



First Quarter 2024

How Maradona moves markets

"The ball always weighs the same, the pitch is always the same size. It's about what you do in that space."

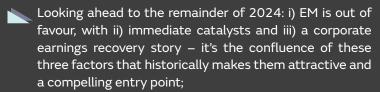


Dear Investors and Friends,

In March, we celebrated a significant milestone: the third anniversary of the launch of our Emerging Markets Active Engagement strategy. Our results are pleasing – the strategy has returned +3.45% against our benchmark's -14.06% return – but perhaps more importantly, stock selection contributed more than 75%. This aligns neatly with our bottom-up approach that leans heavily on material engagement outcomes. Such results, powered by a high stock selection contribution, affords us the confidence to invest with conviction in a disciplined and repeatable way. As a reminder, our UCITS fund launched on 29 July 2022 and has now completed 21 months.

Executive summary





As the global disinflation trend returns, expect interest in emerging markets to increase;

1Q'24 performance was negatively impacted by stock selection in India and China, but sources of strength emerged in Brazil, South Korea and Vietnam;

Portfolio latency is high: pent up hidden value to be unlocked by our Process for Active Corporate Engagement (PACE) approach - this represents a predictor of future returns.

Performance snapshot as at 27.03.2024

	March 2024	3 months	1 Year	Since Inception*	SI Annualised
GIB AM Emerging Markets Active Engagement Fund	2.65	-0.71	10.31	19.45	11.20
MSCI Emerging Markets	1.81	1.70	7.45	8.63	5.07
Relative Performance	0.84	-2.41	2.85	10.82	6.13

No representation is being made that any account will or is likely to achieve profits or losses similar to those shown. Past performance is not indicative of future performance. *Inception Date: 29.07.2022



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Performance data source: Dimension / MSCI. Returns data provided refers to Class I2 USD (C) Non Distributing only, and is based upon NAV net of fees. Class I 2 USD (C) of the Fund is reserved to institutional investors and is subject to an initial subscription of USD 500,000 or more (or the equivalent in another currency). The benchmark is MSCI Emerging Markets Index. The Sub-Fund is actively managed by reference to and seeks to outperform the MSCI Emerging Markets Net Total Return Index. The Sub-Fund is mainly exposed to the issuers of the benchmark, however, the management of the Sub-Fund is discretionary, and will be exposed to issuers not included in the benchmark. The Sub-Fund monitors risk exposure in relation to the benchmark however the extent of deviation from the benchmark is expected to be material.



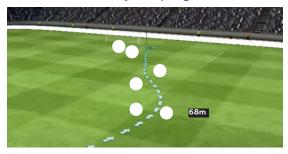
Market review and outlook – what surprised us, what didn't & where next?

Diego Maradona means many things to many people. Probably less celebrated though, is his impact on monetary policy and the role of financial markets. No doubt you've seen Maradona's now (in)famous 'Hand of God' goal in the 1986 World Cup Quarter Final against England – the 5ft-5in midfielder rising above the goalkeeper to punch the ball into the net with his outstretched fist. But in many ways, his second goal to take Argentina into an unassailable 2-0 lead was more remarkable. FIFA have since labelled it the 'Goal of the Century'.

Receiving the ball in his own half, Maradona sprinted 60 metres, beating half of England's team before passing the ball into the English goal. But extraordinarily, Maradona achieved this not by jinking his way around the English defenders. Instead, he ran virtually in a straight line. How was this possible? The answer is that the English defence reacted to what they expected Maradona to do. Because they expected Maradona to pivot right or left, he was able to drive straight on. The defenders essentially moved out of his way.

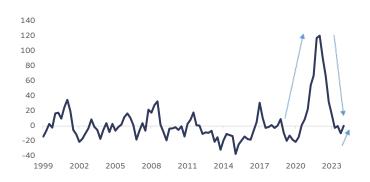
Lord Mervyn King, Governor of the Bank of England (2003-2013), argues that monetary policy works in a similar way: "Market interest rates react to what the central bank is expected to do. In recent years, Central Banks have experienced periods in which they have been able to influence the path of the economy without making large moves in official interest rates. They headed in a straight line for their goals. How was that possible? Because financial markets did not expect interest rates to remain constant. They expected that rates would move either up or down. Those expectations were sufficient – at times – to stabilise private spending while official interest rates in fact moved very little*."

Chart 11: Maradona's journey to goal



Fast forward to March 2024 and the analogy lives on. Markets have undergone a sharp recent correction as earlier expectations of 'immaculate disinflation' now seem fanciful. The narrative from a few months ago pointed to an expectation of the disinflationary pulse of 2H'23 to continue, with the US leading the disinflationary path. January 2024 consensus assumed that by December 2025, Fed rates would be below 3.5%. However, the opposite has materialised. US inflation has stalled over the last 3 months, whilst disinflation has strengthened in markets elsewhere. Talk has moved to no potential Fed cuts this year – or even a hike – despite policy rates in most jurisdictions meaningfully higher than likely natural rates.

Chart 22: G4 Inflation Surprise Index – an inflection?



But Central Banks remains steadfast in their disinflation goal. As the USD strengthens, financial conditions tighten and non-USD assets correct, will these reactions to expectations of what the Fed *might* do next help in turn solve the disinflation pulse? In essence, as markets fall and long duration assets de-rate, are we the proverbial English defenders second guessing Maradona's next move? With hindsight, are we providing the necessary reactions to enable the next 'Goal of the Century' to be possible? Time will tell.

Whilst our focus is predominantly bottom-up in nature, we do acknowledge the importance the outlook for US rates, the USD and global liquidity plays for emerging markets assets. Fortunately, there are signs that the inflation playbook of 2024 could mirror 2023: 1H stronger than the expected inflation pulse, followed by much faster than anticipated disinflation in 2H. Commentators point to moderating US wage inflation, producer price inflation (PPI), import prices and China's role in exporting disinflation globally as contributing factors. Were this to play out, the

^{*}Monetary Policy: Practice Ahead of Theory, Lord King (2005)

¹Fifa TV, the white circles denotes an England player

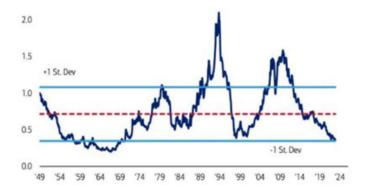
² Bloomberg 2024

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current market set up would be an attractive buying opportunity for emerging market assets.

But as we've argued before, not all emerging markets are equal today. A prospect shared with us a helpful chart (Chart 3) which points to the significant underperformance emerging markets have experienced against developed peers since 2010. This underperformance began on 1st October 2010 - a time when DVDs, digital cameras and Manchester United dominance were ubiquitous - and has resulted in emerging markets losing 2/3 of their relative value over that period. Clearly, the impact of miserable Chinese equity market performance has had an outsized effect - EM ex China returns point to a slightly different story - but the disappointment still stands. The USD bull market, draining liquidity and a deflating global economy were powerful headwinds. Whilst EM vulnerabilities were nowhere near '90s crises levels, the requirement of more local revenue to convert into USD equivalents and reducing USD returns on foreign assets were hurdles too high to contend with. But can this change?

Chart 33: EM equities vs. US equities at 50yr lows (relative price in USD)



For us, a focus on markets with adequate domestic structural reform agendas remains key. This is particularly important as many emerging markets are more restricted to leverage global cyclicality than in the past (unit labour cost arbitrage is less compelling). Emerging markets have an important onus on raising domestic and non-tradeable sector productivity - of which, there will be winners and losers. As a result, this points to economies armed with critical characteristics. Large, deeply integrated domestic markets; productivity driven reform agendas; evolving monetary sovereignty; falling (geo)political risk premia; high primary deficits and independent sources of liquidity.

This introduces India, Saudi Arabia, Mexico, Brazil and Indonesia as core markets within our portfolio. South Korea and **Taiwan** provide a deep waterfront of intangible assets that align and power the accelerated evolution of technology and the Information Age - irreplaceable 'Tech Corridors' embedded in the transformative Artificial Intelligence ecosystem. Such portfolio positioning informed our travel programme over 1Q'24 with Research & Engagement trips to the majority of these markets.

India stands out as one of the most compelling investment stories globally. As we've argued before, it trades at a premium to other emerging markets for good reason. Value can be uncovered through a deeper understanding of the strength of corporate fundamentals and the predictability of Return on Equity growth in the context of its size. Beyond this, further upside can be framed through a continuation of the government in upcoming elections, dramatically reduced external vulnerabilities, likely changes in the government's balance sheet, a growing domestic equity saving pool, a fast-evolving deep tech sector, competitive federalism and rapid urbanisation. This sets in motion an upcoming private sector capex cycle to drive a 20%+ earnings CAGR over the next 5 years.

Saudi Arabia continues its transformational journey with sweeping social and economic reforms, ~\$1tn gigaproject commitments and rapid demographic shifts. Political will behind reforms is high and the continued momentum should extend over the next decade. Social reforms are changing the domestic landscape and fuelling all time high consumer confidence - these include increasing women's rights and labour force participation, easing social restrictions and legal reforms to support business conditions. Brazil and Mexico continue their path of macro-adjustment and rebalancing particularly on inflation.

As we discussed here, Brazil's economy is largely misunderstood. Mistakenly viewed as a commodity focused market, this overlooks its characteristics as a hub for growth in digitalisation, e-commerce, software and green technology. A lower cost of capital, material valuation discount and improving market profitability set the stage for robust medium-term performance. Our trip to South Korea and Taiwan uncovered a wide array of compelling bottom-up investment opportunities (see later). Both are



positioned well cyclically – in the vanguard of the regional and global export pickup as they benefit from the global AI investment theme. A lower cost of capital, material valuation discount and improving market profitability set the stage for robust medium-term performance.

With the threat of wider EM performance negatively affected by the value of intangible assets rising at the expense of more conventional and tangible capital, both markets stand out as beacons of intellectual property (IP) and human capital potency. Implied expectations and valuation multiples appear attractive versus their US AI-linked peers. **South Korea** is further supported by a politically engineered 'Value Up' programme (which can be compared to Japan's) aimed at addressing the 'Korea discount' through incentives to improve corporate profitability, ROEs and valuation multiples. This can be a powerful multiyear investment story, if implemented comprehensively.

For more information, please read our in-depth conclusions from these markets, which can be found <u>here.</u>

As we close out 1Q'24 and look forward to the year ahead, the case for stock picking in emerging markets continues to get stronger. Limited meaningful cyclicality (as we move to a relatively slower growth world), compressed economic and capital market cycles, dramatic productivity shifts, sharp (and often violent) style rotations set the scene for wide stock dispersion. This creates broad and distinctive opportunities for stock picking and bottom-up processes.

Despite market rotations rapidly intensifying, Maradona's words provide us some comfort:

"The ball always weighs the same, the pitch is always the same size. It's about what you do in that space."

How did we perform and why?

The Fund returned -0.71% (USD) over 1Q'24. This underperformed the MSCI Emerging Market Index's return of 1.70% by -2.41ppt. Since inception, the Fund has delivered a net return of 19.45% against the Index's return of 8.63%. Outperformance over that period stretches to 10.82ppt. The good start places the Fund in the top decile against Emerging Market peers since inception.

Perhaps more pleasing for us, is how those returns have been generated. Our bottom-up process of investing has long pointed to relative returns generated predominantly by stock selection rather than asset allocation. This is an important feature for us – since it underlines an investment process that is both robust and repeatable. It further allows us to invest with conviction in a disciplined manner. The chart below illustrates this. Since inception, stock selection has generated 61% of our relative returns on a sector basis. From a geographic perspective, the contribution sits at 67%.

Chart 4 & 5: Drivers of relative outperformance: stock selection Chart 4⁴: Georgraphies



Chart 55: Sectors



Over Q1'24, our underperformance stemmed from weak stock selection in India, China and within the Technology sector. Our Indian attribution – after a particularly strong 2023 – was negatively impacted by the performance of Polycab India (see below) and Cyient which experienced profit taking after 100%+ returns through 2023. In China, our exposure to Hundsun Technologies hampered performance. Within Technology, our underweight exposure to TSMC detracted more than 1ppt of relative performance following its strong momentum as a key beneficiary of AI-linked investments.

We remain comfortable with our positioning in the semiconductor space and have added to our holdings post research trips to Korea and Taiwan - our upcoming insight pieces will explore this in further detail.

On the positive side, strong stock picking in Brazil, South Korea and Vietnam supported performance. Nu Holdings (Brazil | Financials - see later), HPSP (Korea | Technology see later) and Leeno Industrial (Korea | Technology) performed strongly over the quarter.

Of our top two contributors, one operates in Brazil (Nu Holdings) and the other in South Korea (HPSP). Our biggest detractor was from India (Polycab India).

Nu Holdings (Brazil | Financials | +43.5%) is a leader among global digital banks, serving nearly 90 million customers in Brazil, Mexico and Columbia with minimal physical infrastructure, leveraging remote work to ensure operational efficiency. This strategy has resulted in an exceptional Net Promoter Score (NPS) over 90, demonstrating unparalleled customer satisfaction and operational profitability. Thanks to its cost advantage and superior user experience, the bank is now expanding beyond credit cards and consumer loans to penetrate markets that have historically been dominated by legacy players, including the payroll loan sector.

We believe that with a clear cost advantage and a vast addressable market, the company will be able to continue reinvesting capital at high rates of return for the foreseeable future. In the longer term, our team strongly believes that the bank will be able to penetrate markets outside Brazil, where technological advancements and a customer-centric culture will enable it to thrive in new markets.

Nubank is a relatively new addition to our portfolio (4Q'23) but we have already taken initial engagement steps which have been well received by the company. We spent time with the management team in Sao Paulo in March to walk through our suggestions. Despite being a relatively large and well-covered company, we recognize several areas for improvement particularly when it comes to corporate governance structure, enhancing the disclosure of certain operating metrics and establishing clear targets for addressing sustainability topics.

HPSP (South Korea | Technology | 24.7%) is a South Korean semiconductor equipment supplier that specializes in high-pressure hydrogen annealing technology. This process corrects defects in the high-k materials that are adopted by the most advanced chipmakers. This gives it direct exposure to the growing trend of semiconductor miniaturization. HPSP is a monopolistic owner of the technology, which creates high barriers to entry and resultant strong pricing power.

The company has historically focused on the logic foundry market, although future growth aligns to the memory space where the adoption of high-k materials is low and expected to increase significantly. This, combined with the continued miniaturization of processes in the logic foundry market, provide significant runway for the company to grow with the market and compound its capital at high rates of return.

Our initial due diligence on the company began in late 2022. As our due diligence progressed, the strength of their IP and the quality of the management team impressed us increasingly. Discussions with several industry experts, customers and competitors confirmed our thesis regarding the uniqueness of the high-pressure hydrogen annealing technology, HPSP's monopolistic position and the company's economic moat.

Despite superior technology, high profitability and a durable growth profile, the company was trading at a close to 50% discount to relevant global peers, which in our view was unjustified and primarily driven by the lack of business understanding among investors. Our Engagement Plan for the company centers on reducing their implied cost of capital (and valuation discount) by enhancing investor relations communication, corporate governance structure and introducing Sustainability and Net Zero frameworks. In Korea, companies with superior communication, transparency and best in class governance can be rewarded by premium valuations. HPSP's experience with Capital Markets is relatively short (since its IPO in 2H 2022), however we are very encouraged by the level of management receptiveness to ideas that can be value enhancing for the business.

Polycab (India | Industrials | - 29.1%) is a leading manufacturer of Cables & Wires in India. It has a 25%+



brand strength, and lower pricing due to scale economics. Polycab's short-term runway is driven by its dominance in the organized cables market, the doubling of its dealer distribution reach within the next 5 years, the diversification of its product portfolio which should also lead to a margin uplift, and finally through working capital unlock. Source of value unlock focused on driving free cash flow higher through working capital unlock, as well as improved governance, disclosure and the implementation of ESG incentives and KPIs.

Having been one of our top performers since inception, the Polycab share price encountered difficulties in January. The Income Tax Department of India alleged they uncovered INR 18bn of revenue booked in personal records and INR 2bn of taxes outstanding. The allegations were refuted by the Company who are now undergoing a legal process to prove their innocence. Such tax raids are common in India, particularly in election year, with several case studies pointing to sharp recoveries once the cases are settled.

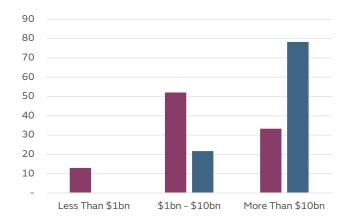
However, the case will take time to reach a conclusion with limited visibility in the near and medium term. As outsiders to the company, it is difficult to determine the veracity of these allegations. In such moments, we must rely on the Company's history, management integrity, publicly available information and the opportunity cost of holding a position with such a binary outcome. As a result, we exited the position on share price strength but remain close to the business and open to re-entry as clarity emerges. Aside from this tax related uncertainty, the business fundamentals remain outstanding.

Our characteristics and exposure

Chart 6: Our characteristics and exposure (Portfolio vs MSCI Emerging Markets Index) ⁶

	Fund	Benchmark	
Return on Invested Capital	13.86	10.08	
Return on Equity	24.87%	15.65%	
Return on Assets	10.30	6.58	
Net Debt / EBITDA	-3.01	0.29	
Net Income Growth	39.66	-4.56	
Free Cash Flow Yield	2.53	3.52	
Dividend Yield	0.67	0.96	
Forward P/E Ratio	18.15	11.93	
Forward EV/EBITDA	12.00	8.40	
Active Share	94.33		
Tracking Error	7.29%		
Volatility	18.88%	17.90	
Number of Securities	32		

Chart 7: Market cap splits (Portfolio vs MSCI Emerging Markets Index) 7



Portfolio latency – how engagement drives results?

We are particularly excited about the inbuilt latency that exists in the portfolio today. We were successful with 7 Engagement Action Points in Q1'24 which each having an impact on improving the Compounding Power or reducing the market implied Cost of Capital for their respective business.

Some highlights include:

One of our portfolio companies, a gym operator in the Middle East, has announced approval of a buyback program in order to secure shares for its inaugural long-term incentive program. This is important since the company's high churn rate among top executives had been one of the key concerns identified throughout the due diligence process, and therefore a key area of focus of our engagement.

A market leader in the **building materials space in India** offered another case of successful engagement. Sustainability KPIs have been introduced into management variable compensation, an investor day is to be organized later this year, and the company has shown a clear intent to bolster its IR function via the addition of a specialist from a well-respected broker. This, alongside corporate governance improvements which include a commitment to split the Chairman-CEO position underpin our confidence in the merits of our long-term approach to investing when combined by our friendly and collaborative style of engagement.

Another of our businesses, a Mexican pharmaceutical company, announced its first dividend payment. This was well received by the market and highlighted the improving profitability story underway.

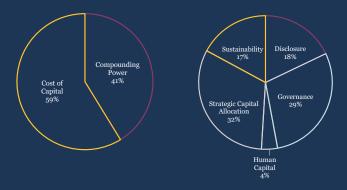
It was satisfying to see one of our portfolio companies, a large Chinese E-commerce player, announce a significant buyback program as part of a larger and revamped capital allocation strategy. This case was particularly validating for our strategy of friendly but persistent engagement, since it was an issue we had raised multiple times over the last 2 quarters. These actions had an immediate impact on the company's share price, rising as much as 18% on the day.

Lastly, one of our Brazilian technology companies, have announced it will be creating a Sustainability Committee with representation from senior management. This is an Action Point that we have frequently returned to with them. We stressed the importance of a Committee for managing material Sustainability risks, aligning it with long-term strategy and bringing disclosures in line with best-in-class peers.

Looking ahead, there remain 215 outstanding Action Points across the portfolio, which we believe can help drive future incremental returns. Of these Action Points, 59% are focused on reducing the market implied Cost of Capital whilst 41% aim on improving the business' Compounding Power. 29% of our Action Points center on improving Governance; 32% on Strategic Capital Allocation; 17% on incorporating Sustainability as a source of returns, 17% on improved Disclosure and 5% on material improvements in Human Capital.

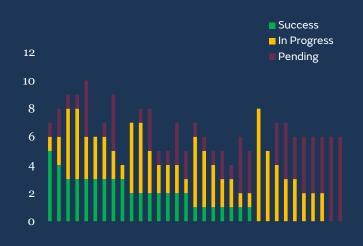
257 Action Points raised since inception

Chart 8: Engagement points8



The chart bellows illustrates the remaining Action Points we have for our 32 companies in the portfolio. 51 Action Points have been successfully resolved (shaded green) however, the yellow and purple shaded areas point to the outstanding unresolved Action Points that represent unaccounted inbuilt latency.

Chart 9: Engagement latency: outstanding suggestions in our current portfolio 9



As these bars turn incrementally green over the subsequent months and years ahead, this can be a strong predictor of future shareholder returns to come.



Portfolio update – new additions

Kanzhun Ltd (China | Technology)

"A leading online recruitment platform focused on matching untapped blue-collar workers with SME markets"

Investing in China has become increasingly challenging. Each week brings a fresh wave of news, typically with a negative tilt, impacting the outlook and sentiment toward the Chinese equity market. The prevailing pessimism is so strong that it often obscures certain sectors and companies that consistently demonstrate robust growth and strong financial performance. These resilient businesses seem to defy geopolitical noise and remain insulated from direct geopolitical risks.

One such company is Kanzhun (also known as 'Boss Zhipin'), the largest online recruitment platform in China, boasting 42 million monthly active users. Kanzhun stands out for its innovative approach - the "direct recruitment model" - which integrates two-way communication and two-sided recommendations into the online recruitment process via a mobile platform. This unique feature, combined with its extensive scale and network effects, sets Kanzhun apart from its peers and serves as a powerful competitive advantage.

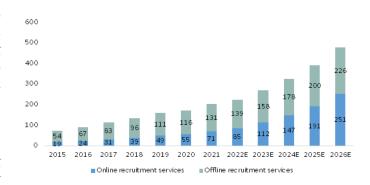
Unlike other online recruitment platforms, Kanzhun deliberately targets blue-collar employees and caters to traditionally underserved SME employers. These segments are poised for substantial growth in the coming years. Despite the broader economy weakness, Kanzhun's business execution remains strong, yet it continues to be undervalued given its reinvestment runway and returns profile.

Chart 10¹⁰: blue-collar recruitment services market expected to experience the fastest increase in online penetration



China's online recruitment market is structurally attractive and growing. Job seekers and employers are increasingly choosing online job-seeking and recruitment journeys. According to CIC, China's online recruitment market size is expected to increase to CNY250.8bn in 2026, representing a CAGR of 28.6% between 2021 and 2026.

Chart 11¹¹: China recruitment service market growth by online/offline composition (RMBbn)



Our interest in Kanzhun stems from its distinctive, assetlight business model—the "direct recruitment model". This innovative approach seems poised to win traditionally underserved markets, particularly SMEs and blue-collar workers. By bridging the gap between employers and job seekers, Kanzhun has carved out a niche that promises substantial growth.

Despite a promising start with its IPO at the end of 2022, Kanzhun has faced market headwinds. While it continues to achieve healthy user growth and enhance profitability, its valuation has undergone a significant derating. Currently, it stands at approximately 20x forward P/E. The market's perception seems to overshadow the company's solid fundamentals. The direct recruitment model, combined with its focus on underserved segments, positions Kanzhun for long-term success.

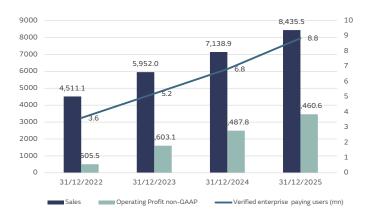
Chart 12¹²: Kanzhun valuation –20x forward P/E ratio despite high visibility of earnings, potential to double profits by 2026 and optionality value thanks it's net cash pile (20% of market cap)

^{10 &}amp; 11 CIC Report estimated (Dec 16, 2022)

 $^{^{\}rm 12}$ Source: Bloomberg and GIB AM estimates 2024



Chart 1313: Kanzhun penetrating its niche market (bluecollar workers and SMEs) and growing despite difficult macroeconomic conditions in China



Kanzhun holds approximately \$12.6 billion worth of net cash on its balance sheet, which constitutes around 20% of its market capitalization. This substantial cash reserve not only ensures safety but also provides strategic optionality for capital allocation and business growth. We believe that Kanzhun has several untapped avenues for growth, particularly in the recruitment market adjacency, including potential foreign expansion.

Alchip (Taiwan | Technology)

"A leading Asian semiconductor design service provider focused on application-specific integrated circuit (ASIC) chip development linked to Artificial Intelligence"

Our team has closely followed Alchip for the past 18 months. During this time, we took the necessary time to gain confidence in the strength of their business model and competitive advantages. Alchip's business model may sound relatively simple and straightforward: it essentially

serves as an outsourcing partner to large customers, assisting them in designing advanced chips, particularly those related to AI and High-Performance Computing (HPC). However, several critical questions needed answers before we could make an informed decision: 1) why do customers choose Alchip over other players? 2) what sets Alchip apart from its global peers? 3) what drives the demand for Application-Specific Integrated Circuits (ASICs)?

To address these questions, we conducted due diligence within the sector. We engaged with multiple peer companies, including smaller firms from South Korea, Malaysia, Taiwan and the United States. Our goal was to understand which player was best positioned in the ASIC field and why.

As our research progressed, we grew increasingly excited about the fundamentals of the ASIC design market and the demand drivers for the next couple of years. It became evident that among Asian companies, Alchip stood out as the best-positioned company to capture the growth in advanced ASIC design. Unfortunately, during this period, Alchip's valuation received a significant boost from the global AI trend, leading to a substantial rerating of the company's stock. Consequently, we decided not to chase the share price and instead wait for a pullback.

We believe that the opportunity has now arrived. This presents the opportunity to take advantage of shortterm market noise and gain exposure to this high-quality compounder operating within an exponentially growing market.

What is ASIC and why is it an attractive market?

ASIC stands for Application-Specific Integrated Circuit. It refers to a customized integrated circuit designed for a specific application or function. Unlike off-theshelf general-purpose chips from companies like Intel or Nvidia, ASICs are tailor-made to meet the unique requirements of a particular use case. Key reasons why industry players, especially hyperscalers such as Amazon, Meta, Google, or Microsoft, choose to develop ASIC chips are chip customization, processing efficiency and costeffectiveness.

¹³ Source: Bloomberg and GIB AM estimates 2024

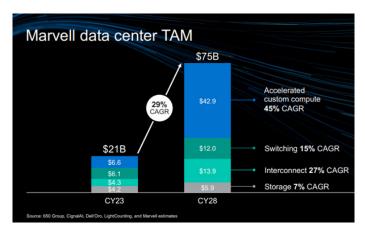


Chart 14¹⁴: ASICs AI chips can be competitive from cost-toperformance ratio against Nvidia

	Google TPU v4	Google TPU v5e	AWS Inferentia2	NVIDIA H100
Compute die process node	TSMC 7nm	TSMC 5nm	TSMC 7nm	TSMC 4nm
INT8 Tensor Core (TOPS)	275	393	380	3,958
TPP ("Total Processing Performance")	4,400	6,288	6,080	63,328
Compute die size (mm^2)	400	325	700	814
PD ("Performance Density")	11.00	19.35	8.69	77.80
Assumed chip price/cost (US\$)	1,500	2,500	1,250	20,000
Cost-performance ratio (the higher the better)	2.9	2.5	4.9	3.2

With the increasing demand for AI, companies such as Google, Meta and Amazon are poised to ramp up their adoption of custom ASICs. Their goal is twofold: reducing silicon costs and achieving product/service differentiation. However, to successfully navigate this, they will need assistance from design services companies like Alchip

Chart 15¹⁵: Expectations regarding ASIC chips demand from data centers – from \$6.6bn to \$42.9bn market in 5 years (29% CAGR)



Why is Alchip well positioned to capture this trend?

Why is Alchip well positioned to capture this trend? 1) Early mover advantage: Alchip has been at the forefront of AI ASIC design projects, securing multiple high-volume design wins among US hyperscaler customers. Being an early mover in this space positions Alchip well to ride the wave of increased adoption of ASICs by hyperscalers. 2) Strong customer references: Alchip's success is bolstered by strong references from customers who are leading the global AI revolution. These endorsements serve as a key success factor in the industry. 3) Focus on advanced technologies: Alchip stands out for its focus on designing for the most advanced technologies, including 7nm and below. This commitment ensures that Alchip's solutions

align with the cutting-edge requirements of AI applications. **4) Close relationship with TSMC:** Alchip's membership in TSMC's Value Chain Alliance (VCA) provides a significant advantage and barriers to entry for peers.

What are the key risks to the investment thesis?

Customer concentration which has also been the core factor contributing to recent share price deterioration. Despite concentration risk being a material risk factor for the company we believe that the mitigating aspect is the fact the addressable market is growing exponentially while the supply of service providers that can offer advanced design skills is very limited. Alchip's track record and references imply they will be able to quickly replenish their order book in a relatively short period of time. One of the conclusions from our sector due diligence was the fact that references, particularly from within advanced nodes/high-performance computing/Al space are key. The likelihood of customers like Google, Meta, Amazon or Microsoft experimenting on their multi-billion-dollar projects with someone new and inexperienced is relatively low. The know-how Alchip has gained serving the most advanced technologies is something that will put the company in front of most players for years to come. We therefore believe that the recent share price pullback was a good entry point to this high-growth business, generating sustainably high ROIC close to 30% and valued at attractive 25x forward P/E.

With our very best wishes,

Greg Konieczny, Kunal Desai (Author), Marcin Lewczuk (Author), and Megan Ie

¹⁴ Source: Company data, Morgan Stanley Research

¹⁵ Marvell's Accelerated Infrastructure for the AI Era Presentation, April 2024



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