

SMALL BUSINESS AS LOCAL ECONOMY DRIVERS: CASE STUDY ON DIRTY NOODLE JOGJAKARTA

Dedi Rianto Rahadi
Pandu Adi Cakranegara
Mochamad Muslih

ABSTRACT

Small business has important role in creating value added and creates jobs in Indonesia. However small business is not considered to have significant multiplier effect unlike foreign direct investment. This study tries to prove the hypothesis that small business can create multiplier effect especially on local economy. The approach used in this study is an applied descriptive analytical. The method used in this study is a case-based study. The chosen small business is dirty noodle factory in Bantul, Jogjakarta because it is located in dry area that has limited resources but managed to become one of the economic wheels in those area. The findings of this study is that the dirty noodle factory increase the local economy by giving value added to supply chain. By making dirty noodle the small business creates other entrepreneurs such as distributor and restaurant seller. In the end it creates jobs and increases local income hence creates local multiplier effect.

Key words: SMEs, multiplier effect, dirty noodle.

INTRODUCTION

Small and Medium Micro Enterprises are often considered to contribute through the ability to absorb labour in the informal sector. However, SMEs in business units are considered to only make a small contribution in contrast to large businesses which in one unit is able to absorb many workers with higher education and provide better wages. This study takes the example of SMEs that are almost a century old and show that SMEs in addition to absorbing direct labour for them can also create labour indirectly to the surrounding sectors (Bartoni et al, 2019).

In developing countries such as Indonesia SME and the informal sector is the backbone of the economy. There are several reasons why this happens. First, capitals are scarce in the developing countries. In Indonesia, interest rates are much higher than in developed countries. This is a challenge for entrepreneurs when opening a business using loan interest. Therefore, SME with minimal capital is an option. SME do not require high human resources. In developing countries, the level of education is lower than in developed countries. Although to establish an SME requires a specific and specific expertise related to the business but higher education is not required. With so many uneducated and untrained workers then the wages given are low. Jobs that require uneducated and untrained labor and low wages are SME jobs. Fourth, in the absence of technology, SMEs become an option because SMEs can be established without the need for high investment in technology (Odoom et al, 2017).

Indonesia has everything it needs to start an SME starting from cheap human resources and consumers who love to consume. This is an ideal habitat for SMEs to grow. Many SMEs are family business. When a person sets up a business then he invites his core family and immediate family to start a business (Hamza et al, 2019).

SMEs in Indonesia have more than just a role to play. One example is why Indonesia has large food and beverages companies because these SMEs consume goods from these companies. How many instant noodle sales are made by indomie stalls around factories, offices and residents' housing? But the point of view that is often used is SME as a market or trader intermediary or small producer. Not as a business unit that creates a business unit around it. Just like a large factory can revive the surrounding economy. SMEs though it small can create the same effect.

LITERARY REVIEW AND HYPOTHESIS DEVELOPMENT

Small Business

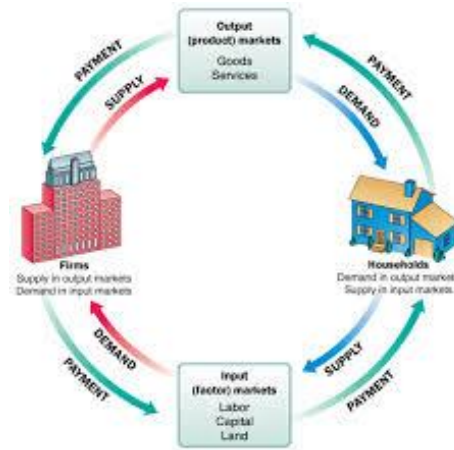
Family business is the foundation of many SMEs. An SME starts with a family member building a business with other family members. This is mainly due to the high level of uncertainty in starting a small business and the need for high commitment. This is a value that exists in the family (Zahra, 2004). These are the values that lead a company to keep trying and survive, especially in unfavorable moments. Business thinking in general will use a profit-oriented approach with financial indicators that must be met.

One of the things that is unique about a small business is its high local content. This means that because the founder of the business is a local, he will see the situation around him and try to create a type of business that suits the conditions. In addition to its local nature it will affect in various operational components such as production, distribution and even in product quality.

Multiplier Effect

The effect of a multiplier or multiplier is how something can give a multiplication effect in addition to the direct consequence it causes. The multiplier effect can be assessed from several things. There are at least two things that can be used to assess the effect of the multiplier, namely the creation of labor and the economic effect in monetary units. Of course, this is not limited to this because the creation of labor is not limited to economic issues but also socio-cultural issues (Alene et al, 2008).

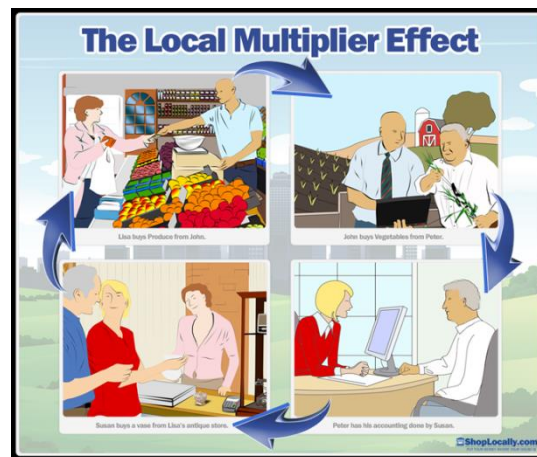
Figure 1. Input and Output Markets



Source: Browning, 2020

Figure 1 shows the relationship between the workforce and the company. Companies here become consumers in the labor market where companies buy labor factors from the public. On the other hand, companies use labor, capital, machinery and technology to produce goods for public consumption. This is a cycle that drives the economy. Each party has a role as a seller and buyer (Browning, 2020).

Figure 2. Local Multiplier Effect



Source: Moretti, 2010

The local multiplier effect is the effect that occurs when a community uses products that come from the community's own production (Morretti, 2010). So, most of the money will be revolve around the community. Simply put, any increase in income by a person will result in additional consumption. In economic terms each Marginal Income will produce Marginal Propensity to Consume and Marginal Propensity to Save. This means that every additional 1 rupiah of income will be partly used for consumption and partly used for savings. One's consumption will be income for others. Then the other person will also consume and the consumption will be income for others.

Figure 3. Food Supply Chain from upstream to downstream



Source: Ling et al, 2020

Figure 3 shows the supply chain in a food product. The supply chain starts from the farmer who plants a commodity, then the party that processes the raw material so that it is ready to be sent to the factory. The factory produces the noodle, which is then distributed by the distributor to the market or retailer and eventually the end consumer (Ling et al, 2020).

Hypothesis Development

This study wants to prove the hypothesis that small business businesses can create multiplier values. And thus also shows that multiplier capability is not limited to large companies or foreign direct investment (Sari et al, 2016). This is important because if the value of multiplier by small businesses then the potential for absorption of manpower is higher because small businesses tend to be dense work while foreign direct investment tends to be dense capital. In the end, he hopes that by proving this, there will be more support from all parties to be able to help small businesses to grow and develop.

RESEARCH METHOD

This research is an applied descriptive research by trying to apply a framework to existing practices in the real world. The purpose of applicative research is to bridge the gap between theory and practice (Myers, 2009). In this case this research uses a framework on new objects. If multiplier effect is usually used for large companies in this study multiplier effect is used with a new object that is SME.

The framework used in this analysis is multiplier analysis. Multiplier analysis is an analysis used in economics to see the sequential impact of an economic activity. In contrast to its commonly used use for the national scale, this study has a local scale that is limited to one particular region only without looking at its effects to other regions (Ismanto and Nasrullah, 2019).

To be able to do the multiplier analysis, the first thing to do is to analyze the supply chain from the raw material provider to the end consumer. In this case, the supply chain analysis of dirty noodle production and economic value will be analyzed. In addition, this supply chain can also show the existing economic actors when a new product of innovation is made. In this research is the processing of cassava into a product that can be processed into dirty noodle which can then be processed into various other products.

The supply chain analysis is used by converting each existing added value into a monetary unit. Thus, you can see the monetary value added from each point of the supply chain. This added value will also be comparable because in the same unit is the monetary unit. Once the value added to the supply chain can be determined, the next step is to calculate the estimated total value of the supply chain of each supply chain. This total value is then the multiplier value.

This study uses a real object or case to prove the research hypothesis that there is a multiplier effect on small businesses. Due to the nature of the case study, the results of the study cannot be directly used for other cases, especially those that have different contexts. But in similar conditions and contexts this result can be applied (Gray, 2019).

The advantage of using a real case is the availability of field data available as material that can be used for input from the framework. The data taken are primary data from interviews and secondary data from news and other trusted sources.

RESULT AND DISCUSSION

A Glimpse of Dirty noodle Jogja

Dirty noodle Jogja originated from the grandfather of Mr. Yasir during the Dutch occupation. At that time before the Second World War there was an economic crisis and a lot of unemployment. Mr. Yasir's grandfather had the idea to use the abundant material in Bantul, namely Cassava. In Java, cassava is a raw material for various traditional foods. However, only Pak Yasir's grandfather used cassava to make noodles (Wijaya, 2019).

The other reason to use cassava is that cassava powder that traditionally known as *gaplek* could create a unique flavor and chewy textures. Some people choose not to use it due the color that resulted from adding cassava. The color of noodles become brown and to local people it is look dirty. Thus, they call it dirty noodle.

Dirty noodles are through a longer process than standard wheat noodles. The process consists of dough making, steaming process, printing process and drying and packing process. The number of steps and time required that not everyone wants to make noodles plus the color is not as attractive as the bright yellow noodles (Anugrahati and Carista, 2020)

The first part in making dirty noodles is the process of making dough. At this stage the dirty cassava noodles that have been crushed soaked in water overnight. After the sediment is formed, the sediment is taken the next day and filtered. The result of this filtering is the initial batter.

The second part is the steaming process. The dough that has been filtered needs to be ground first. Uniquely milling in dirty noodle factory still uses the same equipment and technology as the beginning of the factory was established in the 1940s. Grinding is done using a milling machine driven by cattle. In this process, the noodle dough is still helped by stirring manually. Once the dough is not hard and can be formed then the dough is cut into pieces to get into the steamer. This steamer still uses traditional machines using charcoal.

The third part is the printing process. In order for the dough to be ready to be printed, there must be some steps that need to be done first. The dough that has come out of the steamer is put back into the mill. After grinding, the dough is cut according to the size of the printer. Then the dough that has been cut into units goes into the printing press and becomes noodles.

Although in this phase the noodles processing has finished but. there is still one stage, the drying process. The drying process is done naturally, that is, using solar heating. After the noodles are dried in the hot sun for a full day then the noodles are ready to be wrapped.

Picture 1. Cassava from Farmer



Picture 2. Cassava are processed into powder



Picture 3. Dirty Noodle in Package



Picture 4. Fried Dirty Noodle ready to eat



Dirty Noodle Supply Chain Analysis

a. Supplier

Bantul area is a part of Jogja that is not as fertile as other areas such as Sleman or Kulon Progo. Some parts of Bantul that are drier and near the beach are better suited to grow Palawija. Cassava is one of the suitable plants grown by farmers. Apart from being easy to plant and care for, cassava also does not need a lot of water.

The price of agricultural commodities in this case cassava depends on its demand. Cassava was previously used for traditional snacks and crackers. There are not many alternatives to cassava products. This is in contrast to the wheat flour used as a raw material for various food products. Currently, Bantul dirty noodle factory has a production capacity of 10 tons. Assuming the required yield is 50 per cent then the raw material requirement of dirty noodle factory is 20 tons per month. This means that the absorption power is equivalent to the production of more than one hectare of land reserved for cassava, which is about 17 to 18 tons. This means that in one harvest period the yield that can be absorbed is the result of 15 hectares of land. In addition for farmers the more important is price stability because the factory already has a certain ability to absorb and buy at a certain price.

b. Processor

The dirty noodle factory does not buy directly from farmers in the form of freshly harvested cassava. There is a reason for this. If you buy directly from a newly harvested farmer, then the cassava is still in dirty condition. This will take a lot of time to clean. In addition, cassava which is in a dirty condition will contain various contents other than flour, namely the soil and roots that are still following. By asking the farmer to submit to the processing department i.e. a third party who collects cassava from the farmer and processes it in the machine he owns. The result of this process is cassava flour which is also known as gaplek. Gaplek itself is not only sold to dirty noodle factories but also to markets and other food manufacturers that use cassava flour raw materials (Natalia, 2020).

The presence of third parties that process provides added value for farmers and buyers such as dirty noodle factories. Now the factory can more easily determine the purchase price because the goods he bought are already in net condition and ready to be processed further. In addition, farmers will also find it easier to store and transport. This also in the supply chain adds value to the sale of agricultural products (Aisyah and Fachrizal, 2020).

c. Distributor

Distributors are people who take products from the factory. Not all products from the factory are sold to distributors. The factory itself has a direct relationship with some consumers such as restaurants that specifically sell dirty noodles. The factory will supply them directly. In addition, the factory also has consumers who are out of town who buy in large quantities. But currently this factory does not send or appoint distributors to sell their products outside the city or the Special Region of Yogyakarta.

This distributor sells dirty noodles to various types of consumers. First to the sellers in the market, one of them is Bantul Central Market. The sellers of this market later served the local community who needed dirty noodles to cook at home. Both distributors also distribute to the restaurant which makes dirty noodles one of the menus. In addition, distributors also sell to sellers of dirty noodles around and small food stalls. All three distributors also supply bakeries that make raw noodle raw foods for raw materials making risoles and pastels (Noer et al, 2020).

d. Retailer/Restaurant/Food Stall

Restaurant and food stall are intermediary who buy goods to be used as raw materials. Around the dirty noodle factory there are restaurants selling dirty noodles. One of the famous restaurants is Mbah Mendes dirty noodle house, Kang Sum dirty noodle restaurant, Pak Sur dirty noodle restaurant, Pandawa dirty noodle restaurant and Bumi Langit restaurant. Bumi Langit Restaurant is a place frequented by various figures and even international figures such as the former President of the United States and his family also visit this restaurant to enjoy dirty noodles while on vacation in Yogyakarta.

The five restaurants above are famous restaurants selling dirty noodles. The restaurant above focuses on selling dirty noodles which are generally processed into three types of preparations, namely boiled noodles, fried noodles and fried rice noodles. In addition to these five restaurants there are also other restaurants that sell dirty noodles but not only focus on dirty noodles. For example, those who sell gudeg and dirty noodles, restaurants that sell fried chicken and dirty noodles (Ramadhan et al, 2020).

In addition to the restaurant there are also street vendors and strollers selling dirty noodles. This seller on average sells dirty noodles and not only in Bantul but also in Yogyakarta and Sleman. The number is more than restaurants and it is difficult to calculate because of its distribution.

e. End Consumer

The final buyers of dirty noodles are various communities. Some buy it directly to be cooked into processed noodles either fried noodles or boiled noodles or mix it with rice and fry it. This is a characteristic in the Javanese region where noodles are fried with rice. Some also use it as a filling for food such as risoles and pastels. Dirty Noodles are a favorite stuffing because they are chewy

and easily absorb spices. And especially the price is affordable as an alternative to meat so that the price of cake remains affordable to the public. Other buyers are restaurants, food stalls and vendors around. They buy to recycle and sell it.

Multiplier Effect Estimation

Table 1. Multiplier Effect Estimation and Total Jobs Created

Economic Actor	Output	Price (in IDR/kilo)	Value added
Farmer	Cassava	2.000	2.000
Processing Hub	Cassava Powder	15.000	13.000
Factory	Dirty Noodle	32.000	17.000
Distributor	Dirty Noodle (package)	40.000	8.000
Restaurant/food stall	Dirty Noodle ready to eat	90.000	50.000

Source: Author Calculation, 2020

In calculating the effect of an economic activity can be seen from two things, namely the total expenditure of existing income. In this research, the approach is done by using the revenue approach that is by calculating the production capacity. Table 1 shows a table of value-added in rupiah and the amount of labor absorbed (Goldenberg and Meter, 2020). This table shows the added value that occurs in one kilogram of cassava products ranging from farmers to purchase by end consumers in restaurants or food stalls. Without the presence of a factory that produces dirty noodles then this added value will stop at the processing hub with products in the form of cassava powder. This can be observed in other cassava-producing areas such as in Lampung which is actually the largest cassava-producing area in Indonesia. Cassava powder is used as a mixture in making food ingredients (Yunita, 2020). From this comparison it can be seen that the existence of cassava processing plant as a food product does provide added value.

Table 1 shows that one kg of cassava harvested is worth Rp. 2,000.00. It looks very cheap compared to all the farmers' efforts to plant it. However, when farmers increase their value by turning it into flour, then the price rises 750% to Rp. 15,000.00. Of course, this is by incurring additional costs for the owner of a milling machine that costs Rp. 350.00 / kg. Then the next cost is the cost of buying a 50 kg sack. The total issued by farmers is less than Rp. 1,000.00 / kg. This means that by just adding Rp 1,000.00 / kg cassava farmers have the potential to sell their products up to Rp. 15,000.00.

The existence of factories capable of absorbing up to 20 tons of crops per month. This for farmers will affect how many things. First, farmers now have a party that will absorb their harvest. This will lead to a second consequence of price stability. Agricultural commodities in Indonesia have high volatility. With the relationship of suppliers and buyers who can absorb production capacity will bring price stability.

The factory itself provides almost double the added value when converting cassava powder into dirty noodle. But the greater added value provided by the factory is by creating additional supply chains. With the factory, there will be distributors and restaurants and food stalls. So, the added value of the factory is increased again. If the total difference in the existence of the value-added chain of factories exists, then there will be a value-added difference of 600 percent, namely from Rp. 15,000.00 to Rp 90,000.00 per kilo of cassava.

Table 2. Local Multiplier Effects Estimation (in IDR)

Economic Actor	Output	Price (in IDR/kilo)	Capacity monthly (kilos)	Multiplier Effect (in IDR)	Employee (people)
Farmer	Cassava	2.000	20.000	40.000.000	24
Processing Hub	Cassava Powder	15.000	20.000	300.000.000	6
Factory	Dirty Noodle	32.000	20.000	640.000.000	35
Distributor	Dirty Noodle (package)	40.000	20.000	800.000.000	12
Restaurant/food stall	Dirty Noodle ready to eat	90.000	20.000	1.800.000.000	200

Source: Author calculation, 2020

Table 2 shows the values of the multiplier effects that occur on the local economy. With the presence of dirty noodle factory, the supply chain increases and further the value of the multiplier increases. Before the existence of the value-added dirty noodle factory stopped until cassava powder. At this level the economic value created is about Rp. 340,000,000.00. However, when there is a dirty noodle factory and supply chain increases with the presence of distributors and restaurants / food stalls, then the final added value created is Rp. 1,800,000,000.00.

When viewed from the absorption of manpower then the manpower absorbed about 277 people. This is far more than can be absorbed by the agricultural sector and the processing sector which originally only absorbed about 30 manpower. Meaning from

Figure 5. Pictures of Dirty Noodle sellers in various districts in Jogjakarta



47

5. Goldenberg, M. P., & Meter, K. (2019). Building multipliers, rather than measuring them: Community-minded ways to develop economic impacts. *Journal of Agriculture, Food Systems, and Community Development*, 8(C), 153-164.
6. Gray, D. E. (2019). *Doing research in the business world*. SAGE Publications Limited
7. Hamza, L. M., & Agustien, D. (2019). Pengaruh Perkembangan Usaha Mikro, Kecil, dan Menengah Terhadap Pendapatan Nasional Pada Sektor UMKM di Indonesia. *Jurnal Ekonomi Pembangunan*, 8(2), 127-135.
8. Ismanto, K., & Nasrullah, M. (2019). Multiplier Effects of Pesantren Walindo. *Shirkah: Journal of Economics and Business*, 4(3).
9. Ling, E. K., & Wahab, S. N. (2020). Integrity of food supply chain: going beyond food safety and food quality. *International Journal of Productivity and Quality Management*, 29(2), 216-232.
10. Moretti, E. (2010). Local multipliers. *American Economic Review*, 100(2), 373-77.
11. Myers, M. D. (2019). *Qualitative research in business and management*. Sage Publications Limited.
12. Nathalia, C. N. (2020). *Modifikasi Tepung dan Tapioka dengan Microwaving Cooling Multisiklus*. (Doctoral dissertation, Universitas Pelita Harapan).
13. Noer, I., Humaidi, E., & Kertayoga, I. P. A. W. (2020). Bimtek Kelayakan Usaha dan Pemasaran Aneka Olahan Singkong sebagai Pangan Alternatif di Desan Hujan Mas Kecamatan Abung Barat Kabupaten Lampung Utara. *Jurnal Pengabdian Nasional*, 1(1).
14. Odoom, R., Agbembiese, G. C., Anning-Dorson, T., & Mensah, P. (2017). Branding capabilities and SME performance in an emerging market. *Marketing Intelligence & Planning*.
15. Ramadhan, C. S., Suprabowo, I., & Noviani, W. (2020). Pengembangan Mi Lethek Sebagai Kuliner Unggulan Bantul. *BERDIKARI: Jurnal Inovasi dan Penerapan Ipteks*, 7(2), 112-120.
16. Sari, D. W., Khalifah, N. A., & Suyanto, S. (2016). The spillover effects of foreign direct investment on the firms' productivity performances. *Journal of Productivity Analysis*, 46(2-3), 199-233.
17. Tone, K. (2020). A Digital E-Commerce Approach for Optimizing Economic Equality in Indonesia. *International Journal of Advanced Science and Technology*, 29(6s), 532-537.
18. Wijaya, S. (2019). Indonesian food culture mapping: a starter contribution to promote Indonesian culinary tourism. *Journal of Ethnic Foods*, 6(1), 9.
19. Yunita, F. (2020). SISTEM INFORMASI MONITORING PENJUALAN KERIPIK SINGKONG CAHAYA BARU DI LAMPUNG TENGAH. *Jurnal Alih Teknologi Komputer (ALTEK)*, 1(2).
20. Zahra, S. A., & Sharma, P. (2004). Family business research: A strategic reflection. *Family Business Review*, 17(4), 331-346.

Dedi Rianto Rahadi
Universitas Presiden, STIE Tri Bhakti, Indonesia
Email: dedi1968@yahoo.com

Pandu Adi Cakranegara
Universitas Presiden, STIE Tri Bhakti, Indonesia
Email: cakranegara@gmail.com

Mochamad Muslih
STIE Tri Bhakti, Indonesia
Email: mochamadmuslih@stietribhakti.ac.id