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This paper examines the possible internal and external factors that can affect the competitiveness of small and medium enterprises relative to larger ones. There are in principle two types of ways the competitiveness of SMEs can be increased, by improving the internal factors and/or by making the external factors more favorable. In doing research about the factors affecting the competitiveness of SMEs in a particular region, it is important to go over this list of possible factors one by one in order to systematically determine the factors adversely affecting their competitiveness and to discern ways of improving it. In this way the efficiency and effectiveness of government actions to improve the business environment for SMEs can be enhanced.

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FACTORS AFFECTING THE COMPETITIVENESS OF SMALL AND MEDIUM ENTERPRISES

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March 2, 2000

In this paper we list and briefly discuss the factors which theoretically can affect the competitiveness of small and medium enterprises relative to larger enterprises. It is useful to keep these factors in mind when we are empirically trying to determine the factors affecting competitiveness of particular subsectors in particular regions.

We can divide the factors affecting competitiveness into four types: 1) factors internal to the enterprise which can be changed and 2) factors internal which cannot be changed by people (the owners and managers, governments, non-profit organizations, etc.) given our present knowledge, 3) factors external to the enterprise which can be changed and 4) factors external which cannot be changed by people given our present knowledge. By stating can or cannot be changed given our present knowledge, we do not rule out that some of the non-changeables now may be able to be changed in the future through research and technical change. For example, a subsector strongly affected by economies of scale today may not be so much affected by economies of scale in the future after technical change. The replacement of many large steel mills in the USA by mini-mills with changes in technologies is an example of this.

When external factors can be changed there is the question of who can change them. For some of them individual enterprises or enterprise groups can change them, but for others government action at some level will be required, and in a few cases actions of foreign governments and/or international organizations will be required.

We now list and briefly discuss these factors.

Internal Factors

A. Can be changed

1. The knowledge and capabilities of the managers and entrepreneurs is especially important, i.e. their knowledge about technologies, marketing, management, etc. Here there is not only the question of the quality of the managers and entrepreneurs but also their quantity. Incubator activities can be important in increasing both

¹ PEG is a USAID-funded Project. The views expressed in this report are those of the author and not necessarily those of USAID, the U.S. Government or the Government of Indonesia.

their quantity and quality. Baumol has pointed out that entrepreneurship is not always productive, but also can be unproductive and even destructive (Baumol). It is extremely important that the business environment reward productive entrepreneurship and penalize that which is unproductive and destructive, such as rent seeking activities that waste resources. An example of socially unproductive rent-seeking activity is for SMEs to spend time and money to obtain textile import quotas.

2. Smaller owner managed firms may be able to plan and invest for the longer term compared with large firms listed on the stock exchange whose managers' performance is judged by their current share prices (Acs). Because shareholders of larger firms have imperfect knowledge about the expected returns from investments in physical capital, human capital, research and development, and marketing, they are likely to underestimate the size of these returns, which results in lower share prices than if they had perfect knowledge. Increased knowledge by shareholders would allow managers of some larger firms to adopt a longer term development strategy because it would be more acceptable to the shareholders.
3. SMEs by themselves may not have the resources nor the incentives to undertake research and development themselves, which can make them less competitive relative to larger enterprises. However, by working together such as through cooperatives, or through an association to which they pay a levy for research, the desired research and development can be financed by them collectively and therefore be used to increase their competitiveness. Measures can be taken to increase the ease of adjustment of SMEs.
4. Thurik lists some effects that stimulate smallness, or tend to make smaller enterprises more competitive. One of these is the **adjustment** effect. There is a trade-off between efficiency--production costs given some output level--and adjustability--the cost of adjusting a certain level of output. Commonly large firms can produce at lower unit costs than small firms, but also commonly small firms can adjust their output level at lower costs than large firms.

B. Cannot be changed

1. A very important factor affecting competitiveness is how important are economies of scope and economies of scale in production, marketing and advertising in a particular subsector. If they are important, is it possible for SMEs and cooperatives to fully realise them given their size? If it is not, this factor will put them at a competitive disadvantage relative to the larger enterprises.

What is the nature of the production function for sales promotion in a particular subsector? If the more

effective types of advertising can only be done by larger firms (such as advertising through TV) or there are economies of scale in advertising that cannot be realized by the SMEs and cooperatives, this will adversely affect their competitiveness relative to the larger enterprises. From a social viewpoint it is especially unattractive when there are economies of scale in advertising, with that advertising being of a type which does not increase the amount of useful information to potential consumers, but rather is of a persuasive type or even a misinformation type.

Some of the disadvantages to SMEs from these economies of scale can be offset by them cooperating in marketing or advertising, or through the use of common equipment and machinery.

External Factors

External factors can be described as all the factors that determine the business environment in which enterprises operate. The government has a strong responsibility to work to create a favorable business environment (climate) although some factors are outside of its influence.

A. Can be changed

1. Clearly the **prices and qualities of the factors of production** (including land and climate) and intermediate inputs available are very important because they determine potential comparative advantage for many subsectors. For example, it is impossible for Australia to become competitive in the production of low quality garments because of its high cost of labor. Similarly it is impossible for Indonesia to become competitive in the production of wool because of the climate and the small amounts of land suitable for grazing sheep compared with a main competitor in this field, Australia. The supply of some factors of production cannot be changed at all or only can be changed in the longer term, such as the availability of natural resources including climate and the supply of unskilled labor. On the other hand the supply of skilled labor, capital, and knowledge can be affected by policies, programs, projects and activities (PPAs).

The degree and efficiency with which SMEs can utilize knowledge which is generated by tertiary institutions, government agencies and other government funded research, and through the government's various extension service type activities can have a strong effect on their competitiveness relative to larger enterprises. An important question is how cost effective are the extension type services of the Departments of Trade and Industry, Agriculture, etc. in providing useful knowledge to SMEs.

Government policies affect the supplies and therefore prices of most factors of production.

2. Related to 1, **how reliable are supplies of the factors of production** and other inputs such as electricity? If the electricity supply is poor quality with frequent blackouts and voltage fluctuations this will especially disadvantage SMEs because their cost of generating electricity themselves relative to their other costs of production is generally higher than it is for large enterprises, because of the economies of scale in electricity generation.
3. Also related to 1, is the **availability and cost of credit**. If the cost of most of the credit available to the enterprises is well above the social cost of credit, say because most of it comes from moneylenders rather than the formal credit market, this clearly lowers the competitiveness (daya saing) of SMEs and cooperatives.
4. Another important factor is the **availability of complementary inputs, services, and buyers in the firm's locality**. If the enterprise is in a subsector where agglomeration economies are important, then if it is located in a locality where these complementary factors are not available, it will be unable to realize economies of agglomeration which will lower its competitiveness. Large firms will be better able to supply these complementary inputs themselves than small firms.
5. An additional important factor may be **the supply of infrastructural services provided by governments**. If the roads are underdeveloped or in poor condition, if the harbor needed to ship out the goods is high cost, if the water supply is poor and unreliable, etc., the competitiveness of the enterprises will be adversely affected. If it is lower cost relative to their other costs of production for larger firms compared to SMEs to make up for these deficiencies through their own actions, SMEs will be at a disadvantage relative to the larger enterprises because of these infrastructural deficiencies.
6. Another factor is the **existence of buyers of products of SMEs and cooperatives who are competing with each other**, which facilitates the marketing of SME/Coop products. If the buyers of SME/Coop products have monopsonistic or oligopsonistic power, it clearly disadvantages the SMEs and cooperatives. A possible solution to this situation which needs to be further investigated is the formation and development of secondary cooperatives and trading houses (especially those owned by the SMEs) to market the products of SMEs and primary cooperatives.
7. **Illegal trade practices** by larger firms may also adversely affect the ability of otherwise competitive SMEs and cooperatives to survive. For examples, large buyers may collude with each other to depress the price paid to SMEs

and cooperatives. Or larger firms may engage in predatory pricing--when a SME starts to produce and market a product competitively, the larger firms sell their products under their cost in order to compete the SME out of business. How common is this type of practice in which subsectors in which localities? These practices are now banned by the Undang-Undang Republik Indonesia Nomor 5 Tahun 1999 Tanggal 5 Maret 1999 tentang Larangan Praktek Monopoli dan Persaingan Usaha Tidak Sehat (The unhealthy competition and monopolistic practices law).

8. The costs of transactions (**transactions costs**) are especially important for SMEs because being smaller, a smaller proportion of their transactions are within the enterprise, but instead are between enterprises. An important component of transactions costs is the enforceability of contracts. Because transaction costs are generally high in Indonesia and the enforceability of contracts difficult and unreliable through the legal system, SMEs are disadvantaged relative to larger enterprises.

Enforceability of contracts is especially important when the relative bargaining strength of the SME is stronger before the contract is signed with a larger firm than afterwards. For example, say a larger firm wants to establish a fruit processing plant and is making contracts with fruit growers to supply the fruit. Before the contracts are finalized the two parties have quite equal bargaining strengths. However, after the contracts are signed and the fruit growers have planted their trees with the expectation that the contracts to purchase the fruit at agreed prices will be honored by the larger firm, they will be in a weak bargaining position if the larger firm does not honor the contract, but rather tries to press down its purchasing price.

Commonly transaction costs are higher than necessary in Indonesia because of difficulty in the enforceability of contracts through the legal system and problems of reliability and honesty in the fulfilment of agreements. It is commonly believed that Chinese language dialect groups have been able to lower their transactions costs among themselves through trust and some imposition of penalties on contract violators through the social organization of the dialect group. For example, if a person becomes known as one who often does not fulfil contracts, he may be blacklisted by his dialect group. This cooperation within dialect groups is believed be one of the factors giving Sino-Indonesians a competitive advantage in many types of economic activity.

Improvements in the enforceability of contracts through the legal system or in other ways will lower transaction costs, and will be especially beneficial to SMEs. In some cases transaction costs can be lowered by both parties to

the transactions by prior agreement about the mechanism for dispute settlement, sometimes through an independent arbitrator who is outside of the formal legal system. An example of this, is when a person contracts with a builder to construct a building in Australia, both parties agree to the arbitration of disputes by a third party, which is a non-government agency.

9. A potentially important factor affecting competitiveness in some subsectors is the existence of **local, provincial or national government laws, regulations or practices which adversely affect the competitiveness of SMEs and cooperatives** relative to larger enterprises. For example, in many cases the cost of a smaller enterprise obtaining all the licenses and permits to operate relative to their other costs of production is much larger than for larger enterprises, putting smaller enterprises at a disadvantage at the time of their registration with the government. The Asia foundation and others have argued strongly that the requirements to establish small enterprises need to be greatly simplified in Indonesia. The requirements of establishing and operating a small limited liability company may also need to be changed.

Government red tape was reduced in the United Kingdom through the relaxation of the rules and regulations involved in running a business. For example starting in April 1996 only one form was required for registration for income tax, national insurance and the value-added tax (Worthington, page 223).

In the past in Indonesia another example is that apparently it was the policy of the Government to only give **large** concessions of forest to convert it to plantations, rather than giving concessions to individual farmers or farmers' groups to convert the forest to tree crops. This policy clearly adversely affected SMEs relative to larger enterprises.

Planning laws may discriminate against SMEs, for example by banning on short notice their activities from residential areas, even though they have been long established there. The costs of smaller enterprises fulfilling the requirements of employment, health, safety, and product quality regulations may also be too high relative to the small enterprises' other costs of production.

It is important that **a systemic review of government laws, regulations and practices be made searching for any such adverse impacts on SMEs and cooperatives.**

10. An important factor in some areas is **official and unofficial levies (pungli)**. If the cost of these levies relative to their other costs of production is higher for the SMEs and than for the larger enterprises, it will decrease their competitiveness relative to the larger

enterprises. For example, maybe the unofficial levy to pass a checkpoint on the highway is Rp 10,000 for a 1 ton truck and Rp 30,000 for a 10 ton truck. Clearly the cost per ton is higher for the small truck than the large truck. Perhaps a large and a small factory both fulfil the environmental requirements, with the first factory having a cost of production of Rp 10 million and the 2nd factory Rp 50 million. When environmental inspectors come to inspect perhaps the small factory has to pay an unofficial levy of Rp 500,000 while the larger factory has to pay Rp 1,000,000. In this example, the cost of the levy relative to its other costs of production is higher for the smaller than the larger factory, and therefore clearly adversely affects the competitiveness of the smaller factory relative to the larger one.

There likely is a similar problem with the obtaining of many licenses. Perhaps the larger enterprise pays more to obtain the license than the smaller firm, but pays less relative to its other costs of production.

One can hypothesize that this factor is quite commonly an important factor reducing the competitiveness of smaller enterprises relative to larger ones.

11. In many subsectors competitors are engaging in **illegal practices which increases their competitiveness**, such as underpaying export taxes and import duties, underpaying value-added (PPN) and income (PPH) taxes, illegally gaining access to natural resources such as logs by illegal payments, declaring incorrectly their imports or exports, etc. When these factors are important in determining competitiveness, **honest enterprises and cooperatives are commonly at a particular disadvantage**. Good cooperatives are at a disadvantage because their management practices must be transparent and open to scrutiny, which inhibits them from engaging in these illegal practices. The solution is to create an environment in which these illegal practices disappear--a great challenge.

12. The **commonness and importance of discrimination in commerce** based on race, ethnic group, religion, etc., affect competitiveness. One hypothesis is that ethnic groups tend to favor people from the same ethnic group in commerce, which gives people from the same ethnic group an advantage in trading. If one ethnic group is especially dominant in importing, exporting, manufacturing and wholesaling, discrimination by that ethnic group in favor of enterprises from the same ethnic group clearly decreases the competitiveness of enterprises operated by other ethnic groups. Apparently in Indonesia there is little or no legislation which inhibit discrimination based on race, ethnic group, religion, sex, age, etc. This is not adequately covered by the new Unhealthy competition and monopolistic practices law. The lessening

of discrimination based on race, ethnic group and religion would very likely be to the advantage of most SMEs and cooperatives.

13. **The SMEs in a subsector can produce outputs competitively which can be used as inputs into the production of other commodities provided that two conditions are fulfilled: 1) the price and quality of the inputs are competitive, and 2) the transactions costs are sufficiently low between these SMEs and the potential downstream purchasers of their outputs.** However, for various reasons, the transactions costs may be so high that the larger downstream firms, who potentially can purchase the outputs of the SMEs as their inputs (called **relational contracting** by Hayami, p. 4), either vertically integrate--produce the inputs themselves, or obtain them through imports. If the transaction costs can be reduced sufficiently such as by improving relations between the SMEs upstream and larger firms downstream, the production by the SMEs becomes viable, provided the first condition is also fulfilled. Relations may be able to be improved through improved personal ties and increased mutual trust, as well as through improvements in the legal system. Hayami sees a sizable potential for SMEs in some subsectors in rural areas to supply inputs to larger downstream enterprises in urban areas.

With globalization foreign direct investment is likely to become more important. Although for some SMEs this means increased competition, for others it means increased opportunities to supply them with intermediate inputs and services. It is important that mutually beneficial relationships be facilitated between SMEs and both foreign investors and domestic firms owned by other ethnic groups.

14. **Thurik** also lists another effect which stimulates smallness, or tends to make smaller enterprises more competitive. This is the **transportation effect**: the cost of delivering output to customers or of bringing customers to the place where the service is provided. Small scattered markets facilitate small firms (Thurik), or we say more importantly production plants, where production plant includes retail stores producing retailing services and collection facilities for primary products such as fish or copra. It is important to distinguish between firms and production plants, because a large firm can have many small-scale production plants. Here there is a trade-off between size (if there are economies of scale) and distance from the market. A large plant in one location may have lower production costs because of the greater realization of economies of scale, but have higher transportation costs getting the product to the buyers. Smaller plants close to the scattered markets save in transportation costs but may have higher costs of production because of less realization of economies of scale. Clearly investments in transportation which lower

transportation costs in this case increase the competitiveness of large relative to small plants.

What then determines whether there is a large firm with several small production plants or several small firms having small production plants? If it is difficult for the management of a large firm to manage and monitor effectively widely scattered small plants, i.e. if it has high **transaction costs** of doing so, then it will be efficient for there to be several small firms instead of one large one. Large enterprises clearly have serious difficulties managing and monitoring the performance of widely scattered small retail stores having only several employees, especially in societies where business ethnics and honesty in business are underdeveloped.

Related to this is the case of perishable products. When products are perishable the plants supplying the products to the markets must be closer to the markets, and therefore smaller. If inputs used for production are perishable, such as oil palm kernels, then the production plants must be close to the source of supplies, which also means that they must be smaller compared with the situation when the inputs can be transported long distances without spoiling, such as rubber slabs. For a discussion of factors affecting the competitiveness of self-employed persons in Indonesia see Rice, 1992 and Rice, 1997.

Again, investments that increase the speed of transportation of products will increase the competitiveness of large plants relative to small plants, if the larger ones realize economies of scale. Economic development usually results in improved transportation systems resulting in an increase in the competitiveness of larger plants increases relative to smaller ones for some products.

16. **Another effect listed by Thurik is effectiveness.** The essence of this effect is that what seem to be similar goods and services can have different meanings. A shirt tailored to fit a specific individual and bought for showing off at an occasion, is different from a shirt bought mainly to fulfil the need of covering ones body. A tailor can provide more effective units of the first type of shirt than a big producer, even though the cost of production of the larger producer is lower. In other words, increases in the differentiation and individualization of consumers' requirements can create opportunities for SMEs. In recent years this has been happening in the developed countries and has partially accounted for the revival of SMEs since the 1980s (Carlsson, p. 68).

In the United Kingdom consumer spending habits have moved from mass-produced goods to more specialised products

which puts small firms at a advantage because they can react more quickly to changes in demand and shorter product life cycles (Worthington, p. 221). Worthington also discusses other reasons for the growth of the small-firm sector in the United Kingdom.

17. **Another effect listed by Thurik is control.** Small enterprises with one person in control may have behavioral advantages such as entrepreneurial energy, motivated and effective labor due to the mutual proximity of customers, suppliers, production floor, management and ownership, and so on. Thurik thinks that small firms often have an advantageous wage differential--explained by higher levels of control, commitment, motivation, perseverance and energy. The degree to which this effect increases the competitiveness of SMEs relative to larger enterprises is certainly affected by the local cultural and business environment.
18. **Micro and small retailers are very important as sellers of products of micro and small (MS) manufacturers.** This is because the greater average variation in the quality of differentiated (as opposed to homogeneous) products of MS manufacturers makes it difficult to sell them in fixed price larger retail outlets, as opposed to the variable price MS retailers. Therefore if for whatever reason the value of MS retailer sales decrease relative to those of larger enterprises, MS manufacturers will be damaged. **A policy implication** of this is that it is very important that policies not discriminate against MS retailers if you want to facilitate a strong demand for differentiated products made by MS manufacturers.
19. **With globalization/internationalization the requirements placed on goods and services consumed by rich countries** (such as eco-labelling, high standards of quality including the need to obtain ISO 9000 status, conformance with trade related intellectual property standards) may lessen the competitiveness of SMEs relative to larger enterprises. This is because their cost of fulfilling these requirements is usually greater relative to their other costs of production compared with larger enterprises.
20. **Smaller enterprises usually face more difficulties raising equity capital** to expand than larger enterprises because it is more difficult for them to raise equity capital by selling shares in the stock exchange. This disadvantage can be lessened by increased availability of capital through venture capitalists, by having government and/or private financial institutions who specialize in purchasing shares in smaller enterprises, and through the development of over-the-counter stock exchanges. Apparently financial institutions in Indonesia (including Islamic ones) are now prohibited from purchasing equity in enterprises, although such purchasing is consistent with the production sharing (bagi hasil) principle of Islamic

financial institutions.

Specialized companies renting equipment to enterprises or providing it on a hire purchase basis can help enterprises expand their production without requiring their own capital up front.

B. Cannot Be Changed

1. **The cost of loan capital through the market**--the interest rate--will be higher to SMEs than larger enterprises if their loans are smaller. The reason for this is that the fixed cost of obtaining, administering, and monitoring a loan as a percentage of the face value of the loan tends to decrease with an increase in the size of the loan.

Summary

In this paper we have examined the possible internal and external factors that can affect the competitiveness of small and medium enterprises relative to larger ones. There are in principle two types of ways the competitiveness of SMEs can be increased, by improving the internal factors and/or by making the external factors more favorable. In doing research about the factors affecting the competitiveness of SMEs in a particular region it is important to go over this list of possible factors one by one in order to systematically determine the factors adversely affecting their competitiveness and discern ways of improving it. In this way the efficiency and effectiveness of government actions to improve the business environment for SMEs can be enhanced.

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