April 17, 2023

To Our Clients & Friends:

For the first quarter of 2023, Giverny Capital Asset Management's model portfolio rose 6.06%, net of fees,[1] vs. 7.50% for the Standard & Poor's 500 Index.[2] For the year ended March 31, 2023, the GCAM model, which is a Poppe family account, generated a return of -10.62% vs. -7.73% for the Index, net of fees. Our firm is now three years old and has generated annualized performance of 16.01%, net of fees, vs. 18.61% for the Index since inception.

I like to remind clients that quarterly results don't mean very much. In the short term, the market gyrates; over time, businesses mostly end up with valuations they deserve. Nevertheless, the first quarter was a frustrating one as many our companies navigated choppy waters quite well, yet we ended up trailing the Index. At the end of February, the model portfolio was nicely ahead of the Index in performance after most of our companies had reported strong results for 2022.

But in March, the failures of Silicon Valley Bank and Signature Bank prompted a run on deposits at our holding First Republic Bank, which caused the stock to collapse. My first reaction was to add to the position at what I mistakenly felt was a temporarily distressed price, which compounded our trouble. After it became clear that a huge number of uninsured deposits had left the bank and that its future depended on the kindness of strangers, in the form of larger banks supporting it with deposits, we exited the position.

Our holding Charles Schwab, which has a bank inside its operations, lost 37% of its value as investors feared it, too, would lose deposits (and earnings power). As Schwab began the year as a 7.0% weight in the portfolio, this hurt as much as the wipeout at First Republic. The declines in First Republic and Schwab together cost us a full five percentage points of our capital. Other financial holdings M&T Bank, Credit Acceptance and JP Morgan also lost value during the quarter.

This overshadowed excellent performance across most of the rest of the portfolio. Our top four performers rose more than 30%:

[1] The family account does not pay a management fee. The returns presented herein assume the deduction of an annual management fee of 1% to show what a client's account performance would have been if it had been invested the same as the family account during the period. Past performance is not necessarily indicative of future results.
[2] The S&P 500 Index returns include the reinvestment of dividends and other earnings. The Index is an unmanaged, capitalization-weighted Index of common stocks of 500 major US corporations. The Index does not incur expenses and is not available for investment.

GCAM portfolio companies	Q1 202 Returns
Meta Platforms	76%
Floor & Decor	41%
Arista Networks	38%
Installed Building Products	33%

Additionally, Constellation Software, Analog Devices, Alphabet and Five Below all rose between 16% and 22%. I feel very good about our portfolio overall.

So, what happened here and what did we learn?

At First Republic, I long admired the bank's proposition of offering attentive service to affluent clients. The bank's advertising relied heavily on testimonials from notable entrepreneurs, entertainers and professionals, and these folks' imprimatur helped First Republic grow deposits faster than any other large bank in America over many years. Because the bank's customers were wealthy, it was able to make extremely low-risk loans to them. Over its 37-year history under founder and current chairman Jim Herbert, the bank suffered minuscule credit losses.

But with the clarity of hindsight, I self-report three analytical mistakes. First, it was clear that the bank issued too many long duration loans at very low interest rates during the pandemic. These low-yielding loans did not pose a repayment risk, but as interest rates rose, they created the obvious prospect of weaker earnings for a few years, and the less obvious prospect of structural fragility. When interest rates rise rapidly, the value of low-yielding loans declines, regardless of the creditworthiness of the borrowers. If the bank ever had to sell mortgages yielding 2% or 2.5% into the secondary market, when the current market yield is 5% or 6%, it would lose a lot of money. This was a theoretical issue until it wasn't.

Second, I overestimated the importance of customer loyalty. All those testimonials? The highest Net Promoter Score in the banking industry? Not meaningful. At the first sign of shakiness some 40% of the deposit base fled the bank. Great customer service is not a moat for any bank that depends on deposits that are not covered by FDIC guarantees.

Third, First Republic's growth left it (and its investors) complacent, in my view. It did not believe it had taken on duration risk because over time it had grown the deposit base so fast that every year it was originating many new loans at current market rates. Yes, issuing a mortgage at 2% for 15 years is pretty unattractive, no matter how creditworthy the borrower. At best, you've locked in a return that likely won't beat inflation over time. But First Republic was growing loans by about 20% per year as low-cost deposits poured in. Another 15% or so of the loan portfolio was paid in full every year as successful professionals traded up to better homes. Some affluent borrowers simply paid off their loans early because they didn't like having debt. A small percentage of the book was adjustable rate mortgages that repriced after five or seven years. Add it up and First Republic believed 35%-to-40% of the loan book would re-price to current rates each year. As a result, the bank dismissed the notion that it had been too aggressive in making low yielding loans during the pandemic.

Of course, now it is clear that First Republic's growth was a function of the environment as much as of the bank's service ethos. As interest rates spiked, people stopped trading homes. As tech professionals lost their jobs (or saw their stock options lose value) they didn't see a reason to pay off their cheap mortgages. And as First Republic's deposit growth stagnated as customers sought out higher yields in money market funds, it literally didn't have the money on hand to make new loans at current market rates. Suddenly, instead of repricing 35% of the loan book every year to current interest rates, the bank had a portfolio of low-yielding loans that were likely to be around for a while.

Then the knock-out blow: depositors fled in response to the banking panic and the prospect suddenly loomed of First Republic having to sell low interest rate mortgages into the secondary market to pay back exiting depositors. That could wipe out the bank's equity very quickly.

I ended up selling the stock at a huge loss. I don't think many investors saw the potential for a run on deposits (especially after the federal government quickly stepped up to guarantee all deposits), but it was clear First Republic had taken too much duration risk in its loan portfolio. That was a poor decision by management, and hence a poor decision by me to hold the stock.

First Republic was not a large position as I divided our 7% bank exposure roughly evenly among First Republic, JP Morgan and M&T Bank, which offer very different banking propositions. But First Republic cost us nearly 2.5 percent of our capital this quarter.

Moving to Schwab, there are some similarities with First Republic, but I feel pretty strongly that we're going to be fine holding on to the stock.

I sometimes describe Schwab as the Costco of financial services. Others liken it to the auto insurer Progressive: it has the lowest operating costs in a huge, commoditized industry. Schwab passes on most of the savings from its low cost structure to clients, creating loyalty and trust, which in turn builds its brand. But Schwab has, over many years, reduced fees in so many areas that today it may be overly dependent on the net interest margin it earns on cash swept into its bank.

This has been intentional. Schwab management says investors pay very close attention to trading commissions and do not like paying them, even though they are not the most meaningful indicator of overall value delivered by a brokerage. Customers are less sensitive to the interest rate paid on the idle cash in their brokerage accounts. Schwab has opted for a model where it sweeps idle brokerage deposits into its bank and invests them, mostly in very safe instruments such as US Treasuries.

In the decade of rock bottom interest rates, clients didn't really care about this. And competitively, this model helps Schwab versus rivals because it has more client cash on hand to invest. In particular, when Schwab took most trading commissions to zero a few years ago, TD Ameritrade opted to sell to Schwab rather than try to compete with it.

However, this is an imperfect model. First, it depends on customers not paying close attention to their cash. Second, it means Schwab's earnings growth is only partly reliant on its operational excellence. Costco carries a very high valuation at all times because while it arguably underearns (Costco's prices are lower than they need to be to represent great value) its earnings are always 100% driven by improving member loyalty and spending. Schwab's earnings, by contrast, depend on the vagaries of interest rate spreads.

Schwab Bank ended 2022 with $360 billion in deposits, on which it earned $10.6 billion more in interest than it paid to depositors – half its total revenue. Schwab custodies roughly $7.5 trillion for clients, a huge number, but it earns half its revenue from the 5% or so of their accounts held in cash.

Bank deposits have been declining for Schwab recently, which has been partially offset by higher interest rate spreads. If bank deposits plunged, Schwab's earnings would suffer and it might possibly be in a similar situation to First Republic, where it would have to sell long-term, low-yielding bonds it bought as investments to repay departing bank depositors. Schwab would then crystalize losses on bonds that would otherwise just generate low yields until they mature. This is an unlikely scenario, but not totally implausible. The stock reflects anxiety about this possibility.

This is frustrating because Schwab remains an exceptional asset gathering machine. During the banking panic in March, Schwab attracted some $53 billion in new assets from investors. In a crisis, money flowed into Schwab, not away from it. However, that money is not flowing into bank deposits and it may be some time before Schwab actually shows earnings growth commensurate with asset growth.

I believe Schwab would be better off charging clients a bit more for the services it provides them and reducing its dependence on interest rate spreads. That might mean charging more for some kinds of trading, mutual fund distribution, wealth management products or even charging modest administrative fees to investment advisors. The current system of relying on interest rate spreads would be as if Costco's main earnings driver wasn't growing membership fees and retail sales but benefiting from volatility in food prices.

Schwab counters that clients prefer this economic system. By keeping other charges low, it grows rapidly while still earning high returns on capital. Schwab accepts that while earnings will wobble from time to time with interest rates, so long as it grows brokerage accounts and assets consistently, eventually earnings will follow. Over many years, clients have tended to keep at least 5% of their accounts in cash. So long as that remains true in the future, Schwab will be fine.

To that point, Schwab grew its operating income from $1.6 billion in 2012 to $10 billion last year. Charlie Munger says it's silly to fixate on the smoothness of earnings growth. Lumpy growth is fine. The market disagrees, but Charlie usually turns out to be right about these things.

As for the rest of the portfolio, we mostly had good news. Our non-financial stocks are thriving.

Our holding Arista Networks continues to generate extraordinary results, which the market recognizes. Arista rose 38% during the first quarter and became our largest holding. Arista makes switches, routers and operating software that power enormous data networks, such as for cloud computing. Microsoft's Azure cloud business and Meta Platforms' Facebook and Instagram networks are Arista's two most important customers. Roughly speaking, Arista has tripled its revenue and profit over the past five years and seems poised to continue growing rapidly for the foreseeable future. Demand for hyperscale computing networks may accelerate as artificial intelligence (AI) chat applications grow. By some estimates, the computer power required to answer AI chat queries is roughly seven times more than for a Google or Bing search. I think the realization that data network capacity needs to be much larger to accommodate AI has driven recent enthusiasm for Arista.

In general, I think when a stock blows through my price target the right answer is to bask in the glory and maybe splurge on a latte rather than my usual morning coffee. Don't get itchy about locking in a

profit. In this case, Arista became our largest holding and roughly 8.5% of the portfolio, while also being one of the most expensive businesses we own on a price-to-earnings basis. Arista earned $4.27 in 2022 and I believe there is good reason to expect it to double EPS again, perhaps by 2026 or 2027. But as the stock traded into the $160s, that represents a PE of 20x estimated earnings in four years. While I believe strongly in Arista's competitive position, I know that tech giants are facing budget constraints and a pause in their own intense pace of infrastructure growth would not surprise anyone.

As such, we took Arista down to a 7.75% weight. We used some of the sale proceeds to add to our position in Charles Schwab at about $53 per share at the end of March.

In this case I sold an expensive stock with momentum to buy a cheaper stock without any. Are we trimming our flowers and watering our weeds? I hope not. Arista likely has a lot of growth in front of it, but from today's valuation and our weighting, I felt taking a bit of profit made sense. And Schwab, as I hope I've made clear, is a dominant franchise that is not threatened by rivals so much as inhibited by its own pricing model (which could be amended).

Meta was our leading performer, up 76% for the quarter. I have written quite a bit about Meta in prior letters and I feel like I got the basics right: Meta never had an earnings or engagement problem so much as an expense management problem. Once founder and CEO Mark Zuckerberg announced layoffs and a new commitment to efficiency, the stock doubled in a few months.

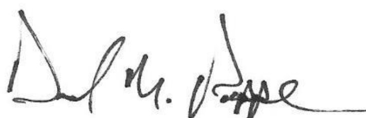
I made small additions to our holdings in Eurofins Scientific and Coherent during the quarter. Both stocks were down a lot in 2022 and I feel both have excellent long-term prospects. We sold a small amount of SS&C. I like this business and its founder-CEO Bill Stone but have been a bit disappointed with the heavy use of floating-rate debt to finance acquisitions.

This quarter marked the end of our third year in business. It has been a wild ride – launching at the start of the pandemic, watching a bubble in low-quality stocks and cryptocurrencies inflate and deflate, and generally living with a high level of volatility. On April 14, our holding JP Morgan announced nice earnings for the first quarter and the stock rose 7%. In a truly efficient market, the largest, best-managed bank in America would not rise or fall 7% on a single data point. Yet, we see it regularly.

We've generated a good absolute return over three years, though below my expectations relative to the S&P 500. We own an eclectic collection of high-quality companies, with a low level of debt across the portfolio and a high level of exposure to founder- or family-managed businesses.

As always, I greatly appreciate the confidence you've placed in me, our operations chief Al Munro and our partners at Giverny Capital Inc.

With every good wish,



David M. Poppe

600 Madison Avenue, #2300, New York, NY 10022
gcaminfo@givernycapital.com

Giverny Capital Asset Management *Top 10 holdings*	
Arista Networks	*8.3%*
Progressive Corp.	*7.7%*
Alphabet A&C	*7.6%*
Constellation Software	*6.8%*
Heico Class A	*5.6%*
Five Below	*5.4%*
Carmax	*4.6%*
Ametek	*4.3%*
Berkshire Hathaway	*4.3%*
Meta Platforms	*4.2%*
Total	***58.8%***

600 Madison Avenue, #2300, New York, NY 10022
gcaminfo@givernycapital.com