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Province, Central Vietnam: Analysis of the
Survival and Growing Cases**

**by
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Small and Medium Enterprises in Thua Thien Hue Province,
Central Vietnam: Analysis of the Survival and Growing Cases

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Abstract

This study analyses the dynamism and its characteristics of small enterprises in the province of Thua Thien Hue, central part of Vietnam. It focuses on the analysis of the growing and the surviving enterprises during period 1995-2002. It turns out that among a cohort of enterprises resurveyed, 105 enterprises have been closed down, 50 enterprises were declined, 9 enterprises were stagnated, and 46 enterprises were growing in 2002. The dynamism of the small enterprises has shown in the transformations of their ownership forms, economic sectors, major characteristics of the owners/managers, economic performance and their linkages to the markets as well as the inter-firm linkages. The typical entrepreneurs representing the survival enterprises are male, between 41 to 60 years old with primary and secondary educational background and past experiences as a farmer and worker in other economic activities. On the other hand, the typical entrepreneurs representing the fast growing enterprises are male, between 31 to 50 years old with secondary and high school educational background and previous experiences as framers and workers in the other economic activities. The study also shows that the small enterprises are less likely to survive in the urban areas than in the rural ones. The younger the owners/managers, the better the survival enterprises are found in this study. The educational background of owners/managers has inverse relation and insignificant to the survival enterprises. The past experience of the entrepreneurs has a positive and significant impact on the survival of the small enterprises. The scale of enterprises measured by total capital has a positive and significant relation to the enterprises survival.

I. Introduction

Although research on the dynamism of small and medium-size enterprises (hereafter SMEs) has a long tradition in the economic literatures, the discussions among researches on determinants of their growth and survival have not ended. In particular, this matter becomes serious, since the primary data in the sector of small and medium enterprises in most developing countries are not available. The primary sources of database and empirical study about SMEs in the Vietnamese economy are not exceptional case. Especially, its economic structure has been drastically changed since the initial introduction of renovation policy, which has been well known as '*Doi Moi*' since the late 1980s. The major concerns of this reform are assigned to the embryonic non-state industrial sector in generating employment, incomes, growth, and bringing the new dynamic trends from SMEs to the whole national economy. This study focuses on the dynamism of the small enterprises in the province of Thua Thien Hue, central part of Vietnam, during the period 1995 – 2002.

The aims of this paper are focused on the survival and growing enterprises to draw out the major determinants for their growth and survival. This study sheds light on several questions: Why some enterprises continue to survive and others have to close down their business? Which factors determine the growth of the small enterprises? Which are

the major characteristics of the enterprises dynamism?

This paper proceeds as follows. Section 2 briefly reviews the past literature on studying approaches of the SMEs sectors and theory of their survival and growth. Section 3 presents the process of data collections of the small and medium enterprises in Thua Thien Hue province. Section 4 describes the main characteristics of the survival and fast growing enterprises. Section 5 and 6 discuss the determinants of surviving and growing enterprises. The last section is conclusion and remarks.

II. Literature review

The economic literatures have plentiful of debates on the various approaches for studying small and medium scale enterprises. There are three common approaches for studying small enterprises (J. Rasmusen et al, 1992).

First, the cross-section approach considers small enterprises as a “sector” and neglects the relation to agents outside the “sector”. Second, the branch-specific studies or a sub-sector approach (Boomgard et al, 1992), this concentrates on the small enterprises’ position in relation to suppliers of inputs, distributors of output and large competitors.

This approach is widely recognized and requires further elaboration (Harris, 1990).

Third, the flexible specialization approach includes four significant aspects to the sub-sector approach. There are location variable; socio-cultural factors; local institution

factor and other factors outside the impact of economic, political and socio-cultural structures (J. Dawson, 1992).

The flexible specialization approach is now widely applied to study small and medium size enterprises not only in the developed countries but also in the developing countries.

In the framework of this study some non-economic variables, such as educational background of the entrepreneurs, age, gender, sectors, and enterprises location are also included. However, for the small enterprises, the success and failures are not always explained by the economic factors as well as the political and socio-cultural structures.

Recently, many researchers pay their attentions to the real contribution of small and medium size enterprises and their dynamism in the current market situation. There are two common trends of SMEs in most East Asian countries. Firstly, they remained their own status or become more important in the whole economy as their role is measured by their contribution of employment and value added. Secondly, the role of micro enterprises (those with less than 10 workers) has the trend to decline (Igbal, F. et al, 2002). The other characteristic of the dynamism of SMEs is their role as the absorption of the economic shocks. However, there were diverse results from the studies of the impact of Asian Crisis in 1997 on employment in small and medium size enterprises. For example, in the cases of Thailand and Indonesia, a relatively higher share of small enterprises has fewer workers after the crisis. Wiboonchutikula studied the shocks

absorption of SMEs in Thailand and concluded that employment growth among smaller enterprises rises at a faster rate than overall industrial growth (Wiboonchutikula, 2002).

On the other hand, in two cases of Korea and Malaysia, reported the opposite result, that is, a smaller share of small enterprises had fewer workers after the crisis.

The total factor productivity performance of small enterprises is also considered in terms of their dynamic transitions. Urata and Kawai studied TFP and growth by firm size for the manufacturing sector in Japan from 1966 to 1996, they concluded that smaller firms (with less than 100 employees) shows positive levels of TFP growth throughout the three decades (Kawai, H. et al, 2002). The similar relation between TFP levels and firm size is also found in the research of Aw for Taiwan enterprises. He finds that the relationship is much higher in going from micro-size firms (with less than 5 workers) to small size firm (with between 5 to 99 workers) than in going beyond to medium (100-299 workers) and large (over 300 workers) firms (Aw, 2002). In the case of China, Wang and Yao report that small enterprises have had a higher growth rate of TFP in the period 1981-95 than larger ones, but the average TFP level of small enterprises remains lower (Wang and Yao, 2002).

The innovation is another characteristic of the dynamism of small and medium enterprises. In general, it was the common understanding that large corporations were good at innovation because their large scale made it possible to have additional

investment in R&D. Indeed, there are very little statistical data on this problem in the developing countries. The measures of patent rate by firm size is one of the distinguished measures for innovation outputs, and now available for several developed countries. Audretsch studies the innovation process of small and medium enterprises in the United State, and finds that large firms have most of the innovations in such industries as aircraft and pharmaceutical products, small enterprises have a higher rate of innovation in such industries as computer soft wares, process control instruments, and plastics products. Urata and Kawai examine the innovation rates of SMEs in Japan, they report that larger firms are more likely to participate in R&D activities. Nevertheless, smaller enterprises seem to be as active as larger ones in obtaining R&D from various sources.

In the economic literatures, many researchers have paid special attentions on the growth and survival issues of small enterprises. In spite of the various studies about growth in the fifties', it has been difficult to identify current specific theoretical outlines or a list of conditioning factors (Rodriguez, A.C., et al, 2003). There are four common theories that the most economists have widely recognized for studying the growth of the firms. First, the Classical Economic Theory indirectly studied growth as a change between two situations of balance within the production theory, concentrated on the search for optimum size and on the modeling of investor behavior (Chenery, 1952 and Jorgeson,

1963). This theory proposed an inverse relation between growth and size, the smaller enterprises growing more rapidly than larger ones. The second theory of the enterprises growth is well known as the Behaviorist approach. The founders for this theory were Baumol (1959, 1962), Penrose (1962, 1995) and Marris (1964). They try to explain the continuous expansion of the large enterprises under the limits proposed by economic efficiency, by working on the principle of the existence of a separation between the function of property and control, given that growth enable executives to gain a higher degree of satisfaction for their individual objectives (Rodriguez, A.C, et al, 2003). The third theory of firm growth is the stochastic approach. This theory dated back in 1931 when Gibrat put forward his Law of Proportional Effect, in which he states that the size does not influence the growth. The growth is described as a random phenomenon, resulting from several factors that act in a multiple fashion on the initial size of the firm. Profitability, benefit, possibilities for market expansion, the executives' aversion to risk or industrial or political trends are some of the factors that interact to determine the firm growth. Due to limitations or dissatisfactions of the random approach to explain the dynamics of enterprise growth has recently given rise to a fourth approach. That is the learning theory, where new theoretical models are developed that underlines the importance of leaning for the organization and its executives, innovation and the characteristics of the activity sector. In these models, the explanatory variables such as

firm size and age, which includes the learning process of the executive and the organization, and, in any case, constitutes an approximation to the life cycle of the enterprise. The Jovanovic's Model (1982) explains the fastest growth of small firms through the introduction of a mechanism of Bayesian learning, which steadily reveals the differences in efficiency of the firm when the industry grows. The other empirical evidence seems to support these approaches, whereby growth and growth variability show an opposite relation with firm age and size (Dunne, Roberts and Samuelson, 1989; Evans, 1987a, b; Dunne and Hughes, 1994; and Farinas and Moreno, 1997; among others). From the viewpoint of these different models, non of these approaches can be interpreted with total satisfaction, since the reason why some enterprises grow and others do not remains to be solved.

III. Data collection

The origin of this study goes back to 1996 when the first baseline survey of micro and small-scale enterprises in Thua Thien Hue province was undertaken as a collaborative effort between the Free University of Amsterdam, the Netherlands and the Faculty of Economics Hue University. The project aims at supporting SMEs is the Micro and Small Scale Enterprise Development (MASCED) project, financed by the Dutch Inter-church Organization for Development Cooperation (ICCO). The final objective of

the MASCED project was concentrated on the establishment of a Center for the Promotion of Micro and Small Scale Enterprises, which will give assistance to starting and growing small enterprises in Thua Thien Hue province.

Thua Thien Hue province is located in the north central Vietnam, one of the poorest areas in the country. The province consists of eight districts and a city, approximately 150 communes, and almost 1,090,000 people. The first baseline survey conducted in 1996 of almost 914 SMEs in the whole province¹. The sample was stratified over eight districts and a city with seven sectors of economic activities (Table 1).

Table 1
Survey Sample by Sector and Geographical Location

Location	S ₁	S ₂	S ₃	S ₄	S ₅	S ₆	S ₇	Total
A Luoi	4	9		9	5	15	8	50
Hue City	28	73	32	40	42	29	23	267
Huong Thuy	8	17	24	8	6	3	1	67
Huong Tra	15	38	20	-	9	2	-	84
Nam Dong	4	14	4	12	3	4	8	49
Phong Dien	32	43	6	21	5	6	13	126
Phu Loc	21	44	7	21	54	5	5	157
Phu Vang	6	11	10	7	5	2	6	47
Quang Dien	6	11	6	12	10	2	1	48
Total	124	260	109	130	139	68	65	895

Note: S₁ – Construction; S₂ – Food processing; S₃ – Hat making; S₄ – Carpentry; S₅ - Machinery services; S₆ – Clothing; S₇ – Metal.

¹ Among total sample of 914 enterprises surveyed, dismissed 19 sample from the final analysis because they did not have enough answered, thus the total declined to 895 samples.

The survey also covered household enterprises as well as private enterprises, cooperatives, and state-owned enterprises. The respondents were the persons who own and run household enterprises, the active owners of private enterprises, the chairmen of cooperatives, and the director of the state-owned enterprises. The main topics of the questionnaires included prior information, respondent characteristics, enterprises characteristics, bookkeeping, business planning, workforce, marketing, resources and profits, taxes, assets and liabilities, contracts and environment.

In 1997 the second survey was carried out by MASCED with an assistance of Center for Development Cooperation Services (CDCS), Free University Amsterdam on about 200 enterprises that have been already interviewed in the first survey. Questionnaires were adopted those of the first survey, however this time two additional sections such as the impact analysis and demand assessment were added to meet the main purposes of the study.

Continue to examine the development of small enterprises in the province the third round survey of these enterprises was carried out in 2002. The study was a productive effort of collaboration between the Research Project of East Asian Industrialization organized under the sponsorship of JSPS, and located at the School of Economics of Nagoya University and Regional Industrialization Project at the School of Economics of Hue University. The sample of this survey was selected from the second round survey

of 241 small enterprises, which have already surveyed in 1996 and 18 enterprises additional for the first time interview, covered in eight districts and Hue city. The questionnaire was mainly adopted from that of the second round survey and added several new topics to meet the major purposes of the study.

This paper, however, focused the analysis on the survival and growing enterprises from the first round survey in 1996 to the third round survey in 2002. Based on their performance, the enterprises were classified into deceased, declining, stagnant, growing and fast growing categories. Apart from the enterprises that closed down, the surviving categories were classified on annual growth rates of value added in the period 1995-2001. The rates were -2.6 percent or more; -2.5 to $+2.5$ percent; 2.6 to 10 percent and more than 10 percent respectively for the declining, stagnant, growing and fast growing categories.

In the following sections, we concerned with only the category of fast growing and surviving enterprises. The fast growing category of enterprises is of which annual growth rate of value added in excess of 10 percent in the period of 1995-2001. The following sections of this paper contain an examination of the main characteristics and behaviors of the fast growing enterprises, and the major determinants of survival and growth of enterprises.

Table 2

Distribution of Resurveyed Enterprises by Sectors and Performance in 1995-2001

	S ₁	S ₂	S ₃	S ₄	S ₅	S ₆	S ₇	Total
Closed down	9	32	13	17	14	10	10	105
Declining	7	10	19	6	3	3	2	50
Stagnant	1	2	1	1	-	2	2	9
Growing	4	6	2	2	2	3	1	20
Fast growing	4	7	1	4	3	3	4	26
Total	25	57	36	30	21	21	19	210

Note1: The total number of resurveyed enterprises was 259, but the figures for computing value added were not available for 31 surviving units and 18 units for the first time surveyed; hence the total number come down to 210.

Note2: S₁- *Construction* sector includes floor tiles, bricks, cement blocks, roof tiles; S₂- *Food processing* includes candy making, tofu/coy bean, cassava powder, fish sauce, rice pancakes; S₃- *Hat making* includes hats, conical hat; S₄-*Carpentry* includes wood cutting, furniture making, fine art making; S₅- *Machinery services* includes rental/doing service of tractors water-pumping equipment, transportation means, paddy/root sorting machine, threshing means; S₆- *Clothing* composes of tailoring, embroidery, textile /det zeng; and S₇- *Metal* composes of forging, casting and others.

However, the data on entire set of resurveyed, surviving enterprises will be presented too, in order to have a perspective of the position of fast growing enterprises in relation to all surviving enterprises. From this study, we expect to identify some crucial determinants and characteristics of successful enterprises, in order to give suggestions for policy making at local as well as national level for further supporting development of small enterprises.

IV. Main characteristics of survival and growing enterprises

3.1 Changes in Ownership Form and Sectors

Among total number of 259 enterprises have been surveyed in 2002, 105 enterprises closed down in 2002 survey, 136 enterprises are surviving, and 18 enterprises surveyed for the first time (excluded in this analysis). The figures in Table 3 show the changes in the ownership form of the enterprises surveyed from 1996 to 2002. Among the surviving enterprises, 98 enterprises (93.3 percent) were household and 7 (6.7 percent) private enterprises in 1996. Compare to 2002, 82.9 percent of all survival enterprises retained their original ownership forms, while 17.1 percent changed.

Table 3
Changes in Ownership Form 1996 – 2002

2002	Private		Partnership		Household		Total	
	Unit	%	Unit	%	Unit	%	Unit	%
1996								
Household	8	8.2	4	4.1	86	87.8	98	100.0
Private	1	14.3	0	0.0	6	85.7	7	100.0
Total	9	8.6	4	3.8	92	87.6	105	100.0

The fast growing category had 19.2 percent of enterprises changed their original forms of ownership, 80.8 percent retained ownership forms in the period 1996-2002. Table 3 shows the dynamic transformations in private and household enterprises. The household enterprises have moved up to the private and partnership form of organization, respectively 8.2 percent and 4.1 percent, but almost 87.8 percent of them retained the original form as in 1996. However, the private enterprises moved down to the

household of 6 units, accounted for 85.7 percent, and one unit (14.3 percent) retained an old form. The change of private form of enterprises to a lower category reflects high mobility of transferring businesses during the renovation period. On the other hand, the movement to higher categories of the organizational form of enterprises recognized a progress in the managerial as well as administrative environment for small enterprises at the micro level during the survey period.

Table 4
Change in Sectors Period 1996-2002 (%)

	2002	S1	S2	S3	S4	S5	S6	S7	Average
1996									
S1		90.91	0.00	0.00	0.00	9.09	0.00	0.00	10.48
S2		0.00	95.24	0.00	4.76	0.00	0.00	0.00	20.00
S3		0.00	4.17	95.83	0.00	0.00	0.00	0.00	22.86
S4		15.38	0.00	0.00	84.62	0.00	0.00	0.00	12.38
S5		21.43	28.57	0.00	0.00	50.00	0.00	0.00	13.33
S6		9.09	0.00	0.00	0.00	0.00	90.91	0.00	10.48
S7		0.00	0.00	0.00	9.09	0.00	9.09	81.82	10.48
Total		15.24	23.81	21.90	12.38	7.62	10.48	8.57	100.00

Note: S1- Construction; S2- Food Processing; S3-Hat Making; S4-Carpentry; S5-Machinery Services; S6-Clothing; S7-Metal

During the interview period of 1996-2002, dynamic transactions in the economic activities have relatively been occurred in the small enterprises. Among the total number of surviving enterprises until 2002, 14.3 percent of them changed their economic activities, while 85.7 percent reserved their old business. A breakdown an

analysis on sector, the figures in Table 4 show different patterns of transforming an economic activities between enterprises and sectors. In 1996, the 15,38 percent of enterprises in carpentry, 21.43 percent in machinery services and 9,09 percent in clothing moved to construction material sector in 2002. Similarly, 28.57 percent of enterprises in machinery service and 4.17 percent in hat making shifted to food processing in 2002. Also 4.76 percent of enterprises in food processing and 9.09 percent in metal moved to carpentry sector; 9.09 percent of enterprises in construction materials changed to machinery services; and the same percent of enterprises in metal sector changed to clothing sector in 2002. Two sectors as hat making, and metal have no any transactions from other economic activities. As a general rule, the transactions between the economic sectors often occurred when the lower business performance sectors move to the higher business perspective sectors. This is too early to conclude however that during the period from 1996 to 2002 two sectors such as hat making and metal seem to be less attractive perceptions for the small business enterprises.

As expected, the process of transactions between the economic sectors was more dynamism in growing and fast growing categories than the declining and stagnant one. During the surveyed period, 19.23 percent of enterprises in growing category and 14.29 percent of fast growing have changed their economic activities, while only 10 percent of declining and zero percent of stagnant categories. The more dynamic transformations in

economic activity the higher growth rate seem to be happened in small enterprises.

3.2 Enterprise history

The year of establishment and firm age reflect the stability and experience of enterprises.

Especially in the case of small business enterprises, being in the same lines of activity

fosters development of useful relations with other firms, government etc., and the

benefits of entrepreneurial experience in production as well as organizational matters in

the long run. Table 5 presents the age distribution of fast growing and all surviving

enterprises by year of establishment. It is not surprising from the figures that more than

58 percent of enterprises were established in the era of renovation period after 1986. On

the other hand, close to 77 percent of fast growing enterprises were set up after 1986.

Less than 8 percent of enterprises surveyed in both all survival and fast growing were

set up after 1996.

As the second half of the table shows, about half of enterprises surviving fall in the

categories of five to ten years and eleven to fifteen years, which mean an equal amount

were very young at the time of the first survey in 1996. Related to the fast growing

enterprises, about 46 percent of them were established in the category from five to ten

years, and 23.1 percent in the next category from eleven to fifteen years. This also

means that the younger enterprises the higher economic performance in terms of annual

growth rate in value added.

Table 5
Year of establishment and firm age in 2002

Year of Establishment	Fast growing	All surviving	Age in 2002	Fast growing	All surviving
Before 1976	3.8	17.1	Less than 5 years	3.8	3.8
1976 - 1980	7.7	12.4	5 - 10 years	46.2	26.7
1981 - 1985	11.5	12.4	11 - 15 years	23.1	23.8
1986 - 1990	26.9	24.8	16 - 20 years	11.5	15.2
1991 - 1995	42.3	24.8	21 - 25 years	7.7	10.5
After 1995	7.7	8.6	More than 25 years	7.7	20.0

Looking at the age distributions of establishment by the ownership form, household enterprises constitute a significant percentage of every age category; half of partnership enterprises were set up in the period before 1976 and another half in the period from 1981 to 1990. It is very clearly that the vast majority of private enterprises were established during the era of renovation after 1986.

3.3 Entrepreneur characteristics

Table 6 shows the main characteristics of owner-managers in small enterprises in terms of gender, age, educational background and prior experiences. The data were collected from the third round survey in 2002 in Thua Thien Hue province. In term of gender, the male were more common than the female entrepreneurs in both fast growing and all

surviving enterprises. It is clear that male entrepreneurs in fast growing enterprises were higher percentage than that in surviving enterprises. The age distribution of the entrepreneurs in fast and surviving enterprises has been altered since 1996, mainly due to the additional six years in the last surveyed period and the transformation of ownership forms. On average, in 2002 the entrepreneurs in fast growing category were younger than that of surviving category, accounted for 3 years. The most populous entrepreneurs in fast growing enterprises were in thirty to fifty years old, accounted for 69.2 percent. While the largest percentage of entrepreneurs in surviving enterprises were fall in the category of fifty to sixty years old, accounted for 32.4 percent. This means that the younger the entrepreneurs the better the growing business in term of value added. Going back to the first survey in 1996, the most populous age distribution of entrepreneurs were fall in the category of less than 30 years old and from thirty to forty years old. At that time they were quite young to penetrate in the market economy, better than the older entrepreneurs.

In terms of education background, it is clear that the highest portion of entrepreneurs in fast growing category had received high school certificate, accounted for 38.5 percent. On the other hand, the largest percentage of entrepreneurs in surviving category was graduated from secondary school, accounted for 28.6 percent. About 54 percent of the entrepreneurs in surviving category had up to 9 years of education (primary and

secondary school), very few entrepreneurs had vocational training and under graduate and post graduate level.

The outcomes from this study clearly indicate that the fast growing category of entrepreneurs had higher educational background than those in all surviving category. In other words, the educational background of the entrepreneurs to some extent determines the success and development of the small enterprises.

Prior experience of the owner-mangers generally contributes to formulate the behaviors of them in doing business. The prior experience was classified as government officer, join-venture's worker; worker in state owned enterprises, farmers and other non-specified categories (Table 6). Almost half of the entrepreneurs in both categories fast growing and surviving enterprises who had former experiences in agricultural activities, accounted for 50 percent and 52.4 percent respectively. Very small portions of entrepreneurs had past experience as a worker in state and joint venture companies in both fast growing and surviving categories. On the other hand, the second common source of entrepreneurs was from the other economic activities, accounted for 42.3 and 34.3 percent in fast growing and surviving enterprises.

Relating to the working hours of the entrepreneurs before they became the owner-manager, there was no specific difference between fast growing and surviving enterprises.

On average they have worked for almost seven years in their business and other enterprises prior to their careers of managers. They have relatively enough time to acquire sufficient knowledge and experience to set up and manage their own business, especially for small enterprises.

The other interesting outcome from this study is that the majority of entrepreneurs in both fast growing and surviving enterprises started up their business career due to the push factor such as improving their living standard, accounted for 79.2 and 76.7 percent respectively.

On the whole, it appears that the typical entrepreneurs representing the fast growing enterprises were male, between 31 to 50 years old, graduated from secondary and high school, and previous employed as farmers and other economic activities. On the other hand, the typical entrepreneurs representing the surviving enterprises were male, between 41 to 60 years old with primary and secondary education, and past experience as a farmer and worker in other economic activities.

Table 6
Main characteristics of owners/managers in 2002

Characteristics	Fast growing (%)	Surviving (%)
Male	80.8	66.7
Female	19.2	33.3
Age		
Mean (years)	44	47
Less than 30 years	7.7	6.7
30 - 40 years	34.6	23.8
41 - 50 years	34.6	29.5
51 - 60 years	19.2	32.4
61 years & above	3.8	7.6
Education		
Primary school	23.1	25.7
Secondary school	30.8	28.6
High school	38.5	19.0
Intermediate vocational training	0.0	1.0
Under graduate	0.0	2.9
Postgraduate	0.0	1.0
Others	7.7	21.9
Prior experience		
Government officer	0.0	9.5
Joint-venture's worker	3.8	1.9
State-enterprise's worker	3.8	1.9
Farmer	50.0	52.4
Others	42.3	34.3
Years of working experience		
Working in this enterprises	7.0	7.7
Working in other enterprises	9.4	6.8
Working in other econ. activities	7.4	6.8

3.4 Scale of operations

This section of the study aims at the analysis on the scale of operation in terms of total assets, capital accumulations, and employment of surviving and fast growing enterprises.

On average, the value of total assets of surveyed enterprises in 1995 were slightly more than 25.6 million dong for all surviving enterprises, and a little bit higher in fast growing category accounting for 33.3 million dong. Looking at the distributions of assets in different group, the largest percentages of enterprises had the value of total assets between one to twenty five million dong for both all surviving and fast growing categories of enterprises, accounting for 68.9 percent and 76.9 percent respectively (Table 7). Comparing to surviving enterprises, the fast growing category had a smaller portion of enterprises in category less than one million total assets and larger portions in the third category, but smaller percentage of enterprises in the last category (more than 100 million dong). Since total value of assets composes of fixed and non-fixed assets, so that the effects to the growth rate of small enterprises mainly depends on the quality of their utilization. There was a vague stratification in total assets from fast growing category to surviving category of surveyed enterprises. It is necessary to examine the relation between capital accumulation in terms of value of machinery and equipment and growth of enterprises.

The capital accumulation process of small enterprises has been usually considered as one of the most important endogenous sources for their growth path. The value of machinery and equipment for all surviving enterprises was slightly more than 20 million dong while fast growing enterprises had a larger value at around 26 million dong on

average in 2001 (Table 7). On average, in 1995 the value of machinery and equipments was much smaller than that in 2001, accounting for around 14 million and 11 million respectively for fast growing and all surviving enterprises. In six years, the accumulation of capital in terms of value in machinery and equipments increased almost two folds for both surviving and fast growing enterprises.

In 1995, the distribution of machinery and equipments clearly indicated that most enterprises surveyed in Thua Thien Hue province were in the category less than one million dong for both fast growing and surviving enterprises, accounting for 56 percent and 53.4 percent respectively. The second popular group fell in the second category from one million to ten million dong for both fast growing and surviving enterprises. On the other hand, the distribution of investment on machinery and equipments for 2001 was increased and moved to the later categories. The most populous enterprises fell in category two from a million to ten million dong for both fast growing and surviving enterprises at 46.7 percent and 45.6 percent respectively. The last category more than fifty million dong changed from 4 percent in 1995 to 13.3 percent in 2001 for fast growing enterprises and from 3.9 percent to 7 percent for surviving enterprises. The percentage of enterprises moving to the last category in terms of the value of investment in machinery and equipments in 2001 was higher when compared to the whole sample of surviving enterprises, indicating that the capital accumulation has occurred at a faster

pace among fast growing enterprises.

Table 7

Distributions of total assets and capital accumulations

	Fast growing %	Surviving %
Total asset in 1995 (1000 VND)		
1000 and less	7.7	11.7
1001 - 25000	76.9	68.9
>25000 - 50000	11.5	6.8
>50000 - 75000	0.0	4.9
>75000 - 100000	0.0	1.9
More than 100000	3.8	5.8
Machinery and equipments in 1995²(1000 VND)		
1000 and less	56.0	53.4
>1000 - 10000	36.0	32.0
>10000 - 20000	4.0	5.8
>20000 - 50000	0.0	4.9
More than 50000	4.0	3.9
Machinery and equipments in 2001 (1000 VND)		
1000 and less	20.0	24.6
>1000 - 10000	46.7	45.6
>10000 - 20000	6.7	14.0
>20000 - 50000	13.3	8.8
More than 50000	13.3	7.0

Concerning to the investment and capital accumulation in small enterprises, source of finance usually plays an important role for their expansion purpose in development. More than half of the fast growing and surviving enterprises exclusively financed their investment in machinery and equipments with their own saving/resources (Table 8).

The most popular resource for financing received from the government bank recorded at

² The money value of machinery and equipment in 1995 has been inflated to the price of 2001.

58.3 percent and 53.8 percent respectively for fast growing and surviving enterprises.

The second large source of financing was the borrowing from Friends and Family, and it accounted for 41.7 percent of fast growing enterprises. Following sources were from Farmer Association, Women Association, Local Authority and Private moneylenders.

There were no specific difference between fast growing and surviving enterprises in terms of resources for financing. However, the data might underestimate the role of informal resources of finance such as private moneylenders, and others referred to the so-called “curb market”, which were popular resources in the province surveyed in particular.

The development trend of small enterprises normally relates closely to the expansion of labor force on one hand and also accompanied with the increase of investment on machinery and other assets on the other hand.

Table 8

Sources of finance on machinery and equipments in 2001

	Fast growing %	Surviving %
Own resources	53.8	62.9
Borrowing/have loan	46.2	37.1
Banks	58.3	53.8
Women Association	16.7	35.9
Local Authority	8.3	5.2
Farmer Association	25.0	23.1
Friends and family	41.7	30.8
Private moneylenders	8.3	5.1

The size of enterprises in terms of total workforce slightly increased for both fast growing and surviving enterprises during the period of 1995 – 2001. Table 9 also presents the percentage of the fast growing as well as a cohort of surviving enterprises in terms of total workforce in 1995 and 2001. Generally speaking, the expansion of small enterprises is usually accompanied with an increase of waged or hired labor rather than an increase of non-paid family labor. In case of this study, the situation has been similar. The average number of hired workers increased from 1.12 persons to 2.65 persons in the period from 1995 to 2001 for fast growing enterprises. And increased from 1.31 persons to 1.69 persons for all surviving enterprises in the same period. However, average total workforce per enterprises surveyed has not changed during the two surveys, almost 3.5 persons for all cohort of surviving category. For fast growing enterprises the number of workforce has been increased from 3.1 persons to 4.5 persons in the period of six years from 1995 to 2001.

The majority of enterprises surveyed in both fast growing and surviving were classified in very tiny enterprise (from 2 to 5 persons), and accounted for 61.5 percent and 67.6 percent respectively in 1995, and correspondently for 76.9 percent and 61.9 percent in 2001. The distributions of the enterprises by workforce for surviving enterprises were almost unchangeable from 1995 to 2001. On the other hand, the distribution of enterprises by scale in terms of employment slightly changed in fast growing enterprises.

The trend of fast growing enterprises moved to the later categories. In 1995, at 23.1 percent of fast growing enterprises fell in the category of one person, declined to 3.8 percent in 2001. Next category from two to five has been increased from 61.5 percent in 1995 to 76.9 percent in 2001. In 1995 the category more than 10 persons was zero percent and moved to 7.7 percent in 2001 in fast growing enterprises. It is necessary to mention that the small enterprises increased their scale in terms of employment for fast growing category, but this was unchanged at all cohort of surviving enterprises. Further, the percentage of wage employment is an important indicator of the contribution of small business to employment generation.

Table 9
Distribution of workforce in 1995 – 2001

	Fast growing %	Surviving %
Workforces in 1995		
1	23.1	17.1
2 - 5	61.5	67.6
6 - 10	15.4	10.5
>10	0.0	4.8
Mean (person)	3.1	3.6
Workforce in 2001		
1	3.8	22.9
2 - 5	76.9	61.9
6 - 10	11.5	11.4
>10	7.7	3.8
Mean (person)	4.5	3.5

3.5 Marketing aspects of fast growing and surviving enterprises

3.5.1 Forward linkages

In term of forward linkage, it refers to the destination of main product sales by category and location of customers. The customers in the first survey in 1996 were classified into such categories as end-users, retailer, middlemen, wholesaler, manufacturing companies, and state owned enterprises. However, the classification of the customers in the third survey was a little bit changed like domestic direct sales, direct export, domestic agency, export agency and others. The respondents have been asked to which channels the main products were sold. Table 10 shows the changes of marketing channels in both fast growing and surviving enterprises in the period of 1995 to 2001. In general, the distribution of the marketing channels in small business enterprises has not much improved. In fact, more than two third of their products were directly sold to customers in both fast growing and surviving enterprises in the period of 1995 to 2001. For example, in 1995 at 76 percent and 69.4 percent of total sales in fast growing and surviving enterprises respectively were sold to the end users (customers). Similarly, in 2001 at 72.9 percent and 68.5 percent of total sales for fast growing and surviving enterprises were sold in domestic direct channel. The main channels for both fast growing and surviving enterprises in 1995 were end users, private retail company, private middlemen and wholesaler. However, the most important channel was the end

user. In 2001, the main channels of sales for both fast growing and surviving enterprises were domestic direct, domestic agency and exports.

Table 10
Forward linkages of fast growing and surviving enterprises in 1995 and 2001

	Fast growing %	Surviving %
Destinations of sales in 1995		
End user	76.0	69.4
Retail	9.2	12.2
Middlemen	9.8	8.5
Wholesaler	3.5	7.8
Manufacturing company	0.0	0.6
State owned company	0.4	0.4
Others	1.2	1.1
Destinations of sales in 2001		
Domestic direct sales	72.9	68.5
Direct export	3.1	1.3
Domestic agency	22.3	19.6
Export agency	4.6	3.5
Others	4.8	11.9

The imperfectly developed markets, small enterprises are mostly in a good position to cater to the individualized and localized demand of individual consumers through their flexibility and proximity to the market. It might be in a good position for small business enterprises in a short run. However, they will lose their position in a competitive market in a long run. The linkages to the international market were very limited for small enterprises, compared to that of large enterprises. The main reasons for that are found in the capacities of the small enterprises in terms of production management, marketing

development, and personnel management.

3.5.2 Backward linkages

The backward linkages in this section address the position of small enterprises in terms of procurement inputs of different suppliers. Table 11 shows the procurement of raw material of the enterprises surveyed by sectors from various sources in 2001. In surviving enterprises, almost one third of raw materials (34%) purchased from the producers, slightly more than half (55%) from the merchants, 5.3 percent from the government companies, and 5.6 percent from the other unspecified sources. On the other hand, the fast growing category incurred a similar percentage of those sources that have been procured by the surviving enterprises. The majority of the surviving as well as fast growing enterprises established personal relations with the suppliers on the market-based mechanisms to procure raw material. Half of the fast growing enterprises did not purchased any raw materials from the producers. On the other side, 27.3 percent of them purchased exclusively all of raw materials from the producers. The remained part of fast growing enterprises procured somewhat percentages from 1 to 74 percent of raw materials. Compared to fast growing enterprises, the surviving enterprises had a similar distribution of getting raw materials from the producers. For instance, 52 percent of surviving enterprises did not purchase absolutely any percentage of raw materials

from the producers.

Related to the distribution of raw material supply from the merchants, about 45.5 percent of the fast growing and 36.7 percent of surviving enterprises did not purchase any percentages of raw materials from the merchants. At the other spectrum, about 36.4 percent in the fast growing and 42.9 percent in the surviving enterprises exclusively purchased raw materials from the merchants. The remained portion of the fast growing enterprises of 18.2 percent purchased about fifty to ninety nine percent of raw materials from the merchants. The other sources to supply raw materials like the government and other unspecific suppliers were very limited to both fast growing and surviving enterprises.

Table 11
Procurement of raw materials in 2001 (%)

	0	1-24	25-49	50-74	75-99	100	Average
<i>a. Raw materials from producers</i>							
Fast growing	50.0	9.1	4.5	9.1	-	27.3	33.9
Surviving	52.0	7.1	7.1	7.1	1.0	25.5	34.0
<i>b. Raw materials from merchants</i>							
Fast growing	45.5	-	-	9.1	9.1	36.4	50.2
Surviving	36.7	1.0	4.1	10.2	5.1	42.9	55.1
<i>c. Raw materials from government</i>							
Fast growing	90.9	-	-	-	-	9.1	9.1
Surviving	93.9	-	1.0	-	1.0	4.1	5.3
<i>d. Raw materials from others</i>							
Fast growing	90.9	-	-	4.5	-	4.5	6.8
Surviving	90.8	1.0	3.1	1.0	1.0	3.1	5.6

V. Which enterprises survived?

In this section, we turn our attention to the determinants of survival enterprises by adopting the multivariate analysis. To answer the question: Given that those enterprises operated in 1996, what are the factors that help some enterprises to survive until 2002?

The logistic model, where the binary dependent variable is set equal to 1 if the enterprise survived from 1996 to 2002 was adopted. Several researchers, such as McPherson (1995), Storey and Wynarczyk (1996), Littunen (2000), Vijiverberg and Houghton (2001), have conducted the empirical studies on firm survival. There is a set of model, which utilizes the characteristics of the enterprises surveyed in 1996 and still survived. Table 12 shows the estimated results of the multivariate analysis.

The micro and small enterprises were less likely to survive in the urban, which is located in Hue City, than the rural areas. At first sight this is surprising, because Hue City is the place of better economic as well as social conditions and most economically dynamic part of the province. Presumably the area is so dynamic that it is pulling people to wage employment or shifting to the other economic activities, leaving less of them to run the small and household enterprises. On the other hand, small enterprises were more likely to survive in the rural areas where there are less pressures of competition, abundant with local raw materials and cheap labors.

Related to the entrepreneur's characteristics, it is expected that male owners/managers were more likely correlated to survival enterprises than female. Enterprises run by young entrepreneurs (less than 26 years old) were also more likely to survive than those of upper middle and older age. However, it is surprising that the educational level of the owners/managers did not influence the survival rate of the enterprises. While, their working experiences had positively related to the survival rate of the enterprises.

Table12
Enterprises Survival: A Logistic Model

	Coefficient	t-stat
Intercept	-5.343	6.010
<i>Region:</i>		
Urban	-1.086	6.053
<i>Entrepreneur's characteristics*:</i>		
Male	0.879	2.872
Age less than 26	1.161	2.141
Age between 26 and 35	0.530	1.000
Age between 36 and 45	-0.100	0.046
Age between 46 and 55	-1.844	5.229
Year of schooling	-0.042	0.733
Year of experiences	0.080	9.389
<i>Sectors**:</i>		
Construction	-0.377	0.216
Food processing	-0.266	0.138
Hat making	1.633	3.257
Carpentry	-1.037	2.112
Machinery services	-0.977	1.763
Clothing	0.109	0.016
<i>Scale operation:</i>		
Labor	-0.047	1.819
Log (Capital +1)	0.360	4.472
Log (Revenue+1)	0.159	0.427

Note: * Group of age over 55 years was excluded category

** Metal sector was excluded category

The sized effect of the enterprises has been considered as an important factor to survival rate by many studies such as Goreski (1995), Agarward and Audretshch (2001), and Vijverberg (2001). Larger enterprises were measured by the size of total capital, were more likely to be in operation until 2002. However, the enterprises measured by the size

of total workforce, were less likely to survive in 2002. It might be a lesson here that enterprises have to grow to survive.

VI. Which enterprises grow?

Now we turn to address the next question, among the survival cohort of enterprises until 2002, which enterprises are growing? In other words, which factors determine the growth rate of the small business in the province of Thua Thien Hue? In the previous sections, the growth of the enterprises has been studied by bivariate correlation between their growth and major characteristics of the entrepreneurs. In order to distinguish the effect of each of factors simultaneously we adopt multivariate analysis.

The growth of small enterprise is defined as the percentage change in its value added. It is considered to be an important indicator for measuring growth rate of small enterprises.

Other researchers, on the other hand, argued that the changes of sales were a significant indicator for growth rate of small enterprises. This is in conformity with the studies by Cuba, Decenzo and Anish (1983), Khan and Rocha (1982), Ibrahim and Goodwin (1986).³

As mentioned in the previous sections, the value added reveals to be the most appropriate indicator for the growth of the small enterprises⁴. The value added (net

³ Michael A. McPerson, 1994 have used labor as a key indicator for growth of small enterprises.

⁴ It could be better to use net profit for measuring growth of enterprises, but for small business enterprises

revenue) defined as total revenue minus all cost except labor costs of owners and family member that were working without payments. We estimate an extended Cobb Douglass type production function to which we add several variables, which were found to be correlation to the growth rate of the enterprises (Vijverberg and Haughton 2001). This study will attempt to analyze the surviving enterprises that dated back from the first round survey in 1996 to the latest survey in 2002. It is hypothesized that the growth of an enterprise is significantly influenced by the following set of variables: enterprise size (+); age of enterprise (+/-); education level (+) and age of entrepreneurs (+/_); gender of owners/managers (+); size of household (+), specific type of industry (+/_); and location of the enterprises (+). The size of enterprises expected to be positive to their growth. The education level of entrepreneurs may expect to have a positive to the growth of enterprises. The different age groups are included in the model because it may be that the older entrepreneurs with long experience in their enterprises could make enterprises growth faster than younger ones. However, in the new market economy in Vietnam, the young owners/managers may actively run their business better than the older pioneers. Therefore, it expected to have positive or negative effect. Conversely, as revealed by a study on small-manufacturing firms in India it can also be noted that younger firms

it was impossible to calculate correctly the labor costs of family members and owners who also work in their business.

growth faster as a result of more dynamic management. Hence, the expected coefficient of this variable can be either positive or negative. The male entrepreneurs expected to positive relation with the enterprises growth. The size of household expected to be positive correlation to growth, so that variable HSIZE would be positive sign. In addition to the above, growth of specific enterprise may be attribute partially to the specific nature of the industry in which they operate. The region variable could be expected to positive correlation to growth, because we divided it into two groups, one is urban the other is rural, and the urban area had a dummy value of 1. In order to capture any such industry specific nature of growth, seven intercept dummy variables are used for the seven sectors to which the sample enterprises belong.

Table 13 shows the results of estimating of an ordinary least square regression on surviving enterprises from 1995 to 2002. However, this does not represent the experience of all enterprises, since about half of them that existed in 1996 were no longer in existence in 2002.

The regression model has R^2 – values at around 0.328. This means that about one third of the variation in the enterprise growth in explained by the model. Because the dependent variable in terms of the changes in the value added in 1995 and 2001, refer to their difference between two moments in time, the noise that occurred in the value added of the enterprise models is essentially multiplied. Moreover, the total sample in

the first survey was 895 enterprises, reduces to 241 in the third survey, and further declines to 93 samples in the current model. This reduces the precision of the parameter estimates. All this suggests that the more precise estimate of the determinant of the enterprise growth the bigger datasets of the surveyed samples are demanded.

Despite of the low level of statistical significant of the most estimates, there are several interesting conclusions. First, the size of the enterprise in terms of capital and labor has different effects on the enterprise growth. Total capital has a positive effect on the enterprise growth, but a very limited. On the other hand total labor has a negative effect on the growth rate of the enterprises.⁵ Second, the youngest enterprises (less than 7 years) seem to growth the fastest, as mentioned in the previous section. Third, the highest growth rates are in metal, clothing, and food process and construction sectors. Fourth, the educational backgrounds of the owners/managers and middle age of the owners/managers have positive influence on the enterprise growth rate. Further, the male entrepreneurs and the household size also contribute to the growth of the small enterprises. Fifth, the enterprises located in the urban areas seem to growth faster than those in rural areas.

⁵The mean growth rates of surviving enterprises are not independent of their sizes but tend to decline with size and also with the unit's age (Caves, 1998). The mean growth rate tends to decline significantly with size in 89 percent of the individual industries that was found in the study of Evans (1987a).

Table 13**Determinants of growth rate in the small enterprise value added**

	Parameter estimate	t-stat
<i>Dependent variable: "Log (Value added 2001+1) – Log (Value added 1995 +1)</i>		
Intercept	-0.769	-1.197
<i>Enterprise size</i>		
Log (Capital)	0.023	0.385
Log (Labor)	-0.256	-0.811
<i>Enterprise characteristics</i>		
Enterprise age less than 7 years	0.155	0.601
Enterprise age between 16 and 25 years	-0.112	-0.608
Enterprise age more than 25 years	-0.191	-0.840
Construction	0.585	1.796
Food processing	0.454	1.638
Carpentry	0.320	0.952
Machinery services	0.217	0.647
Clothing	0.719	2.062
Metal	0.716	2.019
<i>Entrepreneurs characteristics</i>		
Log (Education years +1)	0.166	0.634
Age less than 26	-0.660	-1.353
Age between 26 and 35	0.191	0.827
Age between 36 and 45	-0.041	-0.224
Age over 55	0.058	0.171
Gender owner	0.151	0.716
Log (Household size)	0.024	0.540
Region	0.293	1.465
R-squared	0.328	
F-stat	1.900	
Number of observations	93	

VII. Concluding remarks

This paper focuses the analysis on the dynamism of micro and small enterprises in the province of Thua Thien Hue. It finds that the small enterprises were largely changed between the two surveys in the period of 1996 and 2002. On average around 43.5 per cent of enterprises has been closed down. However, the patterns of dynamism clearly differed between different sectors and enterprises. It was interesting to emphasize the two general trends of dynamism of unsuccessful enterprises, one is to the services sector and another is to agricultural sector. In addition, their dynamism has also presented in the transformations of the ownership forms, economic sectors, major characteristics of the owners/managers, scale of operation and their linkages to the markets as well as inter-firm linkages.

The study finds that the small enterprises are less likely to survive in the urban areas than in the rural ones. The educational background of the owners/managers has an inverse relation to the survival, but their past experience has a positive impact to the survival. The younger owners/managers are more likely to manage their enterprises to survive than the older ones. The scale of enterprises measured by total capital has a positive relation to the enterprises survival.

However, most of the estimates for growing enterprises are not statistically significant.

Therefore, we could not conclude which determinants are important for growing enterprises in Thua Thien Hue province. It also suggests having a larger survey and in-depth studying to have the precise conclusions.

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