

## **Risk of Financial Analysis on Poultry Farm Business** (Survey on Chicken Farmers Group of Gunungrejo Makmur of Lamongan Regency)

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### **ABSTRACT**

This research aims to investigate risk of financial on poultry farm business. The method used is method of survey undertaken in chicken farmers group of layer poultry farming "Gunungrejo Makmur" of Lamongan Regency, which consists of 24 members. To simplify the calculation, so the sample was stratified or grouped into three based on the business scale. The result of analysis risk of financial show that at scale of I obtained by result of OER equal to 71.45%; CR equal to 3.25; DAR equal to 11.97%; RoA equal to 43.92%; RoE equal to 47.10%; and DCR equal to 476.99%. At scale of II obtained by result of OER equal to 66.70%; CR equal to 3.22; DAR equal to 11.81%; RoA equal to 56.73%; RoE equal to 61.62%; and DCR equal to 576.28%. Thus, at scale of III obtained by result of OER equal to 72.34%; CR equal to 3.07; DAR equal to 11.46%; RoA equal to 44.59%; RoE equal to 48.57%; and DCR equal to 448.40%. Pursuant to analysis risk of financial as a whole that at all of scale show generated risk level still is peaceful, because result of obtained advantage admit of to close over risk which possible happened.

**KEY WORDS:** risk of financial, analysis, Gunungrejo Makmur, Lamongan

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### **INTRODUCTION**

One of livestock commodities that provide animal protein is laying hens or poultry farm. Laying hens is in addition to producing animal protein products primarily in the form of eggs, but also meat in the form of culled laying hens. Poultry farm business can produce a rapid capital turnover and prices are relatively inexpensive eggs are easily affordable by levels of Indonesian society. Thus poultry farm still provides market prospects increasingly in increasing and so allow these opportunities to be exploited (10).

According to (3) eggs as a source of animal protein is not the kind of food that is alien to the population of Indonesia. These foods are very easy to find in people's lives every day. Even in the village, almost all the residents become chicken farmers on a small scale that even under 65,000 heads each period.

Under these conditions it is appropriate poultry farm that needs to be protected and supported by government policies in order to further develop this business. This is in line with the statement of (9) that the government has determined to make the agribusiness sector as a leading sector. For the long term, it is expected agribusiness sector could become the locomotive for the stimulation of national development. Indonesia has a great potential in the agribusiness sector. Wealth of resources extremely large agribusiness, agribusiness serve as livelihood majority of the population, as well as agribusiness has the potential to generate foreign exchange earnings for the country. Ironically, the agribusiness sector untapped potential optimally. The growth of production capacity and utilization agribusiness still felt slow. As a result, the desire to rely agribusiness sector as one of the supporting factors stimulating economic recovery is still perceived to be facing obstacles.

Efforts to gain a large and sustainable is the main target for all business activities including poultry farm business, which in turn will improve the welfare of laying hens farm businesses such. To achieve these objectives the need for measures of effort, one of them to determine the financial risk of poultry farm business.

### **MATERIALS AND METHODS**

The research was conducted by survey (4) at the poultry farm business group "Gunungrejo Makmur", which consists of chicken farmers in the district Kedungpring, Sekaran, Sugio, Babat, Widang, Modo, Karang Geneng and Maduran in Lamongan districts (except Widang enter Tuban district).

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Total sample used is the 24 of chicken farmers, which is the total number of group members poultry farm "Gunungrejo Makmur". The sample is then carried stratification or grouping into three based on their business scale. Determination of business scale is divided into small scale (scale of I), medium scale (scale of II) and large scale (scale of III) by using the formula (8) as follows: small scale:  $< X - 0,5SD$  ; medium scale: between  $X - 0,5SD$  to  $X + 0,5SD$  ; and large scale:  $> X + 0,5SD$  ( $X$  = average of population;  $SD$  = standard deviation).

The formula is based on the results obtained with a total sample of 24 chicken farmers with the average 2,281 head of laying hens ownership, the standard deviation of the amount of maintenance by 1,856 heads, so that the category of small-scale chicken farmers is a rancher with a population of less than 1,353 head of laying hens. In the medium scale with a population of between 1,353 to 3,209 heads, while the large scale with a population of more than 3,209 heads.

## Risk of Financial Analysis:

### 1. Operating Expense Ratio (OER)

$$\text{OER} = \frac{\text{TFOE} - \text{TFC}}{\text{GPFR}} \times 100\% \quad [2]$$

Explanation :

OER= Operating Expense Ratio

TFOE= Total Farm Operating Expense

TFC = Total Fixed Cost

GPFR= Gross Profit Farm Revenue

Testing criteria [1] :

- OER < 65% : safe
- OER between 65% to 80% : careful
- OER > 80% : unsafe

### 2. Ratio of Liquidity (Current Ratio/CR)

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} \quad [7]$$

Explanation:

CR = Current Ratio

Testing criteria[1] :

- CR > 1,5 : safe
- CR between 1,1 to 1,5 : careful
- CR < 1,1 : unsafe

### 3. Ratio of Solvability (Debt to Assets Ratio/ DAR)

$$\text{DAR} = \frac{\text{Total Debt}}{\text{Total Assets}} \times 100\% \quad [5]$$

Explanation:

DAR = Debt to Assets Ratio

Testing criteria[1]:

- DAR < 30% : safe
- DAR between 30% to 75% : careful
- DAR > 75% : unsafe

### 4. Ratio of Profitability (RoA and RoE)

$$\text{RoA} = \frac{\text{NFI} + \text{IoD}}{\text{ATA}} \times 100\% \quad [5]$$

Explanation:

RoA = Return on Assets

NFI = Net Farm Income

IoD = Interest on Debt

ATA = Average Total Assets

Testing criteria[1]:

- RoA > 5% : safe
- RoA between 0 to 5% : careful
- RoA < 0% : unsafe

$$\text{RoE} = \frac{\text{NFI}}{\text{ASE}} \times 100\% \text{ [5]}$$

Explanation :

RoE = Return on Equity

NFI = Net Farm Income

ASE = Average Stockholders Equity

Testing criteria[1] :

- RoE > 15% : safe
- RoE between 5 to 15% : careful
- RoE < 5% : unsafe

### 5. Debt Coverage Ratio (DCR)

$$\text{DCR} = \frac{\text{EBIT} + \text{TFC}}{\frac{\text{I} + \text{PR}}{(1 - t)}} \times 100\% \text{ [6]}$$

Explanation:

DCR = Debt Coverage Ratio

EBIT = Earning Before Interest and Tax

TFC = Total Fixed Cost

I = Interest

PR = Principal Repayment

t = tax

Testing criteria[1]:

- DCR > 150% : safe
- DCR between 110 to 150% : careful
- DCR < 110% : unsafe

## RESULTS AND DISCUSSION

### 1. Operating Expenses Ratio (OER)

Calculation of operating expenses ratio or OER in table 1 show in each scale is scale of I of 71.45%, amounted to 66.70% of scale of II and scale of III of 72.34%. OER in the scale of I during the year amounted to 71.45% means that any acceptance of Rp 1,000,000 for one year will cost Rp 714,500. While OER in scale of II during the year amounted to 66.70% means that any acceptance of Rp 1,000,000 for one year will cost Rp 667,000. While OER in scale III during the year amounted to 72.34% means that any acceptance of Rp 1,000,000 for one year will cost Rp 723,400. Value OER in all scale based on criteria submitted by (1) included the category of careful because it is in the range between 65% to 80%. This means that the work done by all of scale is less efficient in their production

processes. Furthermore (1) states that the lower the value of OER, the more efficient the livestock business in generating profits. However, when compared among the third of scale, the scale of II is the most cost efficient in utilizing resources to generate revenue equal to scale of I and III. While most are less efficient is the scale of III, because the value of its operating expense ratio is the highest.

The value of OER greatly influenced by the price of livestock production facilities (pullet, feed, drugs and vaccines) as well as the selling price of output in the form of eggs and chicken manure along the feed used sacks. In the scale of III lowest of revenues generated from the sale of dirt and used sacks of feed when compared to the scale of I and II, which only amounted to 0.20% of the total revenue, while in the scale of I of 1.70 and 0.87 for scale of II. In addition to the scale of III selling price of eggs is lower because it is sold at a price of production due to party more. Whereas in scale of I and II can sell eggs at retail prices because production is relatively less.

## **2. Ratio of Liquidity (Current Ratio / CR)**

Calculation of ratio of liquidity used is the Current Ratio (CR) which is the ratio between the amount of current assets to current liabilities. Based on the research results as shown in table 1 shows the CR in scale of I of 3.25; scale of II of 3.22 and scale of III of 3.07. CR value of 3.25 in scale of I have the sense that every Rp 1,000,000 current liabilities owned by poultry farm of scale of I secured by current assets of Rp 3,250,000. CR value of 3.22 in scale of II means that every Rp 1,000,000 current liabilities owned by poultry farm of scale of II is secured by current assets amounting to Rp 3,220,000. While the CR value of 3.07 in scale of III means that every Rp 1,000,000 current liabilities owned by poultry farm of scale of III secured by current assets amounting to Rp 3,070,000. CR value in all of scale based on criteria submitted by (1) including the safe category as CR value of more than 1.5, which means that all of scale on chickenfarmers group of Gunungrejo Makmur are at a safe condition or is able to pay all current liabilities using its current assets. Meanwhile, according to (1) states there is not an absolute provision about what level of CR that is considered good or that must be maintained by a company because it normally CR level is also very dependent on the type of business of each company.

## **3. Ratio of Solvability (Debt to Assets Ratio / DAR)**

Ratio of solvability used is Debt to Assets Ratio (DAR), which measures the amount of farm business assets are financed by debt or capital from creditors. Based on the research results as shown in table 1, shows the DAR in the scale of I of 11.97%; scale of II of 11.81% and scale of III of 11.46%. DAR value of 11.97% in scale of I means that the value of existing debt amounting to 11.97% of the magnitude of the amount of property owned by poultry farm of scale of I. DAR value 11.81% in scale of II means that the value of existing debt amount of 11, 81% of the number of properties owned by poultry farm of scale of II. Furthermore DAR value 11.46% in scale of III means that the magnitude of the value of existing debt worth 11.46% of total assets owned by poultry farm of scale of III. DAR value in all of scale based on criteria submitted by (1) including the safe category as DAR value less 30% which means a state of the efforts of all scale on chickenfarmers group of Gunungrejo Makmur in a secure state because the percentage of debt is small.

## **4. Ratio of Profitability (Return on Assets / RoA and Return on Equity / RoE)**

Ratio of profitability used are Return on Assets (RoA) and Return on Equity (RoE). RoA value one year in scale of I amounted to 43.92% means that every Rp 1,000,000 assets invested will generate a net profit of Rp 439,200 within one year. RoA value one year in scale of II amounted to 56.73% means that every Rp 1,000,000 assets invested will generate a net profit of Rp 567,300 within one year. While the value of RoA one year in scale of III of 44.59% means that every Rp 1,000,000 assets invested will generate a net profit of Rp 445,900 within one year. RoA value at all of scale based on criteria submitted by (1) including the safe category because the value of RoA of more than 5%, which means on chickenfarmers group of Gunungrejo Makmur all of scale in favorable circumstances. Based on the value of the scale of II RoA most favorable rate of return or cause to have an advantage in this case is the gross profit of the property or assets of the most high, whereas the scale of I at least give you an advantage because the gross rate of return or profit obtained the lowest number.

RoE value one year in scale of I amounted to 47.10% means that every Rp 1,000,000 own capital invested will generate a net profit of Rp 471,000 in one year. RoE value one year in scale of II amounting to 61.62% means that every Rp 1,000,000 own capital invested will generate a net profit of Rp 616,200- within one year. While the value of a one-year RoE in scale of III of 48.57% means that every Rp 1,000,000 own capital invested will generate a net profit of Rp 485,700 within one year. RoE values in all of scale based on criteria submitted by (1) including the safe category because the value of RoE over 15%, which means on chickenfarmers group of Gunungrejo Makmur all of scale in favorable circumstances. Based on the value of the scale of II RoA most profitable because the benefits in

terms of net profit which is the highest amount between the two other scale, whereas the scale of I at least give you an advantage because it benefits both the lowest among other scale.

### 5. Debt Coverage Ratio (DCR)

The ratio of debt or restore the ability of Debt Coverage Ratio (DCR) is often used as a comparison of the ability of income or profit generated an attempt to close the loan installments. Based on the research results as shown in table 1 shows the DCR in scale of I amounted to 476.99%; 576.28% scale of II and 448.40% scale of III. DCR value in all of scale based on criteria submitted by (1) including the safe category as the DCR value of more than 150%. This means that the benefits of poultry farm on the farm (chicken farmers group of Gunungrejo Makmur) is still enough to pay the debt.

Table 1. The Result of OER, CR, DAR, RoA, RoE and DCR on Chicken Farmers Group of Gunungrejo Makmurof Lamongan Regency

Scale	OER	CR	DAR	RoA	RoE	DCR
I	71.45 %	3.25	11.97 %	43.92 %	47.10 %	476.99 %
II	66.70 %	3.22	11.81 %	56.73 %	61.62 %	576.28%
III	72.34 %	3.07	11.46 %	44.59 %	48.57 %	448.40 %

### CONCLUSION

Based on the overall risk of financial analysis that in all of scale indicates the level of risk posed still safe, because the results of the benefits they can cover the risks that may occur. So the chicken farmers group of Gunungrejo Makmur in all of scale is still feasible to develop its business. Need a support from various parties, including the government in order to further develop farm business centers especially poultry farm in Lamongan is still not very large population when compared with other areas in East Java.

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