

BNY Mellon Advantage Funds, Inc.
– BNY Mellon Global Dynamic Bond Income Fund

Supplement to Summary Prospectus, Prospectus and Statement of Additional Information

The Board of Directors of BNY Mellon Advantage Funds, Inc. (the "Company") has approved the liquidation of BNY Mellon Global Dynamic Bond Income Fund (the "Fund"), a series of the Company, effective on or about April 29, 2025 (the "Liquidation Date"). Before the Liquidation Date, and at the discretion of Fund management, the Fund's portfolio securities will be sold and the Fund may cease to pursue its investment objective and policies. The liquidation of the Fund may result in one or more taxable events for shareholders subject to federal income tax.

Accordingly, effective on or about April 7, 2025 (the "Closing Date"), the Fund will be closed to any investments for new accounts, except that new accounts may be established by participants in group retirement plans if the Fund is established as an investment option under the plans before the Closing Date. The Fund will continue to accept subsequent investments until the Liquidation Date, except that subsequent investments made by check or pursuant to TeleTransfer or Automatic Asset Builder no longer will be accepted after April 17, 2025. However, subsequent investments by Individual Retirement Accounts and retirement plans sponsored by BNY Mellon Investment Adviser, Inc. or its affiliates (together, "BNYM Adviser Retirement Plans") pursuant to TeleTransfer or Automatic Asset Builder (but not by check) will be accepted after April 17, 2025.

Effective on the Closing Date, the front-end sales load applicable to purchases of the Fund's Class A shares will be waived on investments made in the Fund's Class A shares. In addition, as of that date, the contingent deferred sales charge ("CDSC") applicable to redemptions of Class C shares and Class A shares of the Fund will be waived on any redemption of such Fund shares.

To the extent subsequent investments are made in the Fund on or after the Closing Date, the Fund's distributor will not compensate financial institutions (which may include banks, securities dealers and other industry professionals) for selling Class C shares or Class A shares subject to a CDSC at the time of purchase.

Fund shares held on the Liquidation Date in BNYM Adviser Retirement Plans will be exchanged for Wealth shares of Dreyfus Government Cash Management ("DGCM"). Investors may obtain a copy of the Prospectus of DGCM by calling 1-800-373-9387.

BNY Mellon Global Dynamic Bond Income Fund



Summary Prospectus | February 28, 2025

Class	Ticker
A	DGDAX
C	DGDCX
I	DGDIX
Y	DGDYX

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/literaturecenter. 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 February 28, 2025 (each as revised or supplemented), are incorporated by reference into this summary prospectus.

Investment Objective

The fund seeks total return (consisting of income and capital appreciation).

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 15 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)	4.50	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	.40	.40	.40	.40
Distribution (12b-1) fees	none	.75	none	none
Other expenses:				
Shareholder services fees	.25	.25	none	none
Miscellaneous other expenses	.48	.93	.44	.36
Total other expenses	.73	1.18	.44	.36
Total annual fund operating expenses	1.13	2.33	.84	.76
Fee waiver and/or expense reimbursement ⁺	(.23)	(.68)	(.19)	(.11)
Total annual fund operating expenses (after fee waiver and/or expense reimbursement)	.90	1.65	.65	.65

* 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.

⁺ The fund's investment adviser, BNY Mellon Investment Adviser, Inc., has contractually agreed, until February 28, 2026, to waive receipt of its fees and/or assume the direct expenses of the fund, so that the direct expenses of none of the fund's share classes (excluding Rule 12b-1 fees, shareholder services fees, taxes, interest expense, brokerage commissions, commitment fees on borrowings and extraordinary expenses) exceed .65%. On or after February 28, 2026, BNY Mellon Investment Adviser, Inc. may terminate this expense limitation agreement at any time.

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. The one-year example and the first year of the three-, five- and ten-years examples are based on net operating expenses, which reflect the expense limitation agreement by BNY Mellon Investment Adviser, Inc. 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)	\$538	\$771	\$1,023	\$1,743
Class C (with redemption at end of period)	\$268	\$662	\$1,184	\$2,614
Class C (without redemption at end of period)	\$168	\$662	\$1,184	\$2,614
Class I (with or without redemption at end of period)	\$66	\$249	\$447	\$1,020
Class Y (with or without redemption at end of period)	\$66	\$232	\$412	\$932

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 124.83% 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 bonds and other instruments that provide investment exposure to global bond markets. The fund normally invests opportunistically in bonds and derivatives and other instruments that provide investment exposure to global bond and currency markets in seeking to produce positive returns across economic cycles. The fund seeks to provide a minimum average annual total return of USD 30-day Compounded SOFR plus 3%, before fees and expenses, over a five-year period. There can be no guarantee that the fund will be able to provide such returns and you may lose money by investing in the fund.

The fund's investments are focused globally among the developed and emerging capital markets of the world. The fund's sub-adviser, Newton Investment Management Limited, an affiliate of BNY Mellon Investment Adviser, Inc., employs a dynamic approach in allocating the fund's assets globally, principally among government bonds, foreign country sovereign debt, debt obligations of supranational entities, emerging market sovereign debt, investment grade and high yield ("junk") corporate instruments, and currencies. Under normal market conditions, the fund invests significantly (at least 40% of its net assets) in issuers organized or located outside the United States, whose primary listing exchange for securities is located outside the United States, whose largest amount of revenues are derived from countries outside the United States or whose reporting currencies are other than U.S. dollars.

The fund's sub-adviser has considerable latitude in allocating the fund's investments and in selecting securities and derivative instruments to implement the fund's investment approach. The fund, however, normally invests at least 10% of its net assets in each of government bonds, emerging market sovereign debt, and investment grade and high yield corporate instruments. The fund generally will sell investments when themes change or when the sub-adviser determines that a particular fixed-income asset class or sector is no longer considered attractive in absolute terms, or the issuer's prospects have changed.

The fund may invest in bonds of any maturity or duration. A bond's maturity is the length of time until the principal must be fully repaid with interest. Average effective portfolio maturity is an average of the maturities of bonds held by the fund directly and the bonds underlying derivative instruments entered into by the fund, if any, adjusted to reflect provisions or market conditions that may cause a bond's principal to be repaid earlier than at its stated maturity. Duration is an indication of an investment's "interest rate risk," or how sensitive a bond or the fund's portfolio may be to changes in interest rates.

The fund will use, to a significant degree, derivative instruments in connection with its investment strategy, including as a substitute for investing directly in bonds and currencies, to increase returns, to manage credit, interest rate or currency risk, or to manage the effective maturity or duration of the fund's portfolio. The fund also may use derivative instruments as part of a hedging strategy or for other purposes related to the management of the fund. The derivative instruments in which the fund may invest typically include options, futures and options on futures (including those relating to securities, indices, foreign currencies and interest rates), forward contracts and swap agreements.

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.

- *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.
- *Fixed-income market risk:* The market value of a fixed-income security may decline due to general market conditions that are not specifically related to a particular company, such as real or perceived adverse economic conditions, changes in the outlook for corporate earnings, changes in interest or currency rates or adverse investor sentiment generally. The fixed-income securities market can be susceptible to increases in volatility and decreases in liquidity. Liquidity can decline unpredictably in response to overall economic conditions or credit tightening. Increases in volatility and decreases in liquidity may be caused by a rise in interest rates (or the expectation of a rise in interest rates). An unexpected increase in fund redemption requests, including requests from shareholders who may own a significant percentage of the fund's shares, which may be triggered by market turmoil or an increase in interest rates, could cause the fund to sell its holdings at a loss or at undesirable prices and adversely affect the fund's share price and increase the fund's liquidity risk, fund expenses and/or taxable distributions. Federal Reserve policy in response to market conditions, including with respect to interest rates, may adversely affect the value, volatility and liquidity of dividend and interest paying securities. Policy and legislative changes worldwide are affecting many aspects of financial regulation. The impact of these changes on the markets and the practical implications for market participants may not be fully known for some time.
- *Interest rate risk:* Prices of bonds and other fixed rate fixed-income securities tend to move inversely with changes in interest rates. Typically, a rise in rates will adversely affect fixed-income securities and, accordingly, will cause the value of the fund's investments in these securities to decline. A wide variety of market factors can cause interest rates to rise, including central bank monetary policy, rising inflation and changes in general economic conditions. It is difficult to predict the pace at which central banks or monetary authorities may increase (or decrease) interest rates or the timing, frequency, or magnitude of such changes. During periods of very low interest rates, which occur from time to time due to market forces or actions of governments and/or their central banks, including the Board of Governors of the Federal Reserve System in the U.S., the fund may be subject to a greater risk of principal decline from rising interest rates. When interest rates fall, the fund's investments in new securities may be at lower yields and may reduce the fund's income. Changing interest rates may have unpredictable effects on markets, may result in heightened market volatility and may detract from fund performance. The magnitude of these fluctuations in the market price of fixed-income securities is generally greater for securities with longer effective maturities and durations because such instruments do not mature, reset interest rates or become callable for longer periods of time. Unlike investment grade bonds, however, the prices of high yield ("junk") bonds may fluctuate unpredictably and not necessarily inversely with changes in interest rates.
- *Foreign investment risk:* To the extent the fund invests in foreign securities, the fund's performance will be influenced by political, social and economic factors affecting investments in foreign issuers. Special risks associated with investments in foreign issuers include exposure to currency fluctuations, less liquidity, less developed or less efficient trading markets, lack of comprehensive company information, political and economic instability and differing auditing and legal standards.
- *Foreign government obligations and securities of supranational entities risk:* Investing in foreign government obligations, debt obligations of supranational entities and the sovereign debt of foreign countries, including emerging market countries, creates exposure to the direct or indirect consequences of political, social or economic changes in the countries that issue the securities or in which the issuers are located. A governmental obligor may default on its obligations. Some sovereign obligors have been among the world's largest debtors to commercial banks, other governments, international financial organizations and other financial institutions. These obligors, in the past, have experienced substantial difficulties in servicing their external debt obligations, which led to defaults on certain obligations and the restructuring of certain indebtedness.
- *Emerging market risk:* The securities of issuers located or doing substantial business in emerging market countries tend to be more volatile and less liquid than the securities of issuers located in countries with more mature economies. Emerging markets generally have less diverse and less mature economic structures and less stable political systems than those of developed countries. Investments in these countries may be subject to political, economic, legal, market and currency risks. Special risks associated with investments in emerging market issuers may include a lack of publicly available information, a lack of uniform disclosure, accounting and financial reporting and recordkeeping standards and limited investor protections applicable in

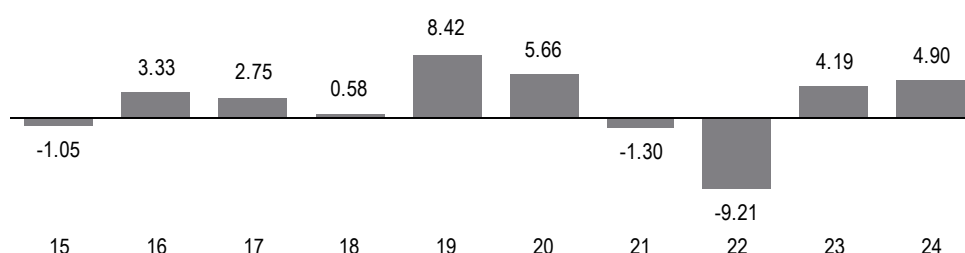
developed economies. The risks also may include unpredictable political and economic policies, the imposition of capital controls and/or foreign investment limitations by a country, nationalization of businesses and the imposition of sanctions or restrictions on certain investments by other countries, such as the United States.

- **Foreign currency risk:** Investments in foreign currencies are subject to the risk that those currencies will decline in value relative to the U.S. dollar or, in the case of hedged positions, that the U.S. dollar will decline relative to the currency being hedged. Foreign currencies, particularly the currencies of emerging market countries, are also subject to risks caused by inflation, interest rates, budget deficits and low savings rates, political factors and government intervention and controls.
- **Derivatives risk:** A small investment in derivatives could have a potentially large impact on the fund's performance. The use of derivatives involves risks different from, or possibly greater than, the risks associated with investing directly in the underlying assets, and the fund's use of derivatives may result in losses to the fund. Derivatives in which the fund may invest can be highly volatile, illiquid and difficult to value, and there is the risk that changes in the value of a derivative held by the fund will not correlate with the underlying assets or the fund's other investments in the manner intended.
- **Leverage risk:** The use of leverage, such as entering into futures contracts or forward currency contracts, may magnify the fund's gains or losses. Because many derivatives have a leverage component, adverse changes in the value of the underlying asset or reference rate can result in a loss substantially greater than the amount invested in the derivative itself.
- **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. The market for below investment grade securities may be less liquid and therefore these securities may be harder to value or sell at an acceptable price, especially during times of market volatility or decline. Investments in foreign securities, particularly those of issuers located in emerging markets, tend to have greater exposure to liquidity risk than domestic securities.
- **Credit risk:** Failure of an issuer of a security to make timely interest or principal payments when due, or a decline or perception of a decline in the credit quality of the security, can cause the security's price to fall. The lower a security's credit rating, the greater the chance that the issuer of the security will default or fail to meet its payment obligations.
- **High yield securities risk:** High yield ("junk") securities involve greater credit risk, including the risk of default, than investment grade securities, and are considered predominantly speculative with respect to the issuer's ability to make principal and interest payments. These securities are especially sensitive to adverse changes in general economic conditions, to changes in the financial condition of their issuers and to price fluctuation in response to changes in interest rates. During periods of economic downturn or rising interest rates, issuers of below investment grade securities may experience financial stress that could adversely affect their ability to make payments of principal and interest and increase the possibility of default.
- **Issuer risk:** A security's market value may decline for a number of reasons which directly relate to the issuer, such as management performance, financial leverage and reduced demand for the issuer's products or services, or factors that affect the issuer's industry, such as labor shortages or increased production costs and competitive conditions within an industry.
- **Government securities risk:** Not all obligations of the U.S. government, its agencies and instrumentalities are backed by the full faith and credit of the U.S. Treasury. Some obligations are backed only by the credit of the issuing agency or instrumentality, and in some cases there may be some risk of default by the issuer. Any guarantee by the U.S. government or its agencies or instrumentalities of a security held by the fund does not apply to the market value of such security or to shares of the fund itself.
- **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 the Bloomberg Global Aggregate Index, a broad measure of market performance, the FTSE One-Month U.S. Treasury Bill Index, and USD 30-Day Compounded SOFR. 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

2020, Q2: 5.35

Worst Quarter

2022, Q2: (6.97)

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 12/31/24)

Class	1 Year	5 Years	10 Years
Class A returns before taxes	0.16%	-0.24%	1.25%
Class A returns after taxes on distributions	-1.07%	-1.66%	-0.07%
Class A returns after taxes on distributions and sale of fund shares	0.09%	-0.75%	0.40%
Class C returns before taxes	3.13%	-0.09%	0.94%
Class I returns before taxes	5.10%	0.93%	1.96%
Class Y returns before taxes	5.19%	1.04%	2.03%
Bloomberg Global Aggregate Index (Hedged)* reflects no deductions for fees, expenses or taxes	3.40%	0.48%	2.01%
FTSE One-Month U.S. Treasury Bill Index reflects no deductions for fees, expenses or taxes	5.38%	2.47%	1.74%
USD 30-Day Compounded SOFR⁺ reflects no deductions for fees, expenses or taxes	5.21%	2.39%	N/A

* 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 October 31, 2024.

⁺ The first value date of the Secured Overnight Financing Rate (SOFR) was published April 2, 2018.

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 Limited (NIM), to serve as the fund's sub-adviser.

Ella Hoxha, Howard Cunningham and Scott Freedman are the fund's primary portfolio managers. Mr. Cunningham has been a primary portfolio manager of the fund since the fund's inception in 2011. Ms. Hoxha and Mr. Freedman have been primary portfolio managers of the fund since December 2023 and April 2024, respectively. Ms. Hoxha is head of the fixed-income team at NIM. Mr. Cunningham is a credit analyst and investment manager and serves as head of credit at NIM. Mr. Freedman is a portfolio manager and credit analyst and a member of the fixed-income team at NIM.

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.