Practical Applications of

Constructing a Passive Global Stock Market Portfolio from a Multigenerational Family Office Perspective



When a very long-term equity investor dismisses the concept of active management and, even further, says that it is a "fantasy that we can in any way predict the future," how does that investor go about constructing a stock market portfolio?

Christian Armbruester, who took over the management of his family's assets at Blu Family Office based his answer on a simple principle: Financial markets around the globe will continue to grow over a multigenerational horizon. Daniel Ziggel, a Professor at FOM Hochschule für Oekonomie & Management, shared his outlook. "We wanted to buy the world," he says.

In Constructing a Passive Global Stock Market Portfolio from a Multigenerational Family Office Perspective, from the Fall 2016 issue of The Journal of Wealth Management, they explain how they translated "buying the world" into a strategy to buy equities in a way that would cover as much of global GDP as possible.

To achieve a balanced exposure, the family developed a model that considered factors other than the common market-capitalization-based approach. Critically, the family office decided to execute the whole plan through an inexpensive combination of passive ETFs, with the understanding that they were willing to compromise on prescribed weightings for the sake of practical efficiency.

Practical Applications

- Forget about active management. No academic or empirical evidence proves
 anyone can predict equity market returns consistently. The authors reject active
 management and the various forms of analysis on which it is based, particularly
 once costs are taken into account.
- Seek exposure to world growth. With world growth as a core belief, the driving investment principle is how best to gain exposure to that growth.
- Cheap, simple execution is key. The authors employed inexpensive ETFs and
 infrequent rebalancing. Future investment success is impossible to determine, but
 savings on costs are pocketed today and compounded for the future.

Practical Applications Report

At first glance, this article seems to follow a relatively familiar pattern of the past decade: Ziggel and Armbruester dismiss the case for active management in equities, move away from expensive third-party providers and seek a disciplined passive approach. However, they present a unique answer to the central question of portfolio construction.

Authors: Daniel Ziggel and Christian Armbruester

Source: The Journal of Wealth Management,

Fall 2016, Vol. 19, No. 2.

Report Written By: Kathryn Saklatvala Keywords: Blu Family Office, Equities, ETFs,

Passive Management



For those who do not believe in active management, what is the best way to construct a well-diversified stock market portfolio?



Key Definitions

Exchange-Traded Fund (ETF)

A fund that tracks an index, trades on an exchange and can be bought and sold throughout the day, just like common stocks.

Family office

A family office may provide a narrow or broad range of services for a family (wealth management, governance, property management and art consulting, for example). What distinguishes a true family office from an asset management firm branded as a family office is that the former exists exclusively to serve the interests of the family for whom they work.

Gross Domestic Product (GDP)

A country's GDP is composed of the total market value (in dollars) of all goods and services produced within a stated period of time. It includes consumer, investment and government spending, plus the value of exports minus imports. The GDP figure is considered to be a measure of the size and health of the economy.

66 The world has been growing for hundreds of years and so, too, asset prices and financial markets have continued to rise. We believe in the continuity of evolution. ??

-Christian Armbruester

It would be impossible to interpret the strategy without first understanding that it entails a full divorce from short-term performance pressures. "At no time was the intention to try to outperform the market. We never even did a backtest until after we had finalized our approach," says Ziggel.

In fact, the backtest featured in the article shows underperformance against the FTSE All-World Index from 2011 through 2015, in part because of a lower allocation to US stocks. This doesn't bother the authors. "We aren't like the asset manager who has to persuade someone to invest in us," Ziggel explains. "It is more important that we have a process everyone can agree on, understand."

PORTFOLIO CONTEXT

The article doesn't discuss the entire family office investment portfolio, but readers will be interested to note that the equity portion presented here represents approximately 25% of the whole. The remainder is carved into three other sections: credit risk, featuring short duration bonds and a significant amount of private lending; market-neutral strategies, for diversification; and a final bucket aptly nicknamed "hope," where they seek convex returns in more-concentrated and higher-risk investment strategies.

DEFINING BELIEFS

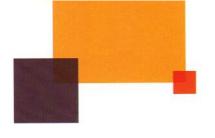
When Armbruester became managing partner of his family office in 2010, he had already accumulated a wealth of financial markets experience at hedge funds and investment banking firms, including managing proprietary trading books for derivatives and arbitrage strategies. He knew that he wanted to break with the old way, which he characterizes as "years of having other people manage the family assets in a very costly and inefficient manner."

Deciding on a new path was far from straightforward. After considerable research, the team dismissed technical, fundamental and macroeconomic analysis as means to time the market or take views on future asset price development. No one could predict the future, they believed, and thus they determined that active management for equities cannot add value.

One equity investment belief to which Armbruester and Ziggel *could* fully subscribe was the long-term growth of the global economy. "The world has been growing for hundreds of years and so, too, asset prices and financial markets have continued to rise," says Armbruester. "We believe in the continuity of evolution." Stock markets, in essence, represent a means to access that growth over a multigenerational time horizon. They also agreed to prioritize a low total expense ratio.

BUYING THE WORLD

Adopting the principle that they wanted to access the world's growth, Armbruester and Ziggel concluded that the cap-weighted index—which undoubtedly would have been the cheapest and most efficient approach—was not appropriate. "The US may represent more than half of the MSCI World, but it has a far lower share of GDP," says Ziggel. "Emerging markets are very under-represented."



66 The US may represent more than half of the MSCI World, but it has a far lower share of GDP. Emerging markets are very underrepresented. ??

-Daniel Ziggel

Although the decision was made to use GDP weighting as a starting point for country allocations, they also wanted a quantitative mechanism that would allow them to incorporate views on the relative attractiveness of different countries. The team agreed on a set of indicators to determine economic, social and political health, incorporating many data series, from inflation and indebtedness to military spending and corruption. "It took an analyst a couple of months to put together this data," says Ziggel.

The next part of the process involved determining the appropriate diversification across sizes and sectors. "Agreeing on the indicators for countries was far easier than agreeing on this part," says Ziggel. "Why would it be better to invest in energy or health care? Either could grow or not and, as our rules tell us, we cannot predict the future."

Just as the decision was made to use GDP as the starting point for country allocations, Armbruester and Ziggel concluded that corporate revenues could form the basis for size and sector weightings. To this end, they analyzed 33,000 listed companies to determine what proportion of overall corporate revenues lay in small-mid- and large-cap companies and what proportion of revenues were in each sector. The resulting figures, with no further adjustment, formed the basis for allocations.

IMPLEMENTATION

This was no mere academic exercise; execution of the strategy in real life was central to the authors' thinking. Simplicity and low cost were of fundamental importance.

Ziggel explains how they went about constructing a basket of ETFs that would more or less reflect the allocations determined by their model. "We looked for ETFs that fit our criteria in terms of bid-ask spread [maximum 0.25%] and size [average daily trading volume at least \$500,000]. Then we broke down those ETFs to understand how many individual stocks they hold for each country and sector. Then it's a matter of finding the best combination." (The article explains this optimization process in some detail.)

Perfection was not the goal, particularly since reducing costs was high on the priority list. "We limited the costs at 35 bps," says Ziggel. "We played around with numbers, raising the ceiling to 40 or 50 bps. You can get closer to the theoretical allocation that way, but we decided it wasn't worth the extra expense." Infrequent rebalancing also helps to keep costs modest.

Looking forward, Armbruester and Ziggel anticipate making refinements to the model, such as adjusting the criteria for determining country weighting as new relevant factors emerge or reviewing the combination of ETFs as they evolve. In the meantime, they have achieved a far less expensive form of global equity exposure that also reflects the family's fundamental investment beliefs.

To order reprints of this report, please contact Dewey Palmieri at dpalmieri@iijournals.com or 212-224-3675.



Daniel Ziggel daniel.ziggel@fom.de

Daniel has more than 11 years of experience in quantitative finance and statistics. From 2006 to 2008, he worked as a scientific assistant to the statistics chair, Prof. Dr. Dette at Ruhr-University Bochum before founding Quasol in 2010. In 2014, Daniel became a professor for statistics and financial mathematics at FOM Hochschule für Oekonomie & Management in Essen, Germany.



Christian Armbruester

christian.armbruester@blu-fo.com

Christian has more than 20 years of experience in investment management, trading and business development. From 1996 to 2003, he managed proprietary trading books for financial derivatives and arbitrage strategies at Bankers Trust and Credit Suisse. In 2003, he founded the hedge fund Cologico Capital (later Nulogic). Christian took over the management of the family's assets and affairs in 2010 and has since focused on expanding the team, infrastructure and scope of Blu Family Office. Christian holds a BSc in finance and economics from Miami University and an MBA from Columbia Business School.

