Managing Small Institutional Portfolios:
ETFs as a Viable Alternative to Managers

Jeffry Haber, Iona College, United States

The Asian Conference on the Social Sciences 2020
Official Conference Proceedings

Abstract
Institutional portfolios provide necessary income for the efficient and effective management of the non-profit entities they are affiliated with. In the recent past a common way to manage the smaller institutional portfolio was with the oversight of a consultant who performed due diligence, recommended managers, provided macro insights and handled performance reporting and elements of risk management. More recently, there has been a move to the outsourced chief investment officer (OCIO) model, where an investment office has responsibility (and often discretion) over several institutional portfolios. In the consultant model there were issues with the better investment funds having capacity constraints and the smaller portfolios having limited (or no) access to these better funds. Similarly, in the OCIO model small portfolios are often unable to find acceptance with the most desirable OCIOs. With the growth of the ETF market there may exist an opportunity for a smaller portfolio to obtain similar returns to larger foundations in a low-cost framework. This paper will build on previous research by using ETFs to replace managers in the average asset allocation of the large foundation. This would remove the constraints of limited access, a minimum investment that was too high, and no liquidity. Without regard to prior performance, and relying only on low cost and Morningstar ratings, the ETF portfolio would have returned 19.59% during 2019.

Keywords: Investments, Investment Management, Institutional Portfolios, Small Foundations, ETFs

Introduction

Institutional portfolios provide necessary income for the efficient and effective management of the non-profit entities that they are affiliated with. The larger the portfolio the more resources that are available for managing the portfolio. Large portfolios (large defined as assets under management (AUM) of at least $2 billion) usually have an internal investment team that can handle most of the tasks involved (asset allocation, initial due diligence, on-going due diligence, performance reporting, risk management, etc.). Smaller portfolios do not have the resources to properly fund an investment office and procure the necessary talent.

In the recent past (about 10 years ago) a common way to manage the smaller institutional portfolio was with the oversight of a consultant who performed due diligence, recommended managers, provided macro insights and handled performance reporting and elements of risk management. More recently, there has been a move to the outsourced chief investment officer (OCIO) model, where an external investment office has responsibility (and often discretion) over several institutional portfolios.

In the consultant model there were issues with the better investment funds having capacity constraints and the smaller portfolios having limited (or no) access to these better funds. Similarly, in the OCIO model small portfolios are often unable to find acceptance with the most desirable OCIOs. The ability of a portfolio with under $100 million in assets to find an OCIO to take them on as a client is severely limited. Anecdotally it is hard for portfolios of under $300 million to find an OCIO home. With the growth of the ETF market there may exist an opportunity for a smaller portfolio to obtain similar returns to larger foundations in a low-cost framework.

Managing Endowments

There are many types of institutional investor. Foundations, university endowments and pensions are the most common types. Within these, there are also many sub-types (the broad term "foundations" include private foundations, operating foundations and community foundations, for instance). Despite many variations, across all types smaller portfolios have issues that larger portfolios do not. Many excellent funds have minimum investment levels that smaller portfolios cannot meet (a portfolio of $50 million that has a rule that no investment can be greater than 5% of the total portfolio value cannot make an investment in a fund that has a $5 million minimum). The need for liquidity is another factor that limits the investment options of the small portfolio.

With the increase in the breadth and depth of exchange traded funds (ETFs), which offer indices as well as active management in a low-cost security with high liquidity, the ability to use allocations to ETFs in place of manager allocations is a viable possibility. This paper builds on previous research (Haber 2019).

Asset Allocation

The management of any portfolio starts with asset allocation. Asset allocation determines the broad asset classes, and sub-classes, how much can be invested in each class and sub-class, and based on certain risk tolerance, this then determines how many managers will be required to fill-out the mandates. It is common to have a rule

that no manager can exceed 5% of the total portfolio. This paper is concerned with the small portfolio. Using the Council on Foundations – Commonfund Study of Foundations for the years 2014-2017, Schedule 1 details the asset allocation of the average small foundation for each year.

	Foundations - under $101 million			
	2017	2016	2015	2014
US equities	**32**	**34**	**35**	**35**
Active	20	22	22	22
Indexed (passive and enhanced)	12	12	13	13
Fixed income	**16**	**16**	**17**	**17**
US investment grade (active)	12	12	13	10
US investment grade (passive)	1	1	2	4
US non-investment grade	1	1	1	1
Non-US investment grade	1	1	1	2
Emerging markets	0	0	0	0
Non-US equities	**22**	**19**	**19**	**18**
Active MSCI EAFE	13	12	12	10
Passive/indexed MSCI EAFE	4	3	3	4
Emerging markets	5	4	3	4
Alternatives	**24**	**23**	**24**	**24**
Private equity	3	3	3	2
Marketable alternatives	14	11	12	12
Venture capital	2	1	1	1
Private real estate	3	2	3	4
Energy and natural resources	1	1	1	1
Commodities and managed futures	1	1	1	1
Distressed debt	0	0	0	1
Not specified	0	4	3	2
Short-term and cash	**6**	**8**	**5**	**6**
Total	**100**	**100**	**100**	**100**

Schedule 1: Asset Allocation of Small Private Foundations, 2014-2017

Over the four years the asset allocation has remained consistent. US equities has decreased, with the increase going to Non-US equities. As more investment choices became global (holding both US and Non-US equities) the differentiation has become less meaningful. If we combine the two to get the total allocation to equities, we see that it was 53% in 2014, 54% in 2015, 53% in 2016 and 54% in 2017. The other allocations did not vary by more than 1%, except for Cash and short-term securities.

Given the tight range and negligible change over the 4 years, the 2017 asset allocation can be considered representative of the small private foundation. Schedule 2 looks provides the asset allocation of the large private foundation over the same time period.

	Foundations - over $500 million			
	2017	2016	2015	2014
US equities	**22**	**22**	**23**	**23**
Active	18	17	18	18
Indexed (passive and enhanced)	4	5	5	5
Fixed income	**7**	**6**	**8**	**8**
US investment grade (active)	5	4	5	5
US investment grade (passive)	2	2	2	2
US non-investment grade	0	0	0	0
Non-US investment grade	0	0	1	1
Emerging markets	0	0	0	0
Non-US equities	**21**	**20**	**17**	**18**
Active MSCI EAFE	14	9	10	8
Passive/indexed MSCI EAFE	2	5	2	3
Emerging markets	6	6	5	6
Alternatives	**48**	**49**	**48**	**47**
Private equity	6	9	8	9
Marketable alternatives	12	18	17	16
Venture capital	6	9	6	5
Private real estate	3	4	4	4
Energy and natural resources	3	4	3	4
Commodities and managed futures	1	0	1	0
Distressed debt	2	4	3	3
Not specified	15	1	6	6
Short-term and cash	**2**	**3**	**4**	**4**
Total	**100**	**100**	**100**	**100**

Schedule 2: Asset Allocation of Large Private Foundations, 2014-2017

Similar to the small foundations, the large foundations have a very consistent asset allocation over the four years. There was some differentiation on a granular level in the alternative asset allocation – 2017 showed a significant increase in the "unspecified" area. In Non-US equities there was a move from passive/indexed EAFE to actively managed EAFE in 2017.

At the broad asset class level 2017 can be considered representative of the four years. At the more granular sub-class level there are differences that need to be considered.

A comparison of the small private foundation asset allocation for 2017 versus the large private foundation is shown on Schedule 3.

	2017		
	Over $500 million	Under $101 million	Difference
US equities	**22**	**32**	**-10**
Active	18	20	-2
Indexed (passive and enhanced)	4	12	-8
Fixed income	**7**	**16**	-9
US investment grade (active)	5	12	-8
US investment grade (passive)	2	1	1
US non-investment grade	0	1	-1
Non-US investment grade	0	1	-1
Emerging markets	0	0	0
Non-US equities	**21**	**22**	**-1**
Active MSCI EAFE	14	13	0
Passive/indexed MSCI EAFE	2	4	-2
Emerging markets	6	5	1
Alternatives	**48**	**24**	**24**
Private equity	6	3	3
Marketable alternatives	12	14	-2
Venture capital	6	2	4
Private real estate	3	3	0
Energy and natural resources	3	1	2
Commodities and managed futures	1	1	0
Distressed debt	2	0	2
Not specified	15	0	15
Short-term and cash	**2**	**6**	**-4**
Total	**100**	**100**	**0**

Schedule 3: Asset Allocation of Large Private Foundations Versus Small, 2017

There are three sub-asset class allocations that vary greatly between the large and small private foundations – indexed US equities, US investment grade (active) fixed income and not specified alternatives. Each of the first two mentioned decreased by 8% while the not specified alternatives increased by 15%. As alternative assets are generally less liquid and have higher minimum investments, it is not surprising that the large foundation would have a higher allocation (the allocation for the large private foundation to the alternative broad category is 48%, double the 24% of the small private foundation). These are important strategic reasons why the smaller

foundation has less of an allocation to alternative assets and more of an allocation to indexed domestic equities and domestic investment grade fixed income.

Since ETFs provide a liquid investment vehicle with no minimum investment threshold, this presents an opportunity for a smaller foundation to utilize the asset allocation of a large foundation without the limitations. Schedule 4 compares the returns of the large foundation versus the small foundation for the last four years. The returns are reported for 1, 3, 5, and 10 years.

	Over $500 million	Under $101 million
2017		
1-year	14.3	14.8
3-year	7.3	6.5
5-year	8.9	8.3
10-year	5.3	5.1
2016		
1-year	6.7	4.7
3-year	4.6	3.2
5-year	8.2	6.6
10-year	4.9	4.3
2015		
1-year	1.1	0.1
3-year	7.8	6.8
5-year	7.0	6.0
10-year	5.8	5.5
2014		
1-year	7.1	5.9
3-year	11.6	10.6
5-year	9.6	8.5
10-year	6.8	5.8

Schedule 4: Comparison of Returns

For each time period, except for the 2017 1-year return, the large foundation has outperformed the small foundation. Because of this outperformance we will utilize the asset allocation of the large foundation. The asset allocation is shown on Schedule 5. In addition, the “Not specified” allocation was distributed equally to each of the

existing allocations. Also included on the schedule are the number of ETFs necessary to fill the allocation (no allocation to a single ETF can be greater than 5%).

	Original	Revised	# of ETFs
US equities	**22**	**22**	**5**
Active	18	18	4
Indexed (passive and enhanced)	4	4	1
Fixed income	**7**	**7**	**2**
US investment grade (active)	5	5	1
US investment grade (passive)	2	2	1
US non-investment grade	0	0	0
Non-US investment grade	0	0	0
Emerging markets	0	0	0
Non-US equities	**21**	**21**	**5**
Active MSCI EAFE	14	14	3
Passive/indexed MSCI EAFE	2	2	1
Emerging markets	5	5	1
Alternatives	**48**	**48**	**11**
Private equity	6	9	2
Marketable alternatives	12	14	3
Venture capital	6	8	2
Private real estate	3	5	1
Energy and natural resources	3	5	1
Commodities and managed futures	1	3	1
Distressed debt	2	4	1
Not specified	15	0	0
Short-term and cash	**2**	**2**	**1**
Total	**100**	**100**	**24**

Schedule 5: Asset Allocation With Distribution of "Not Specified"

Selecting ETFs

ETFs were selected by using the e*Trade ETF platform. ETFs were sorted by fund category (strategy), expense ratio, Morningstar rating and all-star status. To fill an allocation the lowest cost/highest rated ETF was selected that fit the strategy.

For most alternative strategies there were no suitable ETFs, so an internet search was done. In no case were the previous or current returns reviewed in the selection process. Schedule 6 shows the selections made.

	# of ETFs	1	2	3	4
US equities	**5**				
Active	4	VV	IWY	VO	VB
Indexed (passive and enhanced)	1	SPY			
Fixed income	**2**				
US investment grade (active)	1	BIV			
US investment grade (passive)	1	AGG			
US non-investment grade	0				
Non-US investment grade	0				
Emerging markets	0				
Non-US equities	**6**				
Active MSCI EAFE	3	URTH	ACWF	QWLD	
Passive/indexed MSCI EAFE	1	ACWI			
Emerging markets	1	VWO			
Alternatives	**11**				
Private equity	2	QAI	PEX		
Marketable alternatives	3	PHDG	QLS	MNA	
Venture capital	2	IWC	IPO		
Private real estate	1	USRT			
Energy and natural resources	1	VAW			
Commodities and managed futures	1	FUT			
Distressed debt	1	ANGL			
Not specified	0				
Short-term and cash	1	VGSH			

Schedule 6: Selected ETFs

Schedule 7 takes the selections and allocates the percentage of the portfolio that will be allocated to the ETF.

	%	% to each	1	2	3	4
US equities	**22**					
Active	18	4.50	VV	IWY	VO	VB
Indexed (passive and enhanced)	4	4.00	SPY			
Fixed income	**7**					
US investment grade (active)	5	5.00	BIV			
US investment grade (passive)	2	2.00	AGG			
Non-US equities	**21**					
Active MSCI EAFE	14	4.67	URTH	ACWF	QWLD	
Passive/indexed MSCI EAFE	2	2.00	ACWI			
Emerging markets	5	5.00	VWO			
Alternatives	**48**					
Private equity	9	4.50	QAI	PEX		
Marketable alternatives	14	4.67	PHDG	QLS	MNA	
Venture capital	8	4.00	IWC	IPO		
Private real estate	5	5.00	USRT			
Energy and natural resources	5	5.00	VAW			
Commodities and managed futures	3	3.00	FUT			
Distressed debt	4	4.00	ANGL			
Short-term and cash	**2**	2.00	VGSH			
Total	**100**					

Schedule 7: Allocation to ETFs

Returns

Schedule 8 calculates the ETF portfolio return for 2019, using the opening ETF share price on January 2, 2019 and the closing price on December 31, 2019. The percentage of the portfolio allocated to this ETF is then multiplied by the return to get the contribution to the portfolio return. When summed, the ETF portfolio returned 19.59% in 2019.

	%	Stock Price 01/01/19	Stock Price 12/31/19	% Return	% Return x %
US equities					
VV	4.50	113.11	147.84	30.70	1.38
IWY	4.50	70.39	96.58	37.21	1.67
VO	4.50	136.22	178.18	30.80	1.39
VB	4.50	130.31	165.64	27.11	1.22
SPY	4.00	245.98	321.86	30.85	1.23
Fixed income					
BIV	5.00	81.39	87.22	7.16	0.36
AGG	2.00	106.55	112.37	5.46	0.11
Non-US equities					
URTH	4.67	77.88	98.78	26.84	1.25
ACWF	4.67	25.85	31.20	20.70	0.97
QWLD	4.67	68.47	85.53	24.92	1.16
ACWI	2.00	63.28	79.25	25.24	0.50
VWO	5.00	37.77	44.47	17.74	0.89
Alternatives					
QAI	4.50	28.81	30.80	6.91	0.31
PEX	4.50	29.69	34.56	16.40	0.74
PHDG	4.67	25.95	27.98	7.82	0.37
QLS	4.67	19.56	22.79	16.51	0.77
MNA	4.67	31.58	33.20	5.13	0.24
IWC	4.00	81.46	99.49	22.13	0.89
IPO	4.00	23.00	31.11	35.26	1.41
USRT	5.00	44.27	54.59	23.31	1.17
VAW	5.00	109.09	134.14	22.96	1.15
FUT	3.00	40.17	39.25	-2.29	-0.07
ANGL	4.00	26.61	29.85	12.18	0.49
Short-term and cash					
VGSH	2.00	60.10	60.83	1.21	0.02
Total	**100**				**19.59**

Schedule 8: ETF Portfolio Return

Analysis

A common benchmark for a portfolio is a blended return, usually comprising equities and debt. Frequently the MSCI ACWI (all-country world index, a broad global equity index) and Barclays Global Aggregate (a broad debt security index) are used. The relative percentages each contribute to an index is based on the organization that will

be applying it. It would not be unusual to see a 70/30 mix (70% ACWI, 30% Aggregate).

Using the 70/30 blend for the calendar year 2019, the benchmark return was 20.55%, compared to the ETF portfolio return of 19.32%. A one-year comparison is not determinative, and without question, 2019 was a strong equity market. Any portfolio that held a higher proportion of US equities should have expected to do well.

Trying to develop a granular benchmark return (comprised of returns for the constituent strategies) is difficult, largely because many of the alternative strategies do not have robust (or any) benchmarks. The determinative question is whether an organization can do better by moving away from active managers and filling allocations with ETFs. This paper used static ETFs – once they entered the portfolio they remained for the year. There were also no selection criteria based on prior performance – only low cost, Morningstar rating and whether classified as and "all-star" ETF.

Conclusion

The first test of the efficacy of using ETFs in place of managers will come when the 2019 survey results are disseminated and compared to the return of the ETF portfolio. Using the 2019 study the average return of the small foundation can be compared to the 19.59% of this ETF portfolio. If there is a significant difference, a review of the 2019 average asset allocation should be undertaken to see if a shift in strategies accounts for the difference or whether the difference is due to being able to mimic the allocation of a large foundation.

Limitations

The E*TRADE platform is by no means exhaustive, and there may be a considerable number of excellent ETFs that were not considered by virtue of not being carried on the E*TRADE platform. A more robust process for selecting ETFs would include looking at past performance, evaluating current performance and making changes during the year (when warranted).

Future Research

Future research can extend this paper by looking at a longer time horizon, consider a combination of active managers and ETFs as being optimal (use managers where the better ones are available to small portfolios at low cost and ETFs when the better managers are hard to access, provide limited liquidity or have higher minimum investments). A more robust diligence process can also be developed that looks at prior performance, depth of bench, succession planning, risk strategies and governance.

References

Council on Foundations-Commonfund, "2014 Study of Investment of Endowments for Private and Community Foundations."

Council on Foundations-Commonfund, "2015 Study of Investment of Endowments for Private and Community Foundations."

Council on Foundations-Commonfund, "2016 Study of Investment of Endowments for Private and Community Foundations."

Council on Foundations-Commonfund, "2017 Study of Investment of Endowments for Private and Community Foundations."

Haber, Jeffry, "Can Active Fund Managers Be Replaced with Exchange Traded Funds?" Global Journal of Business Research, Vol. 13, No. 2, 2019, pp 95-104

Contact email: jhaber@iona.edu