



Banks Matter:

Inclusive Banking Matters More

ADRIAN D. SAVILLE



“The problem of poverty must force us to innovate, not claim rights to impose our solutions.”

– C.K. Prahalad, *The Fortune at the Bottom of the Pyramid* (2005)¹

**“We have the Internet of
Everything but not the
inclusion of everyone.”**

— Ajay Banga, MasterCard CEO (2015), now President of the World Bank²

Banks Matter: Inclusive Banking Matters More

Adrian D. Saville¹

Banks are economic enablers and social transformers.³ When designed with inclusion in mind, they can be catalysts for national prosperity. This paper explores the power of inclusive banking through theory, data, and global examples.

Bank to the future

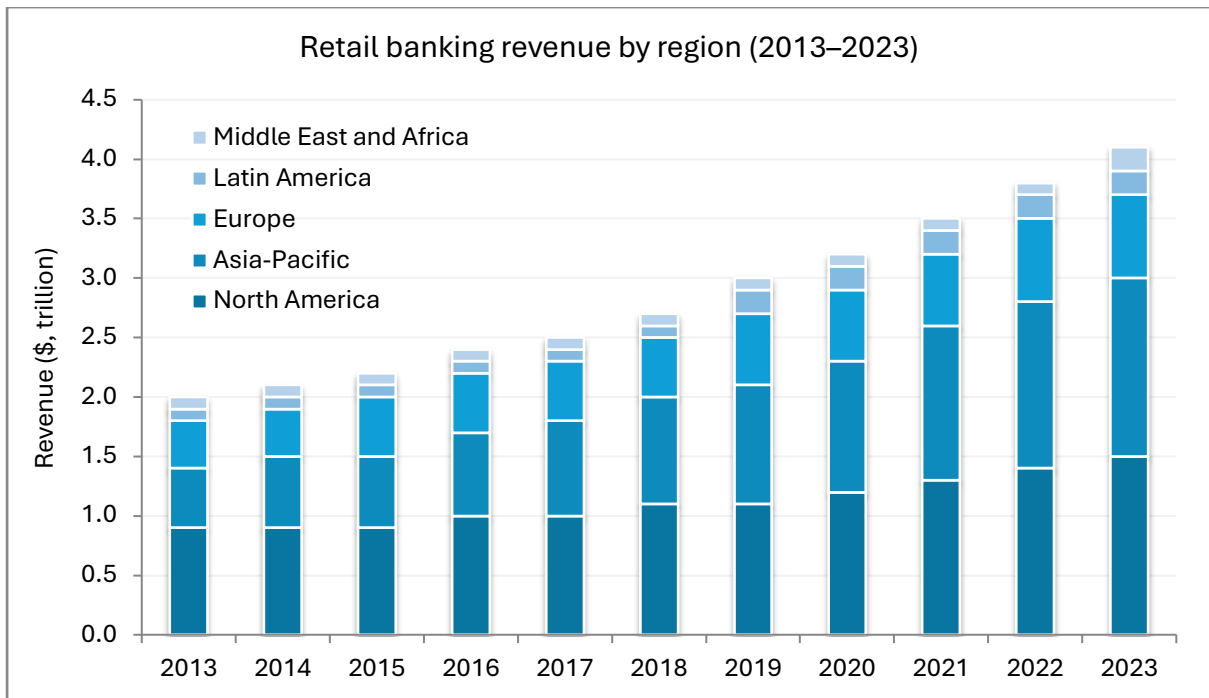
The retail banking industry has been around in some shape or form for centuries. Early forms of banking can be traced to temple and palace institutions in ancient Mesopotamia around 2500 BCE, where deposits were safeguarded, loans were extended, and credit systems were recorded on clay tablets.⁴ Since then, retail banking has become a staple in many lives and scaled into a vast global industry. Yet global does not mean universal. While banks serve many, they still fail to reach all, or even most. And if banks are engines of economic growth and well-being, extending services to the many who remain unbanked or underbanked could unlock prosperity where it is needed most.

Modern banking works (mostly)

Financial inclusion across markets has significantly boosted global retail banking revenues, particularly in developing regions. Global management consulting firm McKinsey & Company reports that over the period 2013-2023, retail banking revenue grew at an annual compound rate of 10.0%, 16.0%, and 6.7% in Middle East and Africa, Latin America, and Asia-Pacific, respectively, compared to the 6.4% growth in high-income economies.⁵ Notwithstanding regional differences, collectively, recent growth is impressive, and this echoes a longer historical trend.

According to economist Kenneth Rogoff, there were about 250 million bank accounts around the globe in 1920 – covering less than 20% of the world’s adult population, concentrated in Europe and North America.⁶ By 1970, Forest Capie and Alex Webber estimate the number had grown to approximately 1.2 billion, still covering fewer than 30% of adults worldwide.⁷ However, the World Bank Global Findex recorded that by 2021, 76% of the global adult population – roughly 4.1 billion people – had access to a bank or mobile money account.⁸

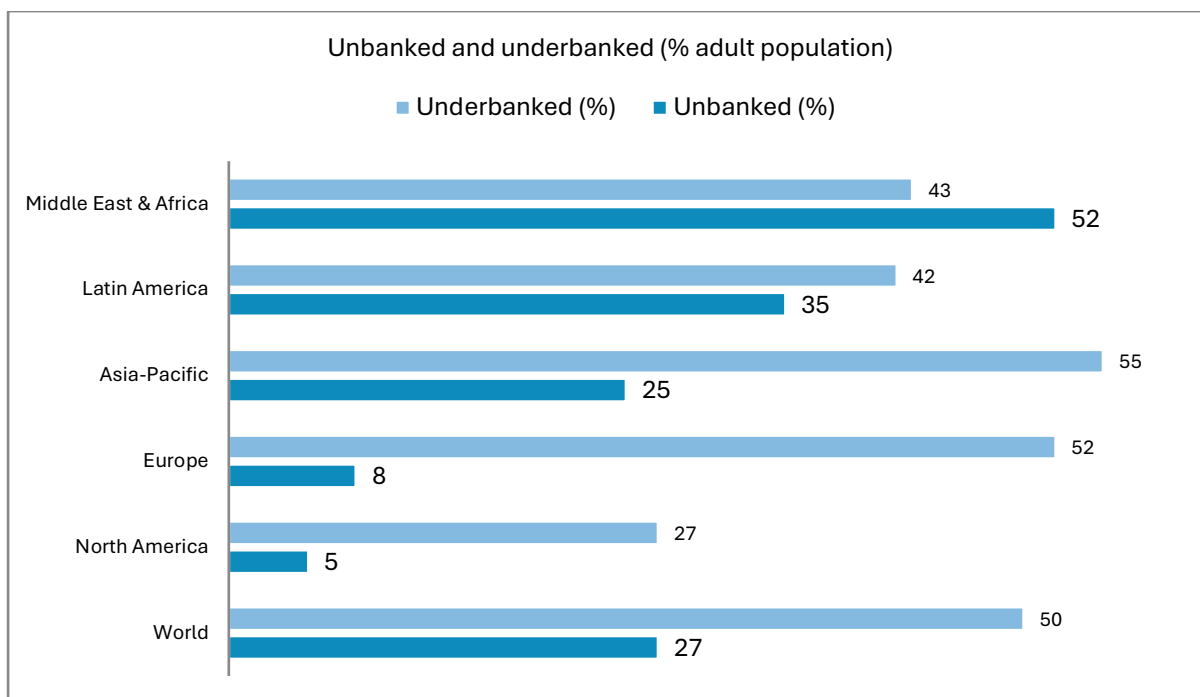
¹ Professor in Economics, Finance and Strategy, Gordon Institute of Business Science, University of Pretoria, and Founding Director, Boundless World (Pty) Ltd. The author would like to gratefully acknowledge the assistance and support of Avaani Singh, Rotman Commerce and IE University; Ian Macleod, Boundless World; and Tamsin Freemantle, Collins Consulting.



Source: McKinsey (2024)

Notwithstanding this sweeping growth through time, an estimated 1.4 billion adults worldwide remain unbanked, meaning they do not have an account at a financial institution or through a mobile money provider.⁹ Notably, over half of these unbanked individuals reside in just seven places: Bangladesh, China, India, Indonesia, Mexico, Nigeria, and Pakistan.¹⁰ Further, perhaps as much as half of the world’s adult population is “underbanked” – meaning people who have access to a formal account, but continue to rely on alternative financial services such as payday loans, cheque-cashing outlets, or informal credit.

According to the World Bank’s Financial Inclusion Project, 44% of the world’s adults are still using cash to make at least one of their utility payments each month, and the largest number of unbanked adults reside in Asia Pacific – mainly explained by large population sizes in rural Asia – while the largest portion of unbanked people reside in Africa.^{11, 12} These users face barriers such as high fees, limited credit access, or low trust in institutions, which means they experience only fragments of the financial system available to others, and so they remain trapped on a financial treadmill.



Source: Lucidity Insights (2024), "Underbanked" defined as the percentage of adults without a credit card as defined by the World Bank Financial Inclusion Project.

Banks matter

Many of us take banks for granted. We are accustomed to making payments online or visiting a bank branch for more complex matters. We drive past dozens of ATMs each day. This proximity and ubiquity can mask the marvel of banking. Banks matter in critical ways.

Banks play a critical role in enabling the innovation that economies need to grow. As Mario Draghi, then President of the European Central Bank, observed, a healthy banking system facilitates the Schumpeterian process of creative destruction – not only by directing credit to younger, more dynamic firms, but also by supporting the resolution of debt tied to older, less competitive businesses. This is not an easy process. Like burning pastures to encourage new growth, outdated business models must sometimes give way to better ones – a transition that cannot happen without a functioning banking system.

More than fostering innovation, banks are a cradle for economic growth. Ross Levine of Stanford University and the National Bureau of Economic Research (NBER) illustrated this with his seminal paper in the *Journal of Economic Literature*.¹³ His sprawling review of theoretical positions and empirical data finds the quality of the banking system is a strong predictor of rates of economic growth, capital accumulation, and technological change.

As Levine writes “... a growing body of empirical analyses, including firm-level studies, industry-level studies, individual country-studies, and broad cross-country comparisons, demonstrate a strong positive link between the functioning of the financial system and long-run economic growth. Theory and evidence make it difficult to conclude that the financial system merely – and automatically – responds to industrialisation and economic activity.” He goes on to conclude: “The body of work would push even the most sceptical toward the appreciation that the development of financial markets and institutions is a critical and inextricable part of the [economic] growth process and away from the view that the financial system is an inconsequential sideshow, responding passively to economic growth.”

But if banks are “good” then the best banks are “inclusive”. Rajan and Zingales¹⁴ have shown that financial development is strongly associated with poverty alleviation and income inequality. Their widely cited work examines the causal relationship based on a single rationale: that financial development reduces the costs of external finance to firms. In their words, “financial development has a substantial supportive influence on the rate of economic growth.” This stands to reason. Efficient, competitive banks cut the cost of capital for its clients. And the findings quickly extend from the firm to the family.

In their paper *Finance, Inequality and the Poor*, Beck, Demirgüç-Kunt, and Levine demonstrate that countries with deeper, more accessible banking systems tend to achieve higher income levels and lower poverty rates.¹⁵ Even the abstract of their work makes clear that financial development “disproportionately boosts the incomes of the poorest quintile, reduces inequality, and lowers the share of the population living on less than US\$1 a day.” Their analysis shows that around 40% of the long-run benefit to the poor comes from reduced inequality, and 60% from faster overall economic growth. The findings emphasise that a strong, inclusive financial system is fundamental not only for economic expansion but for lifting the living standards of the poorest.

One study covering 36 African nations and more than 53,000 people found that “the probability of getting a job increases by up to 17.9 % when the individual has access to banking services. It is worth noting that the authors applied a low bar for access. An individual was deemed to have access to a bank merely by living nearby one. This suggests that even modest innovation could boost that 17.9% further still. The authors’ pithy suggestion: “The findings of this paper support the view that African countries should implement policies aiming at improving the access to the banking sector to boost jobs creation and address the issue of unemployment in the continent.”¹⁶

Exclusion from financial services can also be a function of political borders. In a world with high and growing levels of migration, many migrants find themselves financially stranded in their new country, despite a credit history back home. Zolve, a neobank built for high-skilled migrants moving to the United States, recently raised US\$251 million to help migrants clear a critical hurdle. The business model makes the powerful point that financial freedom shouldn’t depend on your passport. Founded in India and based in the United States, the company uses credit histories from a customer’s home country to underwrite that person in their new country, creating access to bank accounts, credit cards, and home loans from day one. In this way, Zolve dissolves borders, making the firm part of a growing wave of fintechs that see inclusion not as a feature, but as a foundation.

The banking engine behind economic miracles

Banks are also integral parts of every economic “miracle” we know. In the case of Vietnam, *per capita* income has grown by a factor of six times in the space of 30 years. The introduction of a two-tier banking system in the late 1980s played a pivotal role in capital mobilisation during the country’s transition from a planned economy.¹⁷ A 2022 study by Nguyen found a strong long-term correlation between banking development and growth in gross domestic product (GDP).¹⁸ And state-owned entities, including banks, play an important role in carrying out government strategies to boost infrastructure.¹⁹ In recent times, retail digital banking has also surged, and by the end of 2024, Vietnam’s banking sector reached a 98% digital transaction rate.²⁰

Brazil can also point to banking reform as an underlying driver of growth. “Financial institutions had to be completely reformed” after 1994, ushering in “a very conservative and successful regulatory framework ... to avoid the permanent instability of the past.”²¹ To pick just one tool used

to repair Brazil's banking system, the Program of Incentives for the Reduction of the State Role in Banking Activity (PROES) restructured and privatised banks. This slashed the number of public banks from 32 in 1994 by almost two thirds in less than a decade – underlining that for banks to function, the system needs to function.²²

Others have followed suit.

India's great leap upward could not have happened without the financial inclusion that microfinance and digitisation capacitated. Pradhan Mantri Jandhan Yojana (PMJDY) is a government-led financial inclusion initiative launched by the Government of India in 2014. Its primary objective is to provide universal access to banking facilities, ensuring that every household has at least one basic banking account. This includes access to financial services such as savings and deposit accounts, remittances, credit, insurance, and pension funds in an affordable manner.²³ People can open an account even with a zero balance. Within just a week of its launch, the initiative set a Guinness World Record: 36 participating banks had opened 18,096,130 accounts under the financial inclusion campaign. India is a financially transformed nation. The country has built the world's largest digital biometric identity system and real-time payments infrastructure, and its use of digital technology has enabled India to achieve financial inclusion for 85% of its population – when only 20% had access to formal banking a decade ago. Perhaps most important of all is the fact that banks enable saving. Saving feeds investment, and that is the heart of inclusive economic growth that builds prosperity.

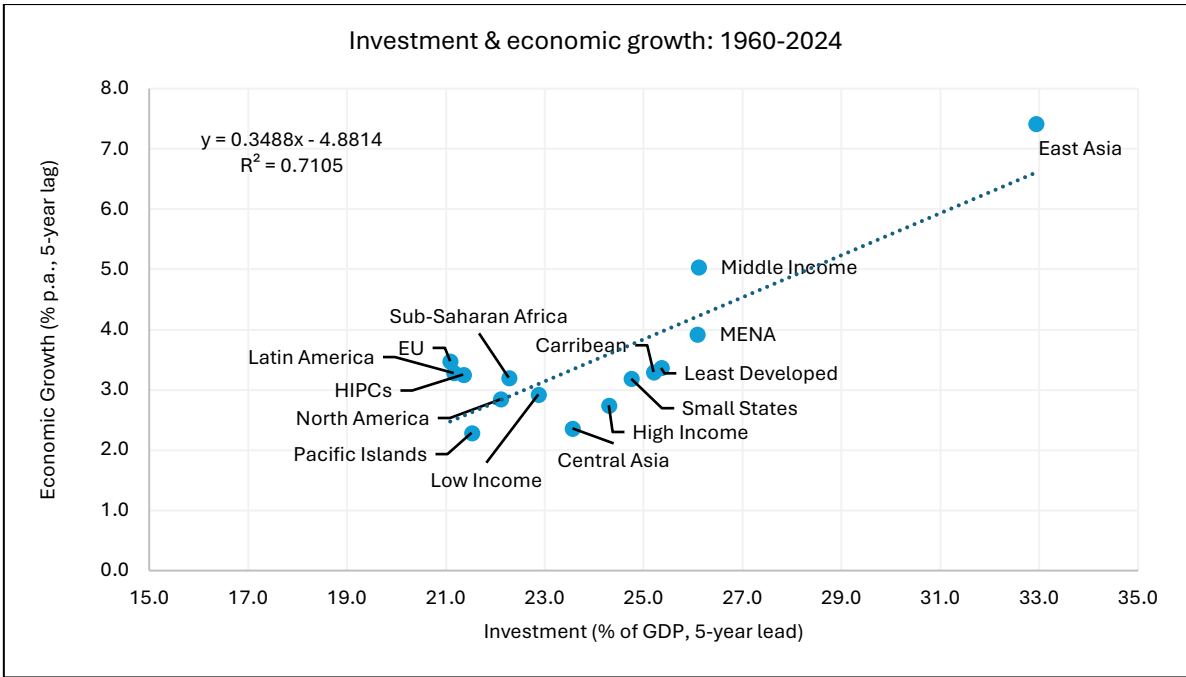
Save. Invest. Prosper

“Banking is necessary, banks are not”.²⁴ When Bill Gates, then President and CEO of Microsoft Corporation made this statement in 1994, he threw the cat among the pigeons in the entrenched financial system, challenging widely held beliefs, and sparking discussions that are still going on today. The question then is, if banks aren't necessary, why does banking matter? Evidently, Gates was speaking to the bricks and mortar design of banks, not the services they offer.

A strong causal link exists between financial inclusion – enabled by banking – and the achievement of sustained prosperity. Savings, made possible through access to formal financial services, are the primary source of capital for investment. Elevated levels of investment, in turn, drive economic growth. While economic growth is a crude proxy for prosperity, it remains a useful one, with growth in per capita incomes strongly correlated with self-reported happiness, democratic resilience, life expectancy, and corporate performance.²⁵

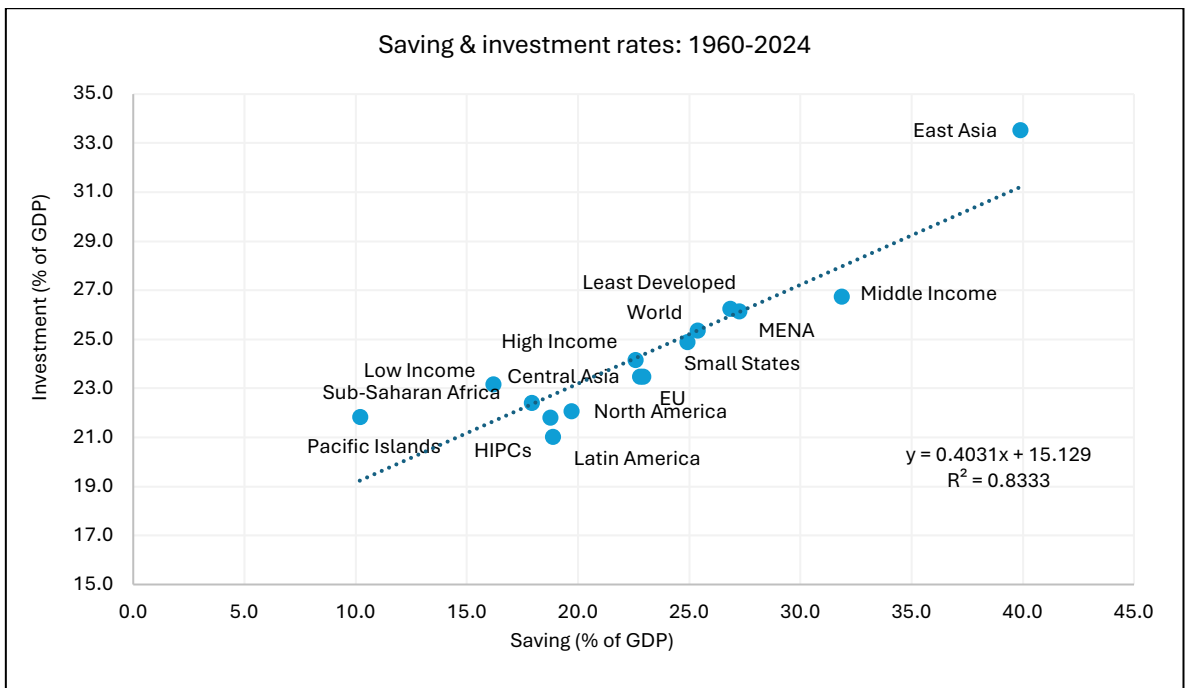
Banking plays a central role in this process. By accepting deposits, banks transform individual surpluses into saving that is channel into credit. This credit creation becomes the fuel for productive investment – and, less ideally, consumption – making banking the essential conduit from financial surplus to growth. By the design of their business models, banks can do this narrowly, aiding certain segments of society. Or they can do it inclusively, broadly enabling small and large sums of money to be saved and transformed into prosperity via the same mechanism but with wider reach through greater efficiency.

Investment plays a central role in driving economic growth. Across a wide range of countries and regions, there is a consistent relationship between the share of investment spending in GDP, averaged over a decade, and the pace of economic growth in the years that follow. Drawing on data from 160 countries over a period of 65 years, the evidence makes a simple point: if we want to understand the forces behind sustained economic growth, we should start with investment.



Source: World Bank data, analysis Adrian Saville and Ian Macleod, Boundless World (2025)

In turn, the evidence from the same set of 160 countries underlines the point that if we want to understand a country's investment level, the root cause is savings. The strength of the relationship between investment and saving takes the form of an $R^2 = 0.833$, which indicates that four-fifths of a country's investment level is explained by the domestic saving rate.²⁶ To put it simply, to fund investment spending and generate economic growth, you need access to savings that fund elevated investment levels.



Source: World Bank analysis by Adrian Saville and Ian Macleod, Boundless World (2025)

Building a nation's savings base

But not all sources of savings are equal. Savings can come from foreign sources in the form of foreign direct investment, foreign portfolio investment, trade credit, or even foreign aid. But these funding sources often are beyond the direct or immediate control of the nation in question – sentiment can shift swiftly. Witness your foreign currency crisis of choice: the Mexican Peso Crisis (1994), the Asian Financial Crisis (1997), Argentina's sovereign default (2001), Turkey's lira collapse (2018), the Eurozone debt crisis (2010–2015), and Sri Lanka's balance of payments crisis (2022).

Governments can save, but it is not their primary role. Most are mandated to deliver services, not to accumulate surpluses. Norway stands as a rare exception, building a vast sovereign wealth fund from oil revenues. More typically, governments run persistent deficits. Nigeria highlights the risk: in 2023, debt service consumed 80% of government revenue.²⁷ Over the past decade, governments in advanced economies have averaged fiscal deficits of 4.3% of GDP per year, with emerging markets and low-income countries averaging 5.0% and 4.1%, respectively. Across all countries, the 30-year average deficit stands at 3.0% of GDP. Governments seldom save – which underlines the imperative to spend effectively.

A third source of saving is corporates, which typically account for 8%–12% of GDP, with slightly higher levels in advanced economies than emerging markets.²⁸ This means that corporate savings are a fundamental source of saving across nations – a role that increases in importance because of the relatively shorter transmission mechanism from company savings to fixed investment.

But if the search is for elevated saving rates, then this establishes households as the vital swing factor. Countries with high household saving rates exhibit high overall national saving rates – and, by extension, higher investment rates.²⁹ Generally, households are not mandated to invest (or spend); and so, typically, their decisions to save are voluntary and often driven by long-term financial goals. Just as important, saving is a sound personal finance strategy. Encouragingly, once households adopt the habit of saving, they often become a reliable and persistent source of savings. We also have robust ways to nudge household saving rates upwards.

Transforming low-saving cultures into high-saving ones is a keystone of making a country rich. A number of countries have achieved this in inspiring fashion: Japan (1950s–1980s), where exceptionally high household saving rates underpinned rapid industrialisation and global technological leadership; South Korea (1960s–1990s), where aggressive savings mobilisation campaigns lifted household saving from 5% to over 20% of income, helping finance export-led growth; Germany (1950s–1970s), where disciplined personal saving supported the reconstruction of a devastated economy; Poland (1990s–2010s), which steadily built savings and stability during its post-communist transformation; China (1990s–2010s), where exceptionally high household and corporate saving rates above 30% of GDP sustained decades of double-digit growth; Singapore (1970s–present), which institutionalised savings through the Central Provident Fund to drive investment and national development; and Botswana (1970s–2000s), where prudent management of diamond revenues and strong saving behaviour translated resource wealth into lasting prosperity.

Given the constraints of time and space, the case of Chile is used to illustrate these dynamics in greater detail.

From mandated saving to a test of financial inclusion

Few countries illustrate the paradox of progress and vulnerability as sharply as Chile. Emerging from the shadows of the Pinochet regime – with its legacy of political repression, economic inequality, and institutional fracture – Chile nonetheless engineered one of the most sustained economic performances in the developing world. Central to this transformation was a commitment to fiscal discipline, institutional credibility, and mandatory long-term saving, which together gave rise to Latin America’s quiet economic miracle. But behind this headline story lies a deeper truth about the architecture of inclusion and the evolving role of financial institutions in enabling – or constraining – opportunity.

While Chile’s transformation is most often credited to its pioneering pension reform, the broader narrative is one of systematised saving as a pathway to inclusion. In the early 1980s, Chile shifted from a failing pay-as-you-go pension scheme to a fully funded system of mandatory individual savings accounts. Faced with unsustainable demographics – the number of active workers per pensioner fell from 12.2 in 1955 to 2.5 by 1980 – the government legislated that all formally employed workers contribute 10% of pre-tax income into privately managed Pension Savings Accounts (PSAs)³⁰ with funds invested by licensed *Administradoras de Fondos de Pensiones* (AFPs). Contributions were mandatory, deducted at payroll, and largely inaccessible before retirement – embedding long-term saving into the architecture of the Chilean labour market.

The economic results were profound. Chile’s gross national savings rate rose from under 10% of GDP in 1986 to 29% by 1996, and the country sustained real GDP growth averaging over 7% per annum through the 1990s.³¹ Pension assets grew to exceed 70% of GDP by the early 2000s, creating one of the deepest capital markets in the developing world. Yet the system had clear limitations. It was built on formal employment, leaving informal workers – particularly women and low-income earners – excluded from long-term savings.

In this way, Chile provides a compelling example of how transforming a low-saving culture into a high-saving one can underpin sustained economic growth. But, as Chile’s experience shows, high household saving is vital – yet it is not enough on its own. To be most effective, savings need to be mobilised through a trusted, efficient, inclusive banking system to drive investment and prosperity.

To this end, and returning to our earlier list of countries, where banks have played a strong role, the results have been most transformative. In Japan (1950s–1980s), a dense network of savings banks and postal institutions efficiently captured household savings to fund reconstruction and industrialisation. In South Korea (1960s–1990s), banking sector expansion and government-led savings campaigns helped finance the country’s export-led growth. Germany (1950s–1970s) relied on its community-based *Sparkassen* to channel household deposits into small- and medium-sized enterprise development and infrastructure rebuilding. Similarly, Poland (1990s–2010s) used post-communist banking reforms to expand household access to finance, supporting growth built on rising domestic saving.

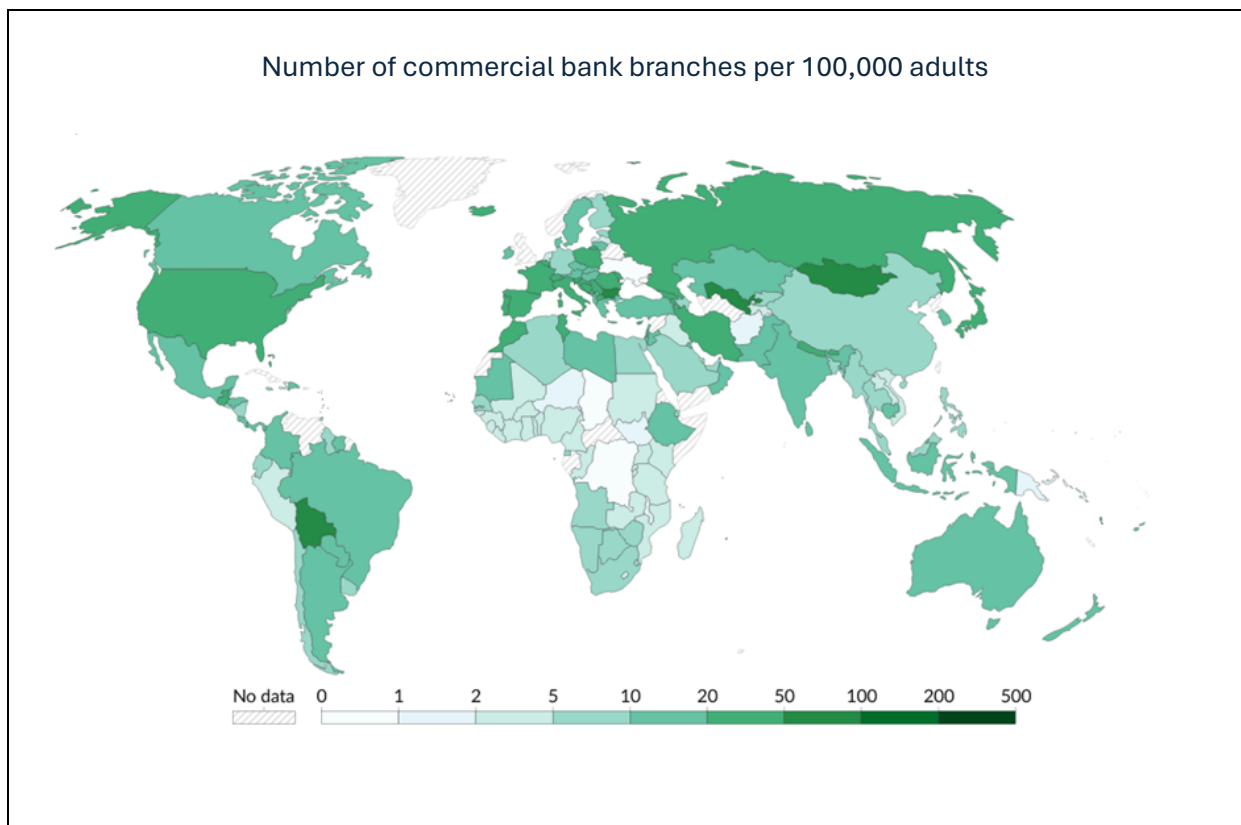
From this it is evident that financial inclusion that mobilises saving is the starting point of transformation; and that banking dynamism is the engine.

Banking: “me” or “we”?

“Me. We.” said boxing legend Muhammad Ali. His words surprised the group of Harvard students he was addressing. Someone in the crowd had shouted out “Give us a poem, Muhammad”, sparking what some have called the shortest poem in history.

Circling back to our earlier point about banking models, Ali had inadvertently framed our discussion well. Banking can be exclusive, serving populations via the “me” model, where bank branches, bank managers and personnel are concentrated in high-density areas – reach can be extended through branches that are less well services and by other technologies, like physical ATMs. Or there is a model that has the capacity to serve the billions of people – the “we” – who are locked out of traditional banks while, at the same time, servicing the already-banked better.

All the savings-to-investment-to-growth superstars had one fundamental in common: access to banking services. It all starts there.

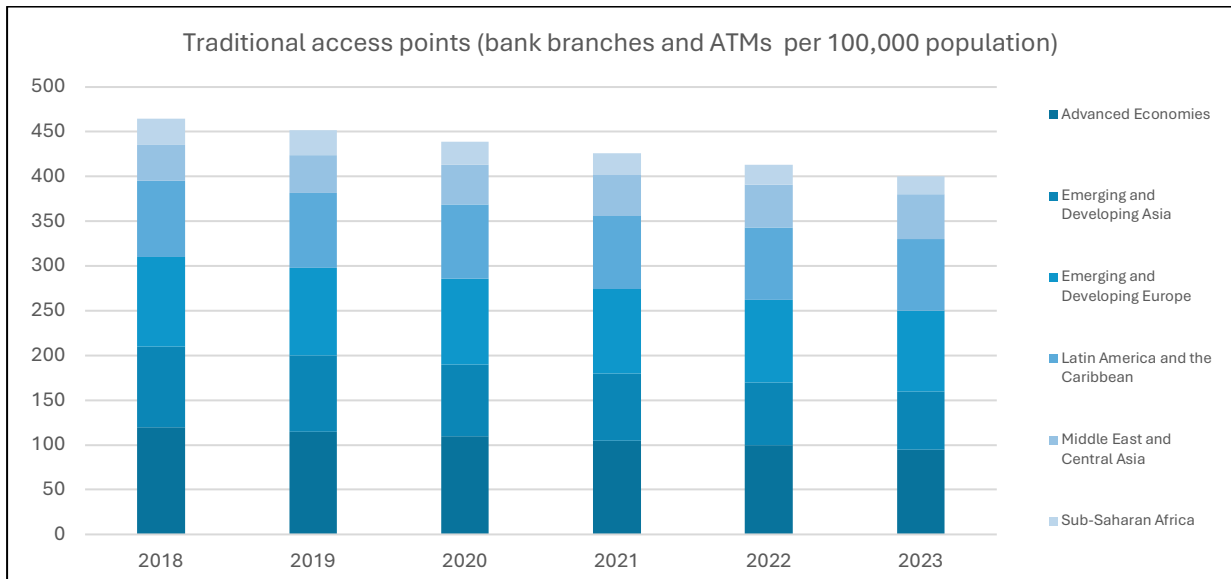


Source: IMF Financial Access Survey 2024

Clearly, some parts of the globe are succeeding. However, as the map of bank-branch density shows, across parts of Asia, eastern Europe, the Middle East, and Africa banking access is more muted. Large numbers of people in these regions don’t have access to even a basic savings account.

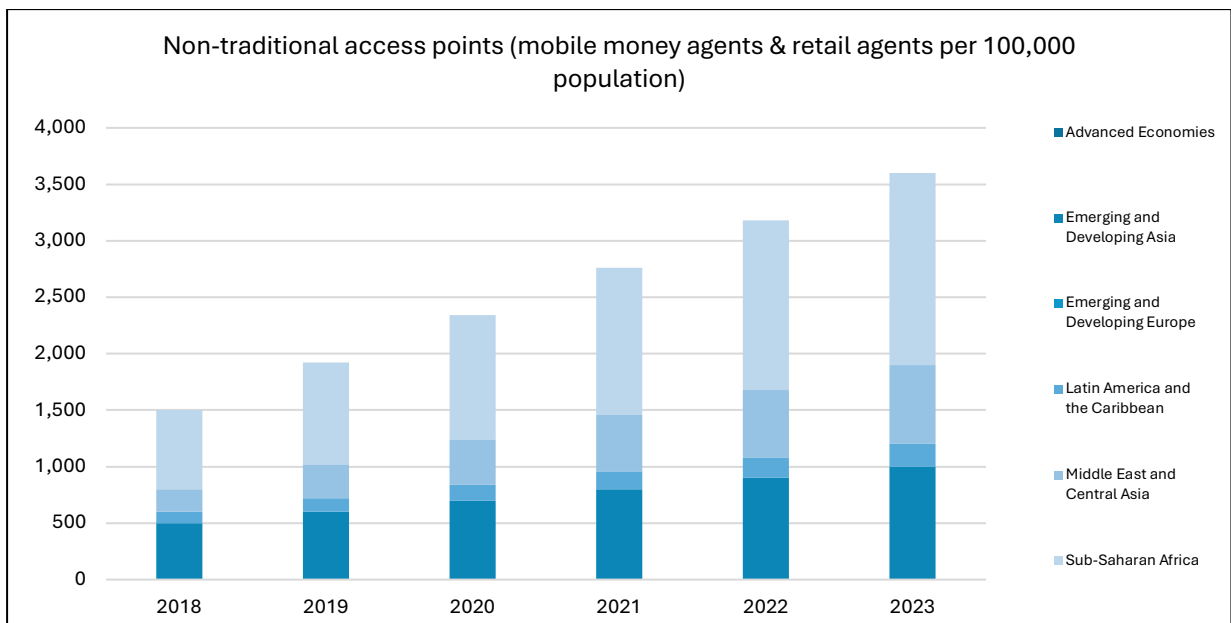
There is good news though. Availability of digital financial services is growing, and so is adoption. The Financial Access Survey highlights the growth of mobile money in sub-Saharan Africa, for instance. This reflects the famous success of mobile money services such as M-Pesa in Kenya. The trend offers a clear-cut principle. Efforts to extend traditional banks with their brick-and-mortar branches will do some good at a high cost. Digital banks, by contrast, have the capacity

to upend the status quo and redirect entire economies towards epochal transformations in living standards.



Source: IMF Financial Access Survey (2024)

In the space of years, digital banks are achieving the reach that traditional banks needed decades to build. The 160-year-old, South African-headquartered Standard Bank has 18 million clients across its operations in 20 African countries. Capitec, the globally respected South African-built bank, took 20 years to reach 15 million customers with a modernised branch model and digital reach. And then Tyme Group’s digital banks in South Africa and the Philippines acquired 15 million customers in five years.



Source: IMF Financial Access Survey (2024)

This begs a question: can traditional banks simply pivot into the digital space? Global accounting firm PwC argues that many traditional banks have become prisoners of their past with labyrinthine systems that are costly to run and slow to adapt.³² But it’s not an impossible ask. Witness the remarkable reinvention of DBS Bank – once a lumbering state-owned institution, now often hailed as one of the world’s most digitally-transformed banks. Under the stewardship of

Piyush Gupta, DBS shed its bureaucratic skin and embraced technology not as an accessory, but as a core operating principle. Yet, such transformations remain rare. For every DBS, there are dozens of incumbents mired in technical debt and institutional inertia.

By contrast, upstart competitors – neobanks and fintech challengers – are born digital. They build from the cloud down, not the mainframe up. This establishes their edge: a feedback system of Data, Network effects, and interwoven Activities. This “DNA loop” allows digital natives to iterate faster, personalise deeper, and scale more efficiently. Freed from the constraints of bricks, branches, and legacy code, these players operate with lower costs, higher agility, and – crucially – a better cultural fit for the pace of the digital economy.

Banking at the bottom of the pyramid

But one might ask, are low-income communities and rural dwellers unbanked because they’re unbankable because of a lack of applicable business models? Renowned professor of business strategy CK Prahalad answers with a resounding “no”. He coined the term the Bottom of the Pyramid (BoP) in 2002, and his contention was that if you live in poverty this doesn’t necessarily equate to accepting sub-standard goods and services, including financial services.

Prahalad demonstrates that the lives of the poorest can be changed using for-profit models and that uplifting this sector of the global population is not solely the purview of governments and non-governmental organisations.

The evidence agrees. In Mexico, cement maker Cemex, has transformed lives by providing affordable home construction solutions to low-income families, including innovative ways to provide credit, technical assistance, and delivery of construction materials in small batches. As of December 2022, Cemex’s Patrimonio Hoy offering “has benefitted 650,000 families, representing over 3 million people.”³³ And Unilever, the fast-moving consumer goods giant, is often cited for one of the most iconic BoP successes in India. Recognising the needs of low-income consumers, the company developed an affordable detergent designed specifically for people who often wash clothes in rivers. Unilever decentralised production and distribution, partnering with local corner stores and building a network of women entrepreneurs – known as *Shakti Ammas* – to sell products door-to-door and expand their reach deep into rural markets.

Shared value creation

In 2011, Michael Porter and Mark Kramer created the concept of shared value creation, where businesses change their understanding of value being only financial, to one of shared value. Where business opportunities, social needs and corporate assets intersect is where shared value lies.³⁴ The link between Porter, Kramer and Prahalad’s theories lies in the fact that Prahalad is arguing in favour of a for-profit business model and Porter and Kramer state that created shared value and corporate social responsibility are not the same. Created shared value is profitable if business opportunities that intersect with social needs and corporate assets are leveraged. Both models are for profit, and not government or company sponsored. And this is where the rubber hits the road.

There are seminal examples that capture the way in which these models apply. In East Africa, Equity Bank reached scale by leveraging mobile and agent banking to serve over 18 million customers, many of them previously excluded from the formal sector.³⁵ In India, Bandhan Bank evolved from microfinance to a full-service commercial bank while continuing to serve low-income women borrowers.³⁶ Latin America offers notable cases such as BancoSol in Bolivia, the

world's first regulated microfinance bank, and Banco Azteca in Mexico, which reaches millions through retail-embedded banking.³⁷ In Europe, Banca Etica in Italy demonstrates a mission-driven approach, financing cooperatives and underserved communities with ethical principles at its core.³⁸ But few models are as foundational as Grameen Bank in Bangladesh, which pioneered group-based microcredit for women and inspired a global movement of pro-poor, financially sustainable banking.³⁹

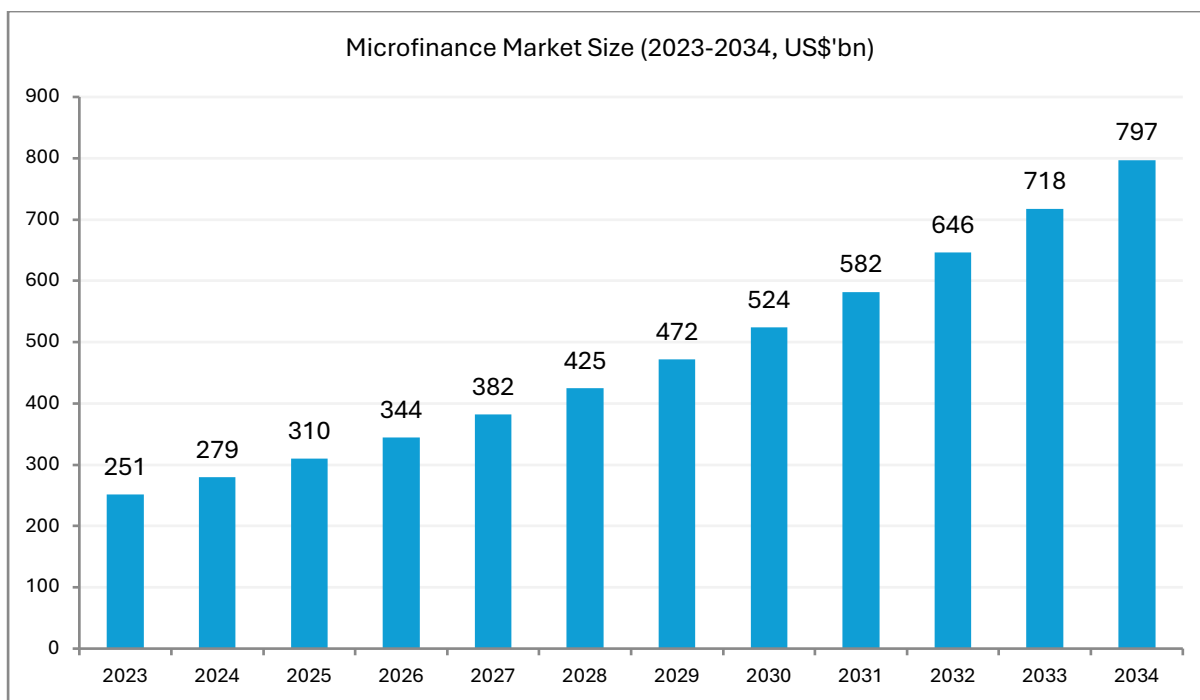
The bank's core innovation was replacing collateral with group-based lending: borrowers form peer groups jointly responsible for repayment. This "social collateral" structure has driven repayment rates of over 95%, even among illiterate and asset-poor clients.⁴⁰ Grameen's decision to focus on women – 97% of its nine million borrowers – was bold in a conservative Muslim society, but profoundly effective.⁴¹ Women used loans for income-generating activities, gained greater autonomy in household decisions, and improved the welfare of their families. Pitt and Khandker (1998) found that every Taka100 borrowed by women increased annual household consumption by Taka18, compared to Taka11 for men – indicating higher marginal returns when lending to women.⁴²

Prior to Grameen, many poor households relied on informal moneylenders charging exploitative interest rates of 10%-20% per month.⁴³ Grameen offered predictable, declining-balance interest of around 20% annually. This undercut predatory lending and increased financial stability amongst Bangladeshi households. A World Bank study showed that informal credit rates fell by nearly 50% in villages with microfinance institutions translating into a material uplift in wellbeing in each of these communities.⁴⁴

Loans were designed not for consumption, but for investment. Grameen's portfolio showed over 75% of loans supporting productive activities – livestock rearing, petty trade, food processing, and tailoring – with strong returns. Hossain (1988) found that 25% of borrowers crossed the poverty line within five years of taking their first loan from the bank, with significant increases in employment, household income, and durable assets.⁴⁵ By 1993, Grameen had mobilised over Taka4.5 billion in deposits – more than four national banks combined.⁴⁶

This transformation turned clients into active savers and investors. Bangladesh's gross domestic savings rate increased from 5.5% of GDP in the 1970s to average 29.2% since then, reflecting a significant shift in financial behaviour. This rise in savings has supported the country's average investment level of 30% of GDP over the past 15 years, compared to lower rates in earlier decades. Economic growth has averaged 6% annually in recent years. *Per capita* income has grown at 4.6% per year over the last three decades compared to the feeble growth of 0.4% per year over the thirty years from 1960-1989. Consequently, *per capita* incomes have grown three-fold over the past 25 years to reach US\$2,675 in 2024. The Asian Financial Cooperation Association reports that “with the joint efforts of the Bangladeshi government, the people, and Grameen Bank, the country, as shown in the latest data from its bureau of statistics, has seen the absolute poverty rate plunge from 82% in 1972 to 11.3% in 2018.”⁴⁷ These developments underscore the broader macroeconomic impact of inclusive financial models.

Grameen may be the iconic example, but it is not alone. The global microfinance market is expected to more than triple in size – from US\$251 billion in 2023 to US\$797 billion by 2034.



Source: Precedence Research (2024)

Banks matter, and their models matter even more. There is a grand “however.” Building inclusive bank models establishes the supply of inclusive banking services. The circle is only squared if those services are demanded and from the field of behavioural economics and finance, we get valuable guidance on how to establish demand for the valuable services afforded by financial inclusion.

Supply doesn’t cause demand

“If you build it, they will come.” This is the oft-quoted line from the 1989 film *Field of Dreams*. For the movie buffs among us, the actual line is more precise: “If you build it, he will come.” In the film, the protagonist, Ray Kinsella, hears a mysterious voice urging him to build a baseball field in the middle of his cornfield. The voice is not calling a crowd but his late father, and the field becomes a vehicle for reconciliation. Yet over time, the quote has morphed into a broader metaphor – a promise that creating something of value will automatically generate its own audience.

That may work for ghosts and baseball, but the dictum falls short in banking. Building a bank – whether physical, digital, or some hybrid variant – is no guarantee that people will come. A well-capitalised balance sheet, elegant mobile interface, or branch network might offer the supply side of financial inclusion, but it doesn’t ensure uptake. Simply offering access does not close the loop. Demand must be activated, and that depends on how people think, decide, and behave – often in ways that are neither consistent nor economically rational.

Fortunately, we don’t have to guess why many people don’t engage with banking services. Abhijit Banerjee and Esther Duflo, professors at the Massachusetts Institute of Technology and recipients of the 2019 Nobel Prize in Economics, are among the most influential thinkers in development economics. As co-founders of the Abdul Latif Jameel Poverty Action Lab (J-PAL), they pioneered the use of randomised controlled trials to test anti-poverty interventions in the real world. In their book *Poor Economics*, they distil years of empirical work into a core set of

insights – three of which are particularly relevant for understanding why financial inclusion often fails to take root.⁴⁸

First, information asymmetry: the poor often lack basic awareness of the financial tools available to them. Second, lack of access: even when products exist, basic services such as savings accounts, insurance, and pensions remain physically or procedurally out of reach. Third, missing markets: credit, especially unsecured and small-value loans, is either unavailable or unaffordable. These barriers are slowly being broken down by inclusive business models, bolstered by digital infrastructure. Mobile banking, simplified onboarding, and data-driven credit assessment are replacing legacy systems of paperwork and exclusion – bringing formal finance to those who need it most.

Banking on behaviour

The field of behavioural economics and financial decision-making is a rich, fast-growing body of knowledge. From the earliest explorations of bounded rationality to today's data-driven applications in banking and fintech, one lesson stands out: access is necessary, but behaviour is decisive. Financial inclusion requires not only infrastructure but also insight into how people make choices. From this expanding landscape, it is possible to draw out a set of principles that are grounded in evidence and experience.

Access alone, as has been noted, is insufficient. Behaviour matters. The tools of behavioural economics, pioneered by Nobel Laureate Richard Thaler and Harvard professor Cass Sunstein, offer indispensable insights. Nudge theory, developed by Thaler and Sunstein, demonstrates that people are not always the rational agents imagined by classical economics.⁴⁹ Inertia, short-term thinking, cognitive overload – these tendencies shape real-world decisions. For banks and fintech platforms, the relevance is immediate: many people know they should save, but do not. They shy away from borrowing, even when credit could be productive. They disengage from financial systems not out of irresponsibility, but because the system feels complex, unfamiliar, and full of friction. Supply does not create demand. Infrastructure does not automatically lead to engagement.

This is where behavioural insights provide powerful tools. Nudges are not mandates; they are small, subtle prompts that meet people where they are. A reminder to top up savings. An opt-out default on pension enrolment. A targeted offer at just the right time. Nudges work precisely because they respect human behaviour, rather than trying to correct it.⁵⁰ Increasingly, digital challengers are using data not just to personalise services, but to shape engagement in ways that quietly shift behaviour toward better outcomes.

Behavioural interventions often start with commitment devices – mechanisms that help people lock themselves into future actions. In the Philippines, SEED accounts – offering clients the opportunity to restrict withdrawals for a fixed period – led to an 81% increase in average savings balances over one year compared to traditional accounts.⁵¹ In India, LXME, a fintech platform focused on women's financial inclusion, has combined commitment devices with gamification to encourage habitual saving, particularly for retirement.⁵² Commitment devices work because they acknowledge what behavioural economics has long told us: people's present selves are not always good stewards of their future selves.

Defaults, too, have proven enormously powerful. Inertia, far from being an obstacle, can be an ally if used thoughtfully. In the United States, automatic enrolment in retirement savings plans raised participation rates above 90%, compared to around 50% in voluntary schemes.⁵³ The

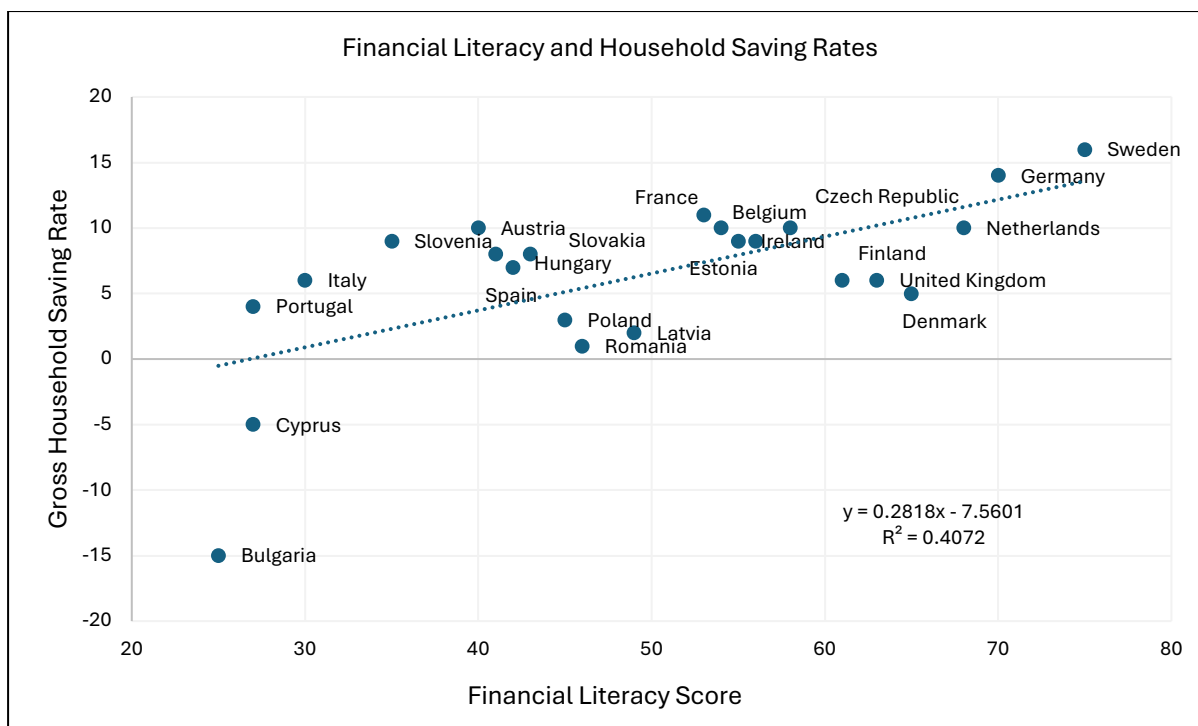
United Kingdom's auto-enrolment policy, introduced in 2012, lifted eligible pension participation from 47% to 87% by 2021.^{54, 55} New Zealand's KiwiSaver programme achieved similarly high uptake, particularly among younger employees.⁵⁶ Defaults succeed because they respect human tendencies: most people will not take the trouble to opt out, particularly when the default choice feels legitimate and endorsed.

Anchoring also plays a subtle but potent role. People tend to rely heavily on initial information – even arbitrary starting points – when making decisions. Suggested contribution rates in retirement plans have been shown to strongly influence eventual saving levels.⁵⁷ Flourish FI, a Brazilian fintech, has used this insight to develop behavioural engagement engines for banks such as Bolivia's BancoSol, where users of the *GanaSol* rewards platform deposited 20% more into their savings accounts and made 266% more digital transactions than non-users.⁵⁸

Prize-linked savings (PLS) schemes, which combine behavioural insights around loss aversion and optimism bias, offer another powerful lever. South Africa's First National Bank found that its 'Million-a-Month Account' attracted more deposits than traditional savings accounts, with PLS accounts constituting 24% of total savings balances within 18 months.⁵⁹ In Mexico, offering prize-linked accounts led to a 36% increase in new account openings in branches where the product was available.⁶⁰ One of the most striking examples of behavioural design at scale is *Ant Forest*, launched by Ant Financial in China. The platform gamifies positive environmental actions, rewarding users with virtual "green energy" points for low-carbon behaviours like walking instead of driving or paying bills online. These points can be used to grow virtual trees, which Ant Financial then translates into real-world tree-planting projects in arid regions of China. Since its launch, Ant Forest has attracted over 500 million users and led to the planting of more than 326 million trees. In doing so, it not only fosters environmental awareness, but also deepens customer engagement within the broader Ant ecosystem – subtly linking behavioural change to both social impact and commercial strategy.⁶¹

Simple reminders also make a measurable difference. SMS prompts increased savings goal achievement by 116% among Ethiopian micro-entrepreneurs.⁶² Platforms like Acorns have built saving behaviour into everyday life by rounding up users' purchases and automatically investing the difference.⁶³ Even emotionally framed reminders – for example, messages purporting to come from a user's children – have been trialled, though studies suggest that tangible rewards remain more effective motivators than emotional nudges alone: gold coins seem to drive stronger responses than gold stars.⁶⁴

Beneath all these mechanisms lies a deeper foundation: financial literacy. Research across the European Union shows a clear correlation between higher financial literacy and higher household savings rates.⁶⁵ Modern digital platforms like LXME in India and Flourish FI in Brazil blend financial education into their offerings, often gamifying content to make learning both engaging and immediately actionable.



Source: Batsaikhan and Demertzis (2018)

The historical roots of behavioural finance stretch far back. As early as the 1690s, England’s *Million Adventure* lottery combined prize incentives with savings mechanisms to finance military efforts to the tune of GBP1 million.⁶⁶ Today’s digital tools merely build on this old insight: that humans are motivated by hopes, habits, and heuristics far more than by abstract rationality.

If the first wave of financial inclusion was about providing access, the next wave – the critical wave – is about building systems that engage behaviour intelligently, empathetically, and effectively. The goal is not to eliminate human fallibility, but to work with it. True financial inclusion rests not just on reaching people, but on understanding them.

Building banks without walls: embedded finance and contextual banking

Behavioural finance integrates seamlessly into daily financial interactions through embedded and contextual banking. China’s Tencent-backed WeBank serves about 400 million customers and continues to add over 2 million users per month, making WeBank the world’s largest digital-only bank by customer base. Additionally, the bank serves over 4.5 million micro, small, and medium-sized enterprises (MSMEs). South Korea’s KakaoBank attracted more than 300,000 subscribers in its first 24 hours in July 2017. Within a fortnight, it surpassed two million customers and today serves over 15 million,⁶⁷ making extensive use of customer data to deliver contextually relevant financial services.⁶⁸

The previously mentioned Zolve, serving affluent Indian expatriates relocating to the US, demonstrates the universal applicability of behavioural finance principles. By leveraging home-country financial histories, Zolve provides immediate access to tailored financial services, significantly easing cross-border transitions. Their intention is to expand these services to Canada, Europe, Australia and New Zealand. Since its launch in 2021, Zolve’s customer base in March 2025 exceeded 750,000, and in addition to offering debit and credit card, it has expanded its product offering to car finance and personal loans.⁶⁹ Its ability to build a successful business

in such a short space of time, despite historical geographical and financial issues for its target client base just highlights behavioural finance's broad applicability across diverse demographics.

The evolution of behavioural finance, supported by sophisticated data analytics, marks a profound shift in global personal saving practices. Commitment devices, default mechanisms, anchoring, gamification, personalised nudges, financial literacy programmes, and contextual banking collectively reshape savings behaviour. These data-driven strategies substantially enhance financial resilience, promoting inclusive and sustainable financial ecosystems worldwide. In this way, then, Ray Kinsella may be right after all: build it, and with the right nudges, they will come.

Conclusion: is it a brave new world?

Banks are useful. Banking is critical. Inclusive banking crosses a Rubicon to a more prosperous world. This was accurate in Ancient Mesopotamia, and it continues to apply today. The real question is how successful we will be in our crossing. How fast will we digitise banking with barrier-breaking models that allow everyone to save, leverage and grow the fruits of their labour?

Sceptics might point to difficulties of geography, behavioural lethargy and embedded systems. Digital bankers, mobile money merchants, and entrepreneurs are putting their swimming trunks on. Code is overcoming distance. Policy and business model innovation is changing behaviour. And new systems are replacing the old.

The evidence suggests a brave new world is already well underway.

Endnotes

- ¹ Prahalad, C. K. (2005). *The fortune at the bottom of the pyramid: Eradicating poverty through profits*. Wharton School Publishing.
- ² Banga, A. (2015, April). *Address to 50th annual convocation of IIM-A*. Quartz. qz.com/india/377104
- ³ Where “banks” and “banking” are referred to generically in this paper, this is shorthand for “retail banks” and “retail banking” which is the focus of this paper.
- ⁴ Hudson, M. (2002). *Reconstructing the Origins of Interest-Bearing Debt and the Logic of Clean Slates*. In M. Hudson & M. Van De Mierop (Eds.), *Debt and Economic Renewal in the Ancient Near East* (pp. 7–58). CDL Press.
- ⁵ McKinsey & Company. (2024). *Global banking annual review 2024: Attaining escape velocity*. www.mckinsey.com/global-banking-review
- ⁶ Rogoff, K. (2016). *The curse of cash*. Princeton University Press.
- ⁷ Capie, F., & Webber, A. (1985). *A monetary history of the United Kingdom, 1870–1982*. Routledge.
- ⁸ World Bank. (2022). *The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19*. globalfindex.worldbank.org/
- ⁹ In 2021, the global adult population (aged 15 and above) was estimated at approximately 5.4 billion individuals, forming the reference group for financial inclusion statistics.
- ¹⁰ World Bank. (2022). *The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19*. bit.ly/3JzW3zY
- ¹¹ www.worldbank.org/en/topic/financialinclusion
- ¹² lucidityinsights.com/infobytes/over-34ths-of-adults-remain-unbanked-or-underbanked
- ¹³ Levine, R. (1997). Financial development and economic growth: views and agenda. *Journal of economic literature*, 35(2), 688-726.
- ¹⁴ Rajan, R., & Zingales, L. (1996). Financial dependence and growth.
- ¹⁵ Beck, T., Demirgüç-Kunt, A., & Levine, R. (2007). Finance, inequality and the poor. *Journal of Economic Growth*, 12(1), 27–49.
- ¹⁶ Ouédraogo, R., Sawadogo, R., & Sawadogo, H. (2021). Access to the banking sector and employment in Africa. *The Quarterly Review of Economics and Finance*, 82, 260-269.
- ¹⁷ A system where a central bank serves commercial banks who, in turn, serve the public and institutions.
- ¹⁸ Nguyen, P. T. (2022). The impact of banking sector development on economic growth: The case of Vietnam’s transitional economy. *Journal of Risk and Financial Management*, 15(8), 358.
- ¹⁹ Infrastructure finance strategies for sustainable development in Vietnam (2017). United States Economic and Social Commission for Asia and the Pacific.
- ²⁰ Dharmaraj, S. (2024). Vietnam: Banking Sector Achieves 98% Digital Transaction Rate. OpenGov Asia.
- ²¹ Filho, E.T.T., Macahyba, L. & Zeidan, R. (2014). Restructuring Brazil’s National Financial System. International Research Initiative on Brazil and Africa (IRIBA).
- ²² Wolters, M. E., Barbosa Do Couto, E., & Felício, J. A. (2014). The effects of the global financial crisis on Brazilian banking efficiency. *Innovar*, 24(53), 23-40.
- ²³ Pradhan Mantri Jan Dhan Yojana (n.d.). Bank of Baroda.
- ²⁴ BusinessWeek. (1994, October 24). *The banking revolution*. BusinessWeek, 3427, 76–84.
- ²⁵ Saville, A. D. (2022, October). *Africa’s growth paradox and growth path: A structural model*. Gordon Institute of Business Science. bit.ly/3U2Y3TT.
- ²⁶ Adrian Saville & Ian Macleod (2019) *Investec GIBS Savings Index: A Path to Prosperity for South Africa*, Investec, 2019, retrieved March 24, 2025, from bit.ly/InvestecGIBSIndex2019
- ²⁷ World Bank. (2024, October 14). *Nigeria overview*. www.worldbank.org/en/country/nigeria/overview
- ²⁸ International Monetary Fund. (2021). *World economic outlook: Managing divergent recoveries* (April 2021). International Monetary Fund. <https://www.imf.org/en/Publications/WEO>
- ²⁹ Saville, A.D. and Macleod, I. (2019) *Saving, Investment and Socio-Economic Transformation Growth Rainbow? Investec-GIBS Savings Index, Third Edition*. Investec, Johannesburg, South Africa.
- ³⁰ Piñera, J. (n.d.). *The Chilean model: The pensions problem*. Retrieved March 25, 2025, from <http://www.josepinera.org/zrespaldo/economic%20Affairs%20327.pdf>.
- ³¹ OECD. (2005). *Pensions at a Glance 2005: Public Policies across OECD Countries*. Organisation for Economic Co-operation and Development. doi.org/10.1787/pension_glance-2005-en
- ³² PricewaterhouseCoopers. (2017). *The new digital tipping point: Primed for a new era in banking*. PwC. bit.ly/3xyk3Zx; and PricewaterhouseCoopers. (2023). *Customers in the spotlight: How FinTech is reshaping banking*. PwC. bit.ly/3Wn4L6O.
- ³³ Cemex’s groundbreaking social program Patrimonio Hoy celebrates 25 years of transforming lives (n.d.). Cemex. <https://www.cemex.com/w/cemex-groundbreaking-social-program-patrimonio-hoy-celebrates-25-years-of-transforming-lives>
- ³⁴ Porter, M. E., & Kramer, M. R., *Creating shared value*, Harvard Business Review, accessed March 27, 2025, www.hbs.edu/faculty/Pages/item.aspx?num=39071.

-
- ³⁵ Equity Group Holdings. (2023). *Annual Report and Financial Statements 2022*. equitygroupholdings.com/investor-relations/annual-reports/
- ³⁶ Bandhan Bank. (2023). *Annual Report 2022–2023*. www.bandhanbank.com/investor-relation/annual-report
- ³⁷ Rhyne, E., & Otero, M. (2006). *Microfinance through the next decade: Visioning the who, what, where, when and how*. ACCION International. (BancoSol case); and de la Torre, A., Gozzi, J. C., & Schmukler, S. L. (2007). *Innovative experiences in access to finance: Market-friendly roles for the visible hand?* World Bank. (Banco Azteca case).
- ³⁸ Banca Etica. (2023). *Who We Are*. www.bancaetica.it/en/who-we-are/
- ³⁹ Yunus, M. (2007). *Creating a world without poverty: Social business and the future of capitalism*. PublicAffairs.
- ⁴⁰ Khandker, S. R. (1998). *Fighting poverty with microcredit: Experience in Bangladesh*. Oxford University Press.
- ⁴¹ Grameen Bank, Introduction, accessed March 27, 2025, grameenbank.org.bd/about/introduction.
- ⁴² Pitt, M. M., & Khandker, S. R. (1998). The impact of group-based credit programs on poor households in Bangladesh: Does the gender of participants matter? *Journal of Political Economy*, 106(5), 958–996. doi.org/10.1086/250037
- ⁴³ Counts, A. (2008). *Small loans, big dreams: How Nobel Prize winner Muhammad Yunus and microfinance are changing the world*. Wiley.
- ⁴⁴ McIntosh, C., de Janvry, A., & Sadoulet, E. (2003). *How rising competition among microfinance institutions affects incumbent lenders*. The Economic Journal, 115(506), 987–1004. doi.org/10.1111/j.1468-0297.2005.01024.x
- ⁴⁵ Hossain, M. (1988). *Credit for alleviation of rural poverty: The Grameen Bank in Bangladesh* (Research Report No. 65). International Food Policy Research Institute.
- ⁴⁶ Yunus, M. (1999). *Banker to the poor: Micro-lending and the battle against world poverty*. PublicAffairs.
- ⁴⁷ Asian Financial Cooperations Association, The Microcredit Business Model of Grameen Bank www.afca-asia.org/Portal.do?method=detailView&returnChannelID=3&contentID=1115
- ⁴⁸ Banerjee, A. V., & Duflo, E. (2011). *Poor economics: A radical rethinking of the way to fight global poverty*. PublicAffairs.
- ⁴⁹ Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. Yale University Press.
- ⁵⁰ Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. Yale University Press.
- ⁵¹ FINRA Investor Education Foundation. (n.d.). *Commitment savings: Using behavioral approaches to reduce debt and increase savings*.
- ⁵² Batsaikhan, U., & Demertzis, M. (2018). Financial literacy and inclusive growth in the European Union. *Bruegel Policy Contribution No. 08*. Retrieved April 15, 2025, from https://www.bruegel.org/sites/default/files/wp-content/uploads/2018/05/PC-08_2018.pdf
- ⁵³ Madrian, B. C., & Shea, D. F. (2001). The power of suggestion: Inertia in 401(k) participation and savings behavior. *The Quarterly Journal of Economics*, 116(4), 1149–1187. <https://doi.org/10.1162/003355301753265543>
- ⁵⁴ Department for Work and Pensions. (2021). *Workplace pension participation and savings trends of eligible employees: 2009 to 2021*.
- ⁵⁵ Cribb, J., & Emmerson, C. (2020). *Ethnic differences in private pension participation after automatic enrolment*. Institute for Fiscal Studies. <https://ifs.org.uk/publications/ethnic-differences-private-pension-participation-after-automatic-enrolment>
- ⁵⁶ Te Ara Ahunga Ora Retirement Commission. (2024). **KiwiSaver: Opportunities for improvement**. Retrieved April 14, 2025
- ⁵⁷ Madrian, B. C., & Shea, D. F. (2001). The power of suggestion: Inertia in 401(k) participation and savings behavior. *The Quarterly Journal of Economics*, 116(4), 1149–1187. <https://doi.org/10.1162/003355301753265543>
- ⁵⁸ Lee, G., Bernhart, C., Dickey, K., & Ferreira, A. (2024). **Flourish Fi: Empowering positive money habits**. Berkeley Haas Case Series.
- ⁵⁹ Cole, S., Iverson, B., & Tufano, P. (2014). Can gambling increase savings? Empirical evidence on prize-linked savings accounts.
- ⁶⁰ Gertler, P., Higgins, S., Scott, A., & Seira, E. (2023). Using lotteries to attract deposits: Evidence from Mexican banks. *CEPR VoxEU*.
- ⁶¹ Lai, K. P. Y., & Langley, P. (2023). Playful finance: Gamification and intermediation in FinTech economies. **Geoforum**. <https://doi.org/10.1016/j.geoforum.2023.103848>
- ⁶² Abebe, G., Tekle, B., & Mano, Y. (2018). Changing saving and investment behaviour: The impact of financial literacy training and reminders on micro-businesses. *Journal of African Economies*, 27(5), 587–611. <https://doi.org/10.1093/jae/ejy007>
- ⁶³ KanBo. (n.d.). *Acorns: Revolutionizing financial inclusion and literacy through micro-investing*.
- ⁶⁴ Akbaş, M., Ariely, D., Robalino, D. A., & Weber, M. (2016). How to help the poor to save a bit: Evidence from a field experiment in Kenya. *IZA Discussion Paper No. 10024*.
- ⁶⁵ Batsaikhan, U., & Demertzis, M. (2018). Financial literacy and inclusive growth in the European Union. *Bruegel Policy Contribution No. 08*.

⁶⁶ University of Hertfordshire. (n.d.). *Research at the University of Hertfordshire*. Retrieved April 15, 2025, from <https://www.research.herts.ac.uk/ws/portalfiles/portal/243052/905632.pdf>

⁶⁷ EY. (n.d.). How a social media firm created South Korea's fastest-growing bank.

⁶⁸ Biometric Update. (2024). KakaoBank nets 15 million users for digital certificate that enables IDV authentication.

⁶⁹ Prosser, D. (2025, March 11). Zolve raises \$251 million to solve the credit challenge for migrants. *Forbes*.