# iBONDS® ETF MATURITIES CASE STUDY



December 2021 Update

# iBonds ETFs Combine Two Great Investment Ideas: Bond Ladders and Funds

In January 2010, iShares launched a series of iBonds ETFs, the first term-maturity fixed income ETFs. These funds offer investors a new way to think about bond investing: ETFs that are designed to mature at a specific date, like a bond; trade similar to a stock; and offer diversification like a fund. The iBonds ETFs allow investors a similar experience to owning a bond ladder, using ETFs that may offer more liquidity and diversification than individual bonds.

Designed to:

MATURE, like a Bond TRADE, like a Stock DIVERSIFY, like a Fund

See how iBonds Compare	iBonds ETFs	Individual bonds	Bond ETFs	Mutual funds
Scalable across client accounts	<b>\</b>		<b>\</b>	<b>\</b>
Diversified portfolio	<b>\</b>		<b>\</b>	<b>/</b>
Monthly distributions	<b>/</b>		<b>\</b>	<b>\</b>
Exchange traded / intra-day prices	<b>/</b>		<b>\</b>	
Set maturity date	<b>/</b>	<b>\</b>		

#### Case Study: Municipal and Corporate iBonds

Since launching in January 2010, twelve investment grade, ten municipal, one high yield and one Treasury iBond ETF has successfully liquidated. All twenty-four iBonds ETFs provided a total return experience that closely approximated holding a portfolio of individual bonds. A table with the outcome of every maturity to date can be found on pages 6 & 7.

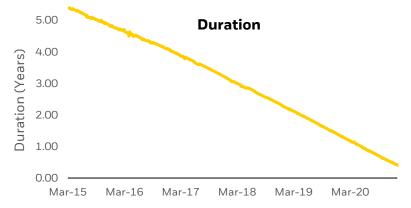
The monthly income distributions and final NAV payment will vary as bonds are entering the portfolios at different yield levels. Portfolio rebalancing, sampling, cash reinvestment and transaction costs can contribute to the variability in realized total returns.

In addition to the municipal and IG corporate funds, iShares launched High Yield and Income iBonds ETFs in May 2019 and Treasury iBonds in February 2020. The first funds in these series, IBHA and IBTA, liquidated in December 2021.

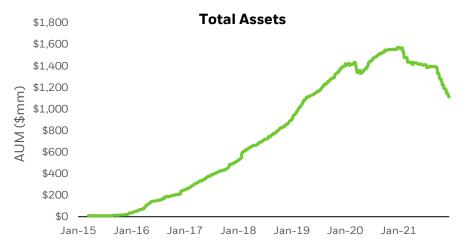
### 2021 IG Corporate iBond Maturity – IBDM

At inception, IBDM had about 6.8 years until its target maturity date (March 2015 to December 2021) and a duration of 5.40 years. The ETF's duration declined as the holdings approached maturity and the fund approached its maturity date.

IBDM's duration declined linearly like an individual cash bond.

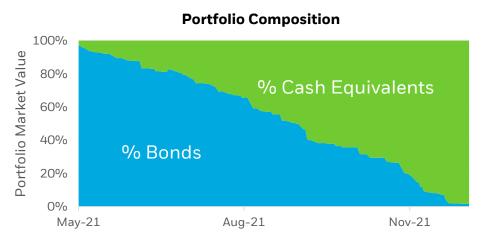


IBDM grew from \$9.9mm to \$1.57bn – then, the fund had redemptions of \$458mm in the last 11 months. This is consistent with the behavior of other iBonds, as some holders seek to invest in the next ladder rung before liquidation.



IBDM grew from a \$9.9mm initial seed amount to \$1.57bn in early 2021.

Lastly, in the final six months of the fund's life, proceeds from coupons and maturities were invested into cash equivalents. This culminated in a final distribution of \$24.73 to shareholders on December 15<sup>th</sup>, in line with the closing price on the final day of trading.



Portfolio holdings shifted to cash as the maturity date approached.

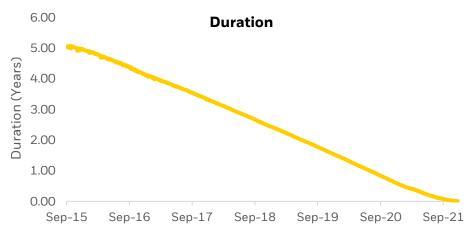


Source: BlackRock, Bloomberg as of 12/15/21

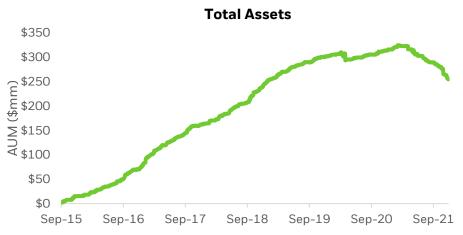
### 2021 Municipal iBond Maturity – IBMJ

At inception, IBMJ had about 6.2 years until its target maturity date (September 2015 to December 2021) and a duration of 5.05. IBMJ's duration declined as its holdings approached maturity and the fund approached its maturity date. When bonds matured between January and December of 2021, the proceeds were invested in short-term tax-exempt money market instruments (cash equivalents).

# IBMJ's duration declined linearly like an individual cash bond

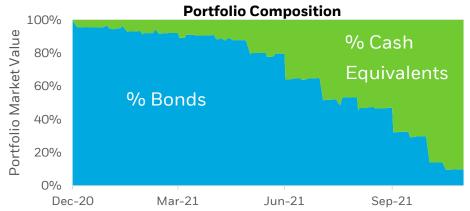


IBMJ grew from \$2.5mm to \$324mm – then, the fund had redemptions of \$70mm in the last 10 months. This is consistent with the behavior of other iBonds, as some holders seek to invest in the next ladder rung before liquidation.



IBMJ grew from its \$2.5mm initial seed amount to \$324mm in 2021.

Lastly, in the final year of the fund's life, proceeds from coupons and maturities were invested into cash equivalents. This culminated in a final distribution of \$25.58 to shareholders on December  $1^{\rm st}$ , in line with the closing price on the final day of trading. Note that the graph below appears jagged due to the nature of municipal bond maturities, which tend to occur on the  $1^{\rm st}$  and  $15^{\rm th}$  of the month.



Portfolio holdings shifted to cash as the maturity date approached.

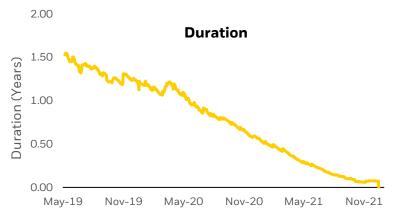
iShares. by BlackRock

Source: BlackRock, Bloomberg as of 12/1/21

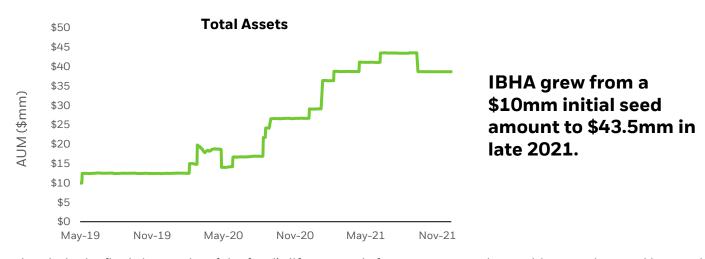
### 2021 HY & Income iBond Maturity – IBHA

At inception, IBHA had about 2.6 years until its target maturity date (May 2019 to December 2021) and a duration of 1.53 years. The ETF's duration declined as the holdings approached maturity and the fund approached its maturity date.

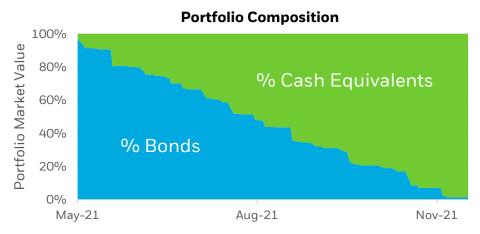
IBHA's duration declined linearly like an individual cash bond.



IBHA grew from \$10mm to \$43.5mm – then, the fund had redemptions of \$4.9mm in the last 3 months. This is similar to the behavior of other iBonds, as some holders seek to invest in the next ladder rung before liquidation.



Lastly, in the final six months of the fund's life, proceeds from coupons and maturities were invested into cash equivalents. This culminated in a final distribution of \$24.13 to shareholders on December 15<sup>th</sup>, in line with the closing price on the final day of trading.



Portfolio holdings shifted to cash as the maturity date approached.

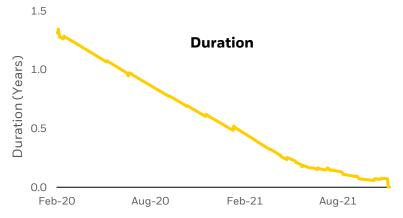


Source: BlackRock, Bloomberg as of 12/15/21

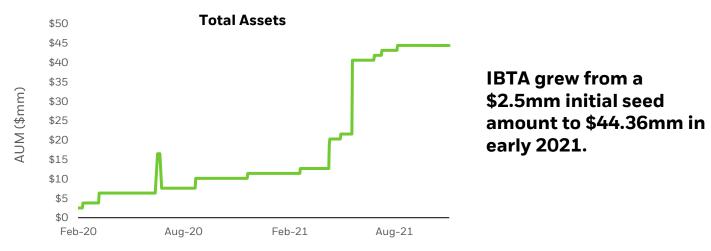
### 2021 Treasury iBond Maturity – IBTA

At inception, IBTA had about 1.75 years until its target maturity date (February 2020 to December 2021) and a duration of 1.31 years. The ETF's duration declined as the holdings approached maturity and the fund approached its maturity date.

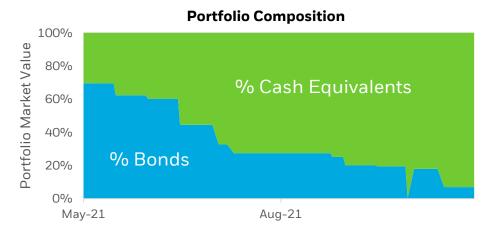
IBTA's duration declined linearly like an individual cash bond.



IBTA grew from \$2.5mm to \$44.36mm without any redemptions in the last 12 months. Contrary to other iBonds, investors in IBTA did not redeem shares of the fund in the final months prior to its maturity.



Lastly, in the final six months of the fund's life, proceeds from coupons and maturities were invested into cash equivalents. This culminated in a final distribution of \$25.35 to shareholders on December 1<sup>st</sup>, in line with the closing price on the final day of trading.



Portfolio holdings shifted to cash as the maturity date approached.



Source: BlackRock, Bloomberg as of 12/02/21

## Performance history of liquidated iBonds

Summary of	Municipal iBonds									
iBonds ETF Performance	MUAA (2012)	MUAB (2013)	MUAC (2014)	IBMD (2015)	IBME (2016)	IBMF (2017)	IBMG (2018)	IBMH (2019)	IBMI (2020)	IBMJ (2021)
Inception Date	1/7/2010	1/7/2010	1/7/2010	1/7/2010	1/7/2010	1/7/2010	3/21/2013	2/4/2014	8/12/2014	9/1/2015
Termination Date	8/15/2012	8/15/2013	8/15/2014	9/1/2015	9/1/2016	9/1/2017	9/1/2018	9/3/2019	9/1/2020	12/1/2021
Initial YTM at Inception	0.96%	1.35%	1.68%	2.20%	2.60%	2.97%	1.18%	1.36%	1.56%	1.81%
Less Fund Expenses	-0.30%	-0.30%	-0.30%	-0.27%	-0.26%	-0.25%	-0.21%	-0.19%	-0.18%	-0.18%
Net YTM	0.66%	1.05%	1.38%	1.93%	2.34%	2.72%	0.97%	1.17%	1.38%	1.63%
NAV Total Return (Since Inception)	0.69%	1.09%	1.41%	1.83%	2.23%	2.51%	1.10%	1.36%	1.49%	1.63%
Performance Difference	0.03%	0.04%	0.03%	-0.10%	-0.11%	-0.21%	0.13%	0.19%	0.11%	-0.00%
Initial NAV	\$50.38	\$50.06	\$50.03	\$50.49	\$24.83	\$25.07	\$25.14	\$25.00	\$25.00	\$25.00
Final NAV	\$50.62	\$50.50	\$51.18	\$52.57	\$26.46	\$27.22	\$25.45	\$25.45	\$25.48	\$25.58
Difference in NAV	\$0.24	\$0.44	\$1.15	\$2.08	\$1.63	\$2.15	\$0.31	\$0.45	\$0.48	\$0.58
Income per Share	\$0.67	\$1.54	\$2.11	\$3.26	\$2.19	\$2.87	\$1.22	\$1.46	\$1.79	\$1.98

Summary of	Corporate iBonds											
iBonds ETF Performance	IBCB (Ex-Fin Mar 2016)	IBDA (Mar 2016)	IBDF (Mar 2017)	IBDJ (Dec 2017)	IBCC (Ex-Fin Mar 2018)	IBDB (Mar 2018)	IBDH (Dec 2018)	IBDK (Dec 2019)	IBDC (Mar 2020)	IBCD (Ex-Fin Mar 2020)	IBDL (Dec 2020)	IBDM (Dec 2021)
Inception Date	4/17/2013	7/9/2013	5/27/2014	3/10/2015	4/17/2013	7/9/2013	5/28/2014	5/10/2015	7/9/2013	4/17/2013	12/2/2014	3/10/2015
Termination Date	3/31/2016	3/31/2016	12/15/2016	12/15/2017	3/15/2018	3/26/2018	12/18/2018	12/16/2019	3/31/2020	3/31/2020	12/16/2020	12/15/2021
Initial YTM at Inception	0.73%	1.23%	0.80%	1.41%	1.26%	2.33%	1.71%	2.18%	3.33%	2.00%	2.74%	2.78%
Less Fund Expenses <sup>1</sup>	-0.10%	-0.10%	-0.10%	-0.10%	-0.10%	-0.10%	-0.10%	-0.10%	-0.10%	-0.10%	-0.10%	-0.10%
Net YTM	0.63%	1.13%	0.70%	1.31%	1.16%	2.23%	1.61%	2.08%	3.23%	1.90%	2.64%	2.68%
NAV Total Return (Since Inception)	0.59%	1.02%	0.66%	1.28%	1.11%	2.06%	1.65%	2.08%	2.93%	1.80%	2.35%	2.29%
Performance Difference	-0.04%	-0.11%	-0.04%	-0.03%	-0.05%	-0.17%	0.04%	0.00%	-0.30%	-0.10%	-0.29%	-0.39%
Initial NAV	\$99.50	\$99.95	\$25.00	\$24.75	\$24.88	\$24.99	\$25.07	\$24.75	\$24.99	\$24.88	\$25.00	\$24.75
Final NAV	\$99.50	\$100.82	\$25.03	\$24.84	\$24.64	\$25.60	\$25.18	\$24.87	\$26.06	\$24.58	\$25.20	\$24.73
Difference in NAV	\$0.00	\$0.87	\$0.03	\$0.09	-\$0.24	\$0.61	\$0.11	\$0.12	\$1.07	-\$0.30	\$0.20	-\$0.02
Income per Share	\$1.72	\$1.91	\$0.39	\$0.78	\$1.57	\$1.85	\$1.76	\$2.32	\$3.95	\$3.33	\$3.34	\$3.80

Performance data represents past performance and does not guarantee future results. Investment return and principal value will fluctuate with market conditions and may be lower or higher when you sell your shares. For additional information on performance see <a href="https://www.iShares.com">www.iShares.com</a>.

¹: For IBMD, IBME, IBMF, IBMG, and IBMH, a contractual fee waiver of 12 bps was in effect for a net expense ratio of 18 bps, effective 5/23/2014. IBCB, IBDA, IBDC and IBCD had contractual fee waivers for any acquired fund fees and expenses for a net expense ratio of 10 bps, effective through termination date of the fund. Fees for IBMD, IBME, IBMF, IBMG, and IBMH were prorated. IBMD changed its ticker from MUAD, IBME changed its ticker from MUAF, IBMG changed its ticker from MUAG, and IBMH changed its ticker from MUAH on 7/7/2014. All the S&P AMT-Free Municipal Series indices extended their maturity from August 15th to September 1st of each calendar year effective 8/1/2014.



## **Performance history of liquidated iBonds**

Summary of	High Yield & Income iBonds					
iBonds ETF Performance	IBHA (2021)					
Inception Date	5/7/2019					
Termination Date	12/15/2021					
Initial YTM at Inception	5.20%					
Less Fund Expenses	0.35%					
Net YTM	4.85%					
NAV Total Return (Since Inception)	1.67%					
Performance Difference <sup>1</sup>	-3.18%					
Initial NAV	\$25.00					
Final NAV	\$24.13					
Difference in NAV	-\$0.87					
Income per Share	are \$1.91					

Summary of	Treasury iBonds					
iBonds ETF Performance	IBTA (2021)					
Inception Date	2/25/2020					
Termination Date	12/3/2021					
Initial YTM at Inception	1.01%					
Less Fund Expenses	0.07%					
Net YTM	0.94%					
NAV Total Return (Since Inception)	0.86%					
Performance Difference	-0.08%					
Initial NAV	\$25.03					
Final NAV	\$25.35					
Difference in NAV	\$0.32					
Income per Share	\$0.08					

Performance data represents past performance and does not guarantee future results. Investment return and principal value will fluctuate with market conditions and may be lower or higher when you sell your shares. For additional information on performance see <a href="https://www.iShares.com">www.iShares.com</a>.

<sup>1</sup>IBHA's performance difference may vary as a result of the index composition transitioning to a composite high yield and BBB index 2.5 years prior to maturity. The initial YTM is based on a portfolio composed of 100% high yield bonds.



#### Frequently Asked Questions About iBonds Maturities

#### 1. When do the individual bonds within iBonds ETFs start to mature?

The underlying bonds will mature through a set time period. See the table below for more details. When the last bond matures, the ETF will then delist from the stock exchange. Investors should receive their proceeds approximately two days after the fund ceases trading, though this may vary depending on their specific brokerage.

Sector	Series	Underlying Bond Maturity Dates	Reinvestment of proceeds in final year
Municipals	Dec Series (2021 – 2028)	Jan 1 to December 15	Tax exempt cash equivalents within 12 months of maturity
Investment Grade Corp	Mar Series (2023) Dec Series (2020-2030)	April 1 to March 31 Jan 1 to December 15	Cash equivalents within 6 months of maturity <sup>1</sup>
High Yield Corp	Dec Series (2021- 2026)	Jan 1 to December 15	Cash equivalents within 6 months of maturity
Treasuries	Dec Series (2021- 2030)	Jan 1 to December 15	Cash equivalents within 6 months of maturity

<sup>&</sup>lt;sup>1</sup>The iShares iBonds Mar 2023 Term Corporate ETF (IBDD) will transition to cash and cash equivalents within the final 12 months of maturity.

#### 2. What will I receive when the iBond matures?

Investors will receive the final net asset value per share, which includes the proceeds from bond maturities and any undistributed interest. For the investment grade corporate, high yield and treasury iBonds ETFs, the proceeds will be reinvested in bonds for the first six months and then reinvested into cash and cash equivalents in the final six months. The municipal iBonds will purchase tax-exempt cash equivalents as the bonds mature. Please review each fund's prospectus and SAI for more information.

#### 3. How will the distribution be treated from a tax perspective?

The distribution, as reflected on Form 1099s to be received by shareholders, may have the following classifications:

- □ Liquidation Distribution one form of a return of capital that is not taxable to the investor, but each investor needs to determine their cost basis to verify if they had a capital gain or loss.
- Exempt-Interest Dividend not subject to income tax as long as the ETF had more than 50% assets invested in muni investments. This is the type of distribution the Municipal iBonds have paid since inception.
- ☐ **Taxable Interest Dividend** subject to income tax. This is the type of distribution the Corporate iBonds have paid since inception.



# **Detailed Structure Comparison**

	iBonds ETFs	Individual bonds	Traditional Bond ETFs	Mutual funds	
Diversified portfolio	Yes	No	Yes	Yes	
Distributions	Monthly	Semi-annual	Monthly	Monthly	
Set maturity date	Yes	Yes	No	No	
Trading	On Exchange	отс	On Exchange	Transact with Fund Sponsor at NAV	
Duration declines over time	Yes	Yes	No	No	
Transparent intraday prices	Yes	No	Yes	No	
Liquidity	Trade on exchanges intraday at market price, which may be greater or less than its NAV		Trade on exchanges intraday at market price, which may be greater or less than its NAV	Accessed directly through the fund company or through a select broker. Bought and sold once per day	
Cost and expenses	Expense ratio + transaction/brokerage costs	Transaction/markup costs + brokerage costs (if applicable)	Expense ratio + transaction/brokerage costs	Expense ratio + any sales loads/redemption fees + other expenses (12b-1 fees)	



#### Important Information Regarding iShares ETFs

Carefully consider the Funds' investment objectives, risk factors, and charges and expenses before investing. This and other information can be found in the Funds' prospectuses or, if available, the summary prospectuses which may be obtained by visiting www.iShares.com or www.blackrock.com. Read the prospectus carefully before investing.

#### Investing involves risk, including possible loss of principal.

Fixed income risks include interest-rate and credit risk. Typically, when interest rates rise, there is a corresponding decline in bond values. Credit risk refers to the possibility that the bond issuer will not be able to make principal and interest payments. There may be less information on the financial condition of municipal issuers than for public corporations. The market for municipal bonds may be less liquid than for taxable bonds. Some investors may be subject to federal or state income taxes or the Alternative Minimum Tax (AMT). Capital gains distributions, if any, are taxable. Funds that concentrate investments in specific industries, sectors, markets or asset classes may underperform or be more volatile than other industries, sectors, markets or asset classes and than the general securities market.

When comparing stocks or bonds and iShares Funds, it should be remembered that management fees associated with fund investments, like iShares Funds, are not borne by investors in individual stocks or bonds. There is no guarantee that any fund will pay dividends.

Shares of ETFs trade at market price, which may be greater or less than net asset value. The iShares® iBonds® ETFs ("Funds") will terminate on or about the month and year in each Fund's name. An investment in the Fund(s) is not guaranteed, and an investor may experience losses, including near or at the termination date. Unlike a direct investment in a bond that has a level coupon payment and a fixed payment at maturity, the Fund(s) will make distributions of income that vary over time. In the final months of each Fund's operation, as the bonds it holds mature, its portfolio will transition to cash and cash-like instruments. As a result, its yield will tend to move toward prevailing money market rates (and in the case of the muni iBonds ETFs, tax-exempt money market rates) and may be lower than the yields of the bonds previously held by the Fund and lower than prevailing yields in the bond market. As the Fund approaches its termination date, its holdings of money market or similar funds may increase, causing the Fund to incur the fees and expenses of these funds.

Following the Fund's termination date, the Fund will distribute substantially all of its net assets, after deduction of any liabilities, to then-current investors without further notice and will no longer be listed or traded. The Funds' distributions and liquidation proceeds are not predictable at the time of investment and the Funds do not seek to return any predetermined amount.

The rate of Fund distribution payments may adversely affect the tax characterization of an investor's returns from an investment in the Fund relative to a direct investment in bonds. If the amount an investor receives as liquidation proceeds upon the Fund's termination is higher or lower than the investor's cost basis, the investor may experience a gain or loss for tax purposes.

Diversification and asset allocation may not protect against market risk or loss of principal. Buying and selling shares of ETFs may result in brokerage commissions.

The Funds are distributed by BlackRock Investments, LLC (together with its affiliates, "BlackRock").

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