

Ariel Investments

	Performance as of December 31, 2025 (%)		Annualized			
	QTD	1-Year	3-Year	5-Year	10-Year	Since Inception
Ariel Emerging Markets Value						04/30/2023
Gross of Fees	8.30	35.08	-	-	-	20.40
Net of Fees	8.14	34.07	-	-	-	19.35
MSCI EM Net Index	4.73	33.57	-	-	-	17.38
Additional Indexes						
MSCI EM Value Net Index	6.37	32.74	-	-	-	16.93
Ariel Emerging Markets Value ex-China						05/31/2023
Gross of Fees	14.00	37.11	-	-	-	22.45
Net of Fees	13.75	35.80	-	-	-	21.21
MSCI EM ex-China Net Index	10.22	34.61	-	-	-	19.34

Past performance is not indicative of future results. An investment's return and principal value will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data quoted. Performance data as of the most recent month-end may be obtained by visiting our website, arielinvestments.com.

Dear Clients and Friends: For the 1-year period ended December 31, 2025, the MSCI EM Index rose +33.57% and the MSCI EM ex-China Index jumped +34.61%, as the technology sector continued to drive returns—particularly in South Korea. By comparison, the Ariel Emerging Markets Value Composite gained +35.08% gross of fees (+34.07% net of fees), while the Ariel Emerging Markets Value ex-China Composite earned +37.11% gross of fees (+35.80% net of fees).

Despite a brief pullback, global equity markets extended their ascent during the fourth quarter, as expectations for rising artificial intelligence (AI) infrastructure investment remained intact amidst persistent questions around returns and long-term sustainability. For the year, South Korea stood out as the strongest of the major equity markets, led by technology companies benefiting from powerful AI tailwinds. South Korean equities were further supported by growing investor enthusiasm for broad corporate-governance reforms under the government's Value Up Program framework. Taiwanese equities also continued their strong run, boosted by the central role many of the country's leading technology companies play in the global AI buildout. By contrast, Indian stocks underperformed other major emerging markets, weighed down by elevated valuations, limited evidence of accelerating earnings growth, and relatively low AI penetration. After sizeable declines earlier in the year, the U.S. dollar strengthened modestly against emerging markets currencies during the quarter, even as U.S. equities continued to trail major non-U.S. equity indices.

Bottlenecks: Fruitful Opportunities in Emerging Markets

As 2026 gets underway, markets are once again centered on the durability of global growth. Will the AI buildout continue to anchor expansion across broad segments of the global economy? Can China extend its unexpectedly resilient, export-led growth while translating its “anti-involution” policy framework into more

sustained momentum? And will the widely anticipated U.S. rate cuts meaningfully re-accelerate growth at home and abroad?

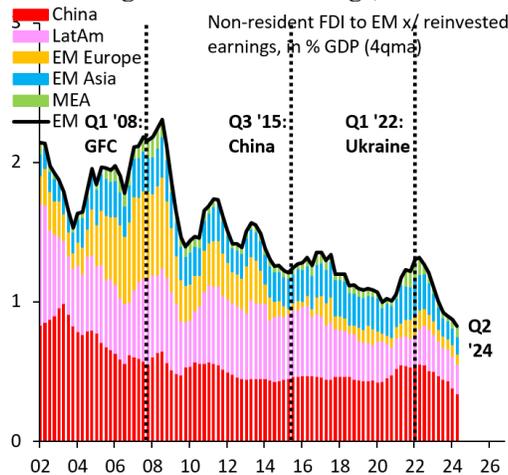
While these questions shape headlines, our investment compass for 2026 is guided by a different, more actionable theme: **where are the bottlenecks?** Bottlenecks arise when supply persistently lags demand—often revealing the pressure points where pricing power, earnings visibility and longer-cycle opportunity converge.

Identifying the next bottlenecks can meaningfully influence performance. In these environments, prices often rise sharply—and remain elevated—as supply constraints persist. While we are hardly alone in seeking out shortages, investors frequently underestimate the magnitude and duration of supply-demand imbalances, leaving alpha hidden in plain sight. Although markets ultimately find equilibrium, the adjustment process is rarely linear, creating ample opportunity to identify bottlenecks early—and remain invested until normalization takes hold.

Focusing on bottleneck dynamics also sharpens our ability to anticipate them. Not surprisingly, throughput constraint tends to form in overlooked and under-invested corners of the market—whether by industry, country or region. **We see growing bottlenecks across emerging markets today.**

Despite faster underlying economic growth, emerging countries remain structurally capital-constrained and have endured more than a decade of under-investment, as shown in the graph below. A sustained recovery in emerging market performance will require a renewed cycle of investments which can be jump-started as economic incentives shift and U.S. policy realigns global capital.

Nonresident FDI (Foreign Direct Investment) to emerging markets, excluding reinvested earnings, in % GDP



Source: Brooks, Robin (8 November 2024) “Geopolitics and emerging market capital flows”
Brookings, <https://www.brookings.edu/articles/geopolitics-and-emerging-market-capital-flows/>

We believe the memory semiconductor industry represents the most visible global bottleneck today. Memory chips are essential to computing devices, responsible for storing and retaining information. They also complement logic chips that handle processing. Over the past two years, demand for memory semiconductors has surged as AI applications require dramatically higher memory content.

Our sizable exposure to South Korean memory leaders **SK Hynix, Inc.** and **Samsung Electronics Company, Ltd.** reflects this favorable demand backdrop. We increased our portfolio weightings last summer as signs of intensifying bottlenecks became more evident. The highly concentrated memory industry cut capital expenditures sharply in 2023, leaving little room to expand as workloads began requiring roughly three times the wafer input per unit of high-end memory output for AI applications. These constraints are now translating

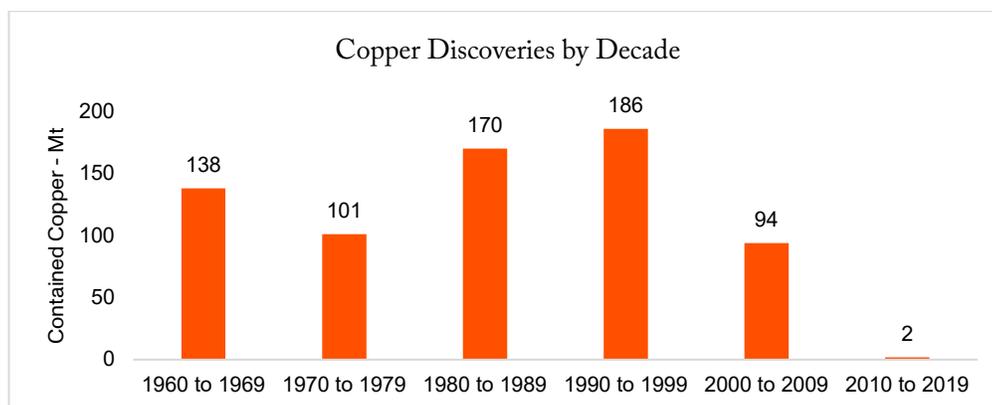
into sharply higher prices, with blended DRAM and NAND memory prices rising approximately 50-55% and 33-38%, respectively, in the fourth quarter, and similar increases expected in the first quarter. Memory cycles are inherently volatile, and these boom conditions will not last forever. Our focus remains firmly on the leading indicators that signal when capacity will begin to catch up.

The metals industry offers additional, and often underappreciated, examples of bottlenecks. While gold and silver prices have surged over the past year on inflation-hedging demand and renewed concerns around currency debasement, we see a more structurally compelling case in aluminum and copper—where ongoing shortages are colliding with steady growth.

For both metals, we expect moderate but well-supported annualized demand growth of roughly 2-3%, with incremental upside driven by electrification trends. Aluminum and copper are critical inputs given their high electrical conductivity, and therefore direct beneficiaries of the global shift toward electric vehicles, renewable power generation and power-intensive AI data centers.

However, the nature of supply constraints differs meaningfully between aluminum and copper. In aluminum, the bottleneck is rooted in China, which accounted for most of the global capacity growth over recent decades. In 2017, Chinese authorities imposed a hard cap on aluminum output to curb carbon emissions and rein in excess capacity. As a result, incremental demand will need to be met by new capacity outside of China—including, India, Middle East and Indonesia. We believe that expansion is likely to proceed at a slower pace and at higher cost than in China, reflecting less-developed supply chains and labor pools. More importantly, aluminum production is highly power-intensive, meaning industry growth is ultimately constrained by energy access. In many emerging markets beyond China, new power generation capacity remains three to four years away. As a result, we expect higher aluminum prices for longer as supply shortages persist. Two of our holdings are positioned to gain from this environment: **Aluminum Corporation of China, Ltd.** (Chalco) and Brazil’s **Companhia Brasileira de Alumínio (CBA)**.

When it comes to copper, supply constraints are rooted in geology, political risks and permitting complexity. High-quality copper deposits are inherently scarce, making new supply heavily dependent on a narrow set of geographies. As shown in the table below, copper discoveries have dropped since 2000. While Chile and Peru remain reliable producers, the development timeline for new projects has lengthened materially as environmental and social impact requirements have become more stringent. As a result, incremental production is increasingly concentrated in jurisdictions with less established mining frameworks, including the Democratic Republic of the Congo and Zambia. Copper mines often take a decade or more to reach production and require billions of dollars of upfront capital. Together, these factors create a structurally slow supply response as demand grows with global electrification trends. Given this asymmetry, the portfolio holds **Ivanhoe Mines, Ltd.**, one of the newest and lowest-cost copper producers in the world with prolific reserves, and **First Quantum Minerals, Ltd.**, which has mines in Zambia as well as Panama where its production should return soon.



Source: USGS, Wood Mackenzie, Schmitz, corporate reports and Bernstein estimates (2016-19) and analysis.

Finally, transformers—not the toy action-figures—but essential equipment underpinning electricity transmission and distribution, are another bottleneck. Transformer supply was already trailing demand well before the AI boom, with year long lead times back in 2022. The surge in power demand from AI data centers has compounded the problem, pushing to three-year delivery times.

The persistent tightness in transformers has been a tailwind to numerous global suppliers, including Siemens Energy in Germany and HD Hyundai Heavy Industries in South Korea.¹ We are most excited about **Astor Transformer Enerji AS**, Turkey’s leading supplier—with 27% market share. Although small in the context of the global market, the company’s most recent update forecasts 43% additional transformer capacity to come online between 2025 and 2027. Meanwhile, we believe new exports to more-profitable markets like the U.S. and European should boost revenues and profits.

Looking Ahead

We believe the bottlenecks in memory semiconductors, aluminum, copper, and power transformers will ease eventually, though likely later than sooner. Meanwhile, the search for bottlenecks will remain an important part of our process and a driver of our portfolio returns. Given the decade-long paucity of investment in emerging markets, researching bottlenecks in our universe should keep us busy for years to come.

Sincerely,



Henry Mallari-D'Auria, CFA®
Chief Investment Officer
Global and Emerging Markets Equities

Investments in non-U.S. securities may underperform and may be more volatile than comparable U.S. stocks because of the risks involving non-U.S. economies, markets, political systems, regulatory standards, currencies, and taxes.

The use of currency derivatives, exchange-traded funds (ETFs), and other hedges may increase investment losses and expenses and create more volatility. Investments in emerging markets present additional risks, such as difficulties in selling on a timely basis and at an acceptable price. The intrinsic value of the stocks in which the portfolios invest may never be recognized by the broader market. The portfolios are often concentrated in fewer sectors than their benchmarks, and their performance may suffer if these sectors underperform the overall stock market. Investing in equity stocks is risky and subject to the volatility of the markets.

Past performance does not guarantee future results. Performance results are net of transaction costs and reflect the reinvestment of dividends and other earnings. Ariel Composite Net of Fees returns are calculated by deducting the actual monthly advisory fee (on an asset-weighted basis) applicable to all accounts in the composite, using the fee rates in place as of the most recent calendar quarter-end. Advisory fees paid by an account may be higher than the actual fee that applies to the composite as a whole, since the actual fee is asset-weighted and aggregated across all accounts. Advisory fee schedules are described in Part 2 of Ariel’s Form ADV. Gross returns do not reflect the deduction of advisory fees. Client returns will be reduced by advisory fees and such other expenses as may be incurred in the management of the account. Returns assume the reinvestment of dividends and other earnings. Returns are expressed in U.S. dollars. Current performance may be lower or higher than the performance data quoted.

¹Not current holdings in the Ariel emerging markets portfolios.

The opinions expressed are current as of the date of this commentary but are subject to change. The information provided in this commentary does not provide information reasonably sufficient upon which to base an investment decision and should not be considered a recommendation to purchase or sell any particular security. There is no guarantee that any expressed views will come to fruition or any investment will perform as described.

As of 12/31/25, the Ariel Emerging Markets Value (representative portfolio) held the following positions referenced: SK Hynix, Inc. 7.70%, Samsung Electronics Company, Ltd. 4.00%, Aluminum Corporation of China, Ltd. 1.98%, Companhia Brasileira de Alumínio 1.24%, Ivanhoe Mines, Ltd. 1.12%; First Quantum Minerals, Ltd. 0.95%, and Astor Transformator Enerji 0.54%. As of 12/31/25, the Ariel Emerging Markets Value ex-China (representative portfolio) held the following positions referenced: SK Hynix, Inc. 8.44%, Samsung Electronics Company, Ltd. 5.20%, Aluminum Corporation of China, Ltd. 0.00%, Companhia Brasileira de Alumínio 1.24%, Ivanhoe Mines, Ltd. 1.10%; First Quantum Minerals, Ltd. 1.01%, and Astor Transformator Enerji 0.53%.

Portfolio holdings are subject to change. The performance of any single portfolio holding is no indication of the performance of other portfolio holdings of the Composites. Portfolio holdings mentioned do not represent all holdings purchased or sold for the Composites.

Investors cannot invest directly in an index. The MSCI Emerging Markets Index captures large and mid cap representation across 24 Emerging Markets (EM) countries. With 1,377 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country. Inception of this benchmark was January 1, 2001.

The MSCI Ariel Emerging Markets Value Index captures large and mid cap securities exhibiting overall value style characteristics across 24 Emerging Markets (EM) countries. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield. Inception of this benchmark was December 8, 1997. MSCI Emerging Markets ex-China Index captures large and mid cap representation across 23 of the 24 Emerging Markets (EM) countries excluding China. Its inception date is March 9, 2017.

All MSCI Index net returns reflect the reinvestment of income and other earnings, including the dividends net of the maximum withholding tax applicable to non-resident institutional investors that do not benefit from double taxation treaties. MSCI uses the maximum tax rate applicable to institutional investors, as determined by the company's country of incorporation. MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used to create indices or financial products. This report is not approved or produced by MSCI.

