

# [Payback period analysis](https://assignbuster.com/payback-period-analysis/)

## Question 1: You argue, that the PP method allows managers to determine whether or not a investment project is profitable or not. However Atrill and McLaney (2009, page 268) argue that the method is not concerned with profitability, as it does only calculate the cash flows. Second, you also state that the main reason to use it is based in its simplicity as well as to make decision. I agree with the fact of simplicity however, believe that the length of the payback period is the key to the decision making process (Atrill and McLaney, 2009, page 267). Your comment?

## Answer

Investment decisions often need to be pre-evaluated and a quick measure of viability is necessary before due consideration can be meted out. It is necessary to use simple measures to evaluate profitability measures on investments that would make decision making easier and clearer. The payback period is a measure that is both simple and effective: the idea of a payback period is important from a financial perspective.

The measure evaluates a project on the length of time that would be needed to earn back the investment worth today. Since it negates the time value of money in its simpler form, it is a very basic and slightly overestimated projection of a break-even. This break-even has a financial bearing more important than the simplicity of the tool warrants for. It calculates the time for which the benefits from a project will directly contribute towards the initial capital invested. A manager may find a project that may have a useful life of 5 years and a payback period of 3 years. This virtually means that the first three years, the project will not be making any new money. However, once the break-even is met, the project will add value to the company for two whole years. Another project with a payback period of 2 years but with a useful life of 2. 5 years may simply be rejected on the basis of the payback period since the value added tenure is lesser.

This simplistic evaluation and ease of calculation makes the payback a predominant choice for managers to pre-screen projects and select viable ones – which are in terms of the time period companies are willing to keep their capital tied up (Atrill & McLaney, 2009).

## Question 2: You said that payback method enables managers to know project that are profitable and those that are not. Do you not think that by considering profitability the managers should take into cognisance the duration of the project be it short time or long time as this might also affect profit?

## Answer

The use of the payback period to evaluate investment decisions is not one of the best of practices. The payback period of a project informs managers the time period during which they will be recovering their initial investment. While financial investment analysis needs to be more detailed and adept, the tool is useful when the time period for investment needs to be considered more than the time value of future cash flows.

However, the importance of the payback period can be understood by the fact that investment returns are gauged by the time period for which their returns are of material value. The length of a project is after all, a key determinant in evaluating a project’s viability. Investments with a longer horizon may have a higher net present value but the returns may be more distributed beyond the life cycle of the project thus making the investment not that attractive in the short-term. On the contrary, a project with a shorter payback period may have a lower net present value but may turn out to be of more material importance due to it having a higher short-term value. Thus, the length of an investment, as denoted by the payback period, is a key evaluation criteria for managers to consider when valuing different investment projects.

## Question 3: I tend to support this view in so far that future project benefits outside of the project life cycle are often not well understood or simply subject to significant uncertainty. These benefits are therefore often considered less important or to difficult to quantify than the benefits that occur early in the life cycle, to your point. In this context the period of payback remains an important consideration for managers. Your thought?

## Answer

The most important in financial management – the time value of money – is ignored in the calculation of the payback period. Although the discounted payback period uses the discounting concept, the emphasis of the payback period is to evaluate the time duration for which investment generates some benefit of value. Historical trends suggest that cash flows become increasingly uncertain as we move farther into time.

Thus, predicting any returns beyond the life cycle of an investment is not only a futile process, but it does not represent a significant contribution. Those benefits or returns are rarely considered to be of material value and thus negated when using the payback period. The assumption is that the most valuable benefits will be realized during the life cycle of the project – thus it becomes a very important tool for managers to evaluate a project in terms of its useful life. Benefits occurring early in the life of the project are subject to lesser discounting and thus are warranted for in the calculation of the payback period making it an important consideration for managers (Atrill & McLaney, 2009).

## Question 4: You made a good point that in the event of two projects or investment which has shorter or longer payback period, it will concentrate on the one that will recuperate quickly, does this mean that short payback period is better than long payback period in terms of the benefit?

## Answer

In terms of benefits usually high risk projects involves high return and low risk projects involves low return but the scenario can change depending upon type of risk i. e. whether is risk is limited to project only or it is the risk which effects the whole market; as market risks cannot be eliminated completely and project risks can be eliminated.

Whenever there is risk involved and if the managers and especially the shareholders are of risk averse nature then it is advised to take on projects with short payback periods, as in short run environment is somewhat predictable and does not tends to change a lot; therefore, shareholders can be sure of a return on their investments but if the managers and shareholders are ready to take risks and there are less chances of the environment getting changed in the long run then the managers can go with projects with long payback periods which usually have high returns attached with them (Atrill & McLaney, 2009).

Returns on a project or benefits received by the shareholders by investing on a project do depend on payback period and when benefits are involved, projects with longer payback period are better usually.

## Question 5: What about considering the complementary nature of the projects (PP)? Would you say that managers should consider the complementary nature of projects when selecting them (PP Methods)? Will this help them in achieving the overall objectives of the shareholders or they have to look at projects in isolation?

## Answer

The overall objectives of the shareholders is to maximize profits and minimize the risk mainly, there are many numerous ways adopted by the shareholders in order to achieve their objectives. If we talk about the payback period method then minimizing the risk will be the jist of our analysis since payback period cannot calculate profits made by a project and it calculates the time investor is expected to receive back the payments i. e. the risk involved with the project; if higher the time greater the risk.

It is wise to consider projects in isolation because every project has different payback periods and thus involves different kinds of risks with it especially if the project can suffice alone but if the project cannot suffice alone that is the product made from the project has no meaning without its complement and there is no substitute of that complement then it is wise to consider complementary nature of the projects especially when taking decisions of carrying on with the projects.

Managers should look at complementary nature of the project when selecting them; it somehow reduces the risk and fear of nonexistent of complementary products in the market thereby minimizing the risk of the shareholders and fulfilling their overall objectives.

## Question 6: Very interesting post, the point you make about risk is interesting, however, I feel that if risk is to be assessed properly then managers must use the sensitivity analysis (SA) (Atrill and Mclaney, 2009, Page 292). This is a far more encompassing method and really outways the minimal abilities of PP to review risk. Your comment?

## Answer

Sensitivity analysis is a good tool in analyzing and assessing risk; however, it is useful only when conditions tend to change. Sensitivity analysis is used when there is some uncertainty in the future and there are chances of conditions which were held constant while using payback period method are likely to change.

However, the payback period method is easy to use, to calculate and to understand. It gives approximate answer and it does involves some sort of judgmental and behind the back calculation to forecast amount of returns expected which can involve sensitivity analysis; but doing sensitivity analysis by managers is a hefty process, it involves a lot of time and knowledge to understand the results. No doubt payback period does not consider changes in the parameters of the model in the long run, which is unlikely to be true, but the only advantage payback has over sensitivity analysis is its ease of calculation and manipulations.

In the long run it depends from managers to managers whether they want the answers quick or they want detailed and accurate answers while deciding on adopting the nature of being a risk taker or a risk averse for the project (Atrill & McLaney, 2009).

## Question 7: I agree with your statement “ Therefore, in practice managers can combine the two methods of investment appraisal to leverage on their individual strengths to arrive at good investment decisions.” Using only one approach is limited when trying to consider such decisions in a holistic manner especially when as you have stated in your post ensuring the creation of wealth for share holders. The issue is there are many financial variables involved and all should be consider, no decision is simple and as such we should not make it on a simplistic premise alone. Your comment?

## Answer

No doubt there are numerous financial variables available and are involved when taking investment decisions and payback period is one the most commonly used by managers while deciding about quick returns and less risky projects. However, payback period does not consider future profits in its analysis and it holds all parameters constant which in a true environment is not possible. Therefore, it is wise for managers to use multiple financial variables while taking an investment decision (Curtis & Gobham, 2005).

No decision should be made solely on the risk involved with the project, there can be projects which offers high return and involves high risks as well; thus it is not necessary that every time low risk projects are good only. Managers must use financial variables and decide on best option of financial parameter as per the nature of the firm and nature of shareholders. If the firm and shareholders want high return and are of risk taker nature then managers must use internal rate of return method and if firm and the shareholders are of risk averse nature then the managers can go with payback period method. However, no method is the best method.