

## Calculating Investment Performance

# Understanding the difference between book value and market value

**Mutual fund investors will often compare the “book value” of their holdings to the “market value” to determine performance – a common mistake that usually leads to incorrect investment performance calculations. Here, PIMCO explains the difference between book value and market value and demonstrates how to accurately calculate investment performance.**

### WHAT IS BOOK VALUE?

Book value (also known as Adjusted Cost Base or ACB) is the original or purchase price of an investment. However, for most mutual funds, the current book value listed on an account statement will not be the same as the original investment. This is because the book value of a mutual fund will change with most transactions that take place over time, including reinvested fund distributions, which are distributions used to purchase additional units of the fund and comprise an important part of the fund’s investment performance.

To elaborate, in connection with Canadian tax law, most mutual funds make distributions at least annually. When a mutual fund investor receives distributions that are reinvested, the value of the distribution has an impact on the price of the mutual fund and the number of units owned. Each time a distribution is paid and additional units are purchased, the book value will increase by the distribution amount, but the actual value of the investment will remain the same.

### WHAT IS MARKET VALUE?

The market value of a mutual fund, in simple terms, is the current value of a fund at a specific point in time, which can change daily to reflect market movements. The current market value of a mutual fund can be determined by looking at its net asset value (NAV) from the previous business day. A mutual fund’s NAV is the combined market value of all the securities held by the fund minus any liabilities divided by the number of outstanding fund units.

### WHAT IS THE CORRECT WAY TO CALCULATE INVESTMENT PERFORMANCE?

A mutual fund’s investment return is comprised of two parts: (i) its interest (a particularly important part of a bond fund) and other earnings from its underlying investments, and (ii) the capital appreciation (or loss) of its underlying investments. To accurately calculate a fund’s investment return, or performance, investors should leave book value out of the equation and look to its current market value minus the amount invested.

To help clarify, consider the performance calculation example on the next page, which highlights the common mistake that mutual fund investors make when calculating performance.

# PIMCO

Example: On January 4th, 2016, Jane Smith made an initial purchase of \$1,000 for 100 units of a PIMCO mutual fund. After making this investment, Jane received four distributions from her fund throughout the year which she chose to reinvest in additional units.

## SUPPORTING SAMPLE INFORMATION

Transaction Date	Transaction	Distribution Rate Per Unit	Transaction Amount	NAV	Number of Units Purchased	Total Account Units	Updated Account Book Value	Updated Account Market Value
4-Jan-16	Purchase		\$1,000.00	\$10.00	100.00	100.00	\$1,000.00	\$1,000.00
31-Mar-16	Distribution Reinvested	\$0.10	\$10.00	\$10.00	1.00	101.00	\$1,010.00	\$1,010.00
30-Jun-16	Distribution Reinvested	\$0.10	\$10.10	\$10.00	1.01	102.01	\$1,020.10	\$1,020.10
30-Sep-16	Distribution Reinvested	\$0.10	\$10.20	\$10.00	1.02	103.03	\$1,030.30	\$1,030.30
19-Dec-16	Distribution Reinvested	\$0.10	\$10.30	\$10.00	1.03	104.06	\$1,040.60	\$1,040.60

At the end of the year, assuming a NAV of \$10.00, Jane's statement reflects the following market value and book value information:

**December 31, 2016 Market Value: \$1,040.60**

**December 31, 2016 Book Value: \$1,040.60**

### Incorrect Performance Calculation at December 31, 2016:

(Current Market Value – Book Value)/Book Value

$(\$1,040.60 - \$1,040.60)/\$1,040.60 = 0.00\%$

### Correct Performance Calculation at December 31, 2016:

(Current Market Value – Amount Invested)/Amount Invested

$(\$1,040.60 - \$1,000)/\$1,000 = 4.06\%$

As you can see, the results of these calculations are very different due to the incorrect use of book value in the first calculation, which could otherwise lead an investor to believe that their fund returned 4% less than it actually did.

To summarize, book value and market value are each valuable pieces of information for investors, principally in connection with capital gain and loss calculations for tax reporting. That

being said, and as demonstrated in the example provided, comparing these amounts with one another does not generally provide reliable performance information due to the dynamic nature of book value reporting, which can be further exacerbated in instances where funds distribute more frequently (e.g., monthly) or where distributions form a core part of a fund's investment mandate.

No offering is being made by this material.

All investments contain risk and may lose value.

This material has been distributed for informational purposes only and should not be considered as investment advice or a recommendation of any particular security, strategy or investment product. No part of this material may be reproduced in any form, or referred to in any other publication, without express written permission. PIMCO is a trademark of Allianz Asset Management of America L.P. in the United States and throughout the world. **PIMCO Canada Corp.**, 199 Bay Street, Suite 2050, Commerce Court Station, P.O. Box 363, Toronto, ON, M5L 1G2, 416-368-3350 ©2017, PIMCO.

### HOW CAN I LEARN MORE?

PIMCO Canada can be contacted at

Toll Free: 866.341.3350

Phone: 416.368.3350

Investment Products

Not FDIC Insured | May Lose Value | Not Bank Guaranteed

PU007\_53660