

July 21, 2025

**BNY MELLON ADVANTAGE FUNDS, INC.
BNY Mellon Opportunistic Midcap Value Fund**

Supplement to Current Summary Prospectus and Prospectus

The following information supersedes and replaces the information in the second paragraph in the sections "Portfolio Management" in the summary prospectus and "Fund Summary – Portfolio Management" in the prospectus:

Andrew Leger and Gregory P. Manley, CFA, are the fund's primary portfolio managers. Mr. Leger has been a portfolio manager of the fund since September 2021 and is a portfolio manager at NIMNA. Mr. Manley has been a portfolio manager of the fund since July 2025 and is a portfolio manager at NIMNA.

The following information supersedes and replaces the information in the second paragraph in the section "Fund Details – Management – Sub-Adviser" in the prospectus:

Andrew Leger and Gregory P. Manley, CFA, are the fund's primary portfolio managers and are jointly and primarily responsible for managing the fund's portfolio. Mr. Leger has been a portfolio manager of the fund since September 2021 and is a portfolio manager at NIMNA. He has been employed by NIMNA or a predecessor company of NIMNA since 2014. Mr. Manley has been a portfolio manager of the fund since July 2025 and is a portfolio manager at NIMNA. He has been employed by NIMNA since February 2025. Prior to joining NIMNA, Mr. Manley worked at Brandywine Global Investment Management from 2000 to January 2025, where he was a lead trader and portfolio manager.

BNY Mellon Opportunistic Midcap Value Fund



Summary Prospectus | December 31, 2024

Class	Ticker
A	DMCVX
C	DVLCX
I	DVLIX
Y	DMCYX

Before you invest, you may want to review the fund's prospectus, which contains more information about the fund and its risks. You can find the fund's prospectus and other information about the fund, including the statement of additional information and most recent reports to shareholders, online at www.bny.com/investments. You can also get this information at no cost by calling 1-800-373-9387 (inside the U.S. only) or by sending an e-mail request to info@bny.com. The fund's prospectus and statement of additional information, dated December 31, 2024 (each as revised or supplemented), are incorporated by reference into this summary prospectus.

Investment Objective

The fund seeks to surpass the performance of the Russell Midcap[®] Value Index.

Fees and Expenses

This table describes the fees and expenses that you may pay if you buy, hold and sell shares of the fund. **You may pay other fees, such as brokerage commissions and other fees to financial intermediaries, which are not reflected in the table and examples below.** You may qualify for sales charge discounts if you and your family invest, or agree to invest in the future, at least \$50,000 in the fund or shares of other funds in the BNY Mellon Family of Funds that are subject to a sales charge. More information about sales charges, including these and other discounts and waivers, is available from your financial professional and in the Shareholder Guide section beginning on page 9 of the prospectus, in the Appendix on page A-1 of the prospectus and in the How to Buy Shares section and the Additional Information About How to Buy Shares section beginning on page II-1 and page III-1, respectively, of the fund's Statement of Additional Information.

Shareholder Fees (fees paid directly from your investment)				
	Class A	Class C	Class I	Class Y
Maximum sales charge (load) imposed on purchases (as a percentage of offering price)	5.75	none	none	none
Maximum deferred sales charge (load) (as a percentage of lower of purchase or sale price)	none*	1.00	none	none
Annual Fund Operating Expenses (expenses that you pay each year as a percentage of the value of your investment)				
	Class A	Class C	Class I	Class Y
Management fees	.75	.75	.75	.75
Distribution (12b-1) fees	none	.75	none	none
Other expenses:				
Shareholder services fees	.25	.25	none	none
Miscellaneous other expenses	.17	.23	.22	.11
Total other expenses	.42	.48	.22	.11
Total annual fund operating expenses	1.17	1.98	.97	.86

* Class A shares bought without an initial sales charge as part of an investment of \$1 million or more may be charged a deferred sales charge of 1.00% if redeemed within one year.

Example

The Example is intended to help you compare the cost of investing in the fund with the cost of investing in other mutual funds. The Example assumes that you invest \$10,000 in the fund for the time periods indicated. The Example also assumes that your investment has a 5% return each year and that the fund's operating expenses remain the same. Although your actual costs may be higher or lower, based on these assumptions your costs would be:

	1 Year	3 Years	5 Years	10 Years
Class A (with or without redemption at end of period)	\$687	\$925	\$1,182	\$1,914
Class C (with redemption at end of period)	\$301	\$621	\$1,068	\$2,306
Class C (without redemption at end of period)	\$201	\$621	\$1,068	\$2,306
Class I (with or without redemption at end of period)	\$99	\$309	\$536	\$1,190
Class Y (with or without redemption at end of period)	\$88	\$274	\$477	\$1,061

Portfolio Turnover

The fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover may indicate higher transaction costs and may result in higher taxes when fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the Example, affect the fund's performance. During the most recent fiscal year, the fund's portfolio turnover rate was 58.67% of the average value of its portfolio.

Principal Investment Strategy

To pursue its goal, the fund normally invests at least 80% of its net assets, plus any borrowings for investment purposes, in equity securities of mid-cap companies. The fund currently considers mid-cap companies to be those companies with market capitalizations, at the time of purchase, within the market capitalization range of companies comprising the Russell Midcap[®] Value Index, the fund's benchmark index. As of November 30, 2024, the market capitalizations of the smallest and largest companies included in the index were approximately \$426 million and \$81.3 billion, respectively, and the weighted average and median market capitalizations of the index were approximately \$27.6 billion and \$11.9 billion, respectively. The fund's sub-adviser identifies potential investments through extensive quantitative and fundamental research. The fund focuses on individual stock selection (a "bottom-up" approach), emphasizing three key factors: relative value, business health, and business momentum.

In constructing the fund's portfolio, the fund's sub-adviser uses an opportunistic value approach to identify stocks whose current market prices trade at a large discount to their intrinsic worth or the expected value, determined by the sub-adviser's assessment of fundamentals, valuation and catalyst(s). The opportunistic value style attempts to benefit from valuation inefficiencies and underappreciated fundamental prospects present in the marketplace. Items such as free cash flow, earning power, controversy assessment, growth prospects and identification of competitive advantages may be used to help assess a stock's intrinsic worth or the expected value. The strategy invests in stocks priced in the market at a discount to their intrinsic worth or expected value which have a catalyst present to enable higher revaluation.

The fund typically sells a stock when, in the sub-adviser's view, it approaches intrinsic worth or the expected value, a significant deterioration of fundamental expectations develops, the revaluation catalyst becomes impaired based on subsequent events or a better risk/reward opportunity is presented in the marketplace.

Principal Risks

An investment in the fund is not a bank deposit. It is not insured or guaranteed by the Federal Deposit Insurance Corporation (FDIC) or any other government agency. It is not a complete investment program. The fund's share price fluctuates, sometimes dramatically, which means you could lose money.

- *Risks of stock investing:* Stocks generally fluctuate more in value than bonds and may decline significantly over short time periods. There is the chance that stock prices overall will decline because stock markets tend to move in cycles, with periods of rising prices and falling prices. The market value of a stock may decline due to general market conditions or because of factors that affect the particular company or the company's industry.
- *Small and midsize company risk:* Small and midsize companies carry additional risks because the operating histories of these companies tend to be more limited, their earnings and revenues less predictable (and some companies may be experiencing significant losses), and their share prices more volatile than those of larger, more established companies. The shares of smaller companies tend to trade less frequently than those of larger, more established companies, which can adversely affect the pricing of these securities and the fund's ability to sell these securities.
- *Value stock risk:* Value stocks involve the risk that they may never reach their expected full market value, either because the market fails to recognize the stock's intrinsic worth or the expected value was misgauged.
- *Market risk:* The value of the securities in which the fund invests may be affected by political, regulatory, economic and social developments, and developments that impact specific economic sectors, industries or segments of the market. In addition,

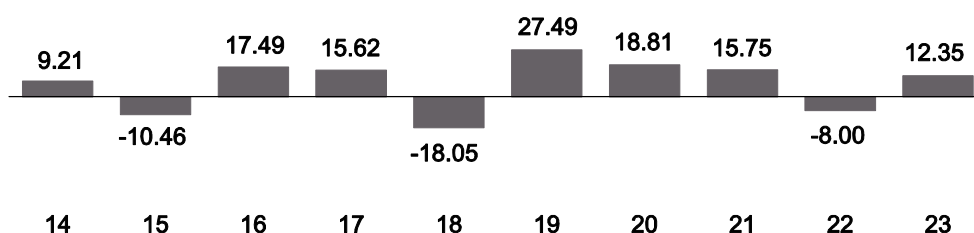
turbulence in financial markets and reduced liquidity in equity, credit and/or fixed-income markets may negatively affect many issuers, which could adversely affect the fund. Global economies and financial markets are becoming increasingly interconnected, and conditions and events in one country, region or financial market may adversely impact issuers in a different country, region or financial market. These risks may be magnified if certain events or developments adversely interrupt the global supply chain; in these and other circumstances, such risks might affect companies world-wide.

- **Liquidity risk:** When there is little or no active trading market for specific types of securities, it can become more difficult to sell the securities in a timely manner at or near their perceived value. In such a market, the value of such securities and the fund's share price may fall dramatically. Investments that are illiquid or that trade in lower volumes may be more difficult to value.
- **Management risk:** The investment process used by the fund's sub-adviser could fail to achieve the fund's investment goal and cause your fund investment to lose value.

Performance

The following bar chart and table provide some indication of the risks of investing in the fund. The bar chart shows changes in the performance of the fund's Class A shares from year to year. Sales charges, if any, are not reflected in the bar chart, and, if those charges were included, returns would have been less than those shown. The table compares the average annual total returns of the fund's shares to those of broad measures of market performance. The fund's past performance (before and after taxes) is not necessarily an indication of how the fund will perform in the future. Performance for each share class will vary due to differences in expenses. More recent performance information may be available at www.bny.com/investments.

Year-by-Year Total Returns as of 12/31 each year (%)
Class A



During the periods shown in the chart:

Best Quarter

Q2, 2020: 24.44%

Worst Quarter

Q1, 2020: -26.46%

The year-to-date total return of the fund's Class A shares as of September 30, 2024 was 12.25%.

After-tax performance is shown only for Class A shares. After-tax performance of the fund's other share classes will vary. After-tax returns are calculated using the historical highest individual federal marginal income tax rates, and do not reflect the impact of state and local taxes. Actual after-tax returns depend on the investor's tax situation and may differ from those shown, and the after-tax returns shown are not relevant to investors who hold their shares through U.S. tax-deferred arrangements such as 401(k) plans or individual retirement accounts. Returns after taxes on distributions and sale of fund shares may be higher than returns before taxes or returns after taxes on distributions due to an assumed tax benefit from losses on a sale of the fund's shares at the end of the period.

Average Annual Total Returns (as of 12/31/23)

Class	1 Year	5 Years	10 Years
Class A returns before taxes	5.88%	11.30%	6.40%
Class A returns after taxes on distributions	4.89%	10.11%	3.86%
Class A returns after taxes on distributions and sale of fund shares	4.14%	8.94%	4.30%
Class C returns before taxes	10.45%	11.73%	6.21%
Class I returns before taxes	12.61%	12.86%	7.29%
Class Y returns before taxes	12.70%	12.99%	7.43%
Russell 3000 Index* reflects no deductions for fees, expenses or taxes	25.96%	15.16%	11.48%
Russell Midcap® Value Index reflects no deductions for fees, expenses or taxes	12.71%	11.16%	8.26%

** In accordance with regulatory changes requiring the fund's primary benchmark to represent the overall applicable market, the fund's primary prospectus benchmark changed to the indicated benchmark effective as of August 31, 2024.*

Portfolio Management

The fund's investment adviser is BNY Mellon Investment Adviser, Inc. (BNYM Investment Adviser). BNYM Investment Adviser has engaged its affiliate, Newton Investment Management North America, LLC (NIMNA), to serve as the fund's sub-adviser.

Andrew Leger is the fund's primary portfolio manager. Mr. Leger has been a portfolio manager of the fund since September 2021 and is a portfolio manager at NIMNA.

Purchase and Sale of Fund Shares

In general, for each share class, other than Class Y, the fund's minimum initial investment is \$1,000 and the minimum subsequent investment is \$100. For Class Y shares, the minimum initial investment generally is \$1,000,000, with no minimum subsequent investment. You may sell (redeem) your shares on any business day by calling 1-800-373-9387 (inside the U.S. only) or by visiting www.bny.com/investments. If you invested in the fund through a third party, such as a bank, broker-dealer or financial adviser, or through a Retirement Plan (as defined below), you may mail your request to sell shares to BNY Institutional Services, P.O. Box 534442, Pittsburgh, Pennsylvania 15253-4442. If you invested directly through the fund, you may mail your request to sell shares to BNY Shareholder Services, P.O. Box 534434, Pittsburgh, Pennsylvania 15253-4434. If you are an Institutional Direct accountholder, please contact your BNY relationship manager for instructions.

Retirement Plans include qualified or non-qualified employee benefit plans, such as 401(k), 403(b)(7), Keogh, pension, profit-sharing and other deferred compensation plans, whether established by corporations, partnerships, sole proprietorships, non-profit entities, trade or labor unions, or state and local governments, but do not include IRAs (including, without limitation, traditional IRAs, Roth IRAs, Coverdell Education Savings Accounts, IRA "Rollover Accounts" or IRAs set up under Simplified Employee Pension Plans (SEP-IRAs), Salary Reduction Simplified Employee Pension Plans (SARSEPs) or Savings Incentive Match Plans for Employees (SIMPLE IRAs)).

Tax Information

The fund's distributions are taxable as ordinary income or capital gains, except when your investment is through an IRA, Retirement Plan or other U.S. tax-advantaged investment plan (in which case you may be taxed upon withdrawal of your investment from such account).

Payments to Broker-Dealers and Other Financial Intermediaries

If you purchase shares through a broker-dealer or other financial intermediary (such as a bank), the fund's distributor and its related companies may pay the intermediary for the sale of fund shares and related services. To the extent that the intermediary may receive lesser or no payments in connection with the sale of other investments, the payments from the fund's distributor and its related companies may create a potential conflict of interest by influencing the broker-dealer or other intermediary and your financial representative to recommend the fund over the other investments. This potential conflict of interest may be addressed by policies, procedures or practices adopted by the financial intermediary. As there may be many different policies, procedures or practices adopted by different intermediaries to address the manner in which compensation is earned through the sale of investments or the provision of related services, the compensation rates and other payment arrangements that may apply to a financial intermediary and its representatives may vary by intermediary. Ask your financial representative or visit your financial intermediary's website for more information.

This prospectus does not constitute an offer or solicitation in any state or jurisdiction in which, or to any person to whom, such offering or solicitation may not lawfully be made.