The impact of the economic crisis on micro, small, and medium enterprises and their crisis mitigation measures in Southeast Asia with reference to Indonesia

Tulus T. H. Tambunan

Abstract

The literature on the impact of the economic crisis on micro, small, and medium enterprises (MSMEs) and how they deal with it is still limited. Focusing on the 1997–1998 Asian financial crisis and the 2008–2009 global financial crisis, this study aims to fill this gap. There are two key questions: how these two economic crises have affected MSMEs and what were then their crisis mitigation (CM) measures. To answer these questions, this study reviews experiences in several countries in Southeast Asia with the impacts of these two crises on MSMEs and their responses to the crises. It shows that the impact of the 1997/1998 crisis on MSMEs is different from the 2008/2009 crisis. Findings from a survey of MSMEs affected by the 2008–2009 crisis indicate that finding new customers or markets in other countries unaffected by the crisis or switching to the domestic market was the most widely adopted CM measure. For other respondents who made adjustments to their workforce, the most important form was to reduce working day.

KEYWORDS

Asian economic crisis, global financial crisis, Indonesia, MSMEs, Southeast Asia

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes. © 2018 The Authors. Asia and the Pacific Policy Studies published by John Wiley & Sons Australia, Ltd and Crawford School of Public Policy at The Australian National University.
1 | INTRODUCTION

Economic crisis can be defined as the wild fluctuations, outside the acceptable limits of change, in the prices or supplies of commodities. Economic crisis is usually seen as a situation in which the economy of a country experiences a sudden downturn in its aggregate output or gross domestic product (GDP). There are many early triggers of an economic crisis, for instance, due to the sudden weakening of the exchange rate of a currency (commonly called the currency crisis) or the sudden collapse of the financial sector in a country (called the financial or banking crisis). The financial crisis that hit a number of countries in Southeast and East Asia in 1997–1998, known as the Asian financial crisis, was originally a regional currency crisis that occurred in Thailand, Indonesia South Korea, and the Philippines, whereas the global crisis in 2008–2009, known as the global financial crisis, began first as a banking crisis in the United States.

Many companies in these countries, including micro, small, and medium enterprises (MSMEs), were affected by these crises, especially the first one. In Indonesia, the first crisis began with the depreciation of the Indonesian rupiah against the U.S. dollar (USD) by more than 200% between 1997 and 1998. As a result, many domestic companies that relied heavily on foreign loans (in USD) and imports of processed raw materials, semifinished products, components, machinery, production equipment, and other inputs were forced to stop their activities. The impact of the first crisis was so severe that the country’s economy slumped into a deep recession with an overall negative growth of about 13%.

The second crisis for Indonesia was a global market crisis as global demand declined for a number of manufactured goods from Indonesia, particularly to the United States. Wood- and rattan-based furniture was one of many Indonesia’s manufactured goods affected by this export crisis, and the main producers are MSMEs. The impact of the second crisis was not as severe as the first crisis, and Indonesia maintained a positive growth rate during the period 2008 and 2009.

The purpose of this study is to review, based on key literature and secondary data, the impact of the crises on MSMEs in Indonesia and several other Southeast Asian countries and to explore crisis mitigation (CM) measures adopted by affected MSMEs. More specifically, this study has two research questions. First, how was the impact of the crises on MSMEs? Second, what CM measure was most widely adopted by affected MSMEs? The nature of this study is not to test a certain number of hypotheses or to examine empirically the correlations between certain variables, but to find answers to these two research questions. The rationality behind this study is that despite many publications about the impact of these two crises on such as economic growth, export, employment/unemployment, poverty, migrant workers, child labour, farm household’s incomes, education, and health (e.g., Bello, 1999; Hartono, 2011; Kane, 2009; Pearson & Sweetman, 2011; Priyambada, Suryhadi, & Sumarto, 2005; Shin, 2015; Tambunan, 2010, 2011a, 2011b; Tambunan & Busneti, 2016; UNICEF, 2009; World Bank, 2009), the literature on the impact of the crises on MSMEs and how they dealt with the crises is still very limited. By filling this gap, this research can add new knowledge to the literature on economic crises and MSMEs.

Methodologically, this study is based on (a) a review of key literature, (b) secondary data analysis, and (c) a small field survey of 39 export-oriented MSMEs affected by the 2008/2009 crisis in the furniture industry in Indonesia by using semistructured questionnaires. The selection of respondents was done randomly, based on the list of furniture producers provided by the regional offices of the Indonesian Furniture Manufacturers Association in three cities in Java: Cirebon, Jepara, and Solo. These cities are the centre of the furniture industry in the country. The survey was conducted during the period from June to July 2009.
2 | TWO CRISES

2.1 | Asian economic crisis 1997/1998

The 1997/1998 Asian financial crisis gripped most of Southeast Asia. It began in July 1997 in Thailand with the fall of the Thai baht after the Thai government was forced to float the baht due to the lack of foreign currency to support its currency peg to the U.S. dollar. At that time, Thailand had acquired a burden of foreign debt that made the country effectively bankrupt even before the collapse of its currency. As the crisis spread in late 1997/early 1998, most of Southeast Asia saw their currencies decline.

Thailand, Indonesia, South Korea, and Malaysia were the most affected countries in the region. Among them, when the crisis peaked in 1998, Indonesia had the highest negative real GDP growth of around \(-13\%\). Thailand had \(-10.5\%\) and Malaysia \(-7.4\%\). Singapore was also affected but with the lowest negative growth rate of around \(-0.1\%\). Other less open economies in the region, namely, Myanmar, Lao PDR, and Cambodia, were much less affected (Table 1).

For Indonesia, the crisis was triggered by sudden capital flight soon after the collapse of the Thai baht, and the Indonesian rupiah depreciated more than 200% against the U.S. dollar. The depreciation was followed by a national banking crisis and ended as a national economic crisis. With the depreciation of the rupiah and higher interest rate, the crisis hit high and middle income groups (e.g., employees in the financial/banking sector) and big companies that relied heavily on credit from banks and imports. After several months, domestic prices began to increase along with the increase in unemployment as many employees were laid off in many affected companies. This led to a significant increase in poverty in 1998 (Tambunan, 2010).

2.2 | Global financial crisis 2008/2009

The 2008/2009 global financial crisis began in 2007 as a domestic financial (mortgage) crisis in the United States and spread throughout the world through global trade and financial relations. The crisis developed rapidly and became a global economic turmoil that resulted in a number of bank failures. Also, various stock indices fell along with a substantial fall in equity

| TABLE 1 | Growth rates of real gross domestic product in Southeast Asian countries during the Asian financial crisis (%) |
|---------|----------------------------------|
|         | 1996    | 1997    | 1998    | 1999    | 2000    |
| Thailand| 5.9     | -1.4    | -10.5   | 4.4     | 4.6     |
| Vietnam | 9.3     | 8.2     | 5.8     | 4.8     | 6.8     |
| Indonesia| 7.8    | 4.7     | -13.1   | 0.8     | 4.9     |
| Malaysia| 10.0    | 7.3     | -7.4    | 6.1     | 8.3     |
| Philippines| 5.8   | 5.2     | -0.6    | 3.4     | 4.4     |
| Singapore| 7.7     | 8.5     | -0.1    | 6.9     | 10.3    |
| Cambodia| 3.5     | 14.4    | 2.1     | 6.9     | 7.7     |
| Lao PDR | 6.9     | 6.9     | 4.0     | 7.3     | 5.8     |
| Myanmar | 6.4     | 5.7     | 5.8     | 10.9    | 13.6    |

Source: Asian Development Bank (ADB, 2002).
and commodity values and a fall in world demand for many manufactured products exported by developing countries.

Some countries in Southeast Asia were also affected. When the crisis peaked in 2009, Thailand, Malaysia, Singapore, and Brunei Darussalam experienced negative growth rates of real GDP. Meanwhile, other countries in the region maintained a positive growth but its rate declined, except Myanmar (Table 2).

This crisis was generally regarded as a world demand crisis because it has affected many countries in the world mainly through a significant drop in their export earnings for various manufactured goods. Indonesian exports were also affected (Table 3). The most severely affected export-oriented industries in Indonesia were textile and clothing, footwears and other leather foods, and wood- and/or rattan-based furniture. The majority of producers in these industries are MSMEs The production of these goods is closely linked to regional and global value chains through trade and production systems associated with multinational companies and/or markets in countries such as Japan, the United States, and the major Eurozone countries (e.g., Germany, France, and United Kingdom; Tambunan, 2009).

3 | IMPACTS OF THE CRISIS ON MSMEs

3.1 | Theoretical framework on key transmission channels of the impact on MSMEs

It is often stated in the literature that one comparative advantage of MSMEs relative to their larger counterparts (LEs) is their flexibility and capacity to move from one product to another when market demand changes, and they can expand easily when the economy grows, and to

| TABLE 2 | Growth rates of real gross domestic product in Asian countries during the global financial crisis (%) |
| --- | --- | --- | --- | --- | --- |
|  | 2006 | 2007 | 2008 | 2009 | 2010 |
| Brunei Darussalam | 4.4 | 0.2 | −1.9 | −1.8 | 2.6 |
| Cambodia | 10.8 | 10.2 | 6.7 | 0.1 | 5.9 |
| Indonesia | 5.5 | 6.3 | 6.0 | 4.6 | 6.1 |
| Lao PDR | 8.6 | 5.9 | 7.8 | 7.6 | 7.9 |
| Malaysia | 5.8 | 6.5 | 4.8 | −1.6 | 7.2 |
| Myanmar | 13.1 | 12.0 | 10.3 | 10.6 | 10.4 |
| Philippines | 5.2 | 6.6 | 4.2 | 1.1 | 7.6 |
| Singapore | 8.7 | 8.8 | 1.5 | −0.8 | 14.5 |
| Thailand | 5.1 | 5.0 | 2.5 | −2.3 | 7.8 |
| Vietnam | 8.2 | 8.5 | 6.3 | 5.3 | 6.8 |

Source: ADB (2002).

| TABLE 3 | Export growth rates of Indonesian manufactured goods (%) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| 27.7 | −9.3 | 1.5 | 6.8 | 17.2 | 19.7 | 17.7 | 13.2 | 20.1 | −15.0 | 35.4 |

Source: CIEC Data Company Ltd. provided by Atje and Kartika (2009).
contract easily in case of economic crisis. Berry, Rodriguez, and Sandee (2001) argue that MSMEs are considered very important in industries or economies that face rapid market or economic condition changes, such as a sharp macro-economic downturn. These enterprises work as a shock absorber in the business cycle. In Sandee, Andadari, and Sulandjari (2000), it is stated that MSMEs can be expected to perform better under volatile macro-economic conditions than LEs that produce more standardized products, where the reorganization of the assembly line takes time.

This view is based on several assumptions. First, MSMEs hire more family members and friends than paid employees, mostly to allow them to earn some money for a while, and they are also easier to be dismiss when they are no longer needed, rather than dismissing paid workers. This keeps the total number of paid workers in MSMEs from falling as fast as in the LE during the economic crisis. Second, in countries such as Indonesia where there is no unemployment benefit, those who cannot find a job are forced to start their own small business to earn any income. Thus, MSMEs act as the only last resort for the unemployed people. One hypothesis of this assumption is that during an economic crisis, when many employees in the formal sector (LEs) are dismissed, the number of MSMEs will increase. Third, because they use less capital goods and most of them have no a special place for production, sunk costs are lower than in LEs. Fourth, MSMEs are less reliant on formal markets and formal credit funds. The latter makes MSMEs less sensitive to the banking crisis (Berry et al., 2001).

However, some authors argue that MSMEs can also be severely affected by the economic crisis. For instance, Humphrey (2009) analysed the three most important types of international trade finance and the potential impact on MSMEs of the economic crisis, namely, letter of credit, domestic bank credit, and trade credit. He argues that when the economic crisis also hits the banking sector, causing the loss of international confidence in the local banking system, the letter of credit cannot be issued and no domestic bank and trade credits are available. As a result, local firms that rely heavily on these financing facilities may experience stagnation. ADB (2009) also reported that the shrinking of trade finance due to the 2008/2009 crisis was one of the major transmission channels through which the crisis affected many Asian firms including MSMEs.

Theoretically, the impact of a crisis such as the 1997/1998 crisis or, more specifically, the impact of national currency depreciation on local MSMEs can occur through both demand and supply sides (Figure 1). The supply-side (SS) effects occur through the market for factors of production and other inputs. The demand-side (DS) effects occur through the market for final and intermediate goods. The SS effects of currency depreciation can be positive or negative. The

![Figure 1](https://ssrn.com/abstract=3339683)

**Figure 1** Theoretical framework of the transmission channels of the effects of the 1997/1998 crisis on MSMEs in Indonesia
negative effects mainly come from two sources. First, the capital market: an increase in interest rate due to tight national liquidity as a direct policy response to currency depreciation or because commercial banks do not have enough funds to lend. As a result, many local MSMEs will face financial difficulties. Second, the inputs market: currency depreciation keeps all prices in the national currency of imported inputs up, and this would be detrimental to local MSMEs that depend heavily on import for their inputs.

The positive SS effect is through the labour market. If many companies go bankrupt due to the weakening of the national currency, then many people will become unemployed. In a country such as Indonesia where there is no unemployment benefit, those without formal jobs are forced to seek jobs in the informal sector that is dominated by micro and small business activities or to run their own micro or small businesses.

With respect to the DS effects, there are four main sources of demand for MSMEs’ products: (a) individuals/households, (b) business communities (companies), (c) national governments (e.g., departments), and (d) exports. The first source is domestic final demand, whereas the second and third comprise domestic demand for semifinished or intermediate goods. The last source represents both final and intermediate demand from abroad.

With respect to the first source of demand, whether the DS effect will be negative or positive, it depends on the relationship between the type of goods/services purchased from MSMEs and the level of consumer income. If the purchased goods are inferior (or noninferior), which have a negative (positive) income elasticity of demand, then when consumer income declines because of crisis, the DS effect will be positive (negative) for MSMEs. Conversely, if consumer income increases due to crisis, the DS effect will be negative (positive; Table 4).

With respect to the second and third sources of demand, the stability of demand for MSMEs’ products during the crisis will depend heavily on the performance or ability of companies used to purchase goods or services from MSMEs prior to the crisis to survive the crisis. The DS effect on MSMEs is negative when companies used to buy goods or services from MSMEs reduce their purchases due to the crisis.

But the deprecation of national currency depreciation can also generate market demand opportunities for MSMEs: Many big companies used to buy inputs from abroad before the depreciation now have to buy them from local markets produced by MSMEs.

Finally, with respect to export, the DS effect can also be positive or negative (or even no effect at all). Basically, the depreciation of national currency will increase the price competitiveness in the international market of local exporting companies, ceteris paribus, other price determinants are constants. But Indonesia relies heavily on import of many goods, including processed raw materials, machinery, equipment, and other industrial goods. So, if exporting

| Income group | Type of products usually purchased | The nature of MSMEs’ products from their perspective | The income elasticity of demand for MSMEs’ products | Changes in demand for MSMEs’ products |
|--------------|-----------------------------------|-------------------------------------------------|--------------------------------------------------|-------------------------------------|
| High         | Luxury/very expensive             | Very inferior                                   | Very negative                                    | Large increase                      |
| Middle       | Less expensive                    | Less inferior                                   | Less negative/more positive                      | Moderate increase/decrease          |
| Low          | Cheap                             | Noninferior                                    | Very positive                                    | Large decrease                      |

Note. MSMEs: micro, small, and medium enterprises.
MSMEs use many imported inputs to produce their export goods, the depreciation can even reduce their exports.

The 2008/2009 crisis was generally regarded as an international trade or export crisis as the export market was the main important DS channel through which the crisis had caused exports of many developing countries in Southeast Asia to decline significantly. In this type of crisis, the most affected MSMEs were export market oriented. However, some domestic market- or “not direct” export-oriented MSMEs can also be affected by this crisis through its effect on “direct” export-oriented MSMEs and/or LEs with which they have production/business linkages. ADB (2009) and Hurst, Buttle, and Sandars (2010) state that the 2008/2009 crisis would affect not only “direct” export-oriented MSMEs but also “indirect” export-oriented MSMEs that produce or supply inputs to the first ones or exporting LEs through domestic subcontracting or to foreign countries located multinational companies through regional or global supply chain processes.

Among export market-oriented MSMEs, some enterprises may be affected directly while others indirectly, depending on how each enterprise exports. In Indonesia, exporting MSMEs can be categorized into four types. First, MSMEs export their products (final or semifinal goods) directly to foreign countries without the use of intermediaries such as traders, intermediaries, or other exporting companies. Second, MSMEs produce certain components or parts of final goods for export-oriented LEs through subcontracting production relations or for trading companies. Third, MSMEs sell their goods to foreign tourists who visit local markets (e.g., handicrafts in famous tourist places such as D.I. Yogyakarta and Bali). Fourth, MSMEs manufacture some components of final goods produced by domestic LEs for domestic market, which are also purchased by visiting foreign tourists. The first two categories can be considered as primarily export-oriented MSMEs (although the first category is more direct than the second), whereas the last two categories are primarily domestic market-oriented MSMEs. Due to their many limitations such as lack of capital, lack of skilled workers, and limited knowledge on regional/international marketing, the majority of export-oriented MSMEs in Indonesia do exports indirectly (Tambunan, 2009; Wattanapruttipaisan, 2005).

With the various categories of export-oriented MSMEs above, Figure 2 illustrates theoretically how the 2008/2009 crisis has affected MSMEs in Indonesia. There were two main crisis

![FIGURE 2 Theoretical framework of the effects of the 2008/2009 crisis on MSMEs in Indonesia](https://ssrn.com/abstract=3339683)
transmission channels: (a) less world demand for Indonesian MSMEs’ products, either directly exported or through intermediaries or subcontracting linkages with both domestic market- and export market-oriented LEs, and (b) fewer tourists visited Indonesia, which caused less demands in the local market for MSMEs products.

3.2 | The 1997/1998 crisis

3.2.1 | Indonesian experience

Based on secondary data provided by the Ministry of Cooperatives and Small and Medium Enterprises, Table 5 shows clearly that the number of MSMEs decreased from nearly 39.8 million units in 1997 to 36.8 million in 1998. In 1999, this number began to increase again and continued even during the 2008/2009 crisis. This may indicate that the first crisis was more severe than the second crisis for MSMEs. To support this view, Table 6 illustrates the percentages of change in real GDP and the number of MSMEs in Indonesia during the two crises. As can be seen, the change pattern of the two variables is the same, and in 1998, both percentages of change were both negative, whereas in the second crisis, both variables continued to grow positively.

With a simple linear regression model with only two variables, namely, the percentage of real GDP growth as the independent variable and the percentage growth of the number of MSMEs as the dependent variable, it shows that both variables have a strong correlation. The

| Year | Unit number of MSMEs in Indonesia |
|------|----------------------------------|
| 1997 | 39,765,110                       |
| 1998 | 36,813,578                       |
| 1999 | 37,911,723                       |
| 2000 | 39,784,036                       |
| 2001 | 39,964,080                       |
| 2002 | 41,944,494                       |
| 2003 | 43,460,242                       |
| 2004 | 44,777,387                       |
| 2005 | 47,017,062                       |
| 2006 | 49,021,803                       |
| 2007 | 50,145,800                       |
| 2008 | 51,409,612                       |
| 2009 | 52,764,603                       |
| 2010 | 53,823,732                       |
| 2011 | 55,206,444                       |
| 2012 | 56,534,592                       |
| 2013 | 57,895,721                       |

Note. MSMEs: micro, small, and medium enterprises.
Source: Indonesian State Ministry of Cooperative and SME (www.depkop.go.id).
R\(^2\) is 0.76, which means that 76\% of variation of the dependent variable is explained by the independent variable, whereas the remaining 24\% cannot be explained by this model. Therefore, no matter how the coefficient of determination is measured, the suitability of the model is relatively high.

Findings from various studies on the impact of the crisis on MSMEs in Indonesia, such as Tambunan (1998), van Dierman, Tambunan, Tambunan, and Wie (1998), Musa (1998), Wiradi (1998), AKATIGA and the Asia Foundation (1999), Hill (1999, 2001a, 2001b), Jellinek and Rustanto (1999), Sato (2000), Wie (2000), and ter Wengel and Rodriguez (2006), support the secondary data shown above. Especially in footwear, furniture, batik (Indonesian traditional cloth), bricks, tofu, cigarette (kretek), and metal industry, many MSMEs were forced to stop their activities for various reasons: The prices of imported raw materials in rupiah were very expensive because of the depreciation of the Indonesian rupiah, no access to bank credit, or low domestic demand for their goods.

Jellinek and Rustanto (1999) pointed out interesting facts. They found that the crisis has created greater domestic market opportunities for MSMEs in some industries because many individuals or households affected by the crisis changed their consumption behaviour from the usual purchase of imported goods to domestic goods at much cheaper prices. This shift in public consumption behaviour has resulted in higher demand for local MSMEs.

However, most of these studies do not look deeply at CM measures adopted by the crisis-affected MSMEs. Only van Dierman et al. (1998) found that many MSMEs in the furniture and batik industries in various locations in Central Java had succeeded successfully during the crisis because they made an appropriate CM measure, namely, they had replaced imported raw materials with local raw materials, although the quality was slightly lower.

| Year | Growth rate MSMEs (%) | Growth rate real GDP (Rp) (%) |
|------|------------------------|-------------------------------|
| 1998 | −7.42                  | −13.1                         |
| 1999 | 2.98                   | 0.8                           |
| 2000 | 4.94                   | 4.9                           |
| 2001 | 0.45                   | 3.6                           |
| 2002 | 4.96                   | 4.5                           |
| 2003 | 3.61                   | 4.8                           |
| 2004 | 3.03                   | 5.0                           |
| 2005 | 5.00                   | 5.7                           |
| 2006 | 4.26                   | 5.5                           |
| 2007 | 2.29                   | 6.3                           |
| 2008 | 2.52                   | 6.0                           |
| 2009 | 2.64                   | 4.6                           |
| 2010 | 2.01                   | 6.2                           |
| 2011 | 2.57                   | 6.5                           |
| 2012 | 2.41                   | 6.2                           |
| 2013 | 2.4                    | 5.6                           |

Note. GDP: gross domestic product; MSMEs: micro, small, and medium enterprises.

Electronic copy available at: https://ssrn.com/abstract=3339683
3.2.2 Experiences of some other Southeast Asian countries

In Thailand, findings from such as Chantrasawang (1999), Berry et al. (2001), Bakiewicz (2004), and Régnier (2005) indicate that many Thai MSMEs were forced to discontinue their production activities for various reasons: Credit from banks was not available, interest rate was extremely high, or domestic demand for their products dropped significantly. One interesting conclusion from Bakiewicz (2004) is that direct export-oriented MSMEs or MSMEs with strong international business relationships had little impact from the crisis compared to domestic market-oriented MSMEs.

The same is true in Malaysia. The Ministry of International Trade and Industry estimates that during the crisis period, about 10% of total MSMEs in the country went bankrupt (Mustafa & Mansor, 1999). According to Abdullah (2002), these MSMEs were affected because they (a) relied heavily on the domestic market and could not direct their efforts to overseas markets, (b) relied heavily on loans from banks and other formal financial institutions, (c) were highly dependent on imported raw materials and other inputs, and (iv) were key suppliers to multinational corporations that were also affected by the crisis that led to low orders or order cancellations.

In the Philippines, Tecson (1999) examined the performance of the auto parts industry for the domestic market during the crisis period. The industry is dominated by medium-sized companies. It shows that as income declined, domestic demand for new cars also dropped significantly, which forced many auto parts suppliers to stop their production. Berry and Rodriguez (2001) also found that domestic sale of auto parts and electronic goods decreased during the crisis, although the rate of decline was lower than that of many other goods. However, during the crisis period, the country’s export of auto parts and electronic goods continued to grow.

3.3 The 2008/2009 crisis

3.3.1 Indonesian experience

Table 5 or Table 6 gives the impression that MSMEs were not affected by the crisis because the total number of MSMEs increased, not declined as experienced in 1998. However, some case studies based on field surveys or direct observations show different facts. For example, SMERU Research Institute (2009) provides evidence that many MSMEs in the textile and garment industry in two important textile and garment industrial centres in West Java province, that is, Bandung and Cimahi, were affected. During the survey in 2009, it was found that 150 MSMEs in this industry in Bandung were threatened with bankruptcy due to rising prices of imported raw materials, which caused production costs to rise by about 20%, whereas on the DS, they faced less orders especially from foreign buyers. In one industrial area in the same district (in Dayeuhkolot Industrial Bonded Area [KBI]), there were 12 MSMEs planning at that time to temporary lay off thousands of their contract workers.

Tourism-related handicraft industries, which are also dominated by MSMEs, were also affected by the crisis. According to this SMERU’s (2009) report, in the second half of 2008, there were several handicraft industries in Bali that began to ask their workers to stay at home. The most important handicraft in this province is silversmith. In 2008, there were about 300 registered silversmiths employing more than 20,000 people. In many villages, traditionally, almost everyone, young and old, are involved in this industry. In Celuk village, for example, at that time, more than 50% of the population were silversmiths, and it was found that 30 of them have
been temporarily suspended. Due to the crisis, silver production fell by 50% from an average of about 100 to 50 kg per month per worker. The same situation also haunted many artisans who made wooden masks in Tegallalang village, Ubud, Bali. It was found that many of them had to stop their production. Handicraft industries in some other provinces also faced the same situation. For example, many songket (a traditional fabric of West Sumatra) weavers in Palembang and Ogan Ilir in Sumatra province ceased production because some of their overseas buyers, especially from Singapore and the United States, no longer buy their products since October 2008. In the eastern province of Java, in mid-2008, production in the brass handicraft industry fell by 50% due to lower demand from many countries (including the United States) from US$120 to US$60 million per month, whereas the estimated number of workers who lost their jobs increased by 50%.

Wood- and rattan-based furniture was one of Indonesia’s major export goods that was heavily affected by the crisis. This industry has traditionally been among the major industries of MSMEs. Other important industries of MSMEs are textile and its related products (including clothing), footwear, and food and beverages. As foreign demand for Indonesian furniture decreased due to the crisis, the industry had to lay off nearly 35,000 workers in early 2009. As reported by Kompas daily, Tuesday, August 11, 2009, the Indonesian Association of Furniture Producers (ASMINDO) announced that in the first and second quarters of 2009, compared with the first and second quarters of 2008, the value of Indonesian furniture exports fell by, respectively, 35% and 30%. The Indonesian National Statistics Agency also announced at a press conference a 28% drop in timber exports in the first quarter of 2009 compared with the same quarter of 2008. Meanwhile, another newspaper, the Jakarta Globe, reported a sharp 23.2% drop in export volume of wooden furniture, doors, and window sills.

ASMINDO conducted a survey in May 2009 in a number of major clusters of the furniture industry. Its findings show that since 2008, (a) the number of containers containing furniture products fell from 360 to 100 units per month on average; (b) total MSMEs declined from 510 to 250 units; (c) the number of jobs dropped from about 7,600 workers to 3,000 workers; and (d) total sales of raw materials and intermediate inputs to the clusters also dropped significantly. According to the surveyed producers, the decline was mainly due to falling demand from the United States and some countries in Europe. (Tambunan, 2011b, 2012).

The negative impact of the crisis, however, was indeed expected because furniture, especially of wood and rattan, is generally regarded as a durable and unimportant product, which is sold at a perceived value rather than an actual price. Consequently, demand for this type of consumption product is strongly influenced by economic fluctuations: A significant economic downturn will affect demand and purchases will be delayed (Andadari, 2008).

3.3.2 | Experiences of some other Southeast Asian countries

Studies on the impact of the 2008/2009 crisis on MSMEs in other countries in the region are very few. There are only two food studies from Griffith-Jones and Ocampo (2009) and Nguanbanchong (2009). The first assessed the impact of the 2008/2009 crisis in some developing countries, including in Southeast Asia, and with their findings, they argue that the main transmission channel of the crisis to exporters of these countries was through the decline in world demand. The second study shows that in some countries in the region, export-oriented MSMEs in labour-intensive manufacturing (e.g., textile, garment, footwear, seafood processing, and electronic) and also MSMEs producing items for tourism were most affected. Many workers in these companies, especially women, were affected by a number of ways such as dismissal of
permanent as well as contract workers, reduction of days or hours of work, and freezes at minimum wage.

In summary, from the available literature with evidence of the impact of the 2008/2009 crisis on MSMEs, Table 7 shows exports most affected by the crisis in some other developing countries in Southeast Asia. Some of these goods, for example, textile, clothing, leather, and food and beverages, are important products of MSMEs in these countries, either as subcontractors or as final producers for domestic and export markets.

4 CM MEASURES OF Affected MSMES: Finding From a Case Study

To take a closer look at the impact of the 2008/2009 crisis on Indonesian MSMEs, particularly in the furniture industry, and the CM measures they adopted, field surveys were conducted over the period July–August 2009 on MSMEs in three cities in Java: Cirebon, Jepara, and Solo. These are the three main furniture production centres in Indonesia. Respondents (owners of MSMEs) were interviewed using a structured questionnaire. Their selection was done as follows. First, MSMEs affected by the crisis were identified based on information provided by the local offices of ASMINDO in the three cities. Then, 37 out of them were randomly selected for the sample survey: 10 units in Jepara, 10 units in Cirebon, and 17 units in Solo (Table 8). In addition, unstructured interviews were also conducted with some relevant local government officials and other key stakeholders including the chairmen of regional ASMINDO in the three cities. For the purpose of analysis, the impact of the crisis refers to the impact that has occurred since the end of the second quarter (Q2) 2008 (June 30, 2008). The main purpose of this survey was not only to assess the impact of the crisis on their revenues or incomes but also to explore their adopted CM measures (if any).

The majority of respondents were micro and small entrepreneurs with, on average, less than 20 workers. During the survey, it was found that many enterprises surveyed were in the informal sector (their businesses were not officially registered) and thus their labour recruitment

| Country   | Commodity                                                                                                                                 |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------|
| Malaysia  | Industrial equipment, processed and preserved meat, fish, fruit, vegetables, oils and fats, basic chemicals, rubber and plastic products, metal manufactures and general industrial nonelectrical machinery, telecom, sound recording and reproducing apparatus, office accounting and computing machinery |
| Philippines | Electrical machinery and apparatus, office accounting and computing machinery, road vehicles and components, clothing, leather products and footwear, processed and preserved meat, fish, fruit, vegetables, oils/fats, beverages |
| Singapore | Basic chemicals, rubber and plastic products, food products, tobacco products, electrical machinery and apparatus, office accounting and computing machinery, metal manufactures, general industrial nonelectrical |
| Vietnam   | Machinery and equipment, food and beverages, leather, leather products and footwear, textiles, rubber and plastics products, wood products (excl. furniture) |

Sources: ADB (2009), Khor and Sebastian (2009), Griffith-Jones and Ocampo (2009), Nguanbanchong (2009), SMERU (2009), Hurst et al. (2010), database from the ASEAN Secretariat, and national data on trade from some individual countries.
system or wage payment system did not follow existing formal regulations (e.g., labour laws, government regulations on working conditions, and safety). Many respondents were found to have run their businesses several years before the 1997/1998 crisis, which gives the impression

| TABLE 8 | Profile of the respondents |
|----------|---------------------------|
| **Description** | |
| Total number of enterprises | 37 |
| Jepara | 10 |
| Cirebon | 10 |
| Solo | 17 |
| Average number of employees per enterprise | |
| Jepara | 18 |
| Cirebon | 11 |
| Solo | 3 |
| Share of female workers | |
| Jepara | 37.5% |
| Cirebon | 32.1% |
| Solo | 14.3% |
| Ownership structure of the enterprises in the sample | |
| Foreign owned | 2 |
| Indonesian owned | 35 |
| Category of the enterprises in the furniture industry | |
| Furniture manufacturers | 22 |
| First tier parts suppliers | 12 |
| Second tier parts suppliers | 3 |
| Year of establishment | |
| Before 1998 | 26 |
| After 1998 | 11 |
| Export share in total revenues | |
| 100% | 17 |
| 90–99% | 5 |
| 60–89% | 10 |
| <60% | 5 |
| Five most import countries of export destination | |
| USA | 6 |
| Australia | 6 |
| Spain | 6 |
| France | 5 |
| Italy | 5 |
that they survived during that great Asian crisis. Only 11 companies in the sample were found to have started several years after the 1998/1998 crisis.

Most of them were found to have been involved in export activities, directly (manufacturers) or indirectly (suppliers for other exporting companies) for years, or even since they started their business. However, in the sample, the level of export orientation varies among respondents. For example, there was one respondent with only about 10% of his total revenue coming from export, and there were 17 respondents with 100% of revenues from export. The most important export markets for most surveyed respondents were the United States, Japan, Australia, and some West European countries such as Spain, France, Italy, Germany, and the Netherlands. These countries are indeed the most important traditional markets for Indonesian exports of furniture and other wood products.

According to the respondents, the decline in their production volume since the end of Q2-2008 was due to the decrease in demand/orders, mainly from abroad. However, the percentage decline was found to vary between respondents. For example, it was found that during the survey, one respondent, used to export four containers 40 ft per month before the crisis, was no longer exporting. Instead, he has become a supplier for a medium-sized exporting company with about four trucks per month. One respondent was found to have laid off his employees from 25 workers to just eight workers because he got fewer orders. One respondent, used to export one container per month before the crisis, was found to have no orders at all. One respondent experienced a significant decrease in orders from abroad since late 2008. He used to export about eight to 10 containers per month before 2008, and during the survey, he was found to send only four to five containers each month.

None of the respondents said that other factors, such as rising input prices or lack of access to credit from banks or other formal financial institutions, also contributed to their production. This is an important difference with the 1997/1998 crisis, when in that period, high input prices and lack of credit were the main factors that forced many companies including many MSMEs to stop production. This evidence can confirm the general view that the 2008/2009 crisis is very different from the 1997/1998 crisis, not only in the nature of the crisis but also its impacts on MSMEs in Indonesia.

It can be argued that when a company faces an unexpected fall in market demand for its products, especially if the decline is not expected as a short-term phenomenon, it will take some adjustment measures to reduce the pressure on its profit. CM measures can be in various forms such as fewer production volumes, fewer working days or hours per day, and laid-off workers, depending on the apparent impact of decreased production or financial condition of the company and, perhaps more importantly, the owner’s own expectation about the prospect of the current condition he or she is facing. To find out whether this business strategy in a crisis situation also applies to MSMEs, the respondents were also asked whether they have taken some actions to address the impact of the crisis and if so, they were asked to identify and to rank the CM measures they adopted since the end of Q2-2008. They were given two questions, namely, what measures they have taken (they were asked to rank the measures they took) and how they have adjusted their existing workforce. In relation to the first question, the respondents were given a list of CM measures that includes cancellation or delay of adding facilities or replacement of old machines; production reduction of employees and other labour costs; finding new customers/markets; and stopping new recruits.

As can be seen in Table 9, the highest rank is finding new customers or markets. Indeed, during the crisis period, the Indonesian government tried to encourage exporters who have experienced a decrease in foreign demand for their goods, especially those who have
traditionally concentrated their export to the United States, Japan, and Europe, to diversify their overseas markets or shift their focus to less or not affected countries such as in Africa and the Middle East or to explore domestic market opportunities during the crisis period. The export market diversification or the exploration of domestic market should be regarded as the right decision in the face of this kind of crisis, that is, a DS crisis, that has affected Indonesia’s economy mainly through export. In fact, to stimulate domestic demand, the Indonesian government has launched a fiscal stimulus package in 2009.

From the sample, there are some producers who did not take special measures to overcome the impact of the crisis, because they thought that the crisis would not last forever. The survey also found that three respondents have closed their business. But as they said, their decision to stop production was only temporary, and in the meantime, they did other things such as opening a small stall selling cigarettes, sweets, and other simple basic goods or working as a day labourer in the construction sector or as a supplier of certain materials for other furniture producers that were still operating in that time. They did such temporary activities while waiting for the market situation to be normal again, so they can restart their furniture business.

In relation to the second question, first, the work situation in the surveyed companies is discussed here briefly. On average, the respondents employed five to 10 workers, mainly skilled production employees. Only few employees were found to have the top position as managers. Not all employees have a steady job. Even in most of the companies surveyed, most of their workers were temporary workers whose jobs were mainly based on order quantity. Almost all respondents employed female workers. More interestingly, it was found that most respondents did not have a written contract with their employees. But this is normal for businesses or production activities in the informal sector in developing countries. Only few workers were found to have a written contract but only for 1 year or less. It was also found that some respondents did not pay their employees on regular monthly wages, but on orders.

For this second question, the respondents were given a list of options of job adjustment measures, including developing alternative work arrangements (i.e., new internal labour division); providing training for workers during low production periods; reducing working days/hours, wages, bonuses, and benefits; offering unpaid leave; and laying off workers. The findings

| Crisis adjustment measures taken by the sampled enterprises to cope with the impact of the crisis (% of total sampled enterprises; N = 37) |
|-----------------------------------------------------------------------------------------------------------------------------|
| Seeking out new customers/markets | 89.2 |
| Halting new recruitment | 81.1 |
| Reducing non-labour cost | 70.3 |
| Cancelling/delaying facilities upgrading | 62.2 |
| Cutting back on production | 51.4 |
| Reducing labour cost | 45.9 |
| Closing down | 8.1 |
| Reducing working time | 5.4 |
| No special measures | 2.7 |
| Reducing total workers | 2.7 |

TABLE 9
indicate that the most important forms of workforce adjustment made by most respondents were reducing working time, followed by developing alternative work arrangements and laid off workers. In the case of the reducing working days/hours, it, however, varies by respondent, simply because the impact of the crisis on the company's financial condition also varies among respondents. For many respondents, the main reason for not firing their workers but only reducing working hours was that they predicted the crisis would be temporary, and to seek/recruit new employees is not easy because, first, they have to compete with other producers in their group to find new workers, and, second, they have to train them, and for all this, they have to spend extra money, energy, and time. For respondents who did not take special actions on their existing employees, their main reason is the same, that they expected the crisis was only a short-term phenomenon, and if they fire their workers, to find new ones will be difficult. Also, they could not reduce the wages of their workers because the workers have been working long enough and they were considered as family members of the owners.

The respondents were also asked to tell how many of their employees, especially women and low-educated workers, have been affected by the type of action they choose. In many companies surveyed, female workers were largely affected by the labour adjustment measures. However, the percentage of the affected female workers varies by type of measure. For example, the survey found that of the 14 respondents who have chosen fewer working days/hours as their primary labour adjustment measure, only one company where female workers were not affected; one company with 2% of its female workers affected; one company with 5%; three companies with 15%; and two companies where all female workers were affected.

The variation in the number of affected female workers was also found in the case of employees benefits reductions. Of six companies that have chosen this type as their primary job adjustment measure, only one company where no female workers were affected. Meanwhile, with regard to unpaid leave as the primary adjustment measure, of the five companies that have adopted this measure, only two companies where 35% and 50%, respectively, of female workers were affected.

Finally, seven respondents have chosen to lay off some of their workers. Of them, only one respondent said that none of his female workers were affected, whereas other two respondents said that they laid off all their female workers. Some respondents considered that female workers are not as important as production workers (who are mainly male) because female workers usually do simple jobs such as packaging. One respondent said that the furniture industry is traditionally a men's job. They employ female workers usually not as much as needed, but only as helpers who are paid lower than production workers. This differs from, for example, garments, textile, and tobacco industries, where female workers are dominant as production workers.

Overall, the survey found that the differences in the CM measures adopted among respondents were determined by the following factors: (a) market diversification (i.e., respondents who were not wholly dependent on exports but also served the domestic market at the same time, or exported not only to one country but also to other non-traditional markets less affected by the crisis), (b) current financial condition (i.e., respondents with better financial condition were more resistant to the crisis), (c) the respondents' personal perceptions (i.e., respondents who were more optimistic in that time that the crisis will be short-lived reacted more appropriately/precisely), (d) relations with workers (i.e., respondents who regarded their workers as family members or have good relationships with their workers adopted non-labour adjustment measures), and (5) skill/specialization of workers (i.e., respondents tried to retain their highly skilled/specialized workers).
5 | POLICY IMPLICATION

The findings of this study have some policy implications. First, to design a special credit scheme for MSMEs. In times of crisis such as the 1997/1998 Asian financial crisis when lending rates were so high, a special credit scheme with subsidized interest rate is essential. Of course, because government funds may be limited, the scheme should be implemented with a strict selection system: The main priority should be given only to MSMEs that export or have a great export potential and MSMEs that produce basic commodities for the domestic market but are highly dependent on imports for their raw materials.

Second, to provide import subsidies for MSMEs that are highly dependent on import of raw materials or other needed inputs. Here also, the first priority should be given only to MSMEs that produce goods that are needed most by domestic market but depend on imported raw materials.

Third, to provide technical and marketing supports (e.g., assisting with promotional activities, arranging business meetings with prospective foreign buyers especially from unexplored countries, and facilitating participation in international trade fairs) to exporting MSMEs or those with great export potentials to be able to take advantage of a crisis such as the 1997/1998 crisis when the rupiah weakened.

Fourth, to assist MSMEs in making market adjustments in times of crisis such as the 2008/2009 crisis. At that time, demand from many countries for Indonesian MSMEs’ products declined, and many MSMEs in the country that exported before the crisis were forced to switch to the domestic market. Assistance provided by the government can be given in various forms, for example, conduct exhibitions for MSME goods, design special measures to encourage business linkages between MSMEs and LEs as potential buyers (e.g., industrial goods, office equipment, production tools, automotive components/spare parts, and furniture for offices) through, for example, subcontracting arrangements, and provide temporary special places during the market adjustment process for MSMEs that used to export before the crisis to sell their products to domestic buyers.

Fifth, to provide vocational/job trainings for female and low-educated workers in times of crisis. As this study has shown, they were largely affected by the surveyed companies’ CM measures. Without such trainings, it is difficult for them to become self-employed and thus create a huge army of unemployed. If possible from the government’s financial side, in addition to vocational trainings, a special funding scheme can also be made for those who after completing the vocational training want to run their own business.

6 | CONCLUSION: LIMITATION AND FUTURE STUDY

In the last 20 years, Indonesia has been hit by two major economic crises, namely, the 1997/1998 Asian financial crisis and the 2008/2009 global financial crisis. This study aims to review the impacts of these two crises on MSMEs in Indonesia and some other countries in Southeast Asia and to explore CM measures adopted by affected MSMEs. Experience with both crises from these countries as discussed in this study suggests that crises with different sources of causes have different effects on MSMEs. In Indonesia, during the first crisis, known as the exchange rate or currency crisis, the number of MSMEs declined mainly due to three factors simultaneously: high interest rates combined with a lack of credit and high cost of imported inputs. Although the second crisis, known as the world demand
or export crisis, did not reduce the number of MSMEs, many export-oriented MSMEs in that time suffered from lack of international orders.

With regard to CM measures, finding new markets, not only overseas but also domestic buyers, was adopted by the majority of respondents. It was also found that for those who made adjustments to their existing workforce, the most widely adopted form was a reduction in working hours/days. Indeed, because the fall in world demand in 2008/2009 was mainly due to the decline in world income because of the crisis, the affected MSMEs have only two options, either to reduce their profit margins/prices if possible or to find new buyers/markets.

An important lesson from the 2008/2009 crisis for MSMEs is about market diversification: They should never rely on just one market, for example, the domestic market, but also to sell their goods abroad. However, it would be wise for MSMEs to maintain their domestic market share while exporting. Their domestic market may act as their “last resort” in the case of global economic crises as the 2008/2009 crisis.

With regard to export markets, MSMEs should not focus on one or a few countries only (especially countries that are fully integrated with the world economy, meaning that they are particularly vulnerable to global economic crises, such as the United States, Japan, EU key countries, and even China today). For MSMEs, the higher the level of market diversification, the less vulnerable to regional or global economic crisis.

However, this study has several limitations, and the most important is related to the field survey. The sample of the survey for this study is relatively small and only focused on exporting MSMEs in the furniture industry, whereas other major industries of MSMEs such as footwear, textile and clothing, and leather products were also affected by the 2008/2009 crisis. The survey also did not look deeply at the following aspects: (a) the main obstacles of their business; (b) their current financial condition at the beginning of the crisis; (c) the initial impact of the crisis on their business; (d) their annual revenues from exports in few years before the crisis; (e) the way they exported, whether directly or through intermediaries; (f) their experiences with the 1997/1998 crisis and how they responded to it; and (g) their individual perceptions of the 2008/2009 crisis. It is very likely that the differences between respondents in all these aspects may have influenced their selection of CM measures to overcome the crisis.

Therefore, further field surveys are needed with a larger sample that covers many industries affected by the crisis with a primary focus on the above-mentioned aspects.

**ORCID**

*Tulus T. H. Tambunan* [http://orcid.org/0000-0003-4526-3042](http://orcid.org/0000-0003-4526-3042)

**REFERENCES**

Abdullah, M. A. (2002). An overview of the macroeconomic contribution of small and medium enterprises in Malaysia. In C. Harvie, & B.-C. Lee (Eds.), *The role of SMEs in national economies in East Asia*. Cheltenham: Edward Elgar.

AKATIGA and the Asia Foundation. (1999). “The impact of economic crisis on Indonesian small and medium enterprises,” study for the United States Agency for International Development, Jakarta.

Andadari, R. K. (2008). *Local clusters in global value chains: A case study of wood furniture clusters in Central Java (Indonesia).* the Tinbergen Institute Research Series no. 421. Amsterdam: Tinbergen Institute & Vrije Universiteit.
Asian Development Bank. (2002). *Key indicators of developing Asian and Pacific countries 2002*. Manila: Asian Development Bank.

Asian Development Bank. (2009). *Key indicators for Asia and the Pacific 2009*. Manila: Asian Development Bank.

Atje, R., & Kartika P. (2009). “A bumpy road toward ASEAN Economic Community 2015”, paper presented at the ASEAN Roundtable Discussion on Financial Crisis, 18 June, Bangkok.

Bakiewicz, A. (2004). Small and medium enterprises in Thailand. Following the leader. *Asia & Pacific Studies*, 2, 131–151.

Bello, W., & Focus on the Global South, Bangkok. (1999). The Asian financial crisis: Causes, dynamics, prospects. *Journal of the Asia Pacific Economy*, 4(1), 33–55.

Berry, A., & Rodriguez E. (2001). “Dynamics of small and medium enterprises in a slow-growth economy: The Philippines in the 1990s”, paper, June (Stock No. 37181), The International Bank for Reconstruction and Development/The World Bank, Washington, D.C.

Berry, A., Rodriguez, E., & Sandee, H. (2001). Small and medium enterprise dynamics in Indonesia. *Bulletin of Indonesian Economic Studies*, 37(3), 363–384.

Chantrasawang, N. (1999). “Current issues of SMEs in Thailand: Its linkages with FDI and the impact of the financial crisis”, paper presented at the International Conference on Small and Medium Enterprises At New Crossroads: Challenges and Prospects”, 28-3- September, Universiti Sains Malaysia, Penang, Malaysia.

Griffith-Jones, S., & Ocampo J. A. (2009), “The financial crisis and its impacts on developing countries”, Working Paper No. 53, April, International Policy Center for Inclusive Growth, Brazil.

Hartono, D. (2011). *Assessing policy effectiveness during the crisis: The case of Indonesia*. Geneva: International Labour Organization (International Institute for Labour Studies).

Hill, H. (1999). *Indonesia in crisis*, unpublished draft postscript for the second edition of *The Indonesian Economy since 1966*. Cambridge: Cambridge University Press.

Hill, H. (2001b). Small and medium enterprises in Indonesia: Old policy challenges for a new administration. *Asian Survey*, 41(2), 248–270.

Hill, H. (2001a). Small and medium enterprises. *Indonesia Asian Survey*, 41(2), 248–270.

Humphrey, J. (2009). “Are exporters in Africa facing reduced availability of trade finance”, research paper, March, Institute of Development Studies Brighton, UK

Hurst, R., Buttle, M., & Sandars, J. (2010). The impact of the global economic slowdown on value chain labor markets in Asia. In A. Bauer, & M. Thant (Eds.), *Poverty and sustainable development in Asia: Impacts and responses to the global economic crisis*. Manila and Tokyo: ADB and ADB Institute.

Jellinek, L., & Rastanto, B. (1999). *Survival strategies of the Javanese during the economic crisis*. Jakarta: Consultancy Report to the World Bank.

Kane, J. (2009). What the economic crisis means for child labour. *Global Social Policy*, 9(Suppl), 175–196.

Khor, N., & Sebastian I. (2009). “Exports and the global crisis: Still alive, though not quite kicking yet”, ADB Economics Working Paper Series No. 190, December, Manila: Asian Development Bank.

Musa, A. (1998). “A study on access to credit for small and medium enterprises (SMEs) in Indonesia before and during the economic crisis (1997–1998),” study for the Asia Foundation and the United States Agency for International Development, Jakarta.

Mustafa, R., & Mansor, S. A. (1999), "Malaysia’s financial crisis and contraction of human resource: Policies and lessons for SMIs", paper presented at the APEC Human Resource Management Symposium on SMEs, 30–31 October, Kaoshiung.

Nguanbanchong, A. (2009). “Feminized recession impact of global economic crisis on women in Southeast Asia”, paper presented at the seminar on Gender and the Economic Crisis: Impact and Responses, Oxford, 15–16 September.

Pearson, R., & Sweetman, C. (Eds.) (2011). *Gender and the economic crisis*. Warwickshire: Practical Action Publishing in association with Oxfam GB.
Priyambada, A., Suryadi, A., & Sumarto, S. (2005). What happened to child labor in Indonesia during the economic crisis? The trade-off between school and work. Jakarta: SMERU Research Institute.

Régnier, P. (2005). The East Asian financial crisis in Thailand: Distress and resilience of local SMEs. In C. Harvie, & B.-C. Lee (Eds.), Sustaining growth and performance in East Asia. Cheltenham and Northampton, MA: Edward Elgar.

Sandee, H., Andadari, R. K., & Sulandjari, S. (2000). Small firm development during good times and bad: The Jepara furniture industry. In C. Manning, & P. van Dierman (Eds.), Indonesia in transition: Social aspects of reformasi and crisis. Singapore: Indonesia Assessment Series, Research School of Pacific and Asian Studies, Australian National University, Canberra, and Institute of Southeast Asian Studies.

Sato, Y. (2000). How did the crisis affect small and medium-sized enterprises? From a field study of the metal working industry in Java. The Developing Economies, XXXVIII(4), 572–595.

Shin, K.-Y. (2015). The two crises and inequality in the labour market. International Union Rights, 22(1), 3–5.

SMERU (2009). “Monitoring the socioeconomic impact of the 2008/2009 global financial crisis in Indonesia”, Media Monitoring No.04/FS/2009, November, Jakarta: SMERU Research Institute

Tambunan, T. (1998). "Impact of East Asia currency crisis and economic development on Indonesia’s SMEs and priorities for adjustment", paper prepared for the SME Resourcing Conference, ASEAN Chamber of Commerce and Industry, March 20–21, Jakarta.

Tambunan, T. (2010). The Indonesian experience with two big economic crises. Modern Economy, 1, 156–167.

Tambunan, T. (2011a). Economic crisis and vulnerability: The story from Southeast Asia. New York: Nova Science Publisher, Ltd.

Tambunan, T. (2011b). The impact of the 2008-2009 global economic crisis on a developing country’s economy: Studies from Indonesia. Journal of Business and Economics, 2(3), 175–197.

Tambunan, T. (2012). "The current global economic crisis and its likely impact on Indonesian MSMEs”, Global Columnist, Opinion and Analysis, MSME News Network, Malaysia, November. Available at http://www.msmenewsnetwork.com/index.php/homepage/opinions-analysis/tulus/item/869-the-current-global-economic-crisis-and-its-likely-impact-on-indonesian-msmes.

Tambunan, T., & Busneti, I. (2016). The Indonesian experience with two big financial crisis and their impacts on micro, small and medium enterprises. Asian Research Journal of Business Management, 3(4), 83–100.

Tambunan, T. T. H. (2009). Small and medium enterprises in Asian developing countries. London: Macmillan Palgrave.

Tecson, G. (1999). Present status and prospects of supporting industries in the Philippines. In Present status and prospects of supporting industries in ASEAN (1): Philippines—Indonesia. Tokyo: Institute of Developing Economies, Japan External Trade Organization.

UNICEF. (2009). Impact of the economic crisis on children: What the crisis means for child labour. Bangkok: United Nations International Children’s Emergency Fund.

van Dierman, P., Tambunan, T., Tambunan, M., & Wie, T. K. (1998). The IMF 50-point program: Evaluating the likely impact on SMEs. Jakarta: draft report for the Asia Foundation.

Wattanapruttipaisan, T. (2005). “SME development and internationalization in the knowledge-based and innovation-driven global economy: Mapping the agenda ahead”, paper presented at the International Expert Seminar on “Mapping Policy Experience for SMEs” Phuket, 19–20 May.

Wie, T. K. (2000). The impact of the economic crisis on Indonesia’s manufacturing sector. The Developing Economies, XXXVIII(4), 420–453.

Wiradi, G. (1998). “Rural Java in a time of crisis: With special reference to Curug village, Cirebon, West Java,” paper presented at The Economic Crisis and Social Security in Indonesia, Berg-en-Dal, The Netherlands.

World Bank. (2009). The global economic crisis: Assessing vulnerability with a poverty lens. New York: World Bank.
