



IRONVINE

CAPITAL PARTNERS, LLC

Investors & Friends of Ironvine-

In aggregate, the businesses we own continue to make steady progress. Look-through earnings across our portfolio grew in the teens last year, and barring external shocks we expect another year of double-digit growth in 2024. We remain enthusiastic about the investments being made by proven operators at CoStar Group, Dollar Tree, Amazon, Costco, and Danaher, among several others. Public market sentiment toward large, multi-year efforts like CoStar’s launch of Homes.com seems to shift as often—and sometimes as violently—as the wind. Fortunately, these teams have presided over many investment cycles and are more focused on creating long-term value than managing quarterly optics.

The performance of the world’s largest technology companies has dominated business and market headlines for much of the last two years. We have little of value to add to the broad stroke debates and narratives, but understand both the fascination and frustration that accompanies narrowly driven markets and outsized success stories. We have been shareholders of Microsoft almost since Ironvine’s inception, owned Apple since 2017 in our Core strategy, Alphabet (Google) since 2018, and purchased Amazon for the first time in 2022. At no point did the concept of “just own the FAANGs¹” or “we are over or underweight the Magnificent Seven²” ever enter our minds. Each of these companies was purchased at different times, under different circumstances, and for reasons unique to the enduring strength of the business. We have maintained these investments through adulation and scorn, excitement and boredom, skepticism and euphoria. And while they may appreciate or decline in tandem at various points in time, ultimately each company fights its own battles and allocates its own capital. If they win or lose as a group, it will be either serendipitous or unfortunate happenstance.

While not intentionally so, the following pages are a continuation of the themes of Competitive Advantage and Stewardship we outlined in our prior two letters. With both central to the investment prospects of any long-term investor, we believe these lenses are key to evaluating the progress of businesses where we have capital at risk today and those where we might instead. Given what has been an eventful past 18 months, we wanted to share our current thinking on Amazon and Alphabet’s prospects.

In Alphabet’s case, the company has a decision to make.

It has all the resources it needs to continue being successful. It holds strong market positions in two of the largest global profit pools, arguably the most advanced team of computer scientists in the world, a footprint of technical infrastructure matched by few (if any) companies, and the capacity to invest in whatever it needs to. Its core Search business has added \$75 billion in high margin revenue since 2019, growing at a 16% CAGR, while its YouTube advertising franchise has grown at a more rapid annual clip of 20%. Google’s still-nascent Cloud business has compounded revenue at a 39% rate while reversing what

¹ FAANG stands for Facebook (now Meta Platforms), Apple, Amazon, Netflix, Google (now Alphabet)

² The Magnificent Seven consists of Microsoft, Apple, Nvidia, Alphabet, Amazon, Meta, and Tesla

amounted to \$5.6 billion in operating losses in 2020 to nearly \$2 billion in profits three years hence. The company has generated \$270 billion in free cash flow over the trailing five years and maintained a war chest of cash summing \$120 billion despite repurchasing more than \$220 billion of stock and retiring 10% of its shares outstanding.

Our long-standing thesis is that Google knows more about user intent than perhaps any other company on the planet. It dominates Search with something in the vicinity of 90% share of a global market that could be defined simplistically as every human on the planet outside of China that uses a connected device to look for information. Google is a monopoly built on user choice and remains one of the most effective means for advertisers to reach potential consumers.

So what's the problem?

We'll say the quiet part out loud. If the management of *any* business allows ideological biases to infiltrate otherwise technically superior products such that the mission of the organization becomes subordinated to dogmatic views—compromising the accuracy and usefulness of products as a result—investors should exercise caution.

Google's stated mission is to organize the world's information and make it universally accessible and useful. "People around the world turn to Search to find information, learn about topics of interest, and make important decisions. We know people rely on us so our commitment will never waver. As technology evolves, we will continue to help everyone find the information they're looking for."

Needless to say, the February launch of Google's Generative AI (Gen AI) chat and image bot Gemini failed to uphold that mission. In the days following its release, responses to queries such as what our country's founding fathers looked like created a public outcry across users and media outlets blaming Google for inaccuracies, racial bias, extreme wokeness, and rewriting history. Google paused Gemini's image generation capabilities two weeks after it launched (it's still paused), but scrutiny over its written responses to user prompts—which it didn't take down—only gained intensity in the following days. Stratechery author Ben Thompson had this to say: "Gemini won't help promote meat, write a brief about fossil fuels, or even help sell a goldfish. It says that effective accelerationism is a violent ideology, that libertarians are morally equivalent to Stalin, and insists that it's hard to say what caused more harm: repealing net neutrality or Hitler." Gemini's peak notoriety came when it told users it is not possible to say definitively who negatively impacted society more, Elon Musk tweeting memes or Hitler.

In fairness, Google *has* responded. In a memo written shortly after Gemini's defects had become widely known, Google CEO Sundar Pichai told employees that Google's mission to provide helpful, accurate, and unbiased information was sacrosanct, that Gemini's responses were unacceptable, and to expect structural changes to product guidelines and launch processes. A week later, Google Chief Business Officer Phil Schindler told investors that it's working around the clock to "fix this," that the company is doing a very deep postmortem to understand how this came to be, and that change was coming. Then just last week, Pichai announced Google was making changes to how its Responsible AI and Trust and Safety teams—who we believe are the culprits—are organized at the company. Importantly, Pichai used the memo to address the office insurrections by Google employees that led to more than 50 firings. "But ultimately we are a workplace and our policies and expectations are clear: this is a business, and not a place to act in a way that disrupts coworkers or makes them feel unsafe, to attempt to use the company as a personal platform, or to fight over disruptive issues or debate politics."

We have our own Orwellian-like sentiments stemming from Gemini's release. We'll spare you those opinions and focus on the practical implications for Google we believe are now visible from the outside looking in. Google is bloated. Its ranks have swollen more than 50% to 182,000 employees in recent years, and it looks increasingly clear to us that the inmates have been running the asylum. From a product and business perspective, if AI assistants, GPTs, and Gen AI image generation machines are going to be widely adopted, the information they produce needs to be accurate. It's too early to know if these platforms are the bridge to the future of Search, but Google *will* lose to competitors willing to put facts and data above ideology, even if they're offensive to some people. It's not too late for Google leadership to retake control and eradicate the brewing cultural rot sabotaging the company's products. Google has a decision to make. Will it return to its core of organizing the world's information above all else?

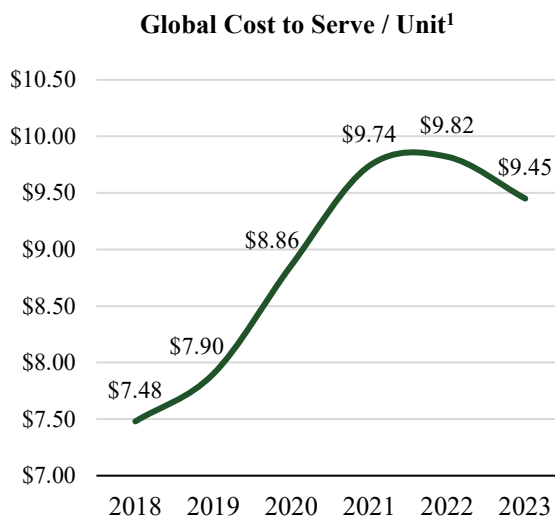
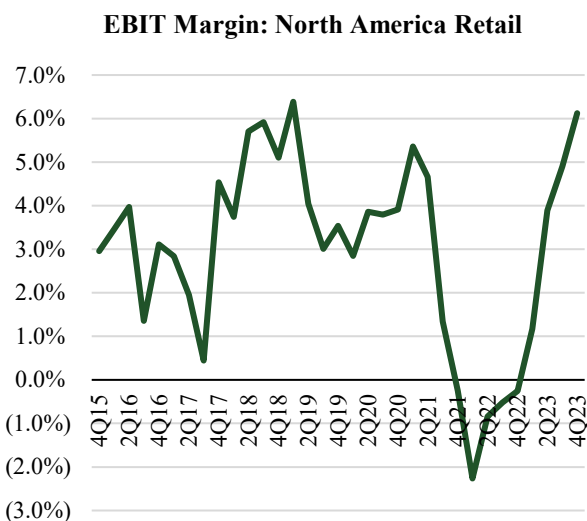
In our July 2022 letter [The Consumer Surplus Machine](#) we wrote about our recent investment in Amazon, which has since grown to be our second largest position across the firm. Our opinion at the time was that Amazon had two phenomenal businesses—its global retailing operation and its cloud computing offering—which both provide unique value to customers. As life returned to normal following the pandemic, it became clear the company had significantly overbuilt capacity in its retail delivery network. Skepticism about the project, which pushed Amazon's North American Retail earnings negative, led to questions about incoming CEO Andy Jassy's operating acumen as the company's share price fell by more than 50%. Our view was that this investment was not only prudent but would extend the company's sizeable logistics advantage and generate attractive returns for shareholders in time.

Why risk the billions of capital necessary to double the company's delivery capacity? Because the prize meant a better offering for customers. Jassy saw a future where regionalized fulfillment would reduce delivery times and lower cost to serve. Faster delivery builds goodwill and encourages customers to choose Amazon more frequently. Reduced costs allow Amazon to invest in price and service. Customers receive an increasingly fair bargain and reliable experience with each transaction. Delighting customers in growing markets is arguably the most durable way to grow enterprise value over time. Nearly two years into our Amazon investment we're increasingly confident both are in place.

Recent results have demonstrated that Amazon's vision for retail is becoming a reality. The company now has 58 same-day fulfillment facilities across the U.S. which constitute its lowest cost to serve nodes across the network. During 2023 this revamped fulfillment network enabled a nearly 70% year-over-year increase in the number of packages delivered same-day or overnight, and costs per unit decreased for the first time since 2018. Faster and cheaper is a combination we like. With warehouse regionalization largely complete, inventory is closer to customers and more easily managed, reducing working capital and improving capital efficiency. In short, customers are getting a better experience, and Amazon is making more money. Jassy summarized his thoughts on the ongoing project as follows:

"...it was very useful for us to go through what was a pretty significant change... where we built out the last-mile transportation network, the size of UPS, in 18 months. It was disruptive to get that optimized. But one of the things that was very useful was it really caused us to re-look at everything we were doing with the fulfillment network... with a beginner's eye. And we have found so many areas that we believe that we can evolve that I think will both help our cost to serve and, even more importantly, deliver faster delivery speeds for customers... I don't believe that 2018 is the North Star in cost to serve... We can keep evolving it and being better than that." – Andy Jassy

The benefits of the North American logistics effort are becoming evident as is illustrated in the charts below. Retail margins are nearing previous high-water marks, and a significant opportunity remains in cost to serve if Jassy is right that 2018 levels are achievable. In 2023 Amazon delivered more than 7 billion units. Capturing ~\$2/unit improvement would equate to a \$14 billion productivity windfall that could be reinvested or returned to equity holders. This will require solid execution over a number of years, but on a base of \$55 billion in estimated 2024 operating income, the ongoing efficiency opportunity is a big one.



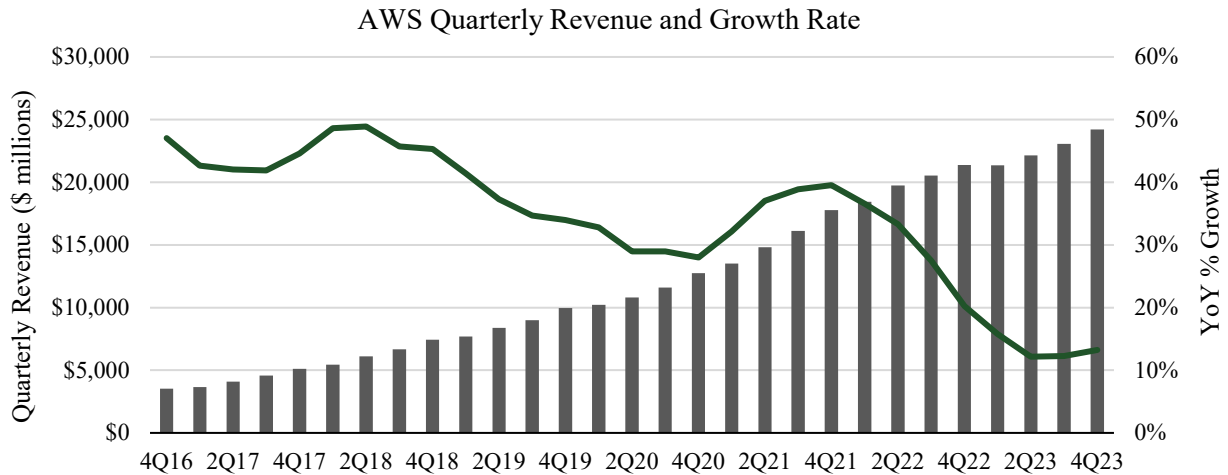
In addition to roughly \$350 billion of retail sales in the US, Amazon operates in more than 20 other markets. The UK, Germany, and Japan are profitable regions and generate more than half of international revenue, while emerging geographies like India, Brazil, Australia, Mexico, Middle East, and Africa are earlier in their journeys. The company has built its logistics know-how in “primitives,” meaning core capabilities developed in established markets for warehousing, picking, packing, and shipping can be applied in other geographies to accelerate progress. It takes years of investment to incubate new markets, but with an estimated 80% of the worldwide retail market still transacting in physical stores we are willing to be patient as they bring Amazon’s world-class systems to new corners of the globe. We remain confident the company’s best days in retailing are ahead of it.

Switching gears to Amazon’s cloud computing business, AWS, we offer two primary observations.

First, one of the core pillars of hyperscale cloud computing is the ability to flex resources on an as-needed basis. Compute demand therefore contains an embedded level of economic sensitivity, which has become more evident as the industry has matured.

The chart below shows quarterly revenue and year-over-year growth at AWS over the past seven years. As the business has matured, growth in percentage terms has naturally come down. Notice the magnitude of growth during the work from home renaissance: from Q4 2020 to Q4 2021 AWS revenue grew 40% off a base of nearly \$13 billion in quarterly revenue. Said differently, AWS grew from \$50 billion in annualized revenue to \$70 billion in 12 months!

³ Source: Company data, Morgan Stanley Research



And then, just as quickly, the world changed again. Over the course of 2022 the 10-year US Treasury more than doubled, from 1.50% to 3.75%, marking the fastest increase in interest rates in decades. Corporate confidence was shaken, several banks became insolvent, and risk capital temporarily fled earlier stage technology and venture capital. Managers of businesses—large and small—were actively looking for ways to cut unnecessary costs.

How did Amazon respond? By proactively helping customers save money. Here is Jassy on the company’s fourth quarter 2022 conference call:

“We’re going to help our customers spend less money. We are not focused on trying to optimize in any one quarter or any one year. We’re trying to build a set of relationships in business that outlasts all of us. And so if it’s good for our customers to find a way to be more cost effective in an uncertain economy, our team is going to spend a lot of cycles doing that.”

The short-term impact to Amazon was lower revenue growth in 2023 as customers reduced spending. But these concessions came with longer contract terms and another layer of goodwill, increasing the durability of the customer relationship for many years to come. With 85% of global IT spending still on-premise⁴, we applaud the team’s multi-generational approach. Growth should once again accelerate after this period of digestion.

Our second observation is that the opportunity in Gen AI is hard to handicap but provides upside optionality given AWS’ position.

At this point Gen AI contributes very little revenue to AWS. The company is investing heavily and there are some early adopters, but in the context of AWS’ ~\$100 billion in run rate revenue, AI related work is still a rounding error.

What AWS has going for it is its head start. Given that it’s one of just a few hyperscale cloud providers, Amazon was early in redirecting existing resources to meet emerging demands. This has allowed the team

⁴ Andy Jassy’s 2023 letter to Amazon shareholders

to develop a broad portfolio of customer-friendly products and services. For example, take a customer wanting to build and train a large language model capable of powering an AI agent to interact with consumers via a company’s help desk. This model could be built on Amazon infrastructure and licensed to customers who use Amazon software to integrate company-owned data. After additional training and tuning, the customer could integrate an Amazon-built “primitive” at the application layer to be deployed on the company’s website as a customer support agent. Once released, the new agent will tap into AWS compute to power each customer engagement.

This is a rudimentary description of a complex use-case, but the point is that AWS is one of a few providers offering solutions across each layer of the Gen AI stack. Choosing to build on Amazon infrastructure with Amazon tools inherently includes best-in-class security. And, as evidenced by a technology, infrastructure, and capital spending budget of roughly \$150 billion annually at the consolidated level, Amazon is setting the pace for what it looks like to take risks and innovate on behalf of customers to meet rapidly evolving demands.

As we look at the industry map, it seems reasonably likely to us that Gen AI is a wave Amazon will both enable and benefit from financially. Perhaps materially so. But at today’s stock price, we don’t have to bet the farm on it given the large, profitable, and growing business AWS has built independent of artificial intelligence.

We closed our mid-year 2022 letter suggesting “*Amazon’s annual free cash flow is likely to exceed \$50 billion a couple of years from now and grow appreciably from there.*” Almost two years into the journey, we can confidently affirm that statement. The Consumer Surplus Machine rolls on.

We remain hard at work on your behalf, having completed research projects on three new businesses in recent months—one of which we began accumulating shares of during April. We look forward to providing a deeper look into each of these companies in the future.

Thank you for your continued trust and confidence.

The Ironvine Team

April 29, 2024



	YTD 03/31/24	Annualized Returns as of 03/31/24				Cumulative	
		1 Year	3 Year	5 Year	10 Year	Inception 04/01/12	Inception 04/01/12
Ironvine Concentrated (net)	5.33%	17.37%	6.68%	13.28%	9.67%	11.44%	266.66%
S&P 500	10.56%	29.88%	11.49%	15.05%	12.96%	13.76%	369.75%
Equities	4.99%	16.85%	4.81%	11.17%	8.76%	10.54%	233.02%
Bonds	(1.43%)	(1.38%)	(3.68%)	(0.46%)	1.27%	1.23%	15.82%
Cash	1.32%	5.37%	2.65%	2.02%	1.36%	1.14%	14.62%

Performance reflects the results of the Ironvine Concentrated Equity Composite. Index returns are shown on a total return basis which assumes the reinvestment of dividends and interest income. Equities represent the total return of the S&P 1,500 equal-weighted index. Bonds represent the returns of the Bloomberg US Treasury index with 7-10 years to maturity. Cash represents the returns of the Bloomberg 1-3 month Treasury Bill index. Indices are unmanaged, do not incur fees or other expenses, and are generally not available for investment. See the Important Disclaimers at the end of this document for additional pertinent information.

Concentrated Equity First Quarter Highlights

- Returned 5.33% net of fees in the first quarter of 2024
- Added to investments in Dollar Tree (\$126) and Boston Omaha (\$14.80)
- Trimmed investment in Alphabet (\$140)

Top 10 Holdings as of 3/31/2024	
MICROSOFT CORP.	9.9%
AMAZON.COM INC.	8.9%
VISA INC.	8.2%
THERMO FISHER SCIENTIFIC INC.	7.1%
DOLLAR TREE, INC.	6.3%
COSTAR GROUP INC.	6.3%
BERKSHIRE HATHAWAY INC.	6.3%
HEICO CORP.	6.1%
ANALOG DEVICES, INC.	5.9%
MOODY'S CORP.	5.6%
Top 10 as % of Assets	70.6%

Company	Portfolio Contribution
Top Contributors - LTM 3/31/2024	
AMAZON.COM INC.	4.6%
MICROSOFT CORP.	4.3%
ALPHABET INC.	2.7%
COSTAR GROUP INC.	2.2%
VISA INC.	2.0%
Top Detractors - LTM 3/31/2024	
CATALENT INC.	(1.9%)
BOSTON OMAHA CORP.	(1.8%)
DOLLAR GENERAL CORP.	(1.4%)
DOLLAR TREE, INC.	(0.2%)
THERMO FISHER SCIENTIFIC INC.	(0.1%)



	YTD 03/31/24	Annualized Returns as of 03/31/24			Cumulative	
		1 Year	3 Year	5 Year	Inception 01/01/16	Inception 01/01/16
Ironvine Core (net)	6.32%	20.98%	6.12%	14.00%	13.72%	188.93%
S&P 500	10.56%	29.88%	11.49%	15.05%	14.19%	198.78%
Equities	4.99%	16.85%	4.81%	11.17%	10.83%	133.56%
Bonds	(1.43%)	(1.38%)	(3.68%)	(0.46%)	0.60%	5.09%
Cash	1.32%	5.37%	2.65%	2.02%	1.65%	14.43%

Performance reflects the results of the Ironvine Core Equity Composite. Index returns are shown on a total return basis which assumes the reinvestment of dividends and interest income. Equities represent the total return of the S&P 1,500 equal-weighted index. Bonds represent the returns of the Bloomberg US Treasury index with 7-10 years to maturity. Cash represents the returns of the Bloomberg 1-3 month Treasury Bill index. Indices are unmanaged, do not incur fees or other expenses, and are generally not available for investment. See the Important Disclaimers at the end of this document for additional pertinent information.

Core Equity First Quarter Highlights

- Returned 6.32% net of fees in the first quarter of 2024
- Initiated new investment in Boston Omaha (\$14.85)
- Sold Laboratory Corp. of America spinoff Fortrea Holdings (\$36)
- Trimmed investments in Dollar General (\$157), Microsoft (\$406), and Alphabet (\$140)
- Added to investment in Dollar Tree (\$126)

Top 10 Holdings as of 3/31/2024	
MICROSOFT CORP.	6.1%
AMAZON.COM INC.	5.6%
THERMO FISHER SCIENTIFIC INC.	5.2%
BERKSHIRE HATHAWAY INC.	5.0%
HEICO CORP. - CL A	5.0%
MASTERCARD INC.	4.6%
COSTAR GROUP INC.	4.5%
VISA INC.	4.2%
DOLLAR TREE, INC.	4.0%
ANALOG DEVICES, INC.	3.9%
Top 10 as % of Assets	48.1%

Company	Portfolio Contribution
Top Contributors - LTM 3/31/2024	
MICROSOFT CORP.	3.1%
AMAZON.COM INC.	3.1%
ALPHABET INC.	1.7%
COSTAR GROUP INC.	1.7%
BERKSHIRE HATHAWAY INC.	1.6%
Top Detractors - LTM 3/31/2024	
CATALENT INC.	(1.9%)
DOLLAR GENERAL CORP.	(0.7%)
DOLLAR TREE, INC.	(0.2%)
THERMO FISHER SCIENTIFIC INC.	(0.2%)
FORTREA HOLDINGS	(0.0%)



Important Disclaimers

We recently updated our Form ADV, Customer Relationship Statement, and Privacy Policy. There were no material changes to these documents, but if you would like to review a copy of them, please visit our website at <https://ironvinecapital.com> or contact us at 402-916-1702.

Reported performance figures represent an average, or composite, of our progress. Individual returns will vary based on the timing of your investment with us, fee differentials, or other account-specific circumstances. Client reporting, including positioning and performance, is sent under separate cover.

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Ironvine Capital Partners, LLC (Ironvine) is an independent registered investment adviser registered with the United States Securities and Exchange Commission. The firm definition includes all assets that are managed by Ironvine.

The Ironvine Concentrated Equity Composite includes all accounts over which Ironvine deems to have discretion and that follow the composite strategy. Ironvine Concentrated Equity seeks to earn above average returns by investing primarily in a concentrated portfolio of global issuers in all facets of capital structures, including and not limited to common and preferred stocks, debt instruments, convertibles etc.

The Ironvine Concentrated Equity Composite was created on December 1, 2013, with an inception date of April 1, 2012. The strategy does not seek to directly track or compare itself to any particular equity benchmark, but the composite is compared against the total return of the S&P 500. The benchmark includes 500 stocks representing all major industries of the economy. Ironvine Concentrated Equity employs a total return strategy and the S&P 500 is provided as it is the most widely recognized alternative to any actively managed mandate amongst global investors. Past performance is not indicative of future results. All results are calculated in US Dollars and include reinvestment of dividends and other earnings.

Performance presented prior December 1, 2013 occurred while the Portfolio Management Team was affiliated with a prior firm and the Portfolio Management Team members were the only individual(s) responsible for selecting the securities to buy and sell. A review of the performance record for compliance with the portability requirements of the GIPS standards was completed by an independent accounting firm. The verification and performance examination report are available upon request.

Prior to October 2017 the composite was named "The Ironvine Composite."

The Ironvine Core Equity Composite includes all accounts over which Ironvine deems to have discretion and that follow the composite strategy. Ironvine Core Equity seeks to earn above average long-term returns by investing primarily in a portfolio of common equity securities with a particular focus on companies that have the ability to generate high and sustainable returns on invested capital.

The Ironvine Core Equity Composite was created on 12/29/2017, with an inception date of January 1, 2016. The strategy does not seek to directly track or compare itself to any particular equity benchmark, but the composite is compared against the total return of the S&P 500. The benchmark includes 500 stocks representing all major industries of the economy. Ironvine Core Equity employs a total return strategy and the S&P 500 is provided as it is the most widely recognized alternative to any actively managed mandate amongst global investors. Past performance is not indicative of future results. All results are calculated in US Dollars and include reinvestment of dividends and other earnings.

Performance presented prior January 1, 2017 occurred while the Portfolio Manager, Richard L. Jarvis, was affiliated with a prior firm. Mr. Jarvis was the only individual responsible for selecting the securities to buy and sell at the predecessor firm and was a primary decision maker in that capacity at Ironvine until his retirement on 12/31/20. This performance record was incorporated into the Ironvine Core Equity Composite in compliance with the portability requirements of the GIPS standards. A copy of the Portability report is available upon request.

Ironvine Capital Partners ("Ironvine") claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS® standards. Ironvine has been independently verified for the periods 12/1/13– 12/31/22. A firm that claims compliance with the GIPS® standards must establish policies and procedures for complying with all the applicable requirements of the GIPS® standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS® standards and have been implemented on a firm-wide basis. The Ironvine Concentrated Equity Composite has had a performance examination for the periods 12/1/13– 12/31/22. The Ironvine Core Equity Composite has had a performance examination for the periods 1/1/17– 12/31/22. The verification and performance examination reports are available upon request.

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Results are based on fully discretionary accounts under management, including those accounts no longer with the firm. To be included in the composite an account must have a minimum value of \$25,000 at the beginning of a month. The U.S. Dollar is the currency used to express performance. Policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request. Returns are presented net of management fees and commissions and include the reinvestment of all income. Net of fee and commission performance was calculated using actual management fees and commissions. The investment management fee schedule for the composite is tiered, at 1.0% for relationships less than \$10 million, 0.90% for relationships between \$10 million - \$25 million, 0.80% for relationships between \$25 million - \$50 million, 0.70% for relationships between \$50 million - \$100 million, and 0.60% for relationships above \$100 million (each tier indicated as an annual percentage charged quarterly). Actual investment advisory fees incurred by clients may vary. The collection of fees produces a compounding effect on the total return net of fees. For example, a portfolio that earned 8% annually for ten years would result in a cumulative return of 115.9% before investment management fees and 96.7% net of such fees, assuming a 1.00% fee per year.

The firm's list of composite descriptions is available upon request. Effective 1/1/2017 Ironvine merged with Saddle Road Partners, LLC (Saddle Road). The surviving entity is Ironvine Capital Partners, LLC. For more information about any of the above contact Paul Penke at 402.916.1702 or ppenke@ironvinecapital.com. No part of this article may be reproduced in any form, or referred to in any other publication, without express written permission.