Financing Broilers' Projects in The Kingdom Between Theory and Reality: Which Deserve More Funds: Large or Small Projects?

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Abstract. Broilers specialized projects in the Kingdom are believed to react differently to risk and uncertainty considerations associated with this industry according to their production capacities. The objective of this study is to find the optimal way at which the Saudi Agricultural Bank could loan these projects taking into consideration their associated business risk. In compliance with this objective, a trial is made to determine the maximum percentage of the projects fixed capital at which the agricultural bank can finance accordingly.

Data on investment costs, operating costs, production capacities, depreciation, and total returns from unpublished reports of the Saudi Agricultural Bank which covers the period 1982-1986 was updated in order to analyze the current and future bank loaning policies. Broilers farms were classified into eight different categories according to their production capacities. A ninth category which represents the large farms (6000 tons annually) was formed and data was collected through personal interviews.

Quadratic Programming (QP) mathematical technique was used to extract the E-V frontier. Two models were made. The first, aims at allocating the funds available for financing broilers projects through maximizing the expected value of the net returns on the invested Riyal in broilers projects for a given variance; or for a given expected value, the variance is minimized. The second, aims at determining the maximum percentage of the project's fixed capital which the bank can finance in order to realize certain level of returns with the least risk possible. On the other hand, decision makers of the bank are assumed to be risk averters.

Some of the results obtained are: (1) The first model shows that large broilers' farms are found to get the biggest share of the bank's funds (contrary to the current status); and that the reliance on only the expected value of net returns of the projects disregarding the associated risk (variance) will yield financing decisions that are not met with reasonable payback rates. (2) The bank's principle of financing a portion of the project's capital is considered a wise policy, given that these portions are "economically" determined. This is because the results of the second model showed that, contrary to the current status, all large projects should be financed.