Portfolio Managers' Quarterly Letter Q3 / 2025

INTRODUCTION

Artificial intelligence is no longer a single application or a mere 'chatbot.' It is a broad technological transformation that is reshaping the structures of the economy, the processes of companies, and the sources of competitive advantage. In earlier letters we described this shift through two frameworks: (Q1/2025) the **Gulf Stream metaphor** — we focus on the deep currents running beneath the surface rather than the short-term waves — and (Q2/2025) the **economics of scalability** — in the spirit of Jevons' paradox and Moore's law, as costs fall, usage grows exponentially. These underlying forces drive demand for AI infrastructure and create winner-take-all markets.

In the Q2 letter we extended the framework to AI agents: a coordinated software ecosystem in which agents perform multi-step tasks, use tools, and operate where the data already lives. For investors, the conclusion was twofold: (i) the structural demand for infrastructure (compute, memory, cloud, security) strengthens, and (ii) organisations that can connect agents to their existing data will capture a disproportionate share of the value. We made this concrete with the **Oracle case**: massive, hard-to-migrate enterprise data, and on top of it vector search, RAG and ready-made models — all in the same database.

In this letter we present two new holdings — **MP Materials** and **Duolingo** — and explain why they fit precisely into the same core strategy: we invest in probable winners in markets whose dynamics are winner-take-all.

NEW INVESTMENT #1:
MP MATERIALS – THE WEST'S 'MINE-TO-MAGNET' WINNER

PERMANENT MAGNETS: A STRATEGIC RESOURCE AT THE HEART OF TECHNOLOGY

Permanent magnets are the silent backbone of modern technology, and their strategic importance is currently growing explosively. They play a central role in today's largest global megatrends, of which the explosive growth of data centres and artificial intelligence is perhaps the most significant.

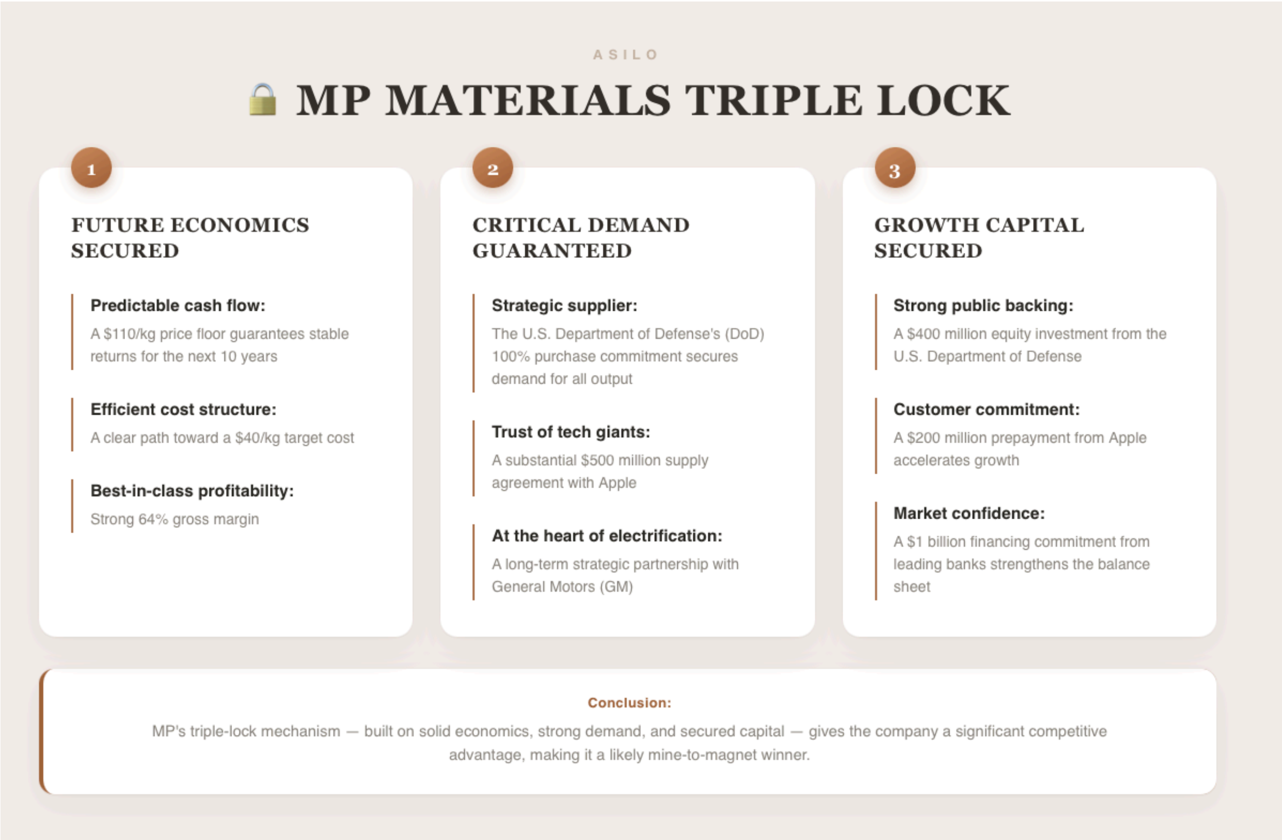
The infrastructure required by data centres is massive and growing at tremendous speed. Neodymium permanent magnets are needed in critical cooling systems, UPS backup-power equipment, server hard drives, and numerous other components. Modern hyperscale data centres typically require 60–150 megawatts of power, and gigawatt (1,000 MW) campuses are now being planned for the future.

To put the scale in perspective: in wind power, one megawatt of capacity requires 171 kilograms of rare-earth metals. A typical 100-megawatt data centre can require as much as 15–20 tonnes of rare-earth metals for its cooling, backup-power and server systems alone — an amount equivalent to the magnet requirements of approximately 40 F-35 fighter jets. The explosive growth of AI-intensive data centres makes this resource one of the most critical bottlenecks in technological development.

The green transition is also entirely dependent on efficient neodymium permanent magnets. Electric vehicles and wind turbines need them for compact, powerful electric motors and generators. In the defence industry these permanent magnets are irreplaceable components in precision missiles, drones, fighter-aircraft radar systems and secure communications. The United States imports 80% of its rare-earth metals from abroad, creating an untenable geopolitical vulnerability — especially given a production chain dominated by China. Building a domestic, fully integrated 'mine-to-magnet' supply chain is not only an attractive commercial opportunity but an absolute strategic necessity. It is an investment in the technological self-sufficiency of the West and in its future industrial competitiveness.

COMPETITIVE ADVANTAGE: THE COMPLEXITY OF THE 'MINE-TO-MAGNET' CHAIN

The moat protecting the build-out of a Western rare-earth supply chain is exceptionally deep. It is not just about mining; it is an extremely complex and capital-intensive process that requires decades of expertise. The first challenge is refining the raw material itself. The mined ore must be separated and purified into precise oxides such as neodymium-praseodymium oxide (NdPr). This step is technically demanding and, from an environmental standpoint, costly to manage. The second — and even greater — barrier is the conversion of these oxides into metal and, ultimately, into finished magnets. This metallurgical process requires specialised technology, billions of dollars of investment in production facilities, and years of development work to achieve the necessary quality and efficiency. For a new entrant it is practically impossible to catch up with decades of technological lead and scale advantages without massive capital and long-term commitment. It is precisely this combination — enormous capital costs, technical complexity and a long time horizon — that creates a durable competitive advantage for established players and makes market entry extremely difficult for new ventures.



THE U.S. DEPARTMENT OF DEFENSE AGREEMENT: STRATEGIC PARTNERSHIP AND RISK ELIMINATION

At the heart of our investment is the company's transformative and strategic agreement with the U.S. Department of Defense. This contract is not merely a financing arrangement; it fundamentally changes the company's financial foundation and removes a significant share of the market risk. The most important element is a ten-year guaranteed-price mechanism that sets a minimum price of $110 per kilogram for NdPr products. This is 50–80% higher than current market prices, ensuring the company strong profitability and cash flow across market cycles. Second, the U.S. Department of Defense has committed to a $400 million equity investment, making it a significant shareholder in the company and signalling deep confidence in its strategy. Third, the agreement includes a 100% purchase commitment for the future 10,000-tonne annual magnet production. This guarantees demand and allows production to be scaled up with complete certainty. The contract makes the company, in practice, the U.S. national champion in rare-earth metals. It not only provides exceptional financial protection but also validates the company's position as a critical part of the West's industrial and defence supply security.

NEW INVESTMENT #2:
DUOLINGO – 'THE INTERNET'S UNIVERSITY' AND A DATA-MOATED AI PLATFORM

MARKET LEADERSHIP IN THE AGE OF ARTIFICIAL INTELLIGENCE

Although the opening phase of the AI revolution has been dominated by infrastructure providers and the developers of the AI models, those that ultimately stand out among the users of AI models built by others will be the ones with protected competitive advantages, such as unique data. In this arena, Duolingo is in a class of its own. With more than ten times the user base of its nearest competitor, it is the undisputed leader in language learning — and yet it has only scratched the surface of a vast $80 billion market in which its share is less than one per cent. In the same way that Netflix turned DVDs into streaming, Duolingo is moving from being merely a language app to becoming an AI-powered 'university of the internet.' Its moat is based on the data generated by 128 million monthly and 48 million daily users across more than 40 languages. The company's Birdbrain AI analyses conversations, pronunciation and engagement in order to predict learning success and personalise study paths in real time. Because AI makes hyper-personalised, around-the-clock tutoring possible at near-zero cost, the centre of gravity in language learning is shifting from traditional classrooms to digital platforms like Duolingo. The issue is not so much that other players lack the knowledge of how languages can be taught. The issue is the knowledge of how to motivate users to learn and to do the things that produce results.

AN UNBEATABLE COMPETITIVE ADVANTAGE: THE SYNERGY OF DATA AND AI

Duolingo's competitive advantage arises from its self-reinforcing cycle in which data and AI feed one another. Billions of weekly exercises produce unique data that competitors cannot replicate. This data is fed into the company's AI models, which continually improve the learning experience, which in turn leads to better user engagement and demonstrably more effective learning outcomes. Academic studies have shown Duolingo's methods to be more effective than traditional instruction. This superior user experience attracts more users, which grows the data volume further and accelerates the loop. On top of this, Duolingo invests more than $200 million per year in research and development — more than the combined revenues of its competitors. This makes possible the development of exclusive AI features such as Duolingo Max, and sustains the company's technological lead. For competitors that operate at a fraction of Duolingo's scale and rely on manual content production, catching up to this lead is extraordinarily challenging.

CULTURE AND REAL OPTIONS: MORE THAN JUST A LANGUAGE APP

The secret of Duolingo's success lies not only in its technology, but also in its innovative company culture, nurtured by CEO Luis von Ahn. The company has succeeded in creating an environment in which the traditional silos between coders and other specialists break down. In this model, non-technical staff can also use AI tools for product development, which dramatically accelerates innovation. The best example of this is the chess-instruction module launched in May 2025. Its prototype was created by a team of only two people who had no prior coding or chess experience. With the help of AI tools they built a working foundation that became the company's fastest-growing and most successful product launch ever, reaching one million daily users in record time. This culture creates valuable 'real options': it allows the company to test and expand into new markets nimbly and without large up-front investments. The chess module is an option to step into the billion-dollar market for entertaining learning beyond languages. Similarly, AI-assisted course creation — which enabled the launch of 148 new courses in a single day — opens doors to hyper-segmented markets such as corporate training and family packages, in a way that competitors cannot match. We see in Duolingo precisely the second-order effect we wrote about in the Q1 letter. New technology enables the reorganisation of the organisation, not merely cost-cutting, and historically this kind of reorganisation has produced by far the greatest efficiency gains.

IN CLOSING

The age of artificial intelligence is, above all, the age of data. Already in September 2024, as we noted in our second-quarter letter, our belief in Oracle's victory was based on a simple but robust observation: the world's most valuable and most critical enterprise data sits in Oracle's databases. We did not expect Oracle to develop superior language models; we understood that the real moat lies where the data is. The switching costs of moving away from Oracle's systems are so enormous — contractually, technically and operationally — that they form an almost unbreakable competitive advantage.

Oracle's strategic genius was not to try to move the mountain to Mohammed, but to bring Mohammed to the mountain. Instead of customers having to move their sensitive data to AI platforms, Oracle integrated AI directly into its database in the 23ai release. This eliminates security risks and migration needs and offers a seamless path to leveraging AI. Enterprises can now run AI analytics and use more than fifty pre-built agents right where the heart of their business already beats.

The most recent results do not merely confirm our thesis; they demonstrate its power explosively. Although the first-quarter earnings fell slightly short of expectations, the market focused on what really matters: future demand. The remaining performance obligation (RPO), which anticipates future revenue, grew to $455 billion — 359% more than a year earlier. This 'thermonuclear' growth lifted the stock by 30% and made Oracle one of the ten most valuable companies in the S&P 500. As we noted previously, every billion in database support can turn into five billion in cloud revenue, and this transition is accelerating at an unprecedented pace. The rise of AI agents adds fuel to the fire: as enterprises roll out thousands of autonomous agents, those agents must operate where the data lives — and in Oracle's case, this translates concretely into growing demand for years to come.

Thank you for your trust,

The Portfolio Managers of the Asilo Argo Special Investment Fund
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