



How Mawer thinks about capacity: Global Equity case study

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MAWER

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One of our goals is to create the most aggregate nominal alpha for clients. When an investment management organization and/or an investment strategy grows in assets, the ability to generate nominal alpha grows correspondingly ... to a point. Borrowing from Econ 101 with regards to optimizing firm output, growth in assets eventually encumbers the ability to add alpha. In other words, the marginal alpha generation to additional assets turns negative. Capacity decisions are therefore a key tool in achieving long-term investment outcomes that put clients' interests first.

However, much like the field of economics, optimizing for aggregate nominal alpha and evaluating capacity isn't a precise science. While quantitative tools are valuable, they need to be balanced alongside qualitative considerations and regarded with a healthy dose of humility. This advocates for a conservative approach that embeds a margin of safety should ex-ante estimates be flawed.

In this piece, we'll describe our framework for managing capacity, both for individual strategies and across our investment platform; we'll summarize the measures we've taken historically to preserve our ability to add value for our existing clients; and, we'll use our global equity strategy as a case study for how we're evaluating capacity today.

Our framework

Whenever we consider launching a new strategy, the business case includes a dedicated component estimating the strategy's total capacity under current market conditions. Effectively, before a single dollar is invested, we've already considered what the strategy's eventual maturity might be should we be fortunate enough for clients to entrust us with their investments. Of course, predictions are difficult; conditions evolve and testing initial capacity estimates may take more than a decade. We expect capacity to be fine-tuned and adjusted over time.

At its most basic level, capacity addresses both **stock** and **flow** challenges. Stock challenges refer to the overall size of assets in a mandate, which may hinder the ability to express conviction in an underlying holding without purchasing a significant portion of the company's free float. Flow challenges refer to the timely ability to put new cash to work.

Here are the factors that play into our framework for evaluating capacity:

Liquidity: Most related to the concepts of stock and flow, evaluating liquidity is a largely quantitative exercise that includes an examination of the number of days' trading volume we own in a particular company as well as our overall ownership in the company itself. This liquidity analysis also provides oversight of cross holdings.

Integrated oversight of cross holdings: As a firm with a single equity investment philosophy, higher-conviction ideas may be held across a number of portfolios. Wolters Kluwer, for example, is a top holding in our global equity, international equity, and EAFE large cap strategies. Evaluating capacity for an individual strategy needs to be done in the context of the broader platform. Liquidity is therefore reviewed in the context of firmwide ownership to incorporate overlap between different asset classes.

Desired portfolio characteristics: The desired character of our portfolios plays into the framework: e.g., portfolio concentration, expected portfolio turnover, and desired market cap exposure. All else equal, greater portfolio concentration, higher levels of trading activity, and greater small-cap exposure are inversely correlated with capacity.

Historical alpha generation: Understanding where we have shown skill historically influences where capacity should be preserved and prioritized. For our all-cap strategies, our investment philosophy has historically added value across market cap ranges, with the \$10-\$100 billion market cap bucket the most significant source of alpha generation.

Internal resources: Considerations are given to the analytical support available for research initiatives and idea generation, which support capacity. At the extreme, a firm consisting of a single investor has lower bandwidth than a broader team of investment professionals.

Portfolio manager feedback: Input solicited from our portfolio managers and trading desk in monitoring capacity balances the drawbacks of quantitative frameworks, especially given the dynamic nature of markets. Over the last three years, as our international equity strategy was nearing asset levels we deemed may warrant capacity constraints, regular coaching check-ins with members of the International equity team frequently touched on capacity. Portfolio manager input for capacity consistently errs on the side of caution. Given our ownership structure, our incentives are long-term firm success, with no incentive for portfolio managers linked to strategy assets. The far greater risk is disappointing clients, colleagues, friends, and family.

Existing client needs: Viewing our clients as partners, decisions regarding capacity constraints may include reserving a desired amount of remaining capacity for existing clients. When we initially closed our Canadian large cap strategy we allowed our existing clients to contribute up to \$10 million per calendar year, should they have incremental capital to put to work or a need to rebalance. We have since learned that this created challenges for some of our clients. As a result, the most recent closure of our international equity strategy to new investors was done earlier than we otherwise might to avoid having to impose constraints on our existing clients. Of course, this is something we will continue to monitor over time.

One of the reasons why determining capacity is pseudo-science is that all of the factors above matter in isolation, but they also interact with each other in impacting matters of **stock** and **flow**. Layer on a complex, dynamic, and adaptive market, and estimates of capacity are just that: best guesses at a given point of time.

Our 20-year track record

Zooming out, our approach to capacity management is guided by and perfectly aligned with each and every one of our firm's core values:

1. Act with integrity
2. Put clients' interests first
3. Pursue excellence
4. Work as a team
5. Think long-term

Here's our Chair, Jim Hall, recounting the process once we'd made the decision to close our Canadian large cap strategy back in 2012. Jim's account is recopied from in an internal Mawer publication entitled *Values in Action*, a series of anecdotes designed to connect our core values with tangible examples in order to bring them to life.

Closing funds is an example of the bigger things we've done that demonstrate integrity and the value of thinking long-term. When we made the decision you would think it would have been this big debate about, well, we should close the funds because they're for clients, but the firm's also important and so is profit...but it was a very easy decision. It didn't even take 10 seconds. It went: motion to close the funds, no debate, and unanimous decision.

The other part of this story is that we had already closed Canadian Small Cap when we said we were going to close Canadian Large Cap. So within a week we had almost a billion dollars worth of business that people wanted to give us. As soon as we made the announcement we had a whole bunch of people trying to get in under the wire, saying "Oh, come on," and we simply said no. We could easily have taken that but we said we wouldn't and we didn't.

And it was a very conscious decision. We knew we could take the billion and that we'd be more profitable in the short-run, but if we didn't take it we'd have this story to tell for decades (as I'm telling it right now) about how we closed the funds in the interest of our clients and stood up for our principles. We believed that in the long-run our profit would be greater than if we had taken that up front amount. That decision also meant that each of us could walk into every single client meeting from then on and say we take care of our clients and here's the proof.

The following table outlines the various measures we've taken over our firm's history to manage capacity across our platform.

Asset class	Year closed	Implementation
Canadian small cap	2004 2013	Soft cap: <ul style="list-style-type: none"> No new institutional clients No limits on new contributions from existing clients Hard cap: <ul style="list-style-type: none"> Existing clients limited to gross contributions of \$5m per calendar year.
Canadian large cap	2012 2022	Soft cap: <ul style="list-style-type: none"> No new institutional clients Existing clients limited to net contributions of \$10m per calendar year Soft cap: <ul style="list-style-type: none"> No new institutional clients With increased capacity due to the market trend away from a domestic equity bias, we eliminated the restriction on new contributions from existing clients
Balanced mandates with a dedicated Canadian equity allocation	2012 2022	Soft cap: <ul style="list-style-type: none"> Closed to new institutional mandates greater than \$25m Existing clients limited to net contributions of \$25m per calendar year Soft cap: <ul style="list-style-type: none"> Open to new institutional clients, up to \$200m in aggregate per calendar year No limits on new contributions from existing clients
Global small cap	2015	Soft cap: <ul style="list-style-type: none"> No new institutional clients Existing clients limited to net contributions of \$10m per calendar year
International equity (ACWI ex US all cap)	2020	Soft cap: <ul style="list-style-type: none"> No new institutional clients No limits on new contributions from existing clients

Updated December 2022

Determining capacity is a multi-faceted decision but is perhaps the most important thing we can do to continue earning our clients' trust.

Case study: Global Equity

When we launched our global equity strategy in 2009, we estimated it could accommodate up to \$15–20 billion USD in assets and this was net of our estimates for international equity, global small cap, and global balanced mandates.

An updated estimate of the capacity in our global equity strategy is quite a bit higher. A few things have changed since that original analysis 12 years ago:

Market evolution. Whereas common measures of inflation have been tame over the past decade, asset prices have increased considerably fueled by low interest rates. In the initial business case, we estimated that 35% of the portfolio might be invested in companies with market caps below \$10 billion. In reality, aside from at the initial launch, the proportion of the portfolio invested in such companies has been much smaller (currently 11%).

Research evolution. First, our research team has grown from 15 to 32 people, and the number of stocks we're invested in across the platform has grown from roughly 250 to 350, resulting in fewer instances of stocks being held across three or more strategies. This has provided a safety valve for ownership limits. Second, while historical attribution suggests that we've added value in small cap companies, we've demonstrated that their impact on long-term outperformance has been significantly outweighed by mid- and large-cap companies. Finally, we've increased the number of asset class teams, which serve as sources of idea generation for global equity and have relaxed the requirement that the strategy be chained, i.e., limited to stocks held in other portfolios.

At the same time, many of the assumptions in our initial framework are still intact:

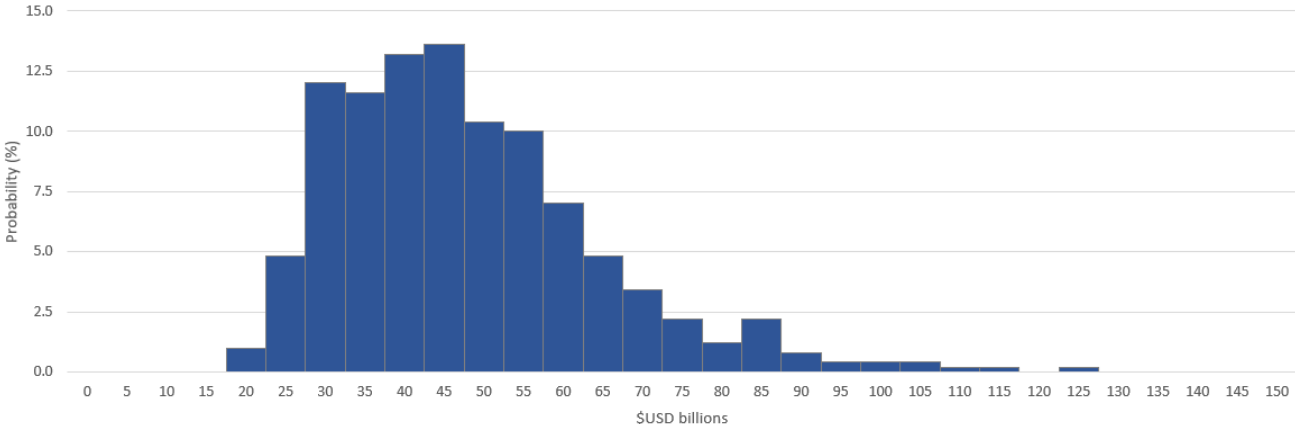
- As long-term investors, we still anticipate annual turnover in the range of 10–25%.
- We anticipate the number of holdings to range between 50–80.
- We continue to invest across the capitalization spectrum.
- We still allocate capital based on how well securities meet our investment philosophy.
- We still want to ensure ample liquidity. With the exception of a few small positions, we consider all positions in the global equity strategy to be liquid, even when considering firm-wide ownership.

We take a probabilistic approach towards capacity, using Monte Carlo simulation to treat key variables stochastically. These key drivers are the portfolio's desired exposure to smaller companies (for the purposes of this analysis, defined as below USD \$10 billion in market cap) and potential cross holdings with the broader platform. Hence:

- We want to ensure we can invest up to 20% of the portfolio in companies with market caps below \$10 billion. In light of the portfolio's existing exposure, we believe this is an assumption that embeds a margin of safety.
- Given this desired exposure, we assume an average position size of 1.0% for those companies, and use a triangle distribution of [0.5%, 1.0%, 1.5%] in the Monte Carlo simulation.
- For those companies below \$10b in market cap, the average market cap uses a triangle distribution of [\$5.0b, \$6.5b, \$8.0b].
- To account for potential cross holdings with other strategies, we assume that global equity's percentage ownership of a company at capacity ranges as follows: [4%, 7%, 12%].

With these inputs, the Monte Carlo produces the following probability distribution as an estimate of global equity capacity:

Estimate of Global equity capacity: Monte Carlo simulation



Summary table (n=500)

Minimum	\$21.0b
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P(10)	\$32.4b
Median	\$47.6b
P(90)	\$72.2b
Max	\$127.2b

Given the aforementioned discussion of the imprecision inherent in capacity estimates and the sensitivity of the inputs, this distribution should be viewed as a point-in-time estimate and with a conservative interpretation given the additional qualitative elements in our framework.

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