

THE COMPETITIVENESS OF SMALL AND MEDIUM AGRIBUSINESS FIRMS IN EAST JAVA INDONESIA

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Received : 23 October 2014; Accepted : 27 October 2014 ; Published : 31 October 2014

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Abstract- *This study focused on the the competitiveness of small and medium agribusiness firms in East Java and specifically refers to the sources of competitiveness, scale advantages, handicaps imposed on small firms by their size, avoiding the disadvantages of small size, constraints on growth, sources of crises, and the resurgence of small firms. This study can be classified as applied and explanatory research. This study was conducted using both primary and secondary data. In collecting primary data, observations and interviews were the main techniques. A questionnaire was sent to the managers and top managers of 41 agribusiness firms in East Java. Information was obtained from 30 firms. The results indicate that The small and medium enterprises are less vertically integrated than large firms. One obvious explanation for this difference is that large firms are more likely to be able to fully utilize an optimum size, or at least a larger-scale facility for performing a process or providing a service which could be bought out. Three sources of competitiveness stood out: 'the channels of distribution used', 'product development' and 'the quality of the services provided for customers'. The fourth most important source of competitiveness was efficiency of production, and this was closely followed by marketing expertise.*

Keywords: Competitiveness, vertically integrated, channel of distribution, product development, quality of service, efficiency of production, marketing expertise

I. INTRODUCTION

There are four aspects underlying competitiveness. First, competitiveness should be long-term orientated, and a company should not concentrate only on short-term scenario. Competitiveness entails focusing on long-term performance rather than the possession of a temporary competitive advantage. Ramasamy (1995) has defined competitiveness as the whole effort made by a company with the aim of developing market share, profit and growth, and staying competitive for a long duration.

Second, competitiveness should be controllable, which refers to the various resources and capabilities of a firm rather than simply the temporary favorable external conditions leading to superior performance. This situation relates to company background and performance. People are accustomed to the above mentioned perspective which is particularly popular among the assessments of the competitiveness of resource-based firms (Barney, 1991; Grant, 1991; Prahalad and Hamel, 1990; Ulrich, 1993). Ghemawat and Porter (1990, 1980, 1985) claimed that competitiveness can also be viewed from a different point of view. Competitiveness is also a relative concept in that it explains the way in which a company competes with others. Feurer and Chaharbaghi (1994) suggest a model of competitive position mapping, while Oral (1986) has focused on a firm's industrial competitiveness. The last characteristic is concerned with its dynamic nature, which involves the dynamic transformation of competitive potential into actual

outcomes. This feature, which is in line with the framework outlined by Buckley et al. (1988), refers to constant changes in companies that are performance-based, enabling such firms to reach goals and profit by the results.

II. METHOD

This study can be classified as applied and explanatory research (Kumar, 1996). Applied research refers to the fact that this study collected information about various aspects of phenomena so that its result can be used for policy formulation. This study is also categorized as explanatory research because its main objective is to explain the relationship between several variables related to the issues of the competitiveness of agribusiness firms. Moreover, since this research focuses on a particular phenomenon occurring in a certain area, especially in East Java, this research can be said to be a case study.

This study was conducted using both primary and secondary data. In collecting primary data, observations and interviews were the main techniques. Since this study was intended to gain in-depth information from respondents, an unstructured interview technique was used in collecting the data (Kumar, 1996: 109). Data obtained using both techniques were focused on the behavior, responses and opinions of respondents toward the competitiveness. To gain accurate data, observations and interviews in this study

involved top managers and managers from thirty private companies which have export product.

A questionnaire was sent to the managers and top managers of 41 agribusiness firms in East Java. Information was obtained from 30 firms, a crude response rate of 73 percent. In the event 11 firms declined to complete the questionnaire because they were part of larger companies; these firms were excluded. The review of literature guided the choice of the most appropriate instruments to measure variables of interest in this study. Pratten's (1991) instrument was chosen to measure the competitiveness of small firms.

III. FINDINGS AND ANALYSIS

1. Source of Competitiveness and Scale Advantage of Small and Medium Agribusiness Enterprises in East Java

The responses managers and top managers of small and medium agribusiness enterprises in East Java provided to the questions about the products made by their firms, the geographic distribution of their sales, and the competition they confronted, were very useful for this study. One of the notable results of the study was the degree to which the small and medium enterprises in the agribusiness industries made products for which there were very few firms anywhere making close substitutes. The small and medium enterprises are less vertically integrated than large firms. One obvious explanation for this difference is that large firms are more likely to be able to fully utilize an optimum size, or at least a larger-scale facility for performing a process or providing a service which could be bought out.

The reasons for the questions concerning competitiveness were to obtain information about the sources of competitiveness. Managers and top managers of small and medium agribusiness enterprises in East Java were asked whether 11 sources of competitiveness were advantageous for their firms and to rank them in order of importance; their answers are summarized in Table 1.

Table 1. Sources of competitiveness

	Is this a source of advantage for your firm?		Number of firms ranking source of competitiveness as	
	Yes	No	Most important source	2 nd or 3 rd most important source
1. Product development	30	0	8	4
2. Scale of production of the products made at your business	17	13	0	1
3. Scale of your firms	16	14	0	2
4. Efficiency of production	19	11	3	2
5. Low overhead costs	4	26	0	1
6. Marketing expertise	21	9	1	4
7. The channels of distribution which your firm uses	30	0	11	5
8. The quality of the services provided for customers	30	0	7	3
9. Low wage and salary rates	25	5	0	5
10. Technology received from developed at a university or polytechnic department	3	27	0	0
11. The proximity of local suppliers	8	22	0	3

Managers and top managers were given an opportunity to specify other sources of competitiveness apart from the 11 listed. The responses indicated whether each source of advantage applied to a company and how it ranked, and this information was analyzed to identify overall importance of each source of competitiveness for the sample companies as a whole.

Three sources of competitiveness stood out: 'the channels of distribution used', 'product development' and 'the quality of the services provided for customers'. The principal sources of competitiveness for the sample firms were the distinctiveness or quality of their products, and the channels of distribution. Respondents considered that they have an advantage through channels distribution, or that they have developed superior products for their niche markets.

The fourth most important source of competitiveness was efficiency of production, and this was closely followed by marketing expertise. Efficiency of production suggests cost and price competitiveness, and if efficiency of production is a source of competitiveness, this implies that a firm has a cost advantage. The fact that the channels of distribution, product development, and service to customers score higher than the efficiency of production implies that many of the sample firms do not compete primarily on price.

Efficiency of production is naturally more important for firms which do not develop product. High levels of efficiency can be achieved in various ways, including careful management to avoid waste, downtime and unnecessary expense, the use of sophisticated manufacturing systems, good labor relations and assembling a well-trained, experienced and motivated labor force.

Turning to the sources of competitiveness which were not as important, respondents stated that for the most part technology received from, or developed at a university or polytechnic was not an important source of competitiveness for most firms. Low wage and salary rates were a source of advantage for five out of the 30 firms answering the question. Some of these positive answers demonstrate that wages paid by Indonesia firms were lower than those paid by their overseas competitors. However, these answers may understate the importance of low wages and salaries as a source of advantage for small firms, since managers could be unwilling to acknowledge low wages and salaries as an important source of competitiveness.

Two questions about scale and competitiveness were included. Managers were asked if the scale of their firms and the scale of production of the products made by their firms were sources of competitiveness. A firm may be small in size but manufacture its products on a larger scale than its competitors, which could include large companies. Table 2 summarizes the answers to another question about scale advantage. Many of the 22 firms which considered the scale of their firm to be an advantage believed their small size was a source of advantage. More firms (28 out of 30) considered the scale of production of the products they made was a source of advantage.

Table 2. Scale advantage for products

	Number of firms
Own firm has scale advantage	22
Own firm and main competitor have scale advantage	6
Main or second competitor has scale advantage	2

Managers of firms whose principal competitors had a scale advantage were asked how they compensated for this. The firms which answered this question gave the quality of

development and/ or the quality of their products. The most common answer was that the firms specialized. This specialization included making distinctive products for a niche market, making a similar product but selling to a niche market, and making a broader range of products. Another common answer was that a higher quality of service includes making 'a more intelligent response' and a quicker response to customers' requirements. A source of competitiveness which was not pursued was the retention of key and skilled staff. Labor turnover and transfer within a larger firm can cause severe disruption and loss of experience and knowledge. At least the proprietors of small firms usually stay with their firms and, as they are often key members of the team, this gives small firms an advantage.

2. Handicaps Imposed on Small and Medium Agribusiness Enterprises in East Java By Their Size

Most of the sample firms, 28 out of 30, considered that they were competing with larger firms, but the nature of the competition varied. One cause of difference in the directness and intensity of competition was the extent of product differentiation. At the meetings convened to complete the questionnaire the questions about handicaps relative to larger firms were introduced, and managers and top managers were asked what they considered to be their main source of handicap. Managers believe that the main disadvantages for small firms are in sales and marketing, and it was noted that large companies have the benefits of greater recognition, credibility and stability; when placing large and important contracts, large supplies are seen to provide greater reliability.

Table 3. Handicaps imposed on firms by their size compared to larger firms

	Number of firms		
	Yes	No	N.A.*
A. Does your firm compete with larger firms in product markets?	28	2	0
B. Is your firm at a disadvantage compared to larger firms with respect to the following sources of competitiveness:			
1. Research and development			
(1) the larger firms innovate more	5	23	2
(2) the larger firms use larger teams of R&D personnel to develop competing product ranges	17	11	2
(3) the larger firms have access to more experts to advise on R&D problems	19	4	7
(4) the larger firms have more sophisticated equipment for supporting R&D	14	8	8
(5) the larger firms do not innovate more but are more successful in the commercialization of new products	7	19	4
2. Production			
(1) the larger firms have more capital intensive production facilities	26	2	2
(2) the larger firms have access to more experts on aspects of manufacturing	23	4	3
3. Marketing			
(1) the larger firms have established names and good will	13	13	4
(2) the larger firms can spread the following costs over larger output:			
(i) Brand or product advertising	7	14	9
(ii) General advertising	8	12	10
(iii) Sales staff in Indonesia	22	5	3
(iv) Sales and marketing organizations overseas	10	16	4
(v) Presentation at trade fairs	17	3	10
4. Distribution			
The larger firms have an advantage for distributions costs	18	12	0

* Not important or not applicable in our trade.

In part this is a matter of having the resources to deal with problems which may occur. A large company can also

develop an image of credibility and can produce more in-house experts when tendering for contracts to convince buyers of its experience and knowledge. In part, credibility is also a function of age; small firms which have established a reputation for reliability and/or have a large share of a niche market may establish and benefit from their own credibility. Many of the companies in the sample were new as well as small, so they had a double credibility handicap, as customers may not be sure that new companies will keep their staff and survive.

Handicaps for selling and marketing are not limited to problems of credibility. Many of the small firms were not selling products which were critical for their customers' viability. Table 3 summarizes the answers to questions about handicaps – all the question about selling and marketing handicaps score as sources of handicap for many small firms. If small firms have a weakness it is in selling and marketing overseas. Some small firms had developed products, but had no means of testing markets outside Indonesia. Others which had developed some export markets considered they were at a disadvantage compared to larger firms which had more comprehensive overseas selling and marketing organizations. Half the sample firms had significant export and the main method of selling to markets overseas is through agents. The reason firms use agents instead of setting up subsidiaries or making direct sales overseas is that agents are rewarded according to their sales and this reduces risk. An agency agreement usually involves lower initial costs for selling to an overseas market. The agent is also likely to know the market and have useful contacts. Some large companies act as agents and can provide credibility for new firms entering a market.

In part, the stress laid on the handicaps for selling and marketing by the managers of small firms reflects other difficulties. A larger-scale producer with lower development and production costs per unit may use this cost advantage to invest in overseas marketing in order to develop export markets. Seen from another perspective, the central marketing and overseas sales organizations of large companies require high overheads which can only be justified by a large turnover. Another danger is that managers of factories lose control of the sales and hence of the output of the factories.

Small companies develop products but do virtually no research; they apply existing technology and improve existing products. Although larger competitors were seen to have advantages for R&D, very few of the sample companies stood in wonder of their R & D resources. This must in part reflect the areas in which the small firms operate - they avoid areas where large R & D resources are required. But that is only part of the explanation because many of the small companies were in existence because of the high quality of their development work. The answers to questions about the sources of competitiveness, mentioned above, demonstrate that development is the principal source of competitive advantage for many small firms and many of the small companies believed their products were superior to those of large competitors and/or that they had an advantage for applying new technology.

It is possible that the managers of small firms may have a biased view of the innovativeness of larger firms; only seven out of 30 managers believed that their larger competitors

were more innovative. The large firms were thought to have larger teams working on development, but the managers of small firms were not bothered by this and there was considerable skepticism of the productiveness of large R & D teams. A small team of two or three development staff was all that was required to devise new products of the type made by many of the firms.

In many cases the managers did not see a need for expert advice, or they could get advice from suppliers, from customers or from elsewhere. Their story for equipment used for R & D was similar; managers of most small firms did not consider themselves at a significant disadvantage in this regard. Although the large firms do not innovate more, the surveyed firms considered that the large enterprises were more successful in the commercializing of new products, but that reflected advantages for selling and marketing rather than R & D.

Some sample firms had reduced their cost and risks of development by developing products for specific customers who contributed to the costs; and in a few cases potential customers contributed to development in return for preferential treatment if the development succeeded. In certain cases overseas agents provided sample firms with pre-production orders in advance of development. It would seem, then, that a major handicap for small firms undertaking R & D is for the need to spread R & D expenditure. Where the larger firms have much greater sales of products to which R & D expenditure relates, their development costs can be spread over the larger output, so reducing costs per unit.

3. Avoiding the Disadvantages of Small and Medium Agribusiness Enterprises in East Java

Four separate sets of relationship through which small firms might prevent the disadvantages associated with their scale of operation are examined. The first sets of relationships considered are those with large companies. These relationships may take many forms: for instance, small firms may act as agents or sub-contractors for one or a few large firms. A large firm may sub-contract work for which there are limited economies of scale if performed within its other operations.

The second set of relationships consists of the agglomeration effects of a number of firms making similar products and operating in one locality. Specialized suppliers of components and/or services emerge to supply the firms, and businesses in the trade may be able to recruit experienced and knowledgeable employees, or get advice, which would be more difficult for a small firm to obtain when operating in isolation.

The third set of relationships examined is made up of those between the sample of small firms which were surveyed and universities and polytechnics. These institutions may limit the possible disadvantages of small firms for conducting R & D; the small firms may be able to get information concerning technical developments from the staff of universities or use the facilities of universities, such as libraries. The final group of relationships consists of those with the government and local authorities. If the government or local authorities provide subsidies or support for small firms this offsets their handicap.

The rough conclusion is that these relationships are not critically important for most firms – the small firms are not

dependent upon, nor owe their existence to, one or a few large companies, and similar conclusions apply to the other relationships. Sixty-three per cent of the firms in the sample of firms included in this general survey (19 out of 30) sold more than 30 per cent of their output to a single large firm, and a further nine firms sold between 10 and 30 per cent to one large company. In some cases, large companies (which were also customers) collaborated with sample firms to assist them to achieve a high standard of quality and to develop products.

Table 4. Large and giant companies as customer for sample firms

One giant company takes more than 30% of output of sample		One large company takes more than 10% and <30% of output of sample		No large or giant company takes more than 10% of output of sample firms
		(number of firms)		
12		4		2

Very few sample firms took a large quantity of their supplies from one large firms and nor were they tied to that supplier. The important point is that for most firms there were alternative suppliers. The purchases made by small firms, and the extent of vertical integration, are perhaps of more interest than the ties with suppliers. Small firms usually avoid the disadvantages of small scale purchases by buying out. Managers were asked if their firms past or present relationships with large companies were important for their development, and it was found that the relationships reported were important for perhaps ten per cent of the firms.

Approximately half the managers of the small firms had experience of working for large companies before setting up or joining the small firms. The focus of the questions about relationships with large companies was to examine whether these relationships enabled the sample firms to avoid the disadvantages associated with their scale of production.

Table 5. the Importance of location within ten miles of firms producing similar products or providing services

	Number of firms	
	Yes	No
1. The location of firms providing similar products or providing services is important for the sample firm's competitiveness	11	19
2. The staff of local firms in a similar line of business provide ideas for solving R & D problems or for new products or service	3	27
3. Local firms are a source of trained and experienced employees	7	23
4. Local suppliers provide the following operation or service of high quality		
1. machining operations	3	27
2. software	1	29
3. development service	0	30
4. testing facilities	1	29
5. marketing and other commercial services	6	24
6. other	0	30

Most of the sample firms were located in East Java, but little more than 10 per cent of them sold most of their output in that region. Although local markets are important, most of the sample firms are not tied to East Java to be near to their

markets. Considering the question of the proximity of firms producing similar products or services, thirty six per cent of firms (11 out of 30) stated that the proximity of firms producing similar products or services was important for their competitiveness. The answers to the questions by industry group are shown in the first row of table 5. For firms located near a university, that institution could be an important part of any agglomeration effects. The rather low rating for relationships with universities and polytechnics as a source of competitiveness was noted. Nevertheless, five out of 30 firms had experienced contacts with a university or polytechnic department. The answers managers gave to questions about these relationships are summarized in Table 6.

Table 6. Relationships with universities and polytechnics

	Number of firms	
	Yes	No
1. Has your firms had contacts with any departments or staff of universities or polytechnics during the past five years?	5	25
2. Please indicate the nature of these contacts :		
1. they provided ideas for new products	1	29
2. they provided advice for R & D problems	1	29
3. they provided advice for resolving production problems	2	28
4. they provided advice on marketing	1	29
5. they provided other advice or assistance	1	29

The relationships between the sample firms and Airlangga University, ITS, the leading university in East Java, appeared surprisingly weak. Indeed, many of the relationships with institutions were more widespread. It is apparent that the links between established firms and Airlangga University, ITS are limited, although they are very important for a few firms. In terms of frequency of assistance, the main forms of help obtained from universities and polytechnics concerned the testing of products, advice on R & D problems, help with product development, and certification of products. In their role as customers, staff at universities and polytechnics made suggestions which guided product improvements and innovations. Some managers complained that university staff lacked a commercial approach, and this usually implied that they were too slow to respond or assist. One link with Airlangga University and ITS, which was important for some firms, concerned the recruitment of graduates. A few firms reported that a high proportion of their professional staff were Airlangga and ITS graduates.

Table 7. Assistance from the government and local authorities since 2000

Number of Firms which had Received Assistance from The government or local authorities	Number of Firms which had Not received Assistance From the government or local authorities
5	25

Government assistance could provide a substitute for, or offset the advantages which large firms gain because of their size. Managers were asked about the support their firms had received from the government or local authorities since 2000, and their answers are summarized in Table 7. The most common scheme was support for the development of products, while grants for purchasing machine tools, for

searching-out new markets, and other advice were received by a number of the firms. Generally the grants were of minor importance and were not critical for the creation or development of products or for the survival of the firms. Few of the sample firms received assistance from local authorities. The grants which firms received were useful and very welcome. Moreover, they enabled some firms to obtain other financial backing, and the award of a grant for product development was considered helpful for establishing credibility.

4. Constraints on Growth and Sources of Crises of Small and Medium Agribusiness Enterprises in East Java

Another approach to assessing the importance of the sources of competitiveness of small firms was to examine the constraints on the growth of the sample firms, and the sources of the obstacles they encountered. The constraints on growth and the obstacles might reflect any disadvantages of operating on a small scale and/or the causes of a lack of competitiveness.

The proprietors of small firms do not always maximize the growth of their firms in the sense that an engineer can maximize the output, given that the proprietor has knowledge of the technical parameters of the plant and the prices of inputs and output. In practice, the effect of many of the decisions taken by proprietors and managers are uncertain, and are based on intuition as well as on quantitative analysis. Also, the proprietors have other objectives which constrain growth, such as retaining control of their business, the level of consumption they wish to finance out of the business, avoidance of stress and hassle, and the effort and time they wish to put into the business. Finally, some proprietors may not think much about ways of expanding their business, so decisions on growth are made by default.

Table 8. Constraints on the growth of firms

Constraints	Number of firms	
	Yes	No
1. Demand	23	7
2. Difficulty in recruiting		
a. R & D staff	2	28
b. Skilled employees	1	29
c. Other employees	1	29
3. office or factory space	7	23
4. Restrictions on the supply of components or parts	1	29
5. Machine capacity	5	25
6. Finance for expansion	8	22
Other constraints described at interviews		
Do not wish to expand	1	29
Management capacity	3	27
New ideas for products	4	26
Wish to keep control of the company or never to borrow	1	29
Avoiding risks	5	25
Less efficient if larger	1	29

Managers were asked about the constraints on the growth of their firms and their answers are summarized in table 8. The responses show that the principal constraints on faster growth of firms were, firstly, demand for product and finance, and secondly, the availability of skilled and qualified employees. The constraints on firms are inter-related.

More than half of the firms (23 out of 30) answering the question reported that demand was a constraint of growth.

Demand is a potential constraint for firms which make distinctive products and have a large share of the actual and potential market for those products and for close substitutes. More than 26 per cent of firms gave finance as a constraint on growth, and for eight it was the major constraint. Finance operates as a constraint where firms could increase sales if they could finance the extra selling and marketing effort required and the extra working capital necessary to finance additional stocks and expenses. Many small firms simply begin with very limited finance and their expenditure and expansion are tied to their cash flow. Finance also acts as a constraint where products development has to be slowed because of lack of finance, or where cost overruns on development cut into a firm's capital and lead to restraint in expenditure on other aspects of the business.

Office or factory space, machine capacity, and restrictions on the supply of components were constraints for a significant proportion of firms. In part these constraints are the result of rapid growth. However, they are rarely the main constraint on long-term growth, and firms can get more space and machine capacity given time. Some firms had little difficulty recruiting R & D staff. Indeed it seems that the problem of recruitment for R & D staff often reflected the very high standards required of potential employees, almost by definition few applicants had the qualifications, experience and presence to meet these standards. Recruitment of staff was the main constraint on growth for a small proportion of firms, but recruitment was a concern and a potential problem for many firms for which it was not the major constraint on growth.

The proprietors of some firms did not wish their firms to expand in terms of financial commitment or employment. Some proprietors simply do not desire the stress and constant crises that come with growth. The comparative advantage for some proprietors and managers is to own and manage a small business; some are not suited by temperament or experience to run much larger enterprises.

More than half of the firms had encountered crises or setbacks since 1994, and these had required the managers to restructure their respective businesses. Many managers reported that they faced a perpetual series of crises. The sources of the crises are summarized in table 9. It can be seen that a fall in demand was the most common cause, being present in 26 per cent of the crises. 'Difficulty with finance', which was the second most important source of crises, was usually related to other problems such as default by customers or a fall in demand. Although the latter may lead to problems with finance, rapid expansion can also lead to financial difficulties. Problems with the development of products was a cause in 16 per cent of the crises. For a large firms, problems with the development of a single product are unlikely to cause the company to restructure, but for a small company such problems can be disastrous.

For three firms, crises were attributable to defaults or to delays by customers, the most common problem being delays in payment by large firms. Managers of the small firms claimed that this was often caused by administrative inefficiency at large firms. One of the attractions for managers who move from large companies to small firms is to get away from the political intrigue inherent in the operation of at least some large companies. It is therefore

noteworthy that managers may not entirely escape similar problems in small companies.

5. The Resurgence of Small and Medium Agribusiness Enterprises in East Java

Managers were asked if small and medium firms had increased their share of business in their particular trades, and the responses are summarized in table 10.

Table 9. Causes of crises since 1994

	Number of firms
1. Firms which had not encountered a crisis which required them to restructure	11
2. Firms which had encountered a crisis which required them to restructure	19
3. Causes of crisis:	
1. A fall in demand for products	5
2. Existing competitors intensified competition	2
3. New competitors entered the market	2
4. Competitors took advantage of new technological developments	0
5. Problems with the development of new products	3
6. Staff leaving the firms	0
7. Increase in costs	1
8. Difficulty with finance	4
9. Default or delay one contractual obligation by :	
a. supplier	2
b. customers	3

Some firms operated in new trades, or in trades in which all or most firms were small; and some managers did not know shares of business in their trades were changing. The remainder was evenly divided between sample firms which considered small and medium firms were increasing their share, and those which believed they were maintaining their share. Only two managers thought small firms were taking a declining share of business in their trades. However, it should be noted that there is a qualification to the answers to this question; some managers answered the question in respect of their own (often narrow) segment of their industry while other managers answered for their trade or industry as a whole.

Throughout the interviews with managers the flexibility and responsiveness of small firms compared to large firms was emphasized. Several of the sample firms had divided their operations into separate companies in order to keep the advantages of flexibility as they grew in size. It is noteworthy that many of the managers of the sample of small firms had themselves worked for large companies, and so they had experience of both large and small firms when making these appraisals. The administrative and management flexibility and responsiveness of small firms alone does not describe their resurgence: presumably small firms have always been more flexible and responsive. An additional shift in the environment requiring increased flexibility and responsiveness, or technical change enabling small firms to be more flexible, is needed to explain this resurgence. One such clarification is the increase in competition brought about by the decrease in trade barriers and the emergence of additional countries producing manufactures for export. This increased the pressure for rapid change and improvements to products to avoid head-on competition with more efficient producers in other countries and manufacturers low-wage countries.

A possible explanation for the resurgence of small firms is that economies of scale have diminished. Technological

developments, such as the substitutions of mechanical machines by electronic ones, and by digitally controlled machine tools and computer-aided design systems, have reduced some scale economic related to the output of product and/or the size of firms and factories. Twenty-eight of the 30 firms answering the question said diminishing economies of scale had not contributed to the increasing share of business taken by small firms.

Table 10. The resurgence of small and medium firms

Small firms are taking	Number of firms	
1. An increasing share of business in your trade	23	
2. A diminishing share of business in your made	2	
3. A steady share of business in your trade	5	
Total	30	

Factors seen as contributing to the resurgence of small firms by firms which believe small firms are increasing their share of business:	Number	
	Yes	No
1. The economies of scale are diminishing	2	28
2. Large firms have switched to buying out our products or service instead of making them in-house	15	15
3. Small firms can reward owners or manager with greater precision	5	25
4. managers and other personnel prefer to work for small firms	1	29
5. Other please specify		

Respondents indicated that the small-business sector more readily rewarded enterprise than did large firms, and this was acknowledged as a motivating factor by five of the 30 firms which believed small firms were increasing their share of business. The idea here is that the owners or employees of small firms which successfully develops a new product are more highly rewarded than if the were employee of large firms. Of course this also works both ways. The proprietors of small firms can pinpoint and reward employees who contribute to the success, though they may not do so. From a limited survey of the practices of large companies it seems that the immediate rewards given to staff who originate developments are modes; they rarely receive large payment as a reward for their effort, thought they may be promoted and so the cumulative extra salary may be substantial. Again, any advantage of this sort for small firms is not new, it would only account for the resurgence of small firms if there were more opportunities for developing new products. Similarly, many people prefer to work for small firms, but this would not by itself account for their resurgence. It is possible that as incomes rise more people place a relatively greater priority on their working environment, including the size of the operations at which they work and the size of the firms which employ them.

An alternative approach to determining the reasons for the resurgence of small firms is to examine the origins of new business. During the course of interviews discussion naturally turned to the origins of the business and the background of their founders. Few of the founders set up their businesses as a response to the recession or because they were unemployed. More of the founders were dissatisfied with working for large companies and referred to the politics in, and indecisiveness of, large companies. Less than 10 per cent of the businesses were set up by staff or students of universities, though many

of the founders were trained at universities before they obtained experience with firms. Nor were they founded by graduates looking for an idea for a business.

For the most part these businesses were established by managers who had in-depth knowledge of the trade in which the business operated (or of a closely allied trade) and their visions of new businesses were developed from this experience. The common factor was the degree of skill of the founders, although the nature of that skill varied from knowledge of new scientific developments and advanced engineering to skill in buying components or negotiating prices for sales.

CONCLUSION

The primary focus of this study is to analysis the competitiveness of small and medium agribusiness firms in East Java and specifically refers to the sources of competitiveness, scale advantages, handicaps imposed on small firms by their size, avoiding the disadvantages of small size, constraints on growth, sources of crises, and the resurgence of small firms. The small and medium enterprises are less vertically integrated than large firms. One obvious explanation for this difference is that large firms are more likely to be able to fully utilize an optimum size, or at least a larger-scale facility for performing a process or providing a service which could be bought out. Three sources of competitiveness stood out: 'the channels of distribution used', 'product development' and 'the quality of the services provided for customers'. The fourth most important source of competitiveness was efficiency of production, and this was closely followed by marketing expertise.

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