THE USAGE OF SURVEYS TO OVERRUN DATA GAPS: BANK INDONESIA EXPERIENCE

by Hendy Sulistiowaty and Ari Nopianti

I. INTRODUCTION

The global economic recession that triggered in the late 2007 in United States has been seriously inflicted the global economy in 2008. The catastrophe has been spread worldwide, with no exception to both advanced and emerging countries. Various stock markets around the world have fallen down sharply, thus causing mass propensity to large financial institutions. Turbulence in the US financial market has created vicious circle between financial market worldwide and real sector. In respond to the situation, several aggressive policies have been adopted at the global level to promote economic recovery. Governments around the world have also launched fiscal stimulus plans with strong efforts to alleviate their economic condition.

A global crisis has caused atrophy of world economic growth. Data from World Economic Outlook (WEO) showed that in 2007 the world economy still grew 5.2%. However in 2008 the world economy decelerated to 3.0% and contracted to -0.6% in 2009. The contraction growth has been experienced in some countries especially in advanced economies due to the increasing integration of the global economy and the deepening of the crisis effect. In 2009, only several countries showed a positive growth although it was lower than previous year, such as India, China, and some ASEAN countries including Indonesia. It seems that although Central Bank and Government have used wide-ranging policy tools to support the economy, no rigorous improvement sentiment signal has yet been given. However, it is also realized that the restoration will need go through difficult transition period.

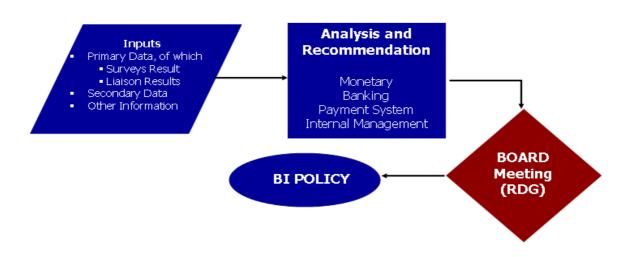
The effect of global crisis in Indonesia was started in the last quarter of 2008. The rupiah exchange rates weakened and touched the lowest level at Rp12.151/USD in November 2008 or depreciated by 31% compared to January 2008. The pressures of rupiah exchange rate came from the mounted balance of payments deficit, fuelled by unfavorable development in current account and capital financial account. This condition also led to a slower Indonesia's economic growth. In the third quarter of 2008, the economy was still amounting to 6.2% growth (yoy). However, in the fourth quarter of 2008, the global financial turmoil began to bear down the Indonesia's economy, followed by slow economic growth to 5.3% (yoy) in the fourth quarter of 2008. Indonesia's

economy in 2008 was still able to record 6.0% on growth, but the crisis itself has generated a 4.5% deceleration on Indonesia's economic growth.

In regards to the central bank perspective, Bank Indonesia (BI) has main single objective i.e. to establish and maintain rupiah stability. Concerning to the global downturn, BI was keeping a close watch on the financial market turbulences and the impact on the Indonesia's economy. Given the high of uncertainty that persists in the economic environment, it is indispensable for monetary policy formulation to be supported by a number of economic indicators and information. Therefore, BI requires progressively statistics data and information that issued by official institution. Since the official economics data were not available to be used as supporting data immediately, BI conducts some surveys on regular basis or by incidental as supplementary information in macro or micro economic condition to meet early indicators respecting national economic movements earlier than official data.

II. BANK INDONESIA SURVEYS

As monetary authority, Bank Indonesia sets up the framework and implements prerequisite monetary policy to achieve and maintain the stability of Rupiah value. In order to support the Board of Governors in formulating the monetary policy, BI needs additional information which was obtained from the surveys. Under the institutes of Bank Indonesia Act No. 23/1999 as amended by the Act No. 3/2004, BI could conducts surveys to assess information concerning the current economic situation as well as its projection.



The Mechanism of Monetary Policy Formulation

The outcome of the surveys is periodically reported to the Board of Governors and several departments in Bank Indonesia. It is also published in Bank Indonesia website, therefore respondents and external stakeholders are able to utilize the survey's results. Some surveys are conducted regularly by Bank Indonesia such as Business Survey, Consumer Survey, Banking Survey, Retail Survey, etc. However, BI also could conduct some ad-hoc surveys to asses particular issues related to the financial market conditions and economic activities. During the global financial crisis, BI conducted Banking Survey and some ad-hoc survey to collect information concerning the impact of the crisis to the financial sector and the real sector.

II.1. BANKING SURVEY

During the global financial crisis, Banking Survey became more important as a tool to obtain early information for monetary and credit development analysis. It is a quarterly survey which covers 48 banks in Jakarta that provide 80% of national total credit. The respondents are

selected by stratified purposive sampling method and classified based on their total asset into: (i) Large Bank with total asset more than Rp25 trillions; (ii) Middle Bank with total asset between Rp4 trillions to Rp25 trillions; and (iii) Small Bank with total asset less than Rp4 trillions. The main purposes of this survey are predominantly to obtain information about the current quarter conditions and the expectation for the next quarter as well as the whole year conditions.

The Banking Survey provides Bank Indonesia with the latest development regarding: (i) the banking policy in funding and deposit lending and (ii) the effectiveness of BI's monetary policy transmission mechanism; and (iii) some additional information related to the banking sector condition which is already reported in Banking Monthly Reports. Some indicators generated by this survey which are important for analyzing financial system condition are: (i) sectoral loans development; (ii) sources and disbursement of funds; (iii) deposit and lending rates; and (iv) projection of credit outstanding growth. In addition, this survey also accommodates a certain number of ad hoc questions dealing specifically with financial market issues. Questionnaires forms are sent by mail, facsimile and email. Since 2008, the questionnaires were distributed to the banks through on line system. The questionnaire is distributed to respondents in the first week at the end of the quarter and returning back to BI a week before the end of the quarter. The response rate of this survey is considerably high, in average above 90%. In the meantime, the report of Banking Survey is published in the first week after the reporting quarter.

Data are classified into quantitative and qualitative types. Qualitative data are processed by weighted net balance method and pooling method. Weighted net balance method is calculated by multiplying respondent's answer with each segment of loan (totally 100%), then calculating the difference between percentage of respondents claiming "increase" and percentage of respondents answering "decrease" (used to known as net balance). Pooling method means that the percentage of the majority answers compare to total respondents. Meanwhile, quantitative data is processed by using simple average method.

For Bank Indonesia, the key important sources of early data which is necessary to assess the impact of the global financial crisis is provided by Banking Survey. Therefore, during the crisis, Bank Indonesia required banks to provide some additional information through three periods of Banking Survey which were conducted in Quarter IV-2008, Quarter I -2009 and Quarter II-2009. Some additional questions related to the global financial crisis include: (i) the impact of the global crisis to the banks' business activities; (ii) which indicators are most affected by the crisis; (iii) the impact of the crisis to the banks' Non Performing Loan (NPL); (iv) the types of credits that suffered the most from the increase of NPL; and (v) the projection of growth in loan

II.2. AD HOC SURVEY

Aside from regular surveys, BI also conducting some ad hoc surveys. The topic of this ad hoc survey are depends on the current economic conditions or some important issues that could generate a negative impact to Indonesia's economy. Every year we conduct four to five ad hoc surveys by using phone survey method. Respondents of the surveys are wide-ranging from individual to companies/institutions. During the period of crisis in 2008 to 2009 we have conducted three ad hoc surveys to capture early information regarding the impact of the crisis to the real sector.

The first survey was conducted in November 2008, the topic was "The impact of Global Economy Crisis to the Real Sectors". The respondents were selected by using purposive sampling which covered 80 companies in some economic sectors i.e. agriculture, mining, manufacturing, construction, trade, and transportation sectors. The survey asked about companies' business situation, capacity utilization, the usage of labor, financial condition, and the impact of exchange rate depreciation to the external as well as domestic demand. Data collected were processed by net balance method, simple average, and pooling system.

The second survey was "Exports and Imports of Non Oil and Gas Performance in Quarter I-2009 and 2009". This survey was carried out from February until March 2009 which involved 317 export companies (covering 29% of non oil and gas export values). They were selected by purposive sampling method. The data collected was processed by using net balance, weighted average, and pooling method.

The third survey was conducted from May until June 2009 mainly to obtain information concerning how the financial crisis affects companies' employment condition. Respondents of this survey embraced 256 companies in several sectors (agriculture, mining, manufacturing, construction, and trade). Respondents were selected by purposive sampling from middle to large companies. The data were processed by simple average and pooling method.

III. THE SURVEY RESULTS

As explained in the previous section, to analyze monetary and credit development as well as the real economic activities, Bank Indonesia requires some data and information. Data from official institutions typically come with a time lag, as a result data and information obtained from surveys become more important to fill data gaps and preserve prompt information to policy makers. In this section, we will discuss about the information obtained through the surveys during the crisis and the conditions of the financial sector and the real sector based on data.

III.1. The Financial Sector

In general, the impact of the global crisis to commercial banks could be minimized due to conservative characteristics of Indonesia's banking. The sources of funds mainly came from deposits, which were placed mainly in form of credit or securities such as governments bond. However, the integration of the domestic financial sector to the global financial market may be problematic. Pressure from the global financial crisis that emerged in the fourth quarter of 2008 until the first quarter of 2009 destabilized the domestic financial sector. Based on the Banking Survey in the fourth quarter 2008, majority of respondents (96.7%) claimed that global financial crisis have impacts to banking activities. This indication was confirmed by some data such as tight liquidity in interbank money market as a result of bank's preference to hold liquidity and limit their interbank transactions. Moreover, weak external demand has deteriorated bank's asset quality as reflected in increasing Non Performing Loan (NPL).

III.1.1. Credit Growth

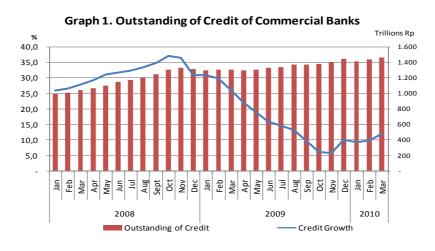
In 2009 the annual growth rate of credit to private sector declined substantially. The dramatic drop in credit growth was indicated on the Banking Survey in the fourth quarter of 2008. Respondents stated that banking activities which most affected by the crisis was lending activity, followed by money markets and lending rates; and tightening liquidity. The main factor behind the deceleration of loan expansion was less production and trade activities due to substantial decline in domestic demand and weaken household purchasing power. Tightening liquidity which created pressure on money market rate and banking lending rates also took a significant role in deceleration loan growth.

The Banking Survey conducted in the first quarter of 2009 also indicated that there are no sign that banks are starting to ease their credit conditions. The low capacity utilization, weak

demand both from domestic as well as external market that led to a delayed plan of business expansion and eventually on financial needs from banks which remain weak are among the reason behind the deterioration of credit growth. On the other side, banks turned more cautious on their lending activities and even restrained from extending credit to particular sectors.

The deceleration of business condition in 2009 also denoted from the ad hoc survey In November 2008. Respondents were pessimistic about the prospect of the real economy and predicted that business condition in 2009 would be getting worse. They predicted that business activities in 2009 would decline 7.51% compared to the previous year. In the second quarter of 2009 Banking Survey, majority of the respondents in large bank group expected that the recovery in both loan demand and credit supply would not happen in 2009. Therefore, they predicted that credit growth in 2009 will be around 10% to 15%, which was lower than 2008.

Data from Banking Statistics confirmed those survey results. In 2008 banking credit grew reasonably high and by the end of 2008 credit growth recorded at 31%. However, in 2009 credit growth down significantly to 10%, which had been predicted in the second quarter of 2009 Banking Survey. The deceleration of credit growth was mainly because banks became more prudent in their lending. In addition, the subdued level of economic activity and trade, and the uncertainty surrounding business outlook dampened firm's demand financing. As a result, banks tended to place their funds in a more secure and liquid instruments mainly in form of central bank's certificate and government bond.



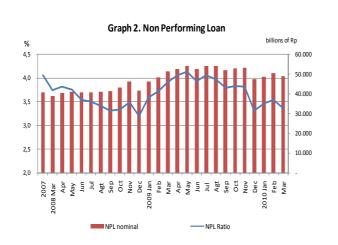
Source: Bank Indonesia

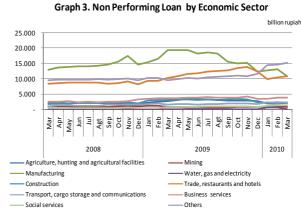
III.1.2. Non Performing Loan (NPL)

Pressure in the economic conditions has indirectly caused broad unfavorable impact on the banking performance, through the downturn in the real sector performance, particularly in exports and imports activity. This condition undermined the ability of banks to provide credit to the business sector that eventually will increase their credit risk and Non Performing Loan (NPL) ¹.

The inclement on NPL ratio pointed on respondents' prediction when they were surveyed in Banking Survey in the fourth quarter of 2008, the first quarter of 2009, and the second quarter of 2009. The majority of respondents predicted that NPL ratio in 2009 will potentially increase, and would reach high NPL ratio in the second quarter of 2009 and the third quarter of 2009. Respondents predicted that NPL ratio in 2009 would be higher than those in 2008. Based on economic sectors, respondents claimed that the highest potential for NPL would occur on manufacturing sector and trade sector.

Data from Banking Statistics proved that since fourth quarter of 2008, NPL has increased monthly and hit the highest point in August 2009 with Rp54.3 trillions (Graph 2). The increasing of nominal NPL in the midst of sluggish credit growth exposed to a rise in bank NPL in 2009. Following high nominal NPL, greater nominal credit risk by economic sector were on trade, hotel, and restaurant sector and manufacturing sector that contributed to 34% of NPL (Graph 3). The increasing of nominal NPL caused the ratio of NPL tend to increase, which was started at the end of 2008





Source: Bank Indonesia Source: Bank Indonesia

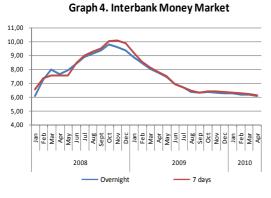
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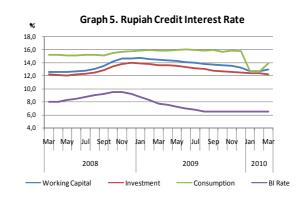
¹ NPL ratio is credits that are sub-standard, doubtful and loss divided by total credits

III.1.3. Interest Rates

Tight liquidity on the global financial market evolved investors to adjust their investment portfolio in emerging countries, including Indonesia, which hastened a foreign capital flow reversal and intensified pressures on the domestic financial market. In the banking sector, tight liquidity was found in the interbank money market as a result of the banks' preference to keep the liquidity and limit interbank transactions. This condition was revealed on the Banking Survey in the fourth quarter of 2008. Most of respondents (89.7%) argued that one of the impacts of the crisis to the banking sector was high interest rate due to tightening liquidity. However, respondents on the Banking Survey in the first quarter of 2009 predicted that for quarter II-2009 and the whole year 2009, interest rate would be lower than 2008.

From Banking Statistics data shows that in 2008 the average of Rupiah credit interest rates start to mount especially in the second semester of 2008. However, entering the year of 2009, we found that pressures on liquidity due to the global crisis have been eased slightly. This condition was parallel with the declining in policy rate (BI rate).





Source: Bank Indonesia

Source: Bank Indonesia

III.2. The Real Sector

The impact of the global crisis in Indonesia was not only to the financial sector, but also spreading to the real sector. The contraction of economic growth in several major countries has suffered world trade volume to -10.7% in 2009. This deterioration in the world economy led to sluggish business condition in Indonesia, particularly to the export oriented businesses and increased the risk of unemployment.

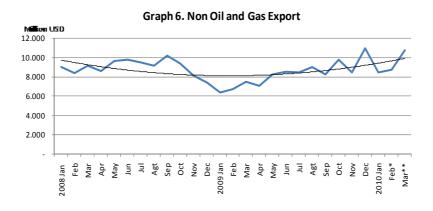
III.2.1. Performance of Export and Import

Export performance

Among the main primary external transaction, Indonesia's export and import has been affected by the global crisis. This condition has been indicated by respondents when BI conducted Exports and Imports of Non Oil and Gas Performance Survey in the first quarter of 2009.

The survey revealed that non oil and gas exports volume in the first quarter of 2009 predicted to decline. In average, export was expected to decrease 18.0% compared to the same period in the previous year. Respondents believed that weak external demand and the delayed of export contracts were the main reasons behind such a depressing condition. The same conditions were also predicted will be occurred for the whole 2009, which projected to decrease -16.8%. To solve the possibility of the alighting in export performance, respondents have some strategies such as cost efficiency, export destinations diversification, products diversification, product quality improvement, and the amount of labor reduction.

The reduction in export performance that indicated from the survey was confirmed with export and import data. Contraction in economic growth in some Indonesia's major trading partners such as USA, Japan, and Singapore in parallel with the declined of international commodity prices has triggered the weak of export performance. Compared to the same quarter in the previous year, non oil and gas export growth in the first quarter until third quarter 2009 experienced a negative growth, thus export growth contracted to -8% during 2009.

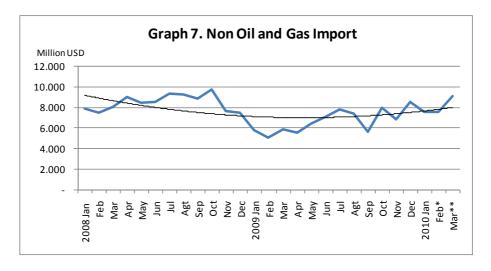


Source: Bank Indonesia

Import Performance

Indonesia's imports have been dominated by non-oil and gas commodities, which average over 70% of Indonesia's total import. Although international turmoil affects the trade through exports, it may also affect trading activity. Moreover, higher level of import substitution especially for Indonesia's manufacturing products may lead import growth deceleration in line with export condition. The contraction in non oil and gas import has been indicated by respondents in Exports and Imports of Non Oil and Gas Performance Survey (first quarter of 2009). The survey revealed that non oil and gas imports were estimated to decrease in the first quarter of 2009 at average of -19.9%, in line with weak export performance. In 2009, respondents predicted that import would decline by -15.7% in average.

Those prediction has been confirmed with import data. During 2009, import of non oil and gas drop in each quarter and touch -22% in 2009 compared to previous year. The performance of import can be seen in the graph 7.



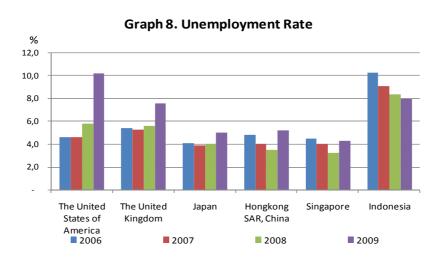
Source: Bank Indonesia

III.2.2. Labor Condition

The pressure from the global crisis had a major effect on several companies to make changes to their operations and upgrade their business efficiency, as the result that some factories closed. These changes led to a rise in planned worker layoffs at some companies. The above condition was indicated in BI's ad hoc survey in May until June 2009 related to the impact of the crisis to the companies' usage of labor. However, respondents predicted that the impact of the

crisis to the decline in the use of labor was insignificant. Respondents who reduced working hours or laid off their worker were relatively smaller compared to the total respondents. The survey conceded that the number of companies who reduce the working hours only 10% in the fourth quarter of 2008 and 8% in the first quarter of 2009. The companies who laid off their worker as much as 16% in quarter IV-2008 and 21% in quarter I-2009 were mostly from export oriented companies. The labors that were laid off majority came from non permanent workers. Generally, the reasons behind the laid off were related to cost efficiency and weak demand both from abroad and domestic market. Furthermore, in 2009 only 11% respondents believed that they have a plan to reduce the labor. The rest of respondents said that they would not reduce the labor since their businesses went normally during the crisis.

The conditions of labor during the crisis can be seen from the number of unemployment rate. As shown in Graph 8, some countries experienced an increase in unemployment rate. In the United States, when the crisis has begun, the unemployment rate in 2009 increase to 7.6% from 5.6% in 2008. However, unemployment rate in Indonesia during the crisis tend to decline. It means that global crisis has no such a big impact to Indonesian labor market, as previously indicated in the survey.



Source: Global Finance

IV. CONCLUSION

Indonesia as one of countries that maintain an open economy was also suffering the adverse effect of the global crisis which was started in the United States in 2007. The crisis has been transmitted to fragility of world economic growth in 2008 and 2009. Indonesia itself also experienced a deceleration on economic growth, even though still charting a positive growth. The impact of the crisis to Indonesian economy was not only to the financial sector but also spread out to the real sector. This global recession presents a signal that there would be more challenges beyond the economic crisis itself.

As a central bank, Bank Indonesia (BI) presides on the global crisis and the impact on the Indonesia's economy. To alleviate the impact of the crisis, BI carried out a series of monetary policies to reinforce earlier measurement. In order to formulate better monetary policies, BI requires data and information that issued by official institution. However, since the data are not available immediately to be used as supporting data, BI conducted some surveys either on regular basis or by incidental

During the period of crisis (2008-2009), BI took a certain number of surveys to get early information from the banks and companies regarding the impact of the crisis on their businesses. The information was gathered from Banking Survey and some ad hoc surveys. The surveys indicated that financial sector and the real sector were affected by the crisis. Low credit growth and increasing of Non Performing Loan (NPL) were several problems arose in the financial sector although yet indicated as a systemic banking crisis. In the real sector, export and import of non oil and gas were dropped in 2009 and several companies cut off their labor particularly export oriented companies.

We found that indicators and information obtained from the surveys was essentially very important in giving early information concerning the impact of the global financial crisis to domestic economy, hence supported BI in taking prudent monetary policy to retrieve from the crisis.

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