

## Chapter 8

# Risk Tolerance

### Chapter Objectives

Students must be able to:

- Explain What Risk Means in Investment Planning.
- Describe the Process in Discovering Someone's Risk Tolerance Level.
- Explain the Differences in People's Perception of Risk.
- Analyze the Life Situations that Involves Risk.
- Define Pure Risk and Investment Risk.
- Identify the Rational and Irrational Thought Patterns of People Regarding Risky Situations.
- Identify the Different Categories of Risk.
- Explain Some Risk Measurement Approaches.
- Explain Some Guiding Principles to Investment Risk Analysis.

## Chapter 8

# Risk Tolerance

### Introduction

Understanding life offers a real challenge. In life we are always pursuing pleasure moments but often life dishes out a lot of pain. Life is wonderful one moment and then quite unbearable at another. There is pleasure and pain surrounding most life situations. And it is not always physical pain or pleasure. Emotional balance has become a major component of our ability to handle life. Just like life, investments require the same emotional balance. There are gains and there are losses. Each time an investment is made there is an emotional clutch holding our nerves. How comfortable we are with the mood swings of investments makes us different as 'financial' human beings. Let us study this human ability or inability to handle risk. This is quite a subject and tomes of study have been made but no real clear demarcation or axioms have evolved from it. We have to go through at least an exploration of the many facets of risk and hope we can derive a better understanding of human reaction to risk taking and its impact on selection of investments.

### Risk

Risk is subjective because its meaning is based on people's perception which varies from person to person. Every person has a version of what the word means. Not surprisingly, even professionals impute meanings to the word in accordance to their trade. Investors, economists, behavioral scientists and risk theorists have their own definition of risk. Investors, for instance, will look at risk as a chance of loss or gain in an investment.

For the financial planner, it is valuable to understand that every client who invests will have a dissimilar perspective of what is risky and what is not. More importantly, every client's capacity to risk a financial loss will vary. Therefore, it is the responsibility of the financial planner to check his client's risk appetite before solutions are recommended. It has also become a requirement in Malaysia that an insurance intermediary must first perform a proper fact-finding on the client. And, based on the analysis of the facts collected he is required to make recommendations in accordance to his client's ability to tolerate risk.

### Finding Risk Tolerance Level

Finding the client's risk tolerance level can be tricky even with the help of a risk tolerant assessment form. Accurate assessment requires both technical analyses of the data collected as well as the

observations of the planner. One has to check whether what the client said is in congruence with his actions. If it is not, a reassessment is needed and a clarification with the client is required.

This reading material examines some of the concepts on risks and risk tolerance and how information about risk situations can be handled. With a better understanding, the financial practitioner will be more perceptive of the client's risk tolerance level and the possible reasons why a client assumes or declines a certain risk.

## **Disparity in People's Attitudes Towards Risk**

The study of investments and people's attitude towards investment risk is a growing subject. Behavioural scientists are trying to uncover the complexities in human thinking as regards assuming risk. There are huge psychological research done on this subject and presented below are some summary findings.

## **Perceived Risk versus Objective Risk**

We may view a risk as having two dimensions - an **objective** and **subjective** dimension. Take the example of a person driving after consuming large amount of alcohol. From the drunk driver's perspective, there is no risk because he 'feels' he is in control driving the car even with so much alcohol in his blood. His attitude is reinforced by the fact that he never had an accident after a drinking session in the past. He perceives no risk. But for the wife sitting beside, can sense that driving after a heavy drinking session is risky because she 'feels' that under such condition, her husband can lose control easily and cause an accident. Although the wife does not drink alcohol or drive, she has read about drink driving accidents in the papers. She perceives a great risk.

In both cases, the risk is *perceived* and perceived *differently*. Without considering the facts, their views are both *subjective* views. In the husband's case, the 'no risk' perception is shaped by his past experience, i.e. no accident caused by his drink driving. And in the wife's case, it is shaped by her common sense feelings and the reports in the newspapers. The interpretation of risk in the situation encountered is known as a **perceived risk**. The actual risk may or may not match that of the perceived risk.

Now let us look at the facts of the case. Statistically, it has been shown that drink driving does have a higher chance of causing a road accident. Hence, the husband's drink driving is risky based on the available facts. This aspect of the risk is known as the **objective risk** – a factual risk. Perception does not change the reality, but it does affect the way a person behaves when confronted with the reality. If, in the above case, the husband is aware of the facts without any form of mental distortion of the reality, he may not drive as he did. His behavior is influenced by his perception of the risk but not the reality of the risk. To him, his perception *is* the reality, and his action is in accordance to his 'reality'.

We see this played out in life in a variety of ways. In some countries demonstrations or protests are perceived as threatening the security of society while in others peaceful demonstrations allow people to express themselves which are good as feelings and emotions allow the authorities to

understand their people. In some countries unions are allowed while in others they are frowned upon. But at the personal level tobacco is a great example. The Surgeon general's warning about the dangers of smoking is not enough to stop the habit. The next step is to put ugly graphic pictures to create distaste for cigarettes. Hopefully this will work. Mostly advertisers put beautiful girls and good living pictures to influence buyers. Even health reports and extra taxes are not stopping the cigarette consumption. Are we to assume that cigarette smokers are high risk takers? Can we interest them in the latest hedge fund derivatives program? Health risk is very subjective. Perhaps losing a few seconds of their life does not seem too high a price to pay. Perhaps once a habit is formed no amount of objective truth about health risk is going to change the human behavior. That is the stuck way of human thinking. Subjective and objective realities clash for a variety of reasons. We as a society are not discerning enough. Let someone else look into it is not an appropriate response in the long run. The emotional state of apathy also contributes to our current state of perceptions and realities.

## **Pure Risk**

A good case in point is our attitude to pure risk. There are two aspects to this risk as considered in risk management. The first is the **amount** that could potentially be lost – the dollar value that is involved, if a loss occurs. The second aspect is the **chance** of the loss occurring. People will either accept or reject a risk after an objective or subjective evaluation (evaluation based on their perception) of these two parts. The situation's objective risk and its perceived risk are not necessarily matched. A common case is the buying of insurance. Many people do not believe in insurance, and as a result of their belief, they do not buy insurance even when in reality they need the cover.

Insurance buying is strewn with subjective realities. Can anything happen to me? Yes and No. What is the probability that I will live till 75 or 55 for that matter? What is the probability that something may happen to me today, yesterday or tomorrow. Not everyone worries about, 'if something happens to me yesterday'. Insurance buying is placed on the same pedestal as 'responsibility level'. How responsible are you towards your family or dependents. The consequence of not being protected is so severe that most feel responsible enough to transfer the risk to an insurance company. If the field is not subjective but objective the buying of life insurance would have been like selling car insurance. The objective reality of meeting third party claims has everyone agreed on the car cover. But life insurance, when it is your own life, the risk bearing takes on a different stance. I am also afraid our relationship with "GOD" also has a bearing on this. There are many who attribute every grace as that of the mercy of GOD. So being alive or dead is in God's hands. Moving people to also protect themselves through human contrived machines like mutual companies has not reached the desired level although we have come a long way. ***Insurance is a perfect study of human differences in subjective realities and objective evidences***

### ● **Influenced by Individual's Beliefs and Value System**

Although people generally have the ability to work things out logically, the underlying makeup that guides decisions are emotional in nature. Emotion distorts reality and influence behavior. For instance, when the "compulsory seat-belt" rule was first introduced in Malaysia, many people complained despite the fact that having a seat belt on has been proven to save lives. From the rational standpoint, this should not have happened. On the other hand, no one

complained when they are asked to put on the seat belt in a plane, although the precaution would be of little help to save lives in a plane mishap. From this, we may expect that people are not totally rational even when making financial decisions of importance.

Economists and psychologists describe this behavior as “bounded” rationality. People are bounded in their thoughts that govern their rationality. Their choices and decisions are filtered through rational thinking, emotions and values. The Malaysian stock market performance over the years gives an indication of how people make investment decisions. Investors rush in and out of the stock market influenced by rumors and the behavior of the masses. The two emotions that affect stock market behavior are ‘greed’ and ‘fear’. We have seen this happen time and again.

- **Overconfidence in Intuitive Judgments**

People tend to over-value (perhaps, over-indulge) their judgment of a situation. When a person says he is 100% certain of a situation happening in a certain manner, it may in fact be only 80%. On the contrary, those who claim that a certain something never happens, it may turn out to happen 20% of the time. Giving people more information about a situation seems to increase their confidence but not the accuracy of their judgment.

Losses in the stock market are sometimes due to overconfidence. When someone is “sure” of a particular stock going up, he tends to ignore the possibility of wrong information received and plunges in without further checking. How the market will behave is another area that individuals have difference of opinions. Economists have all studied economics yet they all have a different viewpoint.

- **Misled by Short-Run Trends**

Many people cannot recognize the difference between results for short-run and long-run trends. The **law of large numbers** works only in long run where the sample base is large enough. For instance, in the short run, it is possible that the stock market keeps going up and up without any correction. This can happen irrespective of market conditions. Many people influenced by the short run trend plunge in at the wrong time, thinking that the trend will keep going the way it currently does. Many have been caught in stock market crashes this way. In Malaysia 1996 was a glorious year but 1997 and 1998 brought everyone to the stark reality of market risk.

- **Misjudging the Magnitude of Risk**

For most, the actual scale of risk and its volatility is difficult to judge in a precise manner. In some assessments, it was found that people neglected to factor exposure time accurately in their assessment of the risk. There is a tendency to overestimate the force of short-duration high-risk events. People tend to feel a higher degree of danger than it truly is. Short term impact clouds the long run situation. When the stock market, for no reason takes a plunge, the market reaction is often not reflective of the situation posed by the sudden drop. The investment world experiences cycles and the wise ones among us wait for the cycle to return.

Today we are facing the magnitude of risk as regards Global Warming. Is Al Gore right in his presentation of “An Inconvenient Truth”? If he is right, there is a chance that the planet earth will disintegrate if we do not stop the C2O emissions. People are still coolly going about their affairs and do not share the same urgency as AL Gore.

Another frightening prospect is the price of oil moving to USD 200 per barrel. The traders of New York may price petrol on a short term basis but the world is sometimes not given an estimate of the long run situation. Is it time to panic and act with these short term trends. I hope these questions get answered by our future generations.

### ● Denial of Risk

Denial is another common attitude towards risk. Many people who engage in high-risk projects or activities either do not know the level of danger involved or simply reject the possibility that the risky situation will apply to them personally. For instance, those amateurs who constantly go diving in the sea deny that the activity is risky. The common rebuke is that they are “trained” for the event and hence the risk for them does not arise. There are also those who deny the existence of risk for them because they have experienced good luck in escaping several risky situations. The danger posed by small, negative probabilities is often denied completely. This attitude assumes that low risk is equal to no risk at all.

### ● Influence of Bias Attitudes

We are all biased to some extent. From a risk perspective, biases can distort our mind. For a variety of reasons, it is common to find people with some kind of bias when they respond to risky events facing them. Below are some of the types of biases that the practitioner may have to deal with in carrying out his task.

- Availability Bias: Those events that can be easily recalled or imagined are often viewed as more real or probable to take place. Likewise, those incidents that are blurrier are treated as less likely to happen. A good case is the payment of insurance policy claims. Although most claims are paid without hassle, the reports in the media and the consumer magazines highlighting rare unpaid claims have created an impression that most insurance claims are not paid out.
- Familiarity Bias: Ignorance creates fear, while knowledge dispels fear. As such, those risks that are more intimately known to a person are less feared. Most investors have favorite counters, those that they are more familiar with and are more willing to take up than other counters unfamiliar to them. In the words of the great investor Warren Buffet “one should know his investment well”. Familiarity is a good thing. So to invest one should get more familiar with what they are investing.
- Evidence Bias: This is the tendency where people will selectively seek evidence to support their action or their belief. They will either distort or ignore evidence that is contrary to their beliefs.

- Illusion of Control Bias: People in control of a situation will be inclined to feel less fear than the risk warrants. A pilot or driver versus the passengers. Fund managers versus passive investors. It is sad to read reports that say that, there is no conclusive evidence that says that professional fund managers have outdone passive fund management on a consistent basis. Yet all the hype about fund management is interesting.

## Risk Taker versus Thrill Seeker

Some studies on human behavior have shown that most *risk takers* do not take risk in an appreciably regular pattern – that is, they choose to take risk only under certain situations and not in all situations.

Based on researches, four broad types of life situations involve risk-taking:

- ⇒ Monetary situations: Risks involving investments, gambling, speculation and even jobs.
- ⇒ Physical risk: Risks involving bodily harm and loss of life, e.g. sky-diving, motor racing
- ⇒ Social risks: Risks involving loss of face, respect of peers, fall from grace of political patronage
- ⇒ Ethical risks: Risks involving moral choices. This topic is the very essence of life. How often we lament the lack of ethics in society. We hardly admit to any wrongdoing. Prove I have done something wrong in the court we say. You are innocent until proven guilty. I did everything according to law. Ethics is an entirely different thing. Financial services professionals are placed in very questionable ethical situations. To be independent or not is an ethical question doing its rounds right now. The author offers no views as this a massive topic by itself.

In these studies, it was found that a risk-taker in one area may not exhibit the same risk taking in another area. People may be willing to throw money at half chances but may not be prepared lose face in social situations. People may be ready to take ethical risks because the fear of God is not strong enough. The pearly gates are furthest from their minds.

A similar type of personality to risk taker is the thrill seeker. **Thrill seekers** are people who consistently seek out or create risks in all life situations they face. In other words, if no risk exists, they will create one to satisfy their thirst for excitement. More men than women fall under this category of people. All thrill seekers despise routine and want experience that is new, challenging and complex. They often choose to play “contra” in the stock market. They tend to value the adventure. The constructive outlet for thrill seeker should be the arts or sciences, where they have the freedom to express themselves and contribute to society. . The destructive outlet is criminal activities.

## Categories of Risk Behavior

Every person behaves according to how he is mentally wired. They would thus be expected to react differently in varying degree from one another if given the same set of risk stimuli. Accordingly, some will be more willing to accept a high level of risk in their dealings, while others will not.

For the purpose of risk assessment, we may classify people into three categories as follows:

- ⇒ Risk **taking or seeking**,
- ⇒ Risk **indifferent**, and
- ⇒ Risk **averting**.

*Risk taking or seeking* and *risk averting* behaviors represent the *opposite end* of the scale when people face risks. Placed in-between is the *risk indifferent* type. Studies have shown that most people prefer safety to taking risk, *i.e. majority of people are risk averse*. People's choice of security over risk is bounded deep in their subconscious.

In the Malaysian's environment, the financial practitioner is required to assess the client's risk tolerance before he makes any investment recommendation. Financial recommendation must fall within the client's risk tolerance level. A wrong assessment of the client's risk tolerance level, which leads to a wrong recommendation, may have severe implications on the practitioner. It is therefore imperative that he understands the three types of risk behavior and to determine of which type the client falls into. The following provide a concise narrative of the three types of human response mentioned earlier:

- **Risk Taking or Seeking: Risk takers** are the "gung ho" type whose perspective of risk is that it is an *opportunity* rather than a *threat*. They tend to have a partiality for uncertainty versus certainty in given situations. Because of their often over positive outlook, they have a tendency to underrate the degree of risk in risky situations. In their daily life, we can observe that risk takers have a preference for variety and uncertainty – they participate in activities that help to spice up their life. Risk taking is considered an important criterion for those involved in business. Not surprisingly, many successful entrepreneurs hold some or all of the risk taker's characteristics.
- **Risk Indifferent:** Risk indifferent persons are neither influenced much by the danger or opportunity presented by a risky situation. They are neither attracted nor repelled by risk. It is good that a large segment of society fall into this category. Much of a financial planners' basket of goods and services must fall in favor of this group.
- **Risk Averting: Risk averters** are generally not so adventurous who view risk as a threat. To avoid risk, they have a preference for certainty over uncertainty. Because of their conservative approach to life, they have a tendency to overestimate risk and hence tend to be pessimistic, in varying degree to risky situations, spotlighting on the "loss" facet of those endeavors. According



to a study made by LIMRA, most people tend to fall into this category of behavior. That is, the majority will want to avoid undue risk.

## **Risk Tolerance**

### **Risk Tolerance and Demographic Attributes**

In an effort to better understand how people will react to risk, extensive studies were made on the relationship between risk tolerance and demographic characteristics such as age, wealth and education. In this section we will briefly explore seven main demographic characteristics of the research done on this topic and taking the local situations into considerations.

- ⇒ **Age:** As a person grows older, there is a tendency to take less risk. Research has found a biological link to this tendency. It seems an enzyme called *monoamine oxidase* (MAO) is found in abundance in those who are risk adverse, and that MAO increases with age. So, it was presumed that as a person ages, the increase of MAO will decrease his urge to take on more risk. There is a distinct difference between physical risk and monetary risk. Older people who understand the investment game may still be at it despite their age. George Soros is no youngster. His appetite for currency positions is legendary.
- ⇒ **Gender:** Women have tended to be more risk averse than their male counterpart across all ages. This is especially so in Asian countries where the environmental conditioning have made women more dependent and risk averse. This has changed and women have firmly placed their footprints in the work environment. In Malaysia the future seems firmly rested on women as two-thirds of new entrants to universities are women. Jobs are also going to women as they seem more dependable and less likely to job hop. The monetary risk taking aspects between working Malaysian men and women will have little difference as we progress into the future.
- ⇒ **Birth Sequence:** >From observations (as little studies are done in this area), it can be noted that the eldest child in most Asian families tend to be more risk averse. In countries with group culture, such as those generally found in Asia, the eldest child of the family is expected to care for the younger siblings and even their parents when they grow up. This is especially so if the eldest child is of the male gender. As such, he is groomed to be more careful and dependable - a breeding ground for him to be more risk-averse, especially with money matters.
- ⇒ **Marital Status:** Single persons are generally presumed to be more risk tolerant than those who are married, especially those singles with no or little responsibilities. However, some studies have concluded that it is not the marital status that really determines the risk tolerant behavior but whether or not that person has any dependents. If, for instance the wife is also employed, then, the husband can take on a more risky, but potentially higher pay work. It was also found that some dual-income couples are able to take on more investment risk because of the dual source of earnings.
- ⇒ **Occupation:** Government servants are generally more risk averse than those working in the private sector. This is probably due to work environment conditioning, where the 'outside'

private sector forces individuals to take on more risks as compared to a government job, which is considered safe and secured. Those who are knowledgeable and more exposed to the world of business, like professionals, tend to take on more risk than those with less knowledge and business exposure. This is consistent with the supposition that risk tolerance will heighten with knowledge and familiarity. It was also found that in the same groupings of professionals, those who work in small firms tend to be more risk tolerant than those who work for big firms. At the managerial level, Risk takers tend to hold more senior positions, earn better income and have greater authority. For those who seek work, risk takers tend to prefer commissions to fixed pay, especially if the potential earnings are high.

- ⇒ **Wealth:** Generally, the wealthier the person, the higher is their risk tolerance – both in *absolute* and *relative* terms. **Absolute risk tolerance** is measured by the ringgit size of wealth one allocates to risky investments. It is generally accepted that absolute risk tolerance increases with the size of one's wealth, because a wealthy person has more to spend on everything. **Relative risk tolerance** is measured by the proportion of wealth a person allocates to risky investments. If the residence is excluded, it seems that those who are wealthier have a higher relative risk tolerance.
- ⇒ **Education Background:** There are two aspects that favor many (not all) of those who are better educated to be more risk tolerant. Firstly, certain investments necessitate knowledge, which is more easily available to those who are well educated. If we consider 'experience' to be a form of education, then there are also those experienced, but less formally educated, individuals, who are risk tolerant because of their wealth of knowledge gained through involving or 'playing' in the investment field. Secondly, it is generally accepted that better education allows higher earning opportunities and hence more wealth and income. In turn, those with higher wealth and income (acquired by reason of better education) increase their risk tolerance. In this case, it is not education per se that increases risk tolerant but the safety of higher net worth. In the business circle, the situation as observed in and around Malaysia is quite different. Many of the top businessmen are not well educated, and yet are seen to be risk takers in terms of their business enterprises. This is probably due to the fact that many of these less educated businessmen are 'forced' to take on more risk by moving into business, as they are unable to get well paying jobs if they work. They are also forced to be resourceful in order to survive and as their wealth grows, they are able to neutralize their lack of education by hiring highly educated professionals to help them to take on more risk – hence more risk tolerant.

### **Measuring the Client's Risk Tolerance**

In financial planning, the purpose of measuring the client's risk tolerance level is to help him recognize his own propensity to bear risk, especially involving investments. With this understanding, it is easier for the financial practitioner to make the appropriate recommendations for achieving the client's financial objectives. Consideration of his predisposition towards risk will avoid future problems with investment experience.

We have learned earlier the issues that wield some form of influence on the person's willingness to take risk. In measuring the client's risk tolerance, we have to consider what is his representative score of risk tolerance – the level at which he is comfortable to make decisions on risky investments.

As is normally the case, the client would not know his level of risk tolerance until he has been 'tested' and shown the results. Even then, it should be cautioned that the financial practitioner is not there to impose on the client to accept this level of risk tolerance based on test conducted; as such tests are only indicative and not definitive. It is finally the client who must decide, after reviewing all evidences, what his risk tolerance level should be.

### **Measuring Approaches**

Essentially, there are two broad approaches to measuring a client's risk tolerance – a **qualitative** and **quantitative** approach. It is generally recommended that financial practitioners use both methods to ensure better accuracy and result. Both methods have their strengths and weaknesses. For instance, in the qualitative approach, the judgment of the financial practitioner based on information given could be wrong; while in the quantitative approach, the financial practitioner may not get to know how the client's wife may feel about a particular risky investment.

- ◆ In the *qualitative approach*, the financial practitioner captures the relevant information mainly based on unstructured discussions with the client. The evaluation of the information is on an instinctive, intuitive basis, which are reliant on the practitioner's knowledge, skill and experience. This would suggest that those practitioners who are weak in communication or who have less experience might face problem using the qualitative approach.
- ◆ As for the *quantitative approach*, the client is interviewed using a structured format, where the information captured is translated into some kind of useful mathematical score. If standardization is required to ease the practitioner's operation, the quantitative approach is an easier option. However, care must be given in the construction of the risk assessment questionnaire or other device used for quantitative analysis. The questions must avoid the tendency to skew the client towards biases in giving out the answers. The ideal quantitative approach would be to have a 'norm' as a benchmark where the practitioner can compare results. For instance, the practitioner is able to compare the risk tolerant level of a client who is a female, age 25, with others in the same age and gender group in Malaysia.

Some of the questions to avoid or be careful of in devising a risk tolerant assessment questionnaire include, but not limited to, the following:

- ◆ Questions that have no bearing on testing the risk tolerance of the client.
- ◆ Questions posed in the wrong format.
- ◆ Too few questions in the questionnaire to provide an adequate representation.

- ◆ Questions that over estimate or underestimate the risk tolerance levels of the client.
- ◆ Questions that are not contextualized to ensure that the score would indicate risk tolerance rather than thrill seeking tendency of the client.

### **Issues in Risk Tolerance Assessment**

Technique-wise, some of the issues approached in risk tolerance assessment include the following:

- ◆ **Client's Investment Objectives:** The client's investment objectives give a good feel for the client's immediate concerns. Depending on where in the life cycle they are currently on, their financial objectives will reveal a certain preference. A client may have preference for liquidity, safety, capital appreciation, inflation-adjusted returns, current income or tax reduction. From the answers provided, a deduction can be made to determine his level of risk tolerance. For instance, if the client prefers growth or capital appreciation and inflation-hedged returns from his investments, then he is likely to be risk tolerant. And if he prefers safety of principal or liquidity then, he is most likely risk averse. Such inference can be highly misleading, as for instance, a client who prefers current income can in fact be either risk averse or risk taking. If you are a fan of Robert Kiyosaki you will adopt his penchant for income sensitive investments versus purely capital appreciating investments. Be the dairy farmer and not the cattle rancher and your assets will be more valuable, he says.
- ◆ **Choice of Investment Vehicles:** Observing a person's choice of investment products is considered the most direct approach in assessing the client's risk tolerance level. Typically the client is asked to allocate his preferred percentage of his funds among the various classes of investments, such as shares, bonds, real property and derivatives, if given a lump sum of money. As this is not a real life situation, the danger is the client may be more *gung ho* than he is in reality. Another approach is to ask the client to rank his preference for each of the investment products given in the list. If overall, he has a bias towards those investments that are high risk, an inference is drawn that he is risk tolerant. In both approaches, it should be noted that the knowledge of the client on the actual risk potential of the various investment vehicles is crucial for accurately determining his risk tolerance. At this stage, we can generally assume that most Malaysians do not have adequate level of financial awareness or knowledge to assess the risk level of the various investment instruments.
- ◆ **Past Behavior Pattern on Monetary Risk:** It has been observed that one of the best forecaster of future behavior is to observe the client's distinctive past behavioral pattern on money matters. While this is not a guarantee, the past pattern of behavior on money matters does indicate how the client is wired-up mentally when he thinks of his finances, which in turn would provide a good clue of his prospective conduct in the future. Here are some daily life peculiarities that can be used to weigh a client's temperament towards monetary risk:
  - ⇒ **Current investment portfolio:** If the investments comprise mainly the 'safe' type, like savings account, time deposits and unit trusts, then we can reasonably assume the

client is risk averse. However, it would be more accurate if we check whether this composition is because the client is ignorant of other investment vehicles or whether he has his “hands burned” in the last stock market or property market crash.

- ⇒ **Debt ratio - Current liabilities to his gross assets:** Generally, if the ratio indicates a large percentage of his assets are leveraged with borrowings, it is a fair indication of risk taking behavior, and vice versa. In fact comfort with borrowing is a very good indicator of risk tolerance.
  - ⇒ **Size of insurance coverage to his annual income:** Generally, it is assumed that a risk averse client will be more security conscious and get himself adequately covered. However, we have to check if he had bought the policy because of his belief in the benefits of life insurance coverage or he had acquired these policies from a close friend or relative to entertain them.
  - ⇒ **Degree of self-insurance or deductibles:** If the client retains a larger amount of self-insurance or deductible he is generally more risk tolerant. You can perhaps even say he is more sophisticated.
  - ⇒ **Number of job changes:** The frequency of job changes is a general indication that the client is a risk taker, as every change requires the movement into unknown territory, which may be termed risky. However, the circumstances leading to these job changes will provide a more accurate picture.
  - ⇒ **Year-to-year income variation:** Risk takers are adventurous in trying out new ways of making more money and their income generally fluctuates in accordance with their year-to-year swing of fortune. It is difficult to say who has made a smarter choice, the person employed or the person in business. But clearly a person entering business is more risk tolerant.
- ◆ **Mindset towards Risk:** Some tests on risk tolerance cover the client’s attitude towards risk. In such tests, both the qualitative and quantitative approach can be used. Questions can also be *broad* (global) or *narrow* (specific) in scope. An example of a broad approach would be to ask the client whether they see themselves as a risk averter or a risk taker. Broad questions such as, “*On a scale of 5, where 1 stands for ultimate risk averter and 2 stands for ultimate risk taker, where would you place yourself?*” may be used to give a global picture of the client’s propensity towards risk. Another form of questioning is to elicit specific reactions to risk from the client. Some of the questions that cover specific areas indicative of risk propensity may be as follows:
- ⇒ Do you experience sleeplessness after you have made a risky investment?
  - ⇒ Do you believe that a person can only move ahead by taking chances?
  - ⇒ Are you afraid to lose you wealth due to bad investment decision?

- ⇒ Are you prepared to borrow from the bank to invest?
- ⇒ Would you see risky projects as an opportunity to make money or a threat to your finances?

There must be a sufficiently large number of questions to derive an accurate sample. The setting of the question must be “intelligent” enough to prevent the client from answering to look good and give the tester an erroneous picture. For instance, the client may be risk averse, but wants to show that he is “bravado” and so attempts to skew his answers to put up a facade that he is a risk taker.

- ◆ **Probability and Payoff Preferences:** There is an assortment of risk propensity measuring approaches that falls under this categorization. The three approaches to be discussed will rely on a manipulation of one or more of the following four elements found in any gambling situation. They are:
  - ⇒ The probability of loss
  - ⇒ The probability of gain
  - ⇒ The amount to be lost
  - ⇒ The amount to be gained

It should be noted that the *framing* of the questions should be carefully considered as it has a profound impact on the answers to be received. **Framing** here means that the conclusion from the identical objective facts can be described either in terms of the probability of gaining (positive emphasis) or the probability of losing (negative emphasis). An example of framing would be describing a bottle as half empty (negative emphasis) or to describe it as half full (positive emphasis) – which although means the same thing, can elicit a different response from the same individual. In congruity to this principle, we can expect that more people will say they are willing to take the risk in a Project if the question is framed in terms of the *probability of success* rather than the *probability of failure*.

Another factor to note is the “**unpacking effect**”. This factor refers to the discovery that the perceived probability of a happening is swayed by how specifically it is depicted. Tests have shown that the more specific is the description of the event, the higher will be the estimates. For instance, if a group is asked for their estimates on the frequency causes of disability due to accidents, a reply of say an average of 55% is given as the answer. If the same group is again asked to estimate, this time, on the probability of disability from a list of three possible forms of accidental disability – car accident, workplace accident and household accident – the probability this time round would be a higher estimate, e.g. 33% for car accidents, 25% for workplace accidents and 10% for household accidents, totaling 68%.

To further illustrate the *probability and payoff preferences* factor of risk assessment, three methods are discussed below:

- ⇒ Preferences for certain versus probable gambles: The two-alternative trial is one of the ways to present a test situation for the client. For instance, Danny is presented with a choice in a risk Project of either:

**Project A:** A definite profit of RM 2,500, or

**Project B:** A 50% chance of profiting RM 5,000

If Danny chooses Project A, he is considered risk averse; and risk taker if he chooses Project B.

- ⇒ Minimal required probability of success: This process of risk assessment is best illustrated using the “Choice Dilemma” questionnaire (Kogan and Wallach, 1964). In this questionnaire, twelve situations are presented, of which, two alternatives (one risky; the other safe) are provided in each situation. In all the situations presented, the risky choice provides the participant a larger potential payoff. Five odds are provided for the chance of success for the risky option, i.e. 1 in 10, 3 in 10, 5 in 10, 7 in 10, and 9 in 10. The participant is requested to decide on the odds that would make it sensible for him to take the risky option rather than the safe one. The types of situational dilemmas are wide ranging, encompassing heart operation, job change, marriage decision, etc.

Although the choice dilemma has sound risk propensity measurement properties, it is not too appropriate to be used for gauging the monetary risk taking aspect of a client as it considers risk in a very broad manner. As we have discussed earlier, risk is not a unitary phenomenon, but have at least four dimensions to content with.

- ⇒ Minimal required return: This type of question requires an answer in terms of the amount to be gained rather than in terms of probability. For instance, if Danny is asked to choose a business Project in which he has a 50% chance of losing half of his personal net worth and a 50% chance of making a certain amount of money, what sort of returns is worthwhile before he will consider taking the risk.

### **Guiding Principles in Gauging the Client’s Risk Tolerance**

In assessing the client’s risk tolerance, some guiding principles are needed to set a rational boundary. Since we are generally talking about financial matters, the monetary aspect of the client’s risk taking character is a priority. There are certain characteristics of a monetary risk taker that should be noted. Often, the client is a good money manager, confident and has good investment knowledge to back him up. There is also a tendency for him to focus on success rather than happiness.

In the current regulatory environment, it is always better to suppose that the client is risk averse until the facts indicate otherwise. Do not take the client’s word for granted. People have a tendency to overstate rather than understate their risk taking inclination. Look out for clients who are considered risk averse who are currently losing money. Many in such situation may turn risk tolerant. In assessing the client, the demographic characteristics must be taken into consideration.

The age, marital status, wealth, etc. can give certain general indications of the client's level of risk tolerance.

Another aspect is the communication style used. Make sure, the manner of communication is appropriate. Communication and interaction between the client and the planner is essential for a good assessment outcome. In communicating with the client, keep in mind the type of biases he may have. Look out for clues, and identify the biases so that you can deal with them appropriately. Look out also for changing events and situation that may alter the client's risk tolerance profile. Once an agreement is reached, it would be good to obtain a written confirmation of the assessment from the client. This would reduce the possibility that the client may accuse the planner of recommending products that are not in accordance to his needs and risk profile.



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## Self Assessment

1. Different people have different attitude towards risk. How does a financial planner solve this problem when constructing a financial plan?
  - a. find out client's net worth
  - b. understand client's risk tolerance level
  - c. always recommend the lower risk investment plan to avoid risk
  - d. advise client to take additional insurance to hedge the risk
  
2. Thrill seeker refers to a person:
  - a. who is consistently seeking out or creating risks in all life situations
  - b. whose perspective of risk is an opportunity
  - c. whose perspective of risk is a danger
  - d. who is neutral or numbed to both the danger and opportunity presented by risk
  
3. If Alan feels that scuba diving is a dangerous sport notwithstanding that actually it is a very safe sport if a person goes through a proper training, Alan is having a:
  - a. objective risk
  - b. risk indifferent
  - c. risk averse
  - d. perceived risk
  
4. An individual's risk tolerance is affected by his/her own human behavior and rationality when making judgment. Which factor below is not contributing to stop an individual from thinking and acting rationally when making risk judgment:
  - a. Mental rejection of risk
  - b. Influenced by individual's educational level
  - c. Over confidence
  - d. Influenced by individual's beliefs and value system

5. Ah Fatt reads an article in the newspapers about a customer's complaint of not having been paid by his insurer over his accident claim and started to create an impression that most insurance companies don't pay out claims. Ah Fatt is having what syndrome:
- Down syndrome
  - Availability bias syndrome
  - Intimacy syndrome
  - Evidence bias syndrome
6. Research has shown that there is some relationship between risk tolerance and demographic characteristics. Choose some of the demographic characteristics below that contribute to that relationship:
- wealth, age and family size
  - family size, marital status and sex
  - family size, age and population density
  - wealth, age and occupation
7. A person feels that working for the government is a long term career with job security. His risk profile is most likely that of a:
- risk averse person
  - risk indifferent person
  - risk conservative person
  - risk seeking person
8. Risks in the most basic sense is defined as:
- chance of an investment loss
  - chance of a financial loss
  - chance of a physical loss
  - chance of an income loss

9. Objective risk is defined as:
- risk involving loss of face
  - risk based on person's beliefs and value system
  - risk involving loss of freedom
  - risk based on reality that exists
10. A person's attitude toward risk in which a decreased return would be accepted for an increase in risk is said to be a:
- risk seeker
  - risk averse
  - risk indifferent
  - risk thriller

Answers : 1-B, 2-A, 3-D, 4-B, 5-B, 6-D, 7-A, 8-B, 9-D, 10-A.

