

# PROJECT PORTFOLIOS <ARE> INVESTMENT PORTFOLIOS

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## **Abstract**

There are many parallels between investment portfolio management and project portfolio management. If enterprise project portfolio managers applied approaches derived from investment portfolio management to their enterprise project portfolio, then better decisions about allocation of scarce resources would be made. This presentation will show how common approaches and techniques applied by professional share traders to manage their investment portfolios can be applied to enterprise project portfolio management.

Key words: investment, project, portfolio, management

## **1. Introduction**

Portfolio management as a discipline originated in the financial arena, to assist investors to manage portfolios of investments and maximise synergies between different classes of investments. Portfolio management is now used in many areas to manage collections of similar entities, for example project portfolio management, application portfolio management, and so on.

This paper examines the approaches and philosophies of investment portfolio management and draws parallels with the area of enterprise project portfolio management. As each topic from investment portfolio management is introduced, the analogy in project portfolio management will be introduced and discussed.

## **2. The Primary Rules of Investment**

The primary rule of investment is to preserve the investor's capital in the face of uncertain trading conditions. This requires a certain rigour in planning, for example the setting of exit triggers for disinvestment and the courage to pull them when necessary. Investors must understand the concepts of "sunk costs", being monies already expended or that will be lost on disinvestment, and "opportunity costs" being alternative investment opportunities that might prove more profitable. Within the constraint of capital preservation, the investment portfolio manager's role is then to maximise the returns on investment of the portfolio, in the face of considerable variability in the performance of individual investments.

The primary aim of enterprise project portfolio management is to maximise the value of the project portfolio to the enterprise, in the face of uncertainties in many areas, such as uncertainty of estimates of costs and benefits, uncertainties in the enterprise's ability to successfully deliver projects, and generally many project proposals competing for available capital and other resources.

## **3. The Psychology of Investment**

In both forms of portfolio management, it is psychologically easier to persevere with troubled investments than to crystallise losses by exiting the investment, even if a contingency plan for disinvestment has been created. Where difficulties are encountered, it is often hoped that conditions might change and performance might improve without having to take drastic and irreversible action. Brokers may issue hold

recommendations and report on the positive fundamentals of the equity; project sponsors may describe in detail actions being taken to resuscitate troubled projects.

One of the roles of a portfolio manager is to stay above the emotion and noise of any particular troubled investment, and to protect the enterprise's capital and other resources. This may mean having a plan with a set of predefined exit criteria, and the determination and rigour to execute it.

Most investors begin by thinking they'll never lose, especially if they start trading in a rising market. In fact, many people start trading at the end of a bull market, enticed by a sometimes extended period of high returns. But then market conditions may change, and they find themselves without the experience to cope. They stay invested in a rising equity even though the market as a whole is falling. They read about a rising star in a magazine, and invest in it without doing even basic due diligence. They've made a significant paper gain in an equity, and hold on to it, even though there might be signals that its run is at an end. The market can take an investor's capital in a surprising number of ways. Their first few losses are an important part of an investor's education.

If all of an enterprise's projects succeed, that may be the cause of self-congratulation. However, assuming a relationship between risk and reward, perhaps the enterprise is risk averse, and may be leaving significant profit on the table. And it might be that the enterprise's project controls aren't as robust as they would be if it had an occasional project failure. The psychology of such an organisation, and its approach to projects, would benefit if one or two projects that were clearly in trouble were cancelled.

### 3. Diversify the Portfolio

In investment portfolio management, diversification of the portfolio into several markets with different cycles is an effective risk reduction tactic that also ensures exposure to growth in some sectors, while other sectors may be experiencing difficulties. Investment managers never bet the firm on a single opportunity. For example, capital may be distributed across several investment categories, or the portfolio might be split into smaller portfolios with different investment objectives, such as long-term capital growth or short-term dividend stripping.

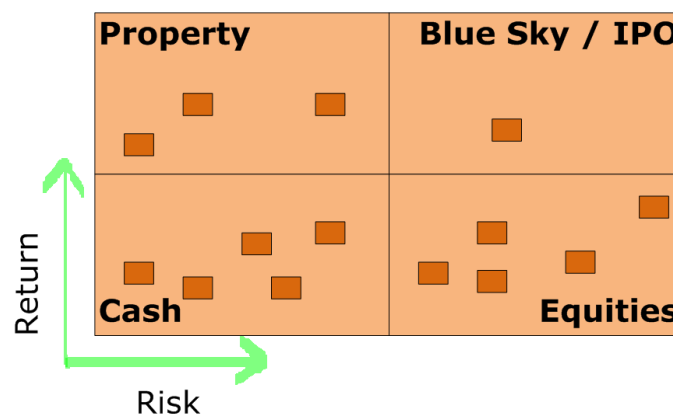


Figure 1 Diversification of an Investment Portfolio

An enterprise project portfolio should similarly be diversified across a number of dimensions. For example, the portfolio might be optimised for its mix of strategic, tactical, operational or speculative projects, or for its mix of long and complex projects and shorter less demanding projects.

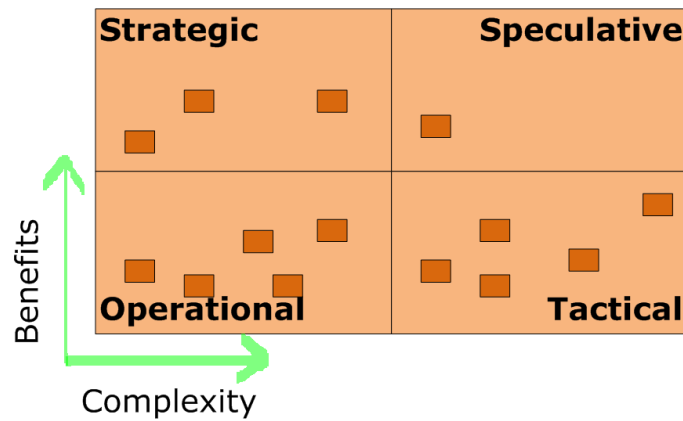


Figure 2 Diversification of an Enterprise Project Portfolio

## 4. Investment Strategies

Both forms of portfolio management have many similar areas to consider.

### 4.1 Reserves

In investment portfolio management, it is never assumed that there will be a sufficient number of attractive investment opportunities. A patient approach is the norm. The portfolio managers will ensure that there is a reserve of capital available for use when attractive opportunities emerge, and to pay for operational aspects of the portfolio.

In some enterprise project portfolios, and in some sectors, there is a tendency to start too many projects at once. This means that available funding is fully committed, and reduces the flexibility of the portfolio managers to fund emerging opportunities. In addition to capital, the project portfolio managers' ability to ensure that each project starts properly, and that senior managers are effectively engaged in governance early on, will be constrained by the rush to proceed.

Both forms of portfolio management benefit from the establishment of reserves for change and new opportunities, and for risk contingency.

### 4.2 Clarity of objective

In investment portfolio management, clear objectives are established for each sub-portfolio – for example, capital safety, capital growth, dividends and franking credits, achievement of a strategic holding in target organisations.

At an enterprise portfolio level, project measures associated with delivery on time, within budget, and of the right level of quality are to be disparaged. These measures are not commensurate with a view that enterprise value is to be optimised. In many organisations, projects which are primarily operational or tactical are redelineated and combined with strategic projects to form strategic programmes, with a primary focus on benefits realisation (1). The programme managers are permitted great leeway in individual project performance provided the primary objective of benefits delivery is achieved.

### 4.3 Assurance

In investment portfolio management, it is unwise to invest in markets or forms of investment that are not well understood. The portfolio managers will undertake research and due diligence before committing capital.

In project portfolio management, project and programme assurance is a responsibility of those governing programmes and projects to ensure that these initiatives are well scoped, risks are well managed, costs and benefits are well understood, and that the performance of the delivery teams is independently reviewed. Portfolio managers in addition will review the performance of those governing these initiatives.

#### **4.4 Conflicts of Interest**

In financial investment, if a broker recommended an Initial Public Offering (IPO) to a portfolio manager as an investment opportunity, the portfolio manager would want to check out whether the broker's firm was underwriting the IPO. If a broker suggested churning some of the portfolio's holdings into supposedly more promising equities, the portfolio manager would want to be very clear that the expense of doing this was in the portfolio's best interests, rather than simply a means for the broker to generate fees at the portfolio's expense. And the American Question is always useful to bear in mind – if the new opportunity is so good, how much has the broker personally invested in it?

If a business unit puts forward a project, the portfolio manager knows that they have a vested interest, regardless of how good a corporate citizen they are. The portfolio manager would check out their proposal with almost as much care as an unsolicited proposal from a consultant.

#### **4.5 Accountability**

Suppose an investor invests on a broker's advice and the investment declines in value, but the broker remains optimistic and so the investor holds on, but the investment declines further. The investor might hold the broker responsible, but the investor remains accountable for the loss.

If an investor engages an investment manager to manage their investment for them, the investor remains accountable for the performance of the investment.

Similarly, with project portfolios, the portfolio managers are accountable for the performance of the portfolio, and should hold the senior managers who sponsor the projects responsible for realisation of the full measure of benefits claimed in the project's business case.

#### **4.6 Warning Signs**

The markets generally won't tell you when they're about to turn against you, but there are sometimes warning signs that deserve further investigation, such as economic indicators or the performance of other stock markets. The investment portfolio manager will be monitoring these signs and prepare the portfolio for changes in market circumstance.

Similarly, a project may seem to be on track, but some signs are worth investigating – issue logs growing, especially change requests and requests to defer full product functionality until another release, rework after quality review larger than average, project buffers (management reserves, change budgets, contingency budgets) shrinking faster than expected, estimates of future benefits shrinking rapidly as operational managers start back-peddalling on their commitments. The project portfolio manager will be monitoring the portfolio for such signs, and will take action to ensure benefits are delivered as expected, or to preserve capital and other resources from being consumed by troubled projects with not return.

#### **4.7 Reaping the Benefits**

An investment portfolio manager knows that they haven't made a profit until an investment has been sold and the money's in the bank. When an equity has risen strongly, some share traders will sell part of their holding to lock in part of the profit. The profit on the remainder of the holding is a paper profit only, at least until it's sold, because the market could turn at any moment.

Similarly, a project can not be said to be a success until benefits have been realised. With some forms of project, some benefits may be realisable early, for example an enterprise may be able to make a profit by selling an uncompleted building. Strategic programmes should always be structured so that the programme can be terminated early if necessary and still be able to reap some tangible benefits that repay at least some of the investment so far.

#### 4.8 Know your limits

An investment portfolio manager may be able to make an investment without having access to all the necessary capital, at a price. However, many enterprises start too many concurrent projects, exceeding their capacity to deliver. An enterprise portfolio manager will understand the capacity of the enterprise to execute programmes and projects, and the capacity of the enterprise to absorb the associated change. Failure to consider these factors in planning reduces project efficiency and jeopardises benefits realisation.

#### 4.9 Oversight

Investment portfolio managers remain accountable for their portfolio. If they can't devote enough time to oversight, they could retain someone with the requisite skills or invest in zero-risk opportunities.

Similarly, an enterprise portfolio manager could delegate responsibility for programme and project oversight and governance to senior line managers.

In both forms of portfolio management, there remains a residual accountability to oversee the overseers.

### 5. Dealing with Uncertainty

Investors in stock markets must understand and respect the inherent uncertainty of the situation. Share prices fluctuate by the minute, with broader patterns over days, weeks and years. Nevertheless, for most of the time, most shares trade within an average trading range; they have inherent intraday price variability. The difficulty for the investor is to distinguish between short-term noise and long-term trends. Some investors attempt to deal with this by investing in multiple promising stocks with a view to reviewing their relative performance after some period of time, then divesting themselves of the poorer performing stocks and increasing their holdings of the better performing stocks.

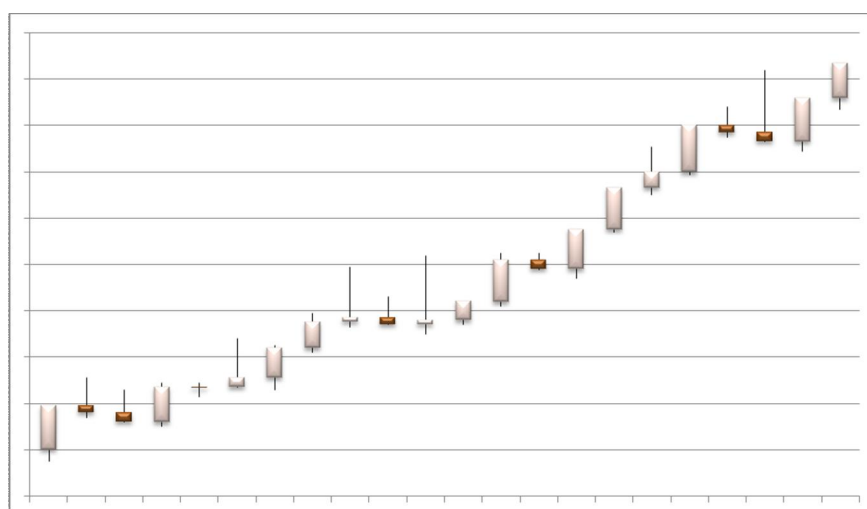


Figure 3 Short-term noise vs long-term trends

An enterprise portfolio manager might undertake a similar exercise at project level, by undertaking concurrent feasibility studies of competing project proposals, with a view to proceeding with those that prove more likely to deliver greater benefits. Alternatively, within a single project, rather than opt for a particular

vendor, the portfolio manager might insist that there be “bake off” between competing tenderers before committing to major expenditure with either one of them.

An enterprise portfolio manager will develop an understanding of the Average Trading Range of each stock in the investment portfolio. A stock price moving within the ATR is not a cause for panic, it merely reflects the market’s response that the fundamentals of the stock and other factors.



Figure 4 Average Trading Range

The analogue of the ATR for stock prices, is the inherent uncertainty in estimates of costs, timeframes and benefits for projects. An enterprise portfolio manager will understand that these uncertainties may mean that projects diverge from their short-term plans without necessarily diverging from their long-term objectives. The portfolio manager will certainly investigate major divergences, but as long as the projection to the end of the project remains within tolerance, then the project remains under control and on track.

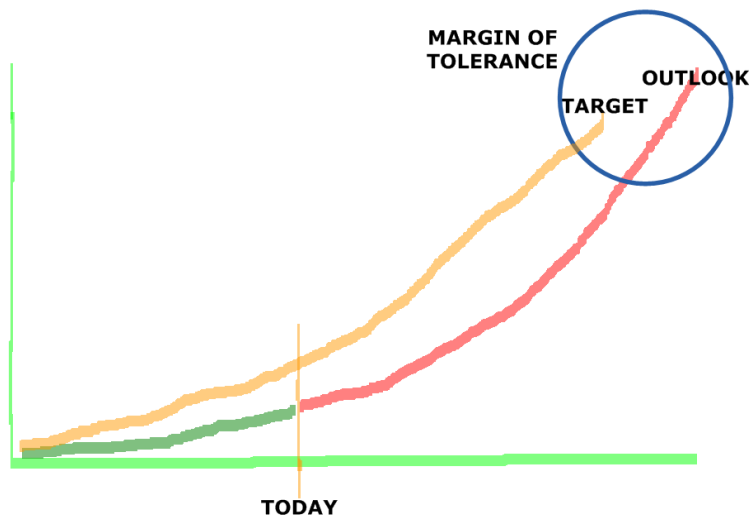


Figure 5 Tolerance around a project's targets

## 6. Analogies with certain share trading tactics

### 6.1 'Legging in'

If a stock’s value is on a run upwards, the investment portfolio manager may invest some more capital in that stock. Or more passively, if an investment returns a dividend, the investment manager might be invited to reinvest the dividend via a Dividend Reinvestment Plan.

If an enterprise project portfolio manager saw that a project was proceeding ahead of plan, it may be possible to deliver greater benefits with the addition of more funding. While a project can be accelerated, throwing more people at a project usually doesn't work in the short-term. Alternatively, if a project returns a saving in one stage (comes in under budget), the portfolio manager might be invited to expand the scope of the project.

In either case, the portfolio manager should consider all options for investing further capital, and choosing the option likely to provide the greatest return, rather than simply assuming that current good performance will continue.

## 6.2 'Dollar cost averaging'

If a stock price was falling, an investment manager with a long-term view might decide to purchase more of the stock, with a view that the overall average price of the stock held in the portfolio would be decreasing, so that the capital gain to be made when the stock eventually increased in value would also be increased. My view is that this 'strategy' is fundamentally flawed, and is not an effective use of available capital, since it clearly violates the primary rule of investment – preservation of capital. Further, if a particular market consumes invested capital time after time, it is probably the case that you probably don't know enough about the market and should exit that market for a time.

If a particular group brings in projects outside the enterprise portfolio managers tolerances time after time, the portfolio manager should step back and review the situation, and address the root causes of the problem, before entrusting that group with further capital. The portfolio manager also has an obligation to review operational performance regularly after project completion, and commission more initiatives and projects to improve performance, to at least the level set out in the programme or project business case.

## 6.3 Active vs Passive Investors

Some share investors with a long-term view take a passive approach to managing their investments. They reason that if the fundamentals of an investment are sound, then any paper loss incurred when a share's price declines will be made up when the stock regains its value. What these investors don't recognise is the opportunity cost of letting their capital sit idle until the market decides that the share price should return to previous levels.

An active share trader would liquidate an investment as soon as the market's signal was clear that the investment's value was declining. These investors would then seek more profitable uses for their capital. While they would incur additional transaction costs, they would be both abiding by the primary rule of investing – preserving their capital – while also seeking to add value to their capital.



Figure 6 *Passive Investment Management*

An active enterprise portfolio manager would also notice when a project was projected to end outside tolerance. While there may be actions that could be taken to bring the project back within tolerance, there

is also the possibility that the breach of tolerance may be significant and irreparable. Where the cost to complete the project significantly outweighs the likely benefits of completion, the portfolio manager should consider terminating the project and applying the capital thus saved to more productive uses. The manager would regard the investment to date in the project as a sunk cost.



Figure 7 *Passive Project Management*

#### 6.4 The ‘Dead Cat Bounce’

In a falling market, some investors may take a punt and buy a stock, in the belief that the fall has bottomed out. Their act of buying may temporarily force the price up. Other investors may mistake this ‘dead cat bounce’ as an indication that the market has turned and themselves purchase more of this stock, driving the price up further. If in fact the general market sentiment is that the stock’s price hasn’t yet reached bottom, the price may then continue downwards. An experienced investment portfolio manager would be very careful in purchasing at such a time, and would be prepared to exit if the stock turned down again.

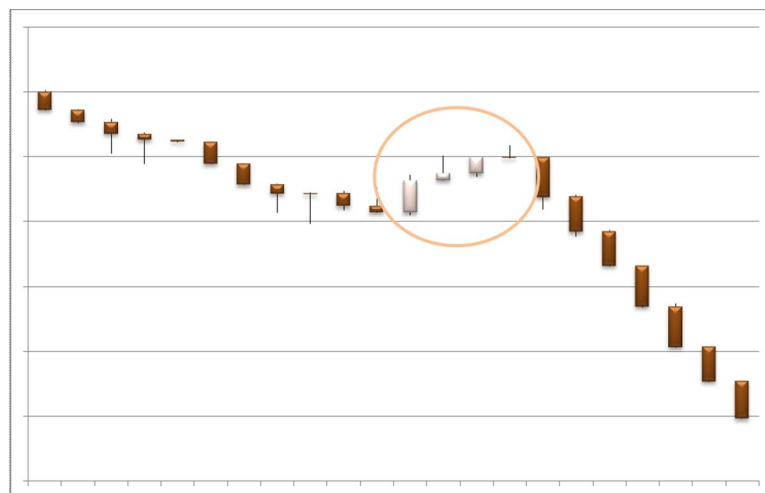


Figure 8 *The Dead Cat Bounce*

Similarly, if a project goes off track, and with concerted effort is brought back on track, an experienced project portfolio manager would maintain a watching brief on that project, and perhaps impose some more stringent controls, such as tighter tolerances, to ensure early warning of any further deviations. A project that has gone off track should remain under scrutiny until it’s completed.

### 7. Conclusion

The fields of financial portfolio management and enterprise portfolio management have many similarities in both philosophy and approach. They are both characterised by many problems that are dilemmas arising from simultaneous commitment to incompatible goals. The tension between uncertainty at a

micro level and desired certainty of eventual outcome at macro level is one of those enduring dilemmas which are never really resolved, only managed more or less well. The on-going nature of dilemmas makes a process for finding solutions more valuable than any particular solution.

## **References**

[1] The Office of Government Commerce, *Managing Successful Programmes*, 2007

## **Author Bio**

Geoff Rankins has been a practicing project management professional for almost 30 years, and a share trader for almost 10 years. He has developed a broad understanding of portfolio management methods through hands-on experience and specialist research. Geoff is a member of PMI, and an accredited trainer and consultant in PRINCE2 and MSP. As well as his ongoing contribution to real-world programs, Geoff now offers specialist services in project and program management as a consultant, coach, trainer and presenter. This paper was written while Geoff was delivering programme management training in Botswana under a UNDP scheme for competency development. And he's made far more on the stock market than he's lost.