

The Passive Vs. Active Fund Montor

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→ SUMMARY

This paper documents the assets under management, market shares and flows of net new money in and out of passively and actively managed retail funds, including ETFs and mutual funds. We exclude from our sample money market funds, funds-of-funds, and segregated funds sold by Canadian life insurance companies.

Overall, the past year was disastrous for the active fund industry.

In 2022, Canadian passive funds increased their market share from 14.7% to 15.5% due to a positive inflow of \$19 billion. Meanwhile, Canadians withdrew \$14 billion from active funds. Passive funds represent \$265 billion of roughly \$1.7 trillion in total assets under management (AUM). We estimate that Canadian passive funds posted a weighted average management expense ratio (MER) of 0.25%, compared to 1.48% for active funds. In the US, passive funds increased their market share from 42% to 45%. US passive funds attracted \$545 billion, while active funds experienced a gut-wrenching \$913 billion outflow. For the world excluding North America, the market share of passive funds increased from 27% to 28% in 2022. For the world, the passive market share amounted to 37% at the end of 2022, up from 35% in the previous year.

Since 2013, Canadian passive funds have increased their market share from 10.4% to 15.5%. During that time, passive funds attracted a cumulative \$144 billion in net new money compared to only \$127 billion for active funds. During the same period, US passive funds have increased their market share from 24% to 45% and attracted a net inflow of \$4.8 trillion, compared to a \$1.2 trillion outflow for active funds. For the world excluding North America, the market share of passive funds increased from 13% to 28%. Passive funds have increased their market share worldwide from 19% to 37%. Over ten years, passive funds have attracted \$7.2 trillion compared to only \$0.9 trillion for active funds.

Passive funds are gaining wide acceptance in Canada, the US, and the rest of the world. This investor behaviour makes sense considering passive funds' higher relative returns, greater predictability, and transparency.

This report was written by Raymond Kerzérho, PWL Capital Inc. The ideas, opinions, and recommendations contained in this document are those of the authors and do not necessarily represent the views of PWL Capital Inc.

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CONTENTS

Introduction	5
1. Methodology	5
2. Canadian Market	6
2.1 Market Share	6
2.2 Flow of Funds	7
2.3 Composition of Passive Funds	8
2.4 Management Expense Ratios	9
3. US Market	11
3.1 Market Share	11
3.2 Flow of Funds	12
4. World Markets excluding North America	13
4.1 Market Share	13
4.2 Flow of Funds	15
5. World Markets	16
5.1 Market Share	16
5.2 Flow of Funds	17
Conclusion	19
Appendix A: Canadian ETF Funds	20
Appendix B: Canadian Mutual Fund Data	
Appendix C: U.S. ETF Data	22
Appendix D: U.S. Mutual Fund Data	23
The Author	24

INTRODUCTION

This report describes the competitive landscape for passively and actively managed retail funds from 2013 to 2022 in Canada, the United States and worldwide.

Section 1 describes the methodology that serves as the backbone of this study.

Section 2 describes the Canadian retail fund market. We review the dollar amount, market share and flow of funds of passive and active funds. We review the types of passive funds offered on the Canadian market, classifying them into three categories: market-capitalization weighted, factor funds and others. We also examine Canada's management expense ratios (MERs) of passive and active funds.

Sections 3, 4 and 5 review the dollar amount, market share and flow of funds of passive and active retail funds for the US, the world ex-US and the world overall.

1. METHODOLOGY

The data in this report is provided by Morningstar Direct and accounts for all mutual funds and exchange-traded funds combined in Canada, the United States, and the world. To mitigate the survivorship bias of our study, the data includes funds that disappeared during the period being considered. Our study focuses on funds categorized by Morningstar as "passively managed, long-term." This "passive" fund definition includes index funds but excludes sector, leveraged and inverse funds, which are similar to active funds due to their investment approach.

The data excludes all money market funds (because they are not at the core of the competition between active and passive funds), funds of funds (to avoid double counting), and segregated funds sold by Canadian life insurance companies (because they are insurance contracts rather than pure investment products). Last year, data excluding money market funds for world markets became available for the first time. This exclusion results in a higher reported market share for passive funds in international markets compared with the previous edition of this report.

To determine the composition of Canadian passive funds, we classified them manually into three categories: "Market-cap weighted," "Factor," and "Other."

We estimated the MER of each fund as the highest of the latest annual MER, the latest semiannual MER and the management fee. In addition, we documented average MERs for three sub-categories of mutual funds: "Commission-Based," "Do-It-Yourself," and "Fee-Based Advice."



2. CANADIAN MARKET

2.1 MARKET SHARE

In 2022, the market share of passive funds increased by 0.8%, from 14.7% to 15.5%. This represents the seventh consecutive annual increase in market share. The data for Canada displays a positive trend in favour of passively managed funds, with their market share increasing from 10.4% in 2013 to 15.5% currently. Correspondingly, the market share of actively managed funds has slipped from 89.6% to 84.5%.

The Canadian data shows an upward trend in the market share of passive funds and a strong growth rate for these funds between 2013 and 2022. Passive funds experienced an impressive 255% growth rate during this period, compared to 126% for active funds. In other words, passive funds grew twice as fast as active funds during the period. All the gains in the passive market share were realized after 2015.

Table 1: Assets Under Management in Canada (CAD Billions)

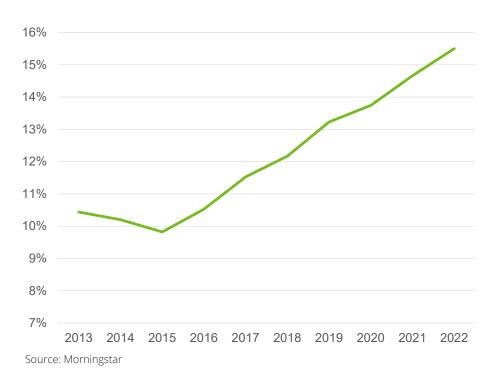
	Passive	Active
2013	74	637
2014	86	761
2015	96	884
2016	113	959
2017	138	1059
2018	141	1014
2019	179	1175
2020	219	1374
2021	282	1642
2022	264	1438
2013-2022	255%	126%

Table 2: Market Share - Canada

	Passive	Active
2013	10.4%	89.6%
2014	10.2%	89.8%
2015	9.8%	90.2%
2016	10.5%	89.5%
2017	11.5%	88.5%
2018	12.2%	87.8%
2019	13.2%	86.8%
2020	13.7%	86.3%
2021	14.7%	85.3%
2022	15.5%	84.5%

Source: Morningstar





2.2 FLOW OF FUNDS

Table 3 and Chart 2 show money flow into passive and active Canadian funds between 2013 and 2022. In 2022, passive funds collected nearly \$19 billion, compared to an outflow of \$14 billion for active funds.

Regarding multi-year trends, the net flow into passive funds has been positive every year since 2013, with a total inflow of \$144 billion over ten years. Over that same period, the money flow in active funds was only \$127 billion. It is the first time we have recorded higher 10-year inflows for Canadian passive funds compared to active funds.

Table 3: Canadian Flow of Funds (CAD Billions)

	Passive	Active
2013	2.8	-2.6
2014	4.9	29.8
2015	11.0	18.3
2016	9.9	0.2
2017	15.1	23.7
2018	9.8	-17.4
2019	15.8	3.6
2020	23.6	8.9
2021	32.9	76.3
2022	18.7	-14.1
2013-2022	144.4	126.6

Chart 2: Canada Flow of Funds



2.3 COMPOSITION OF PASSIVE FUNDS

It should be noted that funds labelled "passive" may have different characteristics. First, the "market-cap weighted" category is the purest type of passive fund using market-cap weighted indices. This category also includes broad-based ESG index funds, making up 85% of Canadian passive funds. A second category, "factor" passive funds, consists of both single-factor (dividend, value, growth, low volatility, etc.) and multi-factor index funds. This category represents 10% of passive funds. Finally, the "other" category, representing 4% of passive funds, includes mostly thematic and other non-market cap-weighted index funds. Chart 3 below depicts the evolving composition of Canadian passive funds since 2013. Despite the growing abundance of new "innovative" ETF offerings, the market-cap weighted share has been stable.

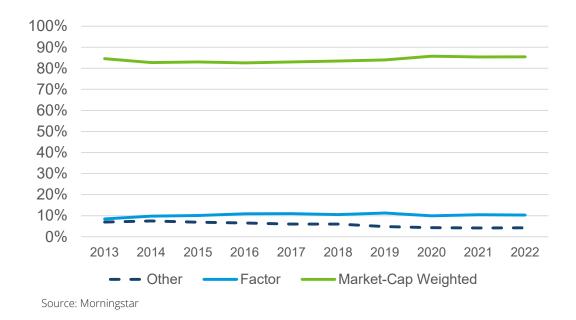


Chart 3: Composition of Passive Funds 2013-2022

2.4 MANAGEMENT EXPENSE RATIOS

We estimate the weighted average MER for active Canadian ETFs at 0.69%, compared to 0.20% for passive ETFs, resulting in a 0.49% difference. Mutual funds are divided into three categories. First, active mutual funds labelled "commission-based" by Morningstar cost an average MER of 1.97%, compared to 0.89% for passive mutual funds, a 1.08% difference. Active mutual funds labelled as "Do-it-Yourself" cost 1.05% compared to 0.36% for their passive equivalent, a difference of 0.68%. Lastly, active mutual funds labelled as "Fee-based advice" (also known as "F Class") cost 0.88% compared to 0.46% for their passive counterpart, a difference of 0.42% in favour of passive funds.

All in all, we estimate the weighted average MER at 1.48% for active mutual funds and ETFs, compared to 0.25% for their passive counterparts, resulting in a 1.23% difference between the cost of active and passive funds. If we combine only ETFs and mutual funds structured for fee-based advice, active funds display a weighted average MER of 0.85%, compared to 0.20% for passive products, a net difference of 0.65%.

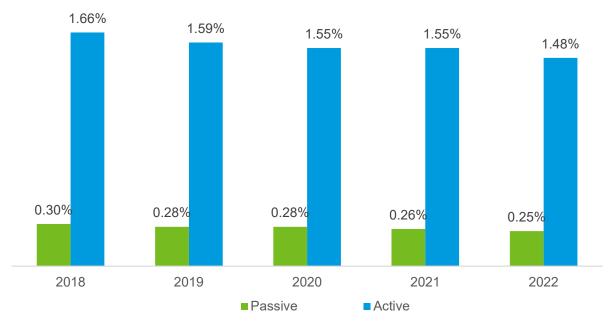
Table 4: Management Expense Ratios

	Active	Passive	Difference
ETFs	0.69%	0.20%	0.49%
Mutual Funds (Commission-Based)	1.97%	0.89%	1.08%
Mutual Funds (Do-It-Yourself)	1.05%	0.36%	0.68%
Mutual Funds (Fee-Based Advice)	0.88%	0.46%	0.42%
ETFs + Mutual Funds	1.48%	0.25%	1.23%
ETFs + Mutual Funds (Fee-Based Advice)	0.85%	0.20%	0.65%

Source: Morningstar

As shown in Chart 4, the MERs of passively managed ETFs and mutual funds have declined by 0.01% in 2022, while the MERs of their actively managed rivals dropped by 0.07%.

Chart 4: Weighted Average MERs for Passive and Active Mutual Funds & ETFs in Canada





3. US MARKET

3.1 MARKET SHARE

In 2022, the US market share of passive funds increased by three percentage points, from 42% to 45%. Over ten years, the data shows a significant increase in market share for passively invested funds, from 24% to 45%. On the other hand, the market share of active funds declined from 76% to 55% over the same period. Passive funds also experienced an astonishing 230% growth rate from 2013 to 2022, compared to only 30% for active funds. The growth rate of passively managed funds outpaced active ones by almost 8:1. In dollar terms, passive funds increased their AUM by \$7.1 trillion compared to only \$2.9 trillion for active funds. Active funds increased their AUM only based on market gains, having recorded sizable outflows during 2013-2022. By contrast, passive funds have attracted considerable amounts in the last ten years (details in Section 3.2).

Table 5: Assets Under Management in the US (USD Trillions)

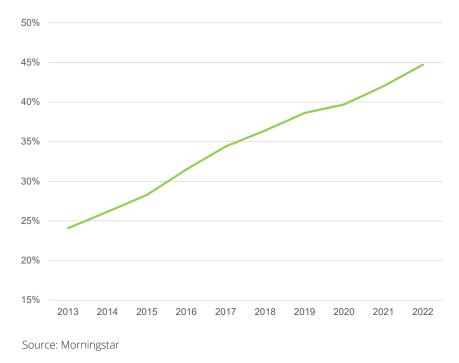
	Passive	Active
2013	3.1	9.7
2014	3.6	10.3
2015	3.9	9.9
2016	4.7	10.2
2017	6.2	11.8
2018	6.1	10.7
2019	8.0	12.7
2020	9.4	14.3
2021	11.8	16.2
2022	10.2	12.6
2013-2022	230%	30%

Table 6: Market Share — US

	Passive	Active
2013	24%	76%
2014	26%	74%
2015	28%	72%
2016	31%	69%
2017	34%	66%
2018	36%	64%
2019	39%	61%
2020	40%	60%
2021	42%	58%
2022	45%	55%

Source: Morningstar





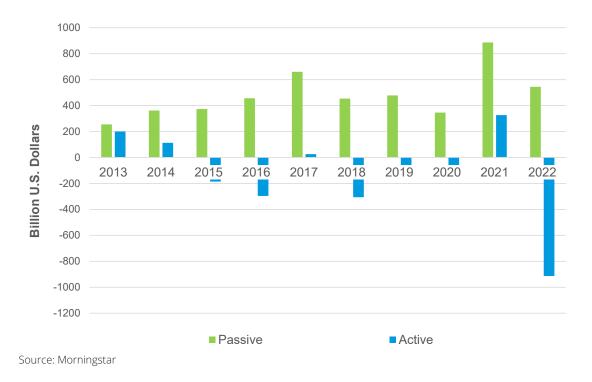
3.2 FLOW OF FUNDS

Table 7 and Chart 6 illustrate US money flows in and out of passive and active funds between 2013 and 2022. In 2022, passive funds attracted \$545 billion in new money, whereas active funds were hit with \$913 billion in withdrawals. Active funds experienced negative cash flows in six of the last ten years. From 2013 to 2022, passive funds attracted \$4.8 trillion in net new money, compared to a \$1.2 trillion net outflow for active funds.

Table 7: US Flow of Funds (USD Billions)

	Passive	Active
2013	255	200
2014	361	113
2015	373	-185
2016	456	-296
2017	660	26
2018	454	-306
2019	479	-86
2020	346	-124
2021	887	327
2022	545	-913
2013-2022	4,817	-1,245

Chart 6: US Flow of Funds



4. WORLD MARKETS EXCLUDING NORTH AMERICA4.1 MARKET SHARE

Table 9 and Chart 7 document the evolution of the passive market share for the world excluding North America (Canada and the US) during the last ten years. In 2022, the market share of passive funds increased by one percentage point, from 27% to 28%. Over ten years, the market share for passively invested funds has more than doubled, from 13% to 28%. Passive funds also experienced an astonishing 219% growth rate from 2013 to 2022, more than nine times the 24% growth rate of active funds. In dollar terms, passive funds increased their AUM by \$2.7 trillion compared to \$2.0 trillion for active funds.



Table 8: Assets Under ManagementWorld ex-North America (USD Trillions)

	Passive	Active
2013	1.3	8.2
2014	1.4	8.4
2015	1.5	7.8
2016	1.7	8.3
2017	2.4	10.5
2018	2.3	9.5
2019	3.1	10.9
2020	3.9	12.0
2021	4.7	12.9
2022	4.0	10.2
2013-2022	219%	24%

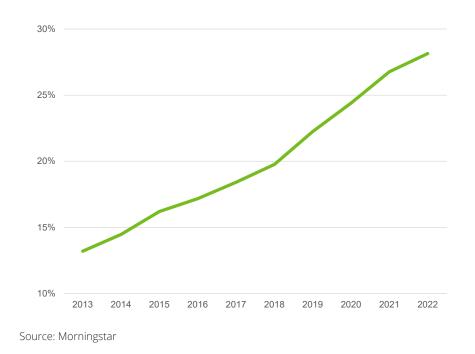
Table 9: Market Share World ex-North America

	Passive	Active
2013	13%	87%
2014	14%	86%
2015	16%	84%
2016	17%	83%
2017	18%	82%
2018	20%	80%
2019	22%	78%
2020	24%	76%
2021	27%	73%
2022	28%	72%

Source: Morningstar

Source: Morningstar

Chart 7: Passive Fund Market Share — World ex-North America





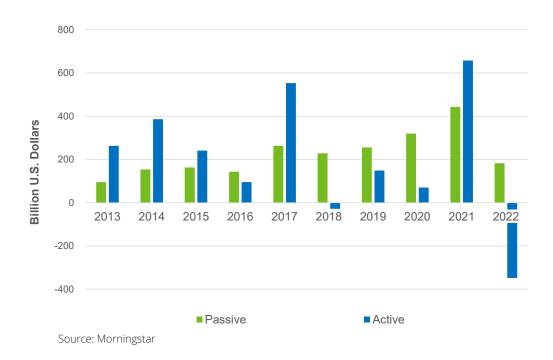
4.2 FLOW OF FUNDS

Table 10 and Chart 8 illustrate the flow of funds in and out of passive and active funds for the world excluding North America. In 2022, passive funds experienced inflows of \$183 billion, and active funds had outflows totalling \$348 billion. Over ten years, passive funds gained \$2.2 trillion in net new assets, compared to \$2.0 trillion for active funds. Passive funds have experienced positive flows every year since 2013. Table 10: Flow of Funds - World ex-North America (USD Billions)

	Passive	Active
2013	95	263
2014	154	386
2015	163	241
2016	143	95
2017	264	553
2018	228	-28
2019	256	149
2020	320	70
2021	443	657
2022	183	-348
2013-2022	2249	2038

Source: Morningstar

Chart 8: Flow of Funds — World ex-North America





5. WORLD MARKETS

5.1 MARKET SHARE

In 2022, the world's market share of passive funds increased by two percentage points, from 35% to 37%. Over ten years, the data shows a sharp increase in the market share of passive funds, which climbed from 19% to 37%.

Worldwide, passive fund assets have experienced spectacular growth of 227% since 2013, compared to only 30% for active funds. In dollars, assets under management for passive funds grew by \$10.1 trillion compared to \$5.6 trillion for their active counterpart. Globally, passively managed funds have increased their market share steadily since 2013.

Table 11: Assets Under Management - World (USD Trillions)

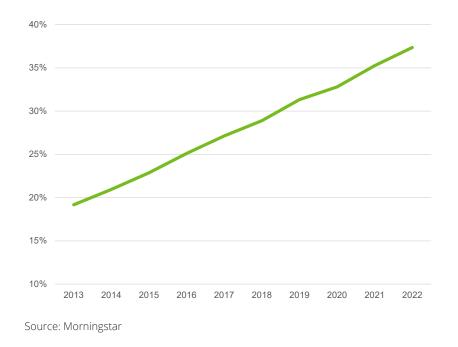
	Passive	Active
2013	4.4	18.6
2014	5.2	19.5
2015	5.5	18.6
2016	6.5	19.5
2017	8.7	23.4
2018	8.6	21.2
2019	11.3	24.8
2020	13.5	27.6
2021	16.8	30.8
2022	14.5	24.2
2013-2022	227%	30%

Table 12: Market Share — World

	Passive	Active
2013	19%	81%
2014	21%	79%
2015	23%	77%
2016	25%	75%
2017	27%	73%
2018	29%	71%
2019	31%	69%
2020	33%	67%
2021	35%	65%
2022	37%	63%

Source: Morningstar



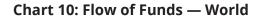


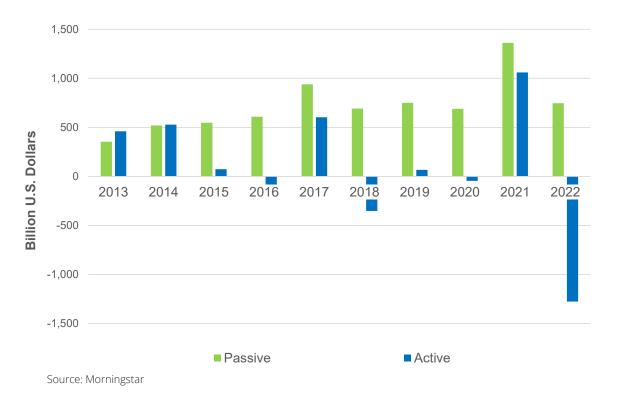
5.2 FLOW OF FUNDS

Table 13 and Chart 10 document contributions to passive and active funds globally between 2013 and 2022. In 2022, passive funds raised \$746 billion in new money, compared to a massive outflow totalling \$1.3 trillion for active funds. Since 2013, passive funds have raised \$7.2 trillion in new money, compared to only \$0.9 trillion for active funds.

Table 13: Flow of Funds World (USD Billions)

	Passive	Active
2013	353	461
2014	520	528
2015	548	74
2016	609	-200
2017	939	603
2018	692	-352
2019	750	66
2020	690	-45
2021	1,362	1,060
2022	746	-1,275
2013-2022	7,210	920







CONCLUSION

In 2022, passive funds attracted positive net amounts and gained market share in Canada, the United States and worldwide. Meanwhile, active funds had a disastrous year, with US \$1.2 trillion in outflows and a 2% decline in market share worldwide.

Passive funds increased their market share in Canada for a seventh consecutive year. In 2022, passive funds collected nearly \$19 billion, compared to an outflow of \$14 billion for active funds. Over ten years, passive funds have attracted new money steadily and have surpassed actively managed fund inflows for the first time. Despite their substantial progress, passive funds still represent a modest market share of 15.5% in Canada. Within Canadian passive funds, 85% are market-cap-weighted funds, 10% are "factor" funds, and 4% are "other" funds. The downward trend in fees persisted in 2022, as passive fund MERs declined from 0.26% to 0.25% and active fund MERs dropped from 1.55% to 1.48%.

In the United States, passive funds increased their market share from 42% to 45%. Passive funds attracted over \$500 billion in 2022, while active funds experienced massive outflows. The domination of passive funds is even more compelling over ten years, with inflows of almost \$5 trillion compared to outflows of \$1.2 trillion for active funds.

For the world ex-North America, passive funds have increased their market share from 27% to 28% in 2022. Passive funds experienced inflows of \$183 billion, and active funds had outflows totalling \$348 billion.

Last but not least, the world market share of passive funds increased from 35% to 37% in 2022, with the help of \$746 billion in net new contributions. Meanwhile, active funds suffered a \$1.2 trillion outflow.

Overall, passive funds are widely adopted by retail investors worldwide. While the 37% market share of passive funds in retail markets is impressive, it contrasts starkly with the positioning of large pension funds. As <u>Beath, Betermier, Flynn and Spehner (2021)</u> reported, only 19% of large pension plan assets in Canada and 21% in the rest of the world are passively managed. This can be explained by several factors, including a greater cost advantage of passive funds in the retail market compared to the institutional market, pension funds' greater access to alternative investments and governance issues.

This said, retail investors have good reasons to prefer passive funds to active ones. As reported by <u>Armour (2022)</u>, a majority of US-domiciled active mutual funds have failed to beat their passive equivalent in 20 of 23 categories over ten years and in all categories over 15 and 20 years. Low-cost passive funds are a logical choice for retail investors: they perform well, are not prone to manager drift, and generally hold their promise to deliver the market's rate of return.

APPENDIX A: CANADIAN ETF DATA

Table 14: Assets Under Management (CAD Billions) Table 15: Market Share

Table 16: Flow of Funds (CAD Billions)

ssive

4.0

Active

0.7

	Passive	Active		Passive	Active	
013	50	13	2013	79%	21%	
014	59	18	2014	77%	23%	
015	68	21	2015	77%	23%	
016	84	30	2016	74%	26%	
017	106	40	2017	73%	27%	
018	110	43	2018	72%	28%	
019	141	56	2019	72%	28%	
020	177	67	2020	72%	28%	
2021	231	96	2021	71%	29%	
022	218	92	2022	70%	30%	

6.3 3.7 11.6 4.5 10.3 5.1 15.5 8.5 10.9 5.0 16.1 6.6 22.8 11.7 30.5 19.6 18.0 10.2 2013-146.0 75.7 2022

Source: Morningstar

Source: Morningstar



APPENDIX B: CANADIAN MUTUAL FUND DATA

Table 17: Assets Under Management (CAD Billions) Table 18: Market Share

Table 19: Flow of Funds (CAD Billions)

			_						
	Passive	Active			Passive	Active		Ра	ssive
2013	25	624		2013	4%	96%	2013		-1.2
2014	27	743		2014	4%	96%	2014		-1.4
2015	28	863		2015	3%	97%	2015		-0.6
2016	29	930		2016	3%	97%	2016		-0.4
2017	32	1,019		2017	3%	97%	2017		-0.5
2018	30	971		2018	3%	97%	2018		-1.0
2019	38	1,120		2019	3%	97%	2019		-0.3
2020	42	1,307		2020	3%	97%	2020		0.8
2021	52	1,547		2021	3%	97%	2021		2.4
2022	46	1,345		2022	3%	97%	2022		0.6
Source: I	Morningstar			Source: Mc	orningstar		2013-		-1.6

Source: Morningstar

2022

APPENDIX C: US ETF DATA

Table 20: Assets Under Management (USD Billions) Table 21: Market Share

Table 22: Flow of Funds (USD Billions)

	Passive	Active		Passive	Active
2013	1.5	0.2	2013	87%	13%
2014	1.7	0.3	2014	86%	14%
2015	1.9	0.3	2015	87%	13%
2016	2.2	0.3	2016	88%	12%
2017	3.0	0.4	2017	88%	12%
2018	3.0	0.4	2018	88%	12%
2019	3.9	0.5	2019	89%	11%
2020	4.8	0.7	2020	87%	13%
2021	6.2	1.0	2021	86%	14%
2022	5.6	0.9	2022	86%	14%

	Passive	Active
2013	144	45
2014	213	32
2015	219	24
2016	251	18
2017	419	46
2018	279	31
2019	319	13
2020	392	114
2021	748	164
2022	491	103
2013- 2022	3,474	587

Source: Morningstar

Source: Morningstar

APPENDIX D: US MUTAL FUND DATA

Table 23: Assets Under Management (USD Trillions)

Table 24: Market Share

Table 25: Flow of Funds (USD Billions)

	Passive	Active		Passive	Active
2013	1.6	9.5	2013	12%	88%
2014	1.9	10.0	2014	13%	87%
2015	2.1	9.6	2015	14%	86%
2016	2.5	9.9	2016	15%	85%
2017	3.2	11.4	2017	17%	83%
2018	3.2	10.3	2018	18%	82%
2019	4.1	12.2	2019	20%	80%
2020	4.6	13.6	2020	22%	78%
2021	5.6	15.2	2021	24%	76%
2022	4.6	11.7	2022	26%	74%

	Passive	Active
2013	112	156
2014	152	81
2015	168	-209
2016	203	-314
2017	243	-19
2018	174	-337
2019	157	-98
2020	-46	-238
2021	145	167
2022	54	-1,014
2013- 2022	1,363	-1,824

Source: Morningstar

Source: Morningstar



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