

# Italian Investment Performance Committee (IIPC)

## Comments of the IIPC on GIPS Guidance Statement on Calculation Methodology

### **Foreword**

The Italian Investment Performance Committee (IIPC) welcomes the opportunity to comment on the Guidance Statement on Calculation Methodology (GS).

The IIPC was established by ABI, AIAF, Assirevi, Assogestioni, ISIP and Mefop. It acts as the “Italian sponsor” of GIPS and as such:

- a) prepared the Italian Investment Performance Presentation Standards (IPPS) — the Italian Version of GIPS which was endorsed by the Investment Performance Council (IPC) in June 2002;
- b) publicises the standards within the industry and among the investing public;
- c) handles relations with the IPC and with the corresponding European committee (the European Investment Performance Committee – EIPC); it participates in their meetings and works to ensure the continuous updating of the Standards on the basis of suggestions drawn from the best practices observed in the national market with regard to “fair representation” and “full disclosure” in the presentation of investment performance.

### **The key issue: Time and Money matter**

Let us consider a portfolio managed over a certain time period going from B (Beginning) to E (Ending). If between this two moments no external cash flow occurs, the most natural way to define the total rate of return of the portfolio is taking its market value relative variation on that period (see GS end of page 3).

As it can be simply understood, the mentioned formula is based both upon "manager's skills" and on the length of the interval between B and E. In other words the formula is time-sensitive.

Allowing in-between money flows adds a new variable to the performance calculation problem. Before we had a one-variable problem (time), now we face a two-variables problem (time and flows).

Unfortunately, while in the no-flow case there is only one obvious performance formula, in the flow case the performance formula is dependent on the way the effects of flows are managed, thus resulting in a great number of different and, at first sight, equally acceptable solutions.

However, among this potentially large number of formulas, one (the GS calls it "Daily Evaluation Method") can be identified which shows a unique feature: it completely removes the effects of flows on the performance and as a consequence its results are totally independent from the amounts and timing of flows which occur between B and E. It calculates the performance as if the flows never occurred: as in the no-flows case, it only depends on the length of the interval between B and E. For this reason it can be called

"Time-weighted" (TW) formula. For the same reason, all other formulas, showing both time and flows dependence, can be defined "Time and Money (or simply Money)-weighted" (MW) formulas.

Turning to the GS we have been invited to comment on, we believe it should provide clear once-for-all definitions of TW and MW rate of return and then consistently refer to them. The lack of these basic definitions has led to a potentially, if not really misleading presentation of the methods allowed under GIPS (see also comments by Prof. Bruno Solnik).

Therefore we suggest the following definitions:

**Time-weighted rate of return (TWRR):** return calculated with a formula which does not depend at all on the amount and on the timing of in-between flows;

**Money-weighted rate of return (MWRR):** return calculated with a formula which depends, no matter how much, on the amount and/or on the timing of in-between flows;

Even if they are not often formally stated, these definitions are used by any finance handbook while presenting the problem of distinguishing the "performance of the manager" from the "performance of the client"<sup>1</sup>. In our opinion this GS is the right place to explicitly state them.

The main consequence of the above definitions is that there exists only one TW rate of return method (the Daily Evaluation one) and that every other method has to be considered of the MW type.

As for this last set of methods, it is used to distinguish between more or less "precise" MW formulas, referring to the quantity of information involved in the calculation. So, the Original Dietz Method should be considered less precise of the Modified one (the former doesn't take into account the timing of flows, while the latter does so). In our opinion this way of thinking is useful at a first stage but it shouldn't be followed further: both Modified Dietz and IRR (and not "Modified IRR") are based on the assumption of in-between constant rate of return and use the same information (the first being simply a linear approximation of the second). It wouldn't seem correct to call IRR the "true" MW method simply because of the supposed superiority of its compounding hypothesis as suggested by Professor Solnik. Furthermore, one could also question the usefulness of applying the compounding rather than the linear convention for periods of less than one month, let alone the well known problems related to the solution of non-linear equations (choice among multiple zeros).

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<sup>1</sup> "...the MWR [...] includes the impact of the timing of the cash flows and therefore cannot be used to compare the relative performance of two managers. As the cash flows [...] are normally outside the control of the manager of the assets [...] it is important to have a more consistent measure when trying to compare the performance across funds. It is in these cases that the time weighted return is considered". *Investment performance measurement*, William G. Bain.

## **The key issue: summary of proposed modification**

As a result of the above arguments we suggest the GS being modified as follows:

- To provide exact definition of TW rate of returns as well as of MW rate of returns (see above);
- If the above definitions are accepted, then the Original Dietz, Modified Dietz and IRR (and not "Modified IRR") methods should be clearly presented as MW ones;
- To state that because of a general gradual approach in implementing the best practices GIPS, at least until 2010, accept estimates/approximation of TWRR obtained by combining in a TW fashion (chain-linking) sub-period (monthly) MW returns;
- To warn about the mathematical difficulties with IRR (those which cannot be solved by a computer) and to suggest that, since in a single month, linear approximation is negligible, firms calculating the monthly return, should apply the Modified Dietz formula, if not able to immediately adopt the TW methodology.

## **Measuring the time**

Therefore the timing of cash flows plays its important role when choosing a performance formula, as previously explained, as well as during the setting up of performance calculations' details. In fact, the exact instant of time since a positive (negative) money flow starts (ends) to affect the performance depends on the portfolio-specific administrative and management cash dealing arrangements. For this reason firms must put a lot of attention in defining cash flow timing and in assessing how they are treated by their calculation procedures.

Unfortunately the GS warns about this issue only when (end of page 5) it explains how the Modified Dietz Method must be adjusted in order to allow for beginning (instead of end) of day flows.

Although it is quite clear that the rule "establish a policy and treat cash flow consistently" encompasses the Modified Dietz and refers to every method presented in the document, we believe the cash-timing issue would deserve a separate introductory paragraph and it should be clearly presented as a cross-method problem.

## **Calculations: the importance of details**

As for the numerical examples reported in the GS, we think too little attention has been paid at working out the calculation details:

Page 8, Example 1

In order to calculate Modified Dietz rate of returns, information on "Market Value Post Cash Flow" (last column) is unnecessary. To deliver the important message that the TW method (Daily Evaluation) should be used whenever possible, last column should be deleted.

## Page 9, Example 2

Monthly return are affected by a too drastic truncation. In calculating February performance, interim figures lose their second digit (0.79% and 2.13% becomes, respectively, 0.8% and 2.1%) thus conducting at a 2.92% month performance (instead of 2.94% obtained with 2-digits precision). The same applies to March. Restoring a 2-digits approximation would have resulted in a 7.56% performance, 8 bp more than the figure showed in the GS.

## Page 12, Application

The type of return has not been specified (Dietz? Modified Dietz? Daily Evaluation?).

Regardless of the method applied (Modified Dietz or Daily Evaluation), returns of Portfolio 1 and 2 are both wrong and so are the composite returns (interim results have not been approximated):

### Portfolio 1

GS:	+11.32%
TW rate of return:	+11.37%
Modified Dietz rate of return:	+11.44%

### Portfolio 2

GS:	+8.26%
TW rate of return:	+8.30%
Modified Dietz rate of return:	+8.33%

## **Portfolio evaluation**

We believe that firms will be able to value portfolios at the time of any external cash flow beginning 1 January 2010 (excluding real estate, venture capital and private equity). We also believe that this cut-off date cannot be deferred.

## **GS effective date**

We agree with the effective date 1 April 2003.