Potential Losses from Bootstrapping Activities Performed by Small and Medium Enterprise (SME's) In Indonesia During The 2013-2019 Period

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Abstract: This study aims to determine the potential losses due to bootstrapping activities carried out by small and medium enterprises (SME's) in Indonesia since 2013-2018. Bootstrapping is an activity of running a new business using one's own capital in a relatively small amount carried out by necessity entrepreneurs. What is meant by the necessity of entrepreneur is entrepreneurs who choose self-employment because there are no other employment options. The research method used in this research is descriptive research method. The data used to calculate potential losses due to the implementation of bootstrapping activities include data on the decrease in the number of SMEs performing bootstrapping and the average capital needed to start a new business. Data on the decrease in the number of SMEs performing bootstrapping was obtained using Total Early Stage Entrepreneurial Activity (TEA) data published by the Global Entrepreneurship Monitor (GEM). Based on TEA data, the estimated number of new entrepreneurs who stop doing business is 20,124,000 entrepreneurs. While the average capital spent by an entrepreneur to start a new business is obtained from GEM publications. The average capital spent by new entrepreneurs in bootstrapping is Rp4,866,925. Potential losses due to bootstrapping during the period 2013-2019 amounted to Rp97.94 trillion.

Keywords: TEA, Necessity Entrepreneur, Bootstrapping

Introduction

Global Entrepreneurship Monitoring (GEM) (2001) an international entrepreneurial research effort involving various universities in the world initiated by Babson College and London Business School - using the concept of entrepreneurship based on a process approach.. GEM researchers initially conducted case studies in 29 countries and used the term Total Early Stage Entrepreneurial Activity (TEA) to describe entrepreneurial activity. GEM defines TEA as "proportion of individuals aged between 18 and 64 that are either in the process of starting a nascent business or are the owner-managers of a new operating business that is less than 42 months old"

Entrepreneurs who run nascent business are called nascent entrepreneurs. What is meant by nascent entrepreneurs are entrepreneurs who are currently trying to start a new business (start-up business); who hope they will become new business owners or have a part of the new business; which has been actively trying to form a new business in the last 12 months but has not yet had a positive cash flow - to cover expenses and the salaries of the owner and company managers for more than three months (Wagner, J., 2004).

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In addition to containing nascent entrepreneurs, the TEA delivered by GEM also includes entrepreneurs who have run new businesses and obtained positive cash flow, but whose business has been operating for less than 42 months.

Based on data published by the Global Entrepreneurship Monitor in 2019, TEA Indonesia has decreased from 25.5% in 2013 to only 13.3% in 2018 (GEM, 2019). The reduction in TEA has very important implications to study since most of the new business funding from Micro, Small and Medium Enterprises (MSMEs) in Indonesia comes mostly from own funding. The funding activity itself to start a business is called bootstrapping (Gniwaley & Fogel, 1994). Bootstrapping activities are carried out by entrepreneurs who are classified as necessity-based entrepreneurs, namely entrepreneurs who employ themselves through entrepreneurial activities because there are no other job choices other than to be entrepreneurs.

This study aims to calculate the potential losses incurred due to bootstrapping activities carried out by new entrepreneurs belonging to MSMEs from 2013 to 2018 using data from GEM.

Literature Review

Necessity Entrepreneur vs Opportunity Entrepreneur

A study conducted by the Global Entrepreneurship Monitor (GEM) (2009) distinguishes the motives of entrepreneurs in conducting entrepreneurial activities into two categories. In the first category, entrepreneurs carry out entrepreneurial activities because there is no other choice for earning other than doing self employment for example by trading or running other businesses. This lack of choice can be caused by various factors, such as the high level of unemployment in a country so that many labor forces are not absorbed to work in companies or due to changes in political climate that are so fundamental that it impacts on a country's economy. For example, after the fall of the Berlin Wall which was the effect of political change is very fundamental in East Germany - many inefficient factories in the East German region stopped operating and left millions of unemployed, whereas previously they were productive working class. After the factories stopped operating, most of the unemployed found that they had no other choice to support themselves and their families except by doing business. The same conditions had hit Indonesia during the economic crisis in the 1990s following the collapse of the New Order regime. Based on the phenomena that occur in East Germany and Indonesia and various other countries, it can be understood that self employment will increase in developing countries and will decrease if there is an increase in employment opportunities (Shrivastava) & Shrivastava, 2013). The entrepreneurs in this category are then called necessity entrepreneurs.

The second category is entrepreneurs who carry out business activities solely based on the existence of business opportunities which are perceived to be exploited to generate profits. These second category entrepreneurs come from professionals who have the motivation to earn more income and take advantage of various business opportunities by using the income or savings they have collected so far to run a business. These entrepreneurs are hereinafter referred to as opportunity entrepreneurs.

Financial Support for Businesses

In general, entrepreneurs need financial assistance for one of the following three things: First, to cover business risk at an early stage of business (start up risk). Second, to raise capital to start a new business (start up capital). Third, to fund business growth or expansion. In developed countries like the United States, venture capital companies (venture capital) are very instrumental in providing financial support for start-up businesses. However, research conducted by Bhide (Gnyawali & Fogel, 1994) shows that one in three new businesses funded by venture capital in the United States has resulted in losses for venture capital companies, so new businesses are deemed unsuitable to be funded by venture capital companies.

New businesses in developing countries have even fewer choices in funding their initial efforts. In general, business actors in developing countries such as Indonesia run their initial business using their own capital, called

bootstrapping. Thus entrepreneurs have full control over the business they run. Based on a survey conducted by the Global Entrepreneurship Monitor, the amount of initial capital needed by entrepreneurs in various countries is as can be seen in Table I below.

Tabel I Average Capital Amounts Needed by SMEs in Various Countries to Start a Business

Regional	Countries		
		Average Initial apital Amount (in US Dollars)	Percentage of Initial Capital Originating from ntrepreneurs (in%)
Africa	Botswana	2.006	62,9
	Burkina Faso	423	46,9
	Cameroon	846	69,6
	Egypt	6.475	61,5
	Senegal	846	47,3
	Tunisia	20.513	54,9
	Morocco	7.173	63,2
	South Africa	810	63,6
Asia dan Oceania	India	1.253	69,7
	Iran	6.500	61,6
	Philiphine	221	77,8
	Vietnam	2.438	95,4
	China	16.263	91,3
	Indonesia	369	97,7
	Lebanon	11.948	67,6
	Malaysia	2.655	64,8
	Thailand	1.464	85,1
	Australia	22.786	76,0
	Israel	26.189	61,8
	South Korea	88.500	76,1
	Taiwan	32.341	65,3
Europe	Bulgaria	5.676	79,4
Lurope	Croatia	11.002	77,9
	Estonia	567	65,3
	Hungary	10.748	74,3
	Kazakhstan	10.715	67,7
	Latvia	11.102	76,1
	Macedonia	11.000	68,0
	L		l

Rumania 12.498 66.2	Regional	Countries	Average Initial Appital Amount (in US Dollars)	Percentage of Initial Capital Originating from attrepreneurs (in%)
Belgium 27.756 69,1		Poland	11.395	71,2
Finland 11.102 70,1 German 22.205 72,1 Greece 33.3.07 75,5 Ircland 16.098 71,4 Italy 55.511 65,8 Luxemburg 13.878 64,8 Netherland 22.205 70,5 Norway 25.280 72,8 Portugal 16.653 72,4 Slovakia 11.302 72,7 Spain 16.653 74,4 Sweden 11.852 62,7 Switzerland 54.351 65,4 England 13.986 84,0 Amerika Latin dan Karibia Argentine 3.576 80,0 Barbados 2.500 81,4 Brazil 624 90,0 Chile 4.680 75,6 Colombia 6.418 59,4 Equador 2.000 74,0 Guatemala 1.305 70,3 Mexico 1.591 71,5 Panama 1.000 93,5,6 Peru 1.577 72,4 Puerto Rico 5.750 85,2 Uruguay 257 76,4				
German 22.205 72,1				
Greece 33.3.07 75,5 Ireland 16.098 71,4 Italy 55.511 65,8 Luxemburg 13.878 64,8 Netherland 22.205 70,5 Norway 25.280 72,8 Portugal 16.653 72,4 Slovakia 11.302 72,7 Spain 16.653 74,4 Sweden 11.852 62,7 Switzerland 54.351 65,4 England 13.986 84,0 Amerika Latin dan Karibia Argentine 3.576 80,0 Barbados 2.500 81,4 Brazil 624 90,0 Chile 4.680 75,6 Colombia 6.418 59,4 Equador 2.000 74,0 Guatemala 1.305 70,3 Mexico 1.591 71,5 Panama 1.000 93,2 Peru 1.577 72,4 Puerto Rico 5.750 85,2 Uruguay 257 76,4 Amerika Utara Canada 19.846 70,5		Finland	11.102	70,1
Ireland		German	22.205	72,1
Registre Section Sec		Greece	33.307	75,5
Luxemburg 13.878 64,8 Netherland 22.205 70,5 Norway 25.280 72,8 Portugal 16.653 72,4 Slovakia 11.302 72,7 Spain 16.653 74,4 Sweden 11.852 62,7 Switzerland 54.351 65,4 England 13.986 84,0 Amerika Latin dan Karibia Argentine 3.576 80,0 Barbados 2.500 81,4 Brazil 624 90,0 Chile 4.680 75,6 Colombia 6.418 59,4 Equador 2.000 74,0 Guatemala 1.305 70,3 Mexico 1.591 71,5 Panama 1.000 93,2 Peru 1.577 72,4 Puerto Rico 5.750 85,2 Uruguay 257 76,4 Amerika Utara Canada 19.846 70,5		Ireland	16.098	71,4
Netherland 22.205 70,5 Norway 25.280 72,8 Portugal 16.653 72,4 Slovakia 11.302 72,7 Spain 16.653 74,4 Sweden 11.852 62,7 Switzerland 54.351 65,4 England 13.986 84,0 Amerika Latin dan Karibia Argentine 3.576 80,0 Barbados 2.500 81,4 Brazil 624 90,0 Chile 4.680 75,6 Colombia 6.418 59,4 Equador 2.000 74,0 Guatemala 1.305 70,3 Mexico 1.591 71,5 Panama 1.000 93,2 Peru 1.577 72,4 Puerto Rico 5.750 85,2 Uruguay 257 76,4 Amerika Utara Canada 19.846 70,5		Italy	55.511	65,8
Norway 25.280 72,8		Luxemburg	13.878	64,8
Portugal 16.653 72,4		Netherland	22.205	70,5
Slovakia		Norway	25.280	72,8
Spain 16.653 74,4		Portugal	16.653	72,4
Sweden 11.852 62.7 Switzerland 54.351 65.4 England 13.986 84,0 Amerika Latin dan Karibia Argentine 3.576 80,0 Barbados 2.500 81,4 Brazil 624 90,0 Chile 4.680 75,6 Colombia 6.418 59,4 Equador 2.000 74,0 Guatemala 1.305 70,3 Mexico 1.591 71,5 Panama 1.000 93,2 Peru 1.577 72,4 Puerto Rico 5.750 85,2 Uruguay 257 76,4 Amerika Utara Canada 19.846 70,5		Slovakia	11.302	72,7
Switzerland 54.351 65,4		Spain	16.653	74,4
England 13.986 84,0 Amerika Latin dan Karibia Argentine 3.576 80,0 Barbados 2.500 81,4 Brazil 624 90,0 Chile 4.680 75,6 Colombia 6.418 59,4 Equador 2.000 74,0 Guatemala 1.305 70,3 Mexico 1.591 71,5 Panama 1.000 93,2 Peru 1.577 72,4 Puerto Rico 5.750 85,2 Uruguay 257 76,4 Amerika Utara Canada 19.846 70,5		Sweden	11.852	62,7
Amerika Latin dan Karibia Argentine Barbados 2.500 81,4 Brazil 624 90,0 Chile 4.680 75,6 Colombia 6.418 59,4 Equador 2.000 74,0 Guatemala 1.305 70,3 Mexico 1.591 71,5 Panama 1.000 93,2 Peru 1.577 72,4 Puerto Rico 5.750 85,2 Uruguay 257 76,4 Amerika Utara Canada 19.846 70,5		Switzerland	54.351	65,4
Barbados 2.500 81,4 Brazil 624 90,0 Chile 4.680 75,6 Colombia 6.418 59,4 Equador 2.000 74,0 Guatemala 1.305 70,3 Mexico 1.591 71,5 Panama 1.000 93,2 Peru 1.577 72,4 Puerto Rico 5.750 85,2 Uruguay 257 76,4 Amerika Utara Canada 19.846 70,5		England	13.986	84,0
Brazil 624 90,0	Amerika Latin dan Karibia	Argentine	3.576	80,0
Chile 4.680 75,6 Colombia 6.418 59,4 Equador 2.000 74,0 Guatemala 1.305 70,3 Mexico 1.591 71,5 Panama 1.000 93,2 Peru 1.577 72,4 Puerto Rico 5.750 85,2 Uruguay 257 76,4 Amerika Utara Canada 19.846 70,5		Barbados	2.500	81,4
Colombia 6.418 59,4 Equador 2.000 74,0 Guatemala 1.305 70,3 Mexico 1.591 71,5 Panama 1.000 93,2 Peru 1.577 72,4 Puerto Rico 5.750 85,2 Uruguay 257 76,4 Amerika Utara Canada 19.846 70,5		Brazil	624	90,0
Colombia 6.418 59,4 Equador 2.000 74,0 Guatemala 1.305 70,3 Mexico 1.591 71,5 Panama 1.000 93,2 Peru 1.577 72,4 Puerto Rico 5.750 85,2 Uruguay 257 76,4 Amerika Utara Canada 19.846 70,5		Chile	4.680	75,6
Guatemala 1.305 70,3 Mexico 1.591 71,5 Panama 1.000 93,2 Peru 1.577 72,4 Puerto Rico 5.750 85,2 Uruguay 257 76,4 Amerika Utara Canada 19.846 70,5		Colombia	6.418	59,4
Mexico 1.591 71,5 Panama 1.000 93,2 Peru 1.577 72,4 Puerto Rico 5.750 85,2 Uruguay 257 76,4 Amerika Utara Canada 19.846 70,5		Equador	2.000	74,0
Panama 1.000 93,2 Peru 1.577 72,4 Puerto Rico 5.750 85,2 Uruguay 257 76,4 Amerika Utara Canada 19.846 70,5		Guatemala	1.305	70,3
Peru 1.577 72,4 Puerto Rico 5.750 85,2 Uruguay 257 76,4 Amerika Utara Canada 19.846 70,5		Mexico	1.591	71,5
Peru 1.577 72,4 Puerto Rico 5.750 85,2 Uruguay 257 76,4 Amerika Utara Canada 19.846 70,5		Panama	1.000	93,2
Puerto Rico 5.750 85,2 Uruguay 257 76,4 Amerika Utara Canada 19.846 70,5		Peru	1.577	72,4
Uruguay 257 76,4 Amerika Utara Canada 19.846 70,5		Puerto Rico	5.750	85,2
		Uruguay	257	76,4
	Amerika Utara	Canada	19.846	70,5
		United State	17.500	73,3

Sources: Daniels, C., Herrington, M., & Kew, P., Special Topic Report 2015-2016: Entrepreneurial Finance, Global Entrepreneurship Monitor.

As can be seen in Table I, the average capital required by small businesses to start a business in Indonesia is \$ 369 or with an average exchange rate of \$ 1 = Rp. 13,500, the average capital required by an entrepreneur to start a small business in Indonesia is Rp.4,981,500 or around Rp.5 million. Table 5.4 also shows that the majority of initial capital to start a new business (start-up business) in Indonesia, comes from the entrepreneur's own funds which amounted to 97.7%. This shows that there is not much financial support for small entrepreneurs in starting new businesses either from venture capital, government or banking institutions in Indonesia.

Research Methodology

This research uses descriptive research methods (Sekaran & Bougie, R, 2017) using analysis of 3 data as follows:

- 1. Data on the number of TEA in Indonesia during the years 2013 2018 using data published by the Global Entrepreneurship Monitor. Based on these data, an estimate will be calculated of the number of business actors who stop doing business activities during the 2013-2018 period.
- 2. Data on the amount of capital issued by SMEs using data published by GEM. Based on these data, an estimate of the amount of capital spent by SMEs will be calculated to start a business.
- 3. Based on the data mentioned in points 1 and 2, the calculation of potential losses incurred due to bootstrapping activities will then be calculated using the following formula:

Potential losses = \sum Number of Entrepreneurs Who Stop Business x Average Initial Capital

Result and Discussion

Estimated Results of the Number of Entrepreneurs Who Stop Business

Table 2 below shows the TEA numbers of various countries in Asia in 2013. Indonesia became the country with the largest TEA with a TEA of 25.5%.

Table 2 TEA From Various Countries in Asia, Pacific and South East Asia

Region	Countries	Nascent	New business	Total Early-stage
		entrepreneurship rate	ownership rate	entrepreneurial
				activity (TEA)
Asia, Pacific &	China	5.2	8.9	14
South Asia				
	India	5.1	4.9	9.9
	Indonesia	5.7	20.4	25.5
	Japan	2.2	1.5	3.7
	South Korea	2.7	4.2	6.9
	Malaysia	1.5	5.2	6.6
	Philipines	12	6.7	18.5
	Singapore	6.4	4.4	10.7
	Taiwan	3.3	5	8.2
	Thailand	7.9	10.4	17.7
	Vietnam	4	11.5	15.4
	Rata-Rata	5.1	7.6	12.4

Sumber: Global Entrepreneurship Monitor, 2013. 2013 Global Report Fifteen Years Of Assessing Entrepreneurship Across The Globe, halaman 30-34

The TEA figure of 25.5% shows that 25.5% of the total population of Indonesia aged between 18 to 64 years are in the process of making a business or are running a business with an operating period of less than 4 years (only 42 months). According to data from the Central Statistics Agency (BPS), Indonesia's population with an age range of 15 to 66 years - as the closest proxy to the age range used by GEM (18 to 64 years) - amounts to 168 million. Thus the number of Indonesian entrepreneurs in the TEA stage (preparing to run a business or already running a business) is estimated at 43 million in 2013.

In 2018, the number of Indonesians between the ages of 18 and 64 was 172 million. With a total TEA of only 13.3% in 2018, the number of entrepreneurs in 2018 will be 22,876,000 entrepreneurs. Thus the number of entrepreneurs who stopped doing business activities during the period of 2013-2018 was 20,124,000 entrepreneurs.

Estimated Results of Average Initial Capital Issued For Running Business Activities

Based on the data presented in Table 1, the percentage of capital coming from entrepreneurs reached an average of 97.7%. If the average business capital needed by a small business to start a business in Indonesia is \$ 369, the average business capital issued by an entrepreneur is \$ 360,513 or equivalent to Rp 4,866,925.

Estimated Results of Potential SMEs Bootstrapping Losses During the 2013-2018 Period

The amount of potential losses due to bootstrapping activities carried out by SMEs during the period 2013-2018 can be calculated as follows:

Potential losses = \sum Number of Entrepreneurs Who Stop Business x Average Initial Capital

 $= 20,124,000 \times 4,866,925$

= Rp97.94 trillion

Discussion of Research Results

Based on the results of research conducted by Dun & Bradstreet Corporation (1991), there are several factors that cause the failure of small businesses. These factors include:

- 1. The ability of entrepreneurs to manage a business that is reflected in bad business behavior, poor health, marital problems etc.
 - 2. Disasters such as fire, death of company owners, etc.
 - 3. Fraud such as obsolete corporate fraud, fabrication of false reports, wrong agreements etc.
 - 4. Economic factors such as high interest rates, loss of market share etc.
 - 5. Sales issues such as weak competitiveness, inventory problems, poor business location, etc.
- 6. Cost issues such as the high operational costs of the company compared to competitors, the amount of the burden of interest costs to be paid by the company every month etc.
- 7. Problems caused by customers such as the problem of collectibility of receivables, the number of customers that are too small, etc.
- 8. Problems relating to capital such as inadequate amount of capital, the existence of capital withdrawal (continuous withdrawal), etc.

Among the eight factors causing the failure of SMEs business that was raised by Dun & Bradstreet Corporation, it seems that the factor of inadequate business and capital management factors is a factor that contributes to the number of SMEs perpetrators of bootstrapping who fail.

Bootstrapping activities are very common in entrepreneurs classified as necessity entrepreneurs. Because there are no job choices, entrepreneurs classified as necessity entrepreneurs try to enter the business world without being preceded by an adequate introduction of market opportunities and not going through a business incubation process so that they do not yet have sufficient skills to start business activities. In addition, bootstrapping SMEs generally have very low initial

capital to start a business (average initial capital under Rp. 10 million) so that the risk of business failure due to inadequate capital is very likely to occur.

The decline in TEA in Indonesia has resulted in a potential loss of Rp97.94 trillion in the period of 6 years from 2013-2018 or equivalent to an average potential loss of Rp16.32 trillion per year. The potential loss due to the bootstrapping activities of entrepreneurs classified as necessity entrepreneurs is very large. Various efforts must be made to stop the rate of potential loss due to bootstrapping activities. These efforts are directed at:

- 1. Improve the ability to run a business for novice entrepreneurs. This can be achieved through business incubation activities carried out by the government, universities and the community.
 - 2. Improve the adequacy of initial capital so that it can guarantee the sustainability of SMEs businesses

Conclusion

- 1. TEA Indonesia has decreased from 25.5% in 2013 to only 13.3% in 2018. This decline in TEA means a decline in new entrepreneurs by 20,124,000 since the period 2013-2018. The new entrepreneurs are bootstrapping entrepreneurs who run businesses using their own capital with a relatively small amount.
 - 2. The average capital issued by new entrepreneurs is Rp4,866,925
 - 3. Potential losses arising from bootstrapping are estimated at Rp97.94 trillion

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