Morningstar[®] Office Tip Sheet: Using the IRR Diagnostic Report to Troubleshoot Return Percentage Errors

Now that you've uncovered an unusually high or low performance number within the Global Performance Summary, the next step is to run the **Internal Rate of Return Diagnostic Report** for each individual account in question.

This report won't detail exactly what the error is, but it allows you to identify the largest cash flows and evaluate how they affect the overall performance number.

For example, say you open a small portfolio and leave it alone for the first six months. Over the second six months, you make several deposits and buy a large amount of stock. The return relative to the original market value for the latter half of the year will have a larger impact on the annual performance number than the first half of the year.

This report will help to identify which cash flows contribute more heavily to the overall performance number.

This report can be run at the individual Account level, and details the following information:

- ► Beginning Market Value
- ► Ending Market Value
- ► Date of each cash flow
- ► Amount of each cash flow
- ► Time Fraction
- Discount Cash flow calculation
- ► Period Rate of Return
- Annualized rate of return

For each cash flow, you'll see the dollar amount listed.

How do I interpret the IRR Diagnostic Report?

Overview

A	В	C	D	E	F	
Report Name: Internal Rate of Return calculation						This example shows
Report Date: 1/1/2002 - 9/30/2015						
Printed on: 12/17/2015						how two cash flows:
Report Currency: USD						the first is a \$1 deposit
Client/Group: Carina Cristofalo1						
Account Name: Example 4 (IRR)						occurring in 2002 and
Account Number: 5647						a deliver-in of \$2263 in
Fee Type: Net of Fees						
			Time Fraction	Discounted cash flow		2013 affect the overall
	Date	Amount	(ni/N)	Fvi*(1+R)^(ni/N)	IRR(%)	performance number
Beginning Value	1/1/2002	0	1	0		performance number.
Cash flow as of 01-01-2002	1/1/2002	- 1	1	-27.94503		
Cash flow as of 01-01-2013	1/1/2013	-2,263.00	0.1996	-4,399.15		
Ending Value	9/30/2015	4,427.10	0	4,427.10		
Period Rate of Return					2,694.50	
Annualized Rate of Return					27.4121	
Note:				-		
Negative amount is cash inflow; postive amount is	T					
cash outflow.						
IRR calculation formula:						
$PV^*(1+R) = Sum of(Fvi^*(1+R)^{(ni/N)} + FVe$						ALC: ALC: ALC: ALC: ALC: ALC: ALC: ALC:
Where						Note that a negative
PV is Beginning Value						amount is a cash
FVi is value for cash flow i						
ni is number of days to end date for cash flow i						inflow.
R is Period IRR						
FVe is Ending Value						
N is purpher of days in the period						

To run the report at the Account level, complete the following steps:

1. From the Clients page under the Client Management tab, double click on the **Client** you want to run the report for. A new window will open.

How do I run the IRR Diagnostic Report?

2. From the Client window, double click on the **Account** you want to run the report for.

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All # A B C D E F G H I J K L M N O P O R S T V V W X Y Z	Saved Re	ports					•	III		Þ	The IRR Calculation report is on available at the individual Account level

3. From the Account window, click **Reports...Data Diagnosis Reports...IRR Diagnosis Reports.**

4. From the report options dialog box, select the **report options** you want to use in your report.

Morningstar Office Report Options Select report option		
Use account inco Start Date End Date Fee Type	Pytion date as Start Date 7/1/2015 9/30/2015 Net of fees	Be sure to select this option when running your report since inception.
	OK Cancel Help	

- 5. Click **OK.**
- ► Click here to view a companion video to this document.