The Private Manufacturing Sector in Vietnam 1991-97: An analysis of the deceased

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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 deceased, in the period 1990-91. The performance of these deceased 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. The reasons for closure and the present occupation of former entrepreneurs are discussed as well. High initial investments combined with low labour content, poor linkages, credit and the easy entry into the private sector seem to have driven the units into an early demise.

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 fourth in a series, presenting the results from this survey.[2] Its focus is on an analysis of the enterprises which closed down during the period between the two surveys.

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

[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] Previously published studies within the same project include: 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), which focuses on the results of the survey of the not previously surveyed enterprises;. Per Ronnås, *The Transformation of the Private Manufacturing Sector in Vietnam in the 1990s*, Working Papers Series in Economics and Finance No. 241 (Stockholm: Stockholm School of Economics, 1998), which analyses the dynamics of the transformation of the private manufacturing sector in Vietnam in the 1990s, and Bhargavi Ramamurthy *The Private Manufacturing Sector in Vietnam: An analysis of the winners,* Working Papers Series in Economics and Finance (Stockholm: Stockholm School of Economics, 1998), which focusses on the most successful of the enterprises surveyed both in 1991 and 1997.

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

Introduction

The non-state sector has been assigned a very important role in Vietnam since the initiation of economic reforms in the late 1980s. High expectations have surrounded its ability to contribute to employment, incomes and growth of the whole nation. The period of the 1990s, in response to the reforms, has seen a vast amount of consolidation in the entire economic structure, specially in the private sector. This sector has witnessed a proliferation of enterprises[3], transformation of enterprise ownership forms, changes in lines of activity but, combined with the new challenges of a nation moving towards market economy, have also driven some of the enterprises to close down while yet others have managed to survive and also grow. The collective sector has also been undergoing a dynamic restructuring, and the harshness of the economic transition has not spared them either. Further, there are numerous regional differences - urban-rural, north-south - which have determined the mixed performance of the non-state sector in this period.

In order to capture some of the dynamism in this non-state sector (including private and collective sectors), keeping in mind that the nature of units vary across regions and ownership forms, three comprehensive surveys were conducted, in 1991 and 1997[4]. The surveys consisted of (i) a survey of some 1,000 enterprises in Hanoi, Ho Chi Minh City, Haiphong 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.[5] As the sampling and stratification procedures as well as the questionnaires were virtually identical in the two surveys, data from surveys (i) and (ii) were used to examine the development of a randomly selected cohort of enterprises in the period 1991-97.[6]

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

[5] 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 Paper Series in Economics and Finance No. 236 (Stockholm, Stockholm School of Economics).

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

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.[7] 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. It also had the highest positive correlation with other relevant quantitative indicators.

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 were not available for fourteen urban and one rural surviving units; hence the total number of enterprises came down to 356.

From Table 1, it is clear that the resurveyed units fall into two distinct categories; those which have grown at a very rapid pace (in excess of 10 percent) and those which have closed down or suffered a pronounced decline. This is true both across regions as well as ownership forms. A detailed analysis of the pattern of growth of all the enterprises[8] concludes that, in this period, a high rate of capital accumulation (in terms of assets) has been a major factor common to most surviving enterprises. Further, the urban-rural differences are also seen to have narrowed down in matters of wages, employment, assets and the like. The study on fast growing enterprises[9] confirms the presence of high rates of capital accumulation in the case of fast growing enterprises and also concludes that they have shown remarkable adaptability and

[7] The rates were -2.6% or more, -2.5 to +2.5%, 2.6 to 10% and more than 10% respectively for the declining, stagnant, growing and fast growing categories.
[8] 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).
[9] Bhargavi Ramamurthy and Per Ronnås. 1998. *The Vietnamese Private Sector 1991-97: An analysis of the winners*. Working Paper Series in Economics and Finance (Stockholm, Stockholm School of Economics) forthcoming.

flexibility in their linkages and modes of operation, in achieving their high growth rates.

Against this backdrop, we now proceed to analyse the characteristics and behaviour pattern of the deceased enterprises, those resurveyed enterprises that closed down in the period 1990-97. We analyse the behaviour of the deceased enterprises in terms of various internal and external determinants[10] of the survival (and growth) of enterprises.

Deceased enterprises

Among the enterprises resurveyed in 1997, about 65 percent were still in operation. The remaining 35 percent had closed down, but the then owner/managers or their families/friends were interviewed regarding the circumstances leading to the closure and their present situation. By examining the nature of operations of these enterprises in 1991, we intend to present a profile of enterprises that might exhibit tendencies towards closure. Wherever possible, data on the entire set of resurveyed, surviving enterprises (excluding the deceased) will be presented too, in order to give the reader a perspective of the place of the deceased enterprises vis-à-vis the surviving ones. Unless otherwise specified, the reference group is deceased enterprises.

Urban enterprises

The urban surveys in 1991 and 1997 were held in the three major cities of Vietnam - Hanoi and Haiphong in the north and Ho Chi Minh City in the south. Among the urban enterprises resurveyed, about 34 percent had closed down operations. The urban deceased accounted for 57 percent of all the deceased enterprises.

Location and organisational structure

Among urban resurveyed enterprises, Haiphong had the highest mortality rate, (48 percent) followed by Hanoi (32 percent) and Ho Chi Minh City, the least with 22 percent. Accordingly, 52 percent, 25 and 23 percent of the deceased units located in Haiphong, Hanoi and Ho Chi Minh City, respectively, in 1991.[11] Across ownership forms, co-operatives had the highest mortality rate (39 percent) and private enterprises, the lowest (25 percent); among household and partnership enterprises it was 36 and 32 percent respectively. Accordingly, 27 percent (each) of the closed units

[10] Determinants, in the micro sense used here, are either internal to the firm (as a function of entrepreneur decisions, firm size, organisation etc.) or imposed from external forces (as a function of other firms, organisations, environment, government etc.). For e.g., initial investment is an internal determinant and availability (not use) of power is an external determinant.

[11] The actual number of urban deceased enterprises were 18 in Hanoi, 17 in Ho Chi Minh city and 38 in Haiphong, bringing the total to 73.

were household and co-operative enterprises, followed by 21 percent private enterprises, 16 percent partnership and 8 percent state enterprises in 1991.

Co-operatives accounted for 29 percent of the closures in Haiphong, followed by private enterprises (24 percent). In Hanoi, household enterprises and co-operatives each accounted for 28 percent of the closures and in Ho Chi Minh City, more than 42 percent of the closures were household enterprises, followed by co-operatives (24 percent). All of the six state enterprises resurveyed in 1997 had shut down operations in the 1991-97 period. Three of these were in Haiphong, two in Ho Chi Minh City and one in Hanoi.

It is important to note that private enterprises have fared better than most forms, accounting for least number of closures in Hanoi (17 percent) and around 20 percent of closures in Ho Chi Minh City and Haiphong. On the whole, Haiphong had the largest amount of private manufacturing closures, in Hanoi it was manufacturing co-operatives and Ho Chi Minh City recorded the largest number of household manufacturing unit closures.

Nature of activity

An overwhelming majority of the deceased enterprises (86 percent) were involved in manufacturing activities in 1991. A little over 4 percent each were in small scale trading and agro processing, and about 3 percent were repair shops. Among surviving enterprises, the situation was similar - 1 percent in agro-processing, 88 percent in manufacturing and 11 percent in trading. The high percentage of manufacturing unit closures (among deceased enterprises) is accounted partly by the fact that over 31 percent of these were co-operatives, a majority of which were involved in manufacturing. Most of the co-operatives (55 percent) were also located in Haiphong. Further about 57 percent of the retail and repair shop units were also located in Haiphong in addition to 75 percent of the state enterprises. Together, these account for the high percentage of closures in Haiphong.

Non-manufacturing units generally have lower capital investments and other overheads and therefore exit easily. On this point, Hanoi presents a very dynamic picture since the closures that have occurred there involves manufacturing units only, except for two agro-processing units. The situation in Ho Chi Minh City is similar, since there were only three non-manufacturing units. An interesting distinction between Hanoi and Ho Chi Minh City, however, is that co-operatives account for the most number of closed manufacturing units in Hanoi (33 percent) whereas it is household units in Ho Chi Minh City (54 percent). It appears that the north has seen a mixed consolidation of manufacturing and small scale trading units while it has been mainly manufacturing in the south.

Enterprise history: Years in operation

The age of enterprises at closure gives important indications of the long term tendency towards firm survival. Relative to their total numbers, the enterprises less than five years old in 1991 were mainly household and private enterprises, while the older enterprises (more than ten years old) were co-operatives and partnership units. Four of the six state enterprises were also less than five years old. Table 2 presents the years of establishment of surviving and deceased enterprises, and the age of the latter at the time of closure. It is very clear from the table that more than 34 percent of the deceased enterprises were established before 1981 and hence had been in operation for at least eleven years at the time of the survey in 1991. The proportion of enterprises established before 1980 is lesser among surviving than deceased enterprises. As the second half of Table 2 shows, 41 percent of the closed units were eleven years old or more at the time of closure.

Further, at the time of the survey in 1991, about 16 percent were a year old or less, indicating a high percentage of 'infant mortality' as well. The average age of enterprises at closure, because of this polarised pattern, was eleven years. While the proportion of 'infant mortality' is very high, it must be noted that 38 percent of the enterprises closed down within five years because of the death or retirement of the entrepreneur. An almost equal number (33 percent) of entrepreneurs, however, have continued self-employment, in a new line of business. The actions of this latter group are, naturally, more important in analysing the factors responsible for consolidation and growth of private sector enterprises.

Table 2
Year of establishment and age of urban enterprises at closure

Year of establishment	% surviving enterprises	% deceased enterprises	Age at closure	% deceased enterprises
Before 1976	12.9	17.8	Less than 5 years	34.2
1976 - 80	11.4	16.4	5 - 10 years	24.7
1981 - 85	22.1	11.0	11 - 15 years	19.2
1986	6.4	4.1	16 - 20 years	8.2
1987	7.1	11.0	21 - 25 years	5.5
1988	6.4	12.3	More than 25 years	8.2
1989	23.6	11.0		
1990	10.0	16.4		

The reasons for closure, as presented in Table 3, show that almost half the enterprises could not sell at profit, followed by 19 percent that closed down for personal reasons. When followed up, almost 28 percent of those that could not sell at profit quoted too much competition or poor distribution and marketing channels, for not being able to sell at profit (Table 3).[12] This finding underscores the importance of profits as major sources of capital accumulation, and hence firm sustenance.

[12] It must be noted that half of the respondents to these questions were close friends, and not the previous owners/managers themselves and caution is warranted in taking these replies at face value.

Household enterprises accounted for 31 percent of closures from this reason, and co-operatives, for 27 percent. A majority of these household enterprises were less than five years old in 1991, which points out to the importance of very high profit margins in the beginning years. Four out of the six state enterprises also shut down operations from insufficient profits. Lack of raw material, payment delays from customers and interference from local government authorities have not been major reasons for enterprise closure.

Across cities, the inability to sell at profit was more pronounced in Ho Chi Minh city, where, 76 percent of the enterprises mentioned it, compared to 37 and 50 percent in Haiphong and Hanoi respectively. To the Ho Chi Minh City entrepreneurs, the low profit margins were mainly due to very high production costs (38 percent) and competition in product markets (31 percent); in Haiphong it was poor marketing and distribution channels (43 percent) and competition (36 percent); in Hanoi it was low product quality (44 percent) followed by poor marketing channels (22 percent). Lack of raw material, interference from government officials and delayed payment from customers appear to be reasons for a very small percentage of enterprises to shut down operations. Further, the data also show that personal reasons (like retirement or death of owner) resulted in closure among mainly smaller units, with less than 100 million dong in initial investment, while the larger units (mainly co-operatives and private enterprises) cited inability to sell at profit as the main reason for closure.

Table 3
Main reasons for closure. Urban enterprises.
Percentages.

	% deceased enterprises
Reasons for closure	
Could not sell at profit	49.3
Lack of raw material	2.7
No prompt payment from customers	2.7
Interference from government officials/local authorities	1.4
Personal reasons	19.2
Other reasons	24.7
Reasons for inability to sell at profit	
Too much competition	27.8
Low product quality	16.7
Poor distribution/marketing channels	27.8
Production costs too high	22.2
Other	5.6

Entrepreneur characteristics

Entrepreneurs of deceased enterprises, in 1991, were typically male, over 50 years old with an education of ten years and previously employed in a state enterprise. Less than 7 percent were women entrepreneurs. A majority of the entrepreneurs were more than 50 years at the time of survey in 1991 and this partly explains why over 32 percent of enterprises closed down because the previous owner had retired (or, in some cases, dead) by the time of the repeat survey. Close to 53 percent of these entrepreneurs over 50 years old were managing household enterprises, thereby also explaining the large percentage of household enterprise closures.[13] When we compare the age of enterprises and managers, we find that nearly 62 percent of the managers over 50 years old were managing enterprises less than four years old at the time of the survey in 1991. These were, possibly, late entrants into the entrepreneurial scene, previously employed in state enterprises, and have given up within five years of selling at sub-optimal profit levels. About 85 percent of these entrepreneurs have subsequently retired (or died) and only 15 percent are now unemployed.

Haiphong had a large percentage of deceased enterprises with entrepreneurs over 50 years old (63 percent) that have not continued in another business activity. All the entrepreneurs have at least seven years of education and have been employed in good positions prior to self employment. The high average age of the entrepreneurs and the fact that a large percentage of entrepreneurs have retired (or died) points out to the strong links between entrepreneur and the enterprise, with the result that the lifetime of the enterprise is limited to the lifetime of its owner. This indicates difficulty in transferring ownership to a second person. Possible reasons for this non-continuation of business after retirement (or death) of owner are: nature of activity of enterprise and the scale of operations. We find in our data that among household enterprises, close to 36 percent were involved in non-manufacturing activities; 14 percent each in commerce and agro processing, which on a household level is usually small scale, making it unattractive for take-over by a second person.

[13] We may recall that most household enterprises were also less than five years old, confirming that these older entrepreneurs started their entrepreneurial careers through establishing household enterprises.

Table 4
Characteristics of owner-managers in 1991. Urban enterprises.

	% surviving enterprises	% deceased enterprises
Male	65.8	93.3
Female	34.2	6.7
Age		
Mean		45.22
-29 years	3.8	15.6
30 - 39 years	26.6	25.0
40 - 49 years	39.2	18.8
50 - years	30.4	40.6
Education		
Up to 4 years	15.4	0.0
Up to 7 years	29.5	32.3
Up to 10 years	35.9	41.9
More than 10 years	19.2	25.8
Experience		
Local cadre	7.3	12.0
War veteran	7.3	4.0
State enterprise employee	36.4	48.0
Other position of responsibility	5.5	32.0
Other	29.1	4.0

After the enterprises closed down, as Table 5 shows, 33 percent have retired (or died) and 29 percent continued self employment in new lines of business. While about 9 percent have moved into wage employment, a little over 11 percent are currently unemployed. Among household enterprises, 78 percent of the entrepreneurs retired (or died) and 11 percent are unemployed. The proportion continuing in a new line of business is more prevalent among non-household forms; the entrepreneurs of 40 percent of private enterprises, 58 percent of partnership and 32 percent of co-operatives have moved into new businesses. That the co-operatives have adapted in this manner is worthy of mention, in this context. All the three agro-processing units among the deceased enterprises closed down on account of the retirement or death of the entrepreneur, two (out of three) trading units and 31 percent of entrepreneurs of manufacturing units continued self-employment in new lines of business. Quite naturally, the majority of entrepreneurs who retired or died are mostly from the age group 50 years or older (in 1991) (74 percent) and 40 years or older (26 percent); all those who have changed lines of businesses belong to the age group 30 to 39 years. The oldest entrepreneurs have not moved to wage employment, even though 15 percent of them report unemployment.

Table 5
Previous owner-manager's present occupation.
Urban enterprises.

Occupation	% deceased enterprises
Employed for wages	8.6
Self employed, same line of business	4.3
Self employed, new line of business	28.6
Unemployed	11.4
Retired or dead	32.9
Other	14.3

Primary Income Source

The life time of an enterprise is also determined by the need and presence of alternative income yielding sources to the entrepreneur's household. Presence of alternative income sources can either extend the life span by increasing the capability to withstand lower profits or enterprise earnings longer; or shorten it by making exit decisions quicker, since the enterprise is not the sole income source. In our sample, the enterprise was the only income yielding source of the household for more than a third of the household and private enterprises (Table 6)[14] in 1990. The remaining two-thirds had at least one additional income source. The most common among them were wage employment (46 percent) and pensions and other transfers (21 percent). Among household and private enterprises, alternative income sources were more common among the latter; 70 percent of the enterprises which depended solely on the enterprise income were household enterprises. Further half of these enterprises (with no alternative source) were located in Ho Chi Minh city, followed by a third in Haiphong and only 20 percent were in Hanoi. A majority of them were also enterprises established after 1985 (91 percent). Compared to the surviving enterprises, more deceased enterprises had an additional income source (Table 6), which might imply that a combination of small scale household production and difficulty to sell products might have made exit decisions easier.

Table 6
Sources of household income in 1990. Urban enterprises.

Source	% surviving enterprises	% deceased enterprises
Enterprise as sole source	52.4	33.3
Wage employment	20.7	45.5
Farming	0.7	3.0
Gifts and remittances	26.2	6.1
Scholarships	-	6.1
Pensions and transfers	-	21.2
Others	-	27.3

[14] The data on household income sources was collected from household and private enterprises only. Other ownership forms were excluded. The percentages calculated are, therefore, based on the number of household and private enterprises only.

Related to the presence of alternative household income sources is the situation of household income after the closure of the enterprises. As shown in Table 7, a large majority of entrepreneurs (36 percent) report an increase in household income in the range of 50 to 100 percent, after closing down the enterprise. Interesting to note is that, among household and private enterprises, 90 percent of the entrepreneur households with no alternative sources reported an increased income (80 percent being an increase over 50 percent). Also, this high increase was found in units that were established after 1985. A third of the units with an increased income of 50 to 100 percent have subsequently retired after the enterprise closure. Next, 61 percent of the households with decreased or unchanged income had entrepreneurs who subsequently retired (or died) (45 percent) or were unemployed (15 percent). When we compare the presence of alternative sources with the size of firms, we find that close to 73 percent of the enterprises without any other income source had invested less than 50 million dong and 68 percent of them reported income increases of 50 to 100 percent; whereas 45 percent of the units that reported a decreased income by 25 to 50 percent had invested more than 50 million dong. We find the size of firm to be inversely proportional to the household income situation after enterprise closure. Larger firms, it follows, have had tougher times than smaller ones. Further, Ho Chi Minh city has fared best, with 76 percent of enterprises reporting income increases over 50 percent, only 12 percent mentioned any decline at all; whereas in Haiphong 55 percent noted income declines with only 29 percent experiencing income increase between 50 and 100 percent. Hanoi had mixed fortunes with an almost equal number experiencing income declines and increases. That Haiphong had the relatively larger enterprises confirms our finding that larger firms have faced harder times.

Table 7
Change in household income since enterprise closure.
Urban enterprises.

Direction and magnitude	% deceased enterprises
Unchanged	6.8
Declined	
Upto 24%	12.3
25 - 49%	15.1
50 - 100%	12.3
Increased	
Upto 24%	11.0
25 - 50%	6.8
50 - 100%	35.6

Scale of operations

The scale of operations are described in terms of initial investments and asset growth from establishment upto 1991. In 1996 prices, the average urban deceased enterprise invested 164 million dong and its assets grew to 445 million dong by the end of 1990, at an impressive average annual rate of asset growth of 154 percent. The average surviving enterprise invested 217 million dong at establishment and its assets had grown, by the end of 1990, to 432 million dong, at an average annual growth rate of 119 percent. As Table 8 points out, the highest percentage of deceased enterprises (34) invested between 100 and 500 million dong at establishment; the other common categories were ten to 50 million dong (25 percent), followed by one to ten million dong (20 percent).

We find among the urban deceased units that the co-operatives established before 1985 and private enterprises established in 1989-90 were larger at establishment than enterprises established between 1985 and 1989. Across non-state ownership forms, household enterprises were the smallest. The average initial investment of household enterprises was 37 million dong, while the private enterprises were the biggest, a class apart with 265 million dong. While almost 80 percent of the household enterprises had invested less than 50 million dong, 73 percent of the private, 50 percent of partnerships and 76 percent of the co-operatives had initial investments of at least this amount.

One salient finding is that a majority (57 percent) of the casualties in Haiphong had invested more than 500 million dong at establishment, mainly due to the large co-operatives. In Hanoi, the highest percentage (43 percent) had invested between one and ten million dong; while in Ho Chi Minh city, 40 percent had invested between 10 and 50 million dong. Overall it seems that the size of the average firm at establishment was largest in Haiphong, followed by Ho Chi Minh city and Hanoi, in that order.[15] Haiphong being the least advanced industrially, among the three,[16] therefore, offers some indications of the non-viability of large non-state industries in an economic environment as yet unprepared for businesses of this size. The co-operatives in Haiphong, though large, traditionally did not have to compete for markets in the manner required since *doi moi*; the 1990s have thus exacted a heavy toll among these larger enterprises that could not manage to adapt and grow well.

Table 8 also presents the distribution of surviving and deceased enterprises according to the value of their assets (in 1996 prices) at the end of 1990. It is seen that 31 percent of the deceased units had assets in excess of 500 million dong in value, slightly higher than the percentage among survivors. However, a quarter of these enterprises had already invested 500 million dong at establishment and the remaining 75 percent had moved from the category investing between 100 and 500 million dong,

[15] Also, Haiphong had the highest proportion of enterprises set up before 1981 (56 percent); and more than half of the Haiphong units had initial investments greater than 100 million dong.

[16] At 1989 prices, the gross output of the local industry in 1990 in Haiphong was the lowest - 128 billion dong, - compared to a higher 367 billion dong in Hanoi and Ho Chi Minh city, in a class of its own, at 2180 billion dong. (Statistical Year Book 1996, General Statistical Office, Socialist Republic of Vietnam, Table 81, pp. 130)

indicating that there has not been much difference between initial investment and assets at the end of 1990. The annual average asset growth rate for deceased enterprises between establishment and 1991 works out to 154 per cent only due to one co-operative in Haiphong experiencing a 5000 percent growth rate; excluding this the average works out to a modest 42 percent. Testing the argument that some of the enterprises which have not moved to higher asset categories might still be less than 5 years old in 1990, we find two more facts - first, that almost 45 percent of the deceased enterprises were set up before 1985; and second, at higher levels of initial investment (viz., 50 million dong and more), 45 percent of the units were (co-operatives) set up before 1986, and, of which, 80 percent were established before 1980 itself. We thus find that among deceased enterprises there was no correlation between age and size of enterprises, mainly due to the presence of co-operatives. If we consider enterprises excluding co-operatives, we find the units set up in 1990 are the largest in the sample. They account for half the units that in the ten and 50 million dong and more than 50 million dong categories.

Compared to the performance of survivors (who experienced 119 percent average annual growth rate) it is apparent that the deceased enterprises share a common malady - inadequate asset growth rates of enterprises during the course of their operative years - and this, rather than initial investment size seems to provide us with a common denominator for closures. While it is not reasonable to expect high percentage growth rates among the largest (deceased) enterprises (42 percent, with more than 100 million dong in initial investment), they certainly explain why the other (58 percent) smaller enterprises might have closed down, except for personal reasons. For the larger ones, inability to sell at profit has made the huge investments unviable, as mentioned earlier, under the section on enterprise history.

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

	% surviving enterprises	% deceased enterprises
Initial investment at establishment		
Less than 1000	2.2	1.6
1001 - 10000	31.1	20.3
10001 - 50000	28.1	25.0
50001 - 100000	5.9	10.9
100001 - 500000	25.9	34.4
More than 500000	6.7	7.8
Total assets in 1990		
Less than 1000	0.7	0.0
1001 - 25000	14.9	18.8
25001 - 75000	12.8	17.2
75001 - 100000	4.3	1.6
100001 - 150000	14.2	4.7
150001 - 500000	29.8	26.6
More than 500000	23.4	31.3

On the rates of asset growth, we find that as many as 29 percent of the enterprises had zero percent annual average growth rate of assets since establishment. Co-operatives established before 1980 and household enterprises established since 1987 account for these zero percent growth rates. Across regions, 36 percent of Haiphong enterprises recorded zero percent growth rates (mainly co-operatives) while 25 percent recorded more than 75 percent growth rate in assets. In Hanoi, 70 percent of the enterprises had under 20 percent growth rate, while in Ho Chi Minh city, with comparable data available for only seven units, representing both extremes, three had zero and two had more than 100 percent growth rates.[17]

A discouraging fact is that most of the zero percent growth rates have occurred mainly in private (36 percent), co-operatives (36 percent) and household enterprises (28 percent). On the other side of the coin, high asset growth rates (over 75 percent) have been more a feature of enterprises established after 1976, (a third of them between 1976-80) and, surprisingly, the co-operatives. This unique observation among co-operatives points to the extent of restructuring going on in that sector, in response to changing macro economic circumstances. Reviewing the data on asset growth, since we have a significant representation of enterprises at both ends of the growth rate spectrum, it is unsatisfactory to regard low asset growth rates as the single determining factor. Rather, it is the combination of high investments, poor asset growth and, as Table 9 points out, the marketing problems that gives us a more concrete picture of the enterprises tending toward closure. Close to 43 percent of the

[17] The other two belonged to the categories 21 - 50 and 51 - 75 percent growth rates.

units with more than 100 percent growth rate in assets cited inability to sell at profit as the main reason for closure.

Table 9
Distribution of annual asset growth rates by main reason for closure .
Urban enterprises. Percentages.

	0%	1-10%	11-20%	21-50%	51-75%	76-100%	>100%	Total
Could not sell at profit	37.5	25.0	50.0	100.0	33.3	100.0	42.9	45.2
Lack of raw materials	0.0	0.0	0.0	0.0	33.3	0.0	0.0	2.4
Delayed payments from customers	7.1	0.0	0.0	0.0	0.0	0.0	0.0	2.4
Personal reasons	21.4	37.5	0.0	0.0	33.3	0.0	14.3	19.0
Other	35.7	37.5	50.0	0.0	0.0	0.0	42.9	31.0

Another important issue related to the scale of operations and investments is the sources of finance at the time of establishment of enterprises. Table 10 shows the extent of reliance on entrepreneurial savings vs. external credit. It is clear that more than half of the urban deceased enterprises financed all of the firm's initial investments through own savings. Except for 11 percent of the firms that used only external sources (both formal and informal), we find all other units invested a certain amount of own resources. Among enterprises that did avail external funds, reliance on informal sources was greater than formal sources. Next to own resources, employee contributions (these were only among the co-operatives), friends and family and private money lenders were the most common sources. Bank funding was utilised by less than 7 percent of the enterprises and credit co-operatives did not figure in any firm's financing.

The greater reliance on informal sources may be interpreted in two ways: first, that there are not enough banks and financial institutions; or second, that there are enough financial institutions, but high transaction costs and/or excessively cautious investors, who do not want to risk huge liabilities, are avoiding formal financing. In either case, it points out to instability in the financial market for small enterprises and the most urgent need for improving the situation. Investments made since establishment of enterprises have also displayed the same trend. Only three units availed bank loans and seven units used non bank credit sources. The rest, if any, used own resources. That the firms need an external source is beyond dispute. Enterprises relying on entrepreneurial savings and internally generated revenues cannot hope to survive for long and collapse at the first instance of falling profits, which we suspect is what has happened among the deceased enterprises. It is also very disturbing to find this situation in the most developed urban areas, and being common to all sizes and ages of enterprises.

Table 10
Percentage distribution of investment finance at establishment by source.
Urban deceased enterprises.

	0	1-25	26-50	51-75	76-99	100
Own resources	10.9	1.6	12.5	10.9	12.5	51.6
Friends and family	84.4	7.8	4.7	1.6	0.0	1.6
Banks	93.8	4.7	0.0	1.6	0.0	0.0
Credit co-operatives	100.0	0.0	0.0	0.0	0.0	0.0
Local authorities	98.4	1.6	0.0	0.0	0.0	0.0
Employees	74.6	7.9	6.3	4.8	1.6	4.8
Private moneylenders	88.7	6.5	3.2	0.0	0.0	1.6
Others	95.3	3.1	0.0	1.6	0.0	0.0

As expected, the reliance on own resources was greatest among household enterprises, 80 percent of them financed all of the firms' investments through own finances. Co-operatives relied least on own resources, followed by private enterprises and partnership enterprises. Haiphong had the most units with zero percent own resources (mainly the co-operatives) while Hanoi had the largest proportion of units utilising own funds for initial investments. None of the household and partnership enterprises used bank financing and only two private enterprises and two co-operatives did, and none of them were in Hanoi. Only one private enterprise in Haiphong used financing from local authorities. Private enterprises used financing from private money lenders most, and a majority of them were in Haiphong. On the other side, of the coin, the liabilities of these enterprises were also low. Only fourteen units reported liabilities with informal sources and the number that owed formal sources in 1991 was only nine. It is abundantly clear that the scale of operations, whether big or small, was determined by own resources and limited to a few formal and informal sources. It is even difficult to envisage survival prospects for these firms, let alone growth, in this situation.

Mechanisation

As Table 11 points out, close to 43 percent of the deceased enterprises used both manually operated and power driven machinery in 1991, a significantly lower percentage than surviving units. In conformity with the relatively higher initial investments, 54 percent of these units were located in Haiphong, 29 and 28 percent respectively were from Ho Chi Minh city and Hanoi. Across forms of ownership, we find that the co-operatives accounted for 36 percent of units using both manual and power driven machinery. In that order, partnership (25 percent), private (21 percent) and household enterprises (18 percent) followed.

Further, household enterprises accounted for the majority of units using only hand tools (40 percent), manually operated machinery only (36 percent) and power driven machinery only (41 percent). This confirms the general belief that non-household enterprise forms have a greater propensity toward mechanisation than household forms. However, while a majority (85 percent) used both manually operated and power driven machinery, some 16 percent of the manufacturing units worked with only hand tools. The sampled units constitute a very wide spectrum of enterprises in terms of size, scale and nature of activity. A majority of units purchased the machinery they used, new (51 percent) or second hand (38 percent). The percentage of units that built machinery in-house was low, at 11 percent. Self constructed machinery was more common among household enterprises and in Hanoi. No enterprise in Ho Chi Minh city used self-constructed machinery, and Haiphong had the most units that bought new, unused, machinery (61 percent).

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

Type of machinery	% surviving enterprises	% deceased enterprises
Only hand tools, no machinery	8.5	15.2
Manually operated machinery only	14.1	16.7
Power driven machinery only	16.9	25.8
Both manually operated and power driven machinery	60.6	42.4

Employment

The distribution of wage employees among the urban deceased and surviving units in 1991 is clear from Table 12. While the average number of wage employees for the whole sample is as high as eighteen workers, as Table 12 shows, close to 22 percent of the units did not use wage labour, about the same proportion as found among surviving enterprises. Not surprisingly, all units without wage labour were household enterprises, implying all non-household enterprises had at least one wage worker. Private and partnership enterprises mainly employed between one and ten workers (with a maximum of 50), but the co-operatives kept the average up for the group with 58 percent employing more than 25 workers per unit. Excluding the co-operatives, the average number of wage employees halves to nine workers.

Across regions, the fourteen household enterprises without wage labour were distributed almost equally across the three cities. Haiphong, had the highest per unit wage employment (23), followed by Hanoi (thirteen) and Ho Chi Minh City (eleven). The largest employers in all three cities were the co-operatives, they were the only units employing more than 70 wage workers. Private enterprises in Hanoi and Ho Chi Minh City did not employ more than ten wage workers. Haiphong presents a very heterogeneous picture in terms of wage employment in 1990. The private and partnership units fall into all categories of employment (except more than 70) and the households fall into all categories less than 50 wage employees.

One important feature on employment in these units is that there is a very high correlation between size of initial investment and number of wage workers. The co-efficient of correlation works out to be 0.6, significant at the 1 percent level. All units with more than 500 million dong in initial investment employed at least 26 wage workers and all enterprises with less than ten million dong employed less than 25 workers (62 percent of the latter category did not employ any wage labour at all).

The capital intensity[18] of the average deceased unit in 1990 was 24 million dong per worker (in 1996 prices), also significantly higher than its surviving counterpart at ten million dong. Excluding the co-operatives, it is still higher at 28 million dong, since the co-operatives had employed more wage labour than the others. Even though the size of the assets was larger in Haiphong, Ho Chi Minh city was the most capital intensive region (40 million dong per worker), followed by Haiphong (24 million dong per worker) and Hanoi (eleven million dong per worker).

While no unit operated without labour, about 42 percent of the units had only wage employees, 22 percent used only unpaid, household labour and the remaining 36 percent used varying proportions of paid and unpaid labour, the average being 74 percent wage labour in 1990. Further, 55 percent of the enterprises used all of their (paid or unpaid) labour full time and 6 percent worked on only part time labour. In the latter category, only one unit used unpaid labour.

It is thus clear that 70 percent of the household enterprises worked without wage labour in 1990 and the sample on the whole had an average of eighteen wage workers per unit largely because of co-operatives and other non-household employers in Haiphong. They were not very different from the survivors with regard to wage employment in 1990.

Table 12
Wage employment in 1990. Urban enterprises.

Number of wage employees	% surviving enterprises	% deceased enterprises
No wage labour	22.9	21.9
1 -10	34.3	29.7
11 - 25	25.0	23.4
26 - 50	16.4	15.6
51 - 70	0.0	9.4
More than 70	1.4	0.0

Production Flexibility

One of the major advantages of small scale production is its ability to alter production processes in response to changes in supply and demand in the input and output markets. This production flexibility is an insurance against rapidly changing technology and tastes; hence, the more flexible a firm is, the better its chances of long term survival. At the firm level, this production flexibility is reflected in the ability of

[18] Capital intensity here is measured as investment on assets per worker not necessarily a wage employee.

firms to introduce new products and/or make improvements in the manufacture of existing products, in terms of technology, form of output or both. In our sample of urban deceased enterprises, in a period of two years from 1989-91, only about 39 percent of the enterprises had only introduced new products, 28 percent had introduced improvements to existing products (Table 13) and 33 percent had initiated both changes, slightly better than the survivors in the same period. However, it should be noted that almost 61 percent of the enterprises that did not introduce new products or improvements, were less than five years old[19] in 1991, which makes a reasonable argument that it is too early to change the product mix. Among units older than five years in 1991, there was an almost equal distribution of units which had or had not introduced any improvements; 55 percent had, 45 percent had not. This proportion, quite understandably, was different for those established after 1985 - 19 percent had already initiated improvements and an overwhelming 81 percent had not.

Across ownership forms, flexibility in terms of introduction of new products was more dominant among non-household enterprises. Only a third of the household enterprises had introduced new products, compared to 50 percent among the partnership and collective enterprises.[20] On the other hand, 35 percent of the household enterprises made improvements to existing products, against only 27 percent of private enterprises and 30 percent of co-operatives. Further, much of this dynamic flexibility was concentrated in Hanoi and Haiphong. Ho Chi Minh city had only a third of its enterprises initiating any form of improvement (all in introducing new products), while in Haiphong 57 percent of the enterprises had some form of improvement (more in improving existing products) and in Hanoi it was a clear majority of 76 percent displaying some production flexibility.

Production flexibility undoubtedly contributes to the strength of the enterprise, but it also indicates instability or constant changes in the output and/or input markets. By this interpretation, it appears that southern firms have faced more stable markets than their northern counterparts. This interpretation is partly brought out by the fact that close to 62 percent of the deceased firms that introduced changes claim difficulty to sell existing product as the main motivating factor, followed by requests from purchasers (21 percent) and increasing domestic competition (15 percent). The difficulty to sell seems to have been a stronger force for deceased than for surviving enterprises (Table 13).

[19] Of these,44 percent were established in 1989 or 1990 and hence the question was not applicable to them.
[20] Only the private enterprises fared poorer than household enterprises on this count, since only 25 percent of private enterprises introduced new products.

Table 13
Product changes in 1989-91 and their impact. Urban enterprises.

Nature of flexibility	% surviving enterprises	% deceased enterprises
Introduced new products	34.0	38.8
Made improvements to existing products	38.2	32.8
Reason for change		
Difficult to sell current product	37.5	61.8
Increasing competition from producers	30.6	14.7
Increasing competition from imports	5.6	0.0
Requested by purchasers	12.5	20.6
Other	6.9	2.9
Degree of success		
Unsuccessful	4.3	2.9
Not very successful	8.7	23.5
Quite successful	65.2	41.2
Very successful	21.7	11.8
Too early to tell	0.0	20.6

As to the success of the changes, that all the enterprises closed down by 1997 is an obvious answer. However, the immediate effects of these changes have been viewed differently. Sixty percent of the enterprises that initiated some form of change felt it was successful (Table 13), in varying degrees, and a fourth of the enterprises regarded it otherwise. The Haiphong entrepreneurs were the most optimistic; they constituted half the respondents that believed their changes were successful. Another third were from Hanoi. On average, the firms that did not consider their changes successful closed down two years later, and the more optimistic ones survived for only three years after the survey in 1991. The units that felt it was too early to predict the effects also closed down in three years.

Continuity of Operations

Another indication of the good health of an enterprise is the continuity in its operations. A stable demand and supply situation in input and output markets (including supply of finance) is reflected in the enterprise capability of remaining open and active throughout the year. Other determinants include the skills of the entrepreneur himself; particularly his strength in marketing and gathering information. In our sample we find that only a little more than half of the deceased enterprises operated throughout 1990 (Table 14). The surviving enterprises had a larger percentage operating throughout the year. The average period of closure among the enterprises that did not operate the full year was 3.5 months among the deceased and 2.4 months among the survivors.

Across ownership forms, 90 percent of partnership, 76 percent of the household, 73 percent of private, and only 47 percent of co-operatives among the deceased operated throughout 1990. The average of 3.5 months of closure is, thus, accounted for mainly by the co-operatives. The process of restructuring of co-operatives since *doi moi* has occurred intensively in Vietnam and this has also reflected in extended periods of closure in 1990. With the co-operatives concentrated in Haiphong (55 percent), the performance of Haiphong in terms of continuity of operations has been the poorest among the three urban areas. Hanoi has the least number of discontinuous operations, with only two units closing down for three months, while Ho Chi Minh city had the unit closed for the longest period of time - eleven months. The major reasons for discontinuous operations, as Table 14 shows, were shortage of demand from the output markets, raw materials and other personal reasons among deceased enterprises. The lack of demand was felt more by household enterprises and the lack of raw materials - by co-operatives. Labour was not mentioned as the reason for closure by any enterprise, mainly because close to 34 percent of the units did not use wage labour. The instability noted in the input and output markets, while usually reflecting constraints imposed upon firms from external sources, might as well be imposed on the firms by the disadvantages of their size and/or poor linkages with the markets. It is possible to envisage two scenarios in this regard: Firstly, that of large firms with greater production capacity (as in Haiphong) facing as yet underdeveloped output markets, which leads to under utilisation of capacity and discontinued operations; and secondly, that of small size firms with very limited reach (as in the household enterprises operating without wage labour) such that tapping slightly distant, developed markets is a virtual impossibility. Next, it also depends on the skills of the entrepreneur in marketing and production organisation. It is not realistic to isolate one reason for discontinuous operations, rather it is a possible combination of one or more of these factors that have resulted in firm closures for extended periods of time.

Among the survivors few mentioned lack of raw material and the predominant reason for closure was lack of demand, followed by other reasons.

Table 14
Continuity of operations in 1990. Urban enterprises.

Months operated and reasons for closure	% surviving enterprises	% deceased enterprises
Operated throughout 1990	66.9	53.4
Closed for		
One month	8.1	5.5
Two months	11.3	2.7
Three months	6.5	8.2
Four months	3.2	2.7
Five months	1.6	0.0
Six months	0.8	4.1
More than six months	1.6	1.4
Reasons for closure		
Lack of raw material	7.9	38.9
Lack of demand	60.5	50.0
Other reasons	31.6	44.4

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 these calculations.

Capacity Utilisation

The extent of utilisation of production capacity throws some more light on the problem of lack of demand, mentioned by enterprises that did not operate throughout the year in 1990. As Table 15 shows, close to 95 percent of the enterprises did not operate at full capacity in 1990. The extent of under-utilisation is also clear. About 28 percent of the enterprises reported that they could more than double production if they used all machinery and equipment[21]. This percentage is higher than among survivors (Table 15). Not surprisingly, 56 percent of the units that reported the possibility of doubling production had invested more than 50 million dong on establishment and since, upto 1990. Only one unit that invested between 100 and 500 million dong reported operating at full capacity. If the capital intensity of the units is high, chronic under-utilisation of production capacity can lead to firm closure in a very short time. It is clear from the data that more than half of the units using both power driven and manually operated machinery felt their production could be doubled with existing capacity.

[21] Of these, 43 percent were co-operatives, 25 percent were private, 19 percent were partnership and 13 percent were household enterprises.

Table 15
Capacity Utilisation in 1990. Urban enterprises.

Extent of utilisation	% surviving enterprises	% deceased enterprises
Operating at full capacity	9.9	5.3
If employing all machinery & equipment, can increase production by		
10 percent	10.7	12.3
10 - 25 percent	23.7	10.5
25 - 50 percent	26.0	19.3
50 - 100 percent	16.8	0.0
More than 100 percent	13.0	28.1

This under-utilisation of capacity might also be related to the nature of growth rate of assets noted earlier[22]. Asset growth in these enterprises comes about mainly by addition to existing capital equipment; in the situation when existing machinery is already not being optimally used, incremental growth in assets is not called for. This might probably explain the low growth rate of assets. On the other hand, firms that have already had high growth rate of assets are the ones that suffered from severe under-utilisation of productive capacity. Attention is once again drawn to the necessity of stable product demand for generating profits as well as asset growth and optimal utilisation of existing capacity.

Across ownership forms, full capacity utilisation was found only among two private and one household enterprises. Co-operatives accounted for 44 percent of the units that mentioned they could more than double their production; households mainly accounted for the category that reportedly could increase production by 25 to 50 percent. A third of the private and partnership enterprises reported they could more than double, and increase production between 50 to 100 percent, respectively. Across regions, Haiphong presented severe under-utilisation: not only did 36 percent say they could increase production by 25 to 50 percent, it had half the units that could more than double production, among the three cities. Hanoi had a large number that could increase production by no more than 10 percent while in Ho Chi Minh City, almost a third were working at less than half their capacity.

Forward Linkages

The nature and extent of forward linkages have important influences on the size and longevity of enterprises. The market reach in turn affects or is affected by the nature of the products. Measuring forward linkages in terms of product sales, Table 16 clearly shows the distribution of destination of sales and their location. It is apparent from the table that the average firm in our sample sold mainly to the government. On

[22] See the section under Scale of Operations for discussion on asset growth. We noted that there was a significant representation of enterprises at both ends of the asset growth rate spectrum (Table 2.6).

average, a firm sold 44 percent of its products to state enterprises and agencies, and directly to individual consumers (29 percent). When we look at the nature of products sold, we find that most of the manufacturing enterprises mainly produced goods for everyday household consumption, like garments, school bags, shoes, curtains, carpets, paint, zippers, metal cookware etc. A few also produced windows, construction materials and spare parts for machinery. Since the product range excludes capital and intermediate goods for the most part, it is natural that the sales are concentrated to state agencies (most probably, distribution centres) (45 percent) and individual household consumers (28 percent). The agro processing units specialising in bread making sold a greater proportion to individual buyers and private enterprises (most probably, bakeries, grocery stores and the like) and on average, 26 percent to state agencies. Sales to tourists, local authorities and exports were non existent among agro processing firms, and constituted less than 5 percent of sales of an average manufacturing enterprise. Further, the greater proportion of sales to government agencies is accounted for by the co-operatives in Hanoi and Haiphong (56 percent). In fact, the major difference between deceased and surviving enterprises is in the percentage selling to state enterprises. While the deceased sold 45 percent, on average, the corresponding share among survivors was lower at 37 percent. The number of units selling to the state sector was also higher among the deceased enterprises than survivors (47 compared to 26 percent), in addition to those selling all of their main product solely to the state sector (22 compared to 11 percent among survivors).

An important finding from the data is that half of the units sold solely to one category of customers. As noted above, 22 percent of the firms sold 100 percent of their produce to state enterprises and agencies; 16 percent to individual buyers; 5 percent to other private enterprises and 3 percent each solely exported or sold to tourists. With a lot of restructuring going on in the state sector since *doi moi*, we might reasonably assume that this sales specialisation caused units depending solely on state purchases to go bankrupt. These are the firms that either did not want to or could not adapt to the need for changed markets. Some of the oft-quoted strengths of flexible specialisation have probably been absent among these firms, mainly co-operatives.

Table 16
Forward linkages of main product in 1990. Urban deceased enterprises. Percentages.

	0	1-24	25-49	50-74	75-99	100	Mean
Destination of sales of main product							
Individual persons	59.3	10.2	1.7	5.1	3.4	20.3	28.6
Private enterprise	71.2	5.1	3.4	8.5	5.1	6.8	17.8
State enterprise	72.9	0.0	1.7	8.5	8.5	8.5	20.9
Other state agency	67.8	5.1	5.1	1.7	1.7	18.6	23.7
Local authority	98.3	0.0	1.7	0.0	0.0	0.0	0.4
Tourist	98.3	0.0	1.7	0.0	0.0	0.0	0.6
Export	96.6	0.0	0.0	0.0	0.0	3.4	3.4
Other	93.2	1.7	0.0	1.7	0.0	3.4	4.6
Geographical distribution of main product sales							
Same town	7.1	3.6	7.1	10.7	8.9	62.5	79.6
Other rural	92.9	1.8	0.0	5.4	0.0	0.0	3.3
Other urban	76.8	7.1	7.1	3.6	1.8	3.6	10.6
Elsewhere	91.1	1.8	0.0	1.8	1.8	3.6	6.4

Since most of the enterprises produced goods for mass consumption, the geographical location of sales was concentrated in their respective local areas. As Table 16 shows, the average enterprise sold close to 80 percent of its produce in the same town as its manufacture and about 11 percent in other towns. Sales to rural areas were insignificant. This geographical limitation was more pronounced among agro processing industries where all the units sold 100 percent of their produce in the same town, the corresponding figure for manufacturing units being lower at 61 percent. Overall, as the table shows, about 63 percent sold entirely in the same town. The scenario we obtain, considering both categories and location of buyers, is that of very strong forward linkages with the local area and limited reach with other firms and locations. The nature of products, either as cause or consequence, limited their market reach.

Backward linkages

Backward linkages measure the relationship of the producing units with the providers of inputs. Here we measure backward linkages in terms of the location and category of sellers of the main raw material used in producing the main product. For the products mentioned earlier, the main raw materials range from iron and steel to sea shells and bread flour. They include chemicals, dye, cloth, cement, sand and other construction materials. From Table 17, it is clear that a typical deceased enterprise, in 1990, bought close to 47 percent of its main raw material from a state enterprise or agency. Further, 24 percent of the enterprises depend solely on the state sector for their main raw material, thus indicating very strong links with the state sector. Individual sellers (mainly other households), surprisingly follow, with 27 percent, and other private enterprises (shops etc.) form 24 percent of the main raw material purchases. The dependence on state sector is greater among agro processing units, with 66 percent of the average firm's purchases coming from the state sector. Across cities, Ho Chi Minh city had the largest number of enterprises buying zero percent of their raw material from the state sector (47 percent) and Hanoi had the largest number of enterprises buying all of their main raw material from the state sector (28 percent). The co-operatives in Hanoi and Haiphong, once again, accounted for 44 percent buying solely from the state. Five deceased units (7 percent), comprising three co-operatives, one private and partnership enterprise mainly in Hanoi and Haiphong, bought and sold solely to the state sector. As with forward linkages, the main difference between deceased and surviving enterprises in 1990 was the former's stronger relationship with the state - the average deceased enterprise bought 47 percent of its main raw material from the state, compared to 32 percent in the average survivor's purchases. The percentage of enterprises buying from the state sector was 51 among deceased and 24 among survivors; the percentage buying solely from the state sector was 23 among deceased and only 11 among survivors in 1990.

Table 17
Backward linkages of main raw material in 1990. Urban deceased enterprises. Percentages.

	0	1-24	25-49	50-74	75-99	100	Mean
Main input supplier							
Individual persons	64.5	4.8	3.2	6.5	1.6	19.4	26.5
Private enterprise	64.5	9.7	0.0	8.1	0.0	17.7	23.9
State enterprise	58.1	1.6	8.1	6.5	8.1	17.7	30.7
Other state agency	79.0	3.2	1.6	3.2	3.2	9.7	15.8
Collective farm	98.4	1.6	0.0	0.0	0.0	0.0	0.3
Other	96.8	0.0	0.0	0.0	1.6	1.6	2.9
Geographical location of main supplier							
Same town	9.1	1.8	0.0	9.1	1.8	78.2	85.6
Other rural	94.5	0.0	0.0	0.0	1.8	3.6	5.1
Other urban	87.3	3.6	7.3	0.0	0.0	1.8	4.7
Elsewhere	94.5	0.0	0.0	1.8	0.0	3.6	4.6

Backward linkages with their respective cities are stronger than forward linkages. As Table 17 shows, a representative deceased enterprise, on average, bought 86 percent of its main raw material from the same town in 1990. Other rural, mainly collective farms, and urban locations account for about 5 percent each. Also clear from the table is the fact that 78 percent of the enterprises bought all of their main raw material from the same town. Under 10 percent of the enterprises bought wholly from outside. As with location of sales, agro processing units bought all of their raw materials from the same town; manufacturing units bought on average, 17 percent from outside. Among the deceased enterprises, five units bought all raw materials from the state sector and sold all of their main product to the state sector too. None of them had subcontracting relationships with the state or non-state sectors. As discussed under forward linkages, this extreme dependence on the state sector might have been a major factor in closure of enterprises, in the face of growing uncertainty in the state sector restructuring in the 90s. We may recall, at this juncture, that half the deceased enterprises cited inability to sell at profit to be the main reason for their closure. With strong local linkages, limited geographic extent of sales and excessive dependence on an unstable state sector, this inability to sell is quite a natural outcome.

On a related issue, close to 70 percent of the enterprises mentioned that raw materials and other inputs were available in adequate quantity and quality. Among those that did experience difficulties in obtaining raw materials, 40 percent cited dependence on imports as the nature of the problem, while 25 percent mentioned erratic supply. Most of these units were located in Haiphong (61 percent), followed by 30 percent in Ho Chi Minh city and the remaining in Hanoi. It was also more commonly found among household enterprises and co-operatives (30 percent each).

Horizontal Linkages

Inter firm linkages are very important sources of information, technology and other resource transfers, thereby determining the survival and life span of firms. Horizontal linkages -between firms- are analysed here in terms of subcontracting arrangements only. From the data on deceased enterprises, it is clear that in 1991, only 15 percent of the firms had subcontracting relationships with other firms, mainly private enterprises (67 percent). Enterprises subcontracting with state enterprises constituted 22 percent and with foreign companies 11 percent. The most common form of assistance from the parent unit was in the form of procuring raw materials (60 percent) and obtaining credit (1 percent). The duration of contracts ranged from one to six months in June 1991. Half of the subcontracting units were co-operatives, 30 percent partnership and 10 percent each were household and private enterprises. Further, subcontracting was more common in the south with 40 percent of the subcontractors located in Ho Chi Minh city. In Hanoi and Haiphong the corresponding percentage was 30 in each. Also, relative to the total number of enterprises, the percentage of subcontractors was highest in Ho Chi Minh city (27 percent) compared to 19 and 9 percent in Hanoi and Haiphong respectively.

Production Relations

Production relations refer to the client-producer contracts, analysed here by the number of customers sold to and the frequency of production on advance orders from buyers. Sales to one or more customers depend on the nature of the product and contractual agreements. In our sample, since most enterprises dealt with consumer goods, and sold a significant percentage to individual buyers, it is reasonable to assume that the number of customers will be high. As expected, most household enterprises sold to more than 10 customers in 1990 (90 percent); as did 40 percent of private; 64 of partnership and 39 percent of co-operatives. Sales exclusively to one customer was absent among household enterprises, but more common among co-operatives (22 percent). The remaining units sold to between two and ten customers that year. Among the units that sold exclusively to one customer, only one unit had subcontracting relations with the buyer.

Sales to more than one customer helps the producing unit to distribute its risk of opportunism from the other party to the contract. A common way to secure payment from customers is to confirm their orders against a cash advance. This is possible only when the firm is selling to other enterprises rather than individual consumers, for the kind of products involved. We find in our data on urban deceased enterprises that most of the units (53 percent) produced almost always on an advance order. The proportion of enterprises selling on advance order was highest in Haiphong (68 percent); considering that the average firm in Haiphong was larger than the other two cities, it is natural that the monetary impact of non-payment or delayed payment from customers is higher and hence the need for cash advances. It was least in Ho Chi Minh city, at 13 percent. Across ownership forms, 73 percent of private enterprises sold mostly on advance order; the corresponding figures being 32 percent of household, 64 percent of partnership and 53 percent of co-operatives. These figures correspond well with the percentage of sales to individual consumers and other enterprises; households sold the largest proportion of their output to individual buyers, followed by partnership, private and co-operatives.

Constraints

A majority of the owners/managers (52 percent) identified shortage of capital as the main constraint to the growth of the enterprise in 1991 (Table 18). Competition from other enterprises (13 percent) and limited product demand (10 percent) followed, in that order. The shortage of capital was felt more by non-household industries; among household industries, it was too much competition from other producers (35 percent). Among non-household industries, capital shortage was more pronounced among co-operatives with 68 percent noting it as the main constraint though the corresponding percentages were also high at 53 and 67 respectively among private and partnership enterprises. Not surprisingly, a majority of units mentioning capital shortage (41 percent) had higher total investments ranging from 100 million to 500 million dong. It appears that for very small units with little capital needs, the need for external capital is also limited, with the result that they do not experience capital shortage to the extent felt by firms of larger size and investment. Haiphong, with its relatively larger industries, obviously had most of its units (71 percent) complaining of capital shortage, thereby also accounting for 76 percent of the total units in our sample registering this constraint. Unless efforts are undertaken at the macro level to expand the network of external credit sources, the survival of large industries and growth of small industries will be greatly affected.

The percentage citing capital constraints was slightly higher among deceased enterprises than among survivors (Table 18); correspondingly, the percentage reporting limited demand was lower among the former.

Table 18
Respondent perception of main constraint in 1990.
Urban enterprises. Percentages.

Nature of constraint	% surviving enterprises	% deceased enterprises
Shortage of capital	42.1	52.4
Cannot afford to hire wage labour	2.9	1.6
Lack of technical know-how	2.1	1.6
Limited demand for products	15.7	9.5
Too much competition	12.9	12.7
Lack marketing and transport facilities	5.0	7.9
Lack modern machinery/equipment	5.7	1.6
Lack of raw materials	1.4	0.0
Lack of energy	4.3	1.6
Uncertain government policies	2.1	1.6
Inadequate premises/space	0.0	0.0
Other	5.7	9.5
No constraint	0.0	0.0

Competition

Related to one of the dominant constraints mentioned above, almost 58 percent the enterprises experienced severe competition (in 1990) from other industries in their field of manufacture, many of them from more than one category of enterprises. More than a third of the enterprises faced severe competition from other private enterprises; 15 percent from state and 11 percent from legal imports. Slightly over 1 percent also cited smuggled goods as their source of severe competition. More than half of the enterprises citing severe competition were located in Haiphong, especially from private enterprises. Hanoi followed, with 24 percent and Ho Chi Minh city had the least number of units facing severe competition, accounting for 21 percent. Important to note is that among units facing severe competition from one or the other kind of enterprises, the size of total investments corresponded to the median in the range of our sample. That is to say, 32 percent of the enterprises were ‘medium size’ enterprises according to the spread of investments of our sample, with investments ranging between 10 and 50 million dong. Neither very small nor large enterprises experienced severe competition to the extent that this middle range enterprises did. Further, across ownership forms, the co-operatives accounted for 44 percent of the units facing severe competition, mainly from private enterprises. This is indicative of the changes occurring in the traditional co-operative sector, with the advent of new private enterprises since *doi moi*.

Government assistance

During establishment almost 62 percent of the enterprises availed government assistance in one form or the other. The most common form of assistance was with submitting relevant documents and registering units with the government departments (41 percent), followed by availing tax exemptions (22 percent) and assistance with organisation of the enterprise. A small percentage (8) also used the help of government authorities in obtaining introductions for collaborative ventures. In matters of obtaining credit, only 3 percent utilised the assistance of local authorities. In fact it appears that most of the government assistance was availed mainly during establishment of the enterprises, particularly in dealing with legal or official formalities. We find that 62 percent of the enterprises either did not approach or did not receive assistance from government officials during the life time of the enterprise. Among those that did, the authorities assisted in obtaining credit, marketing and with resolving management difficulties. It must be noted that a majority of the entrepreneurs (48 percent) were previously state employees and an additional 44 percent served in local or other cadres. This prior relationship with the state and its attendant networks and contacts might have been helpful in obtaining assistance with managing the enterprise as well as marketing, directly or indirectly. Added to this is the fact that deceased units, mainly co-operatives, had very high forward and backward linkages with the state sector, thereby accounting for greater official assistance received. The propensity to avail government assistance, and in multiple areas, was also, not surprisingly, higher among larger firms. At establishment, 47 percent of the firms availing government assistance had investments higher than 50 million dong. Units with less than 1 million dong in total investment comprised 5 percent of those that availed assistance. The same tendency is found with regard to assistance during the life time of the enterprise. We can reasonably argue that smaller units, by virtue of their lesser degree of formality, need lesser bureaucratic assistance than larger firms and so there are size determined advantages (or disadvantages); and that government assistance, being mainly non-monetary in nature, is more within the purview of large firms.

Rural enterprises

The rural survey in 1991 was held in five provinces - Ha Son Binh, Vinh Phu, Quang Ninh, Long An and Cuu Long, but only in Ha Tay (formerly Ha Son Binh) in the north and Long An, in the south, in 1997. Therefore, in the present paper, we will analyse the data on Ha Tay and Long An only. Mortality rate among rural resurveyed enterprises was 39 percent (Table 1), with 56 out of the 143 resurveyed enterprises closing down between 1991 and 1997.

Location and organisational structure

Deceased enterprises in the rural areas were distributed almost equally among the northern and southern sample regions. Long An, in the south, accounted for 54 percent and Ha Tay, in the north had 46 percent of the closed enterprises,[23] indicating that Long An had a slightly higher mortality rate. Household industry dominated, with half the enterprises belonging to this category; close to 36 percent were private enterprises and the remaining 14 percent belonged to other categories.[24] There were no state enterprises in the sample. Across regions, 57 percent of household and 65 percent of private enterprises were located in Long An. Even though Long An was host to more enterprises in each category, relatively speaking, private enterprises were less common in Ha Tay. Only 35 percent of private enterprises were located there, against 43 percent of household industry. Other forms of ownership, however, were found more in Ha Tay (88 percent) than in Long An (12 percent).

Nature of activity

The most common area of activity in 1991 among the rural deceased enterprises was manufacturing. Close to 50 percent of the enterprises were involved in it, 21 percent in agro-processing, and the remaining in various forms of commercial trading. Among survivors, the corresponding percentages were 64, 17 and 19 percent respectively. Mortality rates among manufacturing units was lowest - 33 percent, compare to 44 percent among trading and 46 percent among agro-processing units. The percentage of agro industries on the whole, is, not surprisingly, greater among rural than urban industries. Interesting to note is that all the deceased agro-processing units were located in Long An and a majority of the manufacturing enterprises (88 percent) were located in Ha Tay. Commercial trading was also virtually absent in Ha Tay. This distribution, probably, has something to do with the extent of economic development in both these regions. In 1991, Ha Tay (then known as Ha Sonh Binh) was more rural with handicraft industry dominated household enterprises, than Long

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[23] The actual numbers were 26 in Ha Tay and 30 in Long An.

[24] The other categories included five partnership and two co-operative enterprises.

An, which had a relatively more diversified economic base.[25] Unsuitable conditions in Ha Tay have probably led to the closure of manufacturing industries, while for the same reasons, agro industries could not thrive in Long An.

Enterprise history: Years in operation

The average years of operation among the rural deceased enterprises was approximately nine years, mainly because of the 6 percent of enterprises being in existence from before 1976. The most striking feature relating to the age of rural enterprises is that a majority of the enterprises (59 percent) were three years old or less at the time of the survey in 1991. This scenario is in stark contrast to the urban enterprises, where we found more than 40 percent of the units were 11 years or more at the time of the survey (Table 19). Infant mortality has accounted for most closures among rural enterprises, and are symptomatic of an underdeveloped economic environment for rural entrepreneurship. Table 19 shows the age distribution of rural surviving and deceased enterprises. It is clear that a high 22 percent were only a year old in 1991 and have all closed down subsequently within a maximum of seven years in operation, by 1997. A mere 7 percent of the enterprises were operating for over fifteen years; a majority of 52 percent of the enterprises closed down between five and ten years of operation. Representative of the distribution of ownership forms, household enterprises accounted for more than half of the units that closed down within ten years of operation. There was no private enterprise older than fifteen years in our sample; only two co-operatives and one household enterprise were established before 1976. Overall, it is apparent that most rural deceased enterprises have been of a fairly recent origin and the process of consolidation has been occurring rapidly, with a large proportion of closures within 10 years of operation.

Interestingly, mortality rate among resurveyed enterprises established before 1976 was lowest (27 percent) and highest among those established between 1981-85. For enterprises established after 1986, mortality rate was 38 percent; among these , units established in 1990 fared the worst, with 41 percent closing down in the period 1991-97. Examination of the reasons stated for closure (Table 20) will throw light on this process of consolidation.

[25] See the Introduction in *Employment generation through private entrepreneurship in Vietnam* by Per Ronnås (1992), SIDA/ILO-ARTEP, pp. 17-19 for a discussion of economic characteristics of the provinces in 1991.

Table 19
Year of establishment and age of rural enterprises at closure

Year of establishment	% surviving enterprises	% deceased enterprises	Age at closure	% deceased enterprises
Before 1976	9.6	5.6	Less than 5 years	26.0
1976 - 80	7.2	11.1	5 - 10 years	52.0
1981 - 85	9.6	13.0	11 - 15 years	14.8
1986	2.4	3.7	16 - 20 years	1.8
1987	9.6	7.4	21 - 25 years	0.0
1988	19.3	18.5	More than 25 years	5.5
1989	21.7	18.5		
1990	20.5	22.2		

Similar to the urban scenario, inability to sell at profit accounted for the closure of almost 54 percent of the rural enterprises, followed by personal reasons (retirement or death of entrepreneur) for 20 percent. Most units cited only these two reasons exclusively. Almost 65 percent of the private and 43 percent of the household enterprises shut down due to low profit margins. The major reasons offered for this inability to sell at profit were: very high production costs (37 percent), too much competition in the output market (33 percent) and poor distribution and marketing channels (20 percent). High production costs and competition were mentioned by Long An firms while Ha Tay firms held poor marketing channels as the reason for low profitability. Almost 60 percent of the units quoting low profit margins as the reason for closure were three years old or less at the time of the survey, highlighting the importance of high profit margins and internally generated capital in the firm's early years.

Table 20
Main reasons for closing down. Rural enterprises.

Reason	% deceased enterprises
Could not sell at profit	53.6
Lack of raw material	0.0
No prompt payment from customers	0.0
Interference from government officials/local authorities	1.8
Personal reasons	19.6
Other reasons	25.0

Entrepreneur characteristics

As Table 21 shows, the typical owner-manager of the (subsequently) deceased enterprises, in 1991, was male, more than 50 years old, had a formal education of at least seven years and was previously employed in a state enterprise. However, 40 percent mention 'other' experience, which includes farming activities, thereby making it possible that many entrepreneurs have a background in farming, though the extent is not clear. The profile of this entrepreneur is not very different from that of his/her surviving enterprise counterpart. The percentage of women entrepreneurs (almost ten) among deceased units is slightly higher among rural than urban areas. Similar to the urban areas, most of the entrepreneurs older than 50 years (58 percent) were mainly managing household enterprises. While enterprises older than ten years at the time of the survey in 1991 were almost solely managed by entrepreneurs over 50 years old, they constituted only a fifth of the enterprises in this age category and the majority of 56 percent of the entrepreneurs managed enterprises less then four years old in 1991.

Unlike the urban scenario, the average age of the enterprises itself is quite low in the rural sample and it is obvious that most entrepreneurs were managing fairly new units. So the more interesting finding is that older entrepreneurs had been involved with household while younger entrepreneurs (mainly under 30 years of age) had established private enterprises. Further, it is this younger category of entrepreneurs that have had the benefits of higher education too; since most of the entrepreneurs with more than ten years of education have been under 30 years of age. Among all other age categories, the average number of years of education has been seven. Next, not surprisingly, most of the youngest entrepreneurs have had no prior work experience, while a large percentage of the other categories have been previously employed in the state sector in one form or the other. A possibly[26] disconcerting development is that, 8 percent of the managers of deceased enterprises have subsequently moved into agriculture, and all in Ha Tay. Another 8 percent have moved into wage employment, but almost a quarter have continued entrepreneurship in a new line of business. A fifth of the entrepreneurs have subsequently retired or died, almost all of them in Ha Tay. This percentage is significantly lower than among urban enterprises where a majority of 32 percent had retired or died. Only one rural manager reported unemployment. On the whole, it appears that Long An entrepreneurs have continued self employment in the same or other lines of business to a greater degree than in Ha Tay. Across ownership forms, subsequent movement into agriculture has been characteristic of household enterprises, while private entrepreneurs have moved into newer lines of business after closure of enterprises.

[26] We know from Table 21 that close to 40 percent of entrepreneurs had previous experience in "other" areas, but we do not know the specifications therein. It is not unreasonable to assume that this category might include agriculture; but we do not know how many entrepreneurs had actually moved from agriculture to industry in the first place. As a result, we cannot conclusively say it is disconcerting for sure. After trying industry for while, this 8 percent might have gone back to agriculture, in which case it is not as disturbing as if they entered agriculture as a forced alternative.

Table 21
Characteristics of owner-managers in 1991. Rural enterprises.

	% surviving enterprises	% deceased enterprises
Male	83.3	90.2
Female	16.7	9.8
Age		
Mean	44.8	43.5
-29 years	11.9	17.6
30 - 39 years	23.8	29.4
40 - 49 years	25.0	15.7
50 - years	39.3	37.3
Education		
Up to 4 years	11.9	11.8
Up to 7 years	57.1	45.1
Up to 10 years	17.9	27.5
More than 10 years	13.1	15.7
Experience		
Local cadre	16.1	15.2
War veteran	12.9	6.1
State enterprise employee	16.1	21.2
Other position of responsibility	6.5	3.0
Petty trader	12.9	15.2
Other	35.5	39.4

Primary Income Source

It is apparent from the household activity data that all the enterprise households were involved in some kind of agricultural activity - farming, animal husbandry, or fishery and aquaculture. All of the households recorded self-employment in agriculture, throughout the year, which indicates that the enterprise was not a sole earning source to any rural enterprise household (Table 22). This situation was slightly different among survivors; the enterprise was the sole income source for 9 percent of the enterprises and only a quarter reported household members gainfully employed in agriculture. The most important feature is that 98 percent of the deceased enterprises had household members working (unpaid) at the family enterprise or farm, averaging two workers, other than the owner. Though not very significant, wage employment in other enterprises is also found. Other forms of self-employment were found among a fifth of the enterprises, almost all in Ha Tay. The diversity in income sources was more in Ha Tay.

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

Source	% surviving enterprises	% deceased enterprises
Enterprise as sole source	9.1	0.0
Wage employment	5.7	8.9
Farming	25.3	100.0
Other self-employment	14.9	33.3*

* Includes self-employment (20.3%) and gifts and remittances (13%)

Scale of operations

The scale of operations, as before, are discussed in terms of initial investment and assets in 1990, in 1996 prices. The average initial investment for rural deceased industries was 16 million dong, while the average total assets in 1990 was 80 million dong. The average deceased enterprise was much larger than its surviving counterpart - which had 8 million dong in initial investment and only 33 million dong in assets in 1990. However, there is a distinct difference in the scale of operations across urban and rural areas. The average urban deceased unit is at least seven times larger than its rural counterpart. As shown in Table 23, there is a clustering of enterprises around the 1.5 to five million and five to 25 million dong (initial investment) categories among both surviving and deceased enterprises, but graduate to the five to 25 million categories and higher (in assets) by 1990.

The deceased units with the highest initial investments (over 25 million dong) were the two co-operatives, established before 1976 in Ha Tay; and these are responsible for raising the average of the whole sample to sixteen million dong.[27] Half the enterprises had initial investments of only five million dong. Since most of the units were established after 1985 (70 percent) and were less than five years old at the time of the survey in 1991, there is homogeneity in investment levels across the regions, to a greater degree than their urban counterparts.

Across ownership forms, apart from the two largest co-operatives, household enterprises were on average a third of the size of private enterprises. The average initial investment of household enterprises was five million dong, with half the units investing only three million dong, while the average private enterprise invested 18 million dong, the 50th percentile value being fourteen million dong. An interesting fact is none of the agro processing and trading units had less than one and 1.5 million dong in initial investments, respectively, while two and three manufacturing units had less than one and 1.5 million dong in initial investments. The average firm size in Long An was slightly smaller (14 million dong), at establishment, than Ha Tay (18 million dong), mainly because of the two co-operatives in Ha Tay each of which had a

[27] Excluding the two co-operatives, the average for the group is eleven million dong.

minimum investment of 125 million dong. Excluding these two the average Ha Tay firm is half the size of its Ha Tay counterpart (7 million dong).

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

	% surviving enterprises	% deceased enterprises
Initial investment at establishment		
Less than 500	3.6	3.8
501 - 1500	9.6	9.4
1501 - 5000	41.0	34.0
5001 - 25000	36.1	30.2
25001 - 50000	6.0	17.0
More than 50000	3.6	5.7
Total assets in 1990		
Less than 500	0.0	3.8
501 - 1500	8.0	1.9
1501 - 5000	14.9	19.2
5001 - 25000	40.2	34.6
25001 - 50000	18.4	21.2
More than 50000	18.4	19.2

The second half of Table 23 shows the asset distribution in 1990 among rural surviving and deceased units. We find that investment on asset creation since establishment has been quite low, probably due to the fact that most units were fairly young at the time of the survey in 1991. Even though a majority of the units (61 percent) had zero percent growth rate of assets, the average growth rate for the sample was 13 percent a year, mainly due to a minority (12 percent) whose assets grew in excess of 52 percent a year.[28] In relative terms, there is no significant difference in asset growth rates across ownership forms, since the majority were less than five years old and had zero percent growth rates. Average asset growth rates for household enterprises is 14 percent and the corresponding figure is 13 percent for private enterprises. Only one household enterprise in Ha Tay grew at a rate in excess of 100 percent, while the maximum rate for private enterprises was 73 percent. Across regions, Long An had an average rate of 14 percent while the percentage in Ha Tay was 10. Further, the typical surviving enterprise grew at an annual average rate of 22 percent while it was 13 percent for the average deceased enterprise.

On the whole, it is apparent that the rural deceased enterprises have been more homogeneous, with very few outliers in terms of size and growth rates. However, it is disturbing to find that non state enterprises are of a fairly recent origin in these parts, and they have not been able to survive, irrespective of size. If anything, low asset growth is a common factor for most of the rural deceased units; whether it is the

[28] They were three household enterprises (two in Ha Tay and one in Long An) and two private enterprises (in Long An).

determining factor is hard to say at this point. A number of external circumstances have combined in ensuring a common fate of closure to most of these units. We find units that have asset growth rates in excess of 25 percent per year mentioned inability to sell at profit as the reason for closure of enterprises, strengthening our hypothesis that high capital accumulation is a necessary but not sufficient condition for healthy survival of firms.

Related to the need for capital accumulation and asset growth is the sources of investment finance for rural enterprises. The reliance on own resources is much more pronounced here than among urban enterprises. Almost 66 percent of the entrepreneurs used only their savings for establishing the enterprise. Friends and family and private money lenders are the next common sources for financing start up. Bank financing is conspicuous by its total absence. This shortage of external credit and reliance on informal sources of lending comes out very clearly from Table 24. It can be noticed that about 4 percent of the enterprises relied on cash advances of sales for covering at least half the initial investments. Since household enterprises predominate and they have the most propensity to use personal resources (at establishment as well as during operative years), the rural enterprises present a scenario of self sufficient units prepared to shut down operations at any time without much cost. This trend is true even of investments financed after establishment. Only five units mention availing external finances from a non bank source. In fact, in 1991, with more than 70 percent being less than five years old (see Table 19), it is surprising that only eight enterprises had outstanding liabilities; one owed a credit co-operative, three each owed other private and state enterprises and the last one owed a source other than those listed below. It is hard not to notice the high degree of uncertainty in the minds of the entrepreneurs with regard to success of their entrepreneurial endeavours which has resulted in their weak relationships with external credit sources.

Table 24
Percentage distribution of investment finance at establishment by source.
Rural deceased enterprises.

	0	1-25	26-50	51-75	76-99	100
Own resources	9.4	11.32	5.7	5.7	1.9	66.0
Friends and family	88.7	3.8	5.7	0.0	0.0	1.9
Banks	100.0	0.0	0.0	0.0	0.0	0.0
Credit co-operatives	98.1	1.9	0.0	0.0	0.0	0.0
Local authorities	98.1	1.9	0.0	0.0	0.0	0.0
Employees	96.2	3.8	0.0	0.0	0.0	0.0
Private moneylenders	88.7	0.0	3.8	3.8	1.9	1.9
Advance against sales	94.3	0.0	1.9	1.9	1.9	0.0
Others	92.5	1.9	0.0	0.0	3.8	1.9

Household and Ha Tay entrepreneurs relied more on own resource financing; private and Long An entrepreneurs relied on borrowings from money lenders. All enterprises in Ha Tay invested some percentage of own resources, whereas five units in Long An did not use any of their own resources. Surprisingly, three of the five units mentioned were household enterprises (they used financing from friends/family, money lenders and an unlisted source); one partnership enterprise was wholly financed by employee contributions and one private enterprise relied on money lenders and cash advance from sales to finance initial investment. The lack of correlation between size of the enterprises and use (not even magnitude) of external credit found among urban enterprises is even more glaring among rural enterprises.

Without credit, liabilities, (usually) wage labour and a low degree of mechanisation, it is possible for entrepreneurs to start, exit or change lines of activity very easily. It seems that the firms have achieved a kind of 'organisational flexibility' that insures them against possible losses of heavy magnitude, particularly if the entrepreneurs are beyond 50 years and are investing their savings in non farm endeavours.

Mechanisation

The very distinct scale difference across urban and rural firms is well accounted for by the low degree of mechanisation among rural firms. As Table 25 shows, close to 70 percent of the rural enterprises operated without use of power driven machinery, with 53 percent using only hand tools in 1991. The percentage operating without power driven machinery was significantly greater among deceased than surviving enterprises (Table 25). Obviously, half the deceased units in this category had assets less than five million dong (in 1996 prices) in 1991. Ha Tay had a greater percentage of units that used only hand tools (60 percent) and Long An, the category that used both manually operated and power driven machinery. Further, according to expectations, non household enterprises had a greater propensity to use machinery; half the household enterprises used only hand tools. Most of the agro processing units used machinery, both manually operated and power driven machinery. A majority of the firms that used machinery (64 percent) acquired it newly, fewer units bought used machinery (24 percent) and the remaining 12 percent (all in Ha Tay) constructed the machinery in-house. All the units owned the machinery they used and did not hire from external sources for temporary use.

Table 25
Type of machinery used in 1991. Rural enterprises.

Type of machinery	% surviving enterprises	% deceased enterprises
Only hand tools, no machinery	49.4	52.9
Manually operated machinery only	7.4	15.7
Power driven machinery only	8.6	9.8
Both manually operated and power driven machinery	34.6	21.6

Employment

The homogeneity in scale of operations is also noted in the total employment in each of the rural enterprises. As Table 26 shows, close to 81 percent of the deceased enterprises employed less than ten workers, and many of them are household members, since the latter half of the Table shows that more than half of the units did not employ wage labour. The situation is similar among surviving enterprises also, though the percentage using no wage labour is slightly greater among deceased enterprises. However, the average employees (total) per unit was twelve among deceased and eight among surviving; the average wage employees per unit were seven for deceased and five for surviving enterprises, because of one partnership unit in Ha Tay employing 135 wage workers.

All the deceased household enterprises used less than ten labourers, and none of them used wage labour. On the other hand, all the private enterprises used some percentage of wage labour, on average the figure was 62 percent. Also, all the private enterprises used some amount of household labour, since the percentage of wage employment was less than 100 for all units. Only one co-operative employed 100 percent wage workers. Ha Tay had a greater number of enterprises employing a larger percentage of wage workers; in Long An the maximum percentage of wage workers was 85. We found no direct correlation between size of firms and wage employment. The co-efficient of correlation was 0.03. While firms with assets less than 1.5 million dong in assets (in 1996 prices), in 1990, did not employ wage labour, 80 and 56 percent of those worth between 1.5 and five million dong, and 5.1 to 25 million dong also had no wage labour.

Table 26
Employment in 1990. Rural enterprises.

	% surviving enterprises	% deceased enterprises
Number of total employees		
1 -10	83.7	80.8
11 - 25	11.6	11.5
26 - 50	2.3	1.9
51 - 70	1.2	1.9
More than 70	1.2	3.8
Number of wage employees		
No wage labour	43.7	51.9
1 -10	47.1	36.5
11 - 25	4.6	5.8
26 - 50	3.4	1.9
51 - 70	1.1	1.9
More than 70	0.0	1.9

In this scenario, it appears that labour demand was very low among rural deceased enterprises, mainly because household enterprises dominated the scene and none of them employ wage labour, irrespective of size. An important point to note is that close to 46 percent of the household enterprises did engage in some form of manufacturing activity, but used only unpaid household labour. Private enterprises, on the other hand, were more important in employment generation. Capital intensity (measured in terms of assets per worker) was lowest among co-operatives (four million dong), on average, and highest among household enterprises (thirteen million dong) on account of their respective percentage of employment. Private enterprises were mid-way, with an average capital intensity of seven million dong. Similarly, Ha Tay turned out to be the more capital intensive region with thirteen million dong invested, on average, in 1990 compared with seven million dong in Long An. It is highly probable that this low level of outside employment has made it easier for the firms to exit.

Production flexibility

The importance of production flexibility has already been discussed earlier, in the section on urban enterprises. As before, measuring flexibility in terms of introduction and improvements of products and services in the period 1989-91, we find that rural deceased firms have not displayed a great deal of it, at first glance. Only 21 percent of the rural sample introduced new products and slightly over a quarter initiated improvements to existing products and services. However close to 38 percent of the rural enterprises were set up in 1989-90, and hence the question was not applicable to them; an additional 30 percent were less than 5 years old in 1991 and therefore this low degree of change is understandable. Among those that did introduce changes, Ha Tay was more dynamic than Long An; and surprisingly, the number of household enterprises introducing changes equalled the corresponding number of private enterprises, though in relative terms the percentage of private enterprises found to be slightly more flexible was higher than household enterprises. Further, production flexibility was more dominant among manufacturing firms (which accounted for 80 percent of enterprises introducing new products) than agro processing firms.

Table 27
Product changes in 1989-91 and their impact. Rural enterprises.

Nature of flexibility	% surviving enterprises	% deceased enterprises
Introduced new products	17.4	20.8
Made improvements to existing products	30.2	26.4
Reason for change		
Difficult to sell current product	32.0	27.7
Increasing competition from producers	36.0	11.1
Increasing competition from imports	0.0	11.1
Purchaser requests	24.0	33.3
Other	8.3	16.7
Degree of success		
Unsuccessful	7.7	0.0
Not very successful	23.1	12.5
Quite successful	61.5	37.5
Very successful	0.0	12.5
Too early to tell	7.7	37.5

Regarding the immediate success of these changes, a majority of the enterprises had no response. Only a third of the enterprises that had introduced changes of one kind or the other spoke about their perception of immediate success of the changes. Among these, none of the respondents thought they were unsuccessful. The most important reason for this perception is that a majority of the changes were initiated upon requests from buyers (30 percent), and not at the initiative of the producers themselves, in which case success is defined not as self-initiated efforts toward development of new markets but more as adapting to retain existing markets. The most optimistic respondents were from Ha Tay; Long An had only two respondents to that question, and both felt it was too early to tell. Difficulty to sell products prompted another 27 percent to alter the production mix. On the whole, production flexibility did not play a dominant role in the operations of rural enterprises.

Further, when we compare the flexibility among survivors and deceased, the introduction of new products has been more prevalent among the latter (Table 27). However, the predominant reason for change was increasing competition and a difficulty in selling product, among survivors. Hence the motivation for change has been primarily ‘internal’ to the firm (as opposed to ‘external’ in the case of purchaser requests), and to that degree more innovative than the deceased. The number of optimists have been greater when the motivation for change has come from outside, thereby accounting for the higher percentage of optimists, among deceased enterprises, regarding their changes as successful, in different degrees.

Continuity of operations

The implications of continuous operations in an industry in a year have already been noted earlier. Among the rural deceased enterprises, discontinuity in operations was slightly more pronounced than in urban areas - 55 percent of the rural enterprises did not operate the whole year in 1990.[29] The surviving enterprises had a slightly better performance as well, with 53 percent operating throughout 1990. The average period of closure (among deceased enterprises) in a year was 3.3 months, for those with discontinuous operations. It is clear from the data that the household enterprises are more prone to close down for intermittent periods. Not only did they account for 43 percent of the enterprises that closed down temporarily, the average period of closure was also higher than non-household forms. Overall, 53 percent of the household enterprises, and 57 percent of the private enterprises shut down operations part of the year in 1990.[30]

It is not difficult to envisage the close relationship between agricultural and non agricultural activities in the rural households; as Table 28 shows, a majority of the enterprises mentioned agricultural peak season as the reason for closing down operations temporarily. Considering the fact that all the deceased enterprises had income from farming (Table 22), only 30 percent mentioning temporary closures on account of agricultural peak season is quite low. Among survivors, even though only 25 percent cited gainful employment from farming, 52 percent of the enterprises quoted agricultural peak season as a reason for discontinuous operations, implying a greater tendency to divert enterprise resources for farm activities.

Wage labour in deceased enterprises is conspicuous by its near-absence and whatever household labour is used would have to be diverted to agricultural operations during peak seasons and therefore, the non agricultural enterprise would have to stop temporarily. Next, lack of demand is also mentioned by more than a quarter of the enterprises that had discontinuous operations, reflecting instability in the output markets. As explained earlier in the case of urban enterprises, it is possible that the very small size of the firms combined with low output reach create this 'lack of demand'. Across regions, Ha Tay and Long An both accounted for 50 percent of the enterprises which closed down part of the year; and the average period of shut down was around 3.3 months in both regions. The inability to sell products was more pronounced in Ha Tay than in Long An, where the agricultural peak season was the dominant reason. Apart from this, we do not find any other trends across ownership

[29] We have excluded fourteen industries (25 percent of our rural deceased sample) which started operations in 1990, for this calculation.

[30] Relative to their respective numbers, the percentage among household enterprises is lower, since their absolute number is higher; but relative to other ownership forms, the household enterprises account for a larger percentage of discontinuously operative enterprises.

patterns, nature of activity or age of enterprises affecting the continuity of operations among rural enterprises.

Table 28
Continuity of operations in 1990. Rural enterprises.

Months operated and reasons for closure	% surviving enterprises	% deceased enterprises
Operated throughout 1990	52.9	45.2
Closed for		
1 month	1.1	0.0
2 months	5.7	16.7
3 months	11.5	19.0
4 months	5.7	7.1
5 months	2.3	2.4
6 months	0.0	4.8
7 months	1.1	2.4
Reasons for closure		
Agricultural peak season	52.2	30.4
Lack of raw material	17.4	0.0
Lack of demand	30.4	26.1
Other reasons	26.1	13.1

Remarks: Percentages for reasons for closure are based on the number of units that did not operate throughout 1990. All deceased enterprises did not respond to this question.

Capacity utilisation

Related to the issue of lack of demand is the extent of production capacity utilisation. Unlike the urban scenario, a greater percentage of rural enterprises (30) reported working at full capacity (See Table 29).[31] They were mainly agro processing, private enterprises, and all of them were located in Long An. In Ha Tay, the most efficient enterprise was operating at 75 percent of its production capacity. As Table 29 shows, close to a fifth of the deceased enterprises reported they could increase their production by more than 100 percent, if they employed all their machinery and equipment. Compared to the survivors, the deceased enterprises had a greater percentage operating at full capacity (Table 29), as well as those working at less than half their capacity. Almost 19 percent (compared to 10 among the survivors) mentioned possibilities of increasing production by more than 100 percent.

The above finding points out a clear categorisation among rural deceased enterprises: smaller units working at full capacity and larger units working at less than half their capacity. Most of the units operated at full capacity had between five and 25 million dong in assets in 1990; not surprisingly, most units operating at or near full capacity were in the lower rungs in terms of investment and assets. No unit with more than 50 million dong in assets reported operating close to full capacity. On average, it

[31] This percentage is based on the number of respondents to this question, which was low, at 48 percent. The remaining respondents did not reply.

is apparent that more than a quarter of the units were operating at or close to half their capacity.

Table 29
Capacity Utilisation in 1990. Rural enterprises.

Extent of utilisation	% surviving enterprises	% deceased enterprises
Operating at full capacity	12.2	29.6
If employing all machinery & equipment, can increase production by		
10 percent	17.1	7.4
10 - 25 percent	22.0	11.1
25 - 50 percent	24.0	25.9
50 - 100 percent	14.6	7.4
More than 100 percent	9.8	18.5

Remark: Data for 53 percent of surviving enterprises not included due to non-availability

As discussed under urban enterprises, the extent of capacity utilisation is closely related to growth rate of assets. Apart from the fact that the rural enterprises have a greater percentage of fairly young enterprises, it is clear that half the units with zero percent growth rate in assets were operating at full capacity. That most of them were household enterprises describes a scenario where we have small sized enterprises with low assets and growth rates that have been most likely to be operating at full capacity. Those at the other end of the spectrum, viz., large enterprises with high assets and growth rates have more often been working at less than capacity, mostly due to lack of demand, confirming our initial statement regarding relationship between size of rural deceased units and their capacity utilisation.

Forward linkages

We measure forward linkages in terms of the destination of sales of the main product of the enterprises. Table 30 clearly shows the percentage distribution (among deceased enterprises) of sales by category and location of buyers. According to the table, rural deceased enterprises sold mainly to individual buyers and private enterprises in large cities and their own villages. Considering that Ha Tay and Long An are both closely located to Hanoi and Ho Chi Minh city respectively, it is possible that most of these enterprises were selling relatively more to the urban population in these two cities.

It is also noticed that most deceased enterprises sold exclusively to one category of buyer; 41 percent sold solely to individual buyers, 24 percent sold exclusively to private enterprises and so on. Also clear is the low linkages with state agencies, quite unlike the urban scenario. Around 11 percent of the enterprises sold solely to state; however the instability caused by a restructuring state sector does not seem to have been reasons for closure among rural enterprises, since all units selling solely to the state quoted personal reasons for enterprise closure. On average, a firm sold close to half its main product to individual buyers, 35 percent to private enterprises and about 14 percent to the state sector (Table 30). None of the units sold to local authorities and tourists; less than 3 percent of the units exported between 75 and 99 percent of their main product's output. The low percentage of sales to the state sector may be explained by the facts that households dominated the rural deceased sample and a majority of units were established after the *doi moi* era; hence relationship with the state sector is low. In addition, similar to the urban units, the products were meant for mass consumption, carpentry, construction materials, tileworks etc., which account for the higher percentage of sales to individual buyers.

Table 30
Forward linkages of main product in 1990. Rural deceased enterprises. Percentages.

	0	1-24	25-49	50-74	75-99	100	Mean
Destination of sales of main product							
Individual persons	37.8	8.1	5.4	5.4	2.7	40.5	48.9
Private enterprise	56.8	2.7	2.7	8.1	5.4	24.3	35.0
State enterprise	86.5	2.7	0.0	0.0	2.7	8.1	10.8
Other state agency	97.3	0.0	0.0	0.0	0.0	2.7	2.7
Local authority	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Tourist	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Export	97.3	0.0	0.0	0.0	2.7	0.0	2.6
Other	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Geographical distribution of main product sales							
Same village	75.0	2.8	5.6	2.8	2.8	11.1	18.3
Same commune	75.0	5.6	2.8	5.6	0.0	11.1	13.6
Same rural district	77.8	5.6	0.0	2.8	0.0	13.9	16.7
Nearby town	91.7	0.0	2.8	0.0	0.0	5.6	6.4
Large city	58.3	2.8	2.8	0.0	0.0	36.1	37.5
Elsewhere	88.9	2.8	0.0	2.8	0.0	5.6	7.5

Table 30 also brings out another interesting fact that the rural enterprises have greater linkages with large cities than their own villages or communes. Again, the proximity of Hanoi and Ho Chi Minh city and the nature of products can be held responsible for this trend. Further, there seems to be a dichotomy among enterprises - those selling exclusively in the local areas (36 percent, including same village, commune and district) and those selling exclusively in the large cities (36 percent). This tendency was more pronounced in Ha Tay. The percentage selling in multiple locations was lower, at 28 percent. In fact, a rural enterprise, on average, sold half its output in rural areas and 38 percent went to large cities. Increasing competition in the urban centres may have led to instability in the output markets, so 60 percent of those selling to large cities report inability to sell at profit as the main reason for enterprise closure.

Backward linkages

Measured in terms of source of main raw material and location, backward linkages are important determinants of industrial location and survival. As Table 31 shows, linkages of rural enterprises to their respective rural territories in 1990 was extremely poor. This is accounted partly by the nature of the raw material; in this case the main raw material includes wood, bamboo, chemicals, fertilisers, bricks, stones etc. making it inevitable for enterprises to rely less on households and more on other private enterprises. A little more than a fifth of the enterprises bought all their main inputs from households, and the rest nothing from this category. Most of the enterprises also did not buy from multiple categories of sellers, and more than half of the enterprises bought all of their main input from private enterprises. The reliance on state sector is slightly more among backward than forward linkages. Close to 16 percent of the rural enterprises bought all of their main raw material from the state sector, while only 8 percent sold entirely to the state sector. Given the nature of the raw materials, no unit bought from collective farms, hence it is clear that interdependence between rural agricultural and non agricultural sectors has been weaker, to that extent.

Table 31
Backward linkages of main raw material in 1990. Rural deceased enterprises. Percentages.

	0	1-24	25-49	50-74	75-99	100	Mean
Main input supplier							
Households	78.1	0.0	0.0	0.0	0.0	21.9	21.9
Private enterprise	40.6	0.0	3.1	3.1	0.0	53.1	55.9
State enterprise	84.4	0.0	0.0	3.1	0.0	12.5	14.4
Other state agency	93.8	0.0	0.0	3.1	0.0	3.1	4.7
Collective farm	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	96.9	0.0	0.0	0.0	0.0	3.1	3.1
Location of main input supplier							
Same town	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Same commune	73.0	2.7	0.0	2.7	2.7	18.9	23.5
Nearby town	56.8	0.0	2.7	5.4	0.0	35.1	38.9
Large city	70.3	2.7	5.4	0.0	2.7	18.9	23.5
Elsewhere	83.8	0.0	0.0	5.4	0.0	10.8	14.1

The location of input providers proves the low backward linkages better. None of the enterprises bought their main raw material from the same village. About a fifth bought the whole quantity of main raw material solely from the same commune and large cities, while the largest number (35 percent) bought it from nearby towns. On average, a rural enterprise bought close to 60 percent of its main raw material from urban areas, which indicates low backward linkages with rural areas. That this trend is true of all ownership forms and nature of activity is an important point to note, while analysing the impact of non farm sector development on the local economy. It appears that many rural enterprises, both in Ha Tay and Long An, have only located themselves in rural areas, but have most of their transactions with urban areas. Geographical proximity to urban areas is the most reasonable explanation for this behaviour. Most units felt that raw material availability was not a problem, except for 30 percent for whom it was; but have offered no description of the problem. Only two agro processing units reported seasonality of supply as a problem.

Horizontal linkages

Horizontal linkages, viewed from the point of view of subcontracting relationships, were not very prevalent among rural enterprises in 1991. Only eight enterprises (14 percent of the sample) subcontracted; three each with private enterprises in the same town and state enterprises, and one with a private enterprise elsewhere.[32] All of the subcontracting units were in Ha Tay, which is not surprising since most manufacturing units (88 percent) were in Ha Tay, and subcontracting is mostly found among manufacturing units. The duration of contracts, however, were very short, ranging from five months to a year. Six of the eight subcontracting units mentioned receiving assistance from the parent company; four in the area of procuring raw materials, one in managerial assistance and one in training workers. So it is clear that horizontal linkages were not a strong feature of rural enterprises in both Ha Tay and Long An.

Production relations

Similar to the urban scenario, rural enterprises predominantly (54 percent) sold to over ten customers in 1991. Only one private enterprise in Ha Tay sold exclusively to one customer; this unit did not subcontract either. As expected, most household enterprises sold to more than ten customers, while a large number of private enterprises sold to less than ten customers. Further, a majority of enterprises selling to more than ten customers (70 percent) a year were located in Long An, while Ha Tay accounted for more enterprises (63 percent) selling to the category two to ten buyers. The number of customers is determined by the nature of the product as well as the production contract. Since most of the enterprises in our sample dealt with production of goods for everyday consumption, we find that it is more common to have sales to more than ten customers. Further, a significant portion of the sample was involved in commercial trading, which naturally deals with a greater volume of customers than manufacturing units.

Constraints

Data on main constraints to the enterprises, as perceived by the entrepreneurs themselves, in 1991 indicate problems in both input and output markets. Specifically,

[32] Data on subcontracting partner is not available for the eighth unit.

as Table 32 points out, shortage of capital was the most frequently cited constraint (to 32 percent of the rural enterprises), but an almost equal number (28 percent) quoted limited demand for their products. We may recollect, at this juncture, that 54 percent of the enterprises shut down because of inability to sell at profit. While the percentage mentioning capital constraints is not very different from the survivors, the percentage mentioning limited demand is higher (Table 32). It is apparent that, while capital shortage can be overcome by recourse to informal sources of capital, it is harder for an enterprise to survive against limited product demand. The two possible courses of action in this situation would be to alter their product mix or shut down operations. Our earlier finding[33] shows that almost half the enterprises chose the former course; yet shut down operations. So, it is possible that a general insufficiency of demand was caused by the location of sales (in this case, mainly urban) and the attendant ills of too much competition. A significant 13 percent of the entrepreneurs mentioned competition as a major constraint, strengthening our belief. The shortage of capital was felt by an equal number of enterprises in Ha Tay and Long An, but perceptions of limited demand and competition dominated in Long An. All the units that mentioned lack of transport facilities were located in Ha Tay.

Table 32
Respondent perception of main constraint in 1990.
Rural enterprises. Percentages.

Nature of constraint	% surviving enterprises	% deceased enterprises
Shortage of capital	32.9	31.5
Cannot afford to hire wage labour	0.0	0.0
Lack of technical know-how	0.0	0.0
Limited demand for products	19.5	27.8
Too much competition	6.1	12.9
Lack marketing and transport facilities	8.5	7.4
Lack modern machinery/equipment	2.4	0.0
Lack of raw materials	1.2	1.9
Lack of energy	1.2	0.0
Interference by local officials	2.4	1.9
Uncertain government policies	3.7	3.8
Inadequate premises/space	0.0	0.0
Other	22.0	9.5
No constraint	0.0	0.0

However, unlike the urban scenario, the shortage of capital was felt by smaller units; in fact the agro processing units (which constitute some of largest enterprises in our sample) mentioned competition as a greater constraint than capital[34]. More manufacturing units, on the other hand, regarded capital as the main constraint (38

[33] See the section on rural production flexibility.
[34] In fact, only one agro processing unit mentioned capital shortage as a constraint.

percent) and limited product demand was the second common perception (25 percent). Apart from capital, no other input shortage was significant; only one unit mentioned insufficiency of raw materials as a major constraint. On the whole, various factors in the product markets seemed to be the more dominant constraint. Further, not surprisingly, perceptions of limited product demand were more common among household than among non-household enterprises. Since household enterprises are generally small and more informal, their capital requirements are consequently small, and marketing can be a serious constraint, especially if the destination of products is large cities (as in our rural sample). Private manufacturing enterprises, on the other hand, hold capital shortage as the most serious constraint. Many of the units do not use wage labour and do not feel it is a constraint in any way. Official, bureaucratic interference and policies are also insignificant as constraints. The relatively higher incidence of the transport problem seems also to be directly related to the urban destination of sales.

Competition

Competition in the product market was much more commonly felt among rural enterprises in 1991. More than a third felt that there were too many enterprises, producing similar goods, in the market, but a majority of 44 percent felt that there were neither too many nor too few. This correlates with our earlier finding that only about 13 percent regard competition as a major constraint (Table 32). An equal number of household enterprises felt there were too many enterprises, as well as neither too many nor too few enterprises. However, the perception of severe competition was much more subdued among non household forms, the category that felt too much competition consists mainly of household enterprises. Most of the private enterprises felt the number of enterprises was not very daunting. Across regions, a majority of enterprises that felt this way were in Long An (64 percent), while an equal number of enterprises felt there were too many enterprises in both Ha Tay and Long An. Among those that did feel existence of severe competition, the main source of competition was private enterprises (74 percent), followed by legal imports (15 percent). None of the enterprises mentioned competition from state enterprises to be severe; a majority of 81 percent of the enterprises felt they had no competition from state enterprises.

Government assistance

The data on nature and extent of government assistance indicate that there were very limited relations with the government. Close to 59 percent of the enterprises reportedly received no assistance from government authorities at the time of establishment of the enterprises. Among those that utilised it, assistance in fulfilling procedures of application for registration etc. was the most common form; on the whole 19 percent of the rural enterprises used some help in this regard. The other areas where enterprises availed government assistance were: temporary tax exemptions (11 percent), recommendation on line of business and procuring machinery (4 percent each). An important finding is that most of the units that availed official assistance were household enterprises; they constituted 64 percent of the units availing assistance. That more than a third of the rural entrepreneurs were previously employed in the state sector and that most of them started household enterprises might explain the higher incidence of government relationships among household enterprises. It is possible that governmental contacts during their service have helped them in their entrepreneurial endeavours. Only five units utilised government assistance in more than one area.[35]

The trend is worse when we consider official assistance availed during the life time of the enterprises. Almost 82 percent of the entrepreneurs did not receive (or seek) governmental assistance; among those that did, the main areas were obtaining inputs, resolving managerial issues, marketing and obtaining credit. The percentage of enterprises receiving help in any of these categories is insignificant at under 4 percent each. Across regions, Long An entrepreneurs had a slightly greater propensity toward availing official assistance; they accounted for 57 percent of the entrepreneurs availing official assistance. It is thus clear that linkages with governmental authorities have been poor, and the nature of assistance has been mainly bureaucratic.

Concluding Remarks

Since the initiation of *doi moi* in the late 1980s, a greater percentage of Vietnamese population has tried its fortunes through establishing non farm enterprises. As with consolidation anywhere, some succeeded and some did not. In this context, non personal reasons for closure of enterprises are important indicators of shortcomings in the environment for private sector enterprises. The urban and rural data offer a diverse, and sometimes contradictory picture, at first glance. The deceased enterprises, for instance, can be aligned along a spectrum of sorts based on their characteristics and behaviour in 1990/91: in terms of ownership forms, they include household enterprises, private enterprises, co-operatives, and partnerships; involved in manufacturing (mainly), agro processing, repair shops, restaurants etc.; urban units have operated from one to 35 years; with initial investment averaging 164 million dong; annual average asset growth rates from zero to 400 percent; and employing zero to 70 wage employees. These were the areas with the most heterogeneity. Therefore, we might infer that any of these criteria, viz., size, line of activity etc., does not single-

[35] These include organisation of the enterprise, obtaining credit and introduction for collaborative ventures.

handedly determine success (or failure) by itself. Further, since the sample was stratified across ownership forms and regions, even they are ruled out as determinants. Rather, the choice of firm organisation and economics combined with a number of other internal and external factors like management, entrepreneurial skills, marketing techniques, choice of product, availability of infrastructure, national economic climate etc. determine the long term survival of enterprises. Stability in one or any of these shows up in the degree of capacity utilisation, continuity of operations, extent of production flexibility and so on.

When we studied the behaviour of these enterprises (both urban and rural) in detail, we found some common characteristics among the entire set of deceased enterprises. The following is a broad summary of the findings, presented at the risk of over-simplification.

- Mortality rates have been highest in Haiphong, followed by Hanoi and Ho Chi Minh City; across ownership forms, co-operatives in urban and household enterprises in rural areas had the highest mortality rates. Hence they dominate the two regions respectively.
- Although personal reasons prompted closure of a fifth of both urban and rural units, inability to sell at profit was the most common reason for closure of enterprises. This was more pronounced in the rural sample.
- Entrepreneurs older than 50 years of age were most common and they mainly owned household and private enterprises established in late 1980s, in both the urban and rural sample.
- The age distribution shows urban enterprises were either very old (co-operatives) or very young (other non-state forms); among rural areas, infant mortality accounts for most closures. Co-operatives were nearly absent in the rural sample, hence the older enterprises were fewer.
- There was a distinct scale difference between household and non-household enterprises, and urban and rural areas, in terms of initial investments and assets in 1990. While the urban-rural difference might partly be accounted for by the large co-operatives in Hanoi and Haiphong, the differences between other ownership forms in the two regions were still high. There was a greater degree of homogeneity in scale of operations of rural units.
- The importance of the enterprise to the owner household as sole income source was higher among urban than rural areas.
- In terms of their linkages - forward, backward and horizontal - most units have behaved similarly, with very strong linkages to urban areas and very poor linkages to rural areas. Since co-operatives formed a major percentage, the urban deceased enterprises sample had very strong linkages with the state sector, leading us to

believe that this strong reliance on a sector that is itself changing has caused instability and hence the decision to close, by a lot of these enterprises.

- Most units mentioned demand side difficulties - inability to sell at profit, poor marketing channels etc. However, the input side does not appear to have been of serious concern to the enterprises at all. Very few units mentioned insufficient availability of raw materials, power and other inputs, including labour.
- A serious factor common to both urban and rural units, was the near absence of external credit usage, both at establishment and during operative years, reflecting lack of financial institutions and/or extremely cautious entrepreneurs.
- Data on urban and rural units show that the labour absorptive capacity of most units (except co-operatives), in 1991, was extremely poor. Most units did not use wage labour and relied on unpaid household labour, possibly driven by the small scale of production activity.

Apart from the above, the life time of the enterprise also seems to be limited to the life time of the entrepreneur; very few enterprises were inherited from previous owners and a lot of units closed down because of the retirement or death of the owner. In both urban and rural areas, across ownership forms, household enterprises had the least propensity toward mechanisation, use of wage labour and government assistance, and their production flexibility was smaller. Most household units mentioned inability to sell at profit exclusively among non personal reasons for closure; in fact the most important constraint mentioned by them was not capital shortage but too much competition in the product market.

There is an overall distinction found between two sets of enterprises (excluding co-operatives) in both urban and rural areas in 1991: the first set comprises of small household enterprises, with little or no labour, who work at close to full capacity catering largely to a local market. The other set is of larger enterprises, mainly non-household forms, with a slightly larger geographical reach and better modes of operation. In the rural areas, it appears that the small household enterprises have been basically supplemental income sources; hence, with the advent of greater competition, these entrepreneurs (mainly older than 50 years) have closed down. However, common to both regions have been an inability to sell at profit, lack of external credit, low labour absorptive capacity and limited production flexibility. Combined with little assistance from government (either involuntarily or voluntarily), they have all closed down in the face of increasing competition.

Irrespective of size, location and type of enterprise, firms have had to depend on high rates of internally generated capital, which in turn emphasised the need for strong output markets. With the relative ease of entry and exit into the entrepreneurial sector and a passive government, there have been too many entrepreneurs investing their savings on mainly household consumption goods, trying to sell to markets in cities, with the result that too much competition has driven away a lot of them, irrespective of size. This volatility is not uncommon to transition economies like Vietnam. However, an active governmental regulation of the private sector will go a long way in ensuring its labour absorptive capacity as well as spare the efforts of new entrants who hope to succeed with too little investment in employment and industrial infrastructure. There is also need to separate the small scale industrial sector from the small scale trading sector and make conscious efforts to build the productive and employment capacity of the nation in the area of intermediate goods, letting the benefits of the private sector to extend from the local to the national economy.