## **CHAPTER VII**

# **DISCUSSIONS AND CONCLUSIONS**

#### 7.1 Discussions

In this study, the corporate risk tolerance is assessed by developing the model of the hypothetical investment decisions in a form of questionnaire. Two middle administrative levels are examined: management and technical level.

In term of risk tolerance; in the management level, the senior managers display lower risk tolerance level than the managers. Generally, the personnel in higher management level should explicit higher risk tolerance than the lower level. However, this could be resulted from that the senior managers are more experienced in both working and decision making than the personnel in lower management level. And that causes the senior managers making more cautious decisions or being more conservative than the lower level. In the technical level, the risk tolerance of the groups in this level is in the range between 31 and 97 million dollars and there are persons who have dominant high risk tolerance value within each group. There are relatively small differences in the risk tolerance between the group of coordinators and engineers. Moreover, we found the person shave very high risk tolerance value when compare with others. Generally, this is not strange since the analyst usually familiars with the EMV concept therefore they tend to adopt such concept in decision making.

In term of consistency, we found that the group of senior managers is apparently more consistent with their risk taking than other groups. This results from the fact that the senior managers are normally faced with the situations to make a decision under condition of risk in their normal working experiences and also because of their high working experiences. Therefore, this could cause the senior managers familiar with the risky-choice decisions that make them can preserve their steady decisions in risky decision making. The other groups are inconsistent in risky decisions when compare with those the group of senior managers. Even though the group of managers who have more working experiences than the group of personnel in technical level, they have almost the same consistency measure level as the personnel in technical level. In reality, the group of managers should display more consistency than those in technical level; this could be that the managers have low experiences in decision making that causes their consistency measure being close to the personnel in technical level. And if we compare the consistency among the groups in technical level, we found that the group of analysts is relatively consistent when compare with other groups. And the group of engineers is the most inconsistent in risk taking when compare with other groups in technical level, this is because they are a young engineer, lack of experiences in working and knowledge in risky decision making.

Another one reason why the personnel in technical level or even the group of managers are relatively inconsistent is that they make a decision based on their own thinking without considering in term of the firm at all. Therefore the firm should care about this point seriously since when these personnel are promoted to high management level, they can cause the firm goes to bad performance because of their low quality in decision making. Especially in the group of engineers, they are very inconsistent when compare with other groups. And this group is much likely to be promoted to higher management level. Therefore, the firm should educate or train the personnel to understand more in term of their inconsistency in risky decision making as well as their risk preference attitude. One way is to construct their utility curve and describing their general risk preference and their consistency. By knowing an individual risk preference and risk taking behavior, there would be useful in determining what they changes or a new senior manager or manager would must make in his risk preference and risk taking.

To summarize, the results implied that the personnel in the same administrative level have different degree of risk tolerance. As already shown in the previous chapter, two managers with different risk tolerance, when dealing with the same risk options they would make a decision in a dissimilar way depending on their risk preference. If the company allows the personnel make a decision based on his/her own preference this can affect the performance of the company. Therefore, the firm needs to establish some appropriately standard corporate risk strategy in each performing level in order to provide the responsible person in the firm making a decision based on this corporate risk policy instead of making a decision based on his/her own risk preference. In this case the firm should provide the training course or educate the personnel to get more understanding on the decision under conditions of risk and uncertainty as well as their consistency in risk taking and adjust the risk attitude of the personnel in the same direction of the firm in order to prevent the personnel making a decision against the objective of the firm. However, it is not right or wrong that the personnel in the firm have such high or low risk tolerance since it is their risk preference characteristics.

In term of the techniques, since this is the first attempt to assess the risk tolerance of the firm, the frame of outcomes and probabilities of the model may cause some bias in the case that the model does not represent truly typical decision making the sample normally faced. In this case if the scale of the projects (probability and payoffs) that the samples normally faced are higher or lees than their normally deal with, the results of the risk tolerance that we assessed in this study may have some bias.

However, the risk tolerance is a subjective parameter. It changes from day to day according to the financial environment or other factors, so assessing the exactly risk tolerance value is a hard stuff. However, though this term normally changes, it changes in small differences. Therefore, the assessed risk tolerance value can still being applied and utilized in decision making criteria. But if this term changes dramatically, the new value of risk tolerance should be re-estimated or adjusted according to the financial surrounding. However, at least, the responses from the questionnaire can tell us a roughly risk preference of each person and confirm that each person has his/her own risk attitude.

#### 7.2 Conclusions

The following is the details of conclusions in this study:

7.2.1 There are differences in the degree of risk tolerance among the personnel who take charge in the same administrative level indicating that each individual has his/her own risk preference.

7.2.2 The personnel in high management level are much more consistent in risk taking than the personnel in low management and technical level because of their greater experiences in decision making under condition of risk situation.

7.2.3 The firm needs to establish standard corporate risk policy in each administrative level in order to prevent the personnel in the firm making a decision based on their own risk preference. In this case the firm should provide training courses or educate the personnel to understand in decision making under condition of risk and uncertainty.

### 7.3 Recommendations for future study

7.3.1 In order to obtain the most accurate results, it is very important that the scale (probability and payoff) of the model of the investment decisions have to be similar to the type of day to day operation that the samples encountered in their normal decision making. It will be good that the firm could provide a list of typical projects that the samples would face in terms of their capital budgeting process. Most E&P companies usually characterized the probabilities and payoffs for their projects as they conduct expected value analysis, so this information is necessary to construct the appropriate questionnaire for the firm.

7.3.2 In this study the samples are assumed to have an exponential utility function which has a constant risk aversion property. In reality, the exponential utility function is true for some people but most people are less risk-averse when they have more money in their pocket. So, next study may focus on the other utility functions that represent more real risk attitude of a person.