RIVERPARK FUNDS

Wedgewood Fund

(RWGIX/RWGFX)

Wedgewood. PARTNERS, INC.

Fourth Quarter 2022 Review and Outlook

Performance: Net Returns as of December 31, 2022

	Current Quarter	One Year	Three Year	Five Year	Ten Year	Since Inception
Institutional Class (RWGIX)	5.15%	-25.81%	8.88%	10.34%	10.48%	11.42%
Retail Class (RWGFX)	4.81%	-26.13%	8.49%	9.99%	10.23%	11.17%
Russell 1000 Growth Total Return Index	2.20%	-29.14%	7.79%	10.96%	14.10%	13.93%
S&P 500 Total Return Index	7.56%	-18.11%	7.66%	9.42%	12.56%	12.60%
Morningstar Large Growth Category	3.06%	-30.20%	4.28%	7.88%	11.39%	11.23%

Total returns presented for periods less than 1 year are cumulative, returns for periods one year and greater are annualized. The inception date of the fund was September 30, 2010. The performance quoted herein represents past performance. Past performance does not guarantee future results. High short-term performance of the fund is unusual, and investors should not expect such performance to be repeated. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost, and current performance may be higher or lower than the performance quoted. For performance data current to the most recent month end, please call ***888.564.4517.*** *Gross expense ratios, as of the most recent prospectus dated January 26, 2023, for Institutional and Retail classes are 0.95% and 1.24%, respectively.*

Index performance returns are for illustrative purposes only and do not reflect any management fees, transaction costs, or expenses. Indexes are unmanaged and one cannot invest directly in an Index.

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For calendar 2022 the Fund declined -25.8%. The S&P 500 Index declined -18.1%. The Russell 1000 Growth Index declined 29.1%. For the fourth quarter 2022 the Fund gained 5.2%. The S&P 500 Index gained 7.6%. The Russell 1000 Growth Index gained 2.2%.

Top performance contributors for the year include Texas Pacific Land, Progressive, UnitedHealth and Motorola Solutions. Top performance detractors for the year include Meta Platforms, PayPal, Alphabet, Taiwan Semiconductor Manufacturing and Edwards Lifesciences.

Top performance contributors for the fourth quarter share two stocks for the full year, Texas Pacific Land and Motorola Solutions. The three other top fourth quarter contributors were Tractor Supply Company, Visa and CDW. Top performance detractors for the fourth quarter include most of the detractors for the year, PayPal, Meta Platforms, Alphabet, Edwards Lifesciences and Apple.

During the quarter we trimmed Progressive and Texas Pacific Land. We added to Taiwan Semiconductor Manufacturing and First Republic Bank.

During the year we sold Keysight Technologies and Starbucks. We purchased Pool Corp.

Top Contributors to Performance for the Quarter Ended December 31, 2022	**Average Weight**	**Percent Impact**
Tractor Supply Company	6.28%	1.19%
Texas Pacific Land Corp.	3.87%	1.19%
Motorola Solutions, Inc.	7.34%	1.08%
Visa Inc.	6.61%	1.00%
CDW Corp.	6.53%	0.90%

Top Detractors to Performance for the Quarter Ended December 31, 2022	**Average Weight**	**Percent Impact**
PayPal Holdings, Inc.	5.16%	-0.93%
Meta Platforms Inc.	4.97%	-0.68%
Alphabet Inc.	6.41%	-0.47%
Edwards Lifesciences Corp.	4.15%	-0.44%
Apple Inc.	7.34%	-0.40%

Portfolio Attribution is produced by RiverPark Advisors, LLC (RiverPark), the Fund's adviser, using FactSet Research Systems Portfolio Analysis Application. Please take into account that attribution analysis is not an exact science, but may be helpful to understand contributors and detractors.

Performance attribution is shown gross of fees. Holdings are subject to change.

Top Contributors to Performance for the Year Ended December 31, 2022	Average Weight	Percent Impact
Texas Pacific Land Corp.	3.08%	2.21%
Progressive Corporation	3.71%	0.66%
UnitedHealth Group Inc.	5.37%	0.48%
Motorola Solutions, Inc	6.45%	0.24%

Top Detractors to Performance for the Year Ended December 31, 2022	Average Weight	Percent Impact
Meta Platforms Inc.	6.69%	-6.46%
PayPal Holdings, Inc.	4.73%	-3.32%
Alphabet Inc.	7.42%	-3.29%
Taiwan Semiconductor	5.20%	-2.46%
Edwards Lifesciences Corp.	4.83%	-2.45%

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PayPal detracted from performance during the quarter and for most of the year. During the most recent quarter the Company reported +14% growth in currency-adjusted total payment value (TPV) which helped drive +12% revenue growth. Management gave a cautious outlook for the holiday season as its core e-commerce addressable market continues to normalize post-Pandemic. With most of the disruptions related to eBay and also Pandemic normalization largely complete, PayPal can resume its margin expansion efforts in the new year as its payment's platform remains highly scalable. Meanwhile, disruption in capital markets should hamper its unprofitable competitors in the payments space and allow for more opportunities related to M&A.

Meta Platforms detracted from performance during the quarter and for most of the year. Meta's advertising revenue grew slightly (currency-adjusted) over 2021 but was up over +60% compared to 2019 (pre-Pandemic). The Company reported 2.9 billion "daily active users (DAUs)" of its Family of Apps (as of September 2022), up nearly +30% from December 2019. Despite these impressive gains, the stock now trades at absolute levels well below where it traded before the Pandemic. Much of the market's concern revolves around slowing revenue growth and aggressive reinvestment. It is now quite evident that there was a tremendous pull-forward of demand for many businesses and services over the past couple of years. The normalization of revenue growth from that pull-forward is hardly an existential crisis. Further, while Meta's profit margins have fallen below pre-Pandemic levels, the business likely hired well in excess of what it needed because it assumed the Pandemic induced growth would continue. Meta has plenty of room to moderate its expense base and drive significant value by repurchasing shares at today's historically depressed multiples. (See more on Meta Platforms below.)

Alphabet detracted (like most of our technology holdings) during the quarter and during the year. Alphabet grew its core search revenues high single digits (foreign exchange adjusted) on a staggering *+71%* year ago comparison. Despite this stellar top-line performance, shares continued to sell off as the market discounted fears of an advertising recession. Per our strategy's discipline, our multiyear time horizon allows us to tolerate this exact kind of short-term volatility in growth rates. The past few years of heightened economic volatility has been unprecedented, so a "normalization" of end-market demand at Alphabet is not the end of the world. Alphabet's Cloud segment is generating revenue at a $25 billion run rate but is still running at a loss. This business is capable of generating much better margins in the future. In the meantime, the Company has a fortress balance sheet and has been repurchasing shares at attractive historical multiples.

Edwards Lifesciences reported +6% growth in revenue (foreign exchange adjusted) compared to a year ago. While this quarter represented a deceleration in revenue growth from earlier this year, much of that was due to hospital staffing shortages and the vagaries of global health-care systems emerging from a myriad of Pandemic disruptions. Earlier this year, the Company received FDA approval for its minimally invasive mitral valve repair system PASCAL. The Company has presented compelling clinical data, which could help support accelerating growth in the next few years. As for Edwards' core TAVR system, there continues to be a (unfortunately) pent-up, untreated population suffering from severe aortic stenosis that will ultimately be able to find their way back into healthcare systems as labor market pressures ease, thus driving long-term, double-digit revenue growth. (See more on Edwards Lifesciences below.)

Apple grew quarterly revenues +14% (foreign exchange adjusted) driven by +16% growth in iPhone revenues (also foreign exchange adjusted). iPhone revenue growth was particularly impressive because The Company is compounding on *+47* growth from a year ago. Apple's installed base is over 1.8 billion devices which helps drive a software and services business, which in turn has generated almost *$80 billion* of revenue over the past four quarters and is up *+60%* compared to calendar 2019 (pre-Pandemic). As we have highlighted in the past, Apple's relentless focus on the development and integration between hardware (especially integrated circuits) and software, continues to add significant value for customers of their products and services. We expect this favorable competitive dynamic to continue for the foreseeable future.

Texas Pacific Land was a top contributor to performance during the quarter and the year. Revenue grew over +50% as oil and gas royalties were up over +60% driven by higher realized prices on the production of oil and gas on the Company's acreage. Production of oil and gas also grew +20% over 2021. The Company's royalty interests span over 880,000 acres in West Texas. Most of this land is located in the highly productive Delaware Basin of the Permian Basin. We expect that development activity will continue to grow at a rapid pace in this region, primarily driven by both domestic and multinational producers looking to maximize returns on increasingly scarce oil and gas capital expenditures.

Tractor Supply Company contributed favorably to performance during the quarter. Demand from the Company's niche, affluent rural customer base continues to normalize in a post-Pandemic world with comparable store sales running a sterling +46% higher and total sales +65% higher compared to pre-pandemic (2019) levels. Despite historically high levels of cost inflation and aggressive reinvestment, the Company has also managed to expand margins relative to 2019, helping drive higher and sustained returns on capital. Key to much of this success has been the management's exceptional job overseeing inventories in an environment with unprecedented supply-chain disruptions. The vast majority of the Company's merchandise is sourced from North America, helping it avoid the long lead times that have hurt many trans-Pacific supply chains. Tractor Supply is an exceptional retailer, and we continue to hold it as a top position.

Motorola Solutions contributed to performance during the quarter. Revenue growth accelerated to +16% (currency neutral), while the Company's pricing power helped drive over +20% growth in operating income. The Company's backlog grew +19% for the quarter and marked the fourth consecutive quarter of backlog growth as the funding environment for its customers, particularly in public safety, remains extremely strong. We expect Motorola's core public safety customers to continue adopting and upgrading their LMR (Land Mobile Radio) infrastructure while expanding into software and service solutions that in turn drive higher productivity in the face of chronic labor shortages.

Visa rebounded as the Company continued to report strong growth, while concerns about potential adverse legislation related to its credit card routing practices receded as U.S. legislators failed to take action. Although Visa is not totally free from legislative risk, the Company's value proposition to merchants as well as bank issuing customers and acquirers is robust enough to help blunt the potential effects any future legislation might portend. Over a multi-year time horizon, it would be difficult for any currently nonexistent or even subscale credit routing network to add the value that Visa (or MasterCard) can already add today, legislative fiat notwithstanding.

CDW contributed to performance during the quarter after logging +19% currency-neutral revenue growth and +26% operating earnings growth. The Company’s "omni-office" strategy of outfitting small and medium businesses with software, hardware and services, wherever workers decide or need to work continues to resonate. CDW organizes itself across several end-markets, with each of these end markets at different stages of building out their omni-office presences. In the meantime, the post-Pandemic IT environment has quickly evolved from supply scarcity (due to vendor shortages and strong demand) where CDW flexed its balance sheet to ensure inventory availability, to more recently helping customers manage never before seen levels of complexity related to a work-from-everywhere workforce. CDW's consistent returns, cheap multiple, and mission-critical functions it offers to vendors and customers continues to be an attractive risk-reward for portfolios.

Meta Platforms: If You Build It, They Will Come

"People will come Ray. People will most definitely come."

James Earl Jones

Source: Universal

Company Commentaries

Edwards Lifesciences

Edwards Lifesciences has been in portfolios since 2017. The Company is a leader in treating structural heart diseases and providing critical care technologies to surgical and intensive care centers. Edwards' flagship franchise is its Transcatheter Aortic Valve Replacement (TAVR) SAPIEN family of aortic heart valves. The Company's TAVR products began revolutionizing aortic valve replacement clinics around 15 years ago. Prior to TAVR, patients who were too sick to undergo open-heart surgery often went untreated. After a long history of surgical valve development, Edwards came to develop a prosthetic aortic valve that could be inserted into place with a minimally invasive procedure, often via a small opening in the femoral artery (or less frequently through a small incision in the ribs). Since then, Edwards has provided these life-saving valves for over 800,000 patients.

Edwards' revenue rose over +40% from 2016 through 2021 driven by TAVR revenues that more than doubled. More recently, the Company's TAVR performance has been volatile, especially when compared to the pre-Pandemic trend line. The large swings in growth have been due to random regional shutdowns from the Pandemic in addition to hospital staffing shortages. The Pandemic societal shutdowns are almost impossible to predict, but we assume those will eventually subside, as they have in the U.S.

On the latter point of hospital staffing shortages, it is most acute in the U.S. Even though TAVR is minimally invasive to the body of the patient, it seems TAVR is "moderately invasive" to the administrative efforts of hospitals in the U.S., at least in the early part of this post-Pandemic world. We will admit, surprisingly, that cracking open a patient’s ribs in to expose their beating heart for an aortic valve replacement is more streamlined from an administrative perspective than minimally invasive TAVR. After all, there's no need to guess the condition of a patient’s heart or circulatory system if they're exposed in an open surgery. TAVR, on the other hand, requires several non-invasive, pre-operational steps in order to make a clinically safe decision about if and how the body can handle the procedure. These steps require close coordination between administrators, physicians and patients. Again, this is nothing new to the industry. However, what is new is that administrators are in short supply, so the coordination required to get the patient treated has become a bottleneck.

But Edwards, and the rest of the structural heart technology industry, have an excellent incentive to help hospitals alleviate the administrative bottleneck that emerged during the pandemic. We estimate Edwards' addressable market for TAVR grows by about $1 billion per year in the U.S. alone, based on demographics and compared to the Company's 2021 TAVR revenues that approached $3.5 billion. Severe aortic stenosis (SAS), which is the disease that TAVR is most often used to treat, is most prevalent in those approaching their mid-70's and beyond. Only 12 out of 100 patients with SAS have had valve replacement therapy, with over 1 million patients estimated to be in need of the therapy in the U.S. alone. We estimate U.S. valves to cost anywhere from $20k to $30k per device. Further, Edwards is enrolling a study to treat patients with moderate aortic stenosis (MAS). MAS has been shown to be nearly as lethal as "severe" cases, but with a population that is twice the size.

The good news about Edwards' treatable population is they are living longer, not only once they reach 70 years of age but also once they reach 80 years, and beyond. As people are living longer, they are more susceptible to moderate and severe forms of aortic stenosis. So there's no shortage of patients in need of TAVR treatment. However, as we mentioned earlier, often the bottleneck to treatment is administrative rather than clinical. For example, less than a quarter of 80-year-old patients who have been diagnosed with SAS actually get referred to treatment - that's over 200,000 elderly patients in the U.S. who are not getting treatment. Ageism, in particular, becomes a concrete problem, with younger patients on average, receiving treatment sooner compared to 80+ year-olds. Over 10% of the SAS population dies within six months without treatment, so it is a bias with a truly tragic consequence that can be remedied with regular education from industry stakeholders. Many of these people have SAS recognized in their primary care or general cardiology but aren't getting referred because - to many physicians - TAVR is still considered a "big procedure" given it's replacing open-heart surgery. But TAVR has lowered that risk and Edwards is sensibly investing in its educational efforts to help populations see it more as an opportunity to improve the long-term quality of life for elderly patients. As we have noted in the past, the demise of TAVR growth has been written about every few years. Given the recent bottlenecks in the U.S. healthcare system, those calls for gloom and doom are coming again. But as we can see, the untreated population for both severe and moderate aortic stenosis is clearly huge and underserved, so TAVR’s demise continues to be greatly exaggerated.

We expect Edwards to be able to compound revenues at a double-digit rate over the next several years by driving higher adoption of TAVR as well as through the launch of new platforms targeting other forms of structural heart disease (especially related to mitral valve). The Company probably "under-earns" as they commit between 15-20% of revenues to R&D, a multiple of larger med-tech conglomerates (e.g. Medtronic, Abbott Laboratories, and Stryker). Edwards' returns are still tremendous, even with this high level of reinvestment in future growth. We continue to hold a healthy weight in portfolios, after trimming positions in late 2021 (when the stock was trading near peak multiples). Since then, we've seen the multiple come in during 2022 and it is beginning to look more attractive. We would likely look to add to positions if the stock traded down on short-term worries, given Edwards' commanding long-term competitive positioning and attractive growth profile.

Meta Platforms

Source: Universal

"Our hope is that within the next decade, the metaverse will reach a billion people, host hundreds of billions of dollars of digital commerce."

Mark Zuckerberg, CEO Meta Platforms. October 2021.

With apologies to W.P. Kinsella, Mark Zuckerberg has built it. And they did come. And they have stayed. By the billions. The Metaverse will be the next evolutionary chapter by Meta Platforms.

Speaking of billions. Meta Platforms' Family of Apps (FoA: Facebook, Instagram, WhatsApp and Messenger) currently has over *3.7 billion* monthly active users – this includes almost *3.0 billion* daily active users. If baseball is sports national pastime, Family of Apps is the social national pastime. The International Telecommunications Network (ITU) estimates that of the 8 billion in world population, nearly 3 billion are without an internet connection. If you exclude China's population of +400 million (where U.S. social media companies are largely banned), Meta Platforms Family of Apps are used monthly by a staggering *90%* of the world's connected population and by *70%* on a daily basis. This level of user engagement and density across the

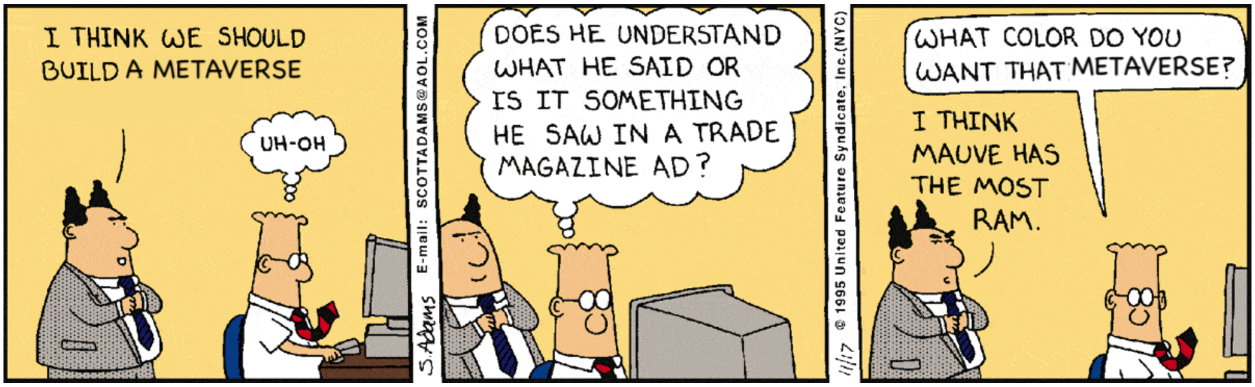
Company's FoAs would seem to be an impenetrable fortress. It surely has been in the continued growth and stickiness in terms of users. In terms of an economic fortress, as in the case back in 2018 (Cambridge Analytica), 2022 brutally challenged that assumption.

Annus Horribilis.

We've chronicled the difficulties Meta Platforms has endured in 2022 in recent Letters. With this Letter we expand our commentary on the Company and why we still remain quite bullish on the future of Meta Platforms. But first, we need to report some brutal numbers. The stock collapsed in 2022, declining *-64%*. Worse still, the stock had declined *-70%* from its all-time high of $384 in early September in 2021.

It seemed that everything that could go wrong for the Company in 2022 - did go wrong: A post-Pandemic growth hangover, the multibillion revenue hit from Apple's infamous iOS 14.5 update that introduced the Company's App Tracking Transparency (ATT), a cyclical slowdown in online advertising spending, poor capital allocation timing of stock buybacks, CEO Zuckerberg's unchecked spending of billions on both new hirings and massive billions to be spent on Artificial Intelligence and the "*Metaverse*." Even the renaming the Company from Facebook to Meta Platforms seems premature. In short (from that long list), CEO Zuckerberg has lost the confidence of shareholders. In the coin of the realm circa-2022, Meta Platforms had lost "the narrative" – despite its still intact Family of Apps profit and cash generation machinery.

Let's start with the overarching matter of "The Metaverse." What is it? When will it arrive? Why does it take multiple tens of billions of dollars in R&D? When will those multiple tens of billions of R&D dollars begin to generate revenues? What will be the return on those multiple tens of billions of R&D dollars? Is it possible that there may never be a return on those multiple billions of R&D dollars? Has META stock become just an open-ended bet on founder CEO (and controlling shareholder) Mark Zuckerberg's avarice to prove his vision of the metaverse? Such questions, along with a collapsing stock price, have become a vicious circle that demand answers. We hope to offer answers in this commentary.



What is the "Metaverse?" These are hard questions to answer in 2022. Would the "3D version of the internet" simplistically suffice for now? We think so. Like so many other computer related technologies, "new" technologies are rarely "big-bang" revolutionary, but most often evolutionary. The metaverse will be no different.

Source: American Online

KATHLEEN (Meg Ryan)
I don't actually know him.

JOE (Tom Hanks)
Really?!

KATHLEEN
We only know each other -- oh God, you're not going to believe this --

JOE
Let me guess. From the Internet?

KATHLEEN
Yes.

JOE
You've Got Mail.

KATHLEEN
Yes.

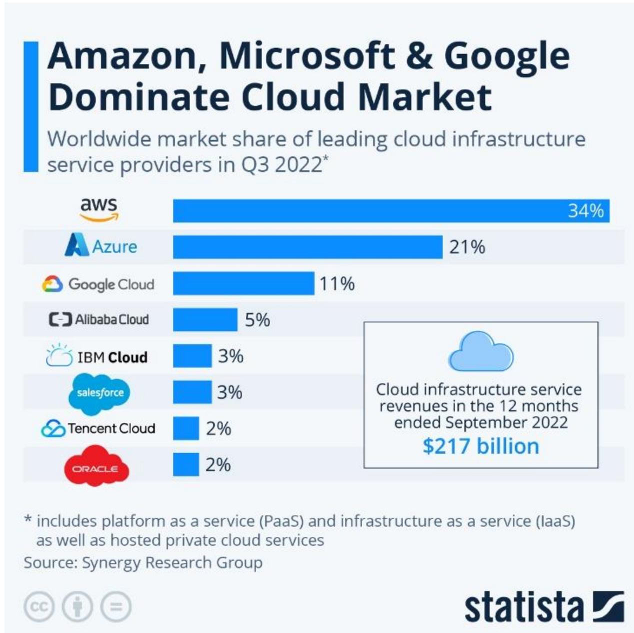
JOE
Very powerful words.

KATHLEEN
Yes…

***You've Got Mail.* 1998.**

Think back to the first time you heard of this thing called the "Internet." If you were a government researcher, you likely heard of it back in the 1960's. If you were employed in the technology sector you may have heard about it in early 1983 when the TCP/IP became the standard protocol. Or maybe in 1994 when Mosaic Communications launched its Netscape Navigator web browser. Maybe 1989 when Quantum Computer launched its first instant messaging service. Quantum would rename itself America Online in 1991. More still heard of the potential internet in May 1995 when Bill Gates penned his famous memo entitled *"The Internet Tidal Wave."*

Consider too the evolution of Cloud Computing. According to Keith D. Foote from Dataversity, the origins of two people using a single computer simultaneously was an idea funded by DARPA (the Defense Advanced Research Projects Agency) with a $2 million grant to MIT in 1963. In 1969, J.C.R. Licklider, who helped develop an early version of the internet called ARPANET promoted his idea of everyone on the planet would one day be interconnected by computers with access to an endless amount of information. Licklider called his computer vision with the zest of a sci-fi writer the Intergalatic Computer Network. "Virtual" private networks advancements in the 1990's would bear the offspring we now call cloud computing. In 1999, Salesforce was a pioneer commercializing the internet to deliver software programs to their end users. In 2006, Amazon introduced Amazon Web Services. That same year Google launched Google Docs. A year later IBM and Google teamed with a few universities to develop huge server farms. That same year Netflix launched their streaming video service. The list goes on. 2011: Hybrid Clouds, IBM SmartCloud, Apple iCloud and Adobe Creative Cloud. 2012: Oracle Cloud. Today, cloud computing is ubiquitous – even the smallest Mom & Pop shop utilizes cloud computing.



So goes it with the metaverse. Meta Platforms addressed its vision of the metaverse in an internal memo entitled "The Metaverse" in June 2018, with the notable line early on in the memo that read, *"The Metaverse is ours to lose…"* Fast forward to 2022; we'll let noted metaverse author and commentator Matthew Bell describe his informed view of the metaverse.

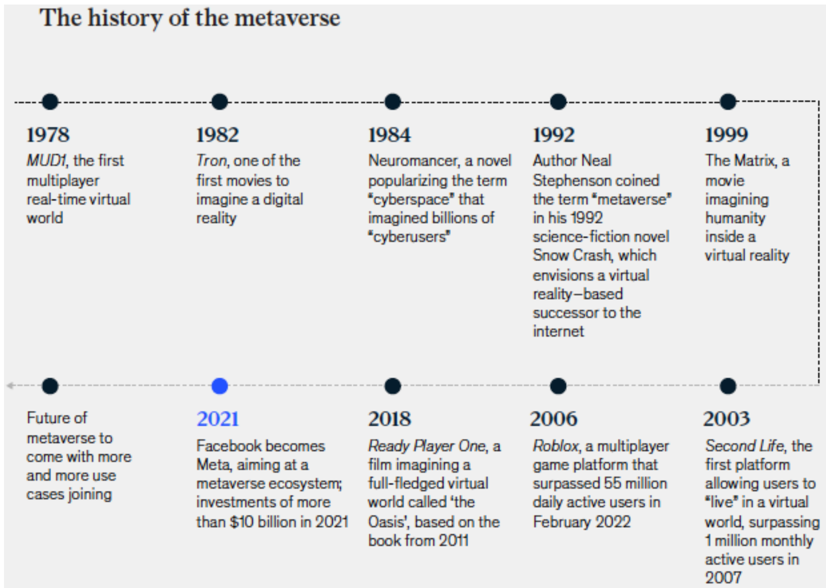
"Think of the metaverse as a fourth era of computing and networking—succeeding mainframes, which ran from the 1950s to 1970s; personal computers and the Internet of the 1980s to mid-2000s; and the mobile and cloud era we experience today. We are in the mobile era today, but the first cellular network call was in 1973, the first wireless data network was in 1991, smartphone in 1992, and so on until the iPhone in 2007. While it's impossible to say when the development of the metaverse began, it's clearly underway.

Source: ***Wall Street.*** **1987.**

"Each era changed who accessed computing and networking resources, when, where, why, and how. The results of these changes were profound. But they were also hard to specifically predict. Think of the metaverse as a parallel virtual plane of existence that spans all digital technologies and will even come to control much of the physical world.

"The metaverse is often misdescribed as immersive virtual reality headsets, such as the Meta Quest (née Oculus VR), or augmented reality glasses, the most famous example of which to date is Google's infamous Glass. VR and AR devices may become a preferred way to access the metaverse, but they are not it. Consider that smartphones are not the same thing as the mobile internet. The metaverse is also not Roblox, Minecraft, Fortnite, or any other game; these are virtual worlds or platforms that are likely to be part of the metaverse, just as Facebook and Google are part of the internet. For similar reasons, think of the metaverse as singular, just as we say "the internet" not "an internet. The next evolution to this trend seems likely to be a persistent and "living" virtual world that is not a window into our life (such as Instagram) nor a place where we communicate it (such as Gmail) but one in which we also exist—and in 3D (hence the focus on immersive VR headsets and avatars)."

Matthew Ball, *The Metaverse*



Source: McKinsey & Company

The challenges of what the metaverse will be for Meta Platforms, notwithstanding, when asked when the metaverse will arrive as a commercial product, as well as when Meta expects to recoup its enormous R&D/Capex investment in the metaverse, CEO Zuckerberg's answers are fleeting at best, and unanswerable circa-2022, at worst. Shareholders have thrown in the towel waiting for cogent answers.

Lest we kid ourselves, the idea that Zuckerberg has "lost Meta's narrative" and share price appreciation (and depreciation) are not mutually exclusive. Zuckerberg has admitted that he greatly overestimated the longevity of the post-Pandemic business tailwinds – which in turn led him to budget enormous spending on AI (FoA) and Reality Labs (Metaverse). (Note: we made the same mistake on Meta and PayPal.) Such booming tailwinds pulled forward so much growth, that that future comparison would begin to seem bust-like by late 2021 – and well into 2022.

Consider where Zuckerberg's thinking was in the summer of 2021. The Company reported second quarter results on July 28. Revenues were up over 2020 by +56%. Operating margin expanded to 43% from 32%. Net income rose *+101%!* Shareholders rejoiced too. The stock would peak about a month later at $384 – a peak gain for the year of +40%. Recall too that the stock was up +108% in the preceding two years of 2019 and 2020. In late October that year, Zuckerberg changed the name of the Company from Facebook to Meta Platforms. Zuckerberg explained the name change and his vision of the metaverse in his *Founder's Letter, 2021* excerpted below:

"We are at the beginning of the next chapter for the internet, and it's the next chapter for our company too. In recent decades, technology has given people the power to connect and express ourselves more naturally. When I started Facebook, we mostly typed text on websites. When we got phones with cameras, the internet became more visual and mobile. As connections got faster, video became a richer way to share experiences. We've gone from desktop to web to mobile; from text to photos to video. But this isn't the end of the line.

"The next platform will be even more immersive — an embodied internet where you're in the experience, not just looking at it. We call this the metaverse, and it will touch every product we build. The defining quality of the metaverse will be a feeling of presence — like you are right there with another person or in another place. Feeling truly present with another person is the ultimate dream of social technology. That is why we are focused on building this.

"As I wrote in our original founder's letter: 'we don't build services to make money; we make money to build better services.' This approach has served us well. We've built our business to support very large and long term investments to build better services, and that's what we plan to do here.

"Right now our brand is so tightly linked to one product that it can't possibly represent everything we're doing today, let alone in the future. Over time, I hope we are seen as a metaverse company, and I want to anchor our work and our identity on what we're building towards. We just announced that we're making a fundamental change to our company. We're now looking at and reporting on our business as two different segments: one for our family of apps and one for our work on future platforms. Our work on the metaverse is not just one of these segments. The metaverse encompasses both the social experiences and future technology. As we broaden our vision, it's time for us to adopt a new brand.

"To reflect who we are and the future we hope to build, I'm proud to share that our company is now Meta. Our mission remains the same — it's still about bringing people together. Our apps and their brands aren't changing either. We're still the company that designs technology around people.

"But all of our products, including our apps, now share a new vision: to help bring the metaverse to life. And now we have a name that reflects the breadth of what we do. From now on, we will be metaverse-first, not Facebook-first. That means that over time you won't need a Facebook account to use our other services. As our new brand starts showing up in our products, I hope people around the world come to know the Meta brand and the future we stand for."

We have long applauded companies that invest for the long-term. Companies, regardless of their particular industry, must adapt, or evolve, or they will slowly die. That's why for years we have emphasized in our research the importance of capital allocation. This is critical to our investment process. We endeavor to hold our investments for many years, not just for a few quarters - which is the typical fare on Wall Street. We believe our portfolio of best of breed businesses generates substantial retained earnings. The deployment of this largesse into a myriad of capital allocation decisions (R&D, capex, M&A, stock buybacks) is arguably the most critical function of the C-suite.

We’ve owned Apple since 2005. Apple is a very different company than it was 15 years ago – much different still from the Company’s founding in Steve Jobs parents’ garage in 1975. At the time of our first purchase, the iPhone was little more than a twinkle in Steve Jobs eyes. In fact, early on in those years, the iPad was slated to be launched before the iPhone.

> ***“An iPod. A phone. An internet communicator. Are you getting it?! This is ONE device.”***
>
> **Steve Jobs introducing the iPhone in 2007**

Think of the evolution of Apple since Time magazine named the iPhone its Invention of the Year. Faster, smaller, more energy efficient semiconductors continue to change the technological and commercial landscape in ways unimagined just a few short years (Tesla?). If you enjoyed binge-watching Breaking Bad on your iPad, you can thank advancements in cellular, fiber optics, WiFi, CPUs, GPUs and Retina 6K video. The App Store has allowed our super-computer mobile phones to become the most powerful, most personalized devices in human history. In short, the technological evolution at Apple (along with countless other integrated technologies) has created mobile devices to allow any human without fortune or political power to instantaneously connect to another human on the other side of the globe – all for the everyday low price of $20 per month.

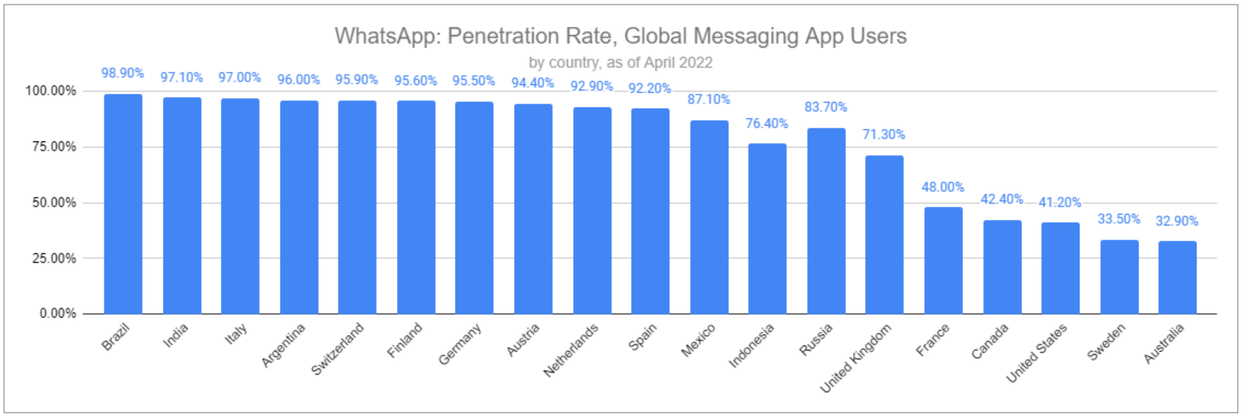
"Humans love video, there's five and half billion people that watch 2.6 hours of video per day of video content. In the United States it's 300 million Americans watching five and a half hours per day"

Matthew Ball. *The Metaverse.*

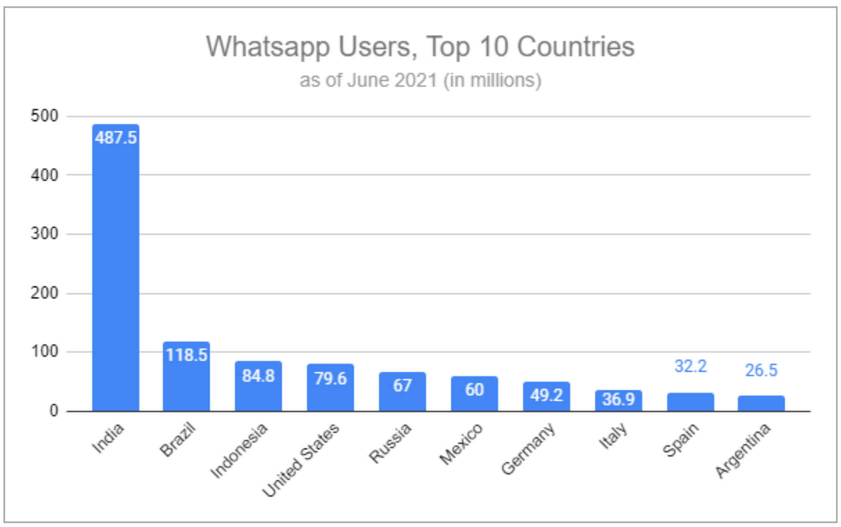
Now consider how different Meta Platforms is from its founding in Mark Zuckerberg's college dorm room in 2004 as a Harvard-only social network. The lineage would first be text, and then photos, and then videos. The next (metaverse) will be full immersive, virtual reality.

In 2006, Facebook launched algorithmically generated updates user friends News Feed on desktops. Messenger was launched in 2011, plus launched for both Google Android and Apple iOS. Recall that mobile ad revenue was so slow to grow that the consensus view then was the Company missed "mobile." Indeed, mobile app advertising revenues were just 11% of the Company's revenue base early on. Yet, by just 2018, mobile app revenues were 93% of the base. In 2012, Zuckerberg bought Instagram for the then preposterous sum of $1 billion. Zuckerberg was just getting warmed up on the spending front. Oculus VR was acquired in 2014 for $2 billion. In 2014, Zuckerberg bought WhatsApp for the then astronomical price tag of $22 billion. In the fall of 2015, Facebook announces it had 1 billion users on a single day – 2 billion by the next summer. In 2017, Facebook rolled out Stories – which took time to ramp. In September 2021, the Company rolled out Reels – which also took time to ramp. Yet, according to the Company, just one year later, 140 billion video Reels are played across Facebook and Instagram – a gain of 50% in just six months. In addition, the Company reports they are gaining time spent share versus their dreaded rival TikTok. Even in the difficult year of 2022, the Company reports that users continue to spend more time on FoA.

And WhatsUp with WhatsApp? WhatsApp has been flying under the radar for years. We suspect that's about to notably change – in fact, it has. WhatsApp is actually the Company's largest user platform. As mentioned above, Zuckerberg paid a king's ransom for WhatsApp eight years ago – and we've only heard tidbits about the platform during earnings conference calls over the ensuing years. Even though WhatsApp is the Company's fastest growing platform in the U.S., where WhatsApp has really shined is in underdeveloped markets and in Europe. Today, after enormous sunk costs, WhatsApp is the largest messaging app in the world.



Sources: Statista and Invariant



Sources: Statista and Invariant

The free app has become ubiquitous as a basic messaging app. The last user update from the Company was back in 2020. At the time, *monthly* user growth reached 2 billion. However, during the Company's last earnings conference call, the Company noted that WhatsApp *daily* average users now exceeds 2 billion – which has just surpassed Facebook's DAUs.

According to Devin LaSarre of Invariant:

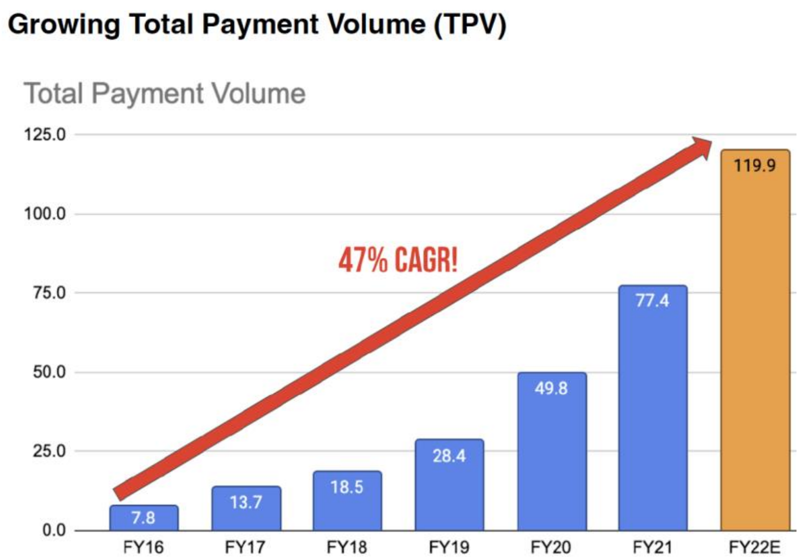
"In India, the country with the greatest number of WhatsApp users, for example, people rely on WhatsApp to communicate with friends, family, and colleagues, buy and sell items, send money, read news, and even access personal medical information. In other countries, like Brazil and Indonesia, total usage and use cases indicate the app may be more important than any other, including Facebook, Instagram, TikTok. Even in Russia, when Facebook and Instagram were banned following Russia's invasion of Ukraine earlier in the year, WhatsApp was untouched. Popular throughout the country, it is clear that the Kremlin worried that blocking WhatsApp could generate significant blowback and loss of public support."

The Company launched WhatsApp Business in 2018 for very small businesses and single entrepreneurs. Since then, the Company has offered the following updates on WhatsApp during recent earnings conference calls (thanks to LaSarre for chronicling these calls):

3Q 2018: 3 million business accounts on WhatsApp.
2Q 2019: Building WhatsApp Business ecosystem.
1Q 2020: Tens of millions business accounts on WhatsApp.
2Q 2020: 50 million businesses on WhatsApp.
2Q 2020: Zuckerberg introduces the term "messaging commerce."
3Q 2020: Integrating WhatsApp Business with Facebook Shops.
3Q 2020: Per Zuckerberg. "*But I think it should simplify things and make it so that these 3 different networks that we've had, between Messenger, Instagram and WhatsApp, can start to function a little bit more like one connected interoperable system."*
1Q 2021: WhatsApp Payments live in India and Brazil.
1Q 2021: WhatsApp Business API sending +100 million messages per day.
1Q 2021: During COVID conversations between people and businesses on Messenger and Instagram grew by more than 40%.
1Q 2021: More than 3 million advertisers use click-to-message ads to direct people to Messenger.
4Q 2021: More than 150 million users globally now view a business catalog in WhatsApp each month.
Q2 2022: Per Sandberg. *"So that means the click-to-messaging ads become the perfect opportunity. They help us move people from discovery to a direct relationship with a business. In a world where we're trying to do more with less data, they give businesses and consumers a direct connection, so it's much easier to measure ROI. And so we're investing heavily. You can message a business from Facebook and Instagram feed from Facebook, Instagram, Messenger Stories to WhatsApp, Messenger, Instagram Direct."*
Q3 2022: Per Zuckerberg. "*Beyond Reels, messaging is another major monetization opportunity. Billions of people and millions of businesses use WhatsApp and Messenger every day, and we're confident that we can connect them in ways that create valuable experiences. We started with click-to-messaging ads, which lets businesses run ads on Facebook and Instagram that start a thread on Messenger, WhatsApp or Instagram Direct, so they can communicate with customers directly. And this is one of our fastest-growing ads products with*

a $9 billion annual run rate. And this revenue is mostly on click to Messenger today since we started there first. But click to WhatsApp just passed a $1.5 billion run rate and growing more than 80% year-over-year."

Lastly, in early December the Company announced a WhatsApp payments partnership with Latin America e-commerce giant MercadoLibre for in-app payments. MercadoLibre is at the forefront of the huge unbanked/underbanked Latin American population.



Source: MELI 10-Q, 10-K and Jun Hao

Admittedly, these revenues won't make or break any quarter in the near future, but at a minimum, they could well cover the Apple ATT revenue losses in the years ahead. In addition, the WhatsApp journey demonstrates that few, if any of the tech behemoths can challenge Meta Platforms in social media – particularly as they curate first-order, global content across FoA – and then next into the metaverse.

In our view, Zuckerberg has built and navigated the Company quite well as technology and user behavior has changed. He has built it. They have come. He continues to build. His "vision thing" has be good too considering his early critics on mobile, Stories and Reels. The jury is still out on his mega spending on metaverse – no, check that – the jury is out on this score. By Wall Street's reaction, Zuckerberg's metaverse vision and spending is a near unanimous flop. We don't share this view. We remain bulls on Zuckerberg and Meta Platforms.

Actually, we'd be less bullish on the long-term prospects of Meta if Zuckerberg wasn't building out a key element of the metaverse. To be clear, Zuckerberg isn't building *the* metaverse, just a piece of it. Further, given the Company's massive 3.5 billion monthly user, plus the fact that many millions of these users use their Facebook login credentials to access other websites throughout the internet, no other company has the combined billions in users and billions in capital to build a metaverse *platform*. Such a platform (think Microsoft) would allow the Company to be more independent from the Apple iOS/Alphabet Android mobile duopoly. Apple's ATT blocking of *+$10 billion* every year in Meta's revenues has no doubt focused Zuckerberg's mind - and will to spend - on this score. Speaking of Microsoft, Zuckerberg is no doubt well-versed too in the drama of how one of the wealthiest corporations ever to exist missed the mobile revolution. When it comes to technology platforms, one platform is a monopoly. Two platforms are a duopoly party. Three's a crowd. Once Apple iOS and Google's Android captured the smartphone market, despite Microsoft's multi-billions in party favors, Gates, Ballmer & Co. were never invited to the trillion-dollar mobile party.

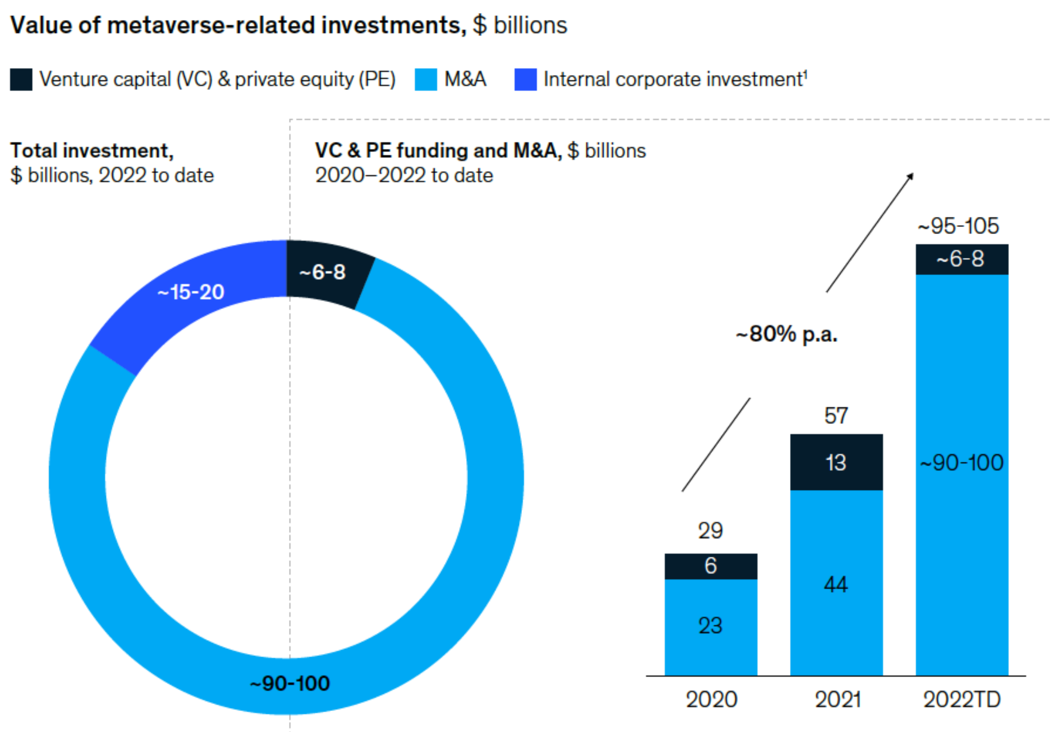
In fact, the general internet economy, which is to say any enterprise or institution whereby the internet today is in any way relevant, expect future "digital disruption." These countless entities are already planning for the next evolution of the internet (call it what you will). And they collectively are already planning for it in size – whether Zuckerberg builds his vision of a metaverse platform or not.

McKinsey & Company published an exhaustive study last summer entitled, *"Value Creation in the Metaverse: The Real Business of the Virtual World*. Here are their key findings:

- The metaverse has the potential to impact everything from employee engagement to the customer experience, omnichannel sales and marketing, product innovation, and community building.
- We believe the metaverse has the potential to be the next iteration of the internet. It may seamlessly combine our digital and physical lives by featuring a sense of immersion, real-time interactivity, user agency, interoperability across platforms and devices, the ability for thousands of people to interact simultaneously, and use cases spanning activities well beyond gaming.
- Beneath the hype, the metaverse's development continues. *Roblox*, launched in 2006, has attracted companies including Nike and Gucci as advertisers and partners. *Fortnite* has more than 20 million daily active users (DAUs), has hosted concerts (more than 27 million unique players attended a Travis Scott performance last April), and generated more than $14 billion in transactions between 2018 and 2020. Naver Z's *Zepeto*—Asia's largest metaverse platform—has over 300 million global subscribers, and in April partnered with Samsung for its Galaxy S Treasure Hunt campaign.

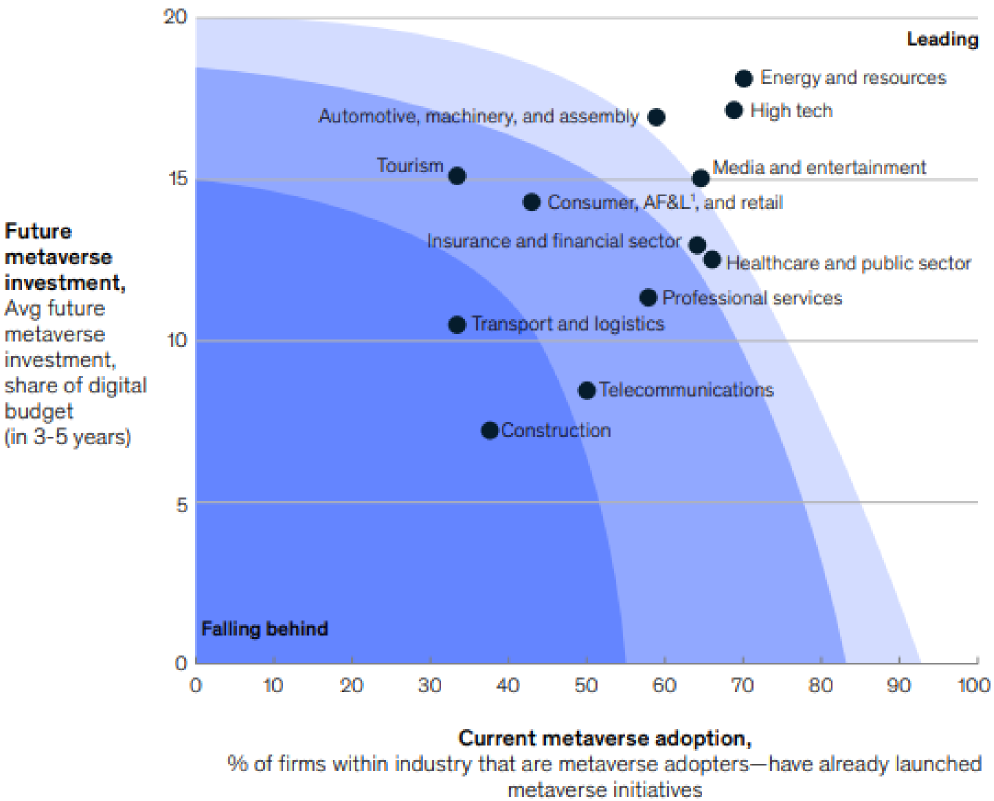
- We estimate it may have a market impact of between $2 trillion and $2.6 trillion on e-commerce by 2030, depending on whether a base or upside case is realized. Similarly, we estimate it to have an impact of $180 billion to $270 billion on the academic virtual learning market, a $144 billion to $206 billion impact on the advertising market, and a $108 billion to $125 billion impact on the gaming market.

- Large technology companies, venture capital (VC), private equity (PE), start-ups, and established brands are seeking to capitalize on the metaverse opportunity. Corporations, VC, and PE have already invested more than $120 billion in the metaverse in the first five months of 2022, more than double the $57 billion invested in all of 2021, a large part of it is driven by Microsoft's planned acquisition of Activision for $69 billion. Large technology companies are the biggest investors —and to a much greater extent than they were for artificial intelligence (AI) at a similar stage in its evolution, for example. Industries currently leading metaverse adoption also plan to dedicate a significant share of their digital investment budgets to it.



[1]Internal corporate investment in 2022 derived for top 30 companies investing in the metaverse based on publicly announced investment amounts.
Source: Crunchbase (Jan 2020–May 2022)

Sectors leading metaverse adoption today also plan to dedicate a significant share of their digital investment budgets to metaverse.



[1]Apparel, footwear, and luxury.
Source: McKinsey & Company Senior Executive Survey, April 2022

- Our survey of more than 3,400 consumers and executives found significant excitement about the potential of the metaverse. Almost 60 percent of consumers using today's early version of the metaverse are excited about transitioning everyday activities to it, with connectivity among people the biggest driver, followed by the potential to explore digital worlds. Some 95 percent of business leaders expect the metaverse to have a positive impact on their industry within five to ten years, and 61 percent expect it to moderately change the way their industry operates. Industries most likely to be impacted by the metaverse include consumer and retail, media and telecommunications, and healthcare, and those industries are also among those already undertaking metaverse initiatives.

We may look back in time and chuckle at the enormity of McKinsey's forecasts. On the other, history is rife with outrageously *low* forecasts of how big computers, the internet and smartphones would ultimately become.

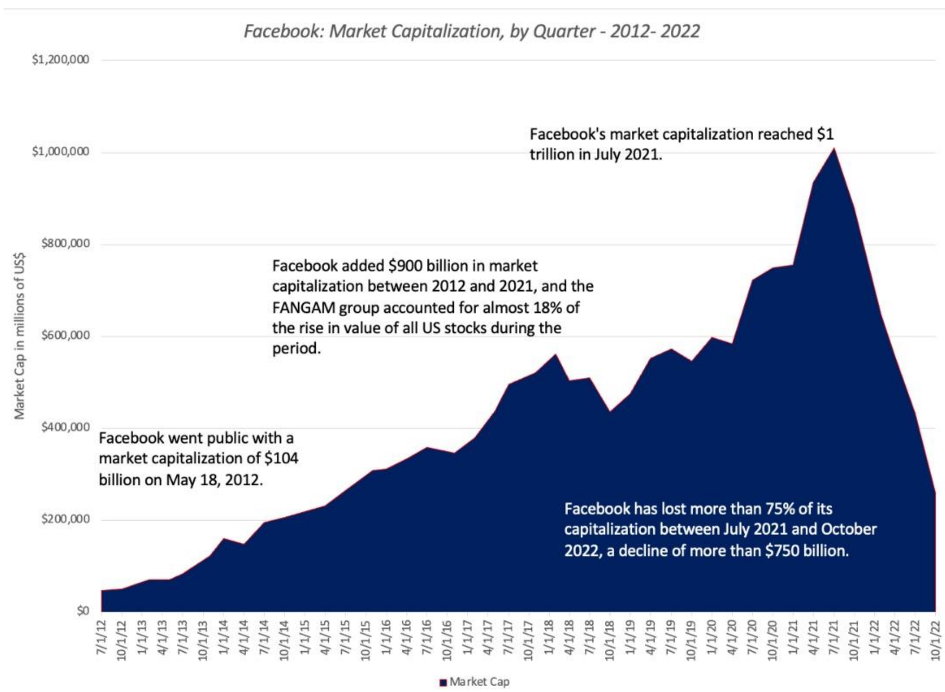
Here are a few more metaverse forecasts to mark for posterity:

- KPMG forecasts a $13 trillion market opportunity and 5 billion users for the metaverse by 2030.

- Morgan Stanley forecasts an $8.3 trillion opportunity for advertising and e-commerce on the metaverse.
- Citi estimated the total addressable market (TAM) for the metaverse between $8 trillion to $13 trillion.

- Goldman Sachs' global metaverse projection between $2.5 trillion and $12.5 trillion.

OK, all that future metaverse bounty aside, let's get back to the present. We have no doubt been on the wrong side of the stock in 2022. A review of the good, the bad and the ugly – mostly ugly – in 2022 is in order.



Source: aswathdamodaran.blogspot.com

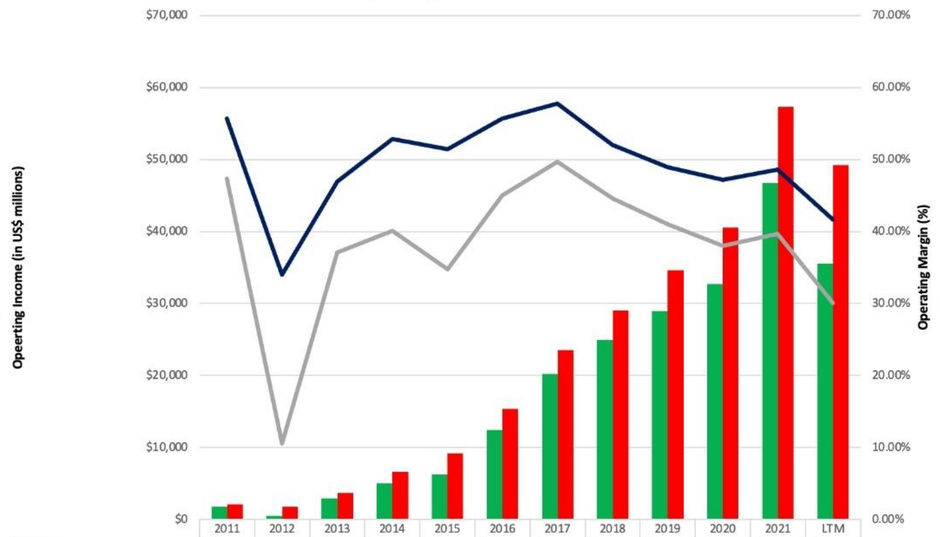
The first crack in the bull "narrative" came early in 2022 when on February 2 the Company reported weaker than expected fourth quarter net income. Even though revenues were in line at +20% growth, net income came in at -5%. The Company gave weak guidance, reported that user growth had slowed, but even worse, expenses skyrocketed up *+38%*. The Company quantified Apple's ATT hit at an annual run rate of $10 billion. Zuckerberg was adamant that spending would remain at elevated levels. The stock tanked -20% the next day. The stock would suffer more than the general market over the course of the bear market. The *coup de grâce* for Zuckerberg & Co. would come on October 26 when the Company reported third quarter results.

The results were truly awful. Year-over-year revenue -4% - the second consecutive quarterly revenue decline. Expenses were +19%. Operating margin collapsed to 20% from 36%. Net income collapsed *-52%!* Losses at Reality Labs skyrocketed too. Losses in this segment rose to -$3.7 billion during the quarter and -$9.4 billion in the first three fiscal quarters. As bad as these backward-looking numbers were, forecasts for 2023, were in a word, shocking. For the full year in 2022 total expenses were likely to come in at around $86 billion – a gigantic number. 2023 forecasted expenses were expected to *increase* to $96-$101 billion. Reality Lab losses in 2023 were forecasted to *"grow significantly."* Even the most patient of investors had seen - and heard enough. No valuation was too low enough to negate selling. The stock fell -25% the next day to $98 – and drifted to $90 over the next week. The low was $88. From its high of $384, the stock collapsed *-77%* in little more than 14 months.

Meta Platforms (Zuckerberg's) ensuing consensus epitaph was swift and brutal. *Zuckerberg broke Facebook.* In his zeal and quest to build the next-generation internet platform he – and he alone – would not only bet (and lose) the Company's treasury of multiple billions. These billions were gone, never to be recouped. Metaverse spending was a sinkhole. But he would also risk in the process neglecting the Company's cash-generating machine (FoAs). The stock? Well. Wall Street's swift verdict - dead and buried money.

As disappointing as the recent reported financials have been – and no doubt they are, we would like to offer a second, perhaps more judicious look at the Company's reported financials. Aswath Damodaran is a Professor of Finance at the Stern School of Business at NYU. His blog, *Musings on Markets* is a must read for both finance students and investment professionals. In a November post he detailed on the Company's conservative accounting treatment of its R&D expenditures. The Company passes these huge R&D expenses through their income statement as operating expenses.

Facebook: Operating Income with R&D Correction



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	LTM
Operating Income	$1,756	$538	$2,921	$4,994	$6,225	$12,427	$20,203	$24,913	$28,986	$32,671	$46,753	$35,543
Corrected Operating Income	$2,067	$1,731	$3,692	$6,593	$9,214	$15,380	$23,490	$29,023	$34,604	$40,576	$57,301	$49,255
Operating Margin	47.32%	10.57%	37.11%	40.06%	34.72%	44.96%	49.70%	44.62%	41.00%	38.01%	39.65%	30.09%
Corrected Operating Margin	55.70%	34.01%	46.90%	52.89%	51.40%	55.65%	57.78%	51.98%	48.95%	47.20%	48.59%	41.70%

Operating Income — Corrected Operating Income — Operating Margin — Corrected Operating Margin

Source: aswathdamodaran.blogspot.com

Damodaran makes the case (and we agree) that the Company's R&D expenses should be *capitalized* assets on the balance sheet, and then prudently amortized over a three-year period. Such treatment offers a more accurate *economic* reality for the Company compared to the misplaced *accounting* treatment. In the graph below, please note the significantly higher corrected operating income and corrected operating margin. Wall Street's knee-jerk obits on Meta Platforms look to be quite a bit more fiction, than nonfiction.

So how did we fare in our evolving analysis and portfolio management during these repeated disappointments in 2022. In a word, poor. Very poor. Grade F.

We first bought the stock in February 2018 during the Cambridge Analytic scandal. Recall then the bearish pileup on Facebook throughout 2018: Huge government fines, huge new spending on employees and R&D on new privacy initiatives, missed analysts' expectations, slowing user growth and revenue growth, European Union's General Data Protection Regulation (GDPR) was launched, plus the recent launch of Stories was monetizing at poor rates. (Kind of has a familiar ring to 2022.)

We first bought Facebook stock in February around $179. We slowly added to our position throughout 2018 and into March of 2019. The prices we added were around $153 and $170. By the last add in March 2020, the position became our largest at a 9.0% weight. The stock would find a bottom (as well as the overall stock market – Powell Pivot) in late December that year around $125. The stock would then boom (with a very short Pandemic-related decline in March of 2020) to nearly $385 at its peak in early September 2022. We made small trims in mid-2020 at $228 and $294. So far, so good.

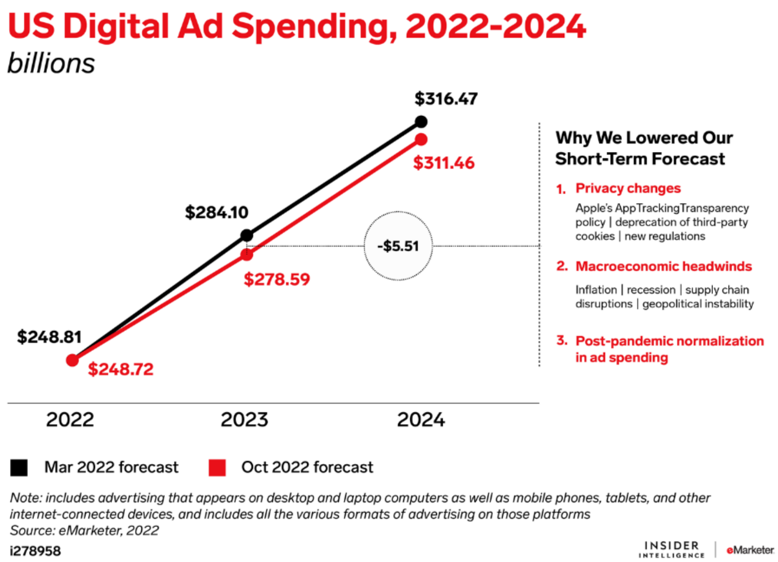
As mentioned, we made the mistake thinking that Pandemic-related growth rates in 2021 for the Company, while likely to moderate in growth rates, yet still grow, would not decline – and heretofore online ad spending less cyclical than tradition mediums. Wrong on both. As such, after to stock retreated from its 2021 high, we added to our position at… *$328.* Ugh. We added again this past March at $194. As the stock collapsed in 2022, so did our grade point.

The saying, "When you're in a hole, stop digging" applies to portfolio management too. We've stopped digging – for now. Although our weighting in the stock currently stands at +4%, the client capital we've cumulatively invested in the stock is considerably more. The stock at year-end is back to $120 – a sharp climb from $88 at the depths in early November.

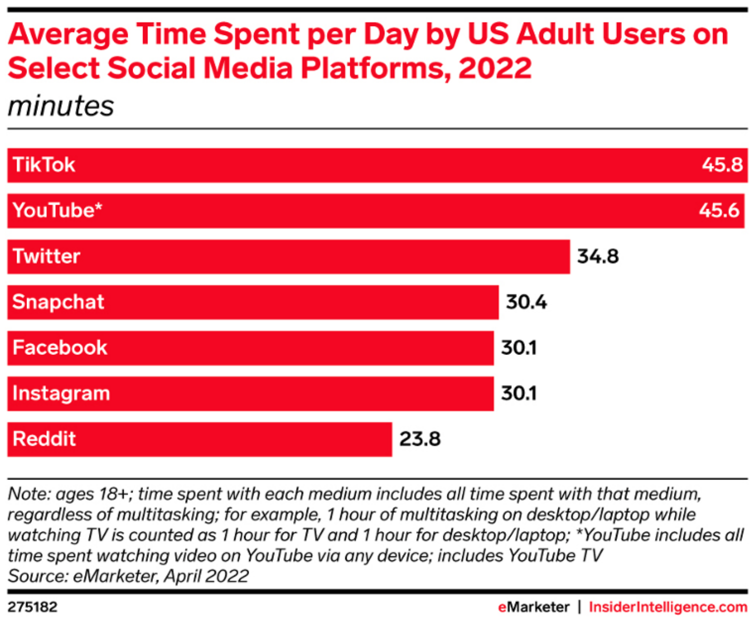
The stock at current valuations has priced in zero growth in FoA users and little rebound in profitability. This is fat-pitch territory. Valuations at current levels need to assume a long secular decline in the Company's Family of Apps business and continued billions dumped into the assumed metaverse landfill. Both extremes in the negative, in our view. If the combination of favorable 2023 catalysts emerge, along with unduly cheap valuations we may well swing again at the shares.

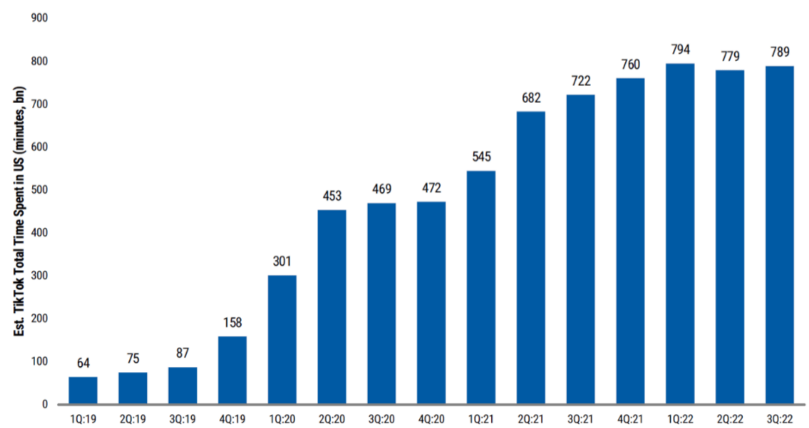
2023 Catalysts:

- Macro: Cadence of improvement in digital ad spending. Verticals like healthcare and travel remain healthy, but larger verticals such as e-commerce and gaming have been struggling.

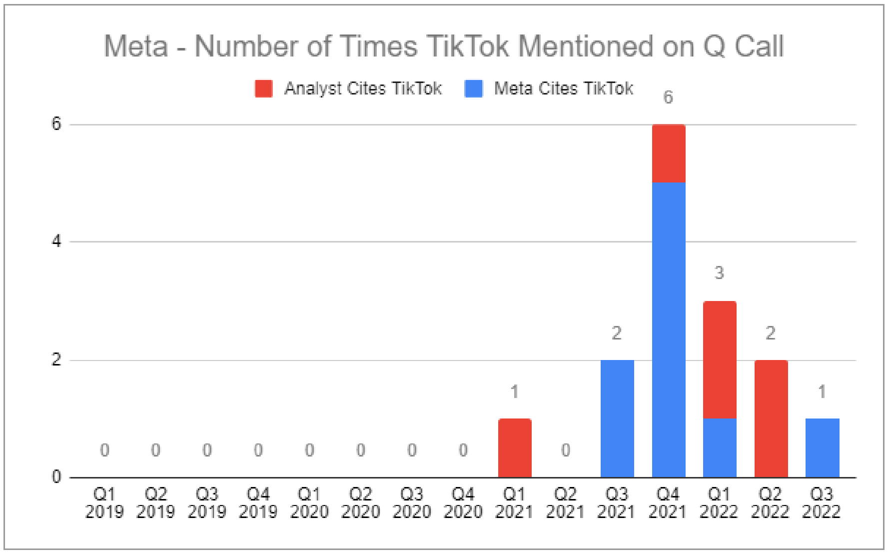


- Capex: 82% of spend is on FoA. Zuckerberg is not betting the Company treasure on Reality Labs (metaverse). This outsized focus will be on Artificial Intelligence (AI) and Machine Learning (ML) probabilistic models – key to Reels growth too. 15% of the content users viewed on Facebook and Instagram has been generated by AI. Per the Company, *"…our level of Capex investment will depend on the returns that we generate through these investments in AI…and if we don't, we'll pace back our spend accordingly."* Capex spending of billions on FoA continues to be a key competitive advantage for the Company.
- FoA: North America user base is largely saturated. Will users stay? Stickier users engage more.
- Reels: Continued user engagement growth across FoA and improved monetization. Comparisons of Stories monetization are instructive: Stories took four years to monetize at the rate of News Feed. Per Zuckerberg on Q2 2022 earnings call, *"Reels is actually making faster progress than we expected. We've now crossed $1 billion annual run rate for Reels ads, Reels also has a higher revenue run rate than Stories did at the identical times post launch."*
- TikTok: Does TikTok continued to impede Instagram's growth? Peak TikTok may be at hand. Growing awareness of national security risks at state level issued phones, federal level politicians, CFIUS and the FBI. Even if calls for bans in the U.S. don't materialize, national advertisers may move away from TikTok, to Reels benefit.





Source: Sensor Tower, Morgan Stanley Research



Source: Invariant

- Twitter: According to Media Matters for America, Twitter has lost half of its largest 100 brand advertisers due to Elon Musk's political leanings. If this continues, advertisers may spend some of these ad dollars with Meta Platforms.
- WhatsApp and Messenger: Continued monetization on both platforms. WhatsApp daily average users (DAU) in North America (their fastest growing market) continues apace. WhatsApp growing significantly internationally. Key commercialization on both platforms helps to offset Apple's ATT/IDFA.
- Advantage+: New machine learning tools such as Advantage+ continue to grow beyond early verticals of e-commerce and retail.
- Apple: ATT/IDFA impact post-2023 one-year anniversary. ATT hurts Apple ads revenues as well. Apple's next gen ad attribution (SKAdNetwork 4.0) will offer more signal linkages between advertiser and click-through attribution.
- AI: Artificial Intelligence (plus Machine Learning) continues to power better ad rankings and scale engagement.
- Privacy: An unremarked competitive advantage for the Company. Privacy spending on social networks is gigantic. Privacy is multi-billion *annual* table stakes in global social media platforms. Meta Platforms is without peer. Ironically, ever more stringent privacy regulations will actually protect the Company's outsized competitive privacy advantage, and thus profitability.
- Currency: At its worst in 2022 forex was a -700 basis point headwind to revenue. The U.S. dollar has fallen since then. Note, on a forex-neutral basis, 3Q revenues actually rose by +2%.

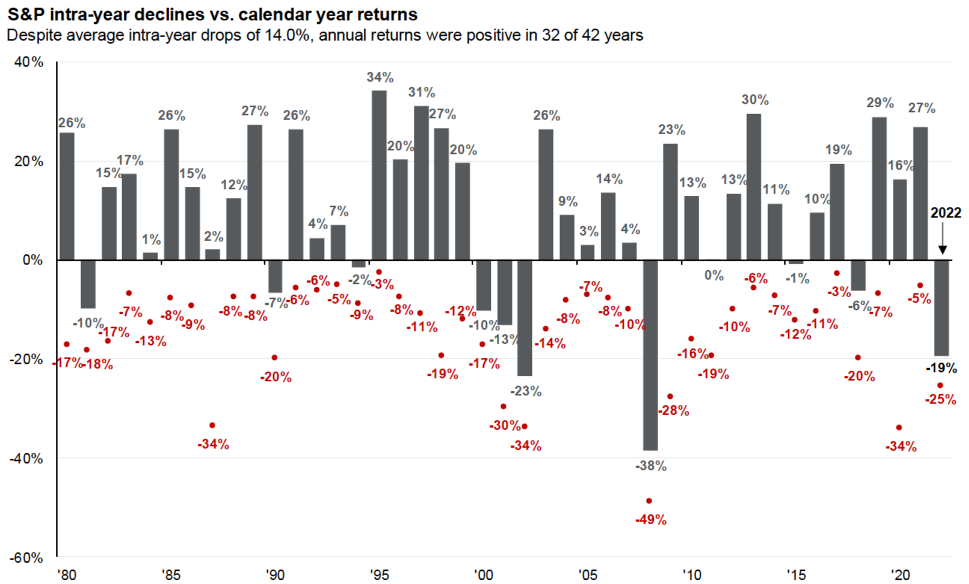
- Management: If the macro digital ad environment worsens will Zuckerberg reign in spending at a concomitant rate? Zuckerberg's most recent comments speak to a new-found balance on spending. In early November, Zuckerberg announced layoffs of more than 11,000 workers (13% of headcount). In December, at a New York Times hosted event, Zuckerberg stated he will operate the Company with "discipline and rigor."

Powell's New, New Mandate: Break the Fed Put

"Changing the inflation target is not something we are thinking about. And it's not something we are going to think about thinking about under any circumstances. Our inflation target is 2%. Full stop."

Fed Chairman, Jerome Powell. December 2022.

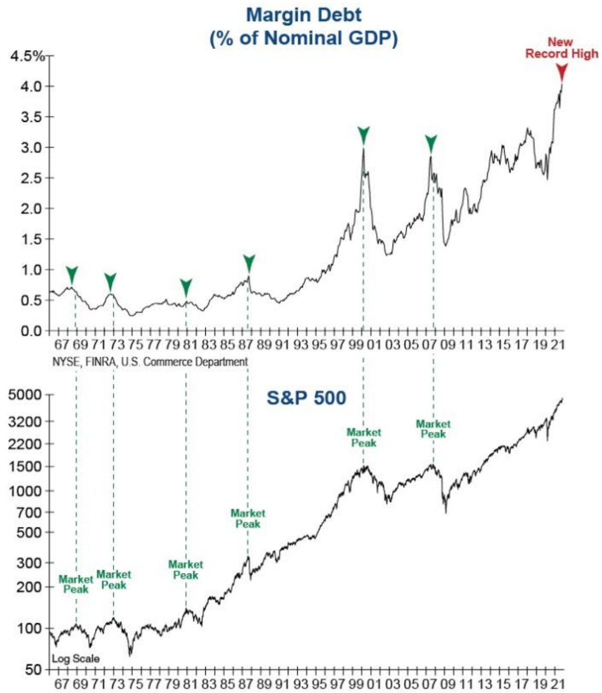
The stock market (S&P 500 Index) declined -18.3%. At its low during the year, the S&P 500 Index fell a sharp -25%. Since World War II, 2022 has been the 4th worst year for the broad stock market. The worst year was back in 2008 during the Great Financial Crisis when the S&P 500 Index fell -37%. The next two worst were 1974 (-26% and 2002 -22%). The results for the typical investor in 2022 were likely worse still as many investors (including Wedgewood) had a meaningful weighting in technology stocks (the NASDAQ Composite was -32% in 2022) and an underweight in the leading (by far) energy sector.



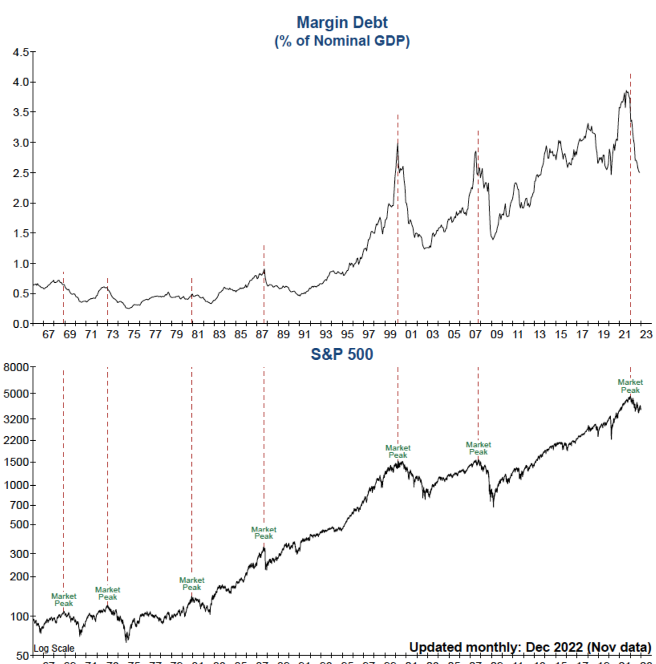
Source: J.P. Morgan Asset Management

We expected a tough year for the stock market as we exited 2021. It really wasn't a prescient call. Remember that at the end of 2021, market valuations were excessive, corporate margins had feasted on trillion in fiscal and monetary stimulus – and the Federal Reserve was determined to raise rates good and hard. This is how we ended our fourth quarter 2021 Client Letter:

We at Wedgewood expect a very volatile 2022, particularly on the downside – Quantitative Tightening (QT) will see to that. Quantitative Easing (QE) has been the oxygen for financial markets for so long that we suspect that far too many market participants can't remember a time without such market-steroids. The graphic below reminds us that when speculation reigns, markets can go far higher than what seems sober. Relatedly, when speculators lose their collective psychology to speculate, then markets will repeat their long history of falling faster and further than what seems sober.



Here is the same graphic twelve quick months later (Source: Investech).



For far too many years we've opined in these Letter's that the Federal Reserve's new monetary policy of Quantitative Easing (QE) was an experiment with vast potential unexpected consequences. At the risk of torturing a harsh metaphor, the Federal Reserve's QE experiment would have made Mary Shelley (of *Frankenstein* frame) proud. As with QE, so too with Modern Monetary Theory (MMT)[1].

The intended benefits of spurring economic growth, as it turns out, were few and far between. The victims of zero-interest policy were middle-class savers, and retirees who "played by the rules" prudently investing their holdings in the highest quality fixed income securities, only to see their interest income evaporate under QE. The outsized benefactors of QE were frenzied financial markets of every stripe, plus hard assets such as real estate, art and a myriad of luxury collectibles (Rolex Daytona's and Day-Date's come to mind).

Recall that the Federal Reserve's balance sheet was "just" $800 billion when Bear Stearns collapsed in 2008. The Fed's balance would then soar to $4.5 trillion by 2015. During the Pandemic it would explode to *$9 trillion*.

On the fiscal stimulus front, the policy of MMT, whereby governments with a fiat currency system can print trillions in digital dollars may be much more of a topic of discussion in 2023. U.S. debt has reached *$30 trillion*. 45% of our debt must be refinanced over the next three years. According to Strategas, the average coupon to be rolled over is just 1.67%. Interest rates may decline significantly from current levels if Powell & Co. can get inflation to be sticky at 2%. If not, almost $14 trillion in U.S. federal debt will need to be rolled over at rates double and triple the miniscule rate of 1.67%. The size of this headwind is unknown, because we've never been here before. It may rival the liquidity shrinkage on QT.

The year 2022 was the beginning of a very different economic environment whereby leverage will be taken out of every nook and cranny of the economy. Powell & Co. with their enormous blunt toolkit, are steadfast in their desire to bring inflation back down to 2% - come bear market and recession hell or unemployment high water.

[1] Modern Monetary Theory (MMT) is an economic theory that suggests that the government could simply create more money without consequence as it's the issuer of the currency. Source: Federal Reserve Bank of Richmond

Taming inflation would take deep recession

U.S. GDP and potential supply, 2017-2025

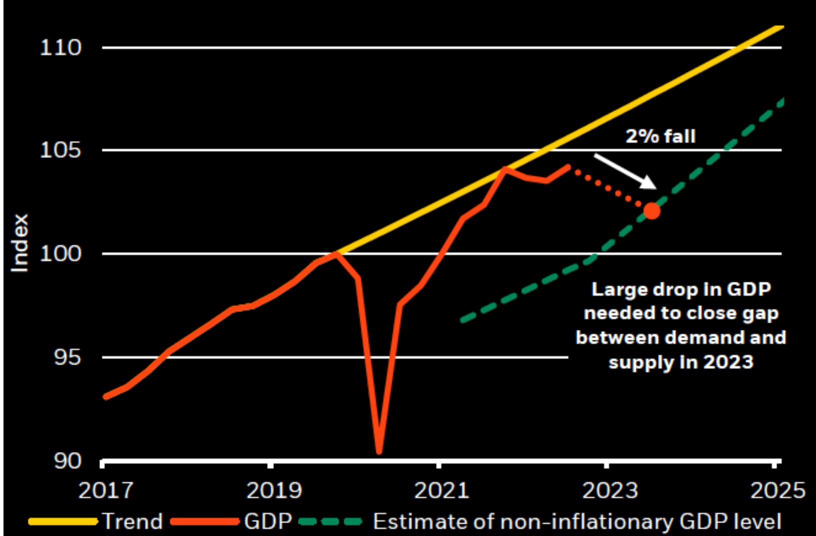


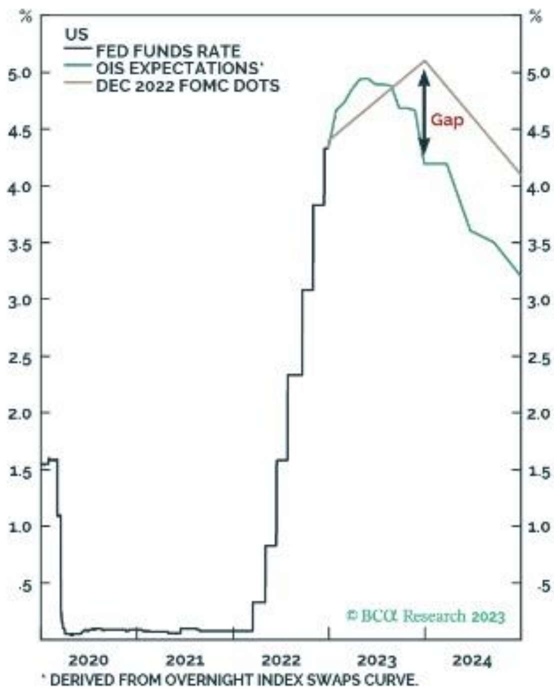
Chart takeaway: *Getting inflation all the way back down to target – the dotted green line – would require the Fed to deal a significant blow to the economy.*

Sources: BlackRock Investment Institute and U.S. Bureau of Economic Analysis, with data from Haver Analytics, November 2022. Notes: The chart shows demand in the economy, measured by real GDP (in orange) and our estimate of pre-Covid trend growth (in yellow). The green dotted line shows our estimate of current production capacity, derived by how much core PCE inflation has exceeded the Federal Reserve's 2% inflation target. When then gauge how far activity (orange line) would have to fall to close the gap with where production capacity (green dotted line), will be by the end of 2023 assuming some recovery in production capacity. We estimate a 2% drop in GDP between Q3 2022 and Q3 2023 (orange dotted line). Forward-looking estimates may not come to pass.

2023 will answer the elephant-in-the-room question: *Will the largest financial and hard asset bubbles in U.S. history, injected with steroid 0% interest rates, plus $120 billion per month of Q.E. not either soft-land or hard-land when the post-addicted withdrawal of 5% interest rates and -$90 billion per month of QT fully courses through the circulatory system of the U.S. economy?*

An added risk, in our view, is the unstated goal by Jerome Powell in particular, to kill the "Fed Put." Market participants who expect the Fed to quickly pivot to resume QE after they slay inflation may be in for a rude awakening. Slaying inflation *AND* killing the "Fed Put" means tighter for longer.

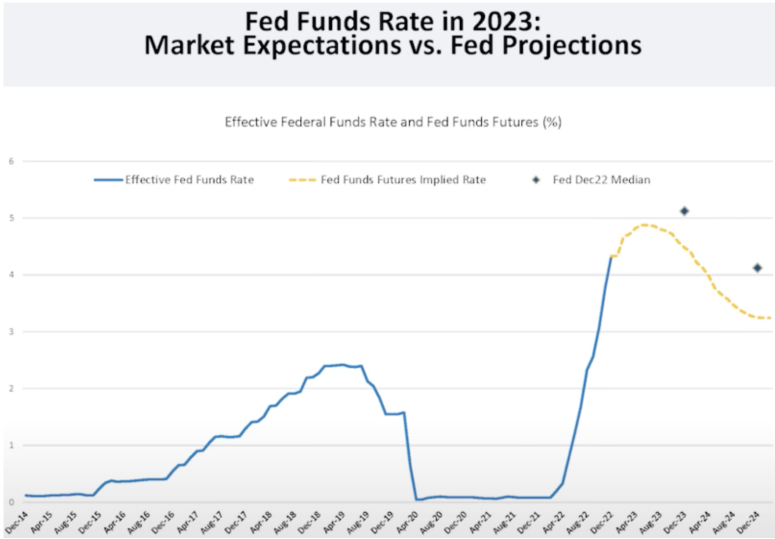
The Market Still Thinks The Fed Will Rush To Cut Rates



Source: BCA Research 2023

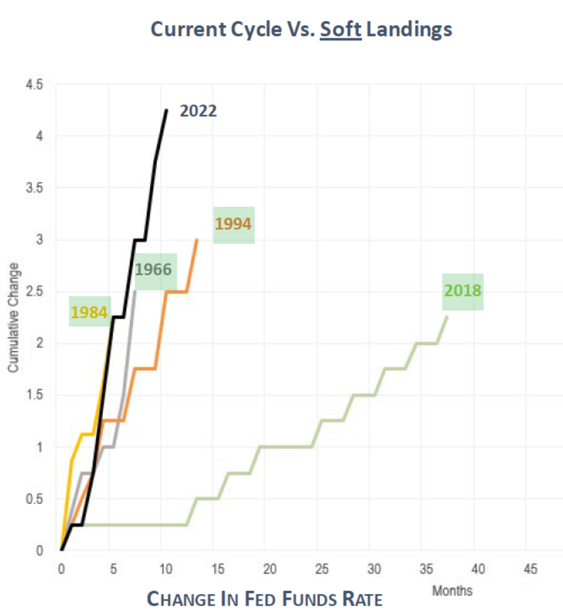
Powell & Co. seem determined to quell any meaningful stock market rally. The last thing the Fed wants is a sharp increase in the wealth effect from the stock market to quash the Fed's carved in stone playbook to achieve their "2%" inflation" target. The New, New narrative transfixing Wall Street is so-called "Quantitative Pivoting," whereby the instant QT is over, the Fed will pivot back to QE. In an ironic twist, the long-held maxim, *"Don't Fight the Fed"* has become, *"The Fed Fights Wall Street."*

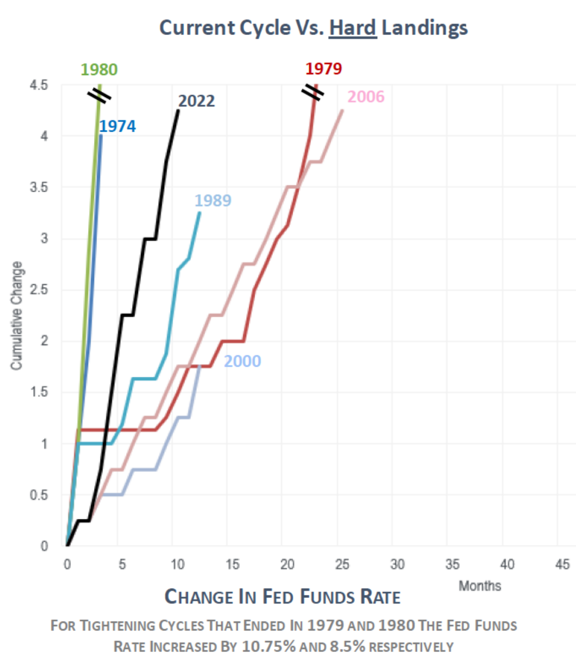
Both stock and bond markets are completely hooked on the Fed – particularly the stock market. Risk-on or Risk-off – we've seen it on our quote screens all year long – and it continues as we type this Letter. In fact, we believe it's not whether Powell & Co. engineer, a soft or hard landing - it's now all about an "soft or hard pivot." Regarding the stock market, trying to predict the next "soft or hard" Fed Pivot has almost become an investment strategy in and of itself, and it's a terrible trap, in our view.



Source: Doubleline

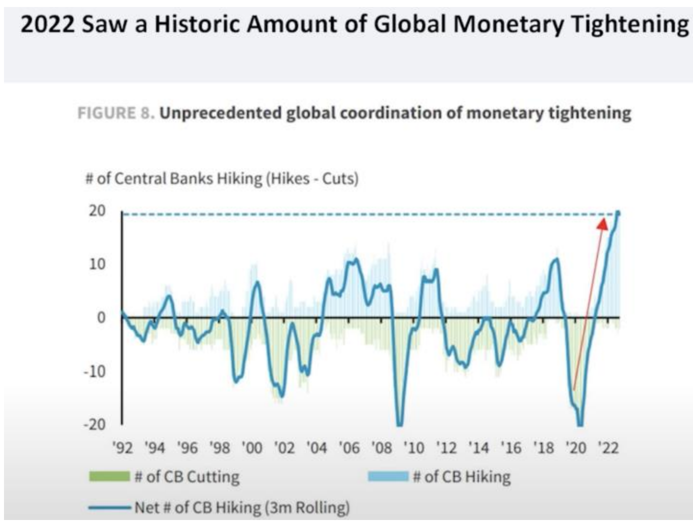
The pace of tightening has been among the sharpest in decades. Time will tell if the Fed can engineer a Goldilocks soft landing, but the Fed has slammed on the monetary breaks about as hard as it ever as – four consecutive hikes in the Fed Funds Rate of 75 basis points is unprecedented.





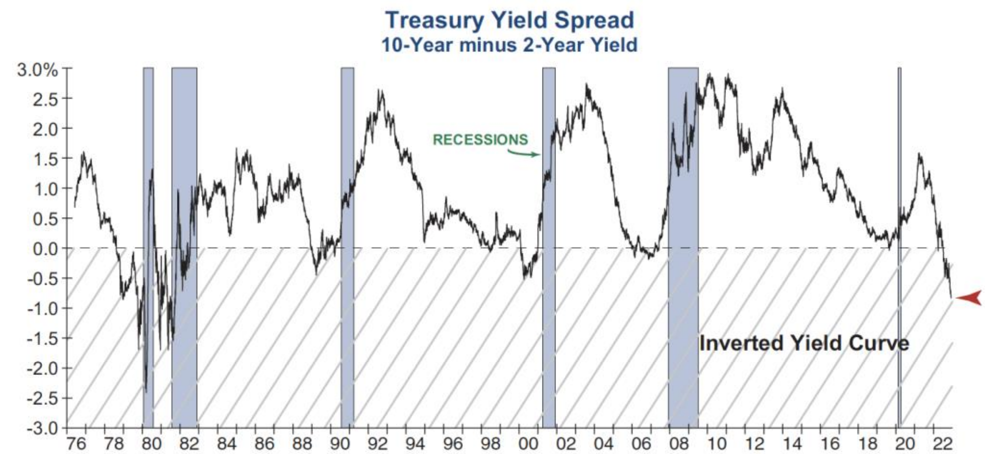
Source: Piper Sandler

Recall too that while our Federal Reserve has been aggressively tightening for seven months (with one or two smaller hikes to come), but global short rates have been going up precipitously for two years, thanks to the tightening efforts by the European Central Bank, Bank of Japan and Bank of England. While the Fed's balance sheet was reduced by a relatively tiny -$206 billion (2.4%) in 2022 - the first annual decline since Powell's first QT in 2018. If QT continues at the current pace of -$95 billion/month, such a reduction will be a significant headwind decline of *-$1.14 trillion* (13.3%) in 2023.



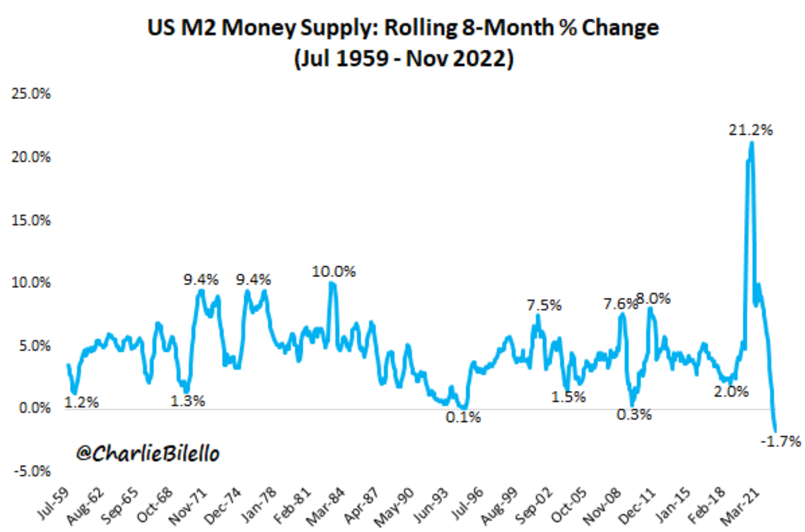
Source: Doubleline

In addition, according to the San Francisco Fed, the impact of Powell & Co.'s QT of $90 billion per month, they calculate that they effective Fed Funds Rate isn't 4.25%-4.50%, but over *6%*. All of this tightening has slammed the yield curve into inversion. Historically a poor omen for near future recession risk, albeit with significant lag times measured in many months – and note, an even worse as a timing indicator for stocks.



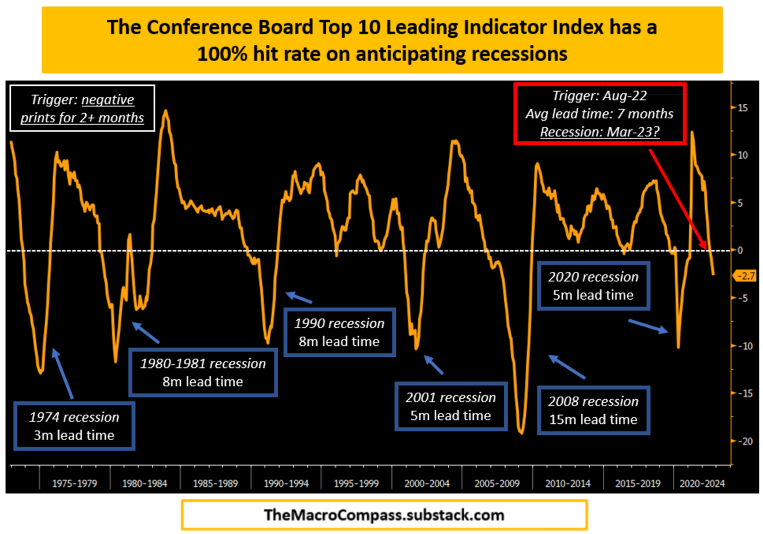
Source: Investech

Such historic tightening has crushed money supply growth to levels, again, for future economic risk.

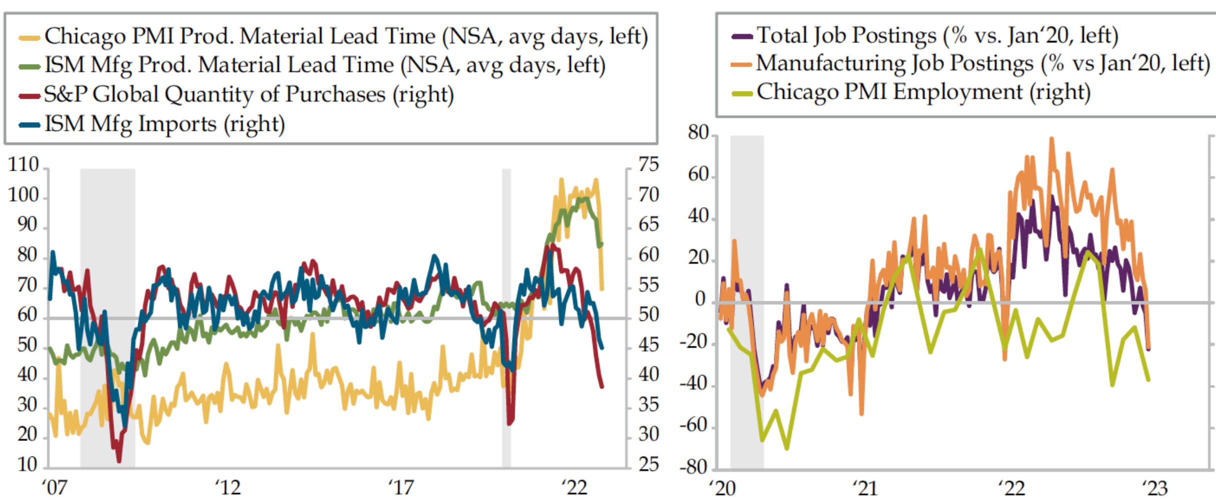


Source: Charlie Bilello

All of this tightening has started to bite in the manufacturing sector. We've chronicled the weakness of various leading economic indicators (Conference Board and various manufacturing PMIs). Even the most recent ISM Services Sector PMI has now fallen into deep contractionary levels last seen during the height of the Pandemic in 2020 – its third largest drop ever.



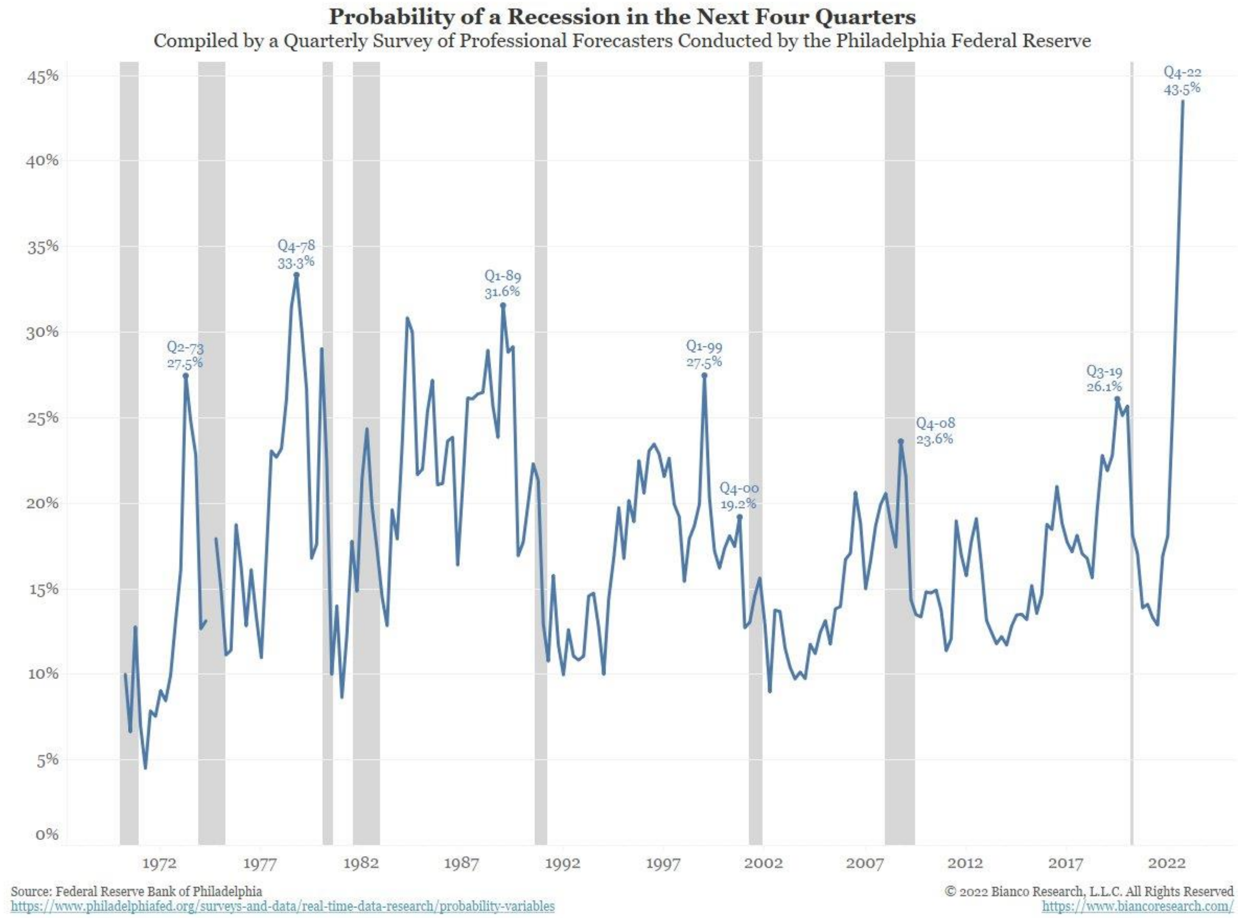
The "Lagging" Cyclical Sector Flashes Recession



Source: Quill Intelligence, ISM, ISM-Chicago, S&P Global. Recessions shaded.

Source: Quill Intelligence, ISM-Chicago, Lightcast. Recessions shaded.

The upshot of the ever-growing list of leading economic indicators flashing red recessionary risks has been slow in accumulating, but, in Wall Street parlance, is not "new news." Contrarily, finding an economist who hasn't already forecasted the "2023 Recession" is a tall order.



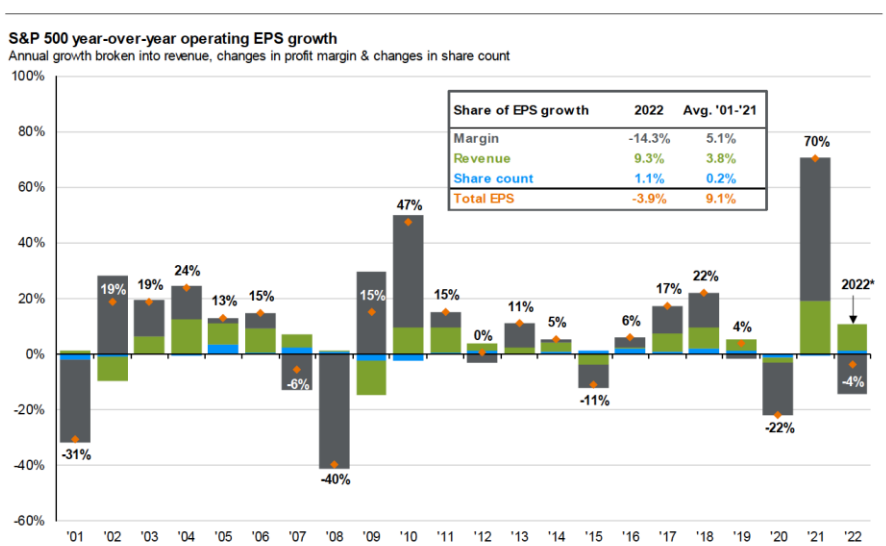
We continue to be concerned - what we worry about most - in 2023 is a soft or hard landing in corporate earnings. The U.S. consumer has thus far been resilient in their spending. Even though post-Pandemic spending has slowed, it remains positive. Given that the U.S. consumer has long represented about 70% of GDP, even if the manufacturing sector falls into a mild recession, as it did in 2015 to 2016 and 2019, the U.S. may keep the greater U.S. economy out of one. That said, any type of recessionary risk means significant risk for corporate profits. That is our continued worry.

In a recession, earnings decline for 5 quarters and on average by 30%

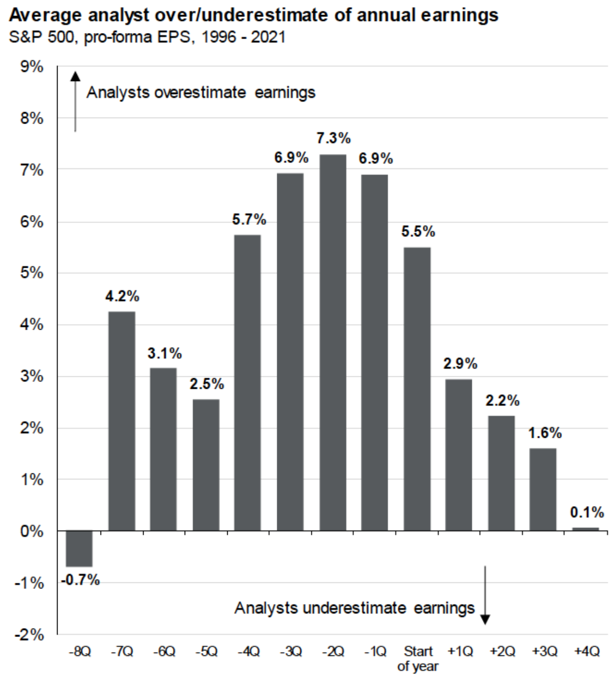
Economic Peak Month	Economic Trough Month	Quarters of EPS Decline	*EPS Change*
August-57	April-58	4	*-17,0%*
April-60	February-61	7	*-11,7%*
December-69	November-70	5	*-12,9%*
November-73	March-75	4	*-14,8%*
January-80	July-80	4	*-4,6%*
July-81	November-82	4	*-19,1%*
July-90	March-91	10	*-36,7%*
March-01	November-01	5	*-54,0%*
December-07	June-09	7	*-91,9%*
February-20	April-20	4	*-32,5%*
Average # of Quarters EPS Declined		5,4	
Average EPS Decline			*-29,5%*

TheMacroCompass.substack.com

We have considerable reason to be worried. Earning in 2022 were weak enough on much weaker peak-2021 margins, but higher cost of capital still needs to filter through the economy in 2023. Indeed, consensus estimates for 2023 haven't been cut much at all. That's not too surprising. Wall Street analysts are typically of the optimistic sort, yet according to FactSet, earnings estimates have been cut -6.5% in the fourth quarter – a considerable decline from the +31% growth in the same quarter last year. Lastly, as we have chronicled in past Letters, corporate margins boomed in 2021, but declined some last year. We suspect that margin pressure will continue to come under pressure for most of 2023.

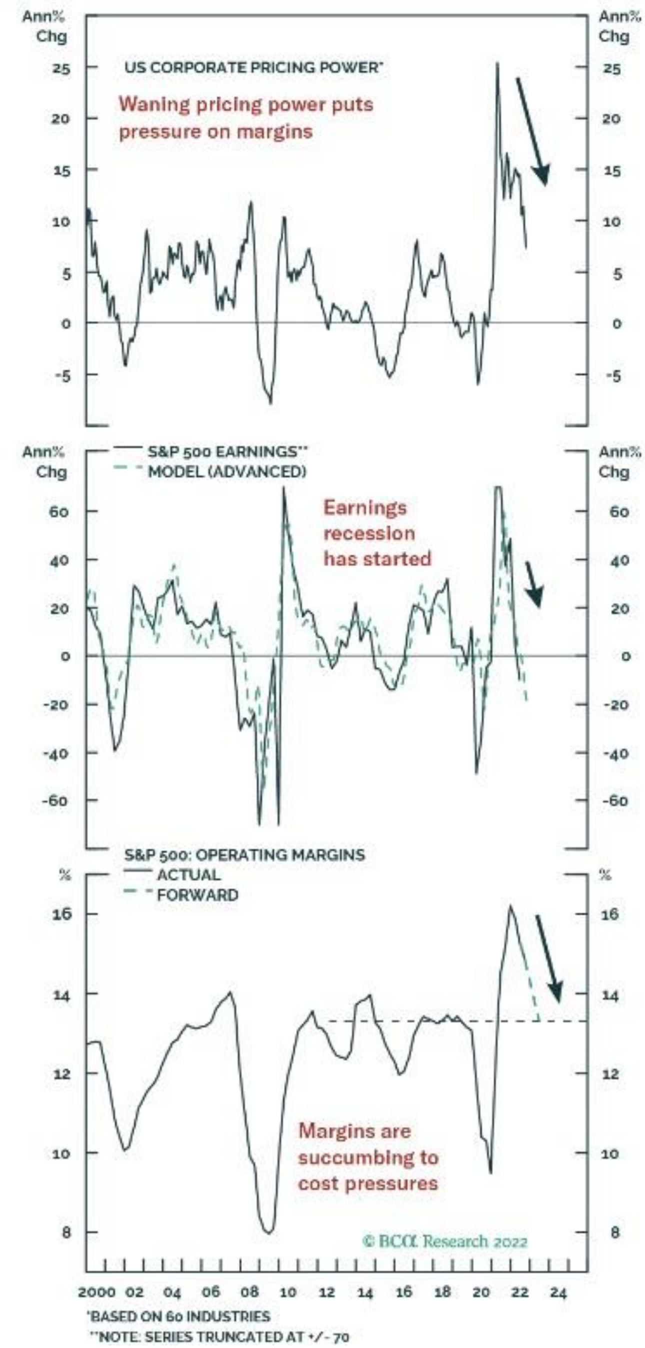


Source: J.P. Morgan asset Management

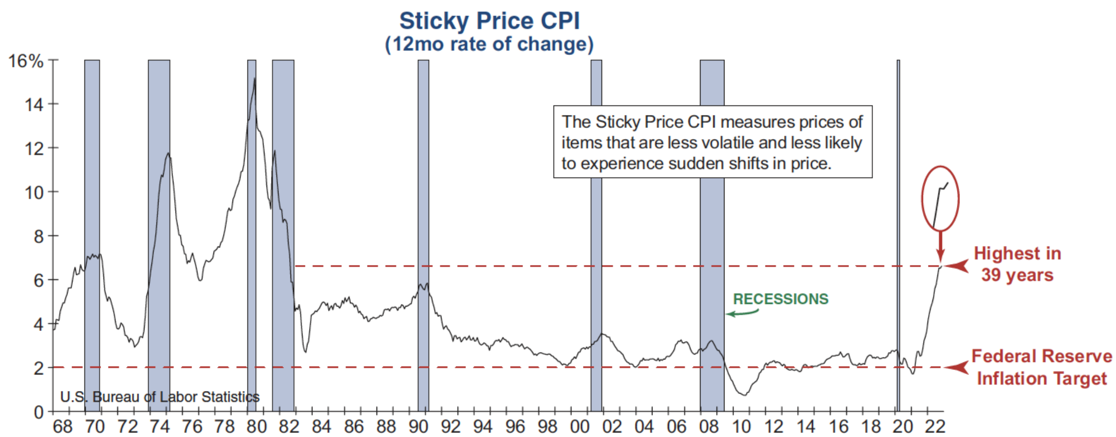


Source: FactSet Research

Profitability



As we enter 2023, Powell & Co. and his inflation warriors are getting what they want: The financial markets have been crushed, financial speculation has all but vanished (crypto, SPACs, IPOs), a bevy of leading economic indicators are pointing to a weaker economy, most inflation measures long peaked last year (some, not all), yet the Fed still faces quite the conundrum.



Source: Investech

The U.S. labor market porridge remains too hot. To get such porridge "just right" the Fed may keep rates higher for longer – and an added benefit too in killing the "Fed Put" once and for all.

2022 was all about the “P” in P/E multiples. Sharply higher interest rates crushed valuations. We suspect that 2023 will be about the “E.” Similar to our message during the bear market last year, we will continue to be patient and let the market serve up bargains.

We are pleased to announce that Steve Kaufmann has been promoted the role of Director of Business Development and Trading. Please feel free to contact Steve at SKaufmann@wedgewood-partners.com with any questions as to our strategies.

In addition, we are pleased to announce our collaboration with FOCUS Distribution. FOCUS Distribution is a marketing and distribution firm that specializes in representing money managers with unique investment solutions. FOCUS was founded by three previous partners from Miller/Howard Investments, a boutique SMA manager in Woodstock, NY. Together they have over 80 years of combined experience in the Institutional and Retail investment marketing world. To date they have raised over $15 billion dollars at major wirehouses, regional brokers, institutions and foundations. Based in Woodstock, NY the firm has additional offices in Houston, TX and Philadelphia, PA.

February 2023

David A. Rolfe, CFA
Chief Investment Officer

Michael X. Quigley, CFA
Senior Portfolio Manager

Christopher T. Jersan, CFA
Research Analyst

Top Ten Holdings

The below charts depict the top 10 holdings as of the end of the quarter.

Holdings	Percent of Net Assets
Motorola Solutions, Inc.	7.7%
Tractor Supply Co.	7.0%
Visa Inc.	6.7%
Apple Inc.	6.6%
CDW Corp.	6.6%
UnitedHealth Group Inc.	6.3%
Alphabet Inc.	5.8%
Microsoft Corp.	5.6%
Taiwan Semiconductor	5.4%
Meta Platforms, Inc.	5.0%
Total	**62.7%**

Holdings are subject to change. Current and future holdings are subject to risk.

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To determine if this Fund is an appropriate investment for you, carefully consider the Fund's investment objectives, risk factors, charges, and expenses before investing. This and other information may be found in the Fund's summary and full prospectuses, which may be obtained by calling 888.564.4517, or by visiting the website at www.riverparkfunds.com. Please read the prospectus carefully before investing.

Mutual fund investing involves risk including possible loss of principal. In addition to the normal risks associated with investing, international investments may involve risk of capital loss from unfavorable fluctuation in currency values, from differences in generally accepted accounting principles or from social, economic or political instability in other nations. Narrowly focused investments typically exhibit higher volatility. There can be no assurance that the Fund will achieve its stated objectives. The Fund is not diversified.

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