



EQUALISATION IS IT WORTH THE HEARTACHE?

This is a composite of two articles on the subject of Equalisation, written by Dermot Butler, first published in the AIMA (Alternative Investment Management Association) Newsletter and which discusses the subject of Equalisation and why it is necessary for alternative investment or hedge funds to utilise one of the accepted methods of Equalisation to ensure that incentive or profit sharing fees are allocated equitably between investors. The article goes on to discuss the various methods used, with particular emphasis on two of the more common methodologies applied to achieve equalisation and which are processed automatically on PFS-PAXUS.

I have seen the mere mention of the subject of “Equalisation” cause the eyes of the most sophisticated fund accountants to acquire the glazed, almost frightened, look of someone who has just seen “The Exorcist”.

What is Equalisation and why does it cause these problems?

In the context of alternative investment and hedge funds – indeed any open ended fund that pays incentive or performance fees – “Equalisation” means an accounting methodology, designed to ensure that not only the investment manager is paid the correct incentive fee, but also that the incentive fees are fairly allocated between each investor in the fund.

Why is this a problem? The easiest way to answer this is by way of examples:

The Free Ride

Firstly the famous “free ride”, which was the original reason and justification for the introduction of Equalisation in the first place. This example, which is illustrated in Table 1, assumes that a fund starts trading at US\$100 per share and that there is an initial investor – Investor A – who buys one share at US\$100. Let us now assume that, at the end of the first quarter, the gross NAV per share has risen to US\$110. This will result in an NAV per share of US\$108, net of the incentive fee of US\$2 (20% of the US\$10 profit), which has been paid.

Let us now assume that one month later the NAV per share has fallen to US\$100 again and a second investor – Investor B – comes in and buys one share for US\$100. Without one of the Equalisation methods being applied, the fund manager would not be able to charge any incentive fees on this second investor's subscription until the NAV per share had risen back up to US\$110 and if that happens, Investor B will get a “free ride” of US\$2 per share, being the incentive fee that he will not be paying on his profit of US\$10 per share.

Equalisation will eliminate this anomaly.

TABLE 1 - THE “FREE RIDE”

i)	Investor A buys one Share at US\$100.
ii)	End of first quarter Gross NAV per Share has risen to US\$110.
iii)	NAV per Share published at US\$108 – (US\$110 – US\$2 incentive fee).
iv)	New High Watermark – US\$110.
v)	At end of the following month, the NAV per Share falls to US\$100.
vi)	Investor B buys one Share at US\$100.
vii)	High watermark still US\$110.
viii)	If NAV per Share rises to US\$110 again, Investor B will have a US\$2 (20% of US\$10 profit) “Free Ride”.

Rising Share Price

There are those who believe that the “free ride” is the sole justification for Equalisation, but this is not true. It is a fact that without some form of Equalisation being applied when investors subscribe at different NAV levels, one shareholder will always be subsidising another shareholder, to some extent or another even with consistently rising NAVs. See the example shown in Table 2, where again we assume that Investor A buys one share at US\$100 when it is launched. We again assume the market rises, but this time by the end of the second month, to US\$110 NAV per share. The NAV per share is published at US\$108, net of the 20% incentive fee accrual. Investor B now buys one share at US\$108, being the published NAV. Let us now assume that at the quarter end the gross NAV per share has in fact risen to US\$120. This results in gross profits of US\$32 based on the following calculation:

Investor A invested US\$100 and Investor B invested US\$108, for a total sum invested of US\$208. The gross NAV of the fund at the end of the quarter was US\$240 (2 x shares at US\$120). This represents a gross profit of US\$32 over the total sum invested of US\$208.

To be equitable the profits should be allocated as US\$20 to Investor A and US\$12 to Investor B. However let us look at how the incentive fee, which will now be due, will be calculated.

The incentive fee should be 20% of the gross profit of US\$32, which is US\$6.40, or US\$3.20 per share. Thus the gross NAV of US\$240 less the incentive fee of US\$6.40 result in a net NAV of US\$233.60, or US\$116.80 per share.

What does this mean? It means that Investor A has effectively paid US\$3.2 incentive fee on a profit of US\$20, which equates to 16.4% of Investor A's profit, whereas Investor B, who also effectively pays US\$3.20 incentive fee, but does so on a profit of US\$12, which equates to an incentive fee of 26.66% of Investor B's profit. This is obviously inequitable.

Equalisation will eliminate this anomaly.

TABLE 2 - RISING SHARE PRICE

i)	Investor A buys one Share at US\$100.
ii)	NAV per Share rises in the <u>second</u> month to US\$110.
iii)	NAV per Share published at US\$108, net of 20% incentive fee <u>accrual</u> .
iv)	Investor B buys one share at US\$108.
v)	At quarter-end, the Gross NAV per Share has risen to US\$120.
vi)	Gross profit is US\$32, calculated as follows: a) Investor A invested: US\$100 b) Investor B invested: <u>US\$108</u> Total invested: US\$208 c) Gross NAV at end Qt: <u>US\$240</u> Gross Profit: US\$ 32
vii)	Incentive fee at 20% of US\$32 = US\$6.4 Gross, or US\$3.2 per Share.
viii)	NAV per Share = (US\$240 ÷ 2) = (US\$120 – US\$3.2 incentive fee) = US\$116.8 per Share.
ix)	Therefore: a) Investor A effectively pays US\$3.2 incentive fee on a profit of US\$20, which equals 16.4% of the profit made by Investor A; whereas b) Investor B effectively pays US\$3.2 incentive fee on a profit of US\$12, which equals 26.66% of the profit made by Investor B.

The Claw Back Syndrome

And of course Equalisation is also necessary to avoid what is known as the “claw-back” syndrome. This occurs where, following in the initial rise to US\$110 shown in the second example given above but the price back to say US\$96 at the end of the quarter and does not rise to US\$120 as shown in Table 3 below.

The incentive fee accrual made at the end of the second month following the successful trading would now revert back to the fund but, without Equalisation, that accrual would benefit all shareholders, including the new investor, whereas the original incentive fee accrual was only accrued in respect of Investor A's investment and not Investor B's investment.

Remember, the total value of the fund at the end of the second month is in fact US\$218, even though the NAV was published at US\$216 (US\$108 per share), because the US\$2.00 incentive fee had only been accrued, it had not been paid out. Because in the following month the fund declined and lost US\$26, the NAV of the fund declined from US\$218 to US\$192. Thus, the NAV per share at the end of the quarter was US\$96. However, as

the fund had lost US\$26 the equitable allocation would have been to debit US\$13 to each investor's account. Thus Investor A, whose account was worth US\$110 at the end of the second month, before accruing the incentive fee, would have declined by US\$13 to US\$97. Whereas Investor B, who only subscribed US\$108 and the end of the second month, should also have seen his NAV per share decline by US\$13 to US\$95. As stated above, the incentive fee accrual of US\$2, which was applied at the end of the second month, related to unrealised gains on Investor A's account. Because this has been "clawed back" by the fund as a whole, it has been allocated to shareholders on a pro-rata basis. Thus, without equalisation, the value of Investor A's holding has dropped from US\$97 to US\$96, whereas Investor B benefits from an allocation from part of Investor A's incentive fee accrual, to the value of US\$1, so that the NAV per share of his investment is now US\$96 instead of US\$95.

Equalisation will eliminate this anomaly.

TABLE 3 - "CLAW BACK" SYNDROME

i)	Investor A buys on Share at US\$100 per share at launch.
ii)	At the end of the second month the Gross NAV per share has risen to US\$110, i.e. US\$108 net of incentive fee accrual.
iii)	Investor B now buys one share at US\$108.
iv)	The NAV of the fund is now US\$218 excluding incentive fee accrual.
v)	The fund loses US\$26 in month three. The Gross NAV falls down to US\$192 or US\$96 per share.
vi)	The loss per share should be $US\$26 \div 2$, which equals US\$13 per share.
vii)	Given that the fund lost US\$13 per share, the fair value of Investor A's investment should be US\$97 (US\$110 – US\$13) whereas the fair value for Investor B should be US\$95 (US\$108 less US\$13)
viii)	The actual loss to Investor A is US\$14 (US\$110 less US\$96), whereas the loss to Investor B is only US\$12 (US\$108 invested less US\$96).

How is Equalisation achieved and how are these anomalies eliminated?

Before discussing Equalisation methods, I must say that it is surprising how many alternative investment and hedge funds still operate without applying any form of Equalisation. This is mainly done in order to avoid the complications, hassle and heartache involved in applying one of the Equalisation methodologies to a fund's accounts. All of the systems are to a greater or lesser extent investor "unfriendly" and, frankly some investors, not only have great difficulty in understanding it, but often have great difficulty in not assuming that there is a "fiddle" going on. Having said that, I think it is clear that Equalisation is necessary, not just to ensure that the Investment Manager takes home every crust he earns, but to ensure that those incentive fees, when paid, are equitably distributed between shareholders. It is not right (and cannot be right) that, in order to avoid a complicated accounting procedure, one investor should be penalised to the advantage of another investor.

As I have mentioned above, the Equalisation process is an accounting methodology which enables each individual investor, or group of investors, who invest in a fund at the same time to be individually assessed for their own incentive fee liability and charged accordingly. If this can be achieved, this will eliminate the problem of one investor being penalised to the advantage of another.

There are several different Equalisation Methodologies used. These include the Series of Shares and Consolidation Method and a number of different "Equalisation Methods".

Series of Shares and Consolidation Method

This is, in my opinion, the most user-friendly and simplest of the Equalisation Methods. It requires the fund to issue a new Series of Shares (“Series”) each time there is a subscription. Every month, when calculating the NAV per Share, the correct incentive fee accruals, if any, are applied to each of the Series separately. The first Series of Shares, which are issued when the fund is launched, is usually known as the “Lead Series”. The objective is to consolidate each of the subsequent Series issued into the Lead Series, at the end of every accounting period, providing an incentive fee has been paid for each of the Series, including the Lead Series. This may be quarterly, half-yearly, or annually.

How does it Work?

By way of example (see Table 4), let us assume that Investor A purchases 1,000 Shares at the launch of the fund, at US\$1,000 per Share. This will be the “Lead Series” of Shares. (*For this example we are assuming that the incentive fees are being paid quarterly.*)

Let us then assume that at the end of the first month the Gross NAV (“GNAV”) (the NAV before deduction of incentive fee) per Lead Share has risen to US\$1,100 and therefore the NAV will be US\$1,080, net of US\$20 / 20% incentive fee. At this time Investor B subscribes US\$1 million for 1,000 Series II Shares at, again US\$1,000 each.

At the end of the second month, the value of the fund has risen by a further 10%, so that GNAV for the Lead Series is now US\$1,210, whereas the GNAV for Series II is now US\$1,100. The NAVs for the Lead Series will now be US\$1,168 and, for Series II US\$1,080, net of 20% incentive fee accrual. At this stage Investor C subscribes a further US\$1 million for 1,000 Shares of Series III at US\$1,000 per Share.

Let us now assume that, at the end of the third month, the NAV has yet again risen by a further 10%, so that:

- a) The GNAV per Share of the Lead Series is US\$1,331, which translates to an NAV of US\$1, 264.80;
- b) The GNAV of Series II is US\$1,210, equalling an NAV of US\$1,168; and
- c) The GNAV for Series III is US\$1,100, equalling an NAV of US\$1,080.

Thus, at the end of the first quarter and because a new High Water-Mark (“HWM”) has been reached and each of the Series of Shares have paid incentive fees, the Series II and Series III Shares can now be consolidated into the Lead Series. This means that, in effect, the owners of Series II and Series III Shares will sell, or exchange their Shares for Lead Series Shares. Therefore, Investor B’s Shares are worth US\$1,168.00, which equates to 923.46616 Shares at the NAV per Lead Series, at US\$1,264.80 each. Similarly Investor C will effectively liquidate his 1,000 Shares for US\$1,080,000 and effectively invest those proceeds of that liquidation into the Lead Series at US\$1,264.80 per Share, to receive 853.890 Lead Series Shares.

If at the end of the third month the value of the fund has declined by say 4%, then the Lead Series and Series II would still be profitable and could be consolidated. However, the Series III would be showing a loss, at GNAV of US\$960 and so would not be consolidated. The Series III would remain in existence until a new HWM had been achieved, which would put the Series III into profit.

TABLE 4 – “SERIES OF SHARES AND CONSOLIDATION METHOD”

i)	Investor A buys 1,000 Lead Series Shares at US\$1,000 per Share
ii)	End of first month, GNAV per Share has risen 10% to US\$1,100
iii)	NAV published at US\$1,080 (US\$1,100 less US\$20 incentive fee)
iv)	Investor B now buys 1,000 Series II Shares at US\$1,000 per Share
v)	End of second month, value of fund has risen by further 10% so that: (a) GNAV of Lead Series is now US\$1,310 = NAV US\$1,168; and (b) GNAV of Series II is now US\$1,100 = NAV US\$1,080
vi)	Investor C buys 1,000 Series III Shares at US\$1,000 per Share
vii)	End of third month, fund value has again risen by 10%, so that: (a) GNAV of Lead Series is now US\$1,331 = NAV US\$1,264.80; (b) GNAV of Series II is now US\$1,210 = NAV US\$1,168; and (c) GNAV of Series III is US\$1,100 = NAV US\$1,080
viii)	As it is the end of the quarter and new HWM has been achieved, the incentive fees are paid.
ix)	Series II and Series III Shares are then consolidated into Lead Series
x)	Thus: (a) Investor B exchanges 1,000 Series II Shares, now worth US\$1,168,000, for 923.466 Lead Series Shares, at US\$1,264.80; and (b) Investor C exchanges 1,000 Series III Shares, now worth US\$1,080,000, for 853.890 Lead Series Shares

The advantage of this system is that it is a relatively simple Method and, investors can understand how it works and can see that it is fair to all parties.

One of the disadvantages of this approach, however, is the fact that many funds only pay incentive fees once a year and this means that the Series of Shares and Consolidation Method can be quite cumbersome, because, if a fund is a heavily traded, expanding fund, then by the end of the year it could have twelve separate Series in issue. And of course, if it is a losing year, then it is possible that that could go up to twenty-four Series being issued, before the next accounting period is finished.

The other obvious disadvantage of the Series Method is that it is not possible to publish a single NAV per Share, because each Series had its own NAV. Of course, there is no real problem in publishing several different NAVs, but it could be confusing to some shareholders, particularly if they make several investments into the fund over a period of time and so end up with holdings that have different NAVs. The third main drawback of issuing several Series of Shares occurs with fund's whose Shares are listed on the Irish Stock Exchange, because it will be necessary to apply to list each Share in issue. This is administratively time consuming and therefore expensive and again there is the problem of having to publish the full list of NAVs.

US Partnerships

I would point out that this Equalisation problem does not generally occur in the United States, because most, if not all, US Alternative Investments and Hedge Funds are structured as Partnerships, primarily for tax reasons. Therefore, because Partnership books are kept on a capital accounting basis, these Equalisation problems just do not occur. Of course the Series of Shares Method, in effect, replicates the relevant components of partnership accounting at a corporate level. US investors need to have full tax transparency in order to comply with US tax reporting requirements and, ironically, it is largely because of this tax transparency that offshore investors tend to shy away from Partnerships, because they do not wish to have a tax liability occur on an annual basis, but only when they liquidate their holdings.

Equalisation Accounting Methodology

Equalisation Methods are a very much more complex way of achieving the same result as the Series of Shares Method, but with the advantage of producing one NAV per Share.

The Wish List

As I mentioned above, there are several different variations on the Equalisation Method, the objective of all of which (including the Series Method) is to try and ensure:

- i) the equitable allocation of incentive fees between each investor in a fund, to ensure that the Investment Manager is paid the correct amount and that each investor pays the amount that it should be paying and is not subsidized by, or does not subsidize, another investor;
- ii) that all investors have the same capital risk per Share;
- iii) that there is a single NAV per Share;
- iv) that the published NAV accurately reflects the fund's performance; and
- v) finally that the Method used should be easily understood by all parties including the investors.

It has to be said that nobody has yet produced a perfect Equalisation Method that meets all of these objectives and is unlikely to do so, until investors have been fully educated in this subject. As I have already said, it is, I think, reasonable to claim that the Series Method is easily understood by most investors, however the Series Method does not provide a single NAV. The other Equalisation Methods, which I describe below do provide a single NAV, but are not easily understood by most investors, although many more investors do understand these procedures than did a couple of years ago.

Simple Equalisation

The first of the more common Methods of Equalisation is what had been described as "Simple Equalisation", which some might consider to be an oxymoron. Be that as it may, the procedure is to calculate the performance fee and allocate it fairly between each investor, or group of investors at the end of each accounting period. As investors will have come in at different levels this will mean calculating different NAVs per investor. However, in order to get a common NAV for all Shares in the fund, the lowest of all the NAV's calculated, on an investor by investor basis, is selected to become the NAV of the fund.

Shareholders with a higher individual NAV per Share are then issued "Equalisation Shares", so that the total number of Shares issued to that investor (i.e.- the original Shares purchased plus any Equalisation Shares) multiplied by the new NAV of the fund, which we know is the lowest NAV calculated, will now enable the investment for those investors to be kept constant.

The advantages of this system are that it is relatively simple to calculate the NAV for each shareholder and you end up with a single NAV per Share for the fund.

However, there are two main disadvantages. Firstly, that the NAV does not accurately reflect the fund performance, because it is continually discounted and, secondly, the addition of Equalisation Shares to investors accounts, on what, to many probably seems an arbitrary basis, confuses those investors.

Equalisation Factor / Depreciation Deposit Approach

The most common Methods of Equalisation are the “Equalisation Factor / Depreciation Deposit Approach” and what is known as the “Equalisation Adjustment Approach”. They are both very similar.

Under the Equalisation Factor / Depreciation Deposit Approach, each investor invests at the NAV, plus either the Equalisation Factor or the Depreciation Deposit, depending upon whether the NAV of the Fund has increased or declined from the last high water-mark.

If the NAV has risen during the period, then a new subscriber would invest the equivalent of the GNAV, to place the same amount of money at risk as the existing shareholders, the difference between the NAV and the GNAV being the Equalisation Factor. If the fund maintains its performance, the Equalisation Factor paid will be refunded in Shares, at the end of the incentive fee calculation period. If, however, the fund subsequently loses value the Equalisation will be lost for that period, but is refundable, in the future, if the fund recovers. This avoids the claw-back syndrome.

If, on the other hand, the fund’s NAV is at a discount to the high watermark at the time that an investor makes a subscription, then the investor will be required to pay a Depreciation Deposit. If the fund starts to improve and recoup its losses, then the Depreciation Deposit becomes payable to the Investment Advisor as a performance fee. This avoids the ‘free ride’ syndrome.

Equalisation Adjustment Approach

The Equalisation Adjustment Approach is similar to the Equalisation Factor / Depreciation Deposit Method, in that the investor will subscribe at the GNAV, but if the NAV at the time of subscription is above the previous high water-mark, then the investor will receive an Equalisation Credit for that portion of the NAV which represents the incentive fee accrual, (which the investor has paid within the GNAV). Like the Equalisation Factor, if, at the end of the accounting period the NAV is still showing a profit, or an increased profit, the investor will be paid his Equalisation Credit by way of an allocation of additional Shares in the fund. If the fund’s NAV declines after the purchase of the Shares, then the Equalisation Credit will decline pro rata, but is recoupable.

Both the Equalisation Credit and Equalisation Factor Methods enable all of the investor’s money to be utilized in the fund.

If the investor subscribes during a draw down, or loss, period, he will still pay the GNAV (which, in this case, will be the same as the NAV), so that he has the same amount of capital risk as existing shareholders, but he will also receive what is described as an “Equalisation Deficit”. If the fund subsequently increases in value by the end of the calculation period, a certain number of the investors Shares will be redeemed to equate to the Equalisation Deficit, (or that part of it that is applicable) and the proceeds paid into the Fund, as compensation to the other shareholders, in order to avoid that investor getting a “free ride”.

The advantage of the Equalisation Deficit Method rather than the Equalisation Depreciation Deposit Method is that the investor’s money is fully invested in the fund, whereas under the Depreciation Deposit Method, the deposit is usually invested in T-Bills, Money Market Funds, or some other passive no-risk investment, which means that the investor is not getting full exposure to the fund.

Equalisation Per Share Method

Finally, there is the Equalisation Per Share Method, which we at Custom House have found to be the most popular method used by our clients.

This method is no simpler or easier to understand than any of the other methods – in fact, its use of Equalisation deficits and credits is as complex as you could imagine. However, it is the flavour of the month and so rather than explain it in text within this document, we are attaching as Appendix 1, a copy of the text that we include in the Offering Memorandum of funds that use this methodology. You will see it also explains how the calculations are applied with the Hurdle Rate. The Appendix also includes a glossary of the terms used in the context of the Equalisation process, which we also include in Offering Memoranda, together with a numerical history of the transaction.

Investment Management Agreement

It is essential to ensure that the Equalisation method chosen complies with the Investment Management Agreement. Many, if not most, Investment Management Agreements state that the Investment Manager will be paid an incentive fee of 20% of *profits*. Thus, if a loss occurs, the Investment Manager has to recoup the total loss before any further incentive fees can be paid. What must be made clear is that, if an investor redeems during a draw down period and thereby accepts a portion of the loss, the amount of loss that the Investment Manager has to recoup will be reduced pro rata.

Thus if a fund with four shareholders, who have subscribed US\$1 million each, loses US\$800,000, or 20% of the portfolio, and one shareholder redeems, thereby reducing the fund by a further US\$800,000 (US\$1 million less US\$200,000 share of loss). There will now only be three shareholders left in the fund with the fund value standing at US\$2.4 million. The Investment Management Agreement may require the Investment Manager to still earn back the full US\$800,000 before he can earn any incentive fee, when in fact the remaining shareholders have only suffered a loss of US\$600,000. Thus if the Investment Manager was required to earn back US\$800,000 those shareholders would get a “free ride” on that US\$200,000 profit.

Choice

The final problem as far as Equalisation goes is the choice of which Method is appropriate for a particular fund. This is usually dictated by a combination of market needs (for example, the choice as to whether to use the Series Method may be dictated by the fact that the Shares are listed on the Irish Stock Exchange) and, to a large extent, the Method that the Fund Manager is most comfortable with.

Another factor that must be seriously considered is the ability of the chosen Administrator to calculate the NAV, utilizing the Equalisation Method selected. At this point I must declare a conflict of interest – a number of administrators, including my own company, have elected to utilize software that automates the Equalisation process. As a result the Administrator has had to make their own selection as to the process they deem most appropriate. With our system, Custom House is able to provide Equalisation on an automated basis, utilizing both the Series of Shares, the Equalisation Adjustment Approach and the Equalisation per Share Method, which is currently the most popular method, because we believe that they provide most of the components of the “wish list”, although none can be described as investor friendly, or easy to understand. But you can't have everything!

Dermot S. L. Butler is Chairman of Custom House Global Fund Services Limited, a member of the Equity Trust group of companies, which offers a full 24/5, “round the world” and “round the clock” administration service out of fully integrated offices in Chicago, Dublin, Guernsey, Luxembourg, Malta, Singapore and The Netherlands.

For further information, please visit the Custom House website:

www.customhousegroup.com

or contact:

Dermot S. L. Butler

Custom House Global Fund Services Limited

T: 353-1-878 0807

e-mail: dermot.butler@customhousegroup.com

Custom House Global Fund Services Limited is regulated by the Malta Financial Services Authority.