Quarterly Letter – 2023 Q3

This letter has a typical beginning and ending. The first two-plus pages discuss recent performance and current valuation. The last nine pages are our standard Statistical Appendix full of performance and portfolio information.

The pages in between are atypical. Instead of a top-down macro analysis of global and market risks or a detailing of recent portfolio exits, this time we discuss behavioral tools we've developed to help investors and prospects invest with us when we believe probabilities are most in their favor based on our historical trends. We think this is vital because we can make no money for someone who does not invest with us. Our hard work is for naught with these folks. We've discussed three tools before, but not all together in a behavioral context. Further, we introduce a new fourth tool from the research we've done while writing this letter.

We recognize that many of our readers may not be interested in this topic, and some may dismiss it as timing nonsense. That's fine. Those who do not worry about or struggle with timing can skip those pages. Over the years, we've had thousands of interactions with hundreds of investors. We know many individuals, family offices, and institutions do think often about timing. It can be a barrier for them to invest initially or to invest more, even at the most favorable times. This is our audience for the behavioral discussion, and we hope we can be of some help to this group.

Performance

We lost 0.96% in Q3 net of fees. By month, July through September, results for our reference investor were 3.97%, -3.29%, and -1.51%, respectively.[1]

The MSCI Frontier Markets Small Cap (FM SC) Index had a Q3 total return of 3%, while the MSCI Frontier Markets (FM) Index made 2%. The other indices we cite all lost money, with MSCI Emerging Markets (EM) and the S&P 500 both down 3% and MSCI EAFE off 4%.

YTD. We are up 14.34% YTD through September, leading the total returns for all these indices. The S&P 500 is +13%, as is FM SC. FM and EAFE are both +7%. EM is +2%.

October. Q3's sour mood carried into the early days of October. The S&P 500 dropped over 1% MTD through October 3, bringing its loss since July 31 to 8%. FM lost nearly 2% MTD by October 3, and EAFE and EM lost 3% MTD through October 4. At worst, we were down more than 2% MTD on October 6. Since then, through October 12, most of these indices rallied to

[1] All investors, regardless of series, had the same -0.96% quarterly return, but returns by month varied by series. We accrued incentive allocation in July as we made money that month after finishing Q2 at an all-time high. This lowered July's returns for Legacy Series and Series A investors, who pay incentive, compared to Series B investors, who do not. A loss in August reduced this accrual and a further loss in September completely reversed the remainder. This boosted returns (lessened the monthly loss) for Legacy Series and Series A investors compared to Series B investors in those two months. Since no one paid incentive at the end of Q3, quarterly returns were identical for everyone in Q3. Please see your statement for your account balance. Our stated Frontaura return is net of all fees for a reference investor joining the fund at inception, making no further contributions, making no withdrawals, and converting to Series B in 2021 Q2. Investors joining on other dates, making additional contributions, making withdrawals, or not converting to Series B in 2021 Q2 may have different results. Our auditor has audited results through 2022. We discuss our returns and different series here.

positive territory MTD, and our MTD loss reduced to 1%. Nevertheless, it's premature to know how the rest of the month will evolve for us or the indices. We do not include October's performance in any returns we state in this letter.

Recent years. As Figure A1 in the Statistical Appendix shows, with one exception, we lead all these indices in one-, two-, and three-year returns. The exception is that for the past 12 months, EAFE made a total return of 26% versus 23% for us. In the past 24 months, we are 4-27 percentage points ahead of these indices and in the past 36 months, we are 23-69 percentage points ahead. Our 80% gain also leads all these indices since the March 2020 COVID low. We continue to believe that COVID acted as a reset for us, after difficult years in 2018 and 2019 when value and small caps were out of favor globally, the dollar was strong, and frontier markets suffered waves of redemptions as an asset class. With our valuations now among their most attractive ever, as high earnings growth has offset positive performance in this year and recent years, we think our relative and absolute outlook both remain excellent.

Valuation

At quarter end, our trailing as-reported portfolio PE was 5.6. This is not a forward-looking number that uses higher earnings figures that have yet to (and may never) occur. This also is not an operating number that excludes some expenses, pretending they did not occur. This is a factual number based on actual, reported accounting earnings. The comparable figure for the S&P 500 was 22.8 at quarter end, meaning that Frontaura investors obtain their earnings at about 1/4 the price that US market investors pay.

Our Q3-ending portfolio price/book was 0.96. Our companies' weighted average dividend yield was 7.1% and their weighted average return on ending equity was 21.9%. Our yield is 4.4 times higher than that of the S&P 500. These are phenomenal valuation levels, among the best in our history.

QVS. Our Quality Value Score (QVS), an equal-weight composite of these four metrics, is presently 97 (100 is the most attractive in our history, 0 is the least attractive). The relationship between QVS and forward one- and two-year total returns is highly significant statistically.[2] Our regression now projects total returns of 25% for one year and 48% for two years. This projection is nearly identical to that of one year ago in our September 2022 comment. In other words, while our investors have done well, EPS growth has kept our forward return projections similar. For those not invested with us, QVS suggests that last year's opportunity still remains. As always, we remind you that past performance is no guarantee of future return.

Over 187 monthly QVS datapoints,[3] only six months had a higher QVS than our September figure. If we look at the top dozen QVS scores that have one-year of subsequent performance data (six of these better than our present QVS, six worse), the average 12-month gain is 43%. Only one data point, September 2019, had a negative return, -15%, because of the

[2] The F-statistic for the two-year return regression is 149. The t-statistic is 4 for the intercept and 12 for the QVS variable. Generally, values above 2 for these statistics are significant.

[3] We have 191 months of history, but we don't have QVS data for our first four months.

later COVID selloff. But even September 2019 turned into a good time to invest, as we made 30% by September 2021, two years later. The average 24-month gain of these top 11 datapoints with a two-year record is 75%, ranging from 30% to 110%.

US and global markets had a rough patch in August and September that may give some investors pause about investing now. We listed some of these reasons in our September comment. It is close to a truism that one can always find reasons not to invest, yet it is a behavioral issue for most investors. In the simplest terms, one should probably not worry about this now with Frontaura. QVS has typically had a great record predicting performance. If you grit your teeth and invest when it's at these levels, historically there has been a great payoff, even if near-term losses occur. In 2022, September was even nastier than this year and developed world recession concerns may have been even greater than now. Nonetheless, and despite a rocky October 2022 where we lost 3%, our actual return of 23% in the past year was in line with the one-year 25% QVS projection we made 12 months ago.

Behavioral Decision-Making Tools for Timing

For our clients, Frontaura exists to make money in frontier market equities, an area different than what they tend to own otherwise. We accomplish this mainly through our daily process of researching companies selling at prices we think are too low and which can provide a good dollar total return, within acceptable risk limits. We do this another way though, by encouraging, reminding, and cajoling investors and prospects to invest when probabilities are more in their favor than usual. Studies show most investors aren't good with timing—they add the most around the tops and the least around the bottoms. We try to get people to invest more around the bottoms. It's only clear in hindsight when the bottoms are, of course, but QVS has shown for years now that it's a good signal caller of those times. We deliberately mention QVS more often when it signals good forward returns so that we can help investors make more money with us. It would be odd if we saw such a positive signal, then kept quiet about it. That wouldn't help anyone.

In this letter, we discuss four behavioral decision-making tools:

1. Quality Value Score (QVS)
2. Dollar-cost Averaging (DCA)
3. Seasonality
4. Wait for a winner

We have discussed the first three in the past. The fourth, wait for a winner, is new and we devote an entire section to it. At the end of this letter, we summarize these tools and provide caveats on their limitations, but first, we'll continue our discussion of QVS.

Some investors aren't too bothered about exact timing. They make a quick decision, especially when our valuation multiples or QVS looks good, and they don't worry if they get the exact timing right. If QVS was high enough, in a year or two, they usually have a nice profit, even if they start out in the hole because of any near-term market losses. For others though, near-term loss aversion can be crippling to the point where they never invest or only do so well after a substantial recovery, missing gains they could have had. We want to help these folks make more money. This led us years ago to the discovery of Value Score (VS) as a timing signal. Eventually, we uncovered the even better (more statistically significant) QVS, by adding return on ending equity as a quality metric to the three existing valuation metrics—PE, PB, and dividend yield—present in VS.

QVS is the main way we nudge people to invest. Importantly, this is not a black box technical tool that is hard to understand and based upon a dubious theory. Academic research has been clear for decades now that markets provide better returns when starting valuation is low. More recent academic studies show a positive relationship between high quality companies and returns. We take three common valuation measures plus a fourth metric that measures quality and combine them into one number, scaled from 0 to 100. That's simple to understand and—even better—it works! Tremendously well, actually.

Dollar-cost averaging (DCA). Despite its strong history of signaling the best times to invest in Frontaura, for some investors QVS alone may not convince them when markets aren't behaving well. That is, at times, one may think, "Okay, QVS says it's a good time to invest and I believe that's probably true within its two-year window, but right now markets feel terrible. I can't quite pull the trigger—what should I do?" This is an issue that many investors and prospects we talk to struggle with. Thus, we need methods beyond QVS to further nudge investors. Dollar-cost averaging (DCA) is a second tool. With DCA, an investor contributes the same fixed dollar amount at recurring intervals. DCA is meant to be investing on autopilot once the initial decision is made.

DCA mitigates the risk of investing everything before a sharp market fall. With DCA, should a fall occur, future buys will be at lower prices. Historically, numerous investors have used DCA with us and we suggested this approach to skittish investors back in our September 2022 comment, writing:

> *To conclude, two signals exist that in the past preceded future strong gains: low valuations and a large monthly selloff. Yet, investors may feel it is early because the US and the developed world still face significant interest rate hikes and recession. What is a rational investor to do? Investing now makes sense, but the record shows losses are likely before the gains kick in. We propose this to investors who think it early and who may want to consider our pronounced positive seasonality that begins in December. A $5 million investor might invest $1 million in four consecutive months December 2022 through March 2023 and hold $1 million back in case of a longer drawdown tail. It probably won't feel comfortable investing (it never tends to around market bottoms), but past situations like the present are where our greatest gains occurred.*

The record since shows that investing fully from 1 October 2022 (despite a loss in October 2022) outperformed our DCA suggestion, however both performed well and DCA minimized any regret over the initial October loss. Most important, if a DCA approach makes the difference between someone investing over time and not investing at all, then DCA can create a significant outperformance versus the too-common alternative of doing nothing. Inertia can discourage an investor twice: first through fear ("I'm not investing now because markets may fall") then, after a rebound, through regret ("I'm not going to invest because I've missed it"). Even if the market break never occurs, this investor may never invest, forever waiting for the selloff to arrive. Better in this case to have started investing with a DCA program.

Let's contrast these two behavioral tools: QVS and DCA. QVS tells you that it's a good time to invest with a one- or two-year horizon, but it does not warn you off from immediate losses. QVS doesn't really care about near-term losses. Its inherent logic is that the starting valuation is low enough that you will make up any losses eventually. If losses do occur, QVS would likely say it's an even better time to invest.

DCA acknowledges that losses can occur near term, and it can mitigate their destructiveness by buying, at even lower prices, after they occur. Nevertheless, DCA is fallible. If it turns out there were no near-term losses, it would have been best in hindsight to invest all at once (plunging in, so to speak) rather than to stretch out the investment over time. Research shows that plunging in makes more money than DCA about two-thirds of the time or more.[4] Another scenario where DCA might disappoint is when a long losing streak outlasts a finite DCA program.[5] If the DCA program began with an attractive QVS, a long losing streak (presumably with high QVS throughout) should provide an investor with good entry points and good eventual returns. Nevertheless, the losing streak bothers some investors, especially if it was underway before they started investing. "It was so obvious markets were heading down—if only I had waited!" is the thinking here. It's easy to dismiss this as being short-sighted but it is a real issue that investors struggle with. To understand better why, see the paragraphs below on Frontaura streaks.

Seasonality. Without diving into a long explanation here, for record keeping we note that seasonality (mentioned in the excerpt above from our comment a year ago) is a third behavioral timing tool. As we've written in the past, on average our fund makes money December through July and loses money August through November. Seasonal market anomalies are well documented. For example, the S&P 500 traditionally makes most of its return in the six months November through April. Our seasonality starts a month later and lasts longer. As we've discussed before, fundamental and behavioral reasons for our seasonality stem from the bunched timing of earnings and dividend announcements. The seasonality takeaway is simple: time new investment for December 1 and if that is not possible, be sure at least to get it in before April 1 as April and May are historically our first and third best months, respectively.

Wait for a Winner, a Negative Momentum Reversal Tool

After writing the September comment, we delved deeper into the near-term timing dilemma. We wondered if there was some kind of all-clear signal that would diminish the risk of long losing streaks. We were skeptical we could find a signal that worked. Looking at our historical data different ways, to our surprise, we found a simple rule that has worked historically. With

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[4] We first read this finding in a 2004 research paper by Dimensional Fund Advisors. We've seen more recent analyses that have conclusions that similarly favor plunging in. If you search the internet with "investment timing: wade or plunge" you'll find several. Here's one that's short and easily digestible.

This plunge calculation considers return only and not the psychological aspects of loss aversion. The pain humans typically feel from losing an amount of money is about double the pleasure they receive from making an equivalent gain. Avoiding or reducing a loss can make some people happier even if they make less money.

[5] In our opinion, the best DCA program has no end, with an investor adding money every month. We have had investors do this in the past and presently and we can discuss individually how best to accomplish this with the least administrative burden.

caveats at the end of our discussion, we present this fourth behavioral timing tool. An academic might call this tool negative momentum reversal. We'll use a catchier moniker: wait for a winner.

Frontaura streaks. Before we explain this tool, as background let us point out that Frontaura's returns have serial correlation from month to month and the worst selloffs tend to have long monthly losing streaks. For example, we lost money six months in a row June through November 2008, totaling 35% with losses concentrated in the final three months. Three years later in 2011, we again lost money these same six consecutive months, June through November, totaling 17%. In 2018, we lost money seven months in a row, May through November, totaling 15%. On the positive side, we have had even longer winning streaks, compiling runs of 11 months (twice), eight months (three times), and seven months.

Why is this? Our markets often act with a lag to global markets, but the lags differ by country. For example, consider the positive winning streak that followed the COVID selloff. US markets bottomed 23 March 2020 and the S&P 500 rose five months in a row, April through August. Some of our markets also bottomed in late March, but others did not bottom until Q2, Q3, or Q4. Our gainers outpaced our losers beginning in April 2020, but our losers kept the gains modest at first. As different markets bottomed, then rallied, our streak continued, running for 11 consecutive months. This is an attractive feature of frontier markets: what you know is coming plays out over a long time giving you long streaks, winning or losing. When it's a losing streak, there's a case for holding off new money until the streak ends and that's what this tool recommends.

Serial correlation. A statistician would label Frontaura's streakiness as positive serial correlation—that is, our future performance depends partially on our past performance. Modern portfolio theory says that security prices do not have serial correlation—past prices cannot predict future prices. For example, during our 191 months of history, this is true for monthly S&P 500 total returns. Its serial correlation of this month's return to the prior month's return is 0.01—almost completely uncorrelated—meaning that its future returns are unrelated to past returns. Let us pause to explain. Correlation runs from -1.00 (perfectly negatively correlated) to 1.00 (perfectly positively correlated). A correlation of 0.00 says there is no relationship between two different data series. Serial correlation uses one set of data, but compares prior datapoints (e.g., last month's return) to future datapoints (e.g., this month's return). During our history, EAFE and EM show only slight serial correlation, at 0.10 and 0.12, respectively. Looking at the most recent 36 months, these indices have negative correlation: -0.26 for the S&P 500, -0.11 for EAFE, and -0.04 for EM.

Frontaura is different. Our inception-to-date serial correlation is 0.40 and over the last 36 months it is similar at 0.33. We have never had a 36-month period in our history where our serial correlation was negative. These statistics support our contention above that historical Frontaura returns are streaky.

Winning and losing months. We've made money in 119 months and lost money in 72 months, a winning percentage of 62%. When the prior month was a winner, our winning percentage for the next month rises to 71% (instead of 62%). If we've had two winning months, the chance the third makes money increases a couple more percentage points to 73%.

Let's look at the losing side. We lose money in 38% of all months. When the prior month was a loser, however, our losing percentage for the next month rises to 51% (instead of 38%). If the last two months lost money, there's a 56% chance we'll lose money in the third month, and when we have three consecutive losers, 60% of the time a fourth loss occurs.

Up to a point, then, the more times a result occurs for us, the greater the chance that result continues.

What to do? With these observations about streakiness, serial correlations, and repeat winners and losers, is there a tactic that would help to find the best entry points? Yes, and it's a simple one. If the prior month was negative, don't invest new money until after a winning month occurs. We call this tactic wait for a winner. Recognize that with wait for a winner you will not receive the gain of that first positive month, so whenever the losing streak lasts but one month, you will always be worse off with this tactic. Of course, you won't know the length of a losing streak ahead of time. If implemented, wait for a winner allows you to avoid all losses on your new investment during the losing streak. In the median case, the gain you forego and the loss you avoid are roughly similar, so you are no better off. Actually, you are slightly *worse* off most of the time, but by a small margin, often between 0% and 1%. However, when wait for a winner works, it really works, because you can avoid significant losses that occur during long losing streaks. Thus, while the *median* return from wait for a winner is just below break-even, the *average* return is positive and the best returns are in double digits, approaching 50%. The worst outcomes from wait for winner are all single-digit losses, and in only one case does the loss exceed 4%. Wait for a winner doesn't make you money most of the time but it has a highly sought after asymmetrical positive-skewed return profile. Think of it as a modestly priced insurance policy with the possibility of a large payoff when you want and need it most.

We want to be clear as to what we mean when we speak of the return from wait for a winner. We are citing the *incremental* return of wait for a winner compared to the alternative of investing immediately. The *total* return you receive from wait for a winner would be the incremental return we cite plus Frontaura's performance. If Frontaura makes a gain during your holding period, then your total return will exceed the incremental return we state. This footnote[6] has a simple example.

Execution risk. Before we go further, we want to emphasize the execution risk with wait for a winner. It requires 1) not investing for the next month if the month about to end is negative and 2) investing for the next month if the month about to end is positive. Without advance planning, you won't get this right and you should not bother. The worst outcome would be if you assume that you will implement wait for a winner, but you miss the positive signal, fail to execute, and never invest out of frustration, foregoing an entire bull phase. For most people, then, it's best to invest when QVS or seasonality are favorable or to implement a DCA program and ignore wait for a winner.

[6] Let's say investing immediately buys into Frontaura at a price of 100 but wait for a winner avoids a losing streak with a 20% loss and invests later at 80. We would say that wait for a winner made a 25% return versus investing immediately. At all future prices, higher or lower, wait for a winner's return multiple would be 1.25 times that of investing immediately and wait for a winner would always have 25% more money because of its lower entry point. For example, let's say Frontaura doubles from 80 to 160. Wait for a winner's return multiple would be 2.00 as it now has $2 for every $1 originally invested. Investing immediately would have a 1.60 return multiple, or $1.60 for every $1 originally invested. Two dollars is 1.25 times (or 25%) greater than $1.60.

For those interested, though, we can make it easy to implement wait for a winner. The two requirements for any Frontaura investment are paperwork and money. You can complete paperwork ahead of time as you would have to do anyway before investing. As for money, you can either deposit it with us and we'll invest it automatically if the prior month was positive (easiest) or you can communicate with us and wire it to us in real time if the prior month appears positive. The real-time wire approach is doable but leaves little room for error on your part (or your bank's part) as we must receive the funds by our deadline.

Wait-for-a-winner results. Figure 1 shows the results of wait for a winner. Columns A through D show the number of occurrences of losing streaks by length when a month began and whether that month was then positive or negative. The first data row shows that there were 35 times (column D) a negative month occurred after a positive month, beginning a new losing streak. This 35 figure appears again in the second data row (column B), showing the number of times we had a one-month losing streak (column A) at the beginning of a month. Eighteen times (column C) this month was positive, ending the one-month losing streak. Wait for a winner would lose money in these 18 cases. On the other hand, this month was negative 17 times (column D), or 49% of the time (column E), making it a two-month losing streak. We don't know the outcome of the August-September 2023 losing streak, so this datapoint does not appear in the third data row for two-month losing streaks, which is why its column B shows 16 occurrences instead of 17. Continuing with the remaining data, column C tells us that 8 losing streaks ended at two months, 3 at three months, 2 at four months, 0 at five months, 2 at six months, and 1 at seven months.

Figure 1
Frontaura Global Frontier Fund LLC
Wait for a Winner Performance
30 September 2023

A	B	C	D	E	F	G	H	I	J
Losing Streak Length When Month Begins	Occurrences	# of Times Month Positive: Losing Streak Ends or Does not Start	# of Times Month Negative: Losing Streak Starts or Continues	% of Negative Months	Wait for a Winner Profitable %	Wait for a Winner Average Return	Wait for a Winner Median Return	Wait for a Winner Best Return	Wait for a Winner Worst Return
-	120	85	35	29.2%					
1	35	18	17	48.6%	29.4%	2.3%	-0.7%	49.7%	-7.9%
2	16	8	8	50.0%	43.8%	4.0%	-0.1%	48.6%	-4.0%
3	8	3	5	62.5%	50.0%	6.8%	-0.4%	45.4%	-4.3%
4	5	2	3	60.0%	60.0%	8.3%	5.3%	33.9%	-3.2%
5	3	0	3	100.0%	100.0%	6.0%	4.4%	10.5%	3.0%
6	3	2	1	33.3%	0.0%	-0.8%	-0.7%	-0.3%	-1.3%
7	1	1	0	0.0%	0.0%	-1.2%	-1.2%	-1.2%	-1.2%
Total	191	119	72	37.7%					

Column E shows that negative months become more likely as a losing streak continues, until they get to the six-month mark.

Column F tells us how often the wait-for-a-winner tactic was profitable, and columns G through J, gives the average, median, best, and worst return for this tactic.

Two negative months. Through September, for the 17th time, we've had two consecutive negative months. Figure 1 tells us in its third data row how wait for a winner fared the 16 prior occasions. This tactic is only successful 44% of the time (column F), but its average payoff is positive, at 4.0% (column G), and its median loss is only 0.1% (column H). In the best outcome, it returned 49% (column I) and in the worst, it lost only 4% (column J). The benefit of waiting becomes stronger after two negative months than after only one, as the average and median returns are better, and the worst loss is less.

Three negative months. October 1 has passed, so let's consider what an investor could do for November 1. If October is positive, wait for a winner says to invest November 1; if negative, don't invest. The fourth data row of Figure 1 tells the story. In the past, we've had 8 occurrences (column B) of a three-month losing streak. Wait for a winner had a positive return half the time (column F), with an average gain of 6.8% and a median outcome of -0.4% (columns G and H). At best, it made 45%; at worst it lost 4% (columns I and J).

Wait for a winner produced positive returns historically after four and five negative months. Beyond this, there are limited datapoints and the wait-for-a-winner returns are slightly negative, although having waited that long, we still think it makes sense to keep waiting for a positive month. Just because our longest losing streaks historically ended after six or seven months, does not mean that a future streak cannot run longer.

One positive month is all it takes. We do not show the data for this, but we did other studies. When the losing streak was two months, we looked at the outcome of waiting for two positive months, instead of only one, before investing. With three-month losing streaks, we looked at the outcome of waiting for either two or three positive months, instead of only one. To our surprise, tactics to wait for two winners or to wait for three winners also had positive average returns, although less than waiting for one winner. The median returns improved and turned positive by waiting an extra month or two, but the tail outcomes got worse. Because you are giving up more of the eventual rally by waiting longer, the best outcome has a lower positive return and the worst outcome has a higher negative return, the longer you wait. To keep it simple, we favor just waiting for one positive month, not two or three.

When not to wait. At the risk of data mining, we can improve wait-for-a winner outcomes. We observe that even in Frontaura bull markets, occasional random monthly losses can occur. This ends a winning streak, but it does not always mean the bull market is over. A second monthly loss is more worrying though. What happens if we ignore a monthly loss when it is the only loss in the prior six months? There are ten cases of this in our history and eight of nine times, we would have been better off ignoring this loss and investing immediately rather than waiting for a winner. The 10th case is the August 2023 loss, and we don't know that outcome yet. In these nine instances, the best pickup in return from not waiting instead of waiting was 8% while the one losing case cost 4%. On average, these nine occurrences made 2.1% more than wait for a winner with a median gain of 2.6%.

We think ignoring the first loss in six months makes sense, although we can certainly construct a scenario where this would not work well. Remember from our earlier discussion that while developed markets can change direction quickly, some of our countries continue the prior trend a while before turning. Initial disruptions to a long streak for us are often only a minor setback that does not repeat the following month. For example, consider 2021. After 11 winning months, we had a 1.8% loss in March 2021, then five more monthly wins. The first of these was 8.5%, which a strict wait-for-a-winner tactic would have missed. Later, in 2021, we had a -0.1% loss in September 2021, before three more monthly wins, the first of which, at 4.0%, wait for a winner would have missed. Altogether, we made money 19 of 21 months through the end of 2021. This is the kind of situation where one minor losing month in six months does not necessarily require waiting. You can see all our monthly returns in Figure A3 in the Statistical Appendix.

Looking for corroboration. QVS now is the same as a year ago, but back then there were other corroborating signals present. We had one of our worst months in September 2022, losing 7%, and ironically, as we explained, losses that bad have been bullish for us because they tend to happen near the end of a bearish phase. September 2022 also saw the US dollar reach an overvalued high, and we thought a reversal could boost our returns. This subsequently occurred. The following month, FM had its worst monthly underperformance in our history versus the S&P 500, and that also ironically was a bullish signal that happens around turning points. November 2022 began a rally for us where we made money 8 months out of 9, gaining 34% altogether. Today, we cannot point to similar corroborating signals. Our August and September losses were not as extreme, the dollar, while strong in these months, is below its level of a year ago, and FM and the S&P 500 have performed similarly. QVS is bullishly high, and for most investors that is signal enough. Others, noting that seasonality is still against us this month and next, might like the idea of using wait for a winner as a second factor to corroborate that an ideal entry point is immediately at hand. Either way, interested investors should get their paperwork in order and have funds available. Be ready.

Summary and Caveats of Behavioral Tools

Let's summarize our four behavioral tools. QVS says to invest now, the next opportunity being November 1. Seasonality says to invest December 1. DCA could have multiple customized answers. An investor could invest for both November 1 and December 1 or for November, December, and January. A slightly longer DCA program could be November through March or December through March. Or one could use a perpetual DCA program, or even a customized program that invests in months where QVS is above a threshold such as 50. Finally, wait for a winner says to get your paperwork done now so that you are ready to pull the trigger at a moment's notice, and talk to us each month to see if current performance is positive.

Caveats. No system is foolproof. Please consider the following:

1. **Past performance is no guarantee of future returns.** There are multiple reasons for this. First, even if QVS stays statistically valid forever, the tool may not work in a given instance due to randomness. Second, markets can change and what was valid in the past may not be valid in the future. Third, maybe what we present is not valid, but is just extraordinary random luck. Of these three possibilities, we do not believe the last to be true and we do not expect the second. The first will occur at times as probabilities are not guarantees, but if it happens only occasionally, it does not invalidate the prior conclusion.

2. **Future shallow drawdowns or sharp positive reversals could undermine the wait-for-a-winner tactic.** Large drawdowns from long losing streaks such as the GFC, 2011, and 2018 support waiting for a positive month. However, the average incremental return from wait for a winner versus investing immediately will decline if future drawdowns are shallow or if future positive reversals are sharp in the first month. If this occurs, the wait-for-a-winner tactic may no longer work.

3. **Don't miss the boat.** One risk we have mentioned is where an investor never invests. What starts as an attempt to avoid losses ends up as an outcome where gains never occur due to remaining too long on the sidelines. This is a significant risk to where many investors shouldn't even think about timing. We have designed our tools to be prescriptive about when to act (e.g., invest in December to take advantage of seasonality or only invest after a positive month) to maximize the chance an investor does invest. Life often intervenes, however, and an investor who puts off an investing decision risks never coming back to it because they get too busy or distracted. Often it's better to strike while the iron is hot than to try to optimize timing.

4. **Entry advice is not exit advice.** This discussion is to help investors become more confident on timing decisions with respect to investing initially or additionally in Frontaura. We do not think the converse of our advice works well for timing Frontaura exits because of the three-month advance-notice requirement and investor-specific exit gates. Entry decisions can occur in a month or less while exits take three to 27 months to complete depending on investor series, so investors cannot time exits in the way they can time entries.[7]

5. **Developed world risks remain.** Throughout 2022 and 2023, we have written about the risk of developed world recession and an ensuing market selloff hurting our returns. The 28% rally that occurred in the S&P 500 from 12 October 2022 through 31 July 2023 has not persuaded us that this risk will not occur. We are respectful of history's lessons that interest rate hikes have long lag times before they dampen economic activity. We still think a US recession more likely than not, a further US market selloff more likely than not, and some impact on our performance more likely than not. We don't know the timing. This may have begun in Q3 or perhaps it has yet to start. We could be wrong on this point, so we prefer to use QVS and wait for a winner as guide rather than relying on our intuition on US developments. Thus, despite our fears, a year ago we used QVS to recommend investing and we think similarly high QVS now means that the forward return outlook is still attractive. People worried about near-term losses can use the wait-for-a-winner tactic as a precise timing signal.

6. **These tools may not apply to other markets**. What we present here are Frontaura lessons that have worked for us historically, and that we believe will continue to work most of the time. Some tools were inspired by what we know works in other markets. The low serial correlation of non-frontier equity markets makes us skeptical that wait

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[7] Further, even an unattractive QVS could still mean low absolute valuations. Our 10 worst QVS had an average PE just over 8 and an average dividend yield just under 5%—far superior to most equity markets. We've always expected at some point that our valuations will take a step function up from their low absolute historical range, so we've never considered QVS to be an exit signal.

for a winner works beyond Frontaura. We have conducted no research on what may or may not work in other markets.

Statistical Appendix

In our Statistical Appendix, Figure A1 shows annual, cumulative, and compounded returns for us and the indices we typically cite. Figure A2 shows quarterly performance for Frontaura and these indices. Figure A3 shows our monthly returns since inception. Figure A4 shows Frontaura's returns in US dollars and seven foreign currencies that are the home currencies of our investors. Please see Figure A5 for portfolio mix by country, region, and sector, along with our portfolio statistics. Figures A6-A7 show country attribution by dollar and percentage returns. Figure A8 shows regional attribution, including at the country level within each region. Figures A9 and A10 show changes in country mix for the quarter and the last 12 months, and Figure A11 shows portfolio concentration and how it has changed in the last three and 12 months.

We thank you for being a Frontaura investor.

Best regards,

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Statistical Appendix

Figure A1
Frontaura Global Frontier Fund LLC
Annual Frontaura and Index Performance[8]
30 September 2023

Period	Frontaura	MSCI Frontier Small Cap	MSCI Frontier	MSCI Emerging	MSCI EAFE	S&P 500
2008	-28%		-54%	-53%	-43%	-37%
2009	46%		12%	79%	32%	26%
2010	37%		24%	19%	8%	15%
2011	-15%	-29%	-19%	-18%	-12%	2%
2012	18%	6%	9%	18%	17%	16%
2013	26%	32%	26%	-3%	23%	32%
2014	-3%	6%	7%	-2%	-5%	14%
2015	-5%	-8%	-14%	-15%	-1%	1%
2016	7%	15%	3%	11%	1%	12%
2017	17%	23%	32%	37%	25%	22%
2018	-13%	-17%	-16%	-15%	-14%	-4%
2019	-1%	-2%	18%	18%	22%	31%
2020	3%	5%	1%	18%	8%	18%
2021	34%	42%	20%	-3%	11%	29%
2022	-11%	-23%	-26%	-20%	-14%	-18%
YTD 2023	14%	13%	7%	2%	7%	13%
1 Year	23%	11%	6%	12%	26%	22%
2 Year	7%	-4%	-20%	-20%	-6%	3%
3 Year	64%	41%	5%	-5%	18%	34%
5 Year	35%	21%	8%	3%	17%	60%
7 Year	44%	36%	26%	25%	43%	124%
10 Year	49%	61%	25%	23%	46%	208%
15 Year	163%		7%	74%	98%	397%
Inception to Date	158%		-14%	5%	32%	282%
2 Year CAGR	3.4%	-2.2%	-10.8%	-10.4%	-3.0%	1.4%
3 Year CAGR	18.0%	12.1%	1.7%	-1.7%	5.8%	10.2%
5 Year CAGR	6.2%	3.8%	1.6%	0.6%	3.2%	9.9%
7 Year CAGR	5.3%	4.5%	3.3%	3.2%	5.3%	12.2%
10 Year CAGR	4.1%	4.9%	2.2%	2.1%	3.8%	11.9%
15 Year CAGR	6.7%		0.4%	3.8%	4.7%	11.3%
ITD CAGR	6.1%		-0.9%	0.3%	1.8%	8.8%

[8] Frontaura returns are net of all fees for a reference investor joining the fund at inception, making no further contributions, making no withdrawals, and converting to Series B in 2021 Q2. Investors joining on other dates, making additional contributions, making withdrawals, or not converting to Series B in 2021 Q2 may have different results. Our auditor has audited results through 2022. Index returns are in USD on a total return basis, net of any withholding tax. We discuss our returns and different series and we explain the different indices we show here.

Figure A2
Frontaura Global Frontier Fund LLC
Quarterly Frontaura and Index Performance[9]
30 September 2023

Period	Frontaura	MSCI Frontier Small Cap	MSCI Frontier	MSCI Emerging	MSCI EAFE	S&P 500	Period	Frontaura	MSCI Frontier Small Cap	MSCI Frontier	MSCI Emerging	MSCI EAFE	S&P 500
2007 Q4	2%		4%	-7%	-5%	-5%							
2008 Q1	1%		-2%	-11%	-9%	-9%	2016 Q1	-1%	-1%	-1%	6%	-3%	1%
2008 Q2	6%		2%	-1%	-2%	-3%	2016 Q2	4%	5%	0%	1%	-1%	2%
2008 Q3	-11%		-23%	-27%	-21%	-8%	2016 Q3	2%	4%	3%	9%	6%	4%
2008 Q4	-25%		-41%	-28%	-20%	-22%	2016 Q4	1%	6%	0%	-4%	-1%	4%
2009 Q1	-2%		-17%	1%	-14%	-11%	2017 Q1	4%	12%	9%	11%	7%	6%
2009 Q2	28%		35%	35%	25%	16%	2017 Q2	7%	3%	6%	6%	6%	3%
2009 Q3	17%		11%	21%	19%	16%	2017 Q3	3%	3%	8%	8%	5%	4%
2009 Q4	-1%		-10%	9%	2%	6%	2017 Q4	3%	3%	6%	7%	4%	7%
2010 Q1	10%		11%	2%	1%	5%	2018 Q1	2%	-1%	5%	1%	-2%	-1%
2010 Q2	5%		-10%	-8%	-14%	-11%	2018 Q2	-7%	-9%	-15%	-8%	-1%	3%
2010 Q3	9%		14%	18%	16%	11%	2018 Q3	-5%	-4%	-2%	-1%	1%	8%
2010 Q4	9%		8%	7%	7%	11%	2018 Q4	-3%	-5%	-4%	-7%	-13%	-14%
2011 Q1	2%	-12%	-5%	2%	3%	6%	2019 Q1	2%	-1%	7%	10%	10%	14%
2011 Q2	-1%	-2%	0%	-1%	2%	0%	2019 Q2	3%	0%	5%	1%	4%	4%
2011 Q3	-10%	-12%	-12%	-23%	-19%	-14%	2019 Q3	-5%	-3%	-1%	-4%	-1%	2%
2011 Q4	-6%	-7%	-2%	4%	3%	12%	2019 Q4	-1%	2%	7%	12%	8%	9%
2012 Q1	6%	6%	6%	14%	11%	13%	2020 Q1	-22%	-24%	-27%	-24%	-23%	-20%
2012 Q2	-3%	-6%	-7%	-9%	-7%	-3%	2020 Q2	6%	12%	15%	18%	15%	21%
2012 Q3	5%	6%	7%	8%	7%	6%	2020 Q3	4%	8%	8%	10%	5%	9%
2012 Q4	9%	1%	3%	6%	7%	0%	2020 Q4	20%	14%	11%	20%	16%	12%
2013 Q1	10%	7%	8%	-2%	5%	11%	2021 Q1	2%	5%	1%	2%	3%	6%
2013 Q2	5%	9%	3%	-8%	-1%	3%	2021 Q2	20%	14%	14%	5%	5%	9%
2013 Q3	1%	1%	6%	6%	12%	5%	2021 Q3	4%	8%	3%	-8%	0%	1%
2013 Q4	7%	12%	7%	2%	6%	11%	2021 Q4	5%	10%	1%	-1%	3%	11%
2014 Q1	-1%	6%	7%	0%	1%	2%	2022 Q1	-5%	0%	-8%	-7%	-6%	-5%
2014 Q2	4%	7%	12%	7%	4%	5%	2022 Q2	-6%	-16%	-14%	-11%	-15%	-16%
2014 Q3	1%	4%	2%	-3%	-6%	1%	2022 Q3	-7%	-6%	-6%	-12%	-9%	-5%
2014 Q4	-7%	-11%	-12%	-5%	-4%	5%	2022 Q4	8%	-2%	-1%	10%	17%	8%
2015 Q1	-3%	-4%	-3%	2%	5%	1%	2023 Q1	7%	3%	3%	4%	8%	7%
2015 Q2	3%	2%	0%	1%	1%	0%	2023 Q2	8%	6%	2%	1%	3%	9%
2015 Q3	-6%	-6%	-11%	-18%	-10%	-6%	2023 Q3	-1%	3%	2%	-3%	-4%	-3%
2015 Q4	1%	-1%	-1%	1%	5%	7%							

[9] Frontaura returns are net of all fees for a reference investor joining the fund at inception, making no further contributions, making no withdrawals, and converting to Series B in 2021 Q2. Investors joining on other dates, making additional contributions, making withdrawals, or not converting to Series B in 2021 Q2 may have different results. Our auditor has audited results through 2022. Index returns are in USD on a total return basis, net of any withholding tax. We discuss our returns and different series and we explain the different indices we show here.

Figure A3
Frontaura Global Frontier Fund LLC
Monthly Frontaura Performance
30 September 2023[10]

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2007											0.4%	1.6%	2.0%
2008	0.7%	0.6%	-0.1%	3.4%	3.9%	-1.0%	-0.8%	-2.2%	-7.9%	-17.5%	-10.7%	1.4%	-28.1%
2009	-2.0%	-0.4%	0.7%	7.7%	14.4%	4.1%	1.4%	4.7%	10.6%	-1.4%	-0.2%	0.2%	46.0%
2010	-0.9%	4.2%	6.6%	4.5%	-1.2%	1.9%	3.4%	0.7%	4.7%	3.5%	1.5%	3.3%	37.1%
2011	2.8%	-3.7%	2.7%	-0.4%	1.0%	-1.7%	-2.4%	-4.0%	-3.9%	-1.6%	-4.9%	0.7%	-14.8%
2012	-0.5%	3.9%	2.6%	2.4%	-4.4%	-1.3%	2.1%	1.4%	1.9%	2.6%	2.2%	4.3%	18.1%
2013	7.3%	1.9%	1.0%	1.8%	3.8%	-0.3%	2.6%	-2.1%	0.2%	3.1%	2.6%	1.6%	25.9%
2014	0.8%	-0.4%	-1.0%	1.6%	2.0%	0.1%	-0.3%	-0.8%	2.2%	0.9%	-4.5%	-3.3%	-2.9%
2015	-4.3%	1.0%	0.4%	3.9%	0.4%	-1.6%	-1.5%	-3.7%	-0.9%	3.3%	-2.4%	0.1%	-5.5%
2016	-4.8%	-0.6%	4.2%	1.8%	2.9%	-0.3%	1.6%	-0.4%	1.1%	-0.4%	0.7%	0.8%	6.6%
2017	2.9%	-0.1%	1.0%	0.4%	4.1%	2.1%	1.3%	1.0%	0.5%	2.3%	-0.2%	0.8%	17.2%
2018	2.3%	-1.1%	0.4%	0.4%	-6.8%	-0.7%	-0.8%	-1.9%	-2.2%	-3.2%	-0.9%	1.2%	-12.8%
2019	1.2%	0.8%	0.1%	0.3%	1.2%	1.9%	0.4%	-4.0%	-1.7%	-0.9%	-0.6%	0.5%	-0.9%
2020	1.3%	-4.9%	-19.3%	3.1%	0.6%	1.9%	1.7%	0.3%	1.8%	2.4%	9.5%	7.5%	2.8%
2021	0.9%	2.7%	-1.8%	8.5%	5.9%	4.3%	0.6%	4.0%	-0.1%	4.0%	0.1%	1.3%	34.4%
2022	-2.1%	-1.9%	-1.4%	0.9%	-0.3%	-7.1%	0.0%	-0.4%	-7.0%	-3.3%	4.5%	6.8%	-11.4%
2023	2.6%	-0.7%	4.5%	2.5%	0.2%	5.5%	4.0%	-3.3%	-1.5%				14.3%

[10] Frontaura returns are net of all fees for a reference investor joining the fund at inception, making no further contributions, making no withdrawals, and converting to Series B in 2021 Q2. Investors joining on other dates, making additional contributions, making withdrawals, or not converting to Series B in 2021 Q2 may have different results. Our auditor has audited results through 2022. We discuss our returns and different series here.

Figure A4
Frontaura Global Frontier Fund LLC
Performance by Currency[11 12]
30 September 2023

Period	USD	AUD	CAD	CHF	EUR	GBP	JPY	SGD
2008	-28%	-10%	-12%	-32%	-25%	-2%	-42%	-29%
2009	46%	14%	26%	41%	42%	32%	50%	43%
2010	37%	20%	30%	24%	47%	42%	20%	25%
2011	-15%	-15%	-13%	-15%	-12%	-14%	-19%	-14%
2012	18%	16%	15%	15%	16%	13%	33%	11%
2013	26%	47%	35%	23%	21%	24%	53%	30%
2014	-3%	6%	6%	8%	10%	3%	10%	2%
2015	-5%	6%	13%	-5%	5%	0%	-5%	1%
2016	7%	8%	4%	8%	10%	27%	4%	9%
2017	17%	8%	10%	12%	3%	7%	13%	8%
2018	-13%	-3%	-5%	-12%	-9%	-8%	-15%	-11%
2019	-1%	0%	-6%	-2%	1%	-5%	-2%	-2%
2020	3%	-6%	1%	-6%	-6%	0%	-2%	1%
2021	34%	42%	34%	39%	44%	36%	50%	37%
2022	-11%	-6%	-5%	-10%	-6%	-1%	1%	-12%
Q1 2023	7%	9%	6%	5%	5%	4%	8%	6%
Q2 2023	8%	9%	6%	6%	8%	5%	18%	10%
Q3 2023	-1%	3%	2%	1%	2%	3%	3%	0%
YTD 2023	14%	21%	15%	13%	16%	13%	30%	17%
1 Year	23%	23%	21%	14%	14%	13%	27%	17%
2 Year	7%	20%	14%	5%	17%	18%	43%	8%
3 Year	64%	83%	67%	63%	82%	74%	132%	64%
5 Year	35%	51%	42%	26%	48%	44%	77%	35%
7 Year	44%	71%	48%	35%	52%	53%	112%	44%
10 Year	49%	116%	97%	51%	91%	98%	127%	62%
15 Year	163%	224%	236%	115%	251%	284%	271%	151%
ITD	158%	275%	272%	104%	254%	341%	234%	144%
2 Year CAGR	3.4%	9.6%	7.0%	2.5%	8.2%	8.7%	19.8%	3.7%
3 Year CAGR	18.0%	22.3%	18.7%	17.7%	22.1%	20.2%	32.5%	18.0%
5 Year CAGR	6.2%	8.6%	7.2%	4.7%	8.2%	7.6%	12.1%	6.2%
7 Year CAGR	5.3%	8.0%	5.8%	4.4%	6.2%	6.2%	11.3%	5.3%
10 Year CAGR	4.1%	8.0%	7.0%	4.2%	6.7%	7.1%	8.5%	5.0%
15 Year CAGR	6.7%	8.2%	8.4%	5.2%	8.7%	9.4%	9.1%	6.3%
ITD CAGR	6.1%	8.7%	8.6%	4.6%	8.3%	9.8%	7.9%	5.8%

[11] USD = US dollar, AUD = Australian dollar, CAD = Canadian dollar, CHF = Swiss franc, EUR = euro, GBP = British pound, JPY = Japanese yen, SGD = Singapore dollar.

[12] Frontaura returns are net of all fees for a reference investor joining the fund at inception, making no further contributions, making no withdrawals, and converting to Series B in 2021 Q2. Investors joining on other dates, making additional contributions, making withdrawals, or not converting to Series B in 2021 Q2 may have different results. Our auditor has audited USD results through 2022. We discuss our returns and different series here.

Figure A5
Frontaura Global Frontier Fund LLC
Portfolio Mix and Statistics[13]
30 September 2023

Country	Holding
Philippines	16%
Vietnam	9%
United Arab Emirates	8%
USA (cash & accruals)	7%
Côte d'Ivoire	7%
Colombia	7%
Peru	5%
Namibia	5%
Tanzania	4%
Rwanda	4%
Chile	4%
Nigeria	4%
Senegal	4%
Cambodia	4%
Argentina	2%
Uganda	2%
Slovenia	2%
Kenya	2%
Bangladesh	1%
Pakistan	1%

Region	Holding
Sub-Saharan Africa	33%
Southeast Asia	29%
Latin America & Caribbean	20%
Middle East / North Africa	8%
USA (cash & accruals)	7%
Eastern Europe	2%
South Asia	2%

Sector	Holding
Financials	43%
Consumer Staples	20%
Consumer Discretionary	11%
Cash & accruals (all countries)	9%
Real Estate	5%
Communication Services	4%
Energy	2%
Industrials	2%
Health Care	1%
Utilities	1%

Portfolio Statistics	
Portfolio Price to LTM Earnings	5.6
Portfolio Price to Book	0.96
Portfolio LTM Dividend Yield	7.1%
Weighted Average ROEE	21.9%
Weighted Median ROEE	20.6%
Positions	32
Countries	21
Weighted Average Market Cap	$2,485m
Weighted Median Market Cap	$822m
Portfolio Turnover (12 Months)	28%
Portfolio Turnover (ITD)	30%
Standard Deviation (36 Months)	16%
Standard Deviation (ITD)	14%
Beta to S&P 500 (36 Months)	0.40
Beta to S&P 500 (ITD)	0.46
Assets Under Management	$134m

[13]Click here for an explanation of our holdings and portfolio statistics.

Figure A6
Frontaura Global Frontier Fund LLC
5 Best and Worst Performing Countries (Dollar Return)
2023 Q3

5 Best Countries			5 Worst Countries		
Country	Frontaura Return ($millions)[14]	Frontaura Return (%)	Country	Frontaura Return ($millions)	Frontaura Return (%)
United Arab Emirates	1.8	20%	Pakistan	(1.0)	-39%
Tanzania	1.3	26%	Peru	(0.9)	-11%
Uganda	0.4	17%	Kenya	(0.6)	-22%
Chile	0.2	4%	Rwanda	(0.5)	-8%
Vietnam	0.2	2%	Argentina	(0.5)	-14%

Figure A7
Frontaura Global Frontier Fund LLC
5 Best and Worst Performing Countries (Percentage Return)
2023 Q3

5 Best Countries			5 Worst Countries		
Country	Frontaura Return ($millions)	Frontaura Return (%)	Country	Frontaura Return ($millions)	Frontaura Return (%)
Tanzania	1.3	26%	Pakistan	(1.0)	-39%
United Arab Emirates	1.8	20%	Niger	(0.3)	-23%
Uganda	0.4	17%	Kenya	(0.6)	-22%
Bangladesh	0.1	4%	Bahrain	(0.1)	-22%
Chile	0.2	4%	Argentina	(0.5)	-14%

[14] This footnote applies to all columns labeled "Frontaura Return ($millions)" and "Frontaura Return (%)" on this page and any similar page. Frontaura individual stock, country, and regional returns are before management fees, fund expenses, and any incentive compensation, as those deductions occur at the fund level and not at the individual stock, country, or regional level. Click here for an explanation of how we calculate country returns.

Figure A8
Frontaura Global Frontier Fund LLC
Performance by Region and Country
2023 Q3

Region / Country	Frontaura Return ($millions)[15]	Frontaura Return (%)	MSCI Small Cap Return (%)[16]	MSCI Standard Return (%)
Middle East / North Africa	**1.7**	**18%**		
United Arab Emirates	1.8	20%	8%	6%
Bahrain	(0.1)	-22%	8%	-1%
Sub-Saharan Africa	**0.6**	**1%**		
Tanzania	1.3	26%	--	--
Uganda	0.4	17%	--	--
Senegal	0.2	3%	--	3%
Nigeria	0.2	4%	7%	2%
Côte d'Ivoire	0.2	1%	--	13%
Namibia	(0.2)	-3%	--	--
Niger	(0.3)	-23%	--	--
Rwanda	(0.5)	-8%	--	--
Kenya	(0.6)	-22%	-27%	-17%
Eastern Europe	**(0.1)**	**-5%**		
Slovenia	(0.1)	-5%	-9%	-3%
Southeast Asia	**(0.5)**	**-1%**		
Vietnam	0.2	2%	10%	-2%
Philippines	(0.2)	-1%	-3%	-4%
Cambodia	(0.5)	-8%	--	--
South Asia	**(1.0)**	**-24%**		
Bangladesh	0.1	4%	-2%	-2%
Pakistan	(1.0)	-39%	--	4%
Latin America & Caribbean	**(1.1)**	**-4%**		
Chile	0.2	4%	-11%	-10%
Colombia	0.0	0%	--	0%
Ecuador	0.0	3%	--	--
Argentina	(0.5)	-14%	--	-14%
Peru	(0.9)	-11%	--	-4%

[15] The Frontaura Return footnote on the first attribution table on a prior page applies to all Frontaura Return columns on this page.

[16] This footnote applies to all columns labeled "MSCI Small Cap Return" and "MSCI Standard Return" on this page and any page with a similar table. We state MSCI small cap and MSCI standard (large cap and mid-cap stocks) country indices on a total return basis with dividends net of any withholding tax. We show "--" if MSCI does not have a small cap or a standard index for a given country.

Figure A9
Frontaura Global Frontier Fund LLC
Significant Quarterly Country Mix Changes[17]
2023 Q3

Country	Percentage Point Change	Explanation
N/A		No mix changes greater than 2%

Figure A10
Frontaura Global Frontier Fund LLC
Significant Annual Country Mix Changes
12 Months through 30 September 2023

Country	Percentage Point Change	Explanation
Colombia	+4	Added position Q1 2023, increased size of existing positions
Argentina	+2	Re-entered country Q2 2023
Bahrain	-2	Exited position and country Q3 2023
Pakistan	-2	Exited position Q4 2022, decreased size of existing position, relative underperformance
Cambodia	-2	Relative underperformance
Rwanda	-4	Relative underperformance, decreased size of existing positions

[17] We show countries whose weighting has changed by two percentage points or more. Total may not add to 0 due to rounding and exclusion of countries changing by less than two percentage points. Note that we do not show the United States as we only hold cash there. Click here for a discussion of how we classify cash by country.

Figure A11
Frontaura Global Frontier Fund LLC
Portfolio Concentration[18]
30 September 2023

	Companies	Countries	Change from Prior Quarter		Change from Prior Year	
			Companies	Countries	Companies	Countries
Positions	32	21	+1	0	+1	0
Top 5	27%	47%	-3	-1	-5	0
Top 10	48%	70%	-2	-3	-7	-1
Top 20	76%	92%	-2	-4	-2	0
Top 20 + USA (Cash)	83%	100%	+1	0	-2	+1

[18] We do not include the US in our country count and most of the percentage totals as we hold only cash there. Change from the prior quarter and the year ago quarter represent the change in the number of positions and the change in percentage points for the top 5, 10, and 20 positions. The Top 20 + USA row does include the US cash percentage in the percentage totals. Click here for a discussion of how we classify cash by country.