CHAPTER VI
CONCLUSIONS

This chapter includes the conclusions and suggestions resulted from this study.

6.1   Conclusions

According to the research objective which fulfilled in this study, the result of this study is as follows.

1. Among the proposed order allocation scenarios: order individually, each order include all brands, and jointly order the selected subset of brands, the best scenario for the order lot size plan which provide minimum total cost is provided by the scenario 2. Based on the calculation, applying scenario 2 would theoretically cost Mari Jaya Rp 43,795,561 for cooking oils, Rp 34,258,559 for margarines, and Rp 67,061,801 for flours.

2. Since the scenario 2 is selected to be applied, the order lot for cooking oil products shall contain 20.615% of Fortune, 10.692% of Siip, and 68.692% of Sovia while margarine products have to consist of 29.857% Fortune margarine, 39.857% Fortune cream, 9% Fortune shortening, and 21.286% Siip margarine, and flour products contains 20.737% Lonceng Hijau, 28.316% Tegu, 1.474% Lonceng Biru, 4.737% Perdana, 9.895% Peacock Biru, 8.316% Mila, 26.211% Lonceng Merah, and 0.316% Mila Mie flour.

3. After simulating the order lot size plan into three inventory control models: Min-max model, Q model, and T model, the model that generates the least cost is the T model for margarines and flours with Rp 4,783,326 (8.084%) and Rp 78,113,704 (31.842%) worth of saves,

though both have the smallest service level among the other with 96.021% for margarine and 97.227% for flour of fulfilled demand on average for all brand in their respective product. Meanwhile, the inventory plan simulation for cooking oil product states that the actual plan is still the one that generates the least cost among the proposed inventory plans.

6.2   Suggestions

After the study has been concluded, there are some suggestions for the future similar studies to be conducted.

1. This study does not consider the stockout cost due to the lack of data provided by the company. Next studies may include the stockout cost into the total cost consideration to simulate the actual condition more realistically.
2. Future research may also include the product's price fluctuations while considering the lot size calculation and inventory control with the help of more advanced models as the currently used models does not allow for such problems.