

# Morgan Stanley

## Growth Portfolio

The Fund is intended to be a funding vehicle for variable annuity contracts and variable life insurance policies offered by the separate accounts of certain life insurance companies.



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# Consolidated Expense Example (unaudited)

## Growth Portfolio

As a shareholder of the Growth Portfolio (the “Fund”), you incur two types of costs: (1) insurance company charges; and (2) ongoing costs, which may include advisory fees, administration fees, distribution (12b-1) fees and other Fund expenses. This example is intended to help you understand your ongoing costs (in dollars) of investing in the Fund and to compare these costs with the ongoing costs of investing in other mutual funds.

This example is based on an investment of \$1,000 invested at the beginning of the six-month period ended December 31, 2023 and held for the entire six-month period.

### Actual Expenses

The table below provides information about actual account values and actual expenses. You may use the information in this table, together with the amount you invested, to estimate the expenses that you paid over the period. Simply divide your account value by \$1,000 (for example, an \$8,600 account value divided by \$1,000 = 8.6), then multiply the result by the number in the table under the heading entitled “Actual Expenses Paid During Period” to estimate the expenses you paid on your account during this period.

### Hypothetical Example for Comparison Purposes

The table below provides information about hypothetical account values and hypothetical expenses based on the Fund’s actual expense ratio and an assumed rate of return of 5% per year before expenses, which is not the Fund’s actual return. The hypothetical account values and expenses may not be used to estimate the actual ending account balance or expenses you paid for the period. You may use this information to compare the ongoing costs of investing in the Fund and other funds. To do so, compare this 5% hypothetical example with the 5% hypothetical examples that appear in the shareholder reports of the other funds.

Please note that the expenses shown in the table are meant to highlight your ongoing costs only and do not reflect any insurance company charges. Therefore, the table below is useful in comparing ongoing costs, but will not help you determine the relative total cost of owning different funds. In addition, if these insurance company charges were included, your costs would have been higher.

	Beginning Account Value 7/1/23	Actual Ending Account Value 12/31/23	Hypothetical Ending Account Value	Actual Expenses Paid During Period*	Hypothetical Expenses Paid During Period*	Net Expense Ratio During Period**
Growth Portfolio Class I	\$1,000.00	\$1,129.40	\$1,022.38	\$3.01	\$2.85	0.56%
Growth Portfolio Class II	1,000.00	1,128.10	1,021.12	4.34	4.13	0.81

\* Expenses are calculated using each Fund Class’ annualized net expense ratio (as disclosed), multiplied by the average account value over the period and multiplied by 184/365 (to reflect the most recent one-half year period). Refer to Note B in the Notes to Consolidated Financial Statements for discussion of prior period transfer agency fees that were reimbursed in the current period.

\*\* Annualized.

# Investment Overview (unaudited)

## Growth Portfolio

The Fund seeks long-term capital appreciation by investing primarily in growth-oriented equity securities of large capitalization companies.

## Performance

For the fiscal year ended December 31, 2023, the Fund's Class I shares had a total return based on net asset value and reinvestment of distributions per share of 48.66%, net of fees, and 48.32%, net of fees, for Class II shares. The Fund's Class I and Class II shares outperformed the Fund's benchmark, the Russell 1000® Growth Index (the "Index"), which returned 42.68%.

Please keep in mind that double-digit returns are highly unusual and cannot be sustained. Investors should also be aware that these returns were primarily achieved during favorable market conditions.

## Factors Affecting Performance

- Surprised by the economy's resilience amid rising interest rates and persistently high (but falling) inflation, U.S. stocks performed well in 2023. The year saw its share of uncertainty, with recession fears dominating the start of the year, a regional banking crisis triggered by high interest rates, concerns about the U.S. government's debt levels and budget, and multiple geopolitical flashpoints. However, by year-end, the U.S. Federal Reserve signaled it was likely finished lifting interest rates after pausing the hiking cycle halfway through the year. This triggered a stock market rally and retreat in long-term bond yields in the final two months of 2023. Additionally, excitement about artificial intelligence drove a narrow group of mega-cap technology stocks to significantly outperform, adding meaningfully to the broader market's gain in the year.
- Large-cap growth equities, as measured by the Index, advanced over the year. All sectors in the Index were positive, led by information technology, communication services and consumer discretionary. Energy, utilities and consumer staples posted the smallest gains in the Index.
- Counterpoint Global seeks high quality companies, which we define primarily as those with sustainable competitive advantages. We manage focused portfolios that are highly differentiated from the benchmark, with securities weighted on our assessment of the quality of the company and our conviction. The value added or detracted in any period of time will result from stock selection, given our philosophy and process.
- The long-term investment horizon and conviction-weighted investment approach embraced by the team since 1998 can result in periods of performance deviation from the benchmark and peers. The Fund outperformed the Index in this reporting period due to favorable stock selection and sector allocations.
- Stock selection in industrials was the greatest contributor to relative outperformance. A leading global ridesharing services platform that has leveraged its network, on-demand workforce and technology to establish additional marketplace solutions addressing product delivery was the leading contributor in the sector and across the portfolio. The company reported strong fundamental results characterized by continued healthy revenue growth, profit margin expansion and greater traction with new product offerings.
- Stock selection in financials was another main contributor to relative performance. A technology platform specializing in consumer buy-now-pay-later point of sale financing and payment processing was the largest contributor in the sector and fifth largest in the portfolio. The company reported results that came in ahead of expectations, driven primarily by strong credit execution, including better-than-expected provisioning, as the company continued to proactively manage loan performance in an uncertain and volatile macroeconomic environment.
- Stock selection in consumer discretionary added to relative performance. A leading food delivery company in the United States was the greatest contributor in the sector and third greatest in the portfolio. The company reported better-than-expected results driven by accelerating sales growth, operational efficiencies and disciplined expense management.
- Conversely, stock selection and an average overweight in health care had the greatest negative impact on relative performance. One of the largest buyers of biopharmaceutical royalties and a leading funder of innovation across academic institutions, non-profits, biotechnology and pharmaceutical companies was the greatest detractor in the sector and second greatest across the portfolio. The company reported solid results, but its shares remained pressured due to investors' ongoing concerns around clinical trial results for a few of its partners' new therapies and the impact to potential related royalties.
- The information technology sector was another detractor from relative performance due to both stock selection and

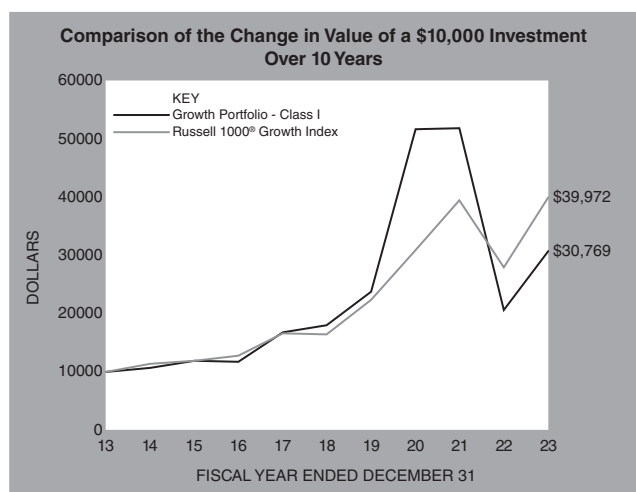
## Investment Overview (unaudited) (cont'd)

### Growth Portfolio

an average underweight in the sector. A leading provider of cloud-based software that helps small and medium-sized businesses with payments and financial-related operations was the top detractor in the sector and third greatest across the portfolio. Its shares languished due to investor concerns around weaker customer spend and the prospect of intensifying competition.

### Management Strategies

- As a team, we believe having a market outlook can be an anchor. Our focus is on assessing company prospects over a five-year horizon, and owning a portfolio of unique companies whose market value we believe can increase significantly for underlying fundamental reasons.



In accordance with SEC regulations, the Fund's performance shown assumes that all recurring fees (including management fees) were deducted and all dividends and distributions were reinvested. The performance of Class II shares will vary from the performance of Class I shares based upon its different inception date and will be negatively impacted by additional fees assessed to that class.

### Performance Compared to the Russell 1000® Growth Index<sup>(1)</sup>

	Period Ended December 31, 2023			
	Total Returns <sup>(2)</sup>			
	Average Annual			
	One Year	Five Years	Ten Years	Since Inception <sup>(5)</sup>
Fund – Class I <sup>(3)</sup>	48.66%	11.22%	11.90%	9.77%
Russell 1000® Growth Index	42.68	19.50	14.86	9.62
Fund – Class II <sup>(4)</sup>	48.32	10.95	11.62	11.34
Russell 1000® Growth Index	42.68	19.50	14.86	11.91

**Performance data quoted represents past performance, which is no guarantee of future results, and current performance may be lower or higher than the figures shown. Performance assumes that all dividends and distributions, if any, were reinvested. For the most recent month-end performance figures, please contact the issuing insurance company or speak with your financial advisor. Investment return and principal value will fluctuate so that Fund shares, when redeemed, may be worth more or less than their original cost. Total returns do not reflect the deduction of taxes that a shareholder would pay on Fund distributions or the redemption of Fund shares. Performance shown does not reflect fees and expenses imposed by your insurance company's separate account. If performance information included the effect of these additional charges, the total returns would be lower. Fund's total returns are calculated based on the net asset value as of the last business day of the period.**

<sup>(1)</sup> The Russell 1000® Growth Index measures the performance of the large-cap growth segment of the U.S. equity universe. It includes those Russell 1000® Index companies with higher price-to-book ratios and higher forecasted growth values. The Russell 1000® Index is an index of approximately 1,000 of the largest U.S. companies based on a combination of market capitalization and current index membership. The Index is unmanaged and its returns do not include any sales charges or fees. Such costs would lower performance. It is not possible to invest directly in an index.

<sup>(2)</sup> Total returns for the Fund reflect fees waived and expenses reimbursed, if applicable, by the Adviser (as defined herein). Without such waivers and reimbursements, total returns would have been lower.

<sup>(3)</sup> Commenced operations on January 2, 1997.

<sup>(4)</sup> Commenced offering on May 5, 2003.

<sup>(5)</sup> For comparative purposes, average annual since inception returns listed for the Index refers to the inception date or initial offering of the respective share class of the Fund, not the inception of the Index.

# Consolidated Portfolio of Investments

## Growth Portfolio

	Shares	Value (000)
<b>Common Stocks (93.1%)</b>		
<b>Automobiles (5.1%)</b>		
Rivian Automotive, Inc., Class A (a)	48,118	\$ 1,129
Tesla, Inc. (a)	100,593	24,995
		26,124
<b>Biotechnology (1.1%)</b>		
Intellia Therapeutics, Inc. (a)	15,777	481
Moderna, Inc. (a)	3,644	363
ProKidney Corp. (a)	251,077	447
Roivant Sciences Ltd. (a)	375,446	4,216
		5,507
<b>Broadline Retail (4.3%)</b>		
Globale Online Ltd. (Israel) (a)	227,261	9,007
MercadoLibre, Inc. (a)	8,432	13,251
		22,258
<b>Capital Markets (1.0%)</b>		
Coinbase Global, Inc., Class A (a)	28,694	4,990
<b>Chemicals (0.3%)</b>		
Ginkgo Bioworks Holdings, Inc. (a)	851,540	1,439
<b>Electronic Equipment, Instruments &amp; Components (0.0%)</b>		
Magic Leap, Inc., Class A (a)(b)(c) (acquisition cost — \$1,526; acquired 12/22/15)	3,138	—
<b>Entertainment (6.1%)</b>		
ROBLOX Corp., Class A (a)	687,878	31,450
<b>Financial Services (8.6%)</b>		
Adyen NV (Netherlands) (a)	15,159	19,569
Affirm Holdings, Inc. (a)	503,496	24,742
		44,311
<b>Ground Transportation (7.6%)</b>		
Grab Holdings Ltd., Class A (Singapore) (a)	758,112	2,555
Uber Technologies, Inc. (a)	596,031	36,697
		39,252
<b>Health Care Providers &amp; Services (2.3%)</b>		
Agilon Health, Inc. (a)	949,571	11,917
<b>Health Care Technology (0.6%)</b>		
Doximity, Inc., Class A (a)	107,299	3,009
<b>Hotels, Restaurants &amp; Leisure (11.2%)</b>		
Airbnb, Inc., Class A (a)	172,348	23,463
DoorDash, Inc., Class A (a)	345,452	34,162
		57,625
<b>Information Technology Services (22.2%)</b>		
Cloudflare, Inc., Class A (a)	512,965	42,709
Shopify, Inc., Class A (Canada) (a)	466,530	36,342
Snowflake, Inc., Class A (a)	177,788	35,380
		114,431
<b>Leisure Products (0.6%)</b>		
Peloton Interactive, Inc., Class A (a)	457,641	2,787

	Shares	Value (000)
<b>Life Sciences Tools &amp; Services (0.5%)</b>		
10X Genomics, Inc., Class A (a)	47,349	\$ 2,650
<b>Media (5.4%)</b>		
Trade Desk, Inc., Class A (a)	388,843	27,981
<b>Pharmaceuticals (4.2%)</b>		
Royalty Pharma PLC, Class A	775,313	21,778
<b>Software (8.4%)</b>		
Aurora Innovation, Inc. (a)	1,706,923	7,459
Bill Holdings, Inc. (a)	223,559	18,240
Gitlab, Inc., Class A (a)	95,959	6,042
MicroStrategy, Inc., Class A (a)	4,422	2,793
Samsara, Inc., Class A (a)	259,574	8,665
		43,199
<b>Specialty Retail (3.6%)</b>		
Carvana Co. (a)	349,221	18,488
<b>Total Common Stocks (Cost \$466,360)</b>		479,196
<b>Preferred Stocks (2.3%)</b>		
<b>Financial Services (0.2%)</b>		
Stripe, Inc., Series I (a)(b)(c) (acquisition cost — \$1,061; acquired 3/17/23)	52,681	1,076
<b>Software (2.1%)</b>		
Databricks, Inc., Series H (a)(b)(c) (acquisition cost — \$8,310; acquired 8/31/21)	113,088	8,072
Databricks, Inc., Series I (a)(b)(c) (acquisition cost — \$2,242; acquired 9/15/23)	30,506	2,178
Lookout, Inc., Series F (a)(b)(c) (acquisition cost — \$1,618; acquired 6/17/14)	141,612	423
		10,673
<b>Total Preferred Stocks (Cost \$13,231)</b>		11,749
<b>Investment Company (2.4%)</b>		
Grayscale Bitcoin Trust (a) (Cost \$12,825)	360,224	12,471
<b>Short-Term Investment (2.4%)</b>		
<b>Investment Company (2.4%)</b>		
Morgan Stanley Institutional Liquidity Funds — Treasury Securities Portfolio — Institutional Class (See Note H) (Cost \$12,335)	12,334,683	12,335
<b>Total Investments Excluding Purchased Options (100.2%) (Cost \$504,751)</b>		515,751
<b>Total Purchased Options Outstanding (0.0%)† (Cost \$1,328)</b>		239
<b>Total Investments (100.2%) (Cost \$506,079) (d)(e)(f)</b>		515,990
<b>Liabilities in Excess of Other Assets (–0.2%)</b>		(1,235)
<b>Net Assets (100.0%)</b>		\$514,755

† Amount is less than 0.05%.

(a) Non-income producing security.

# Consolidated Portfolio of Investments (cont'd)

## Growth Portfolio

- (b) Security cannot be offered for public resale without first being registered under the Securities Act of 1933 and related rules ("restricted security"). Acquisition date represents the day on which an enforceable right to acquire such security is obtained and is presented along with related cost in the security description. The Fund has registration rights for certain restricted securities. Any costs related to such registration are borne by the issuer. The aggregate value of restricted securities (excluding 144A holdings) at December 31, 2023 amounts to approximately \$11,749,000 and represents 2.3% of net assets.
- (c) At December 31, 2023, the Fund held fair valued securities at approximately \$11,749,000, representing 2.3% of net assets. These securities have been fair valued using significant unobservable inputs as determined in good faith under procedures established by and under the general supervision of the Company's (as defined herein)'s Directors.
- (d) The approximate fair value and percentage of net assets, \$19,569,000 and 3.8%, respectively, represent the securities that have been fair valued under the fair valuation policy for international investments as described in Note A-1 within the Notes to Consolidated Financial Statements.
- (e) Securities are available for collateral in connection with purchased options.
- (f) At December 31, 2023, the aggregate cost for federal income tax purposes is approximately \$518,886,000. The aggregate gross unrealized appreciation is approximately \$109,683,000 and the aggregate gross unrealized depreciation is approximately \$112,581,000, resulting in net unrealized depreciation of approximately \$2,898,000.

### Call Options Purchased:

The Fund had the following call options purchased open at December 31, 2023:

Counterparty	Description	Strike Price	Expiration Date	Number of Contracts	Notional Amount (000)	Value (000)	Premiums Paid (000)	Unrealized Depreciation (000)
JPMorgan Chase Bank NA	USD/CNH	CNH 7.43	Jan-24	83,529,989	\$ 83,530	\$ 7	\$ 393	\$ (386)
Standard Chartered Bank	USD/CNH	CNH 7.57	May-24	109,090,159	109,090	115	462	(347)
JPMorgan Chase Bank NA	USD/CNH	CNH 7.79	Aug-24	114,161,744	114,162	117	473	(356)
						<u>\$239</u>	<u>\$1,328</u>	<u>\$(1,089)</u>

CNH — Chinese Yuan Renminbi Offshore

USD — United States Dollar

## Portfolio Composition

Classification	Percentage of Total Investments
Other*	23.2%
Information Technology Services	22.2
Hotels, Restaurants & Leisure	11.2
Software	10.4
Financial Services	8.8
Ground Transportation	7.6
Entertainment	6.1
Media	5.4
Automobiles	5.1
Total Investments	<u>100.0%</u>

\* Industries and/or investment types representing less than 5% of total investments.



## Growth Portfolio

## Consolidated Statement of Assets and Liabilities

December 31, 2023  
(000)**Assets:**

Investments in Securities of Unaffiliated Issuers, at Value (Cost \$493,744)	\$ 503,655
Investment in Security of Affiliated Issuer, at Value (Cost \$12,335)	12,335
Total Investments in Securities, at Value (Cost \$506,079)	515,990
Foreign Currency, at Value (Cost \$1)	1
Receivable for Fund Shares Sold	146
Receivable for Investments Sold	134
Receivable from Affiliate	71
Other Assets	38
Total Assets	516,380

**Liabilities:**

Payable for Fund Shares Redeemed	525
Due to Broker	460
Payable for Advisory Fees	320
Payable for Servicing Fees	162
Payable for Distribution Fees — Class II Shares	46
Payable for Administration Fees	34
Payable for Professional Fees	10
Payable for Directors' Fees and Expenses	10
Payable for Custodian Fees	8
Payable for Transfer Agency Fees	2
Other Liabilities	48
Total Liabilities	1,625

<b>NET ASSETS</b>	<b>\$ 514,755</b>
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**Net Assets Consist of:**

Paid-in-Capital	\$ 684,946
Total Accumulated Loss	(170,191)

<b>Net Assets</b>	<b>\$ 514,755</b>
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**CLASS I:**

<b>Net Assets</b>	<b>\$ 296,798</b>
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<b>Net Asset Value, Offering and Redemption Price Per Share</b> Applicable to 22,232,620 Outstanding	
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\$0.001 Par Value Shares (Authorized 500,000,000 Shares)	\$ 13.35
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**CLASS II:**

<b>Net Assets</b>	<b>\$ 217,957</b>
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<b>Net Asset Value, Offering and Redemption Price Per Share</b> Applicable to 21,519,987 Outstanding	
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\$0.001 Par Value Shares (Authorized 500,000,000 Shares)	\$ 10.13
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## Growth Portfolio

## Consolidated Statement of Operations

Year Ended  
December 31, 2023  
(000)

**Investment Income:**

Dividends from Security of Affiliated Issuer (Note H)	\$ 627
Dividends from Securities of Unaffiliated Issuers (Net of \$3 of Foreign Taxes Withheld)	526
Income from Securities Loaned — Net	107
Total Investment Income	1,260

**Expenses:**

Advisory Fees (Note B)	2,246
Servicing Fees (Note D)	619
Distribution Fees — Class II Shares (Note E)	480
Administration Fees (Note C)	359
Professional Fees	164
Custodian Fees (Note G)	27
Shareholder Reporting Fees	24
Transfer Agency Fees (Note F)	17
Directors' Fees and Expenses	12
Registration Fees	5
Pricing Fees	4
Other Expenses	37
Total Expenses	3,994
Waiver of Advisory Fees (Note B)	(955)
Rebate from Morgan Stanley Affiliate (Note H)	(25)
Reimbursement of Transfer Agency Fees (Note B)	(8)
Net Expenses	3,006

**Net Investment Loss** (1,746)

**Realized Gain (Loss):**

Investments Sold	(86,942)
Foreign Currency Translation	—@
Net Realized Loss	(86,942)

**Change in Unrealized Appreciation (Depreciation):**

Investments	265,794
Foreign Currency Translation	(—@)
Net Change in Unrealized Appreciation (Depreciation)	265,794

**Net Realized Loss and Change in Unrealized Appreciation (Depreciation)** 178,852

**Net Increase in Net Assets Resulting from Operations** \$177,106

@ Amount is less than \$500.

## Growth Portfolio

	Year Ended December 31, 2023 (000)	Year Ended December 31, 2022 (000)
<b>Consolidated Statements of Changes in Net Assets</b>		
<b>Increase (Decrease) in Net Assets:</b>		
<b>Operations:</b>		
Net Investment Loss	\$ (1,746)	\$ (2,659)
Net Realized Loss	(86,942)	(94,624)
Net Change in Unrealized Appreciation (Depreciation)	265,794	(494,828)
Net Increase (Decrease) in Net Assets Resulting from Operations	177,106	(592,111)
<b>Dividends and Distributions to Shareholders:</b>		
Class I	—	(161,329)
Class II	—	(120,205)
Total Dividends and Distributions to Shareholders	—	(281,534)
<b>Capital Share Transactions:<sup>(1)</sup></b>		
Class I:		
Subscribed	16,451	21,161
Distributions Reinvested	—	161,329
Redeemed	(41,851)	(73,166)
Class II:		
Subscribed	66,212	84,262
Distributions Reinvested	—	120,205
Redeemed	(77,778)	(70,611)
Net Increase (Decrease) in Net Assets Resulting from Capital Share Transactions	(36,966)	243,180
Total Increase (Decrease) in Net Assets	140,140	(630,465)
<b>Net Assets:</b>		
Beginning of Period	374,615	1,005,080
End of Period	\$514,755	\$ 374,615
<sup>(1)</sup> <b>Capital Share Transactions:</b>		
Class I:		
Shares Subscribed	1,494	1,087
Shares Issued on Distributions Reinvested	—	15,277
Shares Redeemed	(3,791)	(3,850)
Net Increase (Decrease) in Class I Shares Outstanding	(2,297)	12,514
Class II:		
Shares Subscribed	8,023	5,157
Shares Issued on Distributions Reinvested	—	14,951
Shares Redeemed	(9,129)	(4,909)
Net Increase (Decrease) in Class II Shares Outstanding	(1,106)	15,199

# Consolidated Financial Highlights

## Growth Portfolio

Selected Per Share Data and Ratios	Class I				
	Year Ended December 31,				
	2023	2022	2021	2020 <sup>(1)</sup>	2019 <sup>(1)</sup>
<b>Net Asset Value, Beginning of Period</b>	\$8.98	\$53.72	\$70.24	\$35.80	\$28.62
<b>Income (Loss) from Investment Operations:</b>					
Net Investment Loss <sup>(2)</sup>	(0.03)	(0.07)	(0.35)	(0.28)	(0.14)
Net Realized and Unrealized Gain (Loss)	4.40	(30.00)	2.53	40.32	9.23
Total from Investment Operations	4.37	(30.07)	2.18	40.04	9.09
<b>Distributions from and/or in Excess of:</b>					
Net Realized Gain	—	(14.67)	(18.70)	(5.60)	(1.91)
<b>Net Asset Value, End of Period</b>	\$13.35	\$8.98	\$53.72	\$70.24	\$35.80
<b>Total Return<sup>(3)</sup></b>	48.66% <sup>(4)</sup>	(60.07)%	0.10%	117.31%	31.81%
<b>Ratios to Average Net Assets and Supplemental Data:</b>					
Net Assets, End of Period (Thousands)	\$296,798	\$220,167	\$645,473	\$737,155	\$386,720
Ratio of Expenses Before Expense Limitation	0.78%	0.78%	0.74%	0.74%	0.78%
Ratio of Expenses After Expense Limitation	0.56% <sup>(5)</sup>	0.57% <sup>(5)</sup>	0.57% <sup>(5)</sup>	0.56% <sup>(5)</sup>	0.61% <sup>(5)(6)</sup>
Ratio of Net Investment Loss	(0.28)% <sup>(5)</sup>	(0.39)% <sup>(5)</sup>	(0.52)% <sup>(5)</sup>	(0.55)% <sup>(5)</sup>	(0.41)% <sup>(5)</sup>
Ratio of Rebate from Morgan Stanley Affiliates	0.01%	0.00% <sup>(7)</sup>	0.00% <sup>(7)</sup>	0.01%	0.01%
Portfolio Turnover Rate	33%	41%	59%	55%	95%

(1) Not consolidated.

(2) Per share amount is based on average shares outstanding.

(3) Calculated based on the net asset value as of the last business day of the period. Performance does not reflect fees and expenses imposed by your insurance company's separate account. If performance information included the effect of these additional charges, the total return would be lower.

(4) Refer to Note B in the Notes to Consolidated Financial Statements for discussion of prior period transfer agency fees that were reimbursed in the current period. The amount of the reimbursement was immaterial on a per share basis and the impact was less than 0.005% to the total return of Class I shares.

(5) The Ratio of Expenses After Expense Limitation and Ratio of Net Investment Loss reflect the rebate of certain Fund expenses in connection with the investments in Morgan Stanley affiliates during the period. The effect of the rebate on the ratios is disclosed in the above table as "Ratio of Rebate from Morgan Stanley Affiliates."

(6) Effective April 29, 2019, the Adviser has agreed to limit the ratio of expenses to average net assets to the maximum ratio of 0.57% for Class I shares. Prior to April 29, 2019, the maximum ratio was 0.80% for Class I shares.

(7) Amount is less than 0.005%.

# Consolidated Financial Highlights

## Growth Portfolio

Selected Per Share Data and Ratios	Class II				
	Year Ended December 31,				
	2023	2022	2021	2020 <sup>(1)</sup>	2019 <sup>(1)</sup>
<b>Net Asset Value, Beginning of Period</b>	\$6.83	\$48.42	\$65.09	\$33.51	\$26.95
<b>Income (Loss) from Investment Operations:</b>					
Net Investment Loss <sup>(2)</sup>	(0.04)	(0.09)	(0.46)	(0.38)	(0.21)
Net Realized and Unrealized Gain (Loss)	3.34	(26.83)	2.49	37.56	8.68
Total from Investment Operations	3.30	(26.92)	2.03	37.18	8.47
<b>Distributions from and/or in Excess of:</b>					
Net Realized Gain	—	(14.67)	(18.70)	(5.60)	(1.91)
<b>Net Asset Value, End of Period</b>	\$10.13	\$6.83	\$48.42	\$65.09	\$33.51
<b>Total Return<sup>(3)</sup></b>	48.32% <sup>(4)</sup>	(60.16)%	(0.15)%	116.76%	31.47%
<b>Ratios to Average Net Assets and Supplemental Data:</b>					
Net Assets, End of Period (Thousands)	\$217,957	\$154,448	\$359,607	\$388,580	\$213,760
Ratio of Expenses Before Expense Limitation	1.03%	1.03%	0.99%	0.99%	1.03%
Ratio of Expenses After Expense Limitation	0.81% <sup>(5)</sup>	0.82% <sup>(5)</sup>	0.82% <sup>(5)</sup>	0.81% <sup>(5)</sup>	0.86% <sup>(5)(6)</sup>
Ratio of Net Investment Loss	(0.53)% <sup>(5)</sup>	(0.64)% <sup>(5)</sup>	(0.77)% <sup>(5)</sup>	(0.80)% <sup>(5)</sup>	(0.66)% <sup>(5)</sup>
Ratio of Rebate from Morgan Stanley Affiliates	0.01%	0.00% <sup>(7)</sup>	0.00% <sup>(7)</sup>	0.01%	0.01%
Portfolio Turnover Rate	33%	41%	59%	55%	95%

(1) Not consolidated.

(2) Per share amount is based on average shares outstanding.

(3) Calculated based on the net asset value as of the last business day of the period. Performance does not reflect fees and expenses imposed by your insurance company's separate account. If performance information included the effect of these additional charges, the total return would be lower.

(4) Refer to Note B in the Notes to Consolidated Financial Statements for discussion of prior period transfer agency fees that were reimbursed in the current period. The amount of the reimbursement was immaterial on a per share basis and the impact was less than 0.005% to the total return of Class II shares.

(5) The Ratio of Expenses After Expense Limitation and Ratio of Net Investment Loss reflect the rebate of certain Fund expenses in connection with the investments in Morgan Stanley affiliates during the period. The effect of the rebate on the ratios is disclosed in the above table as "Ratio of Rebate from Morgan Stanley Affiliates."

(6) Effective April 29, 2019, the Adviser has agreed to limit the ratio of expenses to average net assets to the maximum ratio of 0.82% for Class II shares. Prior to April 29, 2019, the maximum ratio was 1.05% for Class II shares.

(7) Amount is less than 0.005%.

# Notes to Consolidated Financial Statements

Morgan Stanley Variable Insurance Fund, Inc. (the “Company”) is registered under the Investment Company Act of 1940, as amended (the “Act”), as an open-end management investment company. The Company is comprised of eight separate active, diversified and non-diversified funds (individually referred to as a “Fund,” collectively as the “Funds”).

The Company applies investment company accounting and reporting guidance Accounting Standards Codification (“ASC”) Topic 946. In the preparation of these financial statements, management has evaluated subsequent events occurring after the date of the Fund’s Consolidated Statement of Assets and Liabilities through the date that the financial statements were issued.

The accompanying consolidated financial statements relates to the Growth Portfolio. The Fund seeks long-term capital appreciation by investing primarily in growth-oriented equity securities of large capitalization companies. The Fund has issued two classes of shares — Class I and Class II. Both classes of shares have identical voting rights (except that shareholders of a Class have exclusive voting rights regarding any matter relating solely to that Class of shares), dividend, liquidation and other rights.

The Company is intended to be a funding vehicle for variable annuity contracts and variable life insurance policies offered by the separate accounts of certain life insurance companies.

**A. Significant Accounting Policies:** The following significant accounting policies are in conformity with U.S. generally accepted accounting principles (“GAAP”). Such policies are consistently followed by the Company in the preparation of its consolidated financial statements. GAAP may require management to make estimates and assumptions that affect the reported amounts and disclosures in the consolidated financial statements. Actual results may differ from those estimates.

The Fund may invest up to 25% of its total assets in a wholly-owned subsidiary of the Fund organized as a company under the laws of the Cayman Islands, VIF Growth Cayman Portfolio, Ltd. (the “Subsidiary”). The Subsidiary may invest in bitcoin indirectly through cash settled futures or indirectly through investments in Grayscale Bitcoin Trust (BTC) (“GBTC”), a privately offered investment vehicle that invests in bitcoin. The Fund is the sole shareholder of the Subsidiary, and it is not currently expected that shares of the Subsidiary will be sold or offered to other investors. The consolidated portfolio of investments and consolidated financial statements include the positions and accounts of the Fund and the Subsidiary. All intercompany accounts and transactions of the Fund and the Subsidiary have been eliminated in consolidation and all accounting policies of the Subsidiary are consistent with those of the Fund. As of December 31, 2023,

the Subsidiary represented approximately \$12,915,000 or approximately 2.51% of the net assets of the Fund.

Investments in the Subsidiary are expected to provide the Fund with exposure to bitcoin within the limitations of Subchapter M of the Code and recent Internal Revenue Service (“IRS”) revenue rulings, which require that a mutual fund receive no more than ten percent of its gross income from such investments in order to receive favorable tax treatment as a regulated investment company (“RIC”). Tax treatment of the income received from the Subsidiary may potentially be affected by changes in legislation, regulations or other legally binding authority, which could affect the character, timing and amount of the Fund’s taxable income and distributions. If such changes occur, the Fund may need to significantly change its investment strategy and recognize unrealized gains in order to remain qualified for taxation as a RIC, which could adversely affect the Fund.

In June 2022, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (ASU) No. 2022-03, Fair Value Measurement (Topic 820): Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions (“ASU 2022-03”), which clarifies the guidance in ASC Topic No. 820 on the fair value measurement of an equity security that is subject to a contractual sale restriction and introduces new disclosures related to such equity security. ASU 2022-03 clarifies that a contractual sale restriction prohibiting the sale of an equity security is a characteristic of the reporting entity holding the equity security and is not included in the equity security’s unit of account. Accordingly, an entity should not consider the contractual sale restriction when measuring the equity security’s fair value (i.e., the entity should not apply a discount related to the contractual sale restriction, as stated in ASC 820-10-35-36B as amended by ASU 2022-03). In addition, ASU 2022-03 prohibits an entity from recognizing a contractual sale restriction as a separate unit of account. The new guidance is effective for public companies with annual reporting periods in fiscal years beginning after December 15, 2023, and interim periods in the following year, with early adoption permitted. An investment company that holds equity securities that are subject to contractual sale restrictions executed before the date at which the investment company first adopts ASU 2022-03 shall continue to account for that equity security using the accounting policy applied before the adoption of ASU 2022-03 until the contractual sale restriction expires or is modified.

**1. Security Valuation:** (1) An equity portfolio security listed or traded on an exchange is valued at its latest reported sales price (or at the exchange official closing price if such exchange reports an official closing price), and if there were no sales on a given day and if there is no official

## Notes to Consolidated Financial Statements (cont'd)

exchange closing price for that day, the security is valued at the mean between the last reported bid and asked prices if such bid and asked prices are available on the relevant exchanges. If only bid prices are available then the latest bid price may be used. Listed equity securities not traded on the valuation date with no reported bid and asked prices available on the exchange are valued at the mean between the current bid and asked prices obtained from one or more reputable brokers/dealers. In cases where a security is traded on more than one exchange, the security is valued on the exchange designated as the primary market; (2) all other equity portfolio securities for which over-the-counter ("OTC") market quotations are readily available are valued at the latest reported sales price (or at the market official closing price if such market reports an official closing price), and if there was no trading in the security on a given day and if there is no official closing price from relevant markets for that day, the security is valued at the mean between the last reported bid and asked prices if such bid and asked prices are available on the relevant markets. An unlisted equity security that does not trade on the valuation date and for which bid and asked prices from the relevant markets are unavailable is valued at the mean between the current bid and asked prices obtained from one or more reputable brokers/dealers; (3) listed options are valued at the last reported sales price on the exchange on which they are listed (or at the exchange official closing price if such exchange reports an official closing price). If an official closing price or last reported sales price is unavailable, the listed option should be fair valued at the mean between its latest bid and ask prices. Unlisted options are valued at the mean between their latest bid and ask prices from a reputable broker/dealer or valued by a pricing service/vendor; (4) fixed income securities may be valued by an outside pricing service/vendor approved by the Company's Board of Directors (the "Directors"). The pricing service/vendor may employ a pricing model that takes into account, among other things, bids, yield spreads and/or other market data and specific security characteristics. If Morgan Stanley Investment Management Inc. (the "Adviser"), a wholly-owned subsidiary of Morgan Stanley, determines that the price provided by the outside pricing service/vendor does not reflect the security's fair value or is unable to provide a price, prices from reputable brokers/dealers may also be utilized. In these circumstances, the value of the security will be the mean of bid and asked prices obtained from reputable brokers/dealers; (5) when market quotations are not readily available, as defined by Rule 2a-5 under the Act, including circumstances under which the Adviser determines that the closing price, last sale price or the

mean between the last reported bid and asked prices are not reflective of a security's market value, portfolio securities are valued at their fair value as determined in good faith under procedures approved by and under the general supervision of the Directors. Each business day, the Fund uses a third-party pricing service approved by the Directors to assist with the valuation of foreign equity securities. Events occurring after the close of trading on foreign exchanges may result in adjustments to the valuation of foreign securities to reflect market trading that occurs after the close of the applicable foreign markets of comparable securities or other instruments that have a strong correlation to the fair-valued securities to more accurately reflect their fair value as of the close of regular trading on the NYSE; (6) foreign exchange transactions ("spot contracts") and foreign exchange forward contracts ("forward contracts") are valued daily using an independent pricing vendor at the spot and forward rates, respectively, as of the close of the NYSE; and (7) investments in mutual funds, including the Morgan Stanley Institutional Liquidity Funds, are valued at the net asset value ("NAV") as of the close of each business day.

In connection with Rule 2a-5 of the Act, the Directors have designated the Company's Adviser as its valuation designee. The valuation designee has responsibility for determining fair value and to make the actual calculations pursuant to the fair valuation methodologies previously approved by the Directors. Under procedures approved by the Directors, the Company's Adviser, as valuation designee, has formed a Valuation Committee whose members are approved by the Directors. The Valuation Committee provides administration and oversight of the Company's valuation policies and procedures, which are reviewed at least annually by the Directors. These procedures allow the Company to utilize independent pricing services, quotations from securities and financial instrument dealers and other market sources to determine fair value.

2. **Fair Value Measurement:** FASB ASC 820, "Fair Value Measurement" ("ASC 820"), defines fair value as the price that would be received to sell an asset or pay to transfer a liability in an orderly transaction between market participants at the measurement date. ASC 820 establishes a three-tier hierarchy to distinguish between (1) inputs that reflect the assumptions market participants would use in valuing an asset or liability developed based on market data obtained from sources independent of the reporting entity (observable inputs); and (2) inputs that reflect the reporting entity's own assumptions about the assumptions market participants would use in valuing an asset or liability developed based on the best information



## Notes to Consolidated Financial Statements (cont'd)

available in the circumstances (unobservable inputs) and to establish classification of fair value measurements for disclosure purposes. Various inputs are used in determining the value of the Fund's investments. The inputs are summarized in the three broad levels listed below:

- Level 1 – unadjusted quoted prices in active markets for identical investments
- Level 2 – other significant observable inputs (including quoted prices for similar investments, interest rates, prepayment speeds, credit risk, etc.)
- Level 3 – significant unobservable inputs including the Fund's own assumptions in determining the fair value of investments. Factors considered in making this determination may include, but are not limited to, information obtained by contacting the issuer, analysts, or the appropriate stock exchange (for exchange-traded securities), analysis of the issuer's financial statements or other available documents and, if necessary, available information concerning other securities in similar circumstances.

The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities and the determination of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to each security.

The following is a summary of the inputs used to value the Fund's investments as of December 31, 2023:

Investment Type	Level 1 Unadjusted quoted prices (000)	Level 2 Other significant observable inputs (000)	Level 3 Significant unobservable inputs (000)	Total (000)
<b>Assets:</b>				
<b>Common Stocks</b>				
Automobiles	\$ 26,124	\$ —	\$ —	\$ 26,124
Biotechnology	5,507	—	—	5,507
Broadline Retail	22,258	—	—	22,258
Capital Markets	4,990	—	—	4,990
Chemicals	1,439	—	—	1,439
Electronic Equipment, Instruments & Components	—	—	—†	—†
Entertainment	31,450	—	—	31,450
Financial Services	24,742	19,569	—	44,311
Ground Transportation	39,252	—	—	39,252
Health Care Providers & Services	11,917	—	—	11,917
Health Care Technology	3,009	—	—	3,009

Investment Type	Level 1 Unadjusted quoted prices (000)	Level 2 Other significant observable inputs (000)	Level 3 Significant unobservable inputs (000)	Total (000)
<b>Common Stocks (cont'd)</b>				
Hotels, Restaurants & Leisure	\$ 57,625	\$ —	\$ —	\$ 57,625
Information Technology Services	114,431	—	—	114,431
Leisure Products	2,787	—	—	2,787
Life Sciences Tools & Services	2,650	—	—	2,650
Media	27,981	—	—	27,981
Pharmaceuticals	21,778	—	—	21,778
Software	43,199	—	—	43,199
Specialty Retail	18,488	—	—	18,488
<b>Total Common Stocks</b>	<b>459,627</b>	<b>19,569</b>	<b>—†</b>	<b>479,196†</b>
<b>Preferred Stocks</b>				
Financial Services	—	—	1,076	1,076
Software	—	—	10,673	10,673
<b>Total Preferred Stocks</b>	<b>—</b>	<b>—</b>	<b>11,749</b>	<b>11,749</b>
<b>Investment Company</b>	<b>12,471</b>	<b>—</b>	<b>—</b>	<b>12,471</b>
<b>Call Options Purchased</b>	<b>—</b>	<b>239</b>	<b>—</b>	<b>239</b>
<b>Short-Term Investment</b>				
Investment Company	12,335	—	—	12,335
<b>Total Assets</b>	<b>\$484,433</b>	<b>\$19,808</b>	<b>\$11,749†</b>	<b>\$515,990†</b>

† Includes a security valued at zero.

Transfers between investment levels may occur as the markets fluctuate and/or the availability of data used in an investment's valuation changes.

Following is a reconciliation of investments in which significant unobservable inputs (Level 3) were used in determining fair value:

	Common Stock (000)	Preferred Stocks (000)
<b>Beginning Balance</b>	\$—†	\$ 6,887
Purchases	—	3,303
Sales	—	—
Transfers in	—	—
Transfers out	—	—
Corporate actions	—	—
Change in unrealized appreciation (depreciation)	—	1,559
Realized gains (losses)	—	—
<b>Ending Balance</b>	<b>\$—†</b>	<b>\$11,749</b>
Net change in unrealized appreciation (depreciation) from investments still held as of December 31, 2023	\$—	\$ 1,559

† Includes a security valued at zero.



## Notes to Consolidated Financial Statements (cont'd)

The following table presents additional information about valuation techniques and inputs used for investments that are measured at fair value and categorized within Level 3 as of December 31, 2023. Various valuation techniques were used in the valuation of certain investments and weighted based on the level of significance. The Fund calculated the weighted averages of the unobservable inputs relative to each investment's fair value as of December 31, 2023:

	Fair Value at December 31, 2023 (000)	Valuation Technique	Unobservable Input	Amount or Range/ Weighted Average*	Impact to Valuation from an Increase in Input**
Preferred Stocks	\$11,749	Market Transaction Method	Transaction Price	\$71.38	Increase
		Discounted Cash Flow	Weighted Average		
			Cost of Capital	16.5%-18.5%/17.2%	Decrease
			Perpetual Growth Rate	3.0%-4.0%/3.5%	Increase
		Market Comparable Companies	Enterprise Value/ Revenue	1.2x-15.5x/8.7x	Increase
			Discount for Lack of Marketability	12.0%-15.0%/12.9%	Decrease
		Comparable Transactions	Enterprise Value/ Revenue	8.8x	Increase

\* Amount is indicative of the weighted average.

\*\* Represents the expected directional change in the fair value of the Level 3 investments that would result from an increase in the corresponding input. A decrease to the unobservable input would have the opposite effect. Significant changes in these inputs could result in significantly higher or lower fair value measurements.

**3. Repurchase Agreements:** The Fund may enter into repurchase agreements under which the Fund lends cash and takes possession of securities with an agreement that the counterparty will repurchase such securities. In connection with transactions in repurchase agreements, a bank as custodian for the Fund takes possession of the underlying securities which are held as collateral, with a market value at least equal to the amount of the repurchase transaction, including principal and accrued interest. To the extent that any repurchase transaction exceeds one business day, the value of the collateral is marked-to-market on a daily basis to determine that the value of the collateral does not decrease below the repurchase price plus accrued interest as earned. If such a decrease occurs, additional collateral will be requested and, when received, will be added to the account to maintain full collateralization. In the event of default on the obligation to repurchase, the Fund has the right to liquidate the collateral and apply the proceeds in satisfaction of the obligation. In the event of default or bankruptcy by the counterparty to the agreement, realization of the collateral proceeds may be subject to cost and delays. The Fund, along with other affiliated investment companies, may utilize a joint trading account for the purpose of entering into repurchase agreements.

### 4. Foreign Currency Translation and Foreign Investments:

The books and records of the Fund are maintained in U.S. dollars. Foreign currency amounts are translated into U.S. dollars as follows:

- investments, other assets and liabilities at the prevailing rate of exchange on the valuation date;
- investment transactions and investment income at the prevailing rates of exchange on the dates of such transactions.

Although the net assets of the Fund are presented at the foreign exchange rates and market values at the close of the period, the Fund does not isolate that portion of the results of operations arising as a result of changes in the foreign exchange rates from the fluctuations arising from changes in the market prices of securities held at period end. Similarly, the Fund does not isolate the effect of changes in foreign exchange rates from the fluctuations arising from changes in the market prices of securities sold during the period. Accordingly, realized and unrealized foreign currency gains (losses) on investments in securities are included in the reported net realized and unrealized gains (losses) on investment transactions and balances. However, pursuant to U.S. federal income tax regulations, gains and losses from certain foreign currency transactions and the foreign currency portion of gains

## Notes to Consolidated Financial Statements (cont'd)

and losses realized on sales and maturities of foreign denominated debt securities are treated as ordinary income for U.S. federal income tax purposes.

Net realized gains (losses) on foreign currency transactions represent net foreign exchange gains (losses) from foreign currency forward exchange contracts, disposition of foreign currencies, currency gains (losses) realized between the trade and settlement dates on securities transactions, and the difference between the amount of investment income and foreign withholding taxes recorded on the Fund's books and the U.S. dollar equivalent amounts actually received or paid. The change in unrealized currency gains (losses) on foreign currency transactions for the period is reflected in the Consolidated Statement of Operations.

Foreign security and currency transactions may involve certain considerations and risks not typically associated with those of U.S. dollar denominated transactions as a result of, among other factors, fluctuations of exchange rates in relation to the U.S. dollar, the possibility of lower levels of governmental supervision and regulation of foreign securities markets and the possibility of political or economic instability.

Governmental approval for foreign investments may be required in advance of making an investment under certain circumstances in some countries, and the extent of foreign investments in U.S. companies may be subject to limitation in other countries. Foreign ownership limitations also may be imposed by the charters of individual companies to prevent, among other concerns, violations of foreign investment limitations. As a result, an additional class of shares (identified as "Foreign" in the Consolidated Portfolio of Investments) may be created and offered for investment. The "local" and "foreign shares" market values may differ. In the absence of trading of the foreign shares in such markets, the Fund values the foreign shares at the closing exchange price of the local shares.

- 5. Derivatives:** The Fund may, but is not required to, use derivative instruments for a variety of purposes, including hedging, risk management, portfolio management or to earn income. Derivatives are financial instruments whose value is based, in part, on the value of an underlying asset, interest rate, index or financial instrument. Prevailing interest rates and volatility levels, among other things, also affect the value of derivative instruments. A derivative instrument often has risks similar to its underlying asset and may have additional risks, including imperfect correlation between the value of the derivative and the underlying asset, risks of default by the counterparty to

certain transactions, magnification of losses incurred due to changes in the market value of the securities, instruments, indices or interest rates to which the derivative instrument relates, risks that the transactions may not be liquid, risks arising from margin and payment requirements, risks arising from mispricing or valuation complexity and operational and legal risks. The use of derivatives involves risks that are different from, and possibly greater than, the risks associated with other portfolio investments. Derivatives may involve the use of highly specialized instruments that require investment techniques and risk analyses different from those associated with other portfolio investments. All of the Fund's holdings, including derivative instruments, are marked-to-market each day with the change in value reflected in unrealized appreciation (depreciation). Upon disposition, a realized gain or loss is recognized.

Certain derivative transactions may give rise to a form of leverage. Leverage magnifies the potential for gain and the risk of loss. Leverage associated with derivative transactions may cause the Fund to liquidate portfolio positions when it may not be advantageous to do so to satisfy its obligations or may cause the Fund to be more volatile than if the Fund had not been leveraged. Although the Adviser seeks to use derivatives to further the Fund's investment objectives, there is no assurance that the use of derivatives will achieve this result.

Following is a description of the derivative instruments and techniques that the Fund used during the period and their associated risks:

**Options:** With respect to options, the Fund is subject to equity risk, interest rate risk and foreign currency exchange risk in the normal course of pursuing its investment objectives. If the Fund buys an option, it buys a legal contract giving it the right to buy or sell a specific amount of the underlying instrument or foreign currency, or futures contract on the underlying instrument or foreign currency, at an agreed-upon price during a period of time or on a specified date typically in exchange for premiums paid by the Fund. The Fund may purchase and/or sell put and call options. Purchasing call options tends to increase the Fund's exposure to the underlying (or similar) instrument. Purchasing put options tends to decrease the Fund's exposure to the underlying (or similar) instrument. When entering into purchased option contracts, the Fund bears the risk of interest or exchange rates or securities prices moving unexpectedly, in which case, the Fund may not achieve the anticipated benefits of the purchased option contracts; however the risk of loss is limited to the premium paid. Purchased options are reported

# Notes to Consolidated Financial Statements (cont'd)

as part of “Total Investments in Securities” in the Consolidated Statement of Assets and Liabilities. Premiums paid for purchasing options which expired are treated as realized losses. If the Fund sells an option, it sells to another party the right to buy from or sell to the Fund a specific amount of the underlying instrument or foreign currency, or futures contract on the underlying instrument or foreign currency, at an agreed-upon price during a period of time or on a specified date typically in exchange for a premium received by the Fund. When options are purchased OTC, the Fund bears the risk that the counterparty that wrote the option will be unable or unwilling to perform its obligations under the option contract. Options may also be illiquid and the Fund may have difficulty closing out its position. A decision as to whether, when and how to use options involves the exercise of skill and judgment and even a well-conceived option transaction may be unsuccessful because of market behavior or unexpected events. The prices of options can be highly volatile and the use of options can lower total returns.

FASB ASC 815, “Derivatives and Hedging” (“ASC 815”), is intended to improve financial reporting about derivative instruments by requiring enhanced disclosures to enable investors to better understand how and why the Fund uses derivative instruments, how these derivative instruments are accounted for and their effects on the Fund’s financial position and results of operations.

The following table sets forth the fair value of the Fund’s derivative contracts by primary risk exposure as of December 31, 2023:

<b>Asset Derivatives Consolidated Statement of Assets and Liabilities Location</b>		<b>Primary Risk Exposure</b>	<b>Value (000)</b>
Purchased Options	Investments, at Value (Purchased Options)	Currency Risk	\$239(a)

(a) Amounts are included in Investments in Securities in the Consolidated Statement of Assets and Liabilities.

The following tables set forth by primary risk exposure the Fund’s realized gain (loss) and change in unrealized appreciation (depreciation) by type of derivative contract for the year ended December 31, 2023 in accordance with ASC 815:

<b>Realized Gain (Loss)</b>		
<b>Primary Risk Exposure</b>	<b>Derivative Type</b>	<b>Value (000)</b>
Currency Risk	Investments (Purchased Options)	\$(997)(a)

(a) Amounts are included in Realized Loss on Investments Sold in the Consolidated Statement of Operations.

<b>Change in Unrealized Appreciation (Depreciation)</b>		
<b>Primary Risk Exposure</b>	<b>Derivative Type</b>	<b>Value (000)</b>
Currency Risk	Investments (Purchased Options)	\$(728)(a)

(a) Amounts are included in Change in Unrealized Appreciation (Depreciation) on Investments in the Consolidated Statement of Operations.

At December 31, 2023, the Fund’s derivative assets and liabilities are as follows:

<b>Gross Amounts of Assets and Liabilities Presented in the Consolidated Statement of Assets and Liabilities</b>		
<b>Derivatives</b>	<b>Assets(b) (000)</b>	<b>Liabilities(b) (000)</b>
Purchased Options	\$239(a)	\$—

(a) Amounts are included in Investments in Securities in the Consolidated Statement of Assets and Liabilities.

(b) Absent an event of default or early termination, OTC derivative assets and liabilities are presented gross and not offset in the Consolidated Statement of Assets and Liabilities.

The Fund typically enters into International Swaps and Derivatives Association, Inc. Master Agreements (“ISDA Master Agreements”) or similar master agreements (collectively, “Master Agreements”) with its contract counterparties for certain OTC derivatives in order to, among other things, reduce its credit risk to counterparties. ISDA Master Agreements include provisions for general obligations, representations, collateral and events of default or termination. Under an ISDA Master Agreement, the Fund typically may offset with the counterparty certain OTC derivative financial instruments’ payables and/or receivables with collateral held and/or posted and create one single net payment (close-out netting) in the event of default, termination and/or potential deterioration in the credit quality of the counterparty. Various Master Agreements govern the terms of certain transactions with counterparties, including transactions such as swap, forward, repurchase and reverse repurchase agreements. These Master Agreements typically attempt to reduce the counterparty risk associated with such transactions by specifying credit protection mechanisms and providing standardization that improves legal certainty. Cross-termination provisions under Master Agreements typically provide that a default in connection with one transaction between the Fund and a counterparty gives the non-defaulting party the right to terminate any other transactions in place with the defaulting party to create one single net payment due to/due from the defaulting party and may be a feature in certain Master Agreements. In the event the Fund exercises its right to terminate a Master Agreement after a counterparty experiences a termination event as defined in the Master

## Notes to Consolidated Financial Statements (cont'd)

Agreement, the return of collateral with market value in excess of the Fund's net liability may be delayed or denied.

The following table presents derivative financial instruments that are subject to enforceable netting arrangements as of December 31, 2023:

<b>Gross Amounts Not Offset in the Consolidated Statement of Assets and Liabilities</b>				
<b>Counterparty</b>	<b>Gross Asset Derivatives Presented in the Consolidated Statement of Assets and Liabilities (a) (000)</b>	<b>Financial Instrument (000)</b>	<b>Collateral Received (b) (000)</b>	<b>Net Amount (not less than \$0) (000)</b>
JPMorgan Chase Bank NA	\$124	\$—	\$(124)	\$ 0
Standard Chartered Bank	115	—	(115)	0
<b>Total</b>	<b>\$239</b>	<b>\$—</b>	<b>\$(239)</b>	<b>\$—</b>

(a) Amounts are included in Investments in Securities in the Consolidated Statement of Assets and Liabilities.

(b) In some instances, the actual collateral received may be more than the amount shown here due to overcollateralization.

For the year ended December 31, 2023, the approximate average monthly amount outstanding for each derivative type is as follows:

**Purchased Options:**

Average monthly notional amount . . . . . 319,461,000

- 6. Securities Lending:** The Fund lends securities to qualified financial institutions, such as broker/dealers, to earn additional income. Any increase or decrease in the fair value of the securities loaned that might occur and any interest earned or dividends declared on those securities during the term of the loan would remain in the Fund. The Fund would receive cash or securities as collateral in an amount equal to or exceeding 100% of the current fair value of the loaned securities. The collateral is marked-to-market daily by State Street Bank and Trust Company ("State Street"), the securities lending agent, to ensure that a minimum of 100% collateral coverage is maintained.

Based on pre-established guidelines, the securities lending agent invests any cash collateral that is received in an affiliated money market portfolio and repurchase agreements. Securities lending income is generated from the earnings on the invested collateral and borrowing fees, less any rebates owed to the borrowers and compensation to the lending agent, and is recorded as "Income from Securities Loaned — Net" in the Fund's Consolidated

Statement of Operations. Risks in securities lending transactions are that a borrower may not provide additional collateral when required or return the securities when due, and that the value of the short-term investments will be less than the amount of cash collateral plus any rebate that is required to be returned to the borrower.

The Fund has the right under the securities lending agreement to recover the securities from the borrower on demand.

At December 31, 2023, the Fund did not have any outstanding securities on loan.

- 7. Restricted Securities:** The Fund invests in unregistered or otherwise restricted securities. The term "restricted securities" refers to securities that are unregistered or are held by control persons of the issuer and securities that are subject to contractual restrictions on their resale. As a result, restricted securities may be more difficult to value and the Fund may have difficulty disposing of such assets either in a timely manner or for a reasonable price. In order to dispose of an unregistered security, the Fund, where it has contractual rights to do so, may have to cause such security to be registered. A considerable period may elapse between the time the decision is made to sell the security and the time the security is registered so that the Fund can sell it. Contractual restrictions on the resale of securities vary in length and scope and are generally the result of a negotiation between the issuer and the acquirer of the securities. The Fund would, in either case, bear market risks during that period. Restricted securities are identified in the Consolidated Portfolio of Investments.

- 8. Indemnifications:** The Company enters into contracts that contain a variety of indemnification clauses. The Company's maximum exposure under these arrangements is unknown as this would involve future claims that may be made against the Fund that have not yet occurred.

- 9. Security Transactions, Income and Expenses:** Security transactions are accounted for on the trade date (date the order to buy or sell is executed). Realized gains and losses on the sale of investment securities are determined on the specific identified cost method. Dividend income and other distributions are recorded on the ex-dividend date (except for certain foreign dividends which may be recorded as soon as the Fund is informed of such dividends) net of applicable withholding taxes. Non-cash dividends received in the form of stock, if any, are recognized on the ex-dividend date and recorded as non-cash dividend income at fair value. Interest income is



# Notes to Consolidated Financial Statements (cont'd)

recognized on the accrual basis (except where collection is in doubt) net of applicable withholding taxes. Discounts are accreted and premiums are amortized over the life of the respective securities. Most expenses of the Company can be directly attributed to a particular Fund. Expenses which cannot be directly attributed are apportioned among the Funds based upon relative net assets or other appropriate methods. Income, expenses (other than class specific expenses) and realized and unrealized gains or losses are allocated to each class of shares based upon their relative net assets.

## 10. Dividends and Distributions to Shareholders:

Dividends and distributions to shareholders are recorded on the ex-dividend date. Dividends from net investment income, if any, are declared and paid annually. Net realized capital gains, if any, are distributed at least annually.

**B. Advisory Fees:** The Adviser, a wholly-owned subsidiary of Morgan Stanley, provides the Fund with advisory services under the terms of an Investment Advisory Agreement, paid quarterly, at the annual rate based on the daily net assets as follows:

First \$1 billion	Next \$1 billion	Next \$1 billion	Over \$3 billion
0.50%	0.45%	0.40%	0.35%

For the year ended December 31, 2023, the advisory fee rate (net of waiver/rebate) was equivalent to an annual effective rate of 0.28% of the Fund's average daily net assets.

The Adviser has agreed to reduce its advisory fee and/or reimburse the Fund so that total annual Fund operating expenses, excluding certain investment related expenses, taxes, interest and other extraordinary expenses (including litigation), will not exceed 0.57% for Class I shares and 0.82% for Class II shares. The fee waivers and/or expense reimbursements will continue for at least one year from the date of the Fund's prospectus or until such time as the Directors act to discontinue all or a portion of such waivers and/or reimbursements when they deem such action is appropriate. For the year ended December 31, 2023, approximately \$955,000 of advisory fees were waived pursuant to this arrangement.

The Adviser provides investment advisory services to the Subsidiary pursuant to the Subsidiary Investment Management Agreement (the "Agreement"). Under the Agreement, the Subsidiary will pay the Adviser at the end of each fiscal quarter, calculated by applying a quarterly rate, based on the annual rate of 0.05%, to the average daily net assets of the Subsidiary.

The Adviser has agreed to waive its advisory fees by the amount of advisory fees it receives from the Subsidiary.

The Adviser agreed to reimburse the Fund for prior years overpayment of transfer agency fees. This was reflected as "Reimbursement of Transfer Agency Fees" in the Consolidated Statement of Operations.

**C. Administration Fees:** The Adviser also serves as Administrator to the Company and provides administrative services pursuant to an Administration Agreement for an annual fee, accrued daily and paid monthly, of 0.08% of the Fund's average daily net assets.

Under a Sub-Administration Agreement between the Administrator and State Street, State Street provides certain administrative services to the Company. For such services, the Administrator pays State Street a portion of the fee the Administrator receives from the Fund.

**D. Servicing Fees:** The Company accrues daily and pays quarterly a servicing fee of up to 0.17% of the average daily value of shares of the Fund held in an insurance company's account. Certain insurance companies have entered into a servicing agreement with the Company to provide administrative and other contract-owner related services on behalf of the Fund.

**E. Distribution Fees:** Morgan Stanley Distribution, Inc. ("MSDI" or the "Distributor"), a wholly-owned subsidiary of the Adviser and an indirect subsidiary of Morgan Stanley, serves as the Distributor of the Fund and provides the Fund's Class II shareholders with distribution services pursuant to a Distribution Plan (the "Plan") in accordance with Rule 12b-1 under the Act. Under the Plan, the Fund is authorized to pay the Distributor a distribution fee, which is accrued daily and paid monthly, at an annual rate of 0.25% of the Fund's average daily net assets attributable to Class II shares.

**F. Dividend Disbursing and Transfer/Co-Transfer Agent:** The Company's dividend disbursing and transfer agent is SS&C Global Investor & Distribution Solutions, Inc. ("SS&C GIDS"). Pursuant to a Transfer Agency Agreement, the Company pays SS&C GIDS a fee based on the number of classes, accounts and transactions relating to the Funds of the Company.

Eaton Vance Management ("EVM"), an affiliate of Morgan Stanley, provides co-transfer agency and related services to the Fund pursuant to a Co-Transfer Agency Services Agreement. For the year ended December 31, 2023, co-transfer agency fees and expenses incurred to EVM, included in "Transfer Agency Fees" in the Consolidated Statement of Operations, amounted to approximately \$1,000.

**G. Custodian Fees:** State Street (the "Custodian") also serves as Custodian for the Company in accordance with a Custodian Agreement. The Custodian holds cash, securities

## Notes to Consolidated Financial Statements (cont'd)

and other assets of the Company as required by the Act. Custody fees are payable monthly based on assets held in custody, investment purchases and sales activity and account maintenance fees, plus reimbursement for certain out-of-pocket expenses.

### H. Security Transactions and Transactions with Affiliates:

For the year ended December 31, 2023, purchases and sales of investment securities for the Fund, other than long-term U.S. Government securities and short-term investments were approximately \$144,938,000 and \$191,261,000, respectively. There were no purchases and sales of long-term U.S. Government securities for the year ended December 31, 2023.

The Fund invests in the Institutional Class of the Morgan Stanley Institutional Liquidity Funds — Treasury Securities Portfolio (the “Liquidity Fund”), an open-end management investment company managed by the Adviser, both directly and as a portion of the securities held as collateral on loaned securities. Advisory fees paid by the Fund are reduced by an amount equal to its pro-rata share of the advisory and administration fees paid by the Fund due to its investment in the Liquidity Fund. For the year ended December 31, 2023, advisory fees paid were reduced by approximately \$25,000 relating to the Fund’s investment in the Liquidity Fund.

A summary of the Fund’s transactions in shares of affiliated investments during the year ended December 31, 2023 is as follows:

Affiliated Investment Company	Value December 31, 2022	Purchases at Cost	Proceeds from Sales	Dividend Income
	(000)	(000)	(000)	(000)
Liquidity Fund	\$4,714	\$137,687	\$130,066	\$627

Affiliated Investment Company (cont'd)	Realized Gain (Loss)	Change in Unrealized Appreciation (Depreciation)	Value December 31, 2023
	(000)	(000)	(000)
Liquidity Fund	\$—	\$—	\$12,335

The Fund is permitted to purchase and sell securities (“cross-trade”) from and to other Morgan Stanley funds as well as other funds and client accounts for which the Adviser or an affiliate of the Adviser serves as investment adviser, pursuant to procedures approved by the Directors in compliance with Rule 17a-7 under the Act (the “Rule”). Each cross-trade is executed at the current market price in compliance with provisions of the Rule. For the year ended December 31, 2023, the Fund did not engage in any cross-trade transactions.

The Fund has an unfunded Deferred Compensation Plan (the “Compensation Plan”), which allows each independent Director to defer payment of all, or a portion, of the fees he or she

receives for serving on the Board of Directors. Each eligible Director generally may elect to have the deferred amounts credited with a return equal to the total return on one or more of the Morgan Stanley funds that are offered as investment options under the Compensation Plan.

Appreciation/depreciation and distributions received from these investments are recorded with an offsetting increase/decrease in the deferred compensation obligation and do not affect the NAV of the Fund.

**I. Federal Income Taxes:** It is the Fund’s intention to continue to qualify as a RIC and distribute all of its taxable and tax-exempt income. Accordingly, no provision for federal income taxes is required in the consolidated financial statements.

The Fund may be subject to taxes imposed by countries in which it invests. Such taxes are generally based on income and/or capital gains earned or repatriated. Taxes are accrued based on net investment income, net realized gains and net unrealized appreciation as such income and/or gains are earned. Taxes may also be based on transactions in foreign currency and are accrued based on the value of investments denominated in such currency.

FASB ASC 740-10, “Income Taxes — Overall”, sets forth a minimum threshold for consolidated financial statement recognition of the benefit of a tax position taken or expected to be taken in a tax return. Management has concluded there are no significant uncertain tax positions that would require recognition in the consolidated financial statements. If applicable, the Fund recognizes interest accrued related to unrecognized tax benefits in “Interest Expense” and penalties in “Other Expenses” in the Consolidated Statement of Operations. The Fund files tax returns with the U.S. Internal Revenue Service, New York and various states. Generally, each of the tax years in the four-year period ended December 31, 2023 remains subject to examination by taxing authorities.

The tax character of distributions paid may differ from the character of distributions shown for GAAP purposes due to short-term capital gains being treated as ordinary income for tax purposes. The tax character of distributions paid during fiscal years 2023 and 2022 was as follows:

2023 Distributions Paid From:		2022 Distributions Paid From:	
Ordinary Income (000)	Long-Term Capital Gain (000)	Ordinary Income (000)	Long-Term Capital Gain (000)
\$—	\$—	\$9,134	\$272,400

The amount and character of income and gains to be distributed are determined in accordance with income tax regulations which may differ from GAAP. These book/tax

## Notes to Consolidated Financial Statements (cont'd)

differences are either considered temporary or permanent in nature.

Temporary differences are attributable to differing book and tax treatments for the timing of the recognition of gains (losses) on certain investment transactions and the timing of the deductibility of certain expenses.

Permanent differences, due to a net operating loss, resulted in the following reclassifications among the components of net assets at December 31, 2023:

Total Accumulated Loss (000)	Paid-in- Capital (000)
\$2,707	\$(2,707)

At December 31, 2023, the Fund had no distributable earnings on a tax basis.

At December 31, 2023, the Fund had available for federal income tax purposes unused short-term and long-term capital losses of approximately \$52,382,000 and \$114,871,000, respectively, that do not have an expiration date.

To the extent that capital loss carryforwards are used to offset any future capital gains realized, no capital gains tax liability will be incurred by the Fund for gains realized and not distributed. To the extent that capital gains are offset, such gains will not be distributed to the shareholders.

**J. Credit Facility:** The Company and other Morgan Stanley funds participated in a \$300,000,000 committed, unsecured revolving line of credit facility (the “Facility”) with State Street. Effective April 17, 2023, the committed line amount increased to \$500,000,000. This Facility is to be used for temporary emergency purposes or funding of shareholder redemption requests. The interest rate for any funds drawn will be based on the federal funds rate or overnight bank funding rate plus a spread. The Facility also has a commitment fee of 0.25% per annum based on the unused portion of the Facility, which is allocated among participating funds based on relative net assets. During the year ended December 31, 2023, the Fund did not have any borrowings under the Facility.

**K. Other:** At December 31, 2023, the Fund had record owners of 10% or greater. Investment activities of these shareholders could have a material impact on the Fund. The aggregate percentage of such owners was 84.3%.

### L. Market Risk and Risks Relating to Certain Financial Instruments:

**Bitcoin:** The Fund may have exposure to cryptocurrencies indirectly through investments in GBTC, a privately offered investment vehicle that invests in bitcoin. Cryptocurrencies (also referred to as “virtual currencies” and “digital

currencies”) are digital assets designed to act as a medium of exchange. Although cryptocurrency is an emerging asset class, there are thousands of cryptocurrencies, the most well-known of which is bitcoin. Cryptocurrency facilitates decentralized, peer-to-peer financial exchange and value storage that is used like money, without the oversight of a central authority or banks. The value of cryptocurrency is not backed by any government, corporation, or other identified body. Similar to fiat currencies (i.e., a currency that is backed by a central bank or a national, supra-national or quasi-national organization), cryptocurrencies are susceptible to theft, loss and destruction. For example, the bitcoin held by GBTC (and the Fund’s indirect exposure to such bitcoin) is also susceptible to these risks. The value of the GBTC investments in cryptocurrency is subject to fluctuations in the value of the cryptocurrency, which have been and may in the future be highly volatile. The value of cryptocurrencies is determined by the supply and demand for cryptocurrency in the global market for the trading of cryptocurrency, which consists primarily of transactions on electronic exchanges. The price of bitcoin could drop precipitously (including to zero) for a variety of reasons, including, but not limited to, regulatory changes, a crisis of confidence, flaw or operational issue in the bitcoin network or a change in user preference to competing cryptocurrencies. The GBTC exposure to cryptocurrency could result in substantial losses to the Fund.

**Market:** The value of an investment in the Fund is based on the values of the Fund’s investments, which change due to economic and other events that affect markets generally, as well as those that affect particular regions, countries, industries, companies or governments. The risks associated with these developments may be magnified if certain social, political, economic and other conditions and events adversely interrupt the global economy and financial markets. Securities in the Fund’s portfolio may underperform due to inflation (or expectations for inflation), interest rates, global demand for particular products or resources, natural disasters and extreme weather events, health emergencies (such as epidemics and pandemics), terrorism, regulatory events and governmental or quasi-governmental actions. The occurrence of global events similar to those in recent years, such as terrorist attacks around the world, natural disasters, health emergencies, social and political (including geopolitical) discord and tensions or debt crises and downgrades, among others, may result in market volatility and may have long term effects on both the U.S. and global financial markets. It is difficult to predict when events affecting the U.S. or global financial markets may occur, the effects that such events may have and the duration of those effects (which may last for extended periods). These events may negatively impact broad segments of businesses

## Notes to Consolidated Financial Statements (cont'd)

and populations and have a significant and rapid negative impact on the performance of the Fund's investments, and exacerbate pre-existing risks to the Fund. The occurrence, duration and extent of these or other types of adverse economic and market conditions and uncertainty over the long term cannot be reasonably projected or estimated at this time. The ultimate impact of public health emergencies or other adverse economic or market developments and the extent to which the associated conditions impact the Fund and its investments will also depend on other future developments, which are highly uncertain, difficult to accurately predict and subject to change at any time. The financial performance of the Fund's investments (and, in turn, the Fund's investment results) as well as their liquidity may be adversely affected because of these and similar types of factors and developments, which may in turn impact valuation, the Fund's ability to sell securities and/or its ability to meet redemptions.



# Report of Independent Registered Public Accounting Firm

To the Shareholders of Growth Portfolio  
and the Board of Directors of  
Morgan Stanley Variable Insurance Fund, Inc.

## Opinion on the Financial Statements

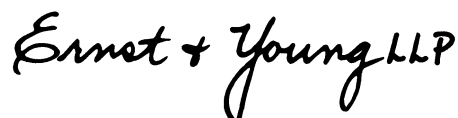
We have audited the accompanying consolidated statement of assets and liabilities of Growth Portfolio (the “Fund”) (one of the funds constituting Morgan Stanley Variable Insurance Fund, Inc. (the “Company”)), including the consolidated portfolio of investments, as of December 31, 2023, and the related consolidated statement of operations for the year then ended, the consolidated statements of changes in net assets for each of the two years in the period then ended, the consolidated financial highlights for each of the three years in the period then ended, the financial highlights for each of the two years in the period ended December 31, 2020 and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the consolidated financial position of the Fund (one of the funds constituting Morgan Stanley Variable Insurance Fund, Inc.) at December 31, 2023, the consolidated results of its operations for the year then ended, the consolidated changes in its net assets for each of the two years in the period then ended, its consolidated financial highlights for each of the three years in the period then ended and its financial highlights for each of the two years in the period ended December 31, 2020, in conformity with U.S. generally accepted accounting principles.

## Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Fund’s financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of the Company’s internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our procedures included confirmation of securities owned as of December 31, 2023, by correspondence with the custodian, brokers and others; when replies were not received from brokers and others, we performed other auditing procedures. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

The signature of Ernst & Young LLP is written in a stylized, cursive script. The letters are dark and fluid, with the 'E' and 'Y' being particularly prominent. The 'LLP' is written in a simpler, more upright font at the end of the signature.

We have served as the auditor of one or more Morgan Stanley investment companies since 2000.  
Boston, Massachusetts  
February 22, 2024

## Liquidity Risk Management Program (unaudited)

In compliance with Rule 22e-4 under the Investment Company Act of 1940, as amended (the “Liquidity Rule”), the Fund has adopted and implemented a liquidity risk management program (the “Program”), which is reasonably designed to assess and manage the risk that the Fund could not meet requests to redeem shares issued by the Fund without significant dilution of remaining investors’ interests in the Fund (i.e., liquidity risk). The Fund’s Board of Directors (the “Board”) previously approved the designation of the Liquidity Risk Subcommittee (the “LRS”) as Program administrator. The LRS is comprised of representatives from various divisions within Morgan Stanley Investment Management.

At a meeting held on March 1-2, 2023, the Board reviewed a written report prepared by the LRS that addressed the Program’s operation and assessed its adequacy, and effectiveness of implementation for the period from January 1, 2022, through December 31, 2022, as required under the Liquidity Rule. The report concluded that the Program operated effectively and was adequately and effectively implemented in all material aspects, and that the relevant controls and safeguards were appropriately designed to enable the LRS to administer the Program in compliance with the Liquidity Rule.

In accordance with the Program, the LRS assessed each Fund’s liquidity risk no less frequently than annually taking into consideration certain factors, as applicable, such as (i) investment strategy and liquidity of portfolio investments, (ii) short-term and long-term cash flow projections and (iii) holdings of cash and cash equivalents and borrowing arrangements and other funding sources. Certain factors are considered under both normal and reasonably foreseeable stressed conditions.

Each Fund portfolio investment is classified into one of four liquidity categories, which classification is assessed at least monthly by the LRS. The classification is based on a determination of the number of days it is reasonably expected to take to convert the investment into cash, or sell or dispose of the investment, in current market conditions without significantly changing the market value of the investment. Liquidity classification determinations take into account various market, trading and investment-specific considerations, as well as market depth, and in some cases utilize third-party vendor data.

The Liquidity Rule limits a fund’s investments in illiquid investments to 15% of its net assets and requires funds that do not primarily hold assets that are highly liquid investments to determine and maintain a minimum percentage of the fund’s net assets to be invested in highly liquid investments (highly liquid investment minimum or “HLIM”). The LRS believes that the Program includes provisions reasonably designed to review, monitor and comply with the 15% limit on illiquid investments and for determining, periodically reviewing and complying with the HLIM requirement, as applicable.

There can be no assurance that the Program will achieve its objectives under all circumstances in the future. Please refer to the Fund’s prospectus for more information regarding the Fund’s exposure to liquidity risk and other risks to which it may be subject.

# Important Notices (unaudited)

## Reporting to Shareholders

Each Morgan Stanley fund provides a complete schedule of portfolio holdings in its semi-annual and annual reports within 60 days of the end of the fund's second and fourth fiscal quarters. The semi-annual and annual reports are filed electronically with the Securities and Exchange Commission ("SEC") on Form N-CSRS and Form N-CSR, respectively. Morgan Stanley makes these reports available on its public website, [www.morganstanley.com/im](http://www.morganstanley.com/im). Each Morgan Stanley non-money market fund also files a complete schedule of portfolio holdings with the SEC for the fund's first and third fiscal quarters as an attachment to Form N-PORT and monthly holding for each money market fund on Form N-MFP. Morgan Stanley does not deliver the reports for the first and third fiscal quarters to shareholders, but makes the complete schedule of portfolio holdings for the fund's first and third fiscal quarters available on its public website. The holdings for each money market fund are also posted to the Morgan Stanley public website. You may, however, obtain Form N-PORT filings (as well as the Form N-CSR, N-CSRS and N-MFP filings) by accessing the SEC's website, [www.sec.gov](http://www.sec.gov). You can also request copies of these materials, upon payment of a duplicating fee, by electronic request at the SEC's email address ([publicinfo@sec.gov](mailto:publicinfo@sec.gov)).

## Proxy Voting Policies and Procedures and Proxy Voting Record

You may obtain a copy of the Company's Proxy Voting Policy and Procedures and information regarding how the Company voted proxies relating to portfolio securities during the most recent twelve-month period ended June 30, without charge, upon request, by calling toll free 1 (800) 869-6397 or by visiting our website at [www.morganstanley.com/im](http://www.morganstanley.com/im). This information is also available on the SEC's website at [www.sec.gov](http://www.sec.gov).

This report is submitted for the general information of the shareholders of the Fund. For more detailed information about the Fund, its fees and expenses and other pertinent information, please read its Prospectus. The Company's Statement of Additional Information contains additional information about the Fund, including its Directors. It is available, without charge, by calling 1 (800) 869-6397.

## Householding Notice

To reduce printing and mailing costs, the Fund attempts to eliminate duplicate mailings to the same address. The Fund delivers a single copy of certain shareholder documents, including shareholder reports, prospectuses and proxy materials, to investors with the same last name who reside at the same address. Your participation in this program will continue for an unlimited period of time unless you instruct us otherwise. You can request multiple copies of these documents by calling 1 (800) 869-6397, 8:00 a.m. to 6:00 p.m., ET. Once our Customer Service Center has received your instructions, we will begin sending individual copies for each account within 30 days.

## Tailored Shareholder Reports

Effective January 24, 2023, the SEC adopted rule and form amendments to require open-end mutual funds and ETFs to transmit concise and visually engaging streamlined annual and semi-annual reports to shareholders that highlight key information. Other information, including financial statements, will no longer appear in a streamlined shareholder report but must be available online, delivered free of charge upon request, and filed on a semi-annual basis on Form N-CSR. The rule and form amendments have a compliance date of July 24, 2024. At this time, management is evaluating the impact of these amendments on the shareholder reports for the Morgan Stanley Funds.

## Directors and Officers Information (unaudited)

### Independent Directors:

Name, Address and Birth Year of Independent Director	Position(s) Held with Registrant	Length of Time Served*	Principal Occupation(s) During Past 5 Years and Other Relevant Professional Experience	Number of Funds in Fund Complex Overseen by Independent Director**	Other Directorships Held by Independent Director During Past 5 Years***
Frank L. Bowman c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1944	Director	Since August 2006	President, Strategic Decisions, LLC (consulting) (since February 2009); Director or Trustee of various Morgan Stanley Funds (since August 2006); Chairperson of the Compliance and Insurance Committee (since October 2015); formerly, Chairperson of the Insurance Sub-Committee of the Compliance and Insurance Committee (2007-2015); served as President and Chief Executive Officer of the Nuclear Energy Institute (policy organization) (February 2005-November 2008); retired as Admiral, U.S. Navy after serving over 38 years on active duty including 8 years as Director of the Naval Nuclear Propulsion Program in the Department of the Navy and the U.S. Department of Energy (1996-2004); served as Chief of Naval Personnel (July 1994-September 1996) and on the Joint Staff as Director of Political Military Affairs (June 1992-July 1994); knighted as Honorary Knight Commander of the Most Excellent Order of the British Empire; awarded the Officier de l'Ordre National du Mérite by the French Government; elected to the National Academy of Engineering (2009).	87	Director of Naval and Nuclear Technologies LLP; Director Emeritus of the Armed Services YMCA; Member of the National Security Advisory Council of the Center for U.S. Global Engagement and a former member of the CNA Military Advisory Board; Chairman of the Board of Trustees of Fairhaven United Methodist Church; Member of the Board of Advisors of the Dolphin Scholarship Foundation; Director of other various nonprofit organizations; formerly, Director of BP, plc (November 2010-May 2019).
Frances L. Cashman c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1961	Director	Since February 2022	Chief Executive Officer, Asset Management Portfolio, Delinian Ltd. (financial information) (May 2021-Present); Executive Vice President and various other roles, Legg Mason & Co. (asset management) (2010-2020); Managing Director, Stifel Nicolaus (2005-2010).	88	Formerly, Trustee and Investment Committee Member, GeorgiaTech Foundation (since June 2019); Trustee and Chair of Marketing Committee, and Member of Investment Committee, Loyola Blakefield (2017-2023); Trustee, MMI Gateway Foundation (2017-2023); Director and Investment Committee Member, Catholic Community Foundation Board (2012-2018); Director and Investment Committee Member, St. Ignatius Loyola Academy (2011-2017).
Kathleen A. Dennis c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1953	Director	Since August 2006	Chairperson of the Governance Committee (since January 2021), Chairperson of the Liquidity and Alternatives Sub-Committee of the Investment Committee (2006-2020) and Director or Trustee of various Morgan Stanley Funds (since August 2006); President, Cedarwood Associates (mutual fund and investment management consulting) (since July 2006); formerly, Senior Managing Director of Victory Capital Management (1993-2006); Senior Vice President, Chase Bank (1984-1993).	87	Board Member, University of Albany Foundation (2012-present); Board Member, Mutual Funds Directors Forum (2014-present); Director of various non-profit organizations.
Nancy C. Everett c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1955	Director	Since January 2015	Chairperson of the Equity Investment Committee (since January 2021); Director or Trustee of various Morgan Stanley Funds (since January 2015); Chief Executive Officer, Virginia Commonwealth University Investment Company (since November 2015); Owner, OBIR, LLC (institutional investment management consulting) (since June 2014); formerly, Managing Director, BlackRock, Inc. (February 2011-December 2013) and Chief Executive Officer, General Motors Asset Management (a/k/a Promark Global Advisors, Inc.) (June 2005-May 2010).	88	Formerly, Member of Virginia Commonwealth University School of Business Foundation (2005-2016); Member of Virginia Commonwealth University Board of Visitors (2013-2015); Member of Committee on Directors for Emerging Markets Growth Fund, Inc. (2007-2010); Chairperson of Performance Equity Management, LLC (2006-2010); and Chairperson, GMAM Absolute Return Strategies Fund, LLC (2006-2010).

# Directors and Officers Information (unaudited) (cont'd)

## Independent Directors (cont'd):

Name, Address and Birth Year of Independent Director	Position(s) Held with Registrant	Length of Time Served*	Principal Occupation(s) During Past 5 Years and Other Relevant Professional Experience	Number of Funds in Fund Complex Overseen by Independent Director**	Other Directorships Held by Independent Director During Past 5 Years***
Eddie A. Grier c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1955	Director	Since February 2022	Dean, Santa Clara University Leavey School of Business (since July 2021); Dean, Virginia Commonwealth University School of Business (2010-2021); President and various other roles, Walt Disney Company (entertainment and media) (1981-2010).	88	Director, Witt/Kieffer, Inc. (executive search) (since 2016); Director, NuStar GP, LLC (energy) (since August 2021); Director, Sonida Senior Living, Inc. (residential community operator) (2016-2021); Director, NVR, Inc. (homebuilding) (2013-2020); Director, Middleburg Trust Company (wealth management) (2014-2019); Director, Colonial Williamsburg Company (2012-2021); Regent, University of Massachusetts Global (since 2021); Director and Chair, ChildFund International (2012-2021); Trustee, Brandman University (2010-2021); Director, Richmond Forum (2012-2019).
Jakki L. Haussler c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1957	Director	Since January 2015	Chairperson of the Audit Committee (since January 2023) and Director or Trustee of various Morgan Stanley Funds (since January 2015); Chairman, Opus Capital Group (since 1996); formerly, Chief Executive Officer, Opus Capital Group (1996-2019); Director, Capvest Venture Fund, LP (May 2000-December 2011); Partner, Adena Ventures, LP (July 1999-December 2010); Director, The Victory Funds (February 2005-July 2008).	88	Director, Vertiv Holdings Co. (VRT) (since August 2022); Director of Cincinnati Bell Inc. and Member, Audit Committee and Chairman, Governance and Nominating Committee (2008-2021); Director of Service Corporation International and Member, Audit Committee and Investment Committee; Director, Barnes Group Inc. (since July 2021); Member of Chase College of Law Center for Law and Entrepreneurship Board of Advisors; Director of Best Transport (2005-2019); Director of Chase College of Law Board of Visitors; formerly, Member, University of Cincinnati Foundation Investment Committee.
Dr. Manuel H. Johnson c/o Johnson Smick International, Inc. 220 I Street, NE Suite 200 Washington, D.C. 20002 Birth Year: 1949	Director	Since July 1991	Senior Partner, Johnson Smick International, Inc. (consulting firm); Chairperson of the Fixed Income, Liquidity and Alternatives Investment Committee (since January 2021), Chairperson of the Investment Committee (2006-2020) and Director or Trustee of various Morgan Stanley Funds (since July 1991); Co-Chairman and a founder of the Group of Seven Council (G7C) (international economic commission); formerly, Chairperson of the Audit Committee (July 1991-September 2006); Vice Chairman of the Board of Governors of the Federal Reserve System and Assistant Secretary of the U.S. Treasury.	87	Director of NVR, Inc. (home construction).
Joseph J. Kearns c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1942	Director	Since August 1994 (Retired December 31, 2023)	Senior Adviser, Kearns & Associates LLC (investment consulting); Chairperson of the Audit Committee (2006-2022) and Director or Trustee of various Morgan Stanley Funds (since August 1994); formerly, Deputy Chairperson of the Audit Committee (July 2003-September 2006); CFO of the J. Paul Getty Trust (1982-1999).	88	Director, Rubicon Investments (since February 2019); Prior to August 2016, Director of Electro Rent Corporation (equipment leasing); Prior to December 31, 2013, Director of The Ford Family Foundation.

## Directors and Officers Information (unaudited) (cont'd)

### Independent Directors (cont'd):

Name, Address and Birth Year of Independent Director	Position(s) Held with Registrant	Length of Time Served*	Principal Occupation(s) During Past 5 Years and Other Relevant Professional Experience	Number of Funds in Fund Complex Overseen by Independent Director**	Other Directorships Held by Independent Director During Past 5 Years***
Michael F. Klein c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1958	Director	Since August 2006	Chairperson of the Risk Committee (since January 2021); Managing Director, Aetos Alternatives Management, LP (since March 2000); Co-President, Aetos Alternatives Management, LP (since January 2004) and Co-Chief Executive Officer of Aetos Alternatives Management, LP (since August 2013); Chairperson of the Fixed Income Sub-Committee of the Investment Committee (2006-2020) and Director or Trustee of various Morgan Stanley Funds (since August 2006); formerly, Managing Director, Morgan Stanley & Co. Inc. and Morgan Stanley Dean Witter Investment Management and President, various Morgan Stanley Funds (June 1998-March 2000); Principal, Morgan Stanley & Co. Inc. and Morgan Stanley Dean Witter Investment Management (August 1997-December 1999).	87	Director of certain investment funds managed or sponsored by Aetos Alternatives Management, LP; Director of Sanitized AG and Sanitized Marketing AG (specialty chemicals).
Patricia A. Maleski c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1960	Director	Since January 2017	Director or Trustee of various Morgan Stanley Funds (since January 2017); Managing Director, JPMorgan Asset Management (2004-2016); Oversight and Control Head of Fiduciary and Conflicts of Interest Program (2015-2016); Chief Control Officer — Global Asset Management (2013-2015); President, JPMorgan Funds (2010-2013); Chief Administrative Officer (2004-2013); various other positions including Treasurer and Board Liaison (since 2001).	88	Formerly, Trustee (January 2022 to March 2023), Treasurer (January 2023 to March 2023), and Finance Committee (January 2022 to March 2023).
W. Allen Reed c/o Perkins Coie LLP Counsel to the Independent Directors 1155 Avenue of the Americas 22nd Floor New York, NY 10036 Birth Year: 1947	Chair of the Board and Director	Chair of the Board since August 2020 and Director since August 2006	Chair of the Boards of various Morgan Stanley Funds (since August 2020); Director or Trustee of various Morgan Stanley Funds (since August 2006); formerly, Vice Chair of the Boards of various Morgan Stanley Funds (January 2020-August 2020); President and Chief Executive Officer of General Motors Asset Management; Chairman and Chief Executive Officer of the GM Trust Bank and Corporate Vice President of General Motors Corporation (August 1994-December 2005).	87	Formerly, Director of Legg Mason, Inc. (2006-2019); and Director of the Auburn University Foundation (2010-2015).

\* This is the earliest date the Director began serving the Morgan Stanley Funds. Each Director serves an indefinite term, until his or her successor is elected.

\*\* The Fund Complex includes (as of December 31, 2023) all open-end and closed-end funds (including all of their portfolios) advised by Morgan Stanley Investment Management Inc. (the "Adviser") and any funds that have an adviser that is an affiliated person of the Adviser (including, but not limited to, Morgan Stanley AIP GP LP).

\*\*\* This includes any directorships at public companies and registered investment companies held by the Directors at any time during the past five years.

## Directors and Officers Information (unaudited) (cont'd)

### Executive Officers:

Name, Address and Birth Year of Executive Officer	Position(s) Held with Registrant	Length of Time Served*	Principal Occupation(s) During Past 5 Years
John H. Gernon 1585 Broadway New York, NY 10036 Birth Year: 1963	President and Principal Executive Officer	Since September 2013	President and Principal Executive Officer of the Equity and Fixed Income Funds and the Morgan Stanley AIP Funds (since September 2013) and the Liquidity Funds and various money market funds (since May 2014) in the Fund Complex; Managing Director of the Adviser.
Deidre A. Downes 1633 Broadway New York, NY 10019 Birth Year: 1977	Chief Compliance Officer	Since November 2021	Executive Director of the Adviser (since January 2021) and Chief Compliance Officer of various Morgan Stanley Funds (since November 2021). Formerly, Vice President and Corporate Counsel at PGIM and Prudential Financial (October 2016-December 2020).
Francis J. Smith 750 Seventh Avenue New York, NY 10019 Birth Year: 1965	Treasurer and Principal Financial Officer	Treasurer since July 2003 and Principal Financial Officer since September 2002	Managing Director of the Adviser and various entities affiliated with the Adviser; Treasurer (since July 2003) and Principal Financial Officer of various Morgan Stanley Funds (since September 2002).
Mary E. Mullin 1633 Broadway New York, NY 10019 Birth Year: 1967	Secretary	Since June 1999	Managing Director of the Adviser and various entities affiliated with the Adviser; Secretary of various Morgan Stanley Funds (since June 1999).
Michael J. Key 1585 Broadway New York, NY 10036 Birth Year: 1979	Vice President	Since June 2017	Vice President of the Equity and Fixed Income Funds, Liquidity Funds, various money market funds and the Morgan Stanley AIP Funds in the Fund Complex (since June 2017); Managing Director of the Adviser; Head of Product Development for Equity and Fixed Income Funds (since August 2013).

The Fund's statement of additional information includes further information about the Fund's Directors and Officers, and is available without charge by visiting [www.morganstanley.com/im](http://www.morganstanley.com/im) or upon request by calling 1 (800) 869-6397.

\* This is the earliest date the officer began serving the Morgan Stanley Funds. Each officer serves an indefinite term, until his or her successor is elected.

**Adviser and Administrator**

Morgan Stanley Investment Management Inc.  
1585 Broadway  
New York, New York 10036

**Distributor**

Morgan Stanley Distribution, Inc.  
1585 Broadway  
New York, New York 10036

**Dividend Disbursing and Transfer Agent**

SS&C Global Investor & Distribution Solutions, Inc.  
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Kansas City, Missouri 64121-9804

**Co-Transfer Agent**

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Two International Place  
Boston, Massachusetts 02110

**Custodian**

State Street Bank and Trust Company  
One Congress Street  
Boston, Massachusetts 02114

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New York, New York 10036

**Counsel to the Independent Directors**

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New York, New York 10036

**Independent Registered Public Accounting Firm**

Ernst & Young LLP  
200 Clarendon Street  
Boston, Massachusetts 02116

**This report is not authorized for distribution to prospective investors in the Fund unless preceded or accompanied by an effective Prospectus. Read the Prospectus carefully before investing.**