

**Reward Risk Pty Limited**

**Submission - Improving the Integrity of PPFs**

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Rewarded Risk Pty Limited  
Submission - Improving the Integrity of PPFs

Introduction

The opportunity to make a submission on "Improving the Integrity of PPFs" is welcomed.

Australia has traditionally had a dearth of private charitable foundations with virtually no innovation in the area with only a limited number created and mainly established via deceased estates.

The general idea of bringing forward the initiation of private giving institutions (by decades in some cases) and the wider promotion and development of a culture of substantial private giving has much to recommend it. PPFs represent a welcome, if belated initiative.

Soon after PPFs became available, we undertook a review of the PPF model and guidelines from the point of view of potential personal use and use by associates.

Our conclusions were that the model and guidelines were an interesting first step, capable of evolving into a highly productive charitable cash flow funding source. However, the guidelines were not conducive to long term investment viability and strategies for managing regulatory and political risk were not clear. Accordingly, we implemented a strategy of awaiting developments while examining alternatives (including foreign options).

Our objectives are to blend suitable very low cost structures and very flexible strategies to produce ongoing and steadily growing cash outflows to research, educational, development and basic needs charities over long timeframes, ideally in perpetuity.

We consider any existing or new structure or guideline which has a self liquidating annuity characteristic to be likely to eventually discourage private charitable foundation giving by prospective donors.

The basic principles we consider can be fitted under headings: Operating costs; Efficiency costs; Capital management; Performance and investment risk; Portfolio risk; and General risks.

1. Operating Costs. Australian foundation and funds management operating costs (investment management, supervisory, accounting, statutory and tax requirements) are high - unnecessary so for small non-pooled structures. There does seem to be scope for simplification and cost reduction in all of the preceding areas.
2. Efficiency Costs. There are both economies and diseconomies of scale built into philanthropic (and other) fund structures. Structures which are non pooled and non tax paying should have minimal regulation and reduced supervisory overhead and are

potentially very efficient even at small scales. Small amounts of money can be more efficiently invested than larger funds in certain asset subclasses/securities and vice versa.

3. Capital Management. Economic theory requires replenishment of business depreciable capital to maintain output as well as new capital for economy wide expansion. This capital replenishment and expansion is partly levered from business retained earnings and increased asset backing supporting long term share price increases.

Capital withdrawals from an income growth share portfolio negatively impact the underlying economic performance of the share portfolio by reducing exposure to the underlying businesses in the portfolio. At the portfolio level this is the same as if the businesses reduced replacement and expansion capex.

4. Performance and Investment Risk. While risk and returns are related in theory, in practice the situation is more murky. The conventional (but not always adequate) measure of risk is the standard deviation of returns or price changes. For some asset classes or subclasses (eg, much real estate), arithmetic mean returns and standard deviations are not realistic (minimal turnovers, appraisal versus actual sale prices, etc), so meaningful analysis verges on the infeasible.

As a rough working hypothesis for liquid asset markets available to Australian investors, the ratio of the standard deviation to arithmetic mean price change is of the order of one to two times on an annual basis. This has huge implications for the management and survival of investment portfolios.

5. Portfolio Risk. For portfolios with high standard deviation to price change ratios (SD/P) (as in principle 4 preceding), the statistical implications of asymmetric capital withdrawals (direct capital and/or unrealised and/or realised capital gains) are relatively simple - capital and future distribution destruction. The main uncertainty is whether the timeframe to non viability is short or long.

The high SD/P ratios guarantee random timeframe price falls (ie, negative results) which may be incapable of future offset in circumstances where capital (in any form) is distributed. With gains distributed the distributional symmetry of price changes (gains and losses) about the mean is destroyed and structural depletion of capital results.

6. General Risks. In planning for future investments, many risks will be unknown and/or not predictable (eg, depressions, regulation changes, etc). There is no insurance policy to cover all contingencies, about all that can be done is to have a totally flexible investment strategy within a low cost flexible investment structure.

To avoid a detailed exposition on the many issues raised by the discussion paper, a brief analysis of what we have believed (or hoped?) were the underlying intent and principles likely to be applied to PPFs over time follows:

1. PPFs were to be philanthropic.
2. PPFs were to encourage private philanthropy which so far has been poorly levered off increasing wealth and living standards over the past 30 years.
3. PPFs were to provide a simple low cost vehicle to encourage successful wealth creators and/or their families to begin sizeable and hopefully growing charitable activities much earlier in life and with much greater beneficial effects over time than other alternatives.

A workable framework for one type of PPF might therefore encompass the following parameters.

#### Objective

To pay out an increasing income stream to approved charities ideally in perpetuity.

#### Strategy

1. To achieve this it is necessary to invest in a portfolio of assets which produce increasing underlying cash flows and dividends. This raises a fundamental issue - why do cash flows and/or dividends increase over time?
2. Assets which produce increasing underlying cash flows over long time frames will also increase in price over long time frames, but short term results are often inconsistent.
3. In the context of 1 and 2 preceding, assets with the foregoing cash flow characteristics contain a degree of price volatility, often measured as the standard deviation of annual price changes and commonly cited as a measure of price risk. The price volatility inherent in producing the required increasing income streams creates significant complications.

#### Analysis

Time series which occur in nature are seldom predictable, though many believe otherwise.

A necessary step to determine when mechanistic (as opposed to naive) modelling potential exists, is to analyse various statistical characteristics of past time series. Note that this is a necessary, but not always sufficient basis for prediction.

Perhaps the first test to be applied to each time series is that of stationarity, which to oversimplify detects if underlying mechanisms may apply. If the time series is stationary, other tests can be applied to confirm prospective predictability. Some pioneering work has been done in this area arising from developments in neurophysiology statistics (Clifford J Sherry).

Unfortunately most financial time series are non-stationary over useful time scales, or if stationary fail other necessary statistical tests with the result that projections of future asset price changes and returns are no more reliable than naive predictions.

Table 1 presents data for the Australian All Industrials share index collated several years ago for private purposes and not updated or rechecked.

The data and analysis presented are intended only to illustrate income growth investment portfolio characteristics and cannot be used to estimate future returns or asset allocations. The calculations used are simplified in several ways, but can only be marginally improved with more detailed data and analysis. Operating costs and franking credits are ignored and an initial lump sum capital investment is assumed for simplicity.

The implications of price volatility for increasing income distributions over time can be considered from this table.

Scenario A. In this case all cash dividend income is distributed annually to approved charities and all realised and unrealised capital gains are retained or reinvested annually. The resulting income distributions are shown as well as the cumulative distribution over time. The annual distributions are volatile, but trend upwards over time and after 10 years total distributions first exceed the subscribed capital. After 22 years, total distributions exceed 4 times the subscribed capital.

Scenario B. In this case (Table 2), all cash income and all net realised and unrealised capital gains are distributed annually. Over the first 10 years the dividends distributed are about 39.6% of those in Scenario A, but total distributions are much higher (ca. 2.2 times) because of the net capital component.

These results reverse in the next 10 years with the combined capital plus dividend distribution of Scenario B yielding only 46.7% of the 10 year dividend distribution of Scenario A. The Scenario A cumulative 20 year dividend exceeds the Scenario B cumulative 20 year capital plus dividend distribution.

It should be noted that this analysis is based on net realised and unrealised capital gains, ie, after a capital loss the subscribed capital is rebuilt to its original value before any further capital distributions are made. In the 5 cases in this particular data set, losses are fortuitously rebuilt in the next year.

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| Table 1<br>Month End | Scenario A        |                      | Accumln |      | TotalRtn |      | Indx Div<br>on Start<br>Price |      | Cumul-<br>ative<br>Indx Div |
|----------------------|-------------------|----------------------|---------|------|----------|------|-------------------------------|------|-----------------------------|
|                      | Price<br>All Inds | PriceRtn<br>All Inds | All     | Inds | All      | Inds | All                           | Inds |                             |
| 31-Dec-79            | 500               |                      |         | 1000 |          |      |                               |      |                             |
| 31-Dec-80            | 660.9             | 32.18%               | 1403.2  |      | 37.01%   |      | 24.15                         |      | 24.15                       |
| 31-Dec-81            | 741.2             | 12.15%               | 1670.5  |      | 16.60%   |      | 29.43                         |      | 53.59                       |
| 31-Dec-82            | 621.6             | -16.14%              | 1510.9  |      | -11.41%  |      | 35.02                         |      | 88.61                       |
| 31-Dec-83            | 1004.3            | 61.57%               | 2592.4  |      | 67.49%   |      | 36.85                         |      | 125.45                      |
| 31-Dec-84            | 1081.8            | 7.72%                | 2948.5  |      | 11.92%   |      | 42.17                         |      | 167.63                      |
| 31-Dec-85            | 1487.1            | 37.47%               | 4255.4  |      | 41.98%   |      | 48.79                         |      | 216.41                      |
| 31-Dec-86            | 2347.4            | 57.85%               | 6977.8  |      | 61.76%   |      | 58.18                         |      | 274.60                      |
| 31-Dec-87            | 1979.8            | -15.66%              | 6083.1  |      | -13.46%  |      | 51.59                         |      | 326.19                      |
| 31-Dec-88            | 2477.4            | 25.13%               | 7983.5  |      | 29.43%   |      | 85.07                         |      | 411.26                      |
| 31-Dec-89            | 2586.5            | 4.40%                | 8873.9  |      | 9.44%    |      | 124.82                        |      | 536.07                      |
| 31-Dec-90            | 1951.7            | -24.54%              | 7194.2  |      | -19.99%  |      | 117.75                        |      | 653.83                      |
| 31-Dec-91            | 2609.7            | 33.71%               | 10048.7 |      | 38.05%   |      | 84.68                         |      | 738.50                      |
| 31-Dec-92            | 2449.8            | -6.13%               | 9861.8  |      | -2.72%   |      | 88.90                         |      | 827.40                      |
| 31-Dec-93            | 3309.3            | 35.08%               | 13858.6 |      | 39.13%   |      | 99.10                         |      | 926.51                      |
| 31-Dec-94            | 2765.3            | -16.44%              | 12110.5 |      | -13.27%  |      | 104.85                        |      | 1031.36                     |
| 31-Dec-95            | 3309.8            | 19.69%               | 15130.7 |      | 23.78%   |      | 113.15                        |      | 1144.51                     |
| 31-Dec-96            | 3754.9            | 13.45%               | 18129.7 |      | 18.51%   |      | 167.50                        |      | 1312.01                     |
| 31-Dec-97            | 4475.9            | 19.20%               | 22583.3 |      | 23.47%   |      | 160.38                        |      | 1472.40                     |
| 31-Dec-98            | 5060.1            | 13.05%               | 26529.1 |      | 16.64%   |      | 160.69                        |      | 1633.09                     |
| 31-Dec-99            | 5403.4            | 6.78%                | 29386.7 |      | 10.08%   |      | 166.74                        |      | 1799.83                     |
| 29-Dec-2000          | 5450.5            | 0.87%                | 30678.2 |      | 3.83%    |      | 159.85                        |      | 1959.68                     |
| 31-Dec-2001          | 5751              | 5.51%                | 33441.4 |      | 8.44%    |      | 159.67                        |      | 2119.35                     |

Sum 2119.35

Compound Returns

(% pa) 11.743% 17.298% 9.412%

Annual Returns (% pa)

|            |         |         |         |
|------------|---------|---------|---------|
| Sum        | 306.92% | 396.72% | 2119.35 |
| Median     | 13.250% | 19.435% |         |
| Average    | 13.951% | 18.033% | 96.33   |
| StdDev n   | 22.483% | 22.881% | 49.50   |
| StdDev n-1 | 23.012% | 23.420% | 50.66   |
| SDn-1/AVG  | 1.649   | 1.299   | 0.526   |
| n in years | 22      | 22      | 22      |

High %pa

61.567% 67.495% 167.50

Low %pa

-24.543% -19.990% 24.15

Table 2 Scenario B

|                            | Capital<br>Base<br>at Start | CG      | Total Mark to Market Payout |                  |                   |                       |
|----------------------------|-----------------------------|---------|-----------------------------|------------------|-------------------|-----------------------|
|                            |                             |         | Dividend                    | CG +<br>Dividend | Cumul<br>Dividend | Cumul CG+<br>Dividend |
| 31-Dec-79                  | 500                         |         |                             |                  |                   |                       |
| 31-Dec-80                  | 500                         | 160.90  | 24.15                       | 185.05           | 24.15             | 185.05                |
| 31-Dec-81                  | 500                         | 60.75   | 22.27                       | 83.02            | 46.42             | 268.07                |
| 31-Dec-82                  | 500                         | -80.68  | 23.62                       | 23.62            | 70.04             | 291.70                |
| 31-Dec-83                  | 419.32                      | 258.16  | 24.86                       | 202.34           | 94.90             | 494.03                |
| 31-Dec-84                  | 500                         | 38.58   | 20.99                       | 59.58            | 115.90            | 553.61                |
| 31-Dec-85                  | 500                         | 187.33  | 22.55                       | 209.88           | 138.45            | 763.49                |
| 31-Dec-86                  | 500                         | 289.25  | 19.56                       | 308.82           | 158.01            | 1072.31               |
| 31-Dec-87                  | 500                         | -78.30  | 10.99                       | 10.99            | 169.00            | 1083.30               |
| 31-Dec-88                  | 421.70                      | 105.99  | 18.12                       | 45.81            | 187.12            | 1129.11               |
| 31-Dec-89                  | 500                         | 22.02   | 25.19                       | 47.21            | 212.31            | 1176.32               |
| 31-Dec-90                  | 500                         | -122.71 | 22.76                       | 22.76            | 235.07            | 1199.08               |
| 31-Dec-91                  | 377.29                      | 127.20  | 16.37                       | 20.85            | 251.44            | 1219.93               |
| 31-Dec-92                  | 500                         | -30.64  | 17.03                       | 17.03            | 268.47            | 1236.97               |
| 31-Dec-93                  | 469.36                      | 164.67  | 18.99                       | 153.03           | 287.46            | 1389.99               |
| 31-Dec-94                  | 500                         | -82.19  | 15.84                       | 15.84            | 303.30            | 1405.83               |
| 31-Dec-95                  | 417.81                      | 82.27   | 17.10                       | 17.17            | 320.40            | 1423.01               |
| 31-Dec-96                  | 500                         | 67.24   | 25.30                       | 92.54            | 345.70            | 1515.55               |
| 31-Dec-97                  | 500                         | 96.01   | 21.36                       | 117.36           | 367.06            | 1632.91               |
| 31-Dec-98                  | 500                         | 65.26   | 17.95                       | 83.21            | 385.01            | 1716.12               |
| 31-Dec-99                  | 500                         | 33.92   | 16.48                       | 50.40            | 401.49            | 1766.52               |
| 29-Dec-2000                | 500                         | 4.36    | 14.79                       | 19.15            | 416.28            | 1785.67               |
| 31-Dec-2001                | 500                         | 27.57   | 14.65                       | 42.21            | 430.93            | 1827.89               |
| Sum                        |                             | 1396.96 | 430.93                      | 1827.89          |                   |                       |
| Compound Returns<br>(% pa) |                             |         |                             |                  |                   | -2.354%               |
| Annual Returns (% pa)      |                             |         |                             |                  |                   |                       |
| Sum                        |                             |         |                             |                  |                   |                       |
| Median                     |                             |         |                             |                  |                   |                       |
| Average                    | 482.07                      | 63.50   | 19.59                       | 83.09            |                   |                       |
| StdDev n                   | 35.88                       | 105.50  | 3.89                        | 79.01            |                   |                       |
| StdDev n-1                 | 36.72                       | 107.98  | 3.98                        | 80.87            |                   |                       |
| SDn-1/AVG                  | 0.076                       | 1.701   | 0.203                       | 0.973            |                   |                       |
| n in years                 | 22                          | 22      | 22                          | 22               |                   |                       |
| High %pa                   | 500.00                      | 289.25  | 25.30                       | 308.82           |                   |                       |
| Low %pa                    | 377.29                      | -122.71 | 10.99                       | 10.99            |                   |                       |

It is also of interest that over the full 22 years of data in Tables 1 and 2, the Scenario A dividend distributions exceed the Scenario B realised and unrealised capital and dividend distributions by 15.9% with Scenario A outperformance accelerating.

The Scenario B dividends decay over time in both absolute and real terms and in the long term appear likely to become negligible in real terms. Mark to market capital gains are also eroding in real terms. This is broadly supportive of the economic and financial theories which require capital investment at both the individual firm and overall economy level for wealth and income to be maintained and to grow.

Policies which drain capital in its various forms from investment portfolios appear to be an effective way to reduce or destroy future value and income. As the income and capital returns from stock markets vary substantially over both annual and decadal periods, it is not possible to estimate attrition rates.

Similar concepts have wide application and have recently been noted for allocated pensions (Roger Montgomery).

It is worth noting that the data set examined is skewed to dividend producing shares and covers an unusually rewarding 22 year period with a geometric mean total return of 17.3% pa and arithmetic mean and standard deviation of total returns of 18.0% and 23.4% pa. A corresponding 101 year geometric mean total return estimate for Australian Shares is 11.9% pa (Elroy Dimson et al).

### Consultation Questions

The issues raised in the Discussion Paper and the Consultation Questions are many and complex with wide ranging ramifications. There is simply not enough time to address these ramifications, so we have compromised with an earlier introduction, objective, strategy and analysis which broadly considers PPFs with the following brief additional comments on specific consultation questions to be read in the context of earlier analysis.

1a Required distributions. Setting a fixed distribution rate, given the variability in the economy and asset markets, is value destructive of both capital and income. It is more indicative of self liquidating structures.

It would be simpler to abolish new PPFs unless the minimum distribution rate is very low (say 3%).

The proposed 15% distribution rate exceeds the long term return available from most asset classes. The 101 year (1900-2000) nominal geometric mean return from Australian shares has been estimated at 11.9%. There have been independent decades where returns have been lower. In 5 of the 10 decades to 2000, the returns have been lower.



The corresponding Australian 101 year nominal returns for bonds and bills are 5.2% and 4.5% (Elroy Dimson et al).

As per the earlier discussion we favour the distribution of operating income with no capital distributions to maximise long term charitable distributions.

If there is serious concern about the integrity of PPFs, it would be much simpler for a larger slice of the setting up funds to be given immediately to approved charities rather than use value destructive fixed rate ongoing distributions.

1b Regular valuation of assets at market rates. If PPFs are limited to liquid mark to market assets, the reduction in the number of investment asset classes reduces diversification, discourages prudent portfolio management, encourages short term investments, and makes PPFs riskier and/or less viable

While we do not subscribe to the high levels of illiquid assets maintained by some U.S. endowments and the occasional Australian industry superannuation fund, at low levels (say 10 or 20%) and when matched with planned cash outflows, they can improve investment portfolio risk characteristics.

We do not support the requirement to value all assets at market rates. We are more supportive of a requirement for a sensible balance between liquid and illiquid assets in the long term or a minimum level of liquid assets - even given the inherent paradox.

1c Minimum PPF size. Adding a size constraint to PPFs discourages innovation and we do not support it.

1d Increased public accountability. Increasing the visibility of PPFs creates problems. As private donors we have spent years reducing the level of unwelcome and uninvited solicitations we receive to allow a more efficient focus.

2a Give the ATO greater regulatory powers. We cannot comment on existing PPFs. We do not support a requirement for a corporate trustee. Each additional requirement adds complexity and reduces the functionality and flexibility of PPFs.

2b, 2c & 3a. We leave comment on these items to existing PPFs.

4a Restrict PPF investments to liquid assets. We think this would be imprudent policy as outlined under 1b.

Summary. While we have not considered the existing PPF model and guidelines to be an efficient charitable structure to date, it has appeared to have considerable potential for future development.

Many of the issues discussed impinge on both the administrative and investment viability of the concept. If the discussion suggestions presented are immutable or if PPFs are to be self liquidating, we suggest banning new PPFs as a more efficient alternative. Those of us interested in long term charitable foundations can look at other Australian or overseas options.

If PPFs are to be encouraged in the long term and there is some misuse of the structure from a tax viewpoint, surely this should be addressed in the simplest way possible, eg, an increase in the one off upfront distributions. Mandatory distributions of capital even at the current level (above CPI) make for increased portfolio management inefficiency and lower long run distributions to charities.

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