Sales Efficiency of the Indonesian Retail Bond (ORI) and Its Implications on Marketing Strategy

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Abstract

This study aims to assess the efficiency of the Indonesian Government Retail Bond known as ORI (Indonesian Retail Bonds) at every branch of BRI (Bank Rakyat Indonesia, an Indonesian commercial bank) in order to obtain a comprehensive study on marketing strategy of ORI that is applicable for the Bank. The method used to analyze the efficiency is SFA (Stochastic Frontier Analysis) method, using number of marketers and marketing costs (marketing promotion cost plus overhead costs) as inputs, while the output is selling fee income of each branch.

The five branches of BRI, namely: Jakarta Pasar Minggu, Jakarta Hayam Wuruk, Kramat Jakarta, Medan Iskandar Muda and Jayapura become the five most efficient branches in conducting sales of ORI001-005. Those branches have average cost per marketers ranges from Rp.533.750 to Rp.1.036.173 while their ORI sales target ranging from Rp.20.000.000 to Rp.7.921.666.667.

Based on the research results, the effective marketing strategy that can be applied to all branches of BRI is to set the sales target of Rp.1.494.000.000 and marketing cost of Rp.1.036.173 (which consists of marketing/promotion cost and marketers' overhead cost) in order to obtain a profit of Rp.5.754.736 per-marketer.

Keywords: ORI, Efficiency, Stochastic Frontier Analysis, Marketing Strategy
JEL Classification Codes: C62, C65, G11, M31

1. Introduction

...ts of a global economic recession, rising oil prices on world markets and the volatility of financial markets are serious. Moreover, inflation and food security are also at risk for macroeconomic stability. One of the Indonesian government's efforts to anticipate the negative impact of U.S. recession is by securing the state budget as the anchor of the national economy.

Anticipation of the structure of the national budget (APBN) is an instrument to manage expenditure and income in order to finance the implementation of government's actions and development, achieve economic growth, increase national income, achieve economic stability, and determine the direction and priorities of the country's development in general. In this case, the APBN has the function of authorization, planning, monitoring, allocation, distribution, and stabilization. All entitled revenue and expenditure of the state in a fiscal year must be included in the budget. Surplus state revenue could be used to finance state spending in the next fiscal year.

APBN's financing instruments include, among others (Warta BI, 2006): First, taxes consisted of income tax (PPh), Value Added Tax (PPN), Customs, and Regional Taxes. Custom tax and import duty is not merely an instrument of revenue, but also an instrument for development which means to improve competitiveness, and facilitate the flow of goods. Second, money printing associated with setting up the seigniorage profit from printing new money and how seigniorage can benefit the people. Seigniorage is the difference between the face value of money with the cost of printing the money, therefore, it is categorized as income.

Third, privatization of BUMN (State Owned Enterprises), Fourth, foreign financing, which includes withdrawal of foreign loans, consisting of program loans and project loans, and foreign debt principal repayments, consisting of Maturity and Moratorium.

Fifth, the Government Securities which covers the State Islamic Securities (Sukuk SBSN or State), SPN (Treasury Bills), ORI (Retail Government Bonds) and Global Bond. The Government has issued various bonds, including Government Securities (SUN) for corporate investors, the Indonesian Retail Bonds (ORI) for individual investors, and will also publish Treasury Bills (NES), which is short term (tenor) and have no interest(zero coupon) and Sukuk (Islamic bonds) that are based on underlying transactions and underlying assets (collateral). The issuance of these bonds serves as the government's commitment to rely on domestic financing sources, aiming to expand the domestic investor base and also to reduce the risk of exchange rates. In addition, to finance the deficit spending, rupiah is generally used.

Bonds is one of the extremely important financial instrument or portfolio investment vehicle in a capitalist economy in addition to stocks and other securities. At a country level, particularly developed countries, the issuance of government bonds has been a common practice for their budget shortfalls. The U.S. economy crisis triggers investors pouring into the bond markets of developing countries. Each of the bonds being offered is always oversubcribed or getting excess demand. Injection of positive sentiment to the emerging market countries is actually growing since the U.S. subprime mortgage crisis which caused the Fed continues to cut rates.

This is evident from the Asian bonds that still give up to 5.4 % profit in the third quarter of 2007 despite the volatility in world markets. Throughout 2006, Asian bonds were capable of generating profits up to 13.6%. Improved performance of Asian bonds was supported by the increase in macroeconomic fundamentals, improvement in credit quality, government policies that create economic growth and market stability. In addition, the Asian bond ratings also continue to rise (Inilah.com 2007).

Bonds is better known as inflation or inflation-linked bond, has a principal amount of debt based on the inflation index. Interest rates on bonds of this type are lower than fixed rate bonds. But with the growth of the principal amount of debt in line for inflation, redemptions of payment were increased.

Literature Review
Changes in Financing Patterns in Developing Countries

After the monetary crisis in 1997, government and companies' securities were increasingly prevalent in the issuance and trading in the secondary market. The interesting thing with the development of these bonds is the existence of substitute placement money from traditional debt securities as time deposits in banking institutions. In governmental and legislative circles, government bonds is currently discussed frequently because it becomes an important debt instrument used as a source of financing for government budget.

There is a lot of debentures' issuance in the developing countries category (emerging markets). For example for Asian countries amounted to 11.95%, Europe amounted to 9.98%, and the Middle East and Africa amounted to 5.65%, while Latin America amounted to 72.42% (MediaIndonesia.com, 2006).

The transition from bank loans' crisis into bonds crisis begins with a process of bank loan securitization to debt securities (Brady bonds); therefore, the role of Brady bonds is significant for emerging markets. In Indonesia case, the monetary crisis in 1997 led to a greater issuance of bonds than the issuance of stocks. Factors that drive bond issuance, among others are: interest rate cuts since 1999, difficulties in launching a national banking credit, thereby encouraging companies to issue bonds to meet its funding needs, and lack of confidence of foreign investors to Indonesia. Generally, the bond issuance proceeds are used to cover part of the due obligation (debt restructuring), company's expansion needs, and working capital requirements.

Research by the International Organization of Securities Commissions (IOSC) (May 2002) which examines the development of bond markets in the domestic market for ASEAN members have concluded that the main reason for the issuance of bonds is as an alternative to domestic debt financing; second, it has a lower cost capital than borrowing from banks, third, it reduces the risks associated with debt maturity mismatches (eg, banks tend to do short-term) and the dominance of corporate earnings in local currency (currency). Fourth, expand the role of capital markets, fifth, credit risk pricing efficiency, sixth, financial stability (which during the charging of credit risk at banks).

However, the World Bank study (1995) argued that changes in corporate finance from bank loans into bonds in emerging markets generally summarized as follows: since 1990, the growth in the number of bonds in domestic and international markets will reduce dependence on bank financing. These financing changes happened due to the importance of investments in infrastructure and capital-intensive projects that require long-term capital debt and fixed costs (fixed rate). In terms of funding requirements with a fixed cost in the long term, the risk of interest rates' fluctuations in the future is not major.

Particularly in Indonesia, the number of corporate bond issuance is much smaller compared to the government's issuance. The government used the funds from bond issuance's proceeds to cover the shortage government spending and to repay the debt, therefore, the issuance of bonds does not directly improve the domestic investment is thus will not trigger higher inflation.

Looking at the experience of developed countries, the issuance of public debt (bonds) is not only for single issuance. Along with time and economic development, debt issuance tends to be continuous (on-the-run issues) and reflects the need for funding in future. Moreover, it is larger compared with the level of savings. Thus it can be predicted to reduce the uncertainty of rising inflation.

But in terms of interests, which may affect the public more, (especially with the current large unemployment rate); a policy should be made between the issuance by the corporate government bonds. Issuance of corporate bonds that are used in business purposes will be more rapid expansion of the public felt in terms of labor absorption.

Another purpose of the state bonds is to finance the state budget deficit and short-term cash shortfall due to a discrepancy between incoming cash and disbursements from the State Treasury Account in a budget year. One of the attractive state bonds that can be accessed by the general public is

Government Retail Bonds (ORI) and Sukuk Retail (SR). Nowadays, the aim of ORI issuance is to capitalize banks and credit financing program. State debt portfolio management aims to minimize debt interest costs at a tolerable level of risk. For that, portfolio debt must be done in an efficiently, based on the practices generally accepted in various countries. These portfolio management includes the issuance, redemption prior to maturity (the buyback), and exchange (swap bond) portion of the outstanding state bonds.

The issuance of ORI is also designated as fiscal instruments, investment instruments, and financial market instruments. For Fiscal Instruments, ORI is expected to explore the potential sources of financing a larger budget from capital market investors. As an Investment Instruments, ORI is expected to provide investment alternatives that are relatively free of default risk and provide opportunities for investors and market participants to diversify their portfolios in order to minimize investment risk. As Instruments of Financial Markets, ORI expected to strengthen the stability of the financial system also can be used as a reference (benchmark) for determining the value of other financial instruments.

Based on data obtained from www.humas.depkeu.go.id, ORI has a significant contribution in reducing the budget deficit (Table 1).

Table 1:   ORI Data Penjualan ORI dan defisit APBN Sales and the State Budget Deficit

ORI	Publication Year	Total Sales (RpTrillion)	State Budget Deficit (RpTrillion)	% to State Budget Deficit
001	2006	3.283	32.1	7.74
002	2007	6.233	46.9	15.39
003	2007	9.367	46.9	15.11
004	2008	13.455	4.2	24.20
005	2008	2.714	4.2	2.87

Source: Processed data

In Table 1 we can see that the issuance of ORI001 gave a significant contribution to the estimated budget deficit in 2006 which was announced at the beginning of the year that is equal to 7.74%. Similarly on the issuance of ORI003 ORI002 are able to contribute by approximately 15%. The highest contribution occurred in the issuance ORI004 that can cover nearly a quarter (24.2%) of the estimated budget deficit early in the year 2008.

In addition to being popular, ORI is also successful due to the yield offered to attract capital owners. Although ORI002 coupon interest (9.28 percent), ORI003 (9.4 percent), ORI004 (9.5 percent) and ORI005 (11.45 percent) are lower than ORI001 by 12.05 percent, the funds flowing into the ORI is actually increased. This is due to the trend of declining market interest rates. Deposit interest rate which is usually used as a reference to individual investors, fell from 9.1 percent in mid-2006, and in early 2008 only reached 6.4 percent (Danareksa.com, 2008)

2.2. ORI Comparison with Japanese Retail Bonds

Based on the Japanese government experience in issuing Government Retail Bond (RGB), in a review journal by Ma'mun and Setiawan (2004), several lessons can be learned, among others, are as follows: First based on the investment patterns of Japanese society, RGB is designed with a 10-year term, however, the patterns of public investment in Indonesia is different from Japan, therefore, the early stages of retail bonds are designed with 2 to 4 year period. Secondly, the Indonesian people in general enjoyed highly liquid investment products; therefore, should be paid every three-month or monthly. Third, the retail bonds should be designed and managed to be fully paperless and designed in conjunction with a dealer or market maker. Fourth, Japanese people generally hold government bonds until the maturity date (Hold To Maturity), and to accomplish the same thing for the people of Indonesia, a design is needed to make ORI as attractive as possible in order to make people interested and hold to maturity. Fifth, the need to involve dealers such as banks and non-bank financial

institutions, including the post office, in RGB sales. In Japan, the dealer incentive is 0, 5% of the RGB therefore, in Indonesia, the selling incentive for ORI is recommended to be 1.0 to 1.5% and can be lowered in the next stages, it can be lowered gradually. Sixth, because the RGB in Japan is designed for investors to hold until maturity, the RGB in the secondary trading market is not active. A specific trading system is not necessary for all dealers and each dealer can build their own trading systems.

The existence of Government Retail Bond (RGB) in Indonesia is very important. It can be seen from: (i) the role of Government Securities (SUN) as a financing instrument in the policy of increasing state finance, (ii) the need to enhance the credibility of government securities as a benchmark for investments in Indonesia through the expansion of SUN ownership among its residents.

Some banks are exploiting recapitalization funds, through the issuance of investment products based on the recap bonds. In general, banks will also enter the bond market, both corporate bonds and government bonds, either for placement of funds and also for the issuance of investment products based on bonds.

The breakthrough by these recap banks is something that has not been regulated by the government, therefore, a deviation that may reduce the credibility of the government is feared. But on the other side, the initiative is in line with the interests of the government to strengthen SUN as a more attractive alternative investment instrument in the long term.

Credibility of a government is a very important element in making government bonds as a benchmark for long-term investment activities in Indonesia. To achieve the required benchmark, an appropriate debt portfolio management is needed, so that the risk-free value inherent in government bonds can be recognized by investors. Therefore, the government is supporting the existence of retail bonds in Indonesia by expanding the ownership of government bonds.

The recent gap between government spending and tax revenues in Japan led to an increased issuance of government bonds. The Gap increased sharply from ¥ 9.2 trillion Yen (1990) to ¥ 40.1 trillion (in 2003). The highest tax revenue amounted to ¥ 60 trillion (in 1990) dropped drastically to ¥ 41.8 trillion (in 2003). This condition causes a stagnate economy. Meanwhile, Japan's total government expenditure rose from ¥ 69.3 trillion (in 1990) to ¥ 81.9 trillion (in 2003). Therefore the Japanese government increased the issuance of Japanese Government Bonds (JGBs) from ¥ 3.7 trillion (in 1990) to ¥ 36.5 trillion (in 2003).

Figure 6 The Gap Between Tax Receipts and Total Expenditures and The Issuance of Government Bond (1990-2003)
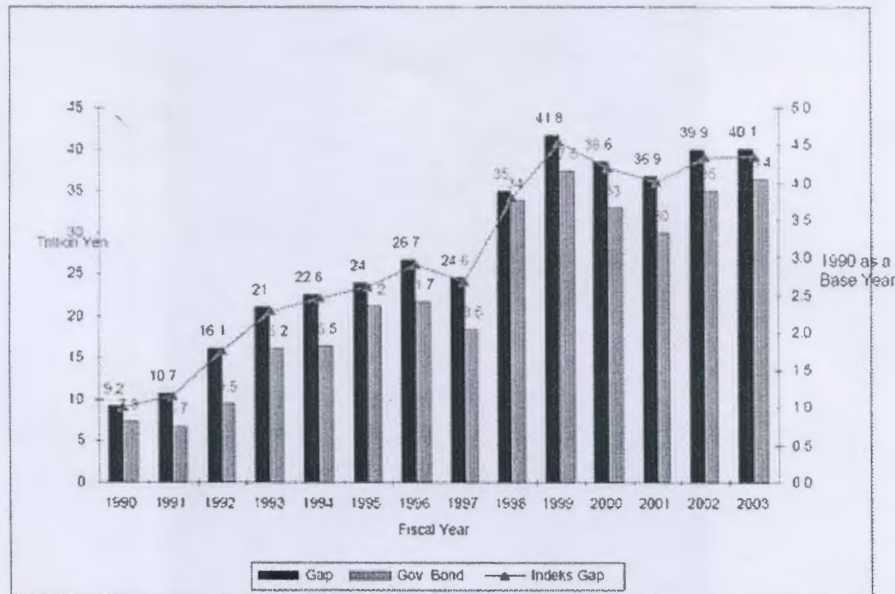
Source: Retail bond in Japan, Finance Bureau, Ministry of Finance, Japan, October 7, 2004

Along with the increased accumulation of the issuance of JGBs, this condition pushed the Japanese government to implement a good debt management strategy. The rationale of this debt management strategy is to stabilize the financing and to reduce costs in the long term. In Japan the majority of JGBs are held by institutional investors, where they are less stable than individual investors in the long term. Thus, increasing the portion of JGBs for individual investors is one way to achieve debt management strategy.

Generally, in long-term, individual investors tend to be relatively more stable in holding bonds. Thus, diversifying the composition of ownership of bonds (bondholder) with the emphasis on the individual will make the market more stable. This condition is the reason for the Japanese government to issue special JGBs for individual investors in March 2003. The retail bonds only for the individual circles are designed to be more attractive in various ways.

RGB has some characteristics, namely: First, the RGB target is only for individual investors. Second, the term is 10 years. Third, bond interest is variable (floating rate bond), which is determined based on interest bearing fixed interest rate JGBs term of 10 years and is paid every six months with a minimum guarantee interest rate 0.05%. Fourth, the fraction of bonds is a minimum purchase of 100 yen and ¥ 10,000 (par). Fifth Interest is paid every half year (semiannually) and tax on interest at 20%. Sixth, after being held for one year, they may be sold back (redeemed).

Until 2000, the Japanese government has issued as many as 17 times RGB (three times a year). For the first time RGB issued in March 2003 amounted to ¥ 383.6 billion or 0.27% of total JGBs and in October 2004 increased to ¥ 1,865.2 billion or 1.15% of total JGBs (Figure 4) Total accumulated RGB published from March 2003 until October 2004 had reached ¥ 8,406.9 billion or 1.46% of total JGBs. More than 50% RGB held by the retirees and housewives.

Figure 2: Tingkat Penjualan RGB (milyar Yen) RGB Sales (billion yen)
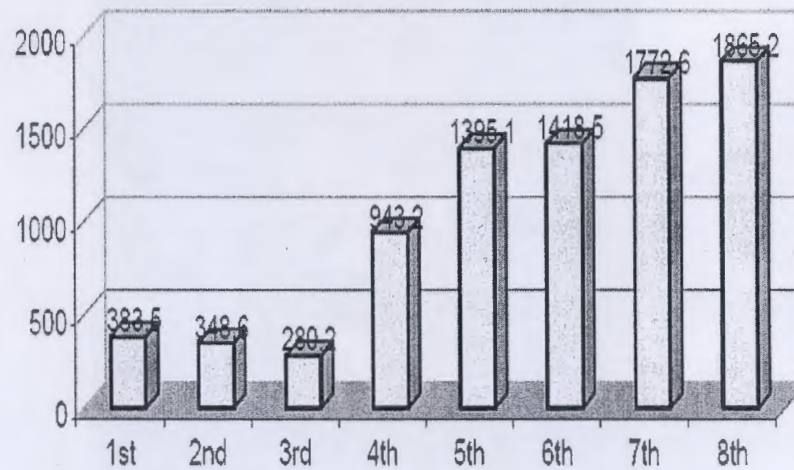
Source: *Retail bond in Japan, Finance Bureau, Ministry of Finance, Japan, October 7, 2004*

In the retail distribution channel of government bonds, there is a primary market and a secondary market. In reality, the RGB trading in the secondary market is inactive due to the RGB design destined to be attractive to investors to hold RGB until maturity.

In the primary market, the Japanese government invited non-banking institutions and banking and post office to become a dealer or agent of RGB. Financial institutions are given the freedom to sell as much RGB as possible, whereas for the post offices, there are certain restrictions. In determining the amount of RGB which will be submitted to the government, banks first calculate the ability of its branches to sell RGB. If there are a number of RGB units that aren't sold, dealers can return them to the government.

Along with the inactive trading in the secondary market, the Japanese government did not ~~cally~~ design the RGB-trade system; therefore, the RGB dealers design their own RGB its trading ~~system~~. For example, Nikko Cordial Securities in collaboration with Lawson, supermarket chains in ~~Japan,~~ in the design of its RGB trading system. Bank of Yokohama and the post office also have their own design that is completely different than the Nikko system.

In the secondary market, RGB involves three main things: processing and settlement, the incentive for dealers, and promotions. In the processing and settlement, investors can buy the RGB from banks, non-banking institutions, and the post office that own a license to sell RGB. Before making reservations, individual investors must first open an account with the dealer. This account serves as a place to record cash flows from coupon payments and interest. Investors will be given a passbook such as the recording of accounting transactions related to RGB.

For the RGB trade, investors are given incentives by government in the form of 0.5% of its RGB sales. For the case of Bank of Yokohama, an investment of ¥ 50 million for the construction trade system has paid for itself just from the sale of its inaugural RGB.

In terms of promotion, both the Ministry of Finance of Japan and the dealers are involved. Ministry of Finance of Japan promotes RGB by putting up advertising posters to the public. The dealers promote through: TV ads showing their baseball star, Ichiro Suzuki; TV shopping shows, the Internet in special page or banner on Yahoo sites and sites for women, as well as links to Nikko Cordial website; seminar on Money Management; and opening an account at a dealer especially for RGB.

2.3. The Market Potential of Indonesian Retail Bonds

The Indonesian retail bonds potential can be predicted from the number of third party funds collected by banks and savings made by households. This type of investment is very liquid and can easily be moved into the retail bonds. In 2001, total public savings in the banking institutions reached Rp169, 35 billion as of April 2004 and increased to Rp247, 10 billion.

Table 2: GDP Ratio of Banking Savings and Deposits

	Savings	Savings Ratio to GDP	Deposits	Deposits Ratio to GDP
2001	169.346	24,2%	250.759	16,7%
2002	189.421	21,7%	252.090	15,7%
2003	238.742	19,4%	243.621	13,8%
2004 (April)	247.103		231.865	

Source: Bank of Indonesia

At the same time the total third party deposits in banking institutions declined from Rp. 250.76 billion (2001) to Rp 231.87 billion (April 2004). Although the savings volume of banking institutions increased, the total savings to GDP ratio in the period of 2001-2004 (April) fell from 24% to 19.4%, and the ratio of deposits to GDP fell from 16.7% to 13.8%.

Looking at the large potential of ORI's market, the government recommends two alternative designs for retail bonds: first is to be conservative two, is to be more attractive. Conservative retail bonds will be designed with an aim to expand the retail bond ownership among individual investors or households. In this case the volume of retail sales of bonds does not become the main target. The retail bonds design is not only intended to broaden ownership of the bonds among individual investors or households, but is also intended to achieve sales targets retail bonds.

In line with the design objectives stated above, the proposed retail bonds are designed with different characteristics. The difference of the two designs is the maximum retail purchases of bonds and bond interest payments. Some basic design considerations for the retail bonds, namely: First, target for the retail bond investors are individuals or households with an aim to provide opportunity for individuals or households to have a government bond. It is also intended to broaden the sources of state financing. Second, the type of bond is script less considering the very simple administrative system,

low in cost and is safer. Furthermore, the people of Indonesia are already familiar with script less forms, such as savings accounts. Third, the short term i.e. 2-4 years was made. It is based on the consideration that these bonds are newly introduced to the public; therefore, it was designed with the short term. Besides, Indonesian people in general are used to investing in deposits with a maturity of 12 months or 24 months. Fourth, fractional retail bonds are Rp 250,000 or Rp 500,000. Analysis results as shown in table 4 can be used as a reference. The analysis result shows that the average surplus income in the lowest class households is 4.2 million per year. Assuming that 61% of the surplus will be invested in illiquid investments, the potential of liquid investments is 2.5 million. Assuming 10% of this potential will be invested in retail bonds, then the fraction is close to USD 250 000, -. However, if we assume 20% of potential retail will be invested in bonds, then the fraction is close to USD 500 000, -. Fifth, the maximum purchase is USD 50 million, - or USD 100 million, - To avoid the ownership of the retail bonds to a group of individuals or households, the purchase of retail bonds should be limited. Sixth, the interest rate. Most individual investors do not pay attention to changes in interest rates. However to encourage individual investors, or households that want to invest in retail bonds, a floating rate based on the SBI or SBI + 1% is designed. The interest rate is far greater than the rate of savings or deposits. Moreover, it is also open to a fixed interest rate. If interest rates are fixed, the rate should be based on government bonds rates rather than with the issued retail bonds minus 1.5%. The reduction is very important considering the retail bonds shorter term, therefore; interest rates should be lower.

2.4. The Role of Banks in Socializing ORI

One objective of the Government issued ORI is to provide education about long-term investment to the community in addition to involving society in developing the nation through the state budget financing. In order to make the ORI popular, the role of the banking industry is as a necessary as marketing media. Banking is expected to be the vanguard in penetrating ORI to the general public since the Indonesian economy is a bank-based economy, an economy that still relies on the existence of banks as a source of financing. Therefore, efforts to strengthen the banking system that are healthy, efficient and beneficial to the economy become the key to success in maintaining the sustainability of national economic development. It requires active participation of banking and one of them is by involving banks to contribute to the mobilization of public funds through the state budget financing instrument that is pointed to state-owned banks and private capital markets and financial institutions (securities companies) as the ORI agencies which allows sellers to collect funding from public sources in country.

BRI as one of the leading banks in Indonesia is participating as an ORI seller. As an agent there are two objectives to be achieved. First, is to assist the government in socializing ORI as one of the profitable investment instruments and to help finance the deficit of state revenue.

Second, a considerable source of revenue despite selling fee earned is still very small when compared to income from credit. However, if BRI was able to find the right strategy in terms of marketing it is possible for ORI's selling fees to become a source of considerable revenue in the near future.

However, it the risks should also be considered, which is when the cannibalism of ORI towards BRI's deposit fund. It could be possible if the size of the financial market is not expanding, so the man who had been saving money in the bank then took the money to be placed in the ORI, unless the purchase was indeed from "new investors".

In a business environment where change is inevitable, successful companies are the ones that are able to effectively manage change and continuously improve the management, systems, strategy and organizational culture in order to continue to withstand the tight competition (David, 2002).

Analyzing changes and facing the competition, BRI must continue to improve its marketing strategies by knowing how to position itself and using modern marketing strategies because the business become increasingly competitive, both in terms of strategy, tactics and the value of BRI. In connection with the sale of ORI in BRI, the right sales strategy will support the competitiveness of BRI among other ORI dealer. The analysis should be conducted thoroughly to cover all branches of the

which sells ORI001 X-005, in order to obtain a comprehensive study on ORI marketing strategies that can be implemented by the next BRI.

2.3. The Analysis of Efficiency

In analyzing a comprehensive review of the ORI marketing strategy at BRI, then a calculation of efficiency needs to be conducted. Efficiency is the ratio between output and input, or the amount generated from an input that is used. So a bank is using efficiency when it is using smaller number of units when compared to the number of input units that are used with other banks to produce the same output, or when using the same input unit, can produce a larger amount of output (Permono and Darmawan, 2000).

Efficiency can also be interpreted as the ratio of output to input. There are three factors leading to efficiency, namely (a) if the same input can produce a larger output, (2) smaller inputs can produce the same output, and (3) with a greater input can result in even greater output (Atmawardhana, 2006).

Viewed from economic theory, there are two terms of efficiency, i.e. technical efficiency and economic efficiency. Economic efficiency has a macro point of view where its scope is more extensive than technical efficiency. Efficiency measurement techniques tend to be limited to technical and operational relationships in converting inputs into outputs. Consequently, efforts to improve efficiency only require internal micro policy, consisting of control and optimal resource allocation (Atmawardhana, 2006).

Tobin said there are four factors that lead to efficiency in financial institutions. The main factor is efficiency due to arbitration information. Second, efficiency due to accuracy of the asset-valuation. Third is efficiency for bank financial institutions ability to anticipate emerging risks. Fourth is the functional efficiency, which is related to the administration and the mechanism of payments made by a financial institution. Included in the functional efficiency of this are risk pooling, general insurance, administration, and mobilization of public funds (Atmawardhana, 2006).

Bank efficiency is one important indicator in analyzing the performance of a bank and also as means to further enhance the effectiveness of monetary policy. Efficiency can be viewed from two sides, namely in terms of costs (cost efficiency) and profitability (profit efficiency). Profit efficiency itself is divided into two, Standard Alternative profit efficiency and profit efficiency.

In general there are three basic concepts of the financial sector efficiency (banking), namely Cost Efficiency, Standard Profit Efficiency, and Alternative Profit Efficiency (Berger and semester in Siti Astiyah and Jardine A. Husman, 2006).

Cost Efficiency basically measures the cost of a bank compared with other banks that have the best operating costs (best practice the bank's cost) that produce the same output with the same technology.

Standard Profit Efficiency basically measures the efficiency of a bank based on the bank's ability to generate maximum profit at a certain price level of output compared with other banks' best operating profit level (best practice banks). This model is often associated with a competitive market condition in which the input and output prices are determined by the market. In other words, no banks can determine the prices of input and output prices; therefore, banks act as price-taking agent.

Standard profit efficiency is the ratio of profit that can be obtained from a bank, such as Bank N compared to a profit in the most efficient banks. For instance, from the above calculation, the profit efficiency standard is 80%, this means that bank N lost 20% of the profits that would otherwise be obtained if operate efficiently. Or in other words there is an inefficiency of 20%.

Alternative Profit Efficiency is different from standard profit efficiency because the nature of the market in this model is perfect competition, while the alternative profit efficiency occurs in imperfectly competitive markets (imperfect market competition). In these market conditions, the bank is assumed to have market power in determining output prices but not at the price of inputs. Because of differences in types of markets are the most striking difference between the two models (standard profit efficiency and alternative profit efficiency) is the exogenous variables in the achievement of maximum profit.

At first, evaluation of the efficiency and productivity performance is measured using financial ratios. But according to some experts (Oral and Yolalan, 1990, Berger and Humphrey, 1992), assessment of efficiency cannot be done partially, it has to take into account all output and all input.

Based on the opinion of the performance measurement of efficiency and productivity, a parametric analysis, one example is the Stochastic Frontier Analysis (SFA).

In the SFA, it is assumed that inefficiencies follow an asymmetric distribution curve, in which random fluctuations followed by a normal distribution curve. Efficiency results are based on the scenes of the data. Each component of inefficiency that is more or less distributed symmetrically will be counted as random error, and each random error that is more or less distributed asymmetrically is calculated as inefficiency.

SFA parametric analysis was first introduced by Aigner et al. (1977). Several studies that were used to calculate the efficiency with SFA method can be seen in Table 3.

Table 3: Comparison of Research Journals in SFA Method

Judul Jurnal Journal Title	Pengarang Author	Tujuan Goal	Kesimpulan Conclusion
Short-run Cost Inefficiency of Commercial Banks: A Flexible Stochastic Approach	Emmanuel I. Kaparakis, Stephen M. Miller, Athanasios G. Noulas	Prove whether the efficiencies will be increased in line with bank size. Bigger banks means higher levels of efficiency.	Efficiency of banks dwindled along with the ever increasing size of the bank. Bank which operates many branches will lead to greater inefficiency costs.
The Effect of Electronic Banking on the Cost Efficiency of Commercial Bank: An Empirical Study	Jui-Chu Lin, Jin-Li Hu, Kang-Liang Sung	Investigate whether the use of electronic banking such as ATMs will increase the efficiency of banks before and after the Asian financial crisis in 1997.	Increasing the number of ATM availability is not always effective in raising the level of bank efficiency without the support of internet banking, e-business and financial electronic data.
Profit and Cost Efficiency of Philippine Comercial Banks Under Periods of Liberalization, Crisis and Consolidation	Santos Jose O. Dacanay III	Investigate the efficiency of commercial banks in the Philippines during the years 1992-2004, the period of financial freedom, crisis and consolidation.	Diminishing the efficiency and cost inefficiency is increasing from year 1992 to 2004. Concluded that efficiency is inversely proportional to the amount of bank assets.
Measurement Matters – Alternative *Input* Price Proxies for Bank Efficiency Analysis	Michael Koetter	Menganalisa besarnya kesalahan pengukuran pada banyak penelitian tentang efisiensi bank dengan menggunakan SFAAnalyzing the errors in research on bank efficiency using SFA	Beberapa faktor yang mempengaruhi besarnya deviasi pengukuran efisiensi adalah: jenis sektor bank, daerah operasinya, aset berisiko, ukuran dan kondisi pasar dari bank lokalSeveral factors affect the amount of deviation of the measurement of efficiency: type of banking sector, the area of operations, risky assets, size and market conditions from local banks.

Title	Author	Purpose	Result
Comparative Bank Efficiency across select ASEAN Countries	Mohd Zaini Abd Karim	Menyelidiki adakah perbedaan efisiensi yang signifikan antara bank-bak di ASEAN (Indonesia, Malaysia, Filipina, Thailand)Investigate the efficiency whether there are any significant differences between banks in ASEAN (Indonesia, Malaysia, Philippines, Thailand)	Urutan bank paling tidak efisien adalah: Thailand, Malaysia, Indonesia dan Filipina.The orders of the most inefficient banks are: Thailand, Malaysia, Indonesia and the Philippines. Negara dengan sektor perbankan yang lebih efisien akan lebih cepat bangkit pada saat krisis 1997 dibanding yang tidakCountries with a more efficient banking sector will rise faster in 1997 than in times of crisis are not.
Efficiency versus Risk in Large Domestic US Banks	Limbo Fan, Sherrill Shafter	Menyelidiki efisiensi profit dari bank-bank komersial di US dan bagaimana kinerjanya dari aspek risiko kredit, risiko likuiditas dan risiko insolvencyInvestigate the profit efficiency of commercial banks in the U.S. and how their performance from the aspects of credit risk, liquidity and insolvency risk.	Efisiensi profit dari 866 bank pd tahun 1998 sebesar 68%.Efisiensi profit lebih sensitif terhadap risiko kredit dan insolvency dibanding likuiditas.Profit efficiency of 866 banks in 1998 amounted to 68%. Profit efficiency is more sensitive to credit risk and insolvency compared to liquidity. Bank menengah (beraset $500jt - $1M) lebih efisien dibanding bank yang lebih kecil dan yang lebih besar.Medium banks (with US$ 500 mil - $ 1tril) were more efficient than smaller banks and larger banks.
An Analysis of Inefficiencies in Banking: A Stochastic Frontier Approach	Simon H. Kwan, Robert A. Eisenbeis	Menyelidiki hubungan antara X-inefisiensi dengan risk taking dan stock returns untuk Bank-bank di USInvestigate the relationship between X-inefficiency with risk taking and stock returns for banks in the U.S.	Rata-rata bank-bank kecil lebih tidak efisien dibandingkan yang besar.Average small banks are less efficient than large. Bank yang inefisien memiliki hubungan yang signifikan dengan tingginya risk taking dan individual stock returnsInefficient banks have a significant relationship with the high risk taking and individual stock returns.
A Comparison of Chance – Constrained DEA and SFA: Bank Efficiency in Taiwan	Tser-yieth Chen	Melihat perbedaan dalam menghitung efisiensi teknik terhadap 39 bank di Taiwan dengan metode DEA dan SFASeeing the difference in calculating the efficiency of the technique against 39 banks in Taiwan with the DEA and SFA methods.	Ada perbedaan yang signifikan dalam menghitung nilai efisiensi dengan menggunakan metode DEA dan SFAThere are significant differences in calculating the value of efficiency using DEA and SFA methods.

SFA method also relies on input and output values that are entered into the equation. Several previous studies are mostly conducted to calculate the efficiency in banking. Pastor et.al, (1995), Berger and Humphrey (1997) and Casu and Molyneux (2002) include loans and deposits as outputs. Hughes et.al (2001) began using cash flow function and then derives a function which will be minimized in order to determine the economic scale, productivity, and results of other technical measures. The study by Espitia-Escuer and Garcia-Cebrian (2004) use credit as output and used the number of employees, number of branches, deposits, and physical capital for input. Meanwhile, Mostafa (2007) summarizes a number of previous studies that attempted to measure efficiency in banking using SFA in table 4.

Table 4: Collection of Research Journals for the Type of Input and Output SFA

Peneliti Researcher	Negara State	Jumlah Bank Number of Banks	Input Added	Output Output
Sherman and Gold (1985)	U.S	14	Karyawan, biaya, luasEmployees, cost, area	Jumlah transaksiNumber of transactions
Parkan (1997)	Canada	35	Karyawan, biaya, luas, sewa, terminalEmployees, cost, area, rental, terminal	Jumlah transaksi, respon konsumen, koreksi kesalahaThe number of transactions, consumer response, error correction
Oral and Yolalan (1990)	Turkey	20	Karyawan, terminal, jumlah rekening, aplikasi kreditEmployees, terminals, account number, credit application	Jumlah transaksiNumber of transactions
Vassiloglou and Giokas (1990)	Greece	20	Karyawan, supplier, luas, terminal komputerEmployees, suppliers, area, computer terminals	Jumlah transaksiNumber of transactions
Giokas (1991)	Greece	17	Karyawan, biaya, sewaEmployees, costs, rental	Jumlah transaksiNumber of transactions
Al-Faraj et al. (1993)	Saudi Arabian	15	Karyawan, lokasi, biaya, peralatan yang dibelEmployees, location, cost, equipment purchased	Laba bersih, saldo rekening saat ini, rekening tabungan, kredit, jumlah rekeninNet income, balance of current accounts, savings accounts, loans, number of accounts
Fukuyama (1993)	Japan	143	Karyawan, modal, dana nasabahEmployees, capital, customer funds	Pendapatan kredit, pendapatan lainnyaCredit revenue, other revenue
Sherman and Ladino (1995)	U.S	33	Karyawan, biaya, sewaEmployees, costs, rental	Jumlah transaksiNumber of transactions
Favero and Papi (1995)	Italy	174	Karyawan, modal, dana untuk kredit, depositoEmployees, capital, funds for loans, deposits	Kredit, investasi surat berharga, pendapatan non-bungaCredit, investment securities, non-interest income
Drake and Howcroft (1999)	English	250	Jumlah rekening kredit, jumlah rekening mortgage, jumlah rekening cekThe number of credit accounts, mortgage account number, the number of checking accounts	Kredit individual, rekening cek baru, kredit mortgage, komisi asuransi, perubahan dari "saldo terpasarkan"Individual loans, new checking accounts, mortgage loans, insurance commissions, the change from "balance terpasarkan"

Zenios et al. (1999)	Cyprus	144	Karyawan, terminal, luas, jumlah rekening saat ini, rekening tabungan, aplikasi kreditEmployees, terminal, area, number of current accounts, savings accounts, credit applications	Jumlah transaksiNumber of transactions
Mukherjee et al. (2002)	India	68	Nilai bersih, pinjaman, biaya operasional, karyawan, jumlah cabangNet value, loans, operating costs, employees, number of branches	Deposito, laba bersih, pembayaran dimuka, pendapatan non-bunga, pendapatan bungaDeposits, net income, prepayment, non-interest income, interest income
Ho and Zhu (2004)	Taiwan	41	Modal saham, aset, jumlah cabang, karyawaShare capital, assets, number of branches, employees	Penjualan, depositoSales, deposits
Sakar (2006)	Turkey	11	Jumlah cabang, karyawan per cabang, aset, kredit, depositoThe number of branches, employees per branch, assets, loans, deposits	ROA, ROE, pendapatan bunga/aset, pendapatan bunga/pendapatan operasional, pendapatan non-bunga/asetROA, ROE, interest income / assets, interest income / operating income, revenue non-interest revenue/asset
Wu et al (2006)	Canada	142	Karyawan, Employees, costs	Deposito, pendapatan, krediDeposits, income, credit
Howland and Rowse (2006)	Canada	162	FTE non-penjualan, FTE penjualan, ukuran, angka tenaga kerja per kotaFTE non-sales, sales FTE, size, number of workers per city	Kredit, deposito, rata-rata jumlah produk/nasabah, kesetiaan konsumLoans, deposits, the average number of products / customers, customer loyalty

Based on previous descriptions, this study aims to assess the efficiency of ORI at any branch of Bank X for the sale of up to ORI005 ORI001 and its implications on marketing strategies.

3. Data and Research Methodology
3.1. Research Data

The data in this study was collected through the database of investors holding in BRI Jakarta, Website Bapepam, BI, e-bursa.com, idx.com, Yahoo Finance, observation and literature review includes data from government and private agencies and, among others, the journal Economic Review, American Bank Association, magazines such as bank info, Business Info, journals and newspapers that circulated in Indonesia and internationally. Furthermore, qualitative and quantitative analysis of the profitability of ORI is being conducted.

This study focuses on the research efficiency of ORI for a period of 2006-2008. Samples used this study are data of ORI001 from 2006, ORI002-003 in 2007 and ORI004-005 in 2008. To calculate the efficiency of ORI in each branch of BRI, we will use ORI sales report data on each branch that sell ORI BRI. The number of samples used in the branch is different for each ORI product. List of BRI branch offices that sell ORI can be seen in table 5.

Table 5: Jumlah sampel kanca BRI yang menjual ORI The Number of Branch BRI Samples Selling ORI

No.	Product	Total Branch BRI Selling ORI	Publication Year
1	ORI001	51	2006
2	ORI002	83	2007
3	ORI003	130	2007
4	ORI004	304	2008
5	ORI005	227	2008

3.2. Data Analysis Method

At first evaluation of the efficiency and productivity performance is measured using financial ratios. During its development, according to some experts (Oral and Yolalan, 1990; Berger and Humphrey, 1992) efficiency rating could not be done partially, but fully, taking into account all output and all input. Another approach in determining the input and output is based on Critical Success Factor (CSF) from a bank. McDonnell and Rubin (1991) identify four CSF for banks, namely: service delivery and quality, sales, expense control and loss control.

Based on the above opinions, then the efficiency and productivity can be measured with the parametric analysis. The Stochastic Frontier Analysis (SFA) is the most popular among other parametric analysis.

SFA method was developed by Aigner, Lovell and Schmidt (1977). In this method, the profit of a bank is modeled to be deviated from profit efficiency frontier due to random noise and inefficiency. Profit Function of the Stochastic Cost Frontier standard has the general form (log) as follows:

$$\log \pi_i = f\left(logX_{ki}, logY_{ki}\right) + e_i \tag{1}$$

where:

π_i = Total profit of bank n
X_{ji} = Input k on bank n
Y_{ki} = Output n k in the bank
e_i = error
e1 consists of two functions, namely:

$$e_i = u_i + v_i \tag{2}$$

where:

u_i = Error factor that can be controlled
v_i = Random error factor that cannot be controlled.

It is assumed that v is normally distributed $N\left(0, \sigma_v^2\right)$ and u is half-normal distributed, $|N\left(\sigma_v^2\right)|$ where $u_u = u_i exp\left(-h\left(t-T\right)\right)^3$ and h is the parameter to be estimated.

In the alternative profit efficiency approach, the bank will maximize its profits by choosing prices of output (y) and the number of inputs (x), for a number of output (y) and input prices (r) has been determined. Indirect profit function that corresponds is named as indirect profit alternative, which is a solution to the following optimization problem (Astiyah Siti and Jardine A. Husman, 2006):

$$MAX \pi = P'Q = \left(p, r\right)\left(y, -x\right) \tag{3}$$

In line with this, suppose that the alternative profit function as follows:

$$\log \pi = f\left(x, y\right) + logu + logv \tag{4}$$

where:

π = profit or efficiency
x = number of inputs
y = number of output
u and v = error

So the alternative profit efficiency can be written as follows:

$$\pi_{Alt}EFF_n = \frac{\hat{\pi}_n}{\hat{\pi}_{max}} = \frac{exp\left[\hat{f}_\pi\left(x^n, y^n\right) + log\left(\hat{u}_{\pi_n}\right)\right]}{exp\left[\hat{f}_\pi\left(x^n, y^n\right) + log\left(\hat{u}_{\pi_{max}}\right)\right]} = \frac{\hat{u}_{\pi_n}}{\hat{u}_{\pi_{max}}} \tag{5}$$

Research variables used in this study for data input is the number of marketer's power and marketing costs representing the sum of the cost of marketer's power and promotion costs, while output is the fee for sales of ORI.

4. Results and Discussion

Studies on the efficiency of ORI sales at branches of BRI will serve as input to determine appropriate marketing strategies for the subsequent issuance of ORI, particularly the strategies associated with the CSF used as an input and output. The results of this study indicate what variables should be optimized by each branch for more efficient sales of ORI. The efficiency rate is based on benchmarking against the most efficient BRI branch in marketing ORI; therefore, the other branch can adopt the same efficient strategy.

The obtained result of the efficiency calculation is divided into several sections according to the type of ORI trading. Each section will have different efficiency results, however, it still be used to make a conclusion about a comprehensive for the next ORI marketing strategy.

In using the software Frontier 1.4 to calculate the efficiency based on the SFA method ,only one output and two inputs are required. Based on the assumption that the sales fee is proportional to the nominal ORI sold, and then one of them can be selected as the output. In this case, the ORI sales fee is selected as output, while the cost of marketing and promotion are combined into one input of marketing costs and another input is the cost of the marketer. In total there are two inputs used.

4.1. Efficiency of BRI Branch that Sells ORI001

Total incoming data from all branches of BRI that are selling ORI001 is 33. Branch offices are spread across seven areas, namely: Bandung, Jakarta, Medan, Palembang, Semarang, Surabaya and Yogyakarta.

If observed from table 6, the branches of the BRI that sells ORI001 are dominated by branches originating from the Bandung area is consisting of four branches, three branches in Jakarta, 2 branches in Surabaya, and 1 branch in Yogyakarta. Pasar Minggu Branch was ranked first with an efficiency score of 0.900. This means that Pasar Minggu branch is able to maximize sales with a high level of cost efficiency. If assessed in terms of nominal sales ORI001, then the branch is one with the most sold ORI001 totaling Rp.630 million, as well as one which obtain the highest sales fee. When compared in terms of net income, it is defeated by Kebayoran Baru branch; however the calculation of comparative efficiency is a combination of inputs and outputs, and it does not always depend on the maximum profit earned.

Table 6: Nilai efisiensi 10 cabang Bank X tertinggi yang menjual ORI001BRI Branch Efficiency Score of 10 Highest Selling ORI001

No.	Branch	Biaya Cost Teof power Pemasar for Marketers	Biaya Promosi Campaign Costs	Jumlah Pemasar Number of Marketers	Biaya/ Pemasar Cost / Marketers	Nominal ORI Terjual ORI Sold	ORI Fee Penjualan ORIORI Osales Fee	Efisiensi Efficiency
1	Pasar Minggu	1.067.500		2	533.750	630.000.000	2.863.636	0.900276
2	Kebayoran Baru	475.277		1	475.277	540.000.000	2.454.545	0.895979
3	Mangga Dua	577.800		1	577.800	280.000.000	1.272.727	0.877698
4	Surabaya Kaliasin	960.000		3	320.000	280.000.000	1.272.727	0.876856
5	Sukabumi	68.000		1	68.000	255.000.000	1.159.091	0.876853
6	Yogya Cik Ditiro	450.000		1	450.000	255.000.000	1.159.091	0.876017
7	Tangerang	1.267.601		4	316.900	220.000.000	1.000.000	0.871327
8	Sidoarjo	2.700.000		6	450.000	250.000.000	1.136.364	0.870402
9	Majalengka	500.000		1	500.000	160.000.000	727.273	0.868056
10	Bandung Dewi Sartika	1.078.983		2	539.492	160.000.000	727.273	0.866682

Source: Data processing (in Rp.)

In terms of costs for the marketer, ranking1-10 shows a variable number ranging from Rp.68.000 - Rp.577.800. The lowest cost marketer is given to branch of Sukabumi, which is located outside the city, while for branches located in provincial capitals, it is above Rp.320.000. The policy of administration fee to the marketer is the authority of each branch, but for the sale ORI001, the effective fee that can be given to marketers are within the range of Rp. 400-500 thousand during the period of two weeks of ORI sales in each branch. The range of fees to marketers as above can certainly spur ORI marketers to acquire as many customers as possible.

Moreover, we need to consider the performance fee calculation. Achieving the target marketers (Nominal of ORI sold divided by the number of marketers) with the highest efficiency level amounted to Rp.315 million per marketers (Appendix) and this is quite realistic when viewed from a branch with high level of efficiency. Thus, one person able to give marketers a net gain at approximately Rp.900.000 for BRI (derived from sales minus the cost of labor fee marketers and promotion costs). If the target is increased to reach Rp.540 million per-marketers such as in the second rank Kebayoran Baru branch, BRI may obtain a net gain of approximately Rp.2.000.000 per-marketers. In conclusion, for ORI001 initial sales targets that are charged per-marketers are ranging from Rp.315 - 540 million for BRI to still get sufficient profit. Strategic policy to reach marketers target is that every marketer needs to pay a fee of Rp.400 - 500 thousand.

4.2. Efficiency of BRI Branch that Sells ORI002

In Table 7, ten of BRI branches that are the most efficient in selling ORI002 are still dominated by branches originating from the territory, as much as eight branches in Jakarta, Surabaya and Medan. One interesting fact is that the city of Jakarta branch that was ranked in the lowest 10 in the sales of ORI001 is included in the 10 major branches with most efficient sales of ORI002. One reason for this is the consistency of the Jakarta branch to allocate campaign funds. The promotion for ORI001sales were notable to attract many investors, so in the ORI002 sales, promotions were able to collect Rp5, 16 billion by simply relying on one person marketers.

Tabel 7: Nilai efisiensi 10 cabang Bank X tertinggi yang menjual ORBRI Branch Efficiency Score of 10 Highest Selling ORI002

No.	Branch	Biaya Cost Teof power Pemasar for Marketers	Biaya Promosi Campaign Costs	Jumlah Pemasar Number of Marketers	Biaya/ Pemasar Cost / Marketers	Nominal ORI Terjual ORI Sold	ORI Fee Penjualan ORIORIO Sales Fee	Efisiensi Efficiency
1	Jkt Hayam Wuruk	5.600.000		8	700.000	2.700.000.000	12.272.727	0.897153
2	Jakarta Kramat	5.600.000		8	700.000	2.260.000.000	10.272.727	0.894370
3	Cab. Roxi	5.600.000		8	700.000	1.695.000.000	7.704.545	0.890650
4	Jakarta Pondok Indah	970.000	3.760.000	2	485.000	2.485.000.000	11.295.455	0.889469
5	Pontianak	2.155.408		4	538.852	5.200.000.000	23.636.364	0.883900
6	Medan Iskandar Muda	5.180.864		5	1.036.173	495.000.000	2.250.000	0.878860
7	Surabaya Kaliasin	960.000		3	320.000	6.510.000.000	29.590.909	0.878368
8	Jakarta Fatmawati	1.100.000		2	550.000	5.365.000.000	24.386.364	0.872367
9	Jakarta Kota	820.000	200.000	1	820.000	5.160.000.000	23.454.545	0.869800
10	Jakarta Cut Meutia	2.010.000		2	1.005.000	3.300.000.000	15.000.000	0.868705

Source: Data processing (in Rp.)

Moreover, there is a need to collect data of customers / investors, because a single investor may buy ORI up to a maximum of Rp.3 Billion. If the nominal sales increased along with the number of customers, then the marketing strategies of these branches could be studied further to apply to the marketing strategy of selling ORI in other branches.

On Table 7, we see the first rank is occupied by the Jakarta branch of Hayam Wuruk with the number of marketers as much as eight people and an average of every marketer can sell Rp.337 million of ORI002 (Appendix) with a cost-per-marketers of Rp.700.000. With the current economic conditions, a person can give marketers the net profit amounted Rp.834.091 (ORI sales fee - the cost of marketing and promotion) for BRI.

Based on data from table 7 it can be concluded that the highest efficiency of the BRI branch in ORI002 sales was reached with the lowest volume of sales per-marketers of Rp.99 million (Iskandar Muda Medan branch) with a cost-per-marketers in the range of Rp.320 thousand - 1 million. In addition the lowest value of the net profits earned by BRI from a marketer is Rp.263.068 and the highest is Rp.22.834.545 (Appendix).

4.2. Efficiency of BRI Branch that Sells ORI003

As shown in Table 8, ten of the most efficient branch of the BRI is still dominated by the branches of Jakarta, a total of five branches. The first rank is occupied by a branch of Iskandar Muda Medan, with total funds of Rp.7, 4 Billion. In terms of net profit, the Surabaya branch Kaliasin successfully recorded the highest profit amounted to Rp.50, 8 million earned from the sale ORI003 by three men with an average marketer sales ofRp.3 8 billion per marketers. Total ORI003 sold amounted to Rp.11, 4 Billion.

Kisaran keuntungan yang dicatat oleh pemasar berada pada rentang Rp.95.455 – Rp.16.960.303 dengan jumlah nominal ORI terjual sebesar Rp.70.000.000 – Rp.11.405.000.000.The range of profits recorded by the marketers were in the range Rp.95.455 - Rp.16.960.303 with ORI sold for a nominal amount Rp.70.000.000 - Rp.11.405.000.000. Namun perlu ditekankan pula bahwa 3 cabang Bank X yang termasuk paling efisien yaitu: Jakarta Roxy, Hayam Wuruk dan Binjai menderita kerugian karena biaya pemasaran yang dikeluarkan lebih besar daripada *fee* yang diperoleh. However it should be emphasized also that the three branches of BRI, including the most efficient namely Jakarta Roxy Hayam Wuruk and Binjai suffered losses due to marketing costs incurred was greater than the *fee* earned. Ketiganya hanya mampu menjual ORI003 dibawah angka Rp.250 Juta dan memiliki 4-8 tenaga pemasar sehingga dapat disimpulkan bahwa untuk memperoleh nilai efisiensi tinggi dan profit yang menguntungkan maka biaya per-pemasar harus berada pada kisaran Rp.400 ribu – Rp.1 juta dengan target per-pemasar minimal Rp.175 juta. Three were only able to sell ORI003 under Rp.250 Million and have 4-8 power marketers; therefore, it can be concluded that in order to obtain high efficiency

and high profit, then the cost-per-marketers should be in the range Rp.400 thousand - Rp1 million with a minimum target per-marketers Rp.175 million.

Table 8:   Nilai efisiensi 10 cabang Bank X tertinggi yang menjual ORI003 BRI Branch Efficiency Score of 10 Highest Selling ORI003

No.	Branch	Biaya Cost Teof power Pemasar for Marketers	Biaya Promosi Campaign Costs	Jumlah Pemasar Number of Marketers	Biaya/ Pemasar Cost / Marketers	Nominal ORI Terjual ORI Sold	ORI Fee Penjualan ORIORIOSales Fee	EfisiensiEfficiency
1	Medan Iskandar Muda	5.180.864		5	1.036.173	7.470.000.000	33.954.545	0.914329
2	Jakarta Kramat	5.600.000		8	700.000	1.400.000.000	6.363.636	0.892650
3	Cab. Roxi	5.600.000		8	700.000	240.000.000	1.090.909	0.886614
4	Jkt Hayam Wuruk	5.600.000		8	700.000	70.000.000	318.182	0.885694
5	Cab. Jayapura	2.566.000		3	855.333	7.865.000.000	35.750.000	0.878207
6	Binjai	4.015.999		4	1.004.000	225.000.000	1.022.727	0.863157
7	Cab. Jatinegara	2.560.000		6	426.667	3.440.000.000	15.636.364	0.852478
8	Surabaya Kaliasin	960.000		3	320.000	11.405.000.000	51.840.909	0.850517
9	Pontianak	2.155.408		4	538.852	3.450.000.000	15.681.818	0.841141
10	Jakarta Otista	2.500.000		3	833.333	1.335.000.000	6.068.182	0.835917

Source: Data processing (in Rp.)

This can also indicate that the potential investors in the eastern part of Indonesia are quite large. Jika peluang ini dapat dibaca oleh pihak manajemen Bank X, maka bukan tidak mungkin, akan terjadi peningkatan dalam jumlah ORI yang terjual dan secara langsung akan berpengaruh pada pendapatan yang diterima Bank X. If these opportunities can be seen by the management of the BRI, then an increase in the number of ORI sold is possible and it will directly affect the revenues received by BRI. Selain itu secara cakupan geografis, jaringan kerja Bank X merupakan yang terbesar di wilayah timur Indonesia sehingga dengan pemasaran ORI yang lebih agresif dan terencana, keuntungan dari fee penjualan ORI akan semakin menjanjikan. In addition, looking at the geographic coverage, BRI's network is the largest in Eastern Indonesia so with a more aggressive marketing ORI and planned, the profits from sales fee ORI will be more promising.

4.3.6 Efficiency of BRI Branch that Sells ORI004

It showed that the top 10 branches with the best efficiency is no longer dominated by the branches from Jakarta (table 9), but from a field of four branches, namely: Iskandar Muda, Tarutung, Rantau Prapat and Binjai.

Disamping itu cabang Jayapura berhasil naik peringkat menjadi kanca paling efisien setelah sebelumnya pada penjualan ORI003 berada di urutan kelima.In addition Jayapura branch Branch successfully rose to become the most efficient after being in the fifth position in the sales of ORI003. This is also supported by the largest sales of ORI, amounted to Rp. 23.76 Billion. From the data, we see that tJika ditarik angka rata-rata maka dengan 3 orang pemasar, masing-masing mampu menjual ORI sebesar 7,9 MilTThe average marketer with three people, each was able to sell ORI for 7.9 Billion. Keuntungan bersih yang diterima Bank X Rp.105.456.727 atau dengan kata lain 1 orang pemasar mampu memberikan keuntungan Rp.35.152.242 (Lampiran). A net profit received by Bank X is Rp.105.456.727 or in other words a person can give advantage Rp.35.152.242 marketers (Appendix).

However, it should also be observed also that there are only four branches that can provide profit for the BRI, namely: Jayapura, Jakarta, Roxy, Jakarta and Medan Kramat Iskandar Muda. This is due to the large costs incurred by marketers is not comparable with the fee earned. Condition of geographic or location that is relatively far from the city could lead to the low number of ORI investors and showed more intensive needs to be disseminated to the public area.

Of the four branches that are most efficient and capable of generating profits for BRI, the data showed that the cost-per-marketers in the range of Rp.700 thousand-one million rupiah each was

...able of achieving its sales target of at least Rp.640 million. While the gains by the BRI from one ... marketer ranges in Rp.2 Million - Rp.35 million.

Table 9: Nilai efisiensi 10 cabang Bank X tertinggi yang menjual ORI004BRI Branch Efficiency Score of 10 Highest Selling ORI004

No.	Branch	Biaya Cost Teof power Pemasar for Marketers	Biaya Promosi Campaign Costs	Jumlah Pemasar Number of Marketers	Biaya/ Pemasar Cost / Marketers	Nominal ORI Terjual ORI Sold	ORI Fee Penjualan ORIORIO Sales Fee	EfisiensiEfficiency
1	Jayapura	2.566.000		3	855.333	23.765.000.000	108.022.727	0.918128
2	Jkt Roxi	6.300.000		9	700.000	5.760.000.000	26.181.818	0.914566
3	Jkt Kramat	5.600.000		8	700.000	7.125.000.000	32.386.364	0.912345
4	Medan Iskandar Muda	5.180.864		5	1.036.173	7.400.000.000	33.636.364	0.908980
5	Tarutung	7.000.000		14	500.000	360.000.000	1.636.364	0.902871
6	Jkt Hayam Wuruk	5.600.000		8	700.000	810.000.000	3.681.818	0.890347
7	Kendal	5.500.000		11	500.000	100.000.000	454.545	0.886212
8	Bireuen Aceh	4.660.848		5	932.170	190.000.000	863.636	0.874972
9	Rantau Prapat	4.000.000		8	500.000	350.000.000	1.590.909	0.864527
10	Binjai	4.015.999		4	1.004.000	225.000.000	1.022.727	0.864203

Source: Data processing (in Rp.)

4.5. Efficiency of BRI Branch that Sells ORI005

There are 138 branches of BRI that sells ORI005 (table 10). Ten branches with the best efficiency are spread fairly evenly with three branches of Jakarta in the top position. What is interesting is the Jakarta branch of Kramat always occupies the position of 10 major branches of the most efficient from the selling of ORI002 to ORI005. This proves that the combination of inputs and outputs are used to produce the maximum efficiency level.

However, in terms of profitability, the profit obtained by the BRI branch in Jakarta Kramat is not significant when compared with the Bandung Asian-African branch and Pondok Indah. With average per-marketers target of Rp.220 million and a cost-per-marketers of Rp.700 thousand, then BRI only gain Rp. 300,000 per-marketers. This condition is not ideal but with the increase in their respective target of each marketer then profit can be improved.

Of the 10 most efficient branches, there are two that do not generate profits for BRI that is: Roxy and Lhoksumawe Jakarta. They are only selling ORI for fewer than 350 million while the number of marketers is between 6 to 9, while eight other branches that are both efficient and profitable collected ORI sales of over Rp1, 5 billion.

In addition, the eight branches have average achievement of minimal ORI sales-per-marketers amount of Rp.220 million (Appendix) with the costs incurred to one person marketer ranging from Rp.320.000 - Rp.940.000. Therefore, if BRI wants to maximize profit while maintaining the efficiency, then each marketers is charged with a minimum fee of Rp.220.000.000 of 400,000. Determining the cost-per-marketers should be based on the percentage of the number of ORI sold and thus providing a higher motivation to marketers.

Table 10: Nilai efisiensi 10 cabang Bank X tertinggi yang menjual ORI005 BRI Branch Efficiency Score of 10 Highest Selling ORI005

No.	Branch	Biaya Cost Teof power Pemasar for Marketers	Biaya Promosi Campaign Costs	Jumlah Pemasar Number of Marketers	Biaya/ Pemasar Cost / Marketers	Nominal ORI Terjual ORI Sold	ORI Fee Penjualan ORIORIOSales Fee	EfisiensiEfficiency
1	Jakarta Kramat	5,600,000		8	700,000	1,760,000,000	8,000,000	0.884152
2	Jakarta Otista	2,800,000		3	933,333	2,255,000,000	10,250,000	0.878834
3	Pondok Indah	1,460,000		2	730,000	2,575,000,000	11,704,545	0.876728
4	Bandung AA	803,409		2	401,705	2,515,000,000	11,431,818	0.871166
5	Pontianak	2,155,408		4	538,852	1,595,000,000	7,250,000	0.860862
6	Bogor	655,393		1	655,393	2,065,000,000	9,386,364	0.860626
7	Jakarta Roxi	6,300,000		9	700,000	350,000,000	1,590,909	0.856301
8	Yogyakarta Cik Ditiro	450,000		1	450,000	1,940,000,000	8,818,182	0.856192
9	Surabaya Kaliasin	960,000		3	320,000	1,570,000,000	7,136,364	0.851409
10	Lhokseumawe	6,020,205		6	1,003,368	195,000,000	886,364	0.850556

Source: Data processing (in Rp.)

4.6. Implications on Marketing Strategy of BRI per Branch

If further examination is done, then the result of processing efficiency using the SFA showed mixed results, however, the calculations on several branches with the highest efficiency value can be used to create future ORI management strategies.

Table 11 shows the result of BRI's five branches that managed to obtain the highest efficiency value in the sales of ORI001-005. From the table it can be concluded that:

1. To be more efficient, BRI must determine cost per marketer to Rp.533.750 - Rp.1.036.173.
2. Target for marketers ranges from Rp.220.000.000 - Rp.7.921.666.667.

BRI can take maximum advantage while maintaining a high level of efficiency by giving target of Rp.7.921.666.667 to each marketer and a fee of Rp.855.333. With such calculation, profit obtained from Rp. 105 456 727 per marketer. However, the strategy is unrealistic, especially with such a large target with such a small fee. A realistic Marketing strategy is to provide a target Rp.1.494.000.000 with a fee of Rp.1.036.173 BRI can make a profit of Rp.5.754.736 per marketers. In addition to further popularize the ORI and increase the number of investors, cost of promotion should be taken into account by each branch.

Table 11: List of Branch with the Highest Efficiency Value of ORI001-005

ORIORI	Cabang Branch	Jumlah Pemasar Number of Marketers	Biaya/ pemasar Cost / Marketers	Nominal ORI Terjual Number of ORI Sold	Fee Penjualan ORI ORI Sales Fee	Target Pemasar Marketers Target	Profit Bank X Bank Profits X	Profit/ pemasar Profit / Marketers
1	Jakarta Pasar Minggu	2	533,750	630,000,000	2,863,636	315,000,000	1,796,136	898,068
2	Jkt Hayam Wuruk	8	700,000	2,700,000,000	12,272,727	337,500,000	6,672,727	834,091
3	Medan Iskandar Muda	5	1,036,173	7,470,000,000	33,954,545	1,494,000,000	28,773,682	5,754,736
	Jayapura	3	855,333	23,765,000,000	108,022,727	7,921,666,667	105,456,727	35,152,242
	Jakarta Kramat	8	700,000	1,760,000,000	8,000,000	220,000,000	2,400,000	300,000

Source: Data procesing (in Rp.)

5. Conclusions

Five branches of the BRI, namely: Jakarta Pasar Minggu, Jakarta Hayam Wuruk, Iskandar Muda Medan, Jayapura and Jakarta Kramat are the most efficient branch in conducting sales ORI001-005. Kelima cabang tersebut rata-rata mengeluarkan biaya untuk tenaga pemasarannya berkisar antara Rp.533.750 – Rp.1.036.173 dengan target masing-masing sebesar Rp.220.000.000 – Rp.7.921.666.66The five branched' average pay for its marketing power range from Rp.533.750 -

036.173 with their respective targets for Rp.220.000.000 - Rp.7.921.666.667. Dari hasil tersebut, ... pemasaran yang cukup realistis dan dapat diterapkan pada seluruh cabang Bank X yang ... ORI adalah dengan memberikan target sebesar Rp.1.494.000.000 dan biaya per-pemasar ... Rp.1.036.173 sehingga dapat diperoleh keuntungan Rp.5.754.736 per-pemasar From these results, the marketing strategy is realistic and can be applied to all branches of BRI in selling ORI is to provide a target for Rp.1.494.000.000 and cost-per-order marketer of Rp.1.036.173 to get Rp.5.754.736 profits per-marketers.

6. Recommendations

The research data was collected up to December 2008 with the assumption that the period is the most appropriate in measuring efficiency. Due to the world economy crisis, the investment instruments, ORI in particular, can be tested for resistance. Moreover, how the strategy of each branch can be observed in crisis conditions. However, further research must be done with a longer span of time, then return to see whether the subsequent issuance of ORI can still be the best investment options in term of efficiency.

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No.	Kanca Branch	Target pemasar Target marketing	Profit Bank X Bank Profits X	Profit/ pemasar Profit / marketers	Kanca Branch	Target pemasar Target marketing	Profit Bank X Bank Profits X	Profit/ pemasar Profit / marketers
		ORI001				**ORI002**		
1	Jkt Pasar Minggu	315,000,000	1,796,136	898,068	Jkt Hayam Wuruk	337,500,000	6,672,727	834,091
2	Jkt Kebayoran Baru	540,000,000	1,979,269	1,979,269	Jakarta Kramat	282,500,000	4,672,727	584,091
3	Jkt Mangga Dua	280,000,000	694,927	694,927	Cab. Roxi	211,875,000	2,104,545	263,068
4	Surabaya Kaliasin	93,333,333	312,727	104,242	Jkt Pondok Indah	1,242,500,000	14,085,455	7,042,727
5	Sukabumi	255,000,000	1,091,091	1,091,091	Pontianak	1,300,000,000	21,480,956	5,370,239
6	Yogya Cik Ditiro	255,000,000	709,091	709,091	Mdn Iskandar Muda	99,000,000	(2,930,864)	(586,173)
7	Tangerang	55,000,000	(267,601)	(66,900)	Sby Kaliasin	2,170,000,000	28,630,909	9,543,636
8	Sidoarjo	41,666,667	(1,563,636)	(260,606)	Jakarta Fatmawati	2,682,500,000	23,286,364	11,643,182
9	Majalengka	160,000,000	227,273	227,273	Jakarta Kota	5,160,000,000	22,834,545	22,834,545
10	Ben Dewi Sartika	80,000,000	(351,711)	(175,855)	Jakarta Cut Meutia	1,650,000,000	12,990,000	6,495,000
		ORI003				**ORI004**		
1	Mdn Iskandar Muda	1,494,000,000	28,773,682	5,754,736	Jayapura	7,921,666,667	105,456,727	35,152,242
2	Jakarta Kramat	175,000,000	763,636	95,455	Jkt Roxi	640,000,000	19,881,818	2,209,091
3	Cab. Roxi	30,000,000	(4,509,091)	(563,636)	Jkt Kramat	890,625,000	26,786,364	3,348,295
4	Jkt Hayam Wuruk	8,750,000	(5,281,818)	(660,227)	Mdn Iskandar Muda	1,480,000,000	28,455,500	5,691,100
5	Cab Jayapura	2,621,666,667	33,184,000	11,061,333	Tarutung	25,714,286	(5,363,636)	(383,117)
6	Bekasi	56,250,000	(2,993,271)	(748,318)	Jkt Hayam Wuruk	101,250,000	(1,918,182)	(239,773)
7	Cab Jatinegara	573,333,333	13,076,364	2,179,394	Kendal	9,090,909	(5,045,455)	(458,678)
8	Sby Kaliasin	3,801,666,667	50,880,909	16,960,303	Bireuen Aceh	38,000,000	(3,797,211)	(759,442)
9	Pontianak	862,500,000	13,526,410	3,381,603	Rantau Prapat	43,750,000	(2,409,091)	(301,136)
10	Jakarta Otista	445,000,000	3,568,182	1,189,394	Binjai	56,250,000	(2,993,271)	(748,318)
		ORI005						
1	Jakarta Kramat	220,000,000	2,400,000	300,000				
2	Jakarta Otista	751,666,667	7,450,000	2,483,333				
3	Pondok Indah	1,287,500,000	10,244,545	5,122,273				
4	Bandung AA	1,257,500,000	10,628,409	5,314,204				
5	Pontianak	398,750,000	5,094,592	1,273,648				
6	Bogor	2,065,000,000	8,730,971	8,730,971				
7	Jakarta Roxi	38,888,889	(4,709,091)	(523,232)				
8	Yogyakarta Cik Ditiro	1,940,000,000	8,368,182	8,368,182				
9	Surabaya Kaliasin	523,333,333	6,176,364	2,058,788				
10	Lhokseumawe	32,500,000	(5,133,841)	(855,640)				