tay has undergone a major transformation. From the earlier dichotomy of enterprises selling locally and in big cities, by 1996, the former category had broken the pattern and half the production of main product was sold to big cities.
- Backward linkages of urban enterprises have changed in favour of private enterprises in rural locations. Rural enterprises increased their purchases from nearby towns, turning inward from their earlier dominant purchases from large cities;
- More rural units sell to more than ten annual customers;
- The percentage mentioning capital constraints reduced among urban units but increased slightly among rural units;
- Both urban and rural units obtained more government assistance in this period, although the increase among urban units is greater.

As a result of these changes, the gap between urban and rural enterprises has reduced considerably, in terms of mode of operations. The distinct difference in the size and scale of operations, in terms of assets, employment etc. however continue to exist. The average urban fast growing enterprise was about eight times the size of its rural counterpart in 1996. However in 1990, it was fifteen times bigger. The rural firms have also caught up with their urban counterparts in their use of power driven machinery, capacity utilisation and other components of the mode of operations. That this change has occurred with household enterprises dominating the rural scene and non-household forms dominating the urban scene ascribes a very positive role to the rural household industry. Household enterprises, on the whole, have been second to none among the fast growers, implying that there is no reason to neglect them as major contributors to employment and income generation.

Apart from the urban-rural differences, intra-urban and intra-rural differences have also narrowed down in this period. Among the urban fast growing enterprises, the average enterprise was largest in Haiphong, followed by Ho Chi Minh City and Hanoi, in that order, at establishment. However, the value of assets of the average Ho Chi Minh City unit was much higher than the other two in 1990. The period 1991-96 saw some dramatic changes in Haiphong and Hanoi and they overtook Ho Chi Minh City in size of assets by 1996. The north has therefore caught up and even surpassed the south in matters of size, in our sample. In achieving this, their growth rates have been phenomenal. Also, the firms in Haiphong and Hanoi, in that order, outperformed Ho Chi Minh City in terms of average wage employees per unit in 1990 and 1996. The performance of co-operatives, distributed mainly in Haiphong and Hanoi, deserves special mention. The growth in the scale of operations of the urban fast growers has also been accompanied by a transition to better modes of operation, thereby narrowing qualitative differences within the region as well. The significance of this finding that the north has performed better than the south in many respects, is greater if we recollect that the pressure on restructuring and increasing efficiency is higher for enterprises in less developed regions (the north, in this case). That the enterprises in the north have met this challenge has paved the way for a higher level of market integration.

Among rural areas, the Long An enterprises were not only twice the size of their Ha Tay counterparts, this difference in size continued in 1990 as well as 1996. However, the Ha Tay enterprises have grown at faster rates, thereby narrowing down the extent of difference in scale of operations. By the end of 1996, average wage employment among Ha Tay enterprises was still low. The greater dynamism found in Ha Tay is also reflected in the greater number of units displaying production flexibility, operating throughout the year in 1996 and in horizontal linkages. Unlike the mainstream, more Ha Tay entrepreneurs quoted limited demand for products as a constraint than capital shortage.

Despite the differences, there are certain common features of all the fast growing enterprises, both urban and rural. They are: first, a vast majority of them were very young at the time of the survey in 1991 and were between five and ten years old in 1997. Second, the owner-managers of these units were in their 40s, with more than ten years of education and prior experience in a position of responsibility, probably in the state sector. Third, their asset growth rates (capital accumulation) have been very high. Fourth, entrepreneurial savings and firm-generated revenue have been the predominant sources for capital investments both at establishment and for expansion purposes. On the one hand, rates of capital accumulation have been high, on the other, the lack of external credit sources has been equally high. With capital accumulation acting as the common denominator for fast growers, this scenario heightens the pressure on profits and savings and the need for breaking this link. The urban data, however, show that use of bank and formal institutional credit has been better for their expansionary purposes, thereby indicating that urban enterprises with a proven record have better access, and that non-utilisation of formal credit might have to do with 'access' as well. Fifth, the government has been a very passive force in their operations. Few enterprises availed help from authorities at the time of establishment and otherwise. However, the increased assistance obtained by urban enterprises indicate that there is an improvement. Rural units were still very poorly linked with local authorities. Sixth, subcontracting relationships are very low. Seventh, linkages between farm and non-farm sectors as markets for each others' product, especially among rural units, is very low. They sell and buy mostly from urban areas. Eighth, most of them use power driven machinery and are under-utilising their production capacity. Lastly, they have displayed enormous adaptability in their forward and backward linkages, especially the urban units.

Since the urban sample covered the three major cities, their findings have a much better ability to be generalised than the rural sample. Geographical proximity to big cities, in our rural sample, has probably played a big role in the development of rural enterprises, by way of easier access to big markets and infrastructure. They have also been a market for urban inputs, thereby helping the growth of the latter as well.

A very decisive factor in the performance of fast growing enterprises is the quality of entrepreneurial skills. The high adaptability and asset growth point out to great tenacity and business acumen on the part of the entrepreneurs, to survive and grow in a general atmosphere of uncertainty. These entrepreneurs are behind the survival and growth of the fittest enterprises in the private sector in Vietnam. The period since *doi moi* has seen a great deal of uncertainty in the Vietnamese economic scene. Firms have used various means to stay in business, operate throughout the year, improve machinery, find new markets, employ more labour, increase assets and so on. The six years between 1991 and 1997 have seen a major change in the character of private sector industry, especially in the rural areas. The overall economic environment has also changed in the nation. The process of consolidation necessitated a large number of closures and high performers in ensuring survival of the more efficient enterprises. From this study, on the changes the fast growing enterprises underwent in this period, several pointers for policy making may be obtained. For instance, promotional policies for the sector as a whole, improved credit infrastructure, strategy for increasing horizontal linkages facilitating inter firm flows of resources, information and so on. It requires an active governmental role, in matters of enterprise friendly policies at national and local levels.