Capital budgeting decision process

Business, Decision Making

Capital Budgeting Decision Process 1. Introduction The maximization of shareholder wealth can be achieved through dividend policy and increasing share price of the mark value. In order to derive more profits, our company shall invest potential investments which always cover a number of years. Those investments involve substantial initial outlay at the outset and the process. The management is responsible to participate in the process of planning, analyzing, evaluating, selecting and making decisions to allocate the limited resource to those investments. This is called capital budgeting decision process.

Budgeting acts as an important managerial tool in practice. It is budget for the major capital investment such as purchase of land and building, plant and machine, investing new product or market. In modern competingenvironment, the company shall go ahead to make those investments in order to survive and profitability. A good evidence is Apple which globally introduced iPhone and acted as a leading market position. Denzil & Antony (2007) stated that “ Those decisions shall take account of the amount, timing and associated risk of expected company cash flow”.

Therefore, Capital budgeting decision process is within the prospective of financial management. 2. The Aims of Financial ManagementFinancemanagement generally embraces financial decision, investment decision and dividend decision. Its aims can be varied from different company, the main aims are expanding a new market, budgeting control, maximizing profit and maximizing shareholder wealth. Keown, et all stated that “ The fundamental goal of a business is o create value for the company’s owners (this is, its shareholders)”.

However, the management may focus on profit maximization that will benefit him because he is the agent on behalf of the shareholder resulting in devoicing ownership and management from the company. It leads to conflict with the shareholder's interest and may detriment the shareholder's wealth. In order to balance those conflicts, the management shall efficiently allocate limited resource and must consider its investment strategies with its financing policies at the best interest of the shareholder. The present value of future cash flows is a better measure of the wealth of shareholder value.

Cash inflows are derived from financing activities such as debt and/or equity. If those funds are used for investment decision, it implies that there will be less contribution to shareholders as a mean of dividends. Efficient and effective allocations of the funds are principleresponsibilityof the management. This can be achieved through making an optimal capital budgeting decision process so as to create value for shareholders. 3. Academicliterature on models of the investment process The company may face many potential investments in which it has to make choices to invest.

It is necessary to evaluate potential investments in order to make better decisions. Every new investment is subject to risk and uncertainty. It always takes a long period of time to report future benefit. It will severely affect the cash flow of the company. The company therefore must manage the cash flow efficiently and effectively. Some techniques are introduced to decide whether to invest potential investment. John Graham & Harvey (2000) conducted a survey of 392 CFOs found that CFOs always use Net Present Value (NPV) and Internal Rate of Return (IRR), percentage respectively is 74. and 75. 7; Payback period (PB) is also popular 56. 7 percent while

Profitability Index (PI) seldom use only 11. 9 percent . Alkaraan & Northcott (2006) also obtained a similar result from survey that UK manufacturing companies applied appraisal techniques. Accounting rate of return (ARR) and PB are commonly used techniques. It is important to be aware of their merits and drawbacks. ARR is an accounting ratio which is also known as Return on investment. It is accepted for potential investment (usually less than one year assessment) if ARR is more than or equal to hurdle rate.

It is easy to understand and calculate, but it ignores cash. PB measures the number of years required so that the estimated returns can cover the initial outlay. It is also easy and simple to use, but it takes no account of cash flow after payback period. Both methods take no consideration of time value ofmoney. To overcome those problems resulted from ARR and PB so as to make optimal decisions, the project appraisal process needs to consider the time value of money. Expected future cash flow of potential investments shall be discounted and added together to derive a lump sum of the present value sing a given discount rate. Three types of discounted cash flow are NPV, IRR and PI. NPV is the difference between sum of present value and initial outlay for the proposed investment. A positive NPV indicates that the proposed investment is accepted and vice versa. NPV takes account of the time value of money and all relevant cash flows over the life of the project. However, it is difficult to understand and rely on to provide an available appropriate discount rate. IRR is the discount rate at which NPV is zero. If IRR is greater than the cost of capital, then the potential investment is recommendable.

IRR is easy to understand and it excludes the drawbacks of ARR and PB that both ignore the time value of money. However, IRR often gives an unrealistic rate of return unless the calculated IRR is a reasonable rate for reinvestment of future cash flows. PI is the sum of the NPV and the original investment divided by the initial outlay. PI is useful under capital rationing since it demonstrates that the best return can be achieved from the available funds. NPV and IRRare commonly used to measure potential investment today.

Michael (2004) suggested that “ Theory would suggest that the DCF methods are superior to the traditional techniques and that NPV is superior to IRR”. Therefore, potential investments can be best chosen to add value to the company. 4. A best practice design for the decision process Dayanada, Don. (2002) showed that “ capital budgeting is a multi-faceted activity”. A best design for the decision process shall include seven stages. Arnold, G. (2008) specified that “ There is a great deal more to successful investment programme than simply project appraisal”.

Firstly, the company must has clear objectives and identify profitable investments project to sustain long term development of the company. Baker, H. Kent, et al. (2011) also suggested that the first stage is identification. The company has amotivationto achieve those objectives. The management translates them to specific directions and policies by using strategic planning after the company establishes objectives. Secondly, the company can develop and classify potential investments according to strategic planning. Thirdly, there are many potential investments in any company.

It needs to be screened at this stage because potential investments are without being examined in depth in the previous stages. It can eliminate unsound and less profitable investments before the next step to evaluate the potential investments. Fourthly, it is the project appraisal stage that evaluates whether those potential investments contribute additional value to the company or not. Fifthly, it requires to present various reports and sets up a level of authorization for proposed projects. Sixthly, it conducts on the implementing stage to control capital expenditure, when to implement and who to be responsible.

Finally, it is the monitoring and evaluating stage that is called the post-completion audit. It compares between the actual cash flows and other forecasted cost and benefit to improve the proposed investment or inducement for further investment. 5. Key stage of the decision process The key stage is project appraisal at the fourth stage from the above decision process. Dayanada, Don. (2002) pointed out that " project analysis is critically important for the firm". Potential investments will be considered the initial outlay and expected future cash flow associated with risk and uncertainty.

At this stage, it involves the application of many techniques, such as forecast, risk analysis, time value of money, discount rate and inflation, etc. Facing many problems of potential investments, the management should be familiar with those techniques. What is the relevant cash flow for the potential investment? Karanovic, et al (2010) pointed out that " In capital budgeting process one of most important things is discount rate determination". It will affect the decision-making using different discount rate. Shall the company choose the highest NPV or the highest IRR when the mutually exclusive potential investments?

James & John (2008) stated that “ different investment projects often have different degrees of risk”. If the proposed investment is more risky, the higher return is required. However, is higher return reasonable? If undertaking it, what will happen? Clive Emmanuel, et al (2010) stated that “ Once taken, capital investments are largely irreversible and significant financial sums are at risk”. Hence, it may require using different appraisal techniques for the same investment, for example, using PB and/or PI technique to assist the analysis of NPV.

When making decision to select potential investment, the management shall consider how to allocate the available funds to those investments efficiently at the same time. Therefore, the fund is a key issue to determine how many potential investments are undertaken. The management must concern about the liquidity of the company immediately after accepting potential investments. Improper acceptance or rejection of any proposed investment may significantly affect the long-term success of the company. 6. Conclusion

The capital budgeting decision process is one of the investment decisions which form the fundamental part of financial management. Inappropriate investment decisions can endanger the survival of the company and cause difficulties in obtaining additional financing from stakeholders. To make optimal capital budgeting decision process, investment proposals shall be analyzed under risk, uncertainty and inflation. After making decisions, the company shall separately consider how the funds generate in the best way.

A sound capital budgeting decision process is beneficial to achieve the aims of financial management.

The efficiency of financial management is a good-measurement to achieve the objective of the company. 7. Recommendations Since our company has a clear objective to maximize the shareholder wealth, it can be achieved through making potential investments to invest. Identifying potential investments is crucial to the prospect of the company. It requires expertise and management to execute the capital budgeting decision process. An independent capital budgeting committee shall be assigned to monitor the capital budgeting decision process.

Since capital budgeting decision process is more dynamic, after implementing it, Cotter, et al (2003) suggested that " real options should be included in a capital budgeting analysis". A good capital development system and management information system will be well on the way to achieve the objective of financial management successfully. Reference List Alkaraan, F. , & Northcott, D. (2006). Strategic capital investment decision-making: A role for emergent analysis tools? : A study of practice in large UK manufacturing companies. The British Accounting Review, 38(2), 149-173.

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