

Third Quarter 2023

The performance of securities mentioned within this letter refers to how the security performed in the market and does not reflect the performance attributed to the core equity portfolio. Please see the chart at the end of letter, which reflects the full list of contributors and detractors based on each security's weighting within the core equity portfolio.

For a copy of Ensemble Capital's equity strategy performance track record, please email a request to info@ensemblecapital.com.

The third quarter of 2023 saw positive, and similar, returns for both our strategy and the S&P 500 through the end of August, despite a meaningful increase in the 10-year treasury yield. But the month of September saw longer term treasury bond yields spike to their highest level since 2007, driving a sell off across the market and our investment strategy.

In the quarter, our strategy declined by 5.68% while the S&P 500 declined 3.27%. Our underperformance was driven by large declines in Illumina and Masimo, our two holdings that have recently elected activist shareholders to their boards. The rest of our portfolio collectively outperformed.

Returns as of September 30, 2023	Q3 2023	YTD	1-YEAR	3-YEAR	5-YEAR	10-YEAR	SINCE INCEPTION*
ENSEMBLE EQUITY COMPOSITE	-5.68%	6.15%	15.82%	3.83%	7.27%	10.82%	9.23%
S&P 500 TOTAL RETURN	-3.27%	13.07%	21.62%	10.15%	9.92%	11.91%	9.21%

\*The composite's inception date is December 31, 2003

#### Past performance is not an indication of future returns.

Please see disclosures on final page. Performance figures with the Ensemble Equity Composite are shown after deducting management fees.

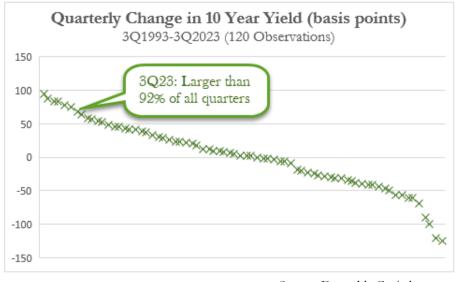
We believe both companies' share prices dramatically undervalue their core businesses, as investors have become focused on problems with a recent acquisition at both companies. We continue to hold our investments in these companies as we believe that even if the acquired businesses were written off as entirely worthless, the core businesses of each company is worth dramatically more than the current share price. This is of course also the thesis of the activist shareholders, who have established large ownership stakes and successfully won representation on each company's board.

Across most of the third quarter, the S&P 500 traded in a relatively narrow range. The real action of interest to investors was found not so much in the equity markets, but in fixed income markets. The Federal Reserve raised the Federal Funds rate by 0.25%, as widely expected in July, and then held the rate steady in September, again, as widely expected. But the 10 year treasury bond yield rose a remarkable 0.73% as investors recalibrated their long term interest rate expectations.

### **ENSEMBLE** CAPITAL

#### Third Quarter 2023

Quarterly increases in long term interest rates of this magnitude -0.65% or more - have been rare over the past thirty years, occurring in just 10 previous quarters. Three of those ten quarters occurred in 2022, as a very rapid and intense surge in inflation caused the Fed to raise rates much further and faster than anticipated at the start of the year.



Source: Ensemble Capital

But inflation is not the only driver of higher interest rates. Just as important is real economic growth. Sharply higher interest rates due to high inflation have a severe negative impact on the value of equities. But when interest rates move higher due to strong real economic growth prospects, the impact on equity fair values is mixed, but generally positive.

Until their most recent meeting, the Federal Reserve had been forecasting that a recession – or economic conditions very near to a recession – was going to play out in 2024. And based on this outlook, they forecasted that they would cut the Federal Funds interest rate substantially, by 1% or more, as the economy slowed down or tipped into contraction. But in their late September meeting, the Fed revealed that they now have a significantly more positive economic outlook and no longer expect a recession to occur. And given this outlook, they forecasted that they would not need to cut interest rates as soon or by as much, given the resilience in the economy they expect.

After nearly two years of rising interest rates being a sign of inflation worries, while falling rates signaled recession worries, it is worth remembering that inflation is not the only driver of rising interest rates.

For instance, the significant increase in the 10 year treasury yield from the summer of 2016 to the fall of 2018, which included a single quarter increase of 0.85% (even more than the increase last quarter), was driven by real economic growth reaccelerating after a period of slow growth. By late 2018, the US economy was

### **ENSEMBLE** CAPITAL

breaking out of the low growth "New Normal" regime and over that two year and three month period the S&P 500 rallied a total of 45%.

2009 and 2010 also saw quarters with large spikes in the 10 year treasury yield. Then too they were driven higher by the recovery in real economic growth after the Great Financial Crisis. Before that, a spike of this magnitude was observed in 2004, as it became clear that the economic recovery after the Dot Com crash was sustainable. And even earlier, in 1994 and 1996, spikes in the 10 year yield occurred during periods when the economy, powering through a "mid cycle slowdown," was showing bouts of strong reacceleration.

During each of the periods of surging, long term interest rates prior to the inflation plagued COVID era, the rise in interest rates was a function of a strengthening economy, or a materially improved economic growth outlook. But today, as recession fears grip the market, equity investors have focused instead on the way that higher interest rates exert drag on the economy.

The interplay between real economic growth, inflation, and interest rates is complicated and multifaceted. But whether rates are being driven by real economic growth, or inflation, has extremely meaningful implications for equity investors.

During the low growth, low inflation, low interest rate period between the Great Financial Crisis and COVID, a period that became known as the New Normal, investors came to believe that not only had realized growth been low, but the potential growth of the US economy had become permanently impaired. This dynamic led to a belief that inflation and interest rates would likewise remain low forever.

On our Intrinsic Investing blog, we wrote about the New Normal concept multiple times (see <u>here</u>, <u>here</u> and <u>here</u>), and explained why it was quite possible that the low realized growth was not due to the US economy becoming permanently less productive than generations of Americans had enjoyed in the past. But rather that the low growth was an outcome of the Great Financial Crisis, a period when American households binged on debt, particularly mortgages, and thus required years and years of household income needing to be directed to balance sheet repair rather than increased spending.

By just prior to COVID, this balance sheet repair had been completed. Mortgage debt stood not at high levels, but at one of the lowest levels in decades relative to household income and home values. By early 2020, it appeared it had become time to learn if the American workforce of today was structurally less productive than the generations that came before, or if the incredible innovations of recent decades would indeed pay off in the form of productivity. But then COVID intervened, and the question fell by the wayside as the world grappled with an emergency of epic proportion.

Real economic growth is made up of the growth in the number of workers, and the growth in the productivity of those workers.

Despite the cries last year of "no one wants to work anymore" the fact is that today a higher percentage of prime working age Americans – those between ages 25 and 54 – have jobs than at any point in history other

## **ENSEMBLE** CAPITAL

Please see disclosures on final page

ПЛ

Third Quarter 2023

than the strongest period of the 1990s economic boom. Americans have been pouring into the workforce, which is why our country has been able to add 3.2 million workers to company payrolls over the last year and still end up with more people looking for work than at the beginning of the period.

Despite very reasonable worries that the Fed's efforts to contain inflation would require a destruction of demand for labor and associated job losses, inflation has come down dramatically even while labor demand has remained strong. This outcome is a function of supply and demand in the labor market coming back into balance not through a contraction in labor demand, but through a moderation of labor demand paired with surging labor supply.

But while the economic outcome to date is approaching the hoped for "soft landing," and the Fed's new longer term economic projections forecast a full soft landing playing out next year, the near term future state of the economy is always full of uncertainty.

It is absolutely true that the historical record shows that it is nearly impossible for inflation to fall dramatically from high levels without an economy experiencing a recession. Yet that same historical record includes no prior period in which a global pandemic had inhibited people's ability to work and companies' ability to supply goods and services.

As Austan Goolsbee, the president of the Federal Reserve Bank of Chicago put it recently, "The past is not that great of a guide when you got weird things happening, and the COVID business cycle was maybe the weirdest of all."

At Ensemble Capital, we do not make investments based around short term economic forecasts. We typically own companies in our portfolio for many, many years and assume that at some point during our ownership there will be a recession. But we do think it is imperative that investors maintain a strong understanding of the macroeconomic conditions in which their portfolio companies are operating. A simplistic review of past periods of central banks raising interest rates to combat inflation would suggest near total certainty of a recession, as many investors came to believe during 2022. But with a holistic understanding of the unique economic events of the decade after the Financial Crisis, and the unique economic circumstances of the global pandemic, it becomes clear that a kneejerk assumption that a recession must be coming is far from a sure thing.

Of course, separate from a recession, investors worry that higher interest rates must mean that stock market valuations need to go lower. But this is not supported by either valuation math or stock market history. Certainly, the shift from very low interest rates to much higher interest rates popped the bubble in speculative stocks that we pointed out in our January 2021 client letter just a month before the bubble peaked. But for the mature, profitable businesses that make up most of the S&P 500, valuations are maximized not by low interest rates, but by inflation, interest rates, and real economic growth that trends in a sweet spot of approximately 2%-3% real growth and 2%-3% inflation leading to about 5% nominal GDP growth and 5% interest rates.

### **ENSEMBLE** CAPITAL

Third Quarter 2023

Today, the US economy is exhibiting real growth of 2%-3%, with inflation trending a bit above 3%, and the interest rate on the 10 year treasury bond a bit below 5%. So, while it is uncertain if these economic trends will persist, neither valuation math nor market history suggests valuations should be low or declining today.

A small number of mega cap stocks trading at high valuations has led the market cap weighted S&P 500 forward PE ratio to stand at 18.6x, within the 15x-20x range that current economic conditions have given rise to in the past, although above the central tendency of 15x-17x. But when removing the skew created by a small number of very large companies trading at high PE ratios, it is revealed that the average stock in the S&P 500 is trading at a PE ratio of just 15.4x. Thus, the average stock in the S&P 500 is currently valued at a level that is consistent with even higher longer term interest rates than we have today, so long as inflation and real growth can trend in the 2%-3% range in the years ahead. It is just these sorts of economic conditions that the Federal Reserve now sees as being most likely, and it is based on this outlook that they have told the market to expect interest rates to remain high.

In other words, the Fed is not saying they will keep rates high because they must, but rather because they can.

Notable detractors from our performance came from our investments in Masimo, Illumina, and Netflix

**Masimo (-46.72%)**: In July, Masimo lowered their growth outlook for 2023. Most importantly, they said that their health care business would see revenue that was approximately flat vs the prior year compared to previously expected 8%-9% growth. This reduction in guidance came even as the company has been successful in signing up record levels of new customers. However, US hospitals are seeing fewer than expected patients this year and thus have shifted to using Masimo products they already have in inventory rather than needing to buy more. But over time, there is no reason to believe that patient visits to hospitals will do anything other than go up.

**Illumina (-26.78%)**: In August, Illumina reduced their full year guidance, something that was not unexpected as life science tool providing companies have mostly all seen a slowdown in demand as customers have sought to cut costs and deplete existing inventories due to macroeconomic concerns and the bumpy recovery from COVID. The cut in guidance did not initially impact the stock, with it rising slightly on the day. But subsequently, investor impatience with the company's GRAIL related issues (a company they bought, which regulators are close to requiring them to sell back off) seems to have reached a crescendo with the stock trading down steeply as even bullish investors await a resolution to the regulatory issue.

**Netflix (-14.28%)**: During an investor conference for Wall Street analysts, Netflix's CFO noted that profit margin growth in the years ahead would likely be less than it has been in recent years. But rather than this being due to some sort of problem with profitability, he said it was because there was more than enough growth opportunity ahead for them to invest at high enough levels that would lead to lower growth in profit margins. Noting that there would be an eventual point at which margins would peak and growth potential would be exhausted, he said "I just don't think we're anywhere near that yet." These comments

### **ENSEMBLE** CAPITAL

Third Quarter 2023

simultaneously validate long term bullish investors' views of significant profit margin and revenue growth still to come, as well as short term bearish investors' concerns that profit margin estimate for 2024 may have been a bit too high.

On the more positive side, we saw notable performance contribution from Booking Holdings, Google, and Broadridge Financial Solutions.

**Booking Holdings (+14.21%)**: Despite macroeconomic worries and inflation eating into global consumers' ability to spend, households around the world continue to prioritize travel. While so called "revenge travel," or increased travel spending after being stuck inside during COVID, has likely run its course, global hotel room nights have only recently returned to pre-COVID trends. As COVID has mostly ceased to have an impact on travel, other than in Asia where China's extended lockdown means a recovery is still ongoing, growth going forward is likely to be more modest. But during COVID, Booking stayed on offense and has been taking market share. Notably, the company's alternative accommodations offering has grown substantially and in recent quarters has grown faster than Airbnb.

**Google (+9.32%)**: Separate from all the discussion of artificial intelligence, Google's core Search business, having experienced a significant slowdown in 2022, now shows clear signs of reacceleration. While the future of AI and its impact on Google is still subject to a healthy debate, the company seems to have put to bed investor concerns about any rapid negative impact. With Search revenue growth accelerating, and the company rolling out lots of new AI tools, the investor panic from the beginning of the year about AI immediately hurting Google appears to have been overblown.

**Broadridge Financial Solutions (+8.56%)**: In August, the company reported the close of their 2023 fiscal year and offered a better than expected earnings outlook for fiscal year 2024. Paired with a 10% dividend increase and the successful go live of their challenged rollout of a new wealth management software service for their anchor client UBS (the biggest global wealth manager) investor confidence in the company's long demonstrated balance of growth and stability seems to have returned.

## Company Focus: Analog Devices (ADI) and Mastercard (MA)

**Analog Devices:** Analog Devices, known in the industry as ADI, makes semiconductor chips that predominantly operate at the boundary of the physical world and the digital world, more commonly referred to as analog and mixed signal chips. These chips usually play a supporting role to the sexier "digital brain" that is the latest and greatest processor from Nvidia, Intel, AMD, Apple, or Qualcomm. While the digital brains get a lot more media attention, the supporting analog chips are as vital as those big expensive digital processors in driving value in electronic devices, which are becoming ubiquitous and intelligent throughout our lives.

Anything with an on-off switch requires lots of these analog chips if it is going to relay input and output information with the physical world as well as manage the electrical power supply feeding the device. While these analog chips are relatively inexpensive to manufacture and distribute, it takes a long time to design and

## **ENSEMBLE** CAPITAL

build a catalog of literally thousands of specific products to create the scale that makes them economically attractive businesses with a reputation of dependability and quality.

What's unique about this class of chips is that companies making them do not need to make the huge investment bets that digital chips require in both R&D and manufacturing to stay ahead on the Moore's Law performance treadmill. Analog chips usually use manufacturing equipment that's several years or even decades old, which are much cheaper to buy than the latest and greatest that digital chips require.

In addition, consolidation has reduced the number of players in the semiconductor industry to a few big players globally and just a handful in the US, with analog chipmakers demonstrating a focus on strong returns on invested capital, high levels of free cashflow, and good competitive advantages built on scale, reputation, and a cornered talent resource of specialized analog engineers that we'll explore further.

To understand why we believe ADI is both different and valuable, we have to delve a little bit into the technicalities of semiconductors. While we think of chips as "thinking" in ones and zeros, the real world does not operate on ones and zeros. The forces in the physical world have more of a continuous analog waveform that is not binary – examples of these are light color and brightness, sound frequency and volume, pressure, temperature, etc.

Mixed-signal chips will take those continuous signals and transform them into digital data that digital processors and memory chips can understand. Then the digital chips can operate on that data to compute new information or activate an output signal, which are translated back for consumption in the physical world by a mixed signal chip. Analog chips perform a similar role, but usually in the realm of power regulation and communication. Analog and mixed signal chips are often made by the same companies and sometimes referred to interchangeably.

As technology has broadly penetrated our world and everyday lives, semiconductors have also done the same as the underlying hardware substrate. Moore's Law has allowed their capabilities to grow, and their cost and energy consumption to fall at an exponential rate, which has driven their adoption and use in a broad range of applications in all industries, bringing us to where we stand today, on the verge of ubiquitous connected intelligence.

As devices are able to do more and become more intelligent, their semiconductor content has increased, relying on more sensors, power management, and communications capabilities. These devices and systems are dispersed throughout our lives... from smartphones to computers, cars, planes, microwaves, ultrasound machines, HVAC systems, cellular radio towers, data centers, factories, etc. Given their role, it's important to recognize that the more powerful and capable the main digital processor is, the more data it needs to bring new applications and value to market.

A lot of these applications also leverage connected devices – think your smart bulbs or fridge or cars – and all of these applications that can do more, generally require more analog chips to do the "sensing" that creates the data that feeds the application or main processor. In the case of the latest cars, those with adaptive cruise control, fancy smart LED lights, and electric vehicles – which are basically getting close to becoming computers on wheels – the number of chips required is multiples that of vehicles just a few years ago and is

### **ENSEMBLE** CAPITAL

Please see disclosures on final page

ПЛ

Third Quarter 2023

10-100x as many as traditional products we think of as technology products like iPhones, PCs, and game consoles.

Therefore, we believe that the analog segment of the semiconductor market can see faster growth ahead, but without the risk and high levels of ongoing cash reinvestment necessary for the sexy digital brain part of the industry. In analog, the pace of technological change is slower and product cycles are much longer, spanning decades in many cases. This results in sustainably higher returns on R&D and manufacturing investments, along with more consistent secular forecastability. In addition, the markets they sell into are global and across all industries making them relatively less dependent on one or two end markets, like smartphones or the data center.

Companies like ADI and Texas Instruments (which the industry refers to as TI), two of the largest analog companies, have built broad portfolios of tens of thousands of products, each with over a hundred thousand customers who make millions of products that sell billions of units. The product needs and lifecycles across all industries can vary from a year to decades, which is why ADI derives half of its revenue from products that are over ten years old! Historically, the prices of these chips have ranged from less than a dollar to a few dollars while volumes in the billions of chips result in \$10-20 billion dollars of revenue for each of these companies at operating profit margins of 30-50%.

Once these chips are designed into customer products, it is generally uneconomical to switch them out for a competing chip because the average selling price is so low relative to reengineering costs, especially when you consider software that is built on top of the designed in hardware. This makes ADI's products sticky once they are designed in, resulting in a competitive moat that spans across the scale of products and distribution, switching costs, and service capability.

Another source of competitive advantage and value to customers is that unlike digital chip design, there is a lot of "art" or experience-based know-how that goes into analog and mixed signal chip engineering that deals with its own unique set of design challenges. This results in an engineering talent pool that is hard to replicate at new companies or even at customers' product design teams. Consolidation in the industry has meant that these resources are even more concentrated at the largest companies, which enable them to drive further efficiencies in product development.

Taken together, in most end markets outside of consumer electronics, all of these factors make it hard for a new entrant to build enough scale in any timeframe under a decade to become a profitable competitor.

While consolidation has mostly played out in the industry, increasing complexity, automation, and integration create other avenues to grow revenue and margins, one that ADI has been particularly focused on with the diversity of functional chips it has in its catalog of nearly 80,000 chips. Customers are coming to rely more and more on buying complete solutions from ADI, which is becoming more of a solutions partner rather than just a chip components vendor. This allows ADI to get closer to its customers' engineering teams and help design and build subsystems comprised of multiple chips that its own engineers have integrated to perform complete functions. Historically, engineers at the customers' design centers would be buying chips from multiple companies and integrating them onto system boards themselves.

### **ENSEMBLE** CAPITAL

Third Quarter 2023

Delivering more complete solutions has enabled ADI to increase its average selling prices and build a higher margin business over time, while also providing further protection from competition and deleterious price pressure effects in the future during more economically challenging times.

Examples of this are battery management and infotainment systems in autos, 5G cellular radio infrastructure, digital systems in healthcare instruments, and smart factories. ADI has targeted and successfully built systems level businesses in these high growth industries.

Based on what industry leaders like ADI and TI are saying and our own broader understanding of trends in various industries, including auto, energy, communications, industrial, and healthcare, it appears that trends in this part of the semiconductor industry is at an inflection point of acceleration. Whereas historically organic growth has trended in the mid-single digits, the next few years are forecasted to grow closer to 10%+ per year. In fact, these companies are so confident in that forecast based on customer conversations that they are allocating billions more in capital to build out new manufacturing capacity to meet the demand.

In the meantime, valuation multiples in this area are reasonably cheap since the semiconductor industry, outside of booming AI related names, has been undergoing an inventory correction as a result of rebalancing from the COVID disruption years. We believe we are at the latter part of the cyclical adjustment that fluctuates around an accelerating secular trend.

The future is bright for analog leaders like ADI and TI, although they are pursuing that opportunity with different business strategies that lead us to currently prefer ADI over TI. However, we believe both could be winners at different stages as the industry evolves to capture the growth opportunity ahead.

**Mastercard:** Mastercard is a company that pretty much everyone has heard of. In fact, when we meet with Ensemble's clients, we occasionally tell them that we're nearly certain that they are carrying a Mastercard in their wallet or purse as we speak, and if not, they are carrying a Visa. Most people carry both.

People carry Mastercard and Visa because they are accepted nearly everywhere in developed markets. And they are accepted in most emerging economies, at least at locations where higher income people spend money. As a shopper you can show up at a bodega in Peru, a high end hotel in Tokyo, a truck stop in Alabama, or an ice cream cart in Milan, show them a piece of plastic and they'll let you walk away with goods and services without any worry that they aren't going to get paid.

Importantly, these companies do not lend any money. If you look at your credit or debit card, you'll find that it is issued by a bank. If it has the name of a non-bank company on it, such as American Airlines or Apple, these companies have just partnered with a bank to issue the card. In American Airlines case, its Barclays and the Apple credit card is issued by Goldman Sachs. The issuing bank is the one whose checking account a debit card is tied to, and they are the ones lending the money to fund credit card payments.

On the other side of the transaction is the merchant and its bank. No matter whether you swipe your card, or wave your smartphone, or use an online digital wallet to make a payment via your credit or debit card, in each case your bank and the merchant's bank need to exchange information across a communication network. And that network is almost always provided by Mastercard or Visa. While you might hear about how merchants pay 2% or more in credit card fees, Mastercard or Visa are only collecting between 1/10<sup>th</sup>

### **ENSEMBLE** CAPITAL

Third Quarter 2023

and  $1/20^{\text{th}}$  of that fee, with the banks, the ones taking the credit risk and covering the risk of fraud, earning the bulk of the fee.

Americans are so used to using debit and credit cards that it is easy to lose sight of how amazing the Mastercard and Visa networks are. The fact is that when you walk into a store anywhere in the United States, you take it for granted that the merchant will allow you to swipe a little piece of plastic with either the Mastercard or Visa logo on it and they will then let you walk out with your purchase. The reason you carry a Mastercard or Visa is because you know they are accepted everywhere. And the reason they are accepted everywhere is because everyone carries one. This is a classic example of a "chicken and egg problem". Before everyone accepted these cards, it was difficult to convince consumers to carry one. And before everyone carried one, it was difficult to get merchants to accept them.

Having solved this problem, Mastercard and Visa now have a competitive moat around their businesses, which makes it very difficult for any new company to compete with them. Let's say that some new payment network was launched that offered superior benefits to merchants and customers. To be successful, a new payment network must offer superior benefits to both sides of the transaction because driving a change in the long ingrained behavior of using credit and debit cards demands a change by both sides.

Even if a new network offers superior value to both sides of the transaction, adoption is still difficult. While early adopters might be attracted to the new payment option, they will find it difficult to actually use until there is widespread adoption such that a customer can expect most merchants to accept it, which will only occur once merchants can expect most customers to have adopted the new offering.

Building a globally accepted payment network was hard in the past. But today it is even harder because not only must a new company in the payment industry solve the chicken and egg problem themselves, but now that it has already been solved, a new competitor must solve the problem in a way that is much better than the existing solution. Credit and debit payments were a significant improvement compared to paying in cash and checks for both customers and merchants. But even with so many technological advancements in the payment industry over the last decade, there has been little in the way of significant improvements versus the existing debit and credit card payment networks. The one major improvement has been the increasing ease of use of credit and debit cards for both merchants and customers, such as the ability to carry a card within your phone, or a merchant's ability to easily set up and accept card payments via tools like Square or online services like Stripe.

While some companies are subject to highly unpredictable changes in macro factors, such as an oil company being dependent on the price of oil, Mastercard's business is driven by far more stable trends. The key metric for them is global consumer spending trends, which even during recessions does not decline by more than a couple percentage points and which we are confident will grow at a modest, but steady rate over the very long term. On top of that growth driver, the company benefits from the relentless shift of consumer spending from cash and checks to credit and debit. While it might seem that this shift has already played out in developed markets, we can look to near cashless countries like Sweden to see that even US consumers are likely see continued declines in their use of cash and checks.

### **ENSEMBLE** CAPITAL

Third Quarter 2023

Despite their incredible ease of use, and the broad based benefits that card-based payments have brought to consumers, merchants, and the global economy as a whole, it is not uncommon to hear complaints from merchants about what they view as the high cost of accepting credit cards. But it is important for observers to understand that these complaints are primarily an argument between merchants and banks about the share of economic value they each capture from the existence of card networks. One way to illustrate this reality is by noting that if accepting credit cards was inferior to getting paid with cash, merchants would simply refuse to accept credit cards. But instead, we see the opposite trend. More and more merchants are no longer accepting cash. Why are they refusing cash and requiring customers to use credit or debit cards?

Cash is expensive to accept.

At first glance it appears that cash has no transaction costs. A customer simply gives cash to a merchant and there are no fees involved for either party. But it turns out there are actually a lot of costs to accepting cash.

- Cash needs to be counted, stored, and safely brought to the merchant's bank. It isn't safe to carry large amounts of cash to the bank. So armed guards or other security protocols must be deployed.
- Unfortunately, cash is sometimes stolen. By armed criminals attacking employees, which trigger real human costs in addition to the lost money. But also, by employees, as National Retail Federation data shows that despite the media attention on shoplifting, nearly half (44.4%) of theft that retailers experience is from their own employees.
- Cash is slow. It takes time for customers to count out bills and cashiers to make change. One of the most important things retailers need to do is keep checkout lines short and moving fast. Long and slow moving lines cause customers to simply leave and not make purchases. And at a minimum they impair the customer (and employee) experience. Companies like Starbucks have learned that digital payment solutions built around cards not only make collecting customer payments faster, but they also allow for custom communication with customers that increase sales and improve the customer experience.
- Cash lacks data. Customer data is a goldmine for merchants. When a customer pays in cash, the merchant has no idea who they are or anything about their shopping experience. Card payments are data rich. They can help merchants understand who their customers are and how they shop. Mastercard provides popular services to merchants that help them process and understand this data to enhance revenue and profitability. The data available with card payments is so valuable, that Target and Amazon both offers customers their own branded credit card that rebates as much as 5% back to the customer, an amount twice the level of credit card acceptance that merchants insist is too high compared to the "free" acceptance of cash.

Retailers are a powerful political interest group. If you track which politicians try to rally support for new laws that reduce acceptance fees, you'll notice that many of them represent districts that include very large corporate retailers who spend heavily on lobbying. Likewise, the politicians who push back against these proposed regulations often represent districts that include very large banks, the entities that receive the vast majority of credit card processing fees.

### **ENSEMBLE** CAPITAL

Third Quarter 2023

Both sides often frame their arguments through the lens of consumer benefit. They argue that their intent is to help consumers, who are the voters after all. But when was the last time you thought to yourself "credit cards are great, but they are too expensive for me to use!" Never. Rather you likely appreciate the benefits you get from using credit cards. Rewards are part of it, but with a credit card you take for granted that if you experience fraud, it will be covered by the bank. Just like if a customer never pays their bill, it's not the retailers problem. And with credit cards you get data too, that can easily populate household budgeting software, just as retailers benefit from card based data. And with a credit card, you don't need to keep your checking account balanced constantly. You can spend over the course of a month, and then settle up by tapping your bank account once to pay all credit card charges. We know these benefits are valuable, because in much of the world outside the US, credit card rewards aren't even a thing. And yet credit card adoption is rising steadily all around the globe.

It is easy for a ubiquitous product or service to be taken for granted. Once in place, it can be easy for the people who benefit to wonder why they have to pay anything at all. But a world without payment cards is a world with less economic activity. Where more resources need to be deployed to processing transactions due to the higher implicit and explicit costs of non-card based payments.

In closing, we note that the COVID era showed an explosion of payment related innovation. Massive amounts of capital were invested in potential payment solutions such as so called Buy Now, Pay Later financial technology companies, and cryptocurrency based systems that were supposed to make payments easy and free and perfect in every way. But in the end, the technological innovations that actually matter, the ones that actually get deployed and used, have again and again been those innovations that make accepting payment cards more often, for more transaction types as easy as possible.

### **ENSEMBLE** CAPITAL

Third Quarter 2023

#### Disclosures

2023 Q3 Contributors and Detractors to Absolute Return Data												
Description	Symbol	Average Weight	Contribution (Gross)	Contribution (Net)	Description	Symbol	Average Weight	Contribution (Gross)	Contribution (Net)			
Booking Holdings Inc	BKNG	7.76%	0.96%	0.94%	Fastenal Co	FAST	3.13%	-0.23%	-0.23%			
Alphabet Inc	GOOGL	8.56%	0.80%	0.78%	NVR Inc	NVR	4.27%	-0.26%	-0.27%			
Broadridge Financial Solutions	BR	5.37%	0.40%	0.39%	Perimeter Solutions	PRM	0.83%	-0.44%	-0.44%			
Paychex Inc	PAYX	3.82%	0.24%	0.23%	Nintendo Co	NTDOY	4.80%	-0.45%	-0.46%			
Mastercard Inc	MA	8.67%	0.15%	0.13%	Ferrari Nv	RACE	4.89%	-0.46%	-0.47%			
Servicenow Inc	NOW	5.50%	-0.03%	-0.04%	Nike Inc	NKE	3.68%	-0.47%	-0.48%			
First American Financial	FAF	4.64%	-0.04%	-0.05%	Chipotle Mexican Grill Inc	CMG	4.40%	-0.57%	-0.59%			
Idex Corp	IEX	1.31%	-0.04%	-0.05%	Netflix Inc	NFLX	7.24%	-1.03%	-1.05%			
Home Depot Inc	HD	6.71%	-0.07%	-0.09%	Illumina Inc	ILMN	4.56%	-1.34%	-1.36%			
Landstar System Inc	LSTR	2.43%	-0.17%	-0.18%	Masimo Corp	MASI	4.10%	-2.69%	-2.70%			
Analog Devices Inc	ADI	2.15%	-0.18%	-0.18%								

**PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS.** It should not be assumed that the recommendations made in the future will be profitable or will equal the performance of the securities listed above. The performance information shown above has been calculated using a representative client account managed by the firm in our core equity strategy and represents the securities held for the quarter ended 09/30/2023. The individual quarterly net contribution to returns are calculated by reducing the gross contribution to return by 1/4 of the weighted average of the firm's highest management fee, which is 1.00% per year. Information on the methodology used to calculate the performance information is available upon request. The performance shown in this chart will not equal Ensemble's composite performance due to, among other things, the timing of transactions in Ensemble's clients' accounts.

#### ADDITIONAL IMPORTANT DISCLOSURES

Ensemble Capital is an SEC registered investment adviser; however, this does not imply any level of skill or training and no inference of such should be made. The opinions expressed herein are as of the date of publication and are provided for informational purposes only. Content will not be updated after publication and should not be considered current after the publication date. We provide historical content for transparency purposes only. All opinions are subject to change without notice and due to changes in the market or economic conditions may not necessarily come to pass. Nothing contained herein should be construed as a comprehensive statement of the matters discussed, considered investment, financial, legal, or tax advice, or a recommendation to buy or sell any securities, and no investment decision should be made based solely on any information provided herein. Ensemble Capital does not become a fiduciary to any reader or other person or entity by the person's use of or access to the material. The reader assumes the responsibility of evaluating the merits and risks associated with the use of any information or other content and for any decisions based on such content.

Ensemble's Equity strategy is intended to maximize the long-term value of the underlying accounts. The strategy generally invests in U.S. common stocks, but from time to time the underlying accounts may hold cash and/or fixed-income investments in an attempt to maximize capital gains. The strategy holds mostly large and medium-capitalization stocks, although accounts may also hold small-capitalization stocks.

### **ENSEMBLE** CAPITAL

#### Third Quarter 2023

Performance results for the Ensemble Equity composite since the composite's inception on December 31, 2003, are unaudited and are subject to change. The Ensemble Equity composite includes realized and unrealized gains and losses, the reinvestment of dividends and other earnings, and is net of management fees, brokerage transaction costs and other expenses. Taxes have not been deducted. Net of fee performance was calculated using actual management fees. Management fees for an Ensemble Equity account range from 1.00% to 0.50% on an annual basis and are typically deducted quarterly. Fees are negotiable, and not all accounts included in the composite are charged the same rate. Results are based on fee paying, fully discretionary, unconstrained accounts managed with an Ensemble Equity objective and include those Ensemble Equity accounts no longer with the firm. Accounts must exceed \$500,000 to be included in the composite. Accounts with assets below \$500,000 and accounts with objectives other than Ensemble Equity are excluded.

Unless otherwise stated, returns for periods exceeding 1 year are annualized.

The comparative benchmark is the Standard and Poor's Total Return Index of 500 Stocks ("S&P 500"), an index of 500 large capitalization equities, generally considered a comprehensive indicator of market performance. The S&P 500 Total Return Index includes realized and unrealized gains and losses, the reinvestment of dividends and other earnings and is not subject to fees and expenses. It is not possible to invest directly in an index. The holdings in the Ensemble Equity strategy may differ significantly from the securities that comprise the benchmark.

All investments in securities carry risks, including the risk of losing one's entire investment. Investing in stocks, bonds, exchange traded funds, mutual funds, and money market funds involve risk of loss. Different types of investments involve varying degrees of risk, and there can be no assurance that any specific investment will be profitable or suitable for a particular investor's financial situation or risk tolerance. Some securities rely on leverage which accentuates gains & losses. Foreign investing involves greater volatility and political, economic and currency risks and differences in accounting methods. Future investments will be made under different economic and market conditions than those that prevailed during past periods. Past performance of an individual security is no guarantee of future results. Past performance of Ensemble Capital client investment accounts is no guarantee of future results. In addition, there is no guarantee that the investment objectives of Ensemble Capital's equity strategy will be met. Asset allocation and portfolio diversification cannot ensure or guarantee better performance and cannot eliminate the risk of investment losses.

As a result of client-specific circumstances, individual clients may hold positions that are not part of Ensemble Capital's equity strategy. Ensemble is a fully discretionary adviser and may exit a portfolio position at any time without notice, in its own discretion. Ensemble Capital employees and related persons may hold positions or other interests in the securities mentioned herein. Employees and related persons trade for their own accounts on the basis of their personal investment goals and financial circumstances.

Some of the information provided herein has been obtained from third party sources that we believe to be reliable, but it is not guaranteed. This content may contain forward-looking statements using terminology such as "may", "will", "expect", "intend", "anticipate", "estimate", "believe", "continue", "potential" or other similar terms. Although we make such statements based on assumptions that we believe to be reasonable, there can be no assurance that actual results will not differ materially from those expressed in the forward-looking statements. Such statements involve risks, uncertainties and assumptions and should not be construed as any kind of guarantee. Readers are cautioned not to put undue reliance on forward-looking statements.