MBA SIM Fund Fall 2024

Portfolio Update

Deepak Baru, Kathryn Clark, Samuel Johnson, Brendan Knight, Carson Thrift

Arizona State University

Copyright © 2023 Arizona Board of Regents

Agenda

- Meet the Team
- Learning Objectives
- Investment Strategy
- Implementation
- Portfolio Visualizations
- Comparison to Benchmark
- Looking Ahead
- Q&A

Copyright © 2023 Arizona Board of Regents

Meet The Team

Deepak Baru

MBA, Supply Chain Management & Business Analytics

Kathryn Clark

MBA, Finance
Certificate of Sustainability

Samuel Johnson

MBA, Finance

Brendan Knight

MBA, Finance

Carson Thrift

MBA, Finance & Real Estate

Copyright © 2023 Arizona Board of Regents

Learning Objectives

- Bloomberg Terminal Expierence
- How to Build and Seed a Portfolio
- Understanding of Rebalancing
- Learn More about ADR's
- How Volatility effects our Strategy

Copyright © 2023 Arizona Board of Regents

Momentum Strategy

- **Momentum**: Tendency of stock prices to persist in a direction.
- **Strategy**: Buy rising stocks, sell falling ones.
- **Jegadeesh, N., & Titman, S. (1993)**. "Returns to Buying Winners and Selling Losers: Implications for Stock Market Efficiency"

Copyright © 2023 Arizona Board of Regents

Why Momentum?

- Ability to integrate ADR application
- Implementation given our Manpower constraints
- Strategy aligns with our time horizon
- Strategy Aligns with our Investment Policy Statement

Copyright © 2023 Arizona Board of Regents

Investment Policy Restrictions

- ADR's limited to 25% of Fund's MKT Value
- Must invest in at least 30 different securities
- No more than 20% of Fund's MKT value may be invested in any one sector
- MKT cap of at least $500mm
- Stay within +/- 7.5% of Russell 3000 Sector Weights

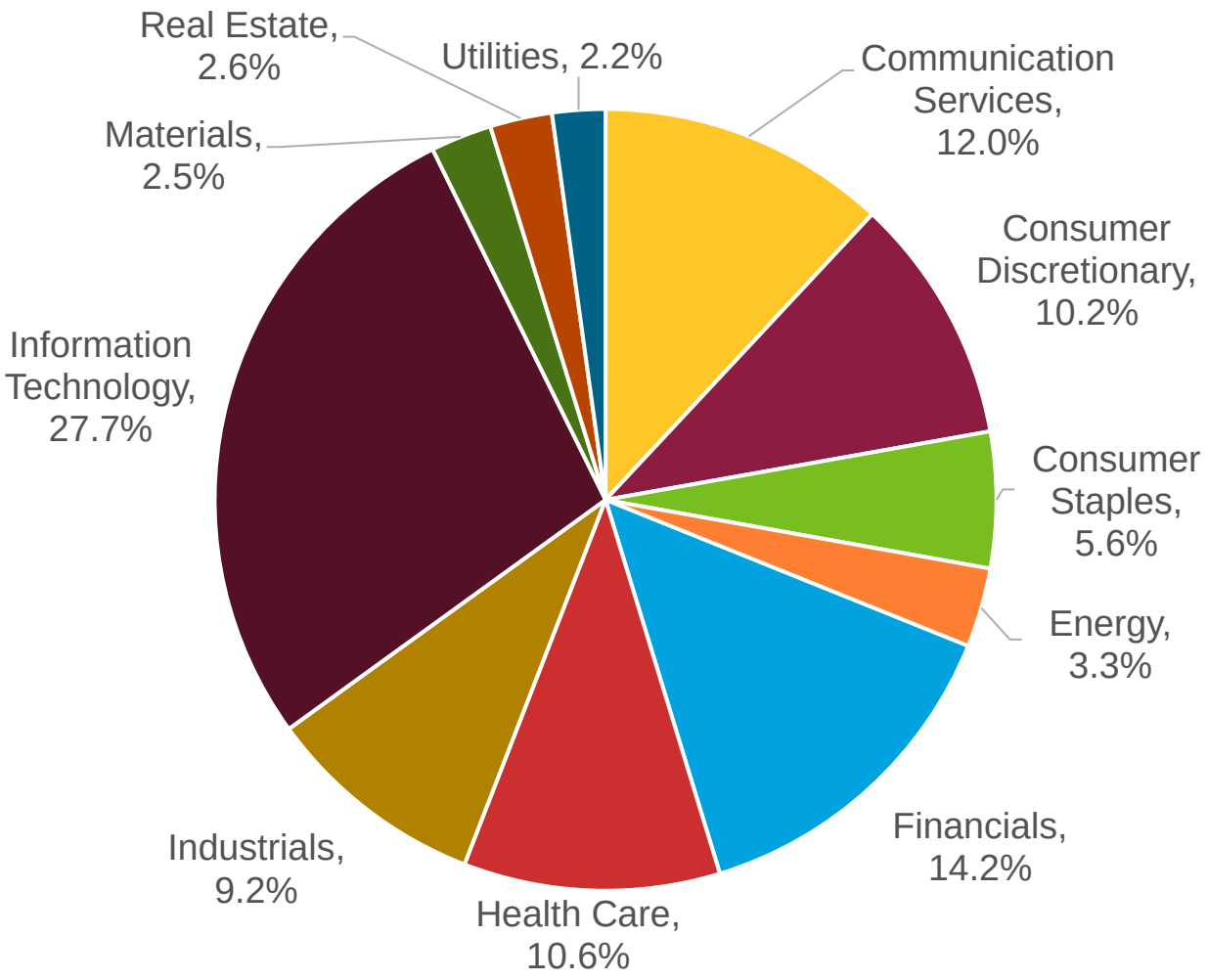
Copyright © 2023 Arizona Board of Regents

Implementation

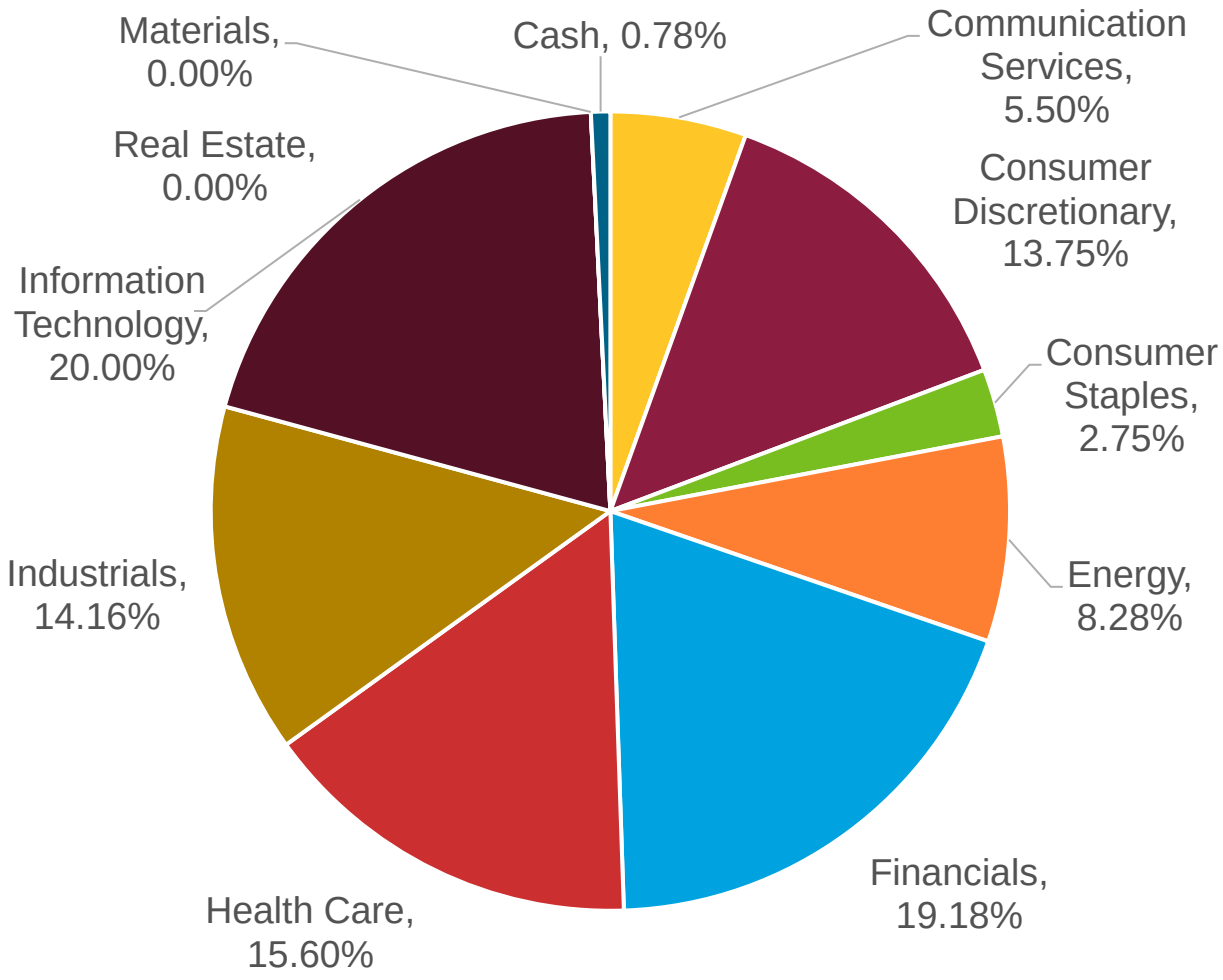
Copyright © 2023 Arizona Board of Regents

Benchmark Comparison

Russel Sector Mkt Cap Weights

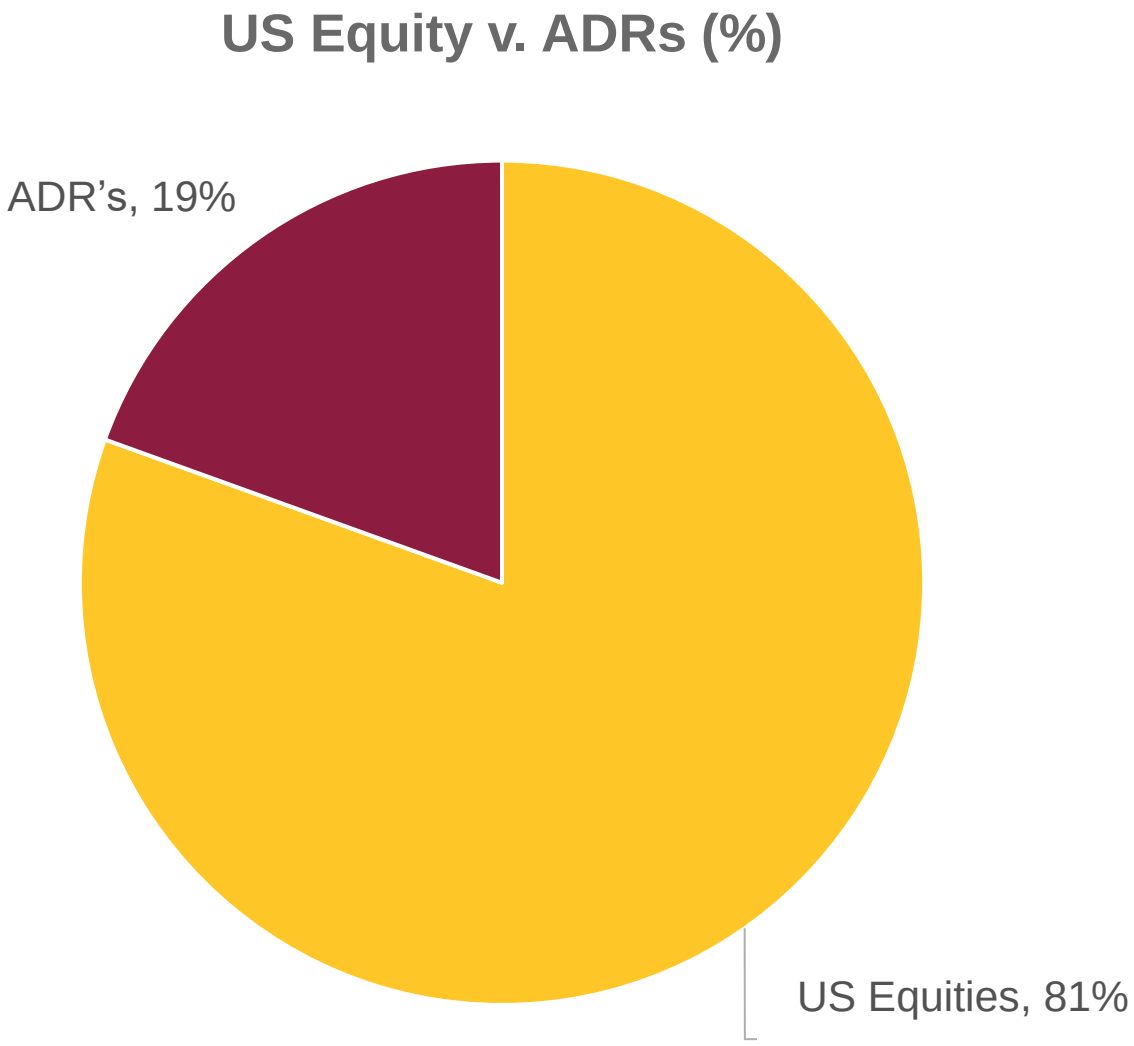


Actual Portfolio Sector Allocation



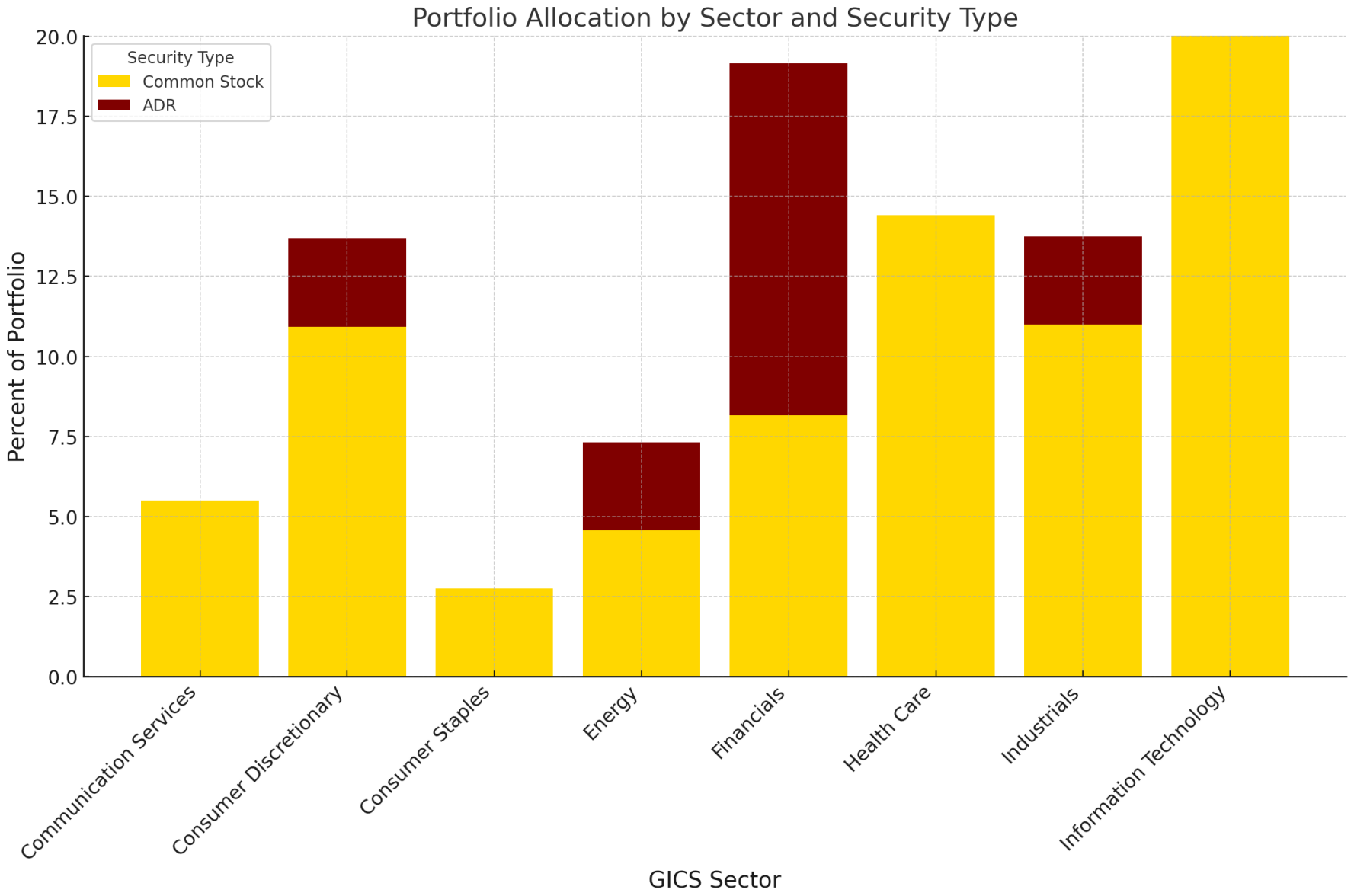
Copyright © 2023 Arizona Board of Regents

Portfolio Visualizations



Copyright © 2023 Arizona Board of Regents

Portfolio Visualizations



Copyright © 2023 Arizona Board of Regents

Rebalancing Process

Updated data on stock performance and momentum indicators to capture the latest market trends.

Reassess portfolio allocations based on the updated momentum scores and strategy parameters.

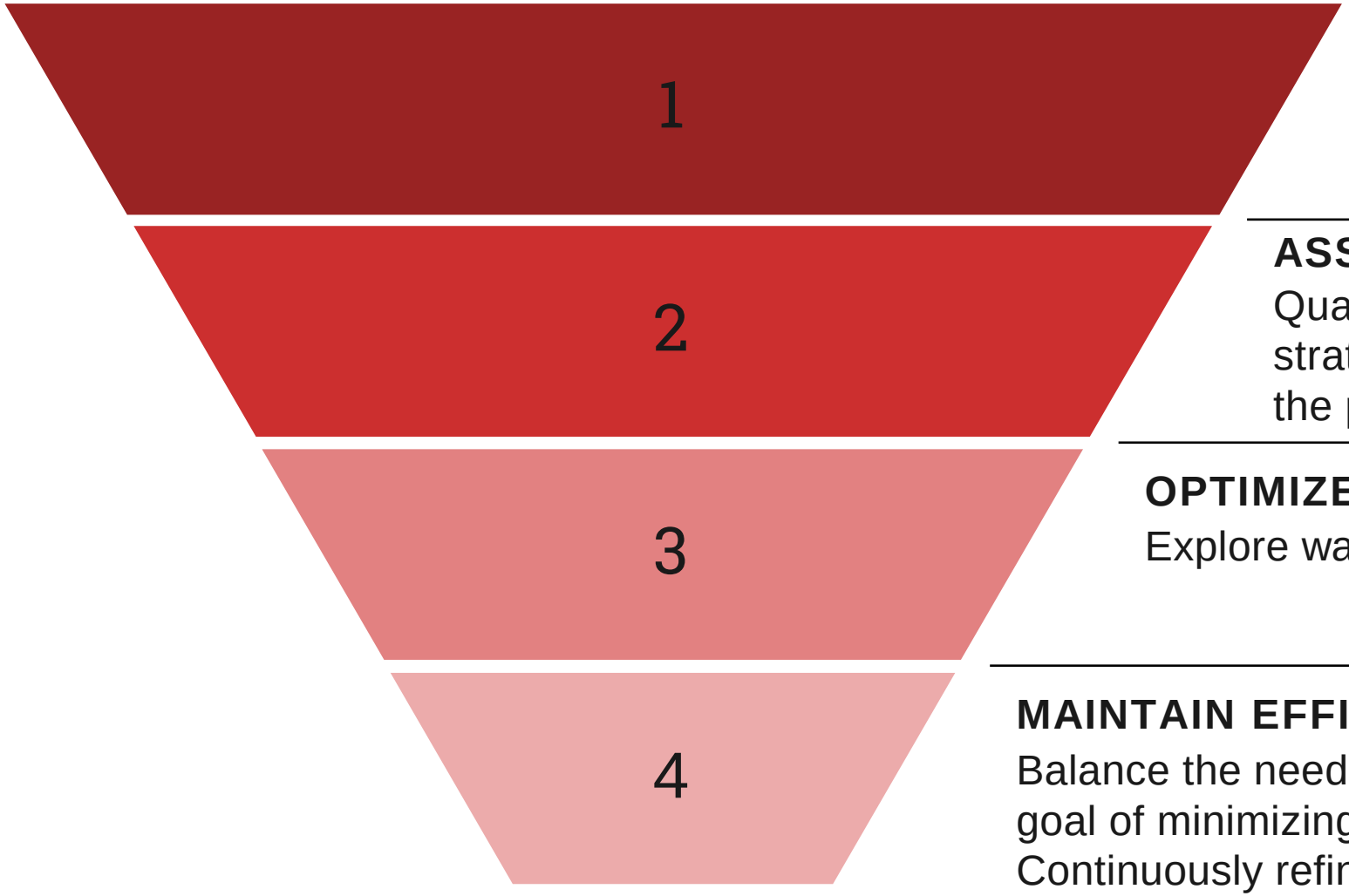
Reflect changes in the portfolio by updating the weight distribution and expected impact on returns.

Incorporate the professor's insights and recommendations to finalize portfolio adjustments.

Execution of trades with Northern Trust

Copyright © 2023 Arizona Board of Regents

Examine Turnover and Costs



EVALUATE TURNOVER

Monitor turnover rates to ensure they align with the momentum strategy's target efficiency.

ASSESS TRANSACTION COSTS

Quantify the transaction and ensure the strategy remains cost-effective to achieve the performance targets.

OPTIMIZE EXECUTION

Explore ways to minimize transaction costs.

MAINTAIN EFFICIENCY

Balance the need for timely portfolio adjustments with the goal of minimizing unnecessary turnover and costs. Continuously refine the rebalancing process to optimize the strategy's efficiency.

Copyright © 2023 Arizona Board of Regents

Plan for Next Cycle

4 WEEKS PRIOR

Review portfolio performance and market conditions to identify areas for optimization

3 WEEKS PRIOR

Gather updated data and run rebalancing analysis in Excel

2 WEEKS PRIOR

Submit proposed portfolio allocations for review and feedback

1 WEEK PRIOR

Finalize portfolio changes and prepare for trade execution

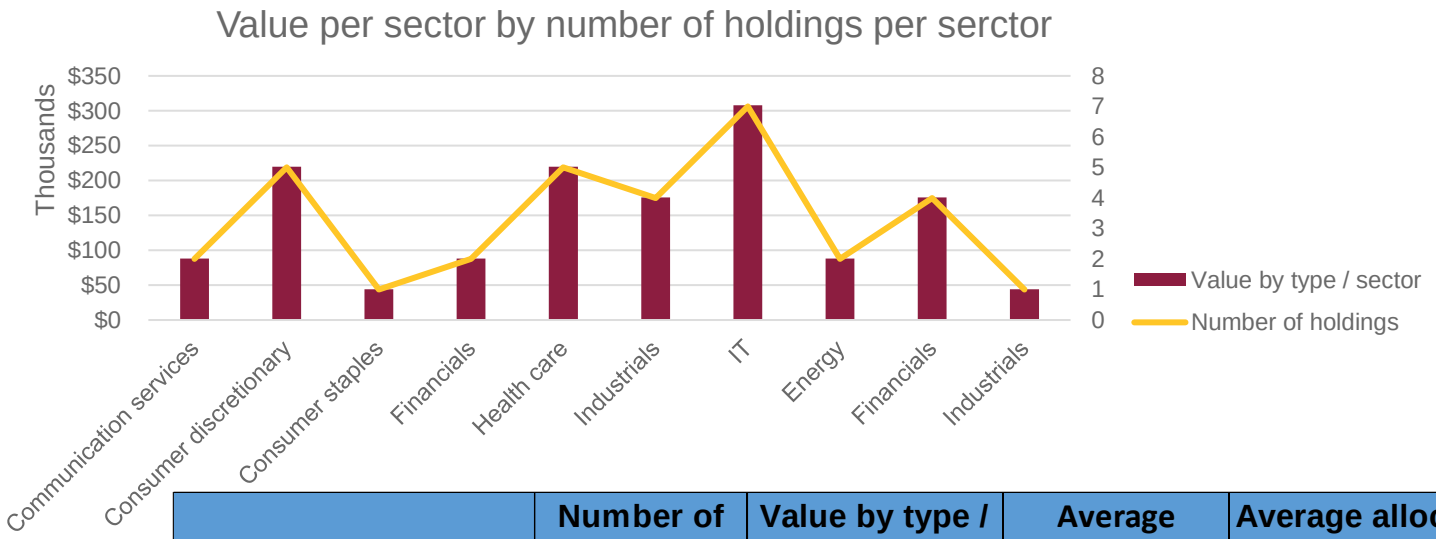
Oversight - Continuously monitor the portfolio's performance and address any deviations promptly. This ongoing oversight ensures the strategy remains aligned with the target benchmarks and objectives.

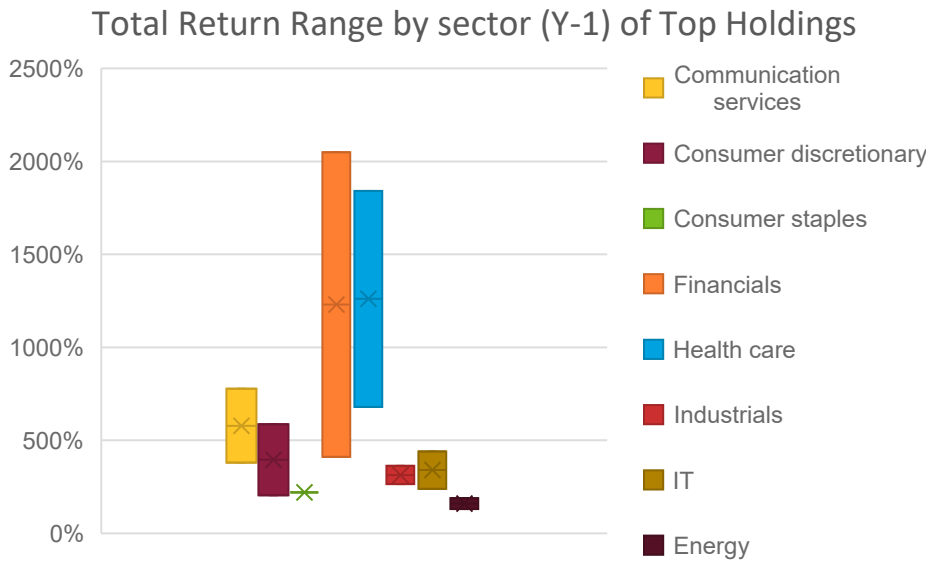
Q&A

Appendix

Copyright © 2023 Arizona Board of Regents

Top Holdings Summary Details





	Number of holdings	Value by type / sector	Average holding value	Average allocation per holding	Price range by sector		Total Return Range (Y-1)	
					Min	Max	Min	Max
Total Holidings	**33**	**$1,451,381**	**$43,981.24**	**2.75%**	**$1.02**	**$381.35**	**130.27%**	**2050.13%**
US Equity	**26**	**$1,143,512**			**$1.02**	**$381.35**	**205.33%**	**2050.13%**
Communication services	2	$87,962	$43,981.24	2.75%	$8.45	$23.35	380.60%	777.40%
Consumer discretionary	5	$219,906	$43,981.24	2.75%	$4.99	$240.35	205.33%	587.24%
Consumer staples	1	$43,981	$43,981.24	2.75%	$28.63	$28.63	219.51%	219.51%
Financials	2	$87,962	$43,981.24	2.75%	$44.91	$381.35	410.72%	2050.13%
Health care	5	$219,906	$43,981.24	2.75%	$18.82	$70.32	680.65%	1841.25%
Industrials	4	$175,925	$43,981.24	2.75%	$27.59	$199.09	265.26%	362.45%
IT	7	$307,869	$43,981.24	2.75%	$1.02	$335.49	238.88%	440.93%
ADR	**7**	**$307,869**			**$10.63**	**$80.83**	**130.27%**	**395.58%**
Energy	2	$87,962	$43,981.24	2.75%	$28.17	$32.84	130.27%	189.15%
Financials	4	$175,925	$43,981.24	2.75%	$10.63	$80.83	338.42%	395.58%
Industrials	1	$43,981	$43,981.24	2.75%	$49.48	$49.48	320.14%	320.14%

Copyright © 2023 Arizona Board of Regents

Top Holdings Details

US Equity / Common stock

Short Name	Ticker	Jurisdiction	Market Cap ($)	Share outstanding	Free Float %	Free Float (%)	GICS Sector	Price:D-1	Volume:D-1	Average Volume:D-20	Total return (Y-1)	Volume (USD)	Allocation	Target position	Target Shares	Return	Cost
SEZZLE INC	SEZL US	US	$1,232,754,135	5,584,986	54.66149139	54.66%	Financials	$381.35	78,840	90,574	2050%	$16,789,767	2.75%	$43,981.24	115	56%	$2.30
GENEDX HOLDINGS	WGS US	US	$1,510,026,423	26,926,384	50.59173203	50.59%	Health Care	$70.32	377,482	568,278	1841%	$22,203,491	2.75%	$43,981.24	625	51%	$12.50
SUMMIT THERAPEUT	SMMT US	US	$16,113,719,416	701,660,032	14.08125401	14.08%	Health Care	$19.02	2,531,620	3,044,139	1031%	$53,822,242	2.75%	$43,981.24	2,312	28%	$46.24
AVIDITY BIOSCIEN	RNA US	US	$5,380,513,767	109,266,000	93.86613464	93.87%	Health Care	$44.81	575,049	868,074	793%	$25,940,461	2.75%	$43,981.24	981	22%	$19.62
AST SPACEMOBILE	ASTS US	US	$7,200,913,017	266,661,632	65.04946899	65.05%	Communications	$23.35	14,701,879	10,914,840	777%	$376,662,152	2.75%	$43,981.24	1,883	21%	$37.66
JANUX THERAPEUTI	JANX US	US	$2,835,662,143	52,162,216	59.7725029	59.77%	Health Care	$48.79	1,074,833	671,716	761%	$57,406,830	2.75%	$43,981.24	901	21%	$18.02
CARVANA CO	CVNA US	US	$41,009,211,682	206,672,992	95.84482574	95.84%	Cons. Discret.	$240.35	2,535,276	2,453,860	587%	$513,469,445	2.75%	$43,981.24	182	16%	$3.64
MICROSTRATEGY	MSTR US	US	$51,739,096,613	190,670,000	99.95514679	99.96%	IT	$335.49	25,093,205	18,087,866	441%	$5,880,341,568	2.75%	$43,981.24	131	12%	$2.62
TERAWULF INC	WULF US	US	$2,620,793,558	374,456,736	79.56624603	79.57%	IT	$1.02	40,360,421	26,295,484	423%	$257,499,491	2.75%	$43,981.24	43,118	12%	$862.36
LENDINGTREE INC	TREE US	US	$706,591,460	13,339,928	81.99518585	82.00%	Financials	$44.91	138,000	139,358	411%	$7,365,060	2.75%	$43,981.24	979	11%	$19.58
WILLIS LEASE	WLFC US	US	$1,195,230,663	7,139,000	34.10904312	34.11%	Industrials	$199.09	30,633	42,572	362%	$5,664,348	2.75%	$43,981.24	220	10%	$4.40
APPLOVIN CO-CL A	APP US	US	$58,513,502,821	334,168,640	73.80892181	73.81%	IT	$285.77	2,193,317	3,604,401	347%	$354,505,837	2.75%	$43,981.24	153	10%	$3.06
FTAI AVIATION LT	FTAI US	US	$14,566,146,338	102,211,400	98.56291199	98.56%	Industrials	$157.47	732,636	1,131,134	341%	$105,675,421	2.75%	$43,981.24	279	9%	$5.58
CAVA GROUP INC	CAVA US	US	$15,829,970,991	112,928,000	67.31707001	67.32%	Cons. Discret.	$140.18	1,937,636	1,836,541	323%	$263,692,876	2.75%	$43,981.24	313	9%	$6.26
IMPINJ INC	PI US	US	$5,816,976,937	28,268,000	84.4568634	84.46%	IT	$176.56	1,097,652	563,365	304%	$220,298,753	2.75%	$43,981.24	249	8%	$4.98
EVGO INC	EVGO US	US	$2,578,369,296	298,393,984	93.41912079	93.42%	Cons. Discret.	$4.99	3,782,344	15,483,826	293%	$33,322,452	2.75%	$43,981.24	8,822	8%	$176.44
AMER SUPERCONDTR	AMSC US	US	$927,524,080	37,399,000	95.17642975	95.18%	Industrials	$30.15	538,284	1,078,510	273%	$12,342,852	2.75%	$43,981.24	1,458	8%	$29.16
TUTOR PERINI COR	TPC US	US	$1,377,318,163	52,389,432	82.34544373	82.35%	Industrials	$27.59	295,344	390,077	265%	$7,670,083	2.75%	$43,981.24	1,594	7%	$31.88
AURORA INNOVATIO	AUR US	US	$11,657,642,088	1,563,000,064	69.77458954	69.77%	IT	$5.04	7,941,012	7,192,337	258%	$50,901,886	2.75%	$43,981.24	8,726	7%	$174.52
ZETA GLOBAL HO-A	ZETA US	US	$6,364,533,593	217,686,928	86.29851532	86.30%	IT	$17.65	3,236,933	3,538,954	252%	$86,620,328	2.75%	$43,981.24	2,491	7%	$49.82
NVIDIA CORP	NVDA US	US	$3,446,955,704,803	24,561,999,872	96.05755615	96.06%	IT	$141.55	205,122,109	253,756,016	239%	$29,032,981,931	2.75%	$43,981.24	310	7%	$6.20
VITAL FARMS INC	VITL US	US	$1,558,026,964	42,971,988	64.3451004	64.35%	Consumer Staples	$28.63	656,221	1,189,353	220%	$23,210,536	2.75%	$43,981.24	1,536	6%	$30.72
RUSH STREET INTE	RSI US	US	$2,376,320,582	225,386,032	87.84540558	87.85%	Cons. Discret.	$10.95	1,152,552	1,330,819	205%	$11,894,336	2.75%	$43,981.24	4,016	6%	$80.32
CAPRICOR THERAPE	CAPR US	US	$975,636,260	31,983,928	83.27023315	83.27%	Health Care	$18.82	1,514,376	4,620,692	681%	$32,983,110	2.75%	$43,981.24	2,337	19%	$46.74
LUMEN TECHNOLOGI	LUMN US	US	$6,517,752,291	1,016,190,016	92.22715759	92.23%	Communications	$8.45	11,603,811	13,202,601	381%	$74,728,544	2.75%	$43,981.24	5,207	10%	$104.14
MODINE MFG CO	MOD US	US	$6,869,323,667	52,400,000	97.33730316	97.34%	Cons. Discret.	$120.78	498,682	541,655	218%	$63,457,285	2.75%	$43,981.24	364	6%	$7.28

ADR

Short Name	Ticker	Jurisdiction	Market Cap ($)	Share outstanding	Free Float %	Free Float (%)	GICS Sector	Price:D-1	Volume:D-1	Average volume:D-20	Total return (Y-1)	Volume (USD)	Allocation	Target position	Target Shares	Return	Cost
GRUPO SV-SP ADR	SUPV US	AR	$857,953,096	438,119,008	98.30799103	98.31%	Financials	$10.63	1,909,269	1,135,867	396%	$11,131,497	2.75%	$43,981.24	4,137	10.88%	$82.74
GRUPO GALICI-ADR	GGAL US	AR	$8,075,413,643	1,474,692,096	68.02206421	68.02%	Financials	$56.92	675,957	933,092	389%	$51,096,116	2.75%	$43,981.24	772	10.68%	$15.44
BANCO MACRO -ADR	BMA US	AR	$5,222,728,753	639,413,376	35.22822952	35.23%	Financials	$80.83	246,604	238,228	363%	$19,458,463	2.75%	$43,981.24	544	9.99%	$10.88
BBVA ARGENT-ADR	BBAR US	AR	$3,220,812,742	612,710,080	33.85692596	33.86%	Financials	$16.40	1,372,209	806,394	338%	$12,716,834	2.75%	$43,981.24	2,682	9.31%	$53.64
SIEMENS ENER-ADR	SMNEY US	DE	$33,347,202,160	862,758,976	77.04103088	77.04%	Industrials	$49.48	35,157	41,987	320%	$1,751,698	2.75%	$43,981.24	888	8.80%	$17.76
YPF SA-ADR	YPF US	AR	$11,464,576,305	393,312,800	48.69358063	48.69%	Energy	$32.84	2,285,125	1,930,161	189%	$56,592,320	2.75%	$43,981.24	1,339	5.20%	$26.78
TRANSPORT GA-ADR	TGS US	AR	$3,584,648,083	752,761,088	33.12976456	33.13%	Energy	$28.17	200,810	148,952	130%	$3,546,547	2.75%	$43,981.24	1,561	3.58%	$31.22

Copyright © 2023 Arizona Board of Regents