ANALYSIS CALCULATION OF INTEREST ON CONVENTIONAL BANK AND
PROFIT SHARING ON ISLAMIC BANK

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Abstract

The object of this research are to determine the interest rate on conventional banking system and the results of the Islamic banks. Development of banking in Indonesia is getting better. The development is indicated by the increasing number of banks both conventional banks and Islamic banks in Indonesia. The more rapid growth of Islamic banking in Indonesia is due to the increasing number of conventional banks to open Islamic banking in the form.

Analysis of research interest calculation in conventional banks and the aim of profit sharing in Islamic banks are to determine interest rate system on conventional banking system and profit sharing in Islamic banking.

Development of banking in Indonesia is getting better now, it’s marked by increasing the number of banks in Indonesia and also started the development of Islamic banking in Indonesia. The development of Islamic banking in Indonesia is quite rapid, marked by every bank began opening in the form of Islamic banking in addition to conventional banks.

Keywords: bank interest, profit sharing, conventional bank, Islamic bank
1.1 Background

Condition of banking in Indonesia is better even though pressure of the crisis financial global more feels. We could see that things from decreasing tight of banking liquidity and growing of total credit banking. Indonesia economic are still fluctuation, government doing deregulations policy and debrocratitation run gradually in financial sector and economy. Means of deregulation policy and debicratitation is efforts for rising the good banking system, efficient and strong. Impact from over regulated to banking are stagnant condition and lost of inisiatif banking. Its encourage central bank doing deregulation of banking to modernization of banking based on demand citizen based on demand citizen, business and economic life on the period.

Development of islamic bank in Indonesia on the last quite rapidly. It looks from growing and blooming industry of islamic bank in Indonesia and increasing levels of public trust. Public was very need the rse of economic institution which can realizing the justice of economy for harrow the social gap. Crisi of economy since 1997’s middle. It still continous till now, it had more awared about the importance the seeking and developing the system of alternatif economic, which can prevent the consentration of wealth in the hands of a few grows groups of people.

1.2 Literature review

Bank is a belief institution functioning as a intermediation institution, help the fluency of payment system and another important is the institution which is medium in implementation of government policy such as monetary policy. Because of its functions, the existence of good bank, whether individually or totality as a system, is prerequisite for a good economy. To crate good banking needed the arrangement and control of effective
bank. Banking’s policy is defined and implemented by Bank of Indonesia which is basically a part of effort to create, to keep and to maintain the good banking system.

In implementing its effort, bank collects the fund from society/people and distributes it back in various of alternative investment. The definition of bank by UU No. 7/ 1992 about banking which has been changed by UU no 10/1998:

1. Bank is corporate for collecting fund from society in form of deposit and distributing it to society in order to improve of living standart for many people.
2. General bank is bank which implementing the business activities conventionally and or based on islam principal which is that activity is to give service in payment traffic.
3. BPR (Bank perkreditan rakyat) is a bank which implementing the business activity conventionall or based on islamic principal which is that activity did not give service in payment traffic.

1.2.2 Definition of Islamic Bank

Islamic bank is a banking system which is it business activity and operational are based on islamic. Islamic banking is also based on the rule of legislation that setting the mechanism of operational and banking islamic managment which appropriate with the predetermined conventional bank, except have contrary with islamic rules. Islamic bank effort activities to be well arranged in Indonesia public rules No. 10/ 1998 about banking that is (12)

“financing based on islamic principles is prepare of money or bill that the same point based on agreement or consensus between bank with other company who compulsory the company that costed to return money or bill after certain term with reward or profit sharing” (13)

Syariah principles are contract rules based on islamic rules between bank and others company for funding finance and or effort activities, or the others activities compatible with syariah, that are financing based on profit sharing principles (mudarabah), financing based on inclusion capital principles (musyarakah), the principles of selling goods to get
profit (murabahah), or financing of capital goods based on pure rent principles without options (ijarah), or with any options of transferring ownership of rent good from bank from other company (ijarah wa iqtina)

a. Vision of developing islamic banking
   “Realization of Islamic banking system heathty, strong and balancing with syariah principles in justice framework, welfare in order to achieve the healthy community as materially and spiritually
b. Mission of developing islamic banking
   “Realization the condusive atmosphere for developing syariah banking that are healthy, efficient and competitive are based onsyariah principles and carefully syariah, which are could support the riil sector through financing based on profit sharing and riil transaction, in order to push nasional economic growing”

Fatwa No : 15/DSN-MUI/IX/2000 about distribution system of profit sharing in syariah finance institution that are :

1. Basicly, LKS may use Net revenue sharing principles and profit sharing in distribution effort result with the customer.
2. Could see from al-ashlah, now enterprise sharing system should use net revenue sharing
3. Determining sharing system principles must be agreed in akad

Distribution Principles of operation are :

1. Revenue sharing
   Devided about revenue reduced HPP (Net revenue/gross profit)
2. Profit sharing
   Devided of profit

All syariah bank in Indonesia using revenue sharing principles in calculation profit sharing to third party funds

1.3 Research Methodology

To give clarity and describe about this research so the methode that writer used are :
1.3.1 Research object
In this research, writer doing calculation of interest using data from syariah bank and conventional bank

1.3.2 Data/Variable
Writer using table of interest saving conventional bank and sharing profit using BRI syariah bank

1.3.3 Collecting Methodology
Methodology of collecting data for this paper are:

a. Secondary data
Secondary data is the data that obtainable by browsing about the problems will be discussed
b. Literature study
Literature study is writer got all the object for this research. Referenced to the guide book and material reading that are related to the issues discussed

1.3.4 Instrument of analysis
In order to achieve the aim of this research, writer applying the instrument of analysis that are:

a. Conventional bank
Generally, there are 3 methods of calculating interest saving that are: Based on lowest balance, average balance and daily balance. Some banks applying 365 days in a year, but there are some banks applying 360 days in a year.

1. Interest calculation method based on lowest balance
In this method, interest in a month calculated based on lowest balance on that month.

The calculation of interest is:

\[ \text{Bunga} = \frac{ST \times i \times t}{365} \]

- \( ST \) = lowest balance
- \( i \) = interest rate in a year
- \( t \) = total days in a month
- 365 = total day in 1 year
2. Interest calculation method based on average balance

In this method, interest in 1 month calculate based on average balance in current month. Average balance calculated based on last total balance saving in daily on that current month, divide with total day in that month.

\[ \text{Bunga} = \text{SRH} \times i \times \frac{t}{365} \]

SRH = Average daily balance

i = interest rate in a year

t = total days in a month

3. Interest calculation method based on daily balance

In this method interest calculated from daily balance. Interest balance on month proceed calculated by sum the interest gained everyday.

Example: Balance less than Rp 5,000,000, interest = 3% pa and balance more than Rp 5,000,000, i = 5% pa

Calculation method:

1st day : Rp.1 Juta x 3 % x \( \frac{1}{365} \) = 82,19

2nd day : Rp.1 Juta x 3 % x \( \frac{1}{365} \) = 82,19

3rd day : Rp.1 Juta x 3 % x \( \frac{1}{365} \) = 82,19

4th day : Rp.1 Juta x 3 % x \( \frac{1}{365} \) = 82,19

5th day : Rp.6 juta x 5 % x \( \frac{1}{365} \) = 821,92

b. Syari’ah bank
Syari’ah bank not applying interest system but applying profit sharing, that is managing fund system in Islamic economy. Calculations are based on a sharing agreement with the bank customers who invest their funds in Islamic banks. The magnitude of the right customer to the bank in the calculation of that profit sharing, on the set with a rate ratio or scale a section called Nisbah. The calculation of revenue sharing and interest income received by the Customer is calculated using the formula:

Profit sharing = \( \text{total days} \times \% \text{Rate Return} \times \frac{\text{total So saving}}{365} \)

Interest = \( \text{Total days} \times \% \text{interest} \times \frac{\text{total So saving}}{365} \)

Distribution for the results to be obtained by the customer. Further to the results of the customer using the formula:

Profit sharing = \( \% \text{Nisbah} \times \text{Distribution of profit sharing} \)

Rate Return = \( \frac{\text{BBH} \times \text{total days in 1 year}}{\text{SRH} \times \text{total day}} \times 100\% \)

Description: \( \text{BBH} = \text{Profit sharing bonus} \)
\( \text{SRH} = \text{Average Daily Balance the 3rd Party} \)

1.4 DISCUSSION AND ANALYSIS
1.4.1 THEORY OF CALCULATION FOR BRI Syariah

A. Provision Calculation of Profit Sharing Syariah bank
   1. All DPK (third party funds) are mixed into pooling funds
   2. Pooling funds become DPK are given to finance funds
   3. Finance funds produce revenue which mix into the main revenue operations
   4. PUO are calculated with financing to deposit ratio (FDR) become PUO that has been distributed
   5. Distribution profit process into distribution profit table
6. Distribution profit is given to DPK Mudharabah and bank

**Description:**

First, Revenue that will shared have to calculated with average position of funding Vs financing, that are:

1. **Funding = Financing**
   - Revenue that will shared are revenue from financing which the source of fund from DPK

2. **Funding < Financing**
   - Revenue that will shared are revenue from financing which the source of fund from DPK but only a few from DPK

3. **Funding > Financing**
Revenue that will shared are the revenue from activa procutive (financing etc) which the source from DPK

Table 1.41 PUO Sharing

<table>
<thead>
<tr>
<th>No</th>
<th>Funding</th>
<th>Financing</th>
<th>financing revenue</th>
<th>Revenue Sharing</th>
<th>Describe</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>150,000</td>
<td>150,000</td>
<td>2,250</td>
<td>2,250</td>
<td>• All revenue financing are shared</td>
</tr>
</tbody>
</table>
| 2  | 150,000 | 175,000   | 2,625             | 2,250          | • 2,625 x 150,000 /175,000  
• Revenue financing will be shared like DPK portion |
| 3  | 150,000 | 125,000   | 1,875             | 1,875 + ...   | • All revenue financing are shared  
• Added other productive revenue activa which the source from DPK. |

1.4.2 Table of Distribution Profit

<table>
<thead>
<tr>
<th>Kinds of saving</th>
<th>Average balance</th>
<th>Revenue are shared</th>
<th>Portion of the funds owner</th>
<th>Portion Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(A)</td>
<td>(B)</td>
<td>(C) (D) (E) (F) (G)</td>
<td></td>
</tr>
</tbody>
</table>
| Giro Wadiah     | A1              | B1 = A1 / ΣA x B   | C1 D1 = B1 x C1            | E1 = D1 / A1 x 100% x 12  
F1 = 100% - C1  
G1 = B1 - D1 |
| Giro Mudharabah | A2              | B2 = A2 / ΣA x B   | C2 D2 = B2 x C2            | E1 = D1 / A1 x 100% x 12  
F2 = 100% - C2  
G2 = B2 - D2 |
| Wadiah saving   | A3              | B3 = A3 / ΣA x B   | C3 D3 = B3 x C3            | E3 = D3 / A3 x 100% x 12  
F3 = 100% - C3  
G3 = B3 - D3 |
| Mudharabah saving | A4            | B4 = A4 / ΣA x B   | C4 D4 = B4 x C4            | E4 = D4 / A4 x 100% x 12  
F4 = 100% - C4  
G4 = B4 - D4 |
| Mudharabah deposit |               |                    |                             |              |
## Describing Table:

1. **Column A** (month average balance daily)
   - Source: from SSL balance concerned
   - Example: last balance date 1 = a1, date 2 = a2 etc ... date 31 = a31
   - Calculation:
     
     \[
     a_1 + a_2 + a_3 + \ldots + a_{31} / \text{number of days in that month}
     \]

2. **Column B** (shared revenue)
   - Revenue activa production portion will be distributed (as a component of revenue in sharing profit distribution/revenue)
   - The source from SSL → first gets the data B
   - Revenue in the form:
     - Margin (Principles of sale and rent)
     - Profit sharing (principle of sharing)
   - Calculation:
     - Ex. Mudharabah saving – B4, revenue in each product are:

\[
B_4 = A_4 / \Sigma A x B
\]
3. Colomn – C (Nisbah customer)

Portions share for customers who have agreed from the beginning

4. Colomn – D (revenue’s customer)

Calculation of customer revenue in dollars (nominal):

\[ D_4 = B_4 \times C_4 \]

5. Colomn – E (equivalent rate for each product), that are :

\[ E_4 = \frac{D_4}{A_4} \times 100\% \times 12^* \]

*calculation each year

1.4.2 APPLICATION CALCULATION OF PROFIT SHARING

1. Period Profit Sharing

Usually do in 1 (one) time in 1 (one) month.

2. Income that has been distributed

All income activa produtive (financing, etc.) which the source comes from DPK will shared to DPK with mudharabah’s contract.

Table 1.4.3 Calculation Profit Sharing

<table>
<thead>
<tr>
<th>Kinds of saving</th>
<th>Average balance</th>
<th>Revenue are shared</th>
<th>Portion of the funds owner</th>
<th>Portion of Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(A)</td>
<td>(B)</td>
<td>(C)</td>
<td>(D)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Nisbah</td>
<td>Nominal</td>
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<tr>
<td>Giro Wadiah</td>
<td>5000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Giro Mudharabah</td>
<td>25.000</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

100%

75%
### STEP 1
Calculate the Main Operating Income (PUO) which would been distributed
(using Table Composition vs Funding. Financing)

PUO which would been distributed is
= PUO x Funding / Financing
= 2.625 x 150 000/175 000
= 2,250

### STEP 2
Enter PUO were distributed to the Profit Distribution Table

### STEP 3
Calculate Shared Revenues for each product DPK

#### How to Calculate

**Revenue are shared (Column B)**

- Revenue activa production portion will be distributed (as a component of revenue in sharing profit distribution/revenue)

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wadiah saving</td>
<td>5,000</td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Mudharabah saving</td>
<td>20,000</td>
<td></td>
<td></td>
<td></td>
<td>70%</td>
</tr>
<tr>
<td>Mudharabah Deposit</td>
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<tr>
<td>1 month</td>
<td>20,000</td>
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<td>55%</td>
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<tr>
<td>3 months</td>
<td>25,000</td>
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<td></td>
<td>54%</td>
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<tr>
<td>6 months</td>
<td>30,000</td>
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<td>53%</td>
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<tr>
<td>12 months</td>
<td>10,000</td>
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<td>Σ A</td>
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<td>ΣG</td>
</tr>
</tbody>
</table>
The source from SSL → first gets the data B

Revenue in the form:
1. Margin (Principles of sale and rent)
2. Profit sharing (principle of sharing)
3. Calculation:

Ex. Mudharabah table – B4, revenue in each product are:

\[ B4 = \frac{A4}{\sum A \times B} \]

STEP 4

Calculate Nominal profit sharing for:

1. Customer portion
2. Bank portion

How to calculate:

✓ Customer nisbah (column – C)

Portions division for customers who have agreed from the beginning
✓ Customer revenue (column - D)

- Customer revenue in rupiah (nominal)
- Calculation:

\[ D4 = B4 \times C4 \]

STEP 5
Calculate the rate of return equivalent to the Customer

How to Calculate

Equivalent rate Calculation of each product (Column E) is:

\[ E4 = \frac{D4}{A4} \times 100\% \times 12\% \]

*Calculate each year

<table>
<thead>
<tr>
<th>Kinds of saving</th>
<th>Average balance</th>
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<th>Portion of Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(A)</td>
<td>(B)</td>
<td>(C)</td>
<td>(D)</td>
</tr>
<tr>
<td>Giro Wadiah</td>
<td>5000</td>
<td>75</td>
<td>0%</td>
<td>-</td>
</tr>
<tr>
<td>Giro Mudharabah</td>
<td>25,000</td>
<td>375</td>
<td>25%</td>
<td>93.75</td>
</tr>
<tr>
<td>Wadiah saving</td>
<td>5,000</td>
<td>75</td>
<td>0%</td>
<td>-</td>
</tr>
<tr>
<td>Mudharabah saving</td>
<td>20,000</td>
<td>450</td>
<td>30%</td>
<td>135</td>
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<tr>
<td>Mudharabah deposit</td>
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<td>1 month</td>
<td>20,000</td>
<td>300</td>
<td>45%</td>
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<tr>
<td>3 months</td>
<td>25,000</td>
<td>375</td>
<td>46%</td>
<td>172.5</td>
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<td>6 months</td>
<td>30,000</td>
<td>450</td>
<td>47%</td>
<td>211.5</td>
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<td>12 months</td>
<td>10,000</td>
<td>150</td>
<td>48%</td>
<td>72</td>
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<td></td>
<td>150,000</td>
<td>2,250</td>
<td></td>
<td>819.75</td>
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</tbody>
</table>

Another way:

1. Index investment per thousand (HI per mile)
2. Calculate HI per mil

\[
\text{Index HI per mil} = 15
\]

**Tabel 1.4.5 Table Distribution profit + index HI per MIL**

<table>
<thead>
<tr>
<th>Kinds of saving</th>
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<td>Mudharabah saving</td>
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<td>Mudharabah deposit</td>
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<td>78</td>
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<tr>
<td>150,000</td>
<td>2,250</td>
<td>819,75</td>
<td></td>
<td>1,430,25</td>
</tr>
</tbody>
</table>

\[
\text{Total funding} = \text{revenue are shared} \times 1,000
\]

\[
= 2.250 \times 1000
\]

\[
= 150,000
\]
If the average balance Mudaraba Savings Mr. Abdullah is Rp.10,000, then profit sharing is:

\[
\text{Eq. Rate Method} \rightarrow 10,000 \times 5.4\% = \text{Rp 45}\]

\[
\text{HI per mil Method} \rightarrow 10,000 \times 30\% \times 15 = \text{Rp 45}\]

\[
\frac{1.000}{12}\]

1.5 Conclusions

From the research it can be concluded that:

1. In Islamic banks use profit-sharing system in which all deposits (third party funds) mixed into pooling funds then become DPK are distributed on financing (finance funds) and generate revenue (revenue) were mixed in the main operating income (PUO) which PUO calculated with financing to deposit ratio (FDR) becomes PUO profit sharing.

2. In conventional bank use a system which there are 3 methods of calculating interest saving there are: based on lowest balances, average balances and daily balances. Some banks apply the number of days in 1

3. In islamic bank quantity, revenue shared is revenue from financing which the source from DPK, but only a portion of DPK

4. In conventional bank, interest rates have been set.

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