Brain Lens Investing:
Capitalizing the Brain Economy for Productivity, and Societal Well-being

Consultation Paper

Under the Auspices of the Rice University Brain Economy Program, the Euro-Mediterranean Economists Association, Davos Alzheimer's Collaborative, Grand Challenges Canada, and the Brain Capital Alliance

This paper provides food for thought to all forward-thinking investors, founders, innovators, philanthropic actors, policymakers, and corporate leaders seeking to understand how investing through a brain lens can catalyze both social impact and economic growth. It outlines a strategic framework for integrating brain capital into financial decision-making. This paper is not exhaustive, but it intends to stimulate further action and refinement after the launch of this concept at the United Nations (UN) Brain Economy Summit. It represents innovation in the context of the "Invest" pillar of the World Economic Forum (WEF) - McKinsey Health Institute (MHI) Brain Economy Action Forum strategy. This work is an extension of the European Investment Bank Institute Foresight Roundtable titled "Systemic Investing in the Brain Economy".

Executive summary

In a world that struggles to marry technological advances simultaneously to sluggish productivity growth, a new approach is needed to unlock sustainable development. Brain capital - encompassing both brain health and brain skills - has emerged as an undervalued investment opportunity with strong potential for generating both financial returns and measurable social impact.

Brain health refers to maintaining optimal brain function and addressing mental, neurological, and substance use disorders, while brain skills include cognitive, emotional, and social capabilities vital for adapting to an evolving world. Prioritizing brain health and fostering brain capital has the potential to unlock $26 trillion in global economic opportunities by enhancing workforce performance, igniting innovation, and reclaiming millions of years of quality life.

Current economic policy and investment frameworks have not sufficiently prioritized brain capital. The failure to integrate it into financial decision-making perpetuates a missed opportunity at the heart of the workforce: a lack of adaptability, resilience, and innovative potential. Addressing this gap requires a paradigm shift in how investments are evaluated and structured.

Finance possesses the power to drive meaningful social change. In this context, “brain lens investing” emerges as a transformative framework: an umbrella construct designed to integrate multiple strategies that bring brain capital considerations into mainstream investment practice. Brain lens investing reconsiders how value is assigned, how relationships are structured, and how processes function across the financial landscape. We have identified three core strategies for shaping the brain lens investing agenda.

- **Strategy 1: Targeting Brain Capital-Enhancing Investments:** This strategy is focused on proactively identifying and investing in sectors, companies, and innovations that build brain capital and unlock human potential. This strategy identifies where to invest for maximum brain capital impact.
- **Strategy 2: Embed Brain Capital into Financial Risk Assessment:** This strategy transforms brain capital considerations from abstract concepts into quantifiable financial risks and opportunities within existing investment frameworks. In short, this quantifies and manages the financial risks and opportunities.
- **Strategy 3: Institutionalize Brain Capital Across Investment Processes:** This strategy embeds brain capital expertise and accountability mechanisms directly into core operations and decision-making processes of financial institutions. In short, it ensures systematic implementation and accountability across investment operations.

Across every strategy outlined in this paper, one theme stands out: without clear, investment-grade measurement tools, brain capital remains invisible to financial systems. By embedding brain capital criteria into investment decisions, this approach seeks not only to mitigate economic risk but to unlock new avenues for growth, resilience, and societal wellbeing.

Box 1: Grounding Terms

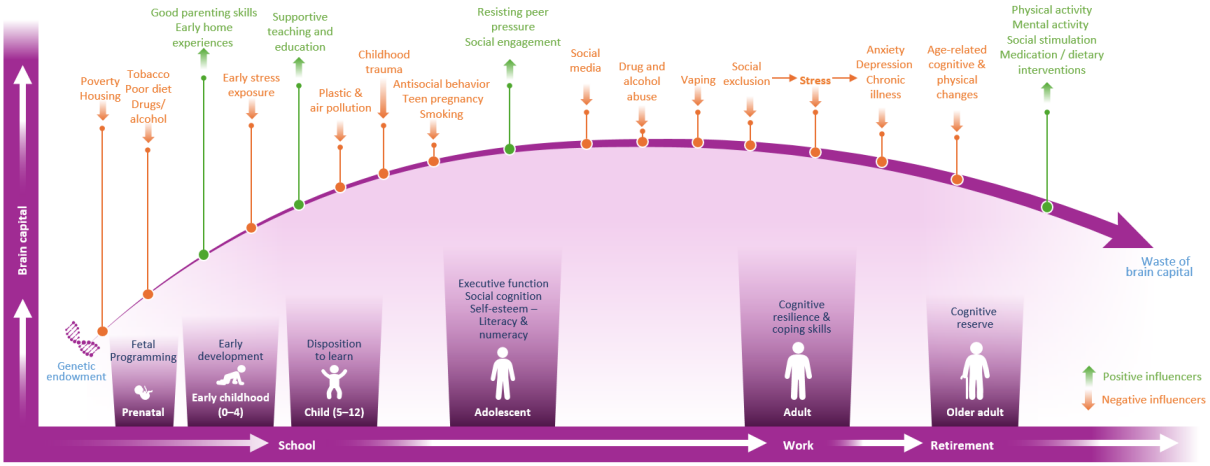
- Brain Health: The promotion of healthy brain function and prevention or treatment of mental, neurological, and substance use conditions.
- Brain Skills: The foundational abilities that help people adapt, relate, and contribute meaningfully (e.g., adaptability, resilience, learning agility, creativity, emotional intelligence and leadership).
- Brain Capital: A new economic asset integrating brain health and brain skills to support growth, societal resilience and wellbeing.
- Brain Economy: An ecosystem that integrates and prioritizes investment in brain capital across the lifespan.

The Brain Economy – Why Now?

For over a decade, productivity stagnation has constrained economic growth globally, resulting in slower growth, rising fiscal pressures, and a workforce struggling to adapt to change. Productivity stagnation poses significant risks to future financial market stability and long-term investment returns. While economists typically attribute productivity challenges to factors such as slow technological diffusion, structural market rigidities, and demographic shifts, an overlooked driver of economic performance is brain capital. Brain capital is critical for entrepreneurial growth, fueling innovation, job creation, and economic recovery from market disruptions.

Investing in brain capital across the lifespan is essential and the cost of inaction is massive. Underinvestment in optimizing early brain capital means an estimated 250 million children under the age of five are at risk of not reaching their full development potential. With the majority of mental health concerns starting before the age of 24, mental health challenges cost the global economy $1 trillion every year. Brain disorders across the lifespan create a $3.5 trillion economic burden, straining both labor markets and fiscal sustainability. Brain capital challenges are exacerbated by the pressures of modern life — rapid technological change, environmental stressors, demographic shifts, and social isolation — all of which strain our collective cognitive resilience. In Figure 1, we outline brain capital dynamics across the lifespan.

Figure 1: Brain Capital Dynamics Across the Lifespan



Adapted by Eyre et al in Molecular Psychiatry 2021 and Neuron 2021.
1. Aligned with WHO 2022 Brain Health Position Paper; 2. Beddington J et al. Nature 2008;455:1057–1060; 3. Smith E … Eyre. Molecular Psychiatry 2021;3–22; 4. Eyre H et al. Neuron 2021;109(5):1430–1432.

A new approach is needed – one that integrates brain capital into economic policy and investing - to mitigate economic risk and unlock growth, resilience, and societal wellbeing.

This emerging 'brain lens investing' approach is compelling. Investing in brain capital could drive economic resilience, long-term performance, and productivity gains. The positive brain economy represents a resilient and thriving economic system, fueled by healthy brains to meet the growing societal demand for brain capital.

Over the last two decades, the financial sector has embraced specialized investment approaches like gender lens investing and child lens investing, proving that targeted strategies can deliver both financial returns and transformative social impact. Brain lens investing represents the next evolution in this trend, offering investors access to an underexplored market with substantial growth potential while addressing workforce productivity risks (among others) that increasingly impact portfolio performance.

Strategic momentum is accelerating across international platforms - from the 2013 G8 Dementia Summit and 2018 G20 Initiative for Early Childhood Development to recent events at 2025 World Economic Forum at Davos. These, and other pioneering efforts like the United Nations Brain Days, G7 Canada Brain Economy Summit, and the Brain Capital United Kingdom Summit have established the brain economy as an important new field in innovative finance. This validation culminated in the European Investment Bank Institute's February 2025 "Systemic Investing in the Brain Economy" roundtable, convening 50 senior experts from leading organizations including World Economic Forum, McKinsey Health Institute, Roche, Merck, Philips, Eli Lilly, European Investment Fund, Wellcome Trust, Wyss Center for Neuro- and Bio-Engineering, and European Commission amongst others. This event demonstrated unprecedented cross-sector alignment on brain capital as a strategic investment priority.

The launch of the WEF and MHI Brain Economy Action Forum further solidifies this emerging field, positioning early investors to capitalize on a market transition from fragmented initiatives to coordinated global action that drives sustainable economic growth. A WEF Brain Economy Insights Report will be released at the next WEF Annual Meeting in Davos, Switzerland, in January 2026.

Brain Capital Investment Opportunities

Strategic brain capital investments span the entire life course, presenting distinct opportunities for both social impact and financial returns.

Early Childhood

Investing in early childhood development offers an incredible opportunity for transformative impact. Investments in children's nutrition, education, and development create compounding benefits for brain health, not just for children but for communities, economies, and future generations. James Heckman's pioneering research demonstrated that early investments in children—particularly from birth to age five—yield the highest returns in human capital development[1]. Beyond the potential for transformative impact on brain capital development, it offers significant investment potential:

- Market Size (2022): USD $249.38 B
- Projected Size (2030): USD $467.83 B
- Compound Annual Growth Rate (CAGR) (2022–2030): 8.21 %
- Key Drivers: Government policies, edtech expansion, and rising awareness of early cognitive development.
- Noted by Zion Market Research

Youth Mental Health

Investing in youth mental health is crucial because it creates long-term economic and social benefits, improves overall physical health, and fosters individual well-being for future generations. Early intervention can enhance educational attainment and labor force participation, leading to increased income levels.

- Global Mental Health Market Size (2024): USD $87.82 B
- Projected Size (2032): USD $132.46 B
- CAGR (2024–2032): 5.3 %
- Youth-Specific Trends: Surge in digital mental health platforms, school-based interventions, and employer-backed youth wellness programs.
- Noted by Fortune Business Insights

[1] The model emphasizes that skills beget skills, and that early cognitive and non-cognitive development enhances the effectiveness of later education and training. This evidence has been instrumental in shaping global frameworks such as the Nurturing Care Framework and the first Lancet Series on Early Childhood Development (ECD), and has been widely used by the World Health Organization (WHO) and funders to advocate for public investment in ECD.

Late-life Brain Health (i.e., Neurology (Diagnostics & Therapeutics))

Investing in late-life brain health is critical for addressing the challenges posed by aging populations, including the prevention of neurodegenerative diseases and the mitigation of staggering economic and social costs. A healthy older population can remain economically productive and engaged, yielding significant societal and individual benefits.

- Market Size (2024): USD $67.3 B
- Projected Size (2029): USD $ 94.8 B
- CAGR (2024–2029): 7.1%
- Key Segments: Neurodegenerative diseases, neurovascular disorders, and epilepsy. Asia-Pacific is the fastest-growing region.
- Noted by BCC Research

Neuroscience

The neurotechnology investment sector is important because it drives medical advancements for brain disorders, improves overall societal productivity and health through brain-based applications, fosters economic growth by creating new industries and high-tech jobs, and accelerates innovations in brain-computer interfaces (BCIs) and neural implants.

- A recent analysis published in JAMA Neurology noted that from 2000 to 2023, 2360 Venture Capital firms made 1771 investments in 496 neurology companies, totaling USD $19.7 billion. With a mean investment of USD $8.6 million and a post investment valuation of USD 56.76 million, capital deployment peaked at USD 3.3 billion in 2021.
- The neurotechnology market, estimated at $400 billion in the US alone

Whole-of-the-Economy Brain Lens Investing

While addressing foundational brain-related objectives remains essential given their massive scale, there is an equally compelling case for implementing an intentional ‘brain lens’ as a core investment framework. Brain lens investing emerges as more than just addressing deficits – it represents a strategic opportunity to leverage the systems of finance as a way to strengthen human potential while building sustainable competitive advantages.

Investors have been able to develop effective tools and protocols to identify financial market risks in an investment context and provide mitigating solutions. We propose that these be considered in the context of brain capital. Such an approach can help uncover an opportunity that wasn’t visible before. Similarly, it can help identify problem areas, risks, and potential unintended negative consequences that were invisible without the intention of a brain lens. For impact-oriented investors, it also provides a framework to move beyond investments that “do no harm” toward investments that bring about positive outcomes.

We have identified three core strategies for shaping the brain lens investing agenda.

- **Strategy 1: Targeting Brain Capital-Enhancing Investments:** This strategy is focused on proactively identifying and investing in sectors, companies, and innovations that build brain capital and unlock human potential. This strategy identifies where to invest for maximum brain capital impact.

- **Strategy 2: Embed Brain Capital into Financial Risk Assessment:** This strategy transforms brain capital considerations from abstract concepts into quantifiable financial risks and opportunities within existing investment frameworks. In short, this quantifies and manages the financial risks and opportunities.
- **Strategy 3: Institutionalize Brain Capital Across Investment Processes:** This strategy embeds brain capital expertise and accountability mechanisms directly into core operations and decision-making processes of financial institutions. In short, it ensures systematic implementation and accountability across investment operations.

Further details and examples are provided below.

Strategy 1: Targeting Brain capital-enhancing investments.

This strategy is focused on proactively identifying and investing in sectors, companies, and innovations that build brain capital and unlock human potential. Ultimately, this strategy identifies where to invest for maximum brain capital impact.

- **Invest in companies that integrate a brain lens in their AI solutions**

Early experimental evidence shows that effective human–AI collaboration can increase individual productivity by 55–70%, particularly when AI systems are designed to reduce social coordination costs and align with human cognitive traits. A brain lens approach to investing in AI has the potential to amplify human potential if the solutions reinforce trust, respect individuals' autonomy, and are adapted to neurodiverse populations.

What could this look like?

- Socioaffective AI: Invest in companies developing AI solutions designed for empathic interaction and adaptive learning.
- Cognitive Augmentation. Invest in AI tools that promote neuroplasticity, personalized cognitive support, and decision-making enhancement.
- Neurodiversity tech: Invest in technologies that accommodate neurodiverse users through sensory-friendly design and inclusive interfaces.

- **Invest in companies that integrate a brain lens in their food system solutions**

Brain-positive food system innovations directly influence cognitive development, mental health, and societal resilience. From early childhood nutrition to gut-brain axis research, emerging solutions like functional foods, regenerative agriculture, and microbiome-based therapies are reframing food as infrastructure for brain capital. These innovations reduce the burden of brain-related disorders, enhance productivity, and foster inclusive prosperity.

What could this look like?

- Functional Nutrition: Invest in companies that address micronutrient deficiencies linked to brain health such as functional foods, biofortified crops, and personalized nutrition platforms.
- Gut-brain Innovation: Support ventures that harness the gut-brain axis such as microbiome-based therapeutics, fermented food startups, and precision agriculture that enhances soil and gut biodiversity.
- Regenerative Food Access: Back regenerative agriculture and food access models that promote brain-positive behaviors, including community-supported agriculture, school meal programs, and culturally relevant food education.

Box: African Development Bank's Grey Matter Infrastructure Initiative:

This initiative leverages nutrition investments across five sectors to promote safe, diverse and nutritious food. The initiative directly recognizes that nutrition infrastructure across these sectors directly builds cognitive capacity. The model highlights that brain lens investing can be embedded into existing sectoral investments (agriculture, water, health) rather than requiring entirely new categories of investment.

- **Invest in companies in the neuroscience-informed built environment and infrastructure that people need for their survival and flourishing**

By aligning infrastructure finance with brain capital outcomes, investors can reassign value to assets that foster resilience, learning, and emotional regulation. This transforms infrastructure from a passive backdrop into an active agent of cognitive development—especially in communities historically excluded from innovation and opportunity. This could include public and municipal bond programs that include high-performance design criteria or are beholden to larger city/ regional Climate Action Plans.

What could this look like?

- Built Environment: Invest in housing, schools, and healthcare facilities that support cognitive resilience and mental well-being via access to nature, high air quality, noise-reducing materials, neighborhoods that provide social connection, walkability, access to fresh food, nature, art, and culture.
- Smart Transportation: Support transportation systems that reduce cognitive load, enhance safety, and promote active mobility such as investments in walkable cities, sensory-friendly transit design, and digital wayfinding tools that accommodate neurodiverse users.
- Clean Infrastructure: Back brain-positive solutions in water, sanitation, and energy systems, such as clean cooking technologies that reduce neurotoxic exposure, or water purification systems that mitigate heavy metal contamination linked to cognitive decline.

- **Invest in specialized infrastructure in sectors/industries that people need for the future aging society**

By advancing specialized infusion and neuroimaging centers, we can ensure equitable access to cutting-edge treatments, early detection, and lifelong brain health management. These investments are foundational for supporting the unique needs of an older society, enabling proactive care and enhancing quality of life for many.

What could this look like?

- Disease-modifying treatment centers: Invest in next-generation infusion centers for disease-modifying brain medicines, such as those treating Alzheimer's, Parkinson's, and multiple sclerosis. These centers—designed with accessibility, cognitive comfort, and care coordination in mind—are critical to scaling equitable access to emerging biologics.
- Advance neuroimaging: Invest in advanced brain imaging infrastructure to support early detection, personalized care, and longitudinal tracking of neurodegenerative conditions.

- **Invest in gender-inclusive brain investments**

Investing in women's brain capital yields substantial economic and societal returns. Women-led ventures consistently outperform on capital efficiency and innovation, generating more revenue per dollar invested than male-led counterparts. Yet, women receive less than 2% of global venture capital, representing a missed financial opportunity rather than a charitable cause. Addressing the gender brain health gap—through targeted investments in female-founded brain health startups, inclusive neurotechnologies, and gender-responsive care—could unlock up to US$250 billion annually in global GDP by 2040.

What could this look like?

- Female-founded Brain health: Invest in female-founded companies advancing brain health solutions, particularly those addressing sex-specific neurological conditions, maternal mental health, and hormonal brain aging.
- Women's Health Funds: Support venture capital funds and accelerators that prioritize gender-responsive brain technologies, including digital therapeutics, neurodiagnostics, and cognitive wellness platforms designed with women's data and needs in mind. Existing women's health based funds include Go Red for Women Venture Fund, RH Capital and FemHealth Ventures.

Strategy 2: Embed brain capital into financial risk assessment

This strategy transforms brain health considerations from abstract concepts into quantifiable financial risks and opportunities within existing investment frameworks. In short - it quantifies and manages the financial risks and opportunities.

Brain health and brain skills considerations should be integrated into investment risk and opportunity frameworks, recognizing that brain capital trends - like workforce productivity, mental health costs, or education outcomes - can impact future investment performance. By embedding brain capital metrics into mainstream financial analysis, the approach leverages finance's influence to signal that brain capital has measurable economic value. This incentivizes companies to consider their brain health impact, while providing governments with market-validated evidence to justify policies promoting brain capital.

- **Develop tools and/or processes for seeing brain-specific risks as a reputational, regulatory, or operating risk**

Advancing investment methodologies that account for brain health will establish new benchmarks for evaluating the cost of brain capital loss, improving investors' ability to detect and mitigate these emerging risk categories

What could this look like?

- ESG Integration: Include brain capital metrics alongside traditional environmental and social factors in impact investment assessments. For example, establish screening methodologies that enhance investment due diligence through brain capital risk analysis, allowing for the identification of brain health-related financial exposures in target investments.
- Reputational Risk: Brain capital risk indicators should be developed that capture reputational exposure, such as a company's failure to address neurotoxic exposures, mental health harms, cognitive inequities, and psychosocial hazards associated with generative AI implementation in its operations or supply chain. Just as child-lens investing reframes harm to children as a material risk, brain-lens investing can surface how neglecting brain capital —especially in vulnerable populations—can erode brand trust, stakeholder alignment, and long-term value. Measurement strategies like the Brain Health Matrix may be relevant.
- Regulatory Foresight: Brain-specific regulatory foresight should be integrated into due diligence, anticipating emerging policies on neurodiversity inclusion, workplace mental health, and environmental neurotoxins. Similar to how climate finance now accounts for carbon-related regulation, brain lens investing can identify where future compliance requirements may arise—particularly in sectors like education, food, and chemicals—positioning investors ahead of policy shifts.
- Workforce Risk: Brain health metrics should be embedded into operational risk models, recognizing that workforce burnout, cognitive overload, and poor executive function can impair productivity, innovation, and safety. These risks, often invisible in traditional financial models, become legible through a brain lens - enabling investors to assess how organizational design and culture impact long-term performance and human capital sustainability. The *Business Collaborative for Brain Health* is leading this charge, offering tools like the HERO Health Brain Health Best Practice Score.

- **Implement processes for seeing brain-specific risks as a market risk.**

Government policy frameworks have historically driven investment opportunities while reducing market risks, as demonstrated by tax incentives for renewable energy transitions and penalties for environmentally harmful practices. These regulatory signals create market stability and guide capital allocation toward societal priorities. Brain capital presents a similar systemic opportunity: unlike sector-specific challenges, brain health and cognitive performance affect every geography, industry, and market segment. The interconnected nature of global markets means that brain capital deficits in one region create cascading risks across portfolios worldwide. This makes brain capital both a universal investment risk that requires systematic mitigation and a significant market opportunity for investors positioned to address these challenges proactively.

What could this look like?

- Systemic Risk Assessment: Position brain capital degradation as a market risk comparable to climate change, affecting workforce productivity and economic resilience. Brain capital deterioration—through rising mental illness, neurotoxic exposures, AI-based labor marker disruptions, and brain health inequity—can destabilize markets and erode national competitiveness if left unaddressed. The Global Brain Capital Dashboard has been developed to study national level brain capital data.
- Stress Testing: Develop frameworks simulating how brain capital shocks (e.g., widespread burnout, neurodevelopmental delays, traumatic events, or aging-related decline) ripple through education, healthcare, and labor markets. These tools would help investors and governments assess the resilience of economies to brain-related disruptions, reinforcing the need to embed brain capital and human development into macroeconomic forecasting.
- Sovereign Risk: Incorporate brain capital metrics into country risk assessments, recognizing long-term fiscal impacts of poor brain capital metrics. Countries with poor brain capital metrics may face long-term fiscal strain, social unrest, or diminished human capital returns, resulting in higher long-term fiscal risk scores that reflect anticipated healthcare costs, productivity losses, and potential for social instability. Countries with proactive investing in brain health infrastructure, early education, and mental health could influence credit ratings, investment flows, and policy agendas—driving the systemic change needed to prioritize cognitive well-being in national development strategies. Portfolio managers could use “brain capital watchlists” to guide capital allocation and engagement strategies for sovereign debt, focusing on mitigation and resilience-building measures.
- Specific impact of AI systems on individuals: There is emerging research to establish a framework for developing AI systems that actively support human flourishing rather than merely avoiding harm, offering significant implications for AI development, ethics, and evaluation. An example is the Flourishing AI Benchmark (FAI Benchmark).

- **Developing forward-looking investment approaches to support industry transition analysis**

Investors should anticipate structural shifts as society increasingly recognizes and penalizes brain capital-degrading practices while rewarding brain-positive innovations, similar to the ongoing energy transition away from fossil fuels.

What could this look like?

- Growth Sectors: Position investments in brain-positive efforts such as workplace mental health, neuroprotective technologies, health food alternatives, and cognitive wellness platforms for premium valuations. For example, this could include companies developing safer building materials, non-toxic cleaning supplies and maintenance products that eliminate the highest risk classes of Chemicals of Concern – creating new market categories as awareness of neurotoxic exposure grows.
- Declining Sectors: Identify industries vulnerable to structural decline due to brain capital-degrading practices. For example, industries heavily reliant on extended shift work, chronic sleep deprivation, or high-stress environments—such as certain sectors within fast fashion manufacturing, high-pressure call centers, or parts of the gig economy—may face decline as awareness grows about the cognitive and health costs to workers. Agricultural chemical producers, fast food, or industries with high neurotoxin output might see risk premiums added to reflect potential regulatory tightening, litigation, and reputational impacts as societal tolerance for such harms decreases.
- Quantitative Adjustments: Apply brain capital impact coefficients to industry analysis, adding risk premiums to neurotoxin-producing sectors while modeling higher growth multiples for brain-enhancing innovations such as healthy food alternatives or digital platforms for literacy.

- **Integrate a brain lens into analysis for infrastructure risk assessment**

Infrastructure asset evaluation routinely employs forecasting models and comparative analysis to assess long-term performance potential. Incorporating brain health factors into these analytical frameworks will reveal previously overlooked investment risks and opportunities by considering the evolving needs of tomorrow's populations.

What could this look like?

- Long-term Performance: Evaluate transportation projects based on neurotoxic exposure reduction, community connectivity (combating cognitive decline), stress reduction and cognitive load.
- Anchor Institution Value: Value schools, hospitals, libraries and public facilities on projected brain capital improvements for the target population. These benefits should be factored into cost-benefit analyses to justify premium capital allocation.
- Future-Proofing: Compare investment returns in regions with strong versus weak brain capital policies to identify the compounding value of 'future proof' infrastructure that is built for generational brain capital.

Strategy 3: Institutionalize brain capital across investment processes.

This strategy embeds brain capital expertise and accountability mechanisms directly into core operations and decision making processes of financial institutions. In short - it ensures systematic implementation and accountability across investment operations.

Investment structures and contractual terms can create binding incentives for brain capital outcomes, such as loan covenants tied to mental health metrics or equity structures with cognitive development milestones. By embedding brain capital requirements directly into the legal and financial architecture of investments, the approach ensures portfolio companies prioritize brain health throughout the investment lifecycle. This can create immediate market incentives and services as an early testing ground for brain lens investing, even before the financial materiality is conclusively proven.

- **Integrate brain capital into covenants in investment agreements**

  What could this look like?

- Investment Covenants: Include workplace mental health programs, neurodiversity hiring practices, and brain health benefits in loan and equity agreements. For example, a private equity fund investing in a tech company might include a term mandating the creation and reporting of mental health support measures in the workplace.
- Environmental Standards: Mandate ongoing assessment and remediation of toxic exposures in real estate or infrastructure projects, ensuring environments where children and vulnerable populations spend time remain safe and conducive to brain capital. For example, build accountability for enforcing environmental, health and safety standards for manufacturing and recycling of lead-acid batteries, e-waste and other substances that contain lead through life cycle assessments.
- Performance Terms: Offer favorable interest rates, longer repayment terms, or profit-sharing to companies demonstrating measurable brain capital improvements. For example, favorable terms can be provided for developers who prove they go beyond regulatory compliance and building codes, adopting healthy building standards (i.e., WELL Building Standard) for indoor environmental quality, noise reduction, and access to restorative outdoor environments.

- **Embed brain capital into innovative finance structures**

  What could this look like?

- Blended Finance: Combine public or concessional capital to absorb early-stage risk with private investment focused on measurable brain capital outcomes. Blended capital approaches can deploy government resources to address the unpredictable nature of brain capital returns and human development timelines, making these investments more viable for commercial funders through guarantees, insurance products, or risk-sharing mechanisms. For example, a pay-for-success contract where development finance

institutions provide concessional capital and corporations contribute co-investment, allowing private investors to fund comprehensive workplace mental health interventions where returns are linked to measurable productivity gains, reduced absenteeism, and improved employee retention rates.

- Social Impact Bonds: Structure performance-based financing linked to brain capital[2]. For example, structure performance-based financing for youth mental health programs where government pays for successful outcomes like improved school attendance and private investors receive returns only when these targets are met.
- Sustainability-Linked Loans or performance-linked bonds: Tie interest rates to achievement of specific brain health targets within corporate ESG frameworks. Structure corporate bonds where interest rates adjust based on measurable brain health outcomes—companies improving employee mental health metrics or reducing neurotoxic exposures receive lower borrowing costs, while those failing to meet targets face higher rates.

- **Building brain capital expertise into core financial processes and business models**

By building brain capital expertise into core financial processes (like due diligence and risk assessment), the approach transforms brain capital insights from abstract concepts into concrete inputs that inform investment design, analysis, and decision-making within frameworks that finance professionals already understand. This ensures that demographic shifts, mental health patterns, and education outcomes are translated into actionable investment risks and opportunities.

What could this look like?

- Investment Team Enhancement: Recruit or partner with neuroscientists, mental health professionals, or occupational health experts as members of investment committees, portfolio management teams and due diligence functions. For example, include neuroscientists or mental health professionals in management presentations to assess how target companies' workforce brain capital affects operational efficiency, retention costs, and scalability.
- Sector Analysis: Integrate brain health specialists who can translate demographic brain capital trends into sector rotation strategies, helping institutional investors understand how population-level brain capital changes create systematic opportunities across healthcare,

[2] A mental health financing guidebook (*Keeping investment in mind: Challenges, strategies, and solutions for financing mental health*) and Financing Mechanism Explorer were developed by the McKinsey Health Institute as part of its contributions to the Coalition for Mental Health Investment (CMHI). These materials were created to support de-risking mental health investment by championing innovative financing approaches, including combining philanthropic and venture investment.

technology, consumer, and industrial sectors. For example, how rising ADHD diagnoses impact EdTech growth prospects or how cognitive decline rates influence healthcare and senior living REITs.
- Credit Assessment: Train analysts to evaluate how regional brain capital trends affect municipal bond default risk and corporate credit quality, particularly for healthcare systems, educational institutions, and workforce-dependent industries.

- **Integrate brain capital metrics into performance measurement and accountability**

This approach creates accountability by establishing systematic measurement and reporting of brain capital across investment portfolios, enabling investors to track and publicly report how their investments affect brain health. Operating on the principle that 'what is measured matters', the approach allows investors who commit to positive brain capital outcomes to pressure fund managers and portfolio companies to achieve these goals.

What could this look like?

- Risk Scoring Systems: Develop brain capital risk assessments that can be integrated into existing ESG, credit, and market risk platforms such as by aligning with "The 12 Competencies Framework"
- Ranking and Recognition: Create standardized metrics to track neuotoxic emissions and workplace mental health policies, publishing annual rankings similar to how Carbon Disclosure Project (CDP) climate scores drive corporate environmental action or the work of Global Child Forum's benchmarks on child rights and the network or manufacturers aligned with Mindful Materials to increase transparency of building products. Build divest/invest movement informed by brain capital metrics, similar to existing neuroscience focused ETFs like BlackRock's iShares Neuroscience and Healthcare ETF and Tema's Neuroscience and Mental Health ETF.
- Impact Reporting: Provide quarterly client reports showing how their investments affect brain capital outcomes, enabling pressure for divestment from brain-harmful companies or increase allocations to brain-positive investments based on concrete impact metrics.
- Engagement targets: Set proxy voting commitments requiring portfolio companies to disclose brain health risks, adopt neurodiversity practices or eliminate harmful chemicals, using shareholder resolutions and board nominations to pressure management when targets aren't met.
- Private Equity Exit Requirements: Require portfolio companies to achieve specific brain health benchmarks (reduced workplace burnout, mental health program adoption) before exit, using measurable outcomes to drive operational improvements and increase valuations.
- Modified Human Capital Accounting Frameworks: Human capital accounting frameworks could be adopted that aim to measure and report the value of an organization's workforce as an asset, incorporating factors like employee skills, experience, and contributions. These frameworks seek to make the human capital contribution

transparent and support workforce sustainability. These frameworks may be models to be adapted for brain capital.

Conclusion

Investment approaches differ significantly, as do the pathways for incorporating brain capital considerations across asset classes. These insights make the beginning of a broader discussion - stretching our vision of how brain lens investing can generate transformative impact for a more sustainable and thriving future. We encourage you to build upon these concepts as you explore what additional possibilities might emerge.

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Appendix 1: Brain Lens Investing: A Systems Approach to Investing in the Brain Economy

Systemic investing refers to deploying capital toward interconnected solutions and their enabling conditions, explicitly targeting transformation at the system level rather than isolated outcomes.

Existing initiatives and funding models are too fragmented and narrowly focused, often addressing specific brain disorders or limited to isolated technological developments. The interconnectedness of brain health and skills across disciplines and industries requires a more systemic approach, where capital is deployed to foster holistic solutions that can drive widespread societal benefits. For example, investing in healthy homes leads to decreased asthma triggers which leads to decreased absenteeism of asthmatic student and parent, which is linked to sustaining job and rent for single parents. This leads to less turnover of property and increased property values and community integration and resilience, which is linked to decreased crime and overall higher education attainment past third grade reading levels.

Systemic investing is an emerging approach to capital deployment at the nexus of impact investing, philanthropy, and sustainable finance.

Systemic investing deploys capital to ensembles of solutions and their enabling conditions to explicitly generate these synergies. This requires investing across asset classes — including philanthropy and other forms of capital. Identifying and realizing synergies across multi-asset portfolios is therefore a key characteristic of systemic investing. The use of such "strategic portfolios" to create value through synergies is a different way to think about diversification, moving beyond its use to manage risk in traditional portfolio construction.

Appendix 2: Strengthening the social foundations of the brain economy

Healthy economies rely on the social foundations that enable people to learn, connect, care, and contribute. These foundations are strengthened by the everyday unpaid activities that sustain families, communities, workplaces, and the environment – from grandparents caring for children to enable workforce participation, to retirees mentoring young people, volunteers providing community health support, and Indigenous peoples' stewardship of land, water, and biodiversity, and more. Collectively, these activities make up **social production** – the hidden engine of community resilience and workforce capability that supports innovation, inclusion, and

long-term economic performance. Yet because they fall outside formal markets, their value is rarely measured or managed.

By quantifying and monetising the value of social production, governments and investors can make this hidden economy visible - revealing how the social foundations of brain capital are expanding or eroding, and directing resources to strengthen them, much as they would maintain physical or digital infrastructure. For organisations, measuring their contribution to social production demonstrates social sustainability, builds trust and loyalty, and helps attract mission-aligned investment and talent.

How measurement could work:

- **At the national level**: Establish a Social Production Satellite Account to quantify and value unpaid contributions across regions and demographic groups, providing an evidence base to guide public and private investment in social capital infrastructure.
- **At the organisational level**: Track and report the monetary value of social production generated through unpaid activities undertaken by employees, such as volunteering, mentoring, or civic participation. Measuring this value enables organisations to examine how social production contributes to workforce retention, adaptability, and community impact, and to refine workplace policies that strengthen these outcomes.

What measurement could enable:

For governments

- Track growth or decline in civic and social vitality across regions and demographic groups.
- Compare the returns on investment in social-capital infrastructure – such as civic participation and resilience initiatives that mobilise citizens for social and environmental good – in terms of additional monetised social production generated per dollar invested.
- Use systems modelling to identify where investments in social production deliver the highest combined economic, social, and health returns.

For organisations and investors

- **Mobilising social production as a source of organisational capital:** Measuring social production would enable demonstration of how supporting unpaid social contribution – such as volunteering, mentoring, or civic participation – strengthens brain capital within the workforce, driving innovation, adaptability, trust, cohesion, and retention.
- **Valuing social production as an investment in system resilience:** Measure and report the monetary value of an organisation's contribution to social production to show how it strengthens the communities in which businesses operate – building local capability, social cohesion, and wellbeing that, in turn, underpin workforce stability, market confidence, and sustainable long-term returns. This reinforces an organisation's social licence to operate and enhances reputation capital - particularly in sectors facing significant disruption due to automation and generative AI.