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APEC ECONOMIC POLICY REPORT 2024

Structural Reform and Financial Inclusion

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APEC Economic Committee

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The views expressed in this paper are those of the authors and do not necessarily represent those of APEC member economies. The terms 'national', 'nation' or 'state' used in the text are for the purposes of this report and do not imply the political status of any APEC member economy.

Cover photo: Artisan woman who boosts the economy by Jose Alberto Sotomayor Jimenez / APEC Photo Contest 2024

PREFACE

Financial inclusion is essential to sustained economic growth. It provides access to financial services such as savings, insurance and credit services, which help households grow wealth and smooth consumption, while access to credit enables entrepreneurial activity and investment. Increasing access to financial services alone, however, is not sufficient; the full benefits of financial inclusion are realised when these services are equitably made available to different income groups.

This year's APEC Economic Policy Report (AEPR) discusses the crucial topic of Structural Reform and Financial Inclusion, addressing both demand-side and supply-side issues through structural reforms to facilitate all people to access and utilise financial services.

The report highlights that financial inclusion should be a deliberate and deliberative process. Inclusion does not spontaneously happen; it needs to be built in from the start and actively implemented. Even as APEC economies have expanded access to financial services—for example, more than 8 in 10 people in the region have a financial or mobile money account—more can be done to ensure that these services are accessible to all people. From incentivising financial sector competition and innovation to promoting financial literacy and reasonable accommodation practices, structural reform can play an important role in expanding equitable access to quality financial services for all people.

This report was made possible through generous funding provided by Australia and New Zealand. I would like to express my gratitude to the AEPR 2024 Core Team co-lead by Peru and the United States, and supported by Australia; Canada; Indonesia; Korea; New Zealand; Russia; Chinese Taipei; and Thailand. I am pleased to note that 19 APEC Economic Committee (EC) member economies provided Individual Economy Reports (IERs) for this AEPR. Eleven economies also provided case studies on their financial inclusion initiatives, all of which greatly contributed to the AEPR. I would like to thank the APEC Secretariat's Program Director for the EC, Alice McKenzie, for her valuable advice throughout the process and the APEC Policy Support Unit (PSU) for managing the production of the main report. The AEPR 2024 was drafted by a team comprised of Emmanuel A. San Andres, Glacer Niño A. Vasquez, Tess Perselay and a team at Svara Institute comprising Made Suardhini, Erica Pramesty and Widdi Mugijayani. This report has also benefited from the peer-review and inputs of the members of the EC and the Asian Development Bank.

This AEPR on Structural Reform and Financial Inclusion contributes to the realisation of the Enhanced APEC Agenda on Structural Reform (EAASR) and the Putrajaya Vision 2040. As the EC's flagship publication for 2024, this Report will serve as a valuable toolkit for economies in promoting economic inclusion and I look forward to members' initiatives to implement the Report's recommendations.

James Ding
Chair
APEC Economic Committee

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KEY ABBREVIATIONS

AEPR	APEC Economic Policy Report`
AI	artificial intelligence
APEC	Asia-Pacific Economic Cooperation
API	application programming interface
BSP	Bangko Sentral ng Pilipinas (central bank of the Philippines)
CDI	Commercial Data Interchange (Hong Kong, China)
CDR	Consumer Data Rights (Australia)
CMIF	Multisector Commission for Financial Inclusion (Peru)
CRD	Credit Risk Database (Japan)
EFS	Enterprise Financing Scheme (Singapore)
FCAC	Financial Consumer Agency of Canada
FI	financial institution
FOGAPE	Small Enterprise Guarantee Fund (Chile)
FSA	Financial Services Agency (Japan)
FSC	Financial Services Commission (Korea)
GDP	gross domestic product
ICT	information and communications technology
IFC	International Finance Corporation
IMF	International Monetary Fund
KODIT	Korea Credit Guarantee Fund
MAS	Monetary Authority of Singapore
MCGP	MSME Credit Guarantee Programme (the Philippines)
MFO	microfinance organisation
MSME	micro, small and medium enterprise
NBPSP	non-bank payment services provider
NPL	non-performing loan
OECD	Organisation for Economic Co-operation and Development
OJK	Financial Services Authority (Indonesia)
PSU	Policy Support Unit (APEC)
SFGS	SME Financing Guarantee Scheme (Hong Kong, China)
SME	small and medium enterprise
TSMEG	Small and Medium Enterprise Credit Guarantee Fund (Chinese Taipei)
WED	APEC Women and the Economy Dashboard
WEF	World Economic Forum

AEPR	APEC Economic Policy Report`
AI	artificial intelligence
APEC	Asia-Pacific Economic Cooperation
API	application programming interface
BSP	Bangko Sentral ng Pilipinas (central bank of the Philippines)
CDI	Commercial Data Interchange (Hong Kong, China)
CDR	Consumer Data Rights (Australia)
CMIF	Multisector Commission for Financial Inclusion (Peru)
CRD	Credit Risk Database (Japan)
EFS	Enterprise Financing Scheme (Singapore)

KEY MESSAGES

- **Financial inclusion is crucial for economic growth.** Access to financial services has significantly improved across APEC economies as digital finance has provided more affordable and accessible financial services to support all in realising their full economic potential, including women, micro, small and medium enterprises (MSMEs), Indigenous Peoples, people with disabilities and those with from remote and rural communities. Between 2014 and 2021, the share of the population that possesses a financial or mobile money account in APEC economies has increased from 74 percent to 84 percent. Notably, this 10 percentage point increase in account ownership is associated with a 2.7 percent rise in real gross domestic product (GDP) per capita and a 0.3 percent increase in employment rate.

- Expanding financial access promotes economic growth, but a more equitable distribution amplifies its impact. Econometric analysis shows that financial inclusion broadens access to financial services, which enables more individuals and businesses to engage in economic activities. However, the full benefits of financial inclusion are realised when these services are equitably distributed across different income groups, including poorer segments of the population. Equitable distribution ensures that the positive effects on GDP are maximised and that the economic benefits are widely shared.

- An equitable distribution of financial access is also essential for job creation and poverty reduction. Increasing access to financial services alone is insufficient to significantly reduce poverty or create jobs. The effectiveness of financial inclusion in addressing these issues depends more strongly on the distribution of financial services. Econometric analysis shows that ensuring financial access reaches lower-income populations and addressing inequality in financial distribution are key to reducing poverty and fostering job growth, which leads to a more inclusive economy.

- Expanding access to financial services should go hand in hand with equitable distribution across income groups. When financial services are distributed more equitably to low-income groups, it leads to economic growth and employment gains complementing those achieved through increased access alone.

- **Financial inclusion empowers groups with untapped economic potential.** Access to financial services empowers such groups to manage their finances effectively, as well as to save and prepare for emergencies, including health crises. It also facilitates access to affordable credit, important for aspiring entrepreneurs, and enhances creditworthiness through banking and loan repayment activities.

- However, some groups such as women, MSMEs, Indigenous Peoples, people with disabilities and those with from remote and rural communities face significant barriers to full economic and social participation in the APEC region. These barriers include legal, regulatory and policy constraints that restrict their access to financial services. Even when regulatory burdens are reduced, these groups can still face barriers such as onerous documentation requirements and cost-related obstacles, limiting their access to financial services. Insufficient financial literacy and awareness further compound these challenges.

- Enabling financial inclusion supports growth in sectors like services, apparel, textiles and handicrafts, which often see higher participation by groups with untapped economic potential. This approach helps reduce inequality by channelling economic gains to these sectors and promotes the transition of informal businesses to the formal economy.

- Digitalising financial products and services is essential in transforming financial inclusion by lowering access barriers and enhancing accessibility through tools such as artificial intelligence (AI), chat-based support and contactless payments. These innovations benefit elderly individuals and those with disabilities, promoting broader financial participation.

- **Financial inclusion policies in APEC.** To enhance financial inclusion, APEC economies have sought to create tailored products that cater to the diverse needs of various groups – such as the rural population, women, Indigenous communities, people with disabilities and the elderly. Several economies have introduced such products, either through government-owned banks or government-led initiatives, to help expand the geographic and socio-economic coverage of financial services.

- Digital technology has transformed the accessibility and delivery of financial services in APEC economies. The adoption of digital payment systems, including the use of QR codes and digital banks, has played a pivotal role. Moreover, as users engage with digital accounts over time, it is expected that they would build comprehensive financial profiles with their payment service providers, enhancing their access to a broader range of financial services in the future.

- APEC economies have implemented various policies and programmes to support credit access for MSMEs. Notably, credit guarantee schemes have been introduced by many economies. These schemes transfer risk to the guarantor, which helps alleviate the need for high collateral and makes MSMEs more appealing from the lender's perspective. Given the substantial contribution of MSME loans across APEC economies, credit guarantee schemes offer an alternative solution to facilitating easy credit access for MSMEs.

- Promoting financial inclusion requires economies to address the critical issue of financial literacy, especially for underbanked communities. As a result, most APEC economies have implemented or are currently in the process of designing economy-wide strategies for financial education. Improvements to financial literacy will not only foster sustainable demand for financial products and services, but also serve as a safeguard against financial mis-selling, fraud and abuse.

Policy Recommendations:

Objective 1: Expand quality access to financial services.

- **Ensure the stability of the financial sector.** The financial sector plays a crucial role in ensuring financial inclusion as it is the conduit by which formal financial services are provided. Prudent macroprudential policies, financial market safeguards, and mechanisms for financial consumer and data protection not only ensure sustained growth but also build trust in financial systems, which in turn can increase demand for and utilisation of financial services. A stable and secure financial sector is the bedrock of financial inclusion.

- **Bring down the cost of financial services.** Cost of financial services can be a barrier to accessing financial services. Promoting competition in the sector is important to improving service provision and bringing down costs, but this should be balanced with attention to safeguarding the stability and security of the financial sector. Financial innovation should also be encouraged, and regulatory sandboxes could be created to test out new ideas without putting clients or financial markets at greater risk.
- **Include MSMEs in financial inclusion.** MSMEs continue to have difficulty in accessing financial services and credit. Targeted measures to ensure their financial inclusion could be considered, such as credit guarantee schemes, microfinance, alternative financing and information exchange.
- **Digitalise financial services.** Digital innovations in finance could help in the targeted provision of financial services to groups with untapped economic potential. At the same time, cybercrime and hacking are real and growing concerns, and digital tools are needed to ensure cybersecurity and protect personal data.

Objective 2: Ensure inclusion in financial inclusion.

- **Remove structural barriers to financial inclusion.** Removing laws that bar certain groups from accessing financial services, and enacting laws that explicitly prohibit discrimination – such as those based on sex or other demographic characteristics – should be a priority.
- **Promote ease of doing finance.** Documentary requirements could be a barrier to accessing financial services, especially for those in rural and remote areas, Indigenous Peoples or those in the informal sector. Promoting the access, usage and uptake of digital financial services could be considered to facilitate financial inclusion, including through allowing alternatives to formal documentation, such as digital identification or mobile phones.
- **Consider the specific needs of groups with untapped economic potential.** Groups with untapped economic potential may have specific needs in accessing financial services. These could include cultural and language considerations for some groups, reasonable accommodation for people with disabilities, and accessibility requirements for senior citizens.

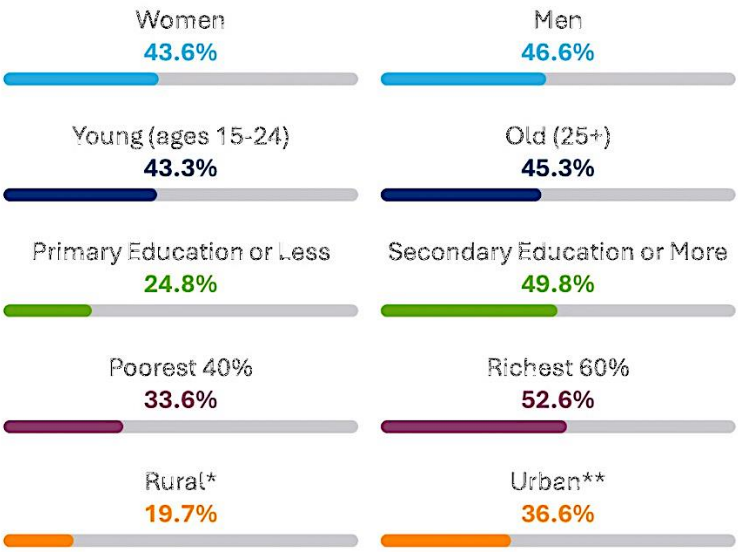
Objective 3: Facilitate utilisation of financial services.

- **Promote financial literacy.** Financial literacy is an enabler of sustained demand for and informed usage of financial products and services. It will not only build awareness of financial products and procedures, but can also encourage prudent financial management, savings and budgeting. Financial literacy also contributes to consumer protection by providing information that can mitigate the risk from financial fraud and scams.
- **Facilitate entrepreneurial opportunity.** Financial inclusion does not end when the credit cheque is signed; it includes maximising the client's likelihood of success and business expansion. Support for entrepreneurial activity, particularly by MSMEs, could be provided through networking, information sharing and capacity building.

1. THE CHALLENGE OF PROMOTING FINANCIAL INCLUSION IN THE APEC REGION

While post-pandemic recovery is still high on many APEC economies' policy agendas, macroeconomic issues that pre-dated the pandemic continue to affect the region, including the challenge of financial inclusion. For example, APEC economies continue to struggle to integrate all members of society in the formal financial system through financial inclusion, despite reaching milestones for other macroeconomic growth. Worldwide, more than 25 percent of adults have no formal bank account, which means that they are not able to receive, store, save or send money within the formal economy.[1] Within that 25 percent, financial literacy remains low, such that, even if provided with an account, two-thirds of individuals note they would require assistance to be able to use the account.[2] Additionally, though the 2021 Global Findex Database report notes that 71 percent of adults in developing economies are a part of the formal economy, the remaining 29 percent are disproportionately from groups with untapped economic potential, as shown in Figure 1.1.[3]

Figure 1.1. Snapshot of APEC's average savings at a formal financial institution for some groups with untapped economic potential in 2021/2022



Note: All figures show results for ages 15 and older. Figures are an average of APEC economies with data available. Data not available for Brunei Darussalam and Papua New Guinea.
* Data for rural groups only available for Chile; Indonesia; Malaysia; and Peru.
** Data for urban groups only available for Chile; Indonesia; Malaysia; Peru; and Singapore.
Source: World Bank, *The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19* (Washington, DC: International Bank for Reconstruction and Development/World Bank, 2021).

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[1] World Bank, *The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19* (Washington, DC: International Bank for Reconstruction and Development/World Bank, 2021), https://www.worldbank.org/en/publication/globalfindex
[2] World Bank, *The Global Findex Database 2021*.
[3] United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), "Policy Approaches for Financial Inclusion: An Examination of Approaches across Asia and the Pacific and Latin America" (Bangkok: ESCAP, 2023).

Financial inclusion, which is also referred to as inclusive finance, means that all members of society – individuals and businesses – are provided with accessible, affordable financial services through the formal banking system, such as insurance, bank accounts or lines of credit, among other services. For instance, the World Bank defines it as a 'situation in which individuals, households and businesses have access in efficient ways to useful and affordable financial services and products that meet their needs'.[4] Other authors put emphasis on the 'ease of access, availability and usage of the formal financial system *for all members of an economy*'.[5] As a result of increased financial inclusion, economies can expand their macroeconomic potential for all and increase equitable distribution.

Financial inclusion often requires tailoring financial products and services to support all in realising their full economic potential, including women, MSMEs, Indigenous Peoples, people with disabilities and those with from remote and rural communities. In essence, financial inclusion is a critical component of sustainable and inclusive economic growth through its ability to expand service offerings to incorporate unbanked and underbanked people.

Financial inclusion also provides policymakers with an opportunity to strengthen household resilience to economic shocks, especially for groups with untapped potential. For groups such as women; Indigenous Peoples as appropriate; people with disabilities; those from remote and rural communities; and businesses looking to transition into the formal economy, financial inclusion is a centrepiece to economic empowerment. Financial inclusion, in essence, not only provides the opportunity to engage in the formal economy, but also increases preparation to withstand unexpected negative economic situations.[6] In addition, financial inclusion can contribute to equitable distribution through increased participation by groups with untapped economic potential.

STRUCTURAL REFORM AND FINANCIAL INCLUSION

Structural reform refers to the laws, policies, regulations, rules and programmes that economies can use to overcome barriers to macroeconomic growth and development. Most frequently initiated and implemented by governments, structural reforms aim to target the systemic issues that may cause economic problems, such as market failures or lack of business operational efficiency. Structural reform can also address systemic issues that result in inequality, whether intended or unintended, for groups with untapped economic potential.

For financial inclusion, structural reform can be used to tackle many barriers. The types of barriers can be simplified into two major categories – demand side and supply side – outlined below.

[4] World Bank Group, "Financial Inclusion," accessed 11 October 2024, https://www.worldbank.org/en/topic/financialinclusion/overview

[5] *Emphasis added.* M. Sarma, "Index of Financial Inclusion," Working Paper 215, Indian Council for Research on International Economic Relations, 2008.

[6] D. Moore et al., "Building Resilience through Financial Inclusion: A Review of Existing Evidence and Knowledge Gaps" (Innovations for Poverty Action, Financial Inclusion Program, 2019).

Demand-side barriers. Demand-side structural reforms are targeted at lowering barriers to accessing financial products and services. They generally focus on the enabling environmental factors that may inhibit individuals from accessing financial products and services. Some examples of demand-side barriers[7] include:

- **Lack of financial and digital literacy**. This refers to the insufficient ability to understand and effectively use financial skills (such as financial management and budgeting) and digital skills (such as utilising technology to find, evaluate or communicate information). For example, despite account ownership having increased in the APEC region between 2011 and 2021 to over 86 percent, only 47 percent of individuals have used those financial accounts to save.[8] This may be due to a lack of financial literacy or inaccessible digital tools.

- **Digital gaps and inequitable access to technology**. This can affect individuals, especially as banking becomes more technologically dependent. If individuals must be able to access technology to conduct routine banking tasks, they are at a significant disadvantage. This is especially true for those in rural areas, where technology may be too expensive and internet connectivity is not available or unreliable.

- **Social norms, stereotypes and perceptions**. These refer to the shared standards of acceptable behaviour by groups that shape our ideas about other people. These can result in a barrier to financial inclusion because many times people think they are not the 'right' type of person to conduct formal economic participation. For example, in some economies, it is tradition that only men handle financial transactions for the entire family. Women, in these cases, are often not seen as financially capable and, as a result, experience financial exclusion.

- **Lack of formal civil registration and vital documents**. Most financial transactions, like opening a bank account or withdrawing funds, require a form of government-issued identification or other administrative vital documents. In areas that are more rural or remote, or where individuals are not able to get the specific necessary documents, they are often blocked from accessing formal financial institutions.

- **Lack of institutional trust**, which affects individuals across the APEC region. Because of economic downturns, bank runs, perceived corruption, historical discrimination, or other factors, individuals may not trust that a formal financial institution is a safer place to store their funds or do business.[9] Individuals with this perception will often utilise alternative, informal financial means, such as holding money in their home, rather than an account, or conducting cash-only business.[10]

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[7] M. Fahmy and H. Ghoneim, "Financial Inclusion Demand-side Determinants: Analysis from Egypt," *Management and Sustainability: An Arab Review* 2, no. 3 (2023): 255–84.
[8] World Bank, *The Global Findex Database 2021*.
[9] C. van der Cruijsen, J. de Haan, and R. Roerink, "Trust in Financial Institutions: A Survey," *Journal of Economic Surveys* 37, no. 4 (2023): 1214–54. https://doi.org/10.1111/joes.12468
[10] E. Beckmann and D.S. Mare, "Formal and Informal Household Savings: How Does Trust in Financial Institutions Influence the Choice of Saving Instruments?" SSRN, 2017, https://doi.org/10.2139/ssrn.3023711

- **Laws allowing discrimination**. As will be detailed in Chapter 3, discrimination is not explicitly prohibited in some APEC economies with regard to accessing financial products and services.[11] Discrimination can be legal on the basis of sex, as it is in 12 APEC economies,[12] or disability status, or other demographic factors. In these cases, individuals may be aware that financial institutions can legally discriminate against them and hence opt to not be part of the formal financial system.

Supply-side barriers refer to the lack of targeting or inability to tailor financial products and services to meet the needs of all potential consumers. This disproportionately influences groups with untapped economic potential, who are often among the least frequent users of formal financial products and services, including when they have overcome demand-side barriers. Supply-side barriers can result from a range of issues, from lack of understanding on the part of the government or financial institutions to a lack of consumer information. Some examples of supply-side barriers are:

- **Limited agent networks or financial institutions**. This refers to the lack of representatives or banks, especially in rural or remote areas. If individuals do not have the ability to connect with a financial institution, they cannot conduct regular business or depend on the ability to easily manage their funds.

- **Lack of competition among financial service providers**. When there is only one or a few financial service providers in any given area, there is a significantly lower likelihood of favourable costs and terms for those looking to receive products and services given the tendency for monopolisation and collusion.

- **Lack of data on financial behaviours**. Financial institutions often do not have the information on financial behaviours and, when they do, the data are often not disaggregated by primary demographics, such as sex; age; education level; household income level; disability status; geographic region; Indigenous identity; or others. Without this data, financial institutions cannot know how their products and services are being utilised by various populations or if there is a gap in their offerings that is missing groups with untapped economic potential.

- **Bias within traditional financial product and service offerings**. Because financial institutions often do not have the data on financial behaviours disaggregated by major demographic categories, there tends to be a bias toward the 'ideal customer'. The ideal customer is often male and from a majority group with a long history of financial inclusion.[13] As a result, financial institutions may focus – intentionally or unintentionally – their offerings to cater to these customers, which can create bias against groups with untapped economic potential, who may not have the same characteristics as a traditional ideal customer.

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[11] World Bank, "Women, Business and the Law 2024," accessed 11 October 2024, https://wbl.worldbank.org/en/wbl-data

[12] APEC, "The APEC Women and the Economy Dashboard 2023" (Singapore: APEC, 2023).

[13] J. Yinger, "Measuring Racial Discrimination with Fair Housing Audits: Caught in the Act," *American Economics Review* 76, no. 5 (1986): 881–93; A.H. Munnell et al., "Mortgage Lending in Boston: Interpreting HMDA Data," *American Economics Review* 86, no. 1 (1996): 25–53; D.G. Blanchflower, P.B, Levine, and D.J. Zimmerman, "Discrimination in the Small Business Credit Market," Working Paper 6840, National Bureau of Economic Research (NBER), 1998.

To overcome these barriers, policymakers can utilise structural reform. Table 1.1 demonstrates the barriers and the relevant structural reform tools policymakers can use to expand financial inclusion.[14] This table is intended to be illustrative and not exhaustive of all options. The options are further demonstrated in this report through APEC members' case study examples and individual economy reports (IERs).

Table 1.1. Structural reform tools for financial inclusion

Barrier	Barrier Type	Structural Reform Tool
Financial illiteracy	Demand	Prioritising financial literacy programming through economy-wide programmes
Lack of vital documentation, such as identification	Demand	Ensuring universal, secure and private access to digital identification
Lack of data on use of financial products and services for groups with untapped economic potential	Supply	Incentivising disaggregated data reporting into an economy-wide system
Lack of financial institutions in rural areas	Supply	Rewarding financial institutions for including agent networks in underserved rural areas

Source: Authors.

In addition to the structural reform interventions in Table 1.1, one area APEC economies could focus on is ensuring that their laws provide equal opportunity for groups with untapped economic potential, such as women, to access credit. According to the 2023 APEC Women and the Economy Dashboard, only nine economies have an existing law against discrimination in access to credit on the basis of sex.[15] What this means is that in 12 APEC economies, women can be denied financial products and services completely and solely based on their sex, regardless of other measures of creditworthiness, such as collateral or credit history. Additionally, even in economies where sex-based discrimination in accessing credit is illegal, financial institutions are often able to leverage legal methods of bias to prevent women's equal access to credit. For example, because of perceived risk or other bias, women tend to be offered loans at higher interest rates, smaller loan amounts and increased penalty dues for missed payments.[16] Structural reforms, in either instance, can provide the opportunity for groups with untapped economic potential to equally access and utilise financial products and services.

LINKING STRUCTURAL REFORM, FINANCIAL INCLUSION AND INCLUSIVE GROWTH PRIORITIES

By targeting change at the systemic level, economies have the opportunity to leverage structural reform to advance financial inclusion and, as a result, inclusive economic growth. Structural reform provides the policy and regulatory tools for decisionmakers to effect meaningful comprehensive change with potential dramatic results for gross domestic product (GDP) and non-GDP measures of success. For example, by increasing financial inclusion, groups with untapped economic potential can increase their savings, grow their businesses and participate more fully in the economy. By extension, when all groups in society are participating equally in the economy, sustainable economic

[14] ESCAP, "Policy Approaches for Financial Inclusion."
[15] APEC, "The APEC Women and the Economy Dashboard 2023."
[16] P. Dalal, L. Gomez and A. Patel, "Give Her Credit: Expanding Women's Access to Finance," Mastercard Center for Inclusive Growth, 9 March 2022.

growth and development becomes realisable because economic stability is broad-based and not contingent on the success of specific groups.

In addition, structural reforms that increase financial inclusion have the potential to alleviate poverty and reduce income inequality. Access to financial services, such as payments, savings, credit and insurance services for groups with untapped economic potential, provides opportunities to smooth consumption, invest in human capital, and raise income levels. Additionally, saving at a formal financial institution is positively correlated with increased expenditures, business investment and agricultural production.[17] This has substantial subsequent benefits on poverty alleviation, especially for the lowest income households. The availability to access to these services also allows 'households and businesses […] to withstand financial shocks than those that do not'.[18]

More specifically, throughout the years, there has been extensive discussion in the literature on the effects of easing access to financial services and the financial improvement of households in poverty conditions. According to Saha and Qin's empirical longitudinal study of 156 economies from 2004 to 2019, there is a significant negative association between financial inclusion on moderate poverty, which is weaker than that on extreme poverty.[19] Focusing on regions in particular, Park and Mercado find that for 37 developing Asian economies, there is 'a robust and significant correlation between higher financial inclusion and lower poverty and income inequality'.[20] Chinnakum, also analysing developing economies in Asia, finds that 'financial inclusion can influence the reduction in both poverty and income inequality' and that the 'availability of credit to lower income groups improves their access to financial services, which in turn enables them to undertake productive activities and smoothen their consumption in the face of short-term adverse shocks'.[21] Similarly, Polloni-Silva et al. conclude that as 'financial inclusion increases, poverty and inequality decrease. Additionally, the combined effects of financial inclusion and technology use are also beneficial for [Latin American economies]'. For instance, they propose that 'Latin American [economies] have the potential to diminish social issues by investing in financial inclusion and the "democratization" of finance'.[22] Indeed, Chapter 2 of this report demonstrates the positive impact of financial inclusion, through access and distribution of access, not only on macroeconomic growth but also on employment and poverty reduction.

This means that structural reforms to increase financial inclusion can have a disproportionately positive effect on the lowest income households in the APEC region, which tend to be the most difficult poverty cycle to break. This is likely because of the

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[17] A. Demirguc-Kunt, L. Klapper and D. Singer, "Financial Inclusion and Inclusive Growth: A Review of Recent Empirical Evidence," Policy Research Working Paper 8040, World Bank, 2017.
[18] World Bank, *The Global Findex Database 2021*.
[19] S.K. Saha and J. Qin, "Financial Inclusion and Poverty Alleviation: An Empirical Examination," *Economic Change and Restructuring* 56 (2023): 409–440.
[20] C.-Y. Park and R.V. Mercado, Jr, "Financial Inclusion, Poverty, and Income Inequality in Developing Asia," Economics Working Paper 426, Asian Development Bank (ADB), Manila, 2015.
[21] W. Chinnakum, "Impacts of Financial Inclusion on Poverty and Income Inequality in Developing Asia," *Singapore Economic Review* 68, no. 4 (2023): 1375–91.
[22] E. Polloni-Silva et al., "Does Financial Inclusion Diminish Poverty and Inequality? A Panel Data Analysis for Latin American Countries," *Social Indicators Research* 158, no. 3 (2021): 889–925.

benefits gained through formal economic participation, such as stability and resilience. Through poverty alleviation afforded by financial inclusion, APEC economies can increase inclusive economic growth and increase economic stability throughout the region.

APEC'S STRUCTURAL REFORM AND FINANCIAL INCLUSION EFFORTS

Financial inclusion and structural reform directly enhance APEC's broader policy agenda. For example, the APEC Putrajaya Vision 2040 sets forth the intention for economies to 'pursue structural reforms and sound economic policies to promote innovation as well as improve productivity and dynamism'. This work also supports the implementation of the Putrajaya Vision, including through the Aotearoa Plan of Action (APA), through 'ensur[ing] that the Asia-Pacific region is resilient to shocks, crises, pandemics and other emergencies, we will foster quality growth that brings palpable benefits and greater health and wellbeing to all, including MSMEs, women and others with untapped economic potential'. This APEC Economic Policy Report (AEPR) also supports the La Serena Roadmap for Women and Inclusive Growth (2019–2030), in which APEC Leaders noted that empowering women through access to capital and markets' is a key action area.

Within the APEC Economic Committee, financial inclusion and structural reforms align with all four pillars of the Enhanced APEC Agenda for Structural Reform (EAASR), namely:

- Creating an enabling environment for open, transparent and competitive markets
- Boosting business recovery and resilience against future shocks
- Ensuring that all groups in society have equal access to opportunities for more inclusive and sustainable growth, and greater well-being
- Harnessing innovation, new technology, and skills development to boost productivity and digitalisation.

This AEPR aligns with all four of the EAASR pillars, particularly as financial inclusion is an essential mechanism that fosters a positive enabling environment; boosts the ability of businesses to recover and remain resilient; ensures equal access; and provides the foundation to increase innovation and use of new technology. In essence, financial inclusion is a linchpin to unlock broad-based, inclusive economic growth and innovation. By leveraging structural reform to increase financial inclusion, economies can enable individuals and businesses to benefit from financial products and services that meet their needs through affordable and accessible means.

In addition, this AEPR bolsters the aims and commitments articulated during various iterations of the APEC Finance Ministers' Process and the Declarations arising from those meetings. Many of these have included financial inclusion as a priority, with a focus on supply-side financial inclusion issues. For example, the 2015 Cebu Action Plan (CAP) and the New Strategy for the Implementation of the Cebu Action Plan both highlight the importance of financial inclusion.

2. UNDERSTANDING THE MACROECONOMIC IMPACT OF FINANCIAL INCLUSION

FINANCIAL INCLUSION AND THE ECONOMY

Linkages and transmission mechanisms

Financial inclusion is among the key pillars of APEC's action agenda as stated in the 2017 Leaders' Declaration.[23] The World Bank defines financial inclusion as individuals and businesses having access to useful and affordable financial products and services – such as transactions, payments, savings, credit and insurance – that meet their needs and are delivered in a responsible and sustainable manner.[24] Other definitions of financial inclusion include easy and affordable access to necessary financial products and services in the appropriate form[25] and increased availability of fundamental bank accounts by financial institutions.[26] Meanwhile, Sarma emphasises that financial inclusion must consider appropriateness, transparency and fairness[27] and Mehry et al. highlights that enabling people to get credit from informal moneylenders and small institutions does not achieve financial inclusion.[28]

Financial inclusion is measured in three dimensions: (1) access to financial services; (2) usage of financial services; and (3) the quality of the products and the service delivery. Access to financial services refers to the ability of financial institutions to provide services and products, influenced by regulatory, market and technological environments. Assessing access involves identifying barriers faced by institutions in delivering services and by clients in using them. Access indicators measure the reach of financial services, such as the presence of bank branches or point of sale (POS) devices. Usage of financial services refers to how clients use financial services, including the regularity and duration of use (e.g., average savings balances, number of transactions per account, etc.). While access to financial products is necessary for usage, not everyone with access will use these products. The quality of the products and the service delivery refers to the extent to which financial services and products meet consumers' needs. Quality measures assess how well these services match clients' needs, the variety of available options and clients' awareness and understanding of financial products.[29]

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[23] APEC, "APEC Leaders' Declaration 2017: Annex A: APEC Action Agenda on Advancing Economic, Financial, and Social Inclusion in the APEC Region," 2017.

[24] World Bank Group, "Financial Inclusion," accessed 11 October 2024, https://www.worldbank.org/en/topic/financialinclusion/overview

[25] S.P. Sinclair, *Financial Exclusion: An Introductory Survey* (Edinburgh: Centre for Research into Socially Inclusive Services, Edinburgh College of Art, Heriot-Watt University, 2001); J.P. Pollin, and A. Riva, "Financial Inclusion and the Role of Postal Systems," in *Modernisation and Privatisation of Postal Systems in Europe*, ed. R. Ruozi and L. Anderloni (Berlin: Springer, 2002).

[26] J. Midgley, "Financial Inclusion, Universal Banking and Post Offices in Britain," *Area* 37, no. 3 (2005): 277–85.

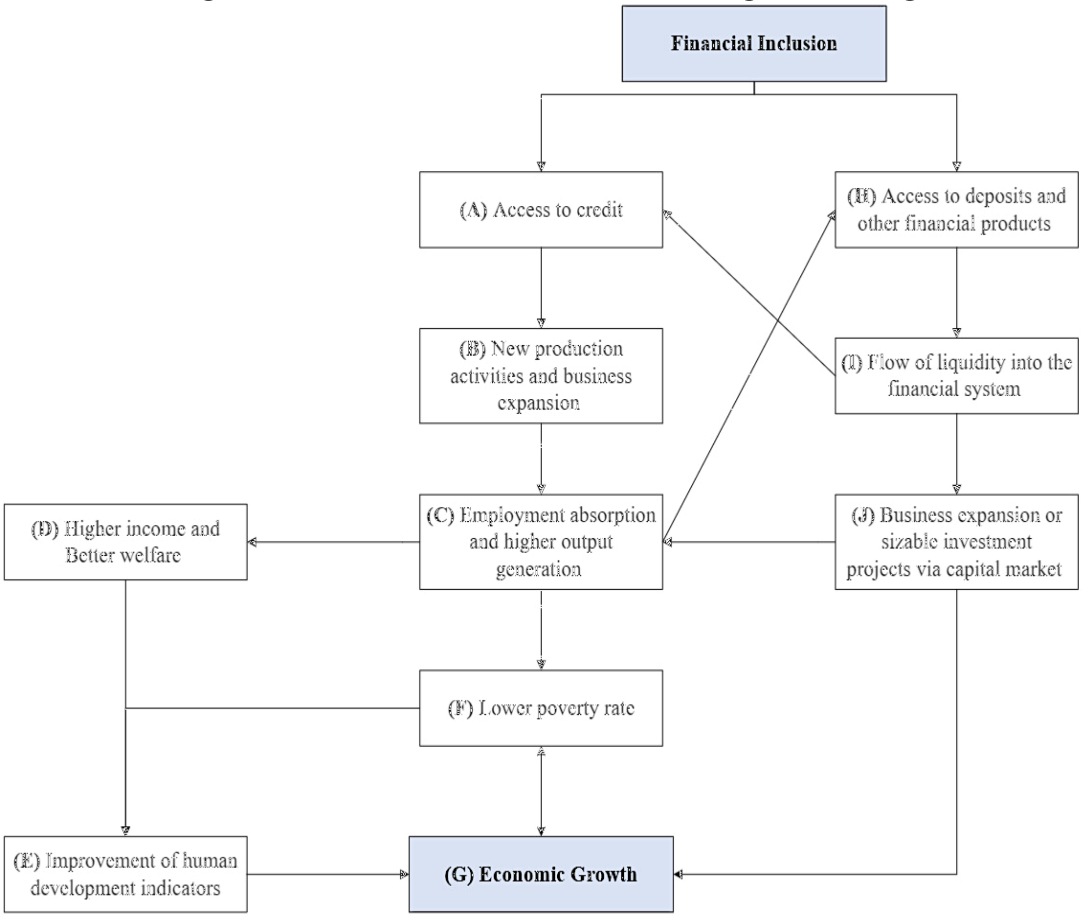
[27] M. Sarma, "Index of Financial Inclusion," Working Paper 215, Indian Council for Research on International Economic Relations, 2008.

[28] E.-B. Mehry, S. Ashraf, and E. Marwa, "The Impact of Financial Inclusion on Unemployment Rate in Developing Countries," *International Journal of Economics and Financial Issues* 11, no. 1 (2021): 79–93, https://doi.org/10.32479/ijefi.10871

[29] World Bank, "Financial Inclusion Strategies Reference Framework" (Washington, DC: World Bank, 2012), https://documents1.worldbank.org/curated/en/801151468152092070/pdf/787610WP0P144500use0only0900A9RD899.pdf

This chapter adopts Sethi and Acharya's 2018 framework to analyse financial inclusion in APEC economies.[30] Financial inclusion contributes to economic growth via two broad channels: (1) credit and (2) deposit and other financial products.[31] Under this framework, credit availability can spur economic growth when it is used to create new productive activities or support business expansion. Subsequently, these activities create employment and generate higher output, resulting in higher income and better welfare. Improved access to credit is particularly important for the poor, as they do not have the privilege of seeking funding from sources like the capital market. Ozoh et al. find that access to credit will improve the capacity of the poor to generate income, savings and investment through acquiring productive capital.[32] This will ultimately improve public welfare. Figure 2.1 visualises the financial inclusion–economic growth linkage from Sethi and Acharya's framework.

Figure 2.1. The financial inclusion–economic growth linkage



Source: Authors' illustration, developed from D. Sethi and D. Acharya, "Financial Inclusion and Economic Growth Linkage: Some Cross Country Evidence," *Journal of Financial Economic Policy* 10, no. 3 (2018): 369–85, https://doi.org/10.1108/JFEP-11-2016-0073

[30] D. Sethi and D. Acharya, "Financial Inclusion and Economic Growth Linkage: Some Cross Country Evidence," *Journal of Financial Economic Policy* 10, no. 3 (2018): 369–85, https://doi.org/10.1108/JFEP-11-2016-0073
[31] Sethi and Acharya, "Financial Inclusion and Economic Growth Linkage."
[32] J.N. Ozoh et al., "Impact of Access to Credit on Household Welfare in Nigeria," *International Journal of Management Studies and Social Science Research* 4, no. 2 (2022), https://www.ijmsssr.org/paper/IJMSSSR00680.pdf

People can utilise the money from credit for productive purposes. For instance, in rural areas, farmers can use credit to purchase higher quality seeds improving the quality of their output. Fishers can use credit to procure better fishing equipment leading to higher fish output. Several economies with over 30 percent of their populations under the poverty line, for example, Mexico;[33] Papua New Guinea;[34] and Peru,[35] have come up with programmes to ease access to credit for vulnerable people, with interest subsidies and less stringent credit requirements offered under microcredit or microfinance schemes.

Higher employment and output generated after credit utilisation will eventually lead to poverty reduction and higher economic growth. Roemer and Gugerty highlight that growth in per capita GDP can be and usually is a powerful force in reducing poverty.[36] In line with that, Khan shows that successful poverty reduction is closely associated with a combination of high growth, productive employment and lower inequality.[37]

Access to deposits and other financial products, in turn, increases the flow of funds to the financial system which can support liquidity needs of the credit market. Other financial products include the insurance and investment products necessary to support consumption smoothing and a better quality of life. Insurance products protect people against unfortunate events, which may affect their quality of life, while investment products can help grow wealth and savings, improving welfare. Furthermore, liquidity in the financial system can be directly channelled to sizeable investment projects through the capital market in the form of debt or equity injection.

Allocating funding for productive investment can directly or indirectly impact economic growth. As investment is a component of GDP, productive investment can directly impact economic growth. These investments can also, through generating higher employment, lead to higher economic growth. As such, strong credit and deposit growth supports strong economic growth.

In addition to promoting economic growth, financial inclusion plays an important role in ensuring monetary and financial stability. Mehrotra and Yetman note that increased financial inclusion significantly alters the behaviour of firms and consumers, which in turn impacts the effectiveness of monetary policy.[38] For instance, greater inclusion can enhance the effectiveness of interest rate as a policy tool, and can facilitate the efforts of central banks to maintain price stability. Moreover, financial inclusion influences financial stability by changing the composition of savers and borrowers. A broader base

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[33] 36.3% (2022). See G. Jr. Cárdenas Salgado et al., "Mexico: Poverty Decreases at Its Lowest Level (36.3%); but Access to Health Deteriorates," BBVA Research, 16 August 2023, https://www.bbvaresearch.com/en/publicaciones/mexico-poverty-decreases-at-its-lowest-level-363-but-access-to-health-deteriorates/

[34] 40% (2022). See United Nations Children's Fund (UNICEF), "Country Office Annual Report 2022: Papua New Guinea," 2022, https://www.unicef.org/media/136321/file/Papua-New-Guinea-2022-COAR.pdf

[35] 33.7% (2021). See World Bank data, in Macrotrends, "Peru Poverty Rate 1997–2024," accessed 12 October 2024, https://www.macrotrends.net/global-metrics/countries/PER/peru/poverty-rate#:~:text=Peru%20poverty%20rate%20for%202021,a%202.2%25%20decline%20from%202017

[36] M. Roemer and M.K. Gugerty. "Does Economic Growth Reduce Poverty?" Discussion Paper 5, Consulting Assistance for Economic Reform (CAER) II, Cambridge, MA, 1997.

[37] A.R. Khan, "Growth, Employment and Poverty: An Analysis of the Vital Nexus Based on Some Recent UNDP and ILO/SIDA Studies," Issues in Employment and Poverty, Discussion Paper 19, United Nations Development Programme (UNDP) and International Labour Office (ILO), New York and Geneva, 2005.

[38] A.N. Mehrotra and J. Yetman, "Financial Inclusion – Issues for Central Banks," *BIS Quarterly Review* (March 2015).

of depositors and more diversified lending can contribute positively to financial stability. However, it is essential to recognise that increased financial access may also elevate financial risks, particularly if it leads to rapid credit growth or the expansion of relatively unregulated sectors within the financial system.

Digital finance to support financial inclusion and inclusive growth

Digitalisation in financial services, or digital finance, describes the use of new technologies in the financial services industry. It includes a variety of products, applications, processes and business models that have transformed the traditional way of providing banking and financial services.[39] Compared with traditional finance, digital financial inclusion emphasises accurate risk mitigation and effective information exchange using advanced tools and technologies such as the internet, big data and cloud computing, so that all social groups can enjoy equal, convenient, efficient and affordable financial products and services.[40]

Digital finance happens in line with the growth of mobile and smart phone users. According to the International Telecommunication Union (ITU), there were more than 8.58 billion mobile subscriptions in use worldwide in 2022, compared to a global population of 7.95 billion halfway through the year.[41] J-PAL highlights that the share of adults making digital payments in low- and middle-income economies doubled, rising from 26 percent to 51 percent between 2014 and 2021.[42] In line with that, the proportion of account owners engaging in digital payments increased from about half to over two-thirds.

Digital finance supports financial inclusion by expanding the range of financial services and resource availability.[43] Digitalisation enables more affordable and accessible financial services and other credit facilities for groups such as low-income households and micro, small and medium-sized enterprises (MSMEs), thereby helping inclusive growth to materialise.[44] Digital finance can even provide solutions to the shortage of bank branches, automated teller machines (ATMs) and other financial services facilities in rural areas. Digital finance is also beneficial for smoothing consumption and investment. It increases efficiency and decreases financing costs in financial intermediation and improves banking performance.[45] J-PAL finds that the advent of mobile banking has yielded alternative avenues for savings accumulation.[46] Studies consistently show that the integration of mobile money accounts with traditional

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[39] European Commission, "Overview of Digital Finance," accessed 24 October 2024, https://finance.ec.europa.eu/digital-finance/overview-digital-finance_en

[39] W. Xi and Y. Wang, "Digital Financial Inclusion and Quality of Economic Growth," *Heliyon* 9, no. 9 (2023): e19731, https://doi.org/10.1016/j.heliyon.2023.e19731

[40] Xi and Wang, "Digital Financial Inclusion and Quality of Economic Growth."

[41] International Telecommunication Union (ITU), "Individuals Using the Internet," accessed 24 October 2024, https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx

[42] J-PAL, "Digital Financial Services to Improve Formalized Access and Inclusion," updated June 2024, https://www.povertyactionlab.org/policy-insight/digital-financial-services-improve-formalized-access-and-inclusion?lang=id

[43] J. Beirne and D.G. Fernandez, eds, "Harnessing Digitalization for Sustainable Economic Development: Insights for Asia" (Tokyo: Asian Development Bank Institute (ADBI), 2022).

[44] J. Beirne and N.L. Dang, "Digitalization for Enhancing Access to Finance and Inclusive Growth," Asia Pathways (blog), 24 November 2023, https://www.asiapathways-adbi.org/2023/11/digitalization-for-enhancing-access-to-finance-and-inclusive-growth/

[45] Beirne and Dang, "Digitalization for Enhancing Access to Finance and Inclusive Growth."

[46] J-PAL, "Digital Financial Services to Improve Formalized Access and Inclusion."

banking systems increased savings deposits in addition to providing a variety of other benefits.

During the COVID-19 pandemic, digital finance played an important role in mitigating the negative impact of the pandemic on households and the economy as whole. Mobile banking facilities enabled users to access financial services despite the mobility restriction imposed during the pandemic. Mobile banking facilities allowed users to access financial services even faster and more efficiently than going to banks in person. The increased use of fintech, peer-to-peer lending and crowdfunding supported MSMEs to remain economically viable during the pandemic. Additionally, digital finance enabled governments to identify and disburse social protection payments during economic shutdowns.

In addition, fintech also provides important support to the informal or 'gig' economy as well as MSMEs, sectors that are typically underserved by traditional banking.[47] Istuk notes that digital financial services can help close the financing gap for SMEs by providing access to alternative sources of funding and improving access to traditional players by enabling new digital products and process automation.[48] The use of alternative data sources and big-data analytics provide additional information sources to the credit risk-assessment process, allowing MSMEs that were once unable to obtain finances to gain access. New business models such as the sharing economy and e-commerce, digitalisation of MSME business processes, and open banking provide rich data on MSME activities and cash flows, enabling digital financial services, and can help MSMEs obtain access to financial products. At the same time, MSMEs still face some challenges in reaping the benefit of digital finance, in particular related to digital financial literacy and awareness of digital financial services, digital infrastructure, financial supervision and regulation, digital identity, data privacy and data protection.

From a macroeconomic perspective, those innovations narrow inequality and stimulate more balanced economic growth. As Khera et al. find, the exogenous component of digital financial inclusion is positively associated with growth in GDP per capita during 2011–2018 in 52 developing economies, which suggests that digital financial inclusion can accelerate economic growth.[49] Meanwhile, fractional logit and random effects empirical estimation identifies access to infrastructure, financial and digital literacy, and quality of institutions as key drivers of digital financial inclusion. J-PAL asserts that the introduction of digital finance enables users to send money, which significantly reduces remittance transaction costs and leads to increased migration, enhanced financial resilience and poverty reduction.[50]

In terms of the gender equality gap, it has been widely documented that digital finance has the potential to make a significant difference by increasing women's financial autonomy and improving their economic participation. Digital finance helps bridge the gap in account ownership, increase women's participation in the financial system and

[47] K. Singh, V. Seetharam, and N. Singh, "A Study on the Effect of COVID-19 Uncertainty on Gig Workers' Job Insecurity and Banking Behavior," in *The Sustainable Fintech Revolution: Building a Greener Future for Finance,* ed. K. Singh, R. Abraham, and P. Kolar (Hershey, PA: IGI Global, 2023), https://doi.org/10.4018/979-8-3693-0008-4.ch009

[48] I. Istuk, "The Role of Digital Financial Services in Bridging the SME Financing Gap," World Bank Blogs, 13 July 2023, https://blogs.worldbank.org/en/psd/role-digital-financial-services-bridging-sme-financing-gap

[49] P. Khera et al., "Is Digital Financial Inclusion Unlocking Growth?" Working Paper WP/21/167, IMF, 2021.

[50] J-PAL, "Digital Financial Services to Improve Formalized Access and Inclusion."

give women the opportunity to save formally or access credit. It can lower the risks associated with greater financial autonomy by improving privacy, confidentiality and reducing the time spent travelling. It can also help their businesses by lowering costs and giving access to a diversity of financial services. Yet, women are already lagging behind in the digital field and in accessing financial services. The current gender equality gap in financial inclusion and the gender digital inequality can be traced to many common factors, ranging from unequal opportunities, and structural barriers to social and cultural norms.[51]

To reap the benefits of digital finance, one of the requirements is to improve the level of digital literacy and financial literacy across economies. This is in line with Demirgüç-Kunt et al., who emphasise the importance of sufficient levels of digital and financial literacy for harnessing the financial inclusion impacts of digital financial services.[52] There is significant heterogeneity in digital and financial literacy levels in developing economies, which means that the rate of diffusion and take-up of digital financial services differs across economies and regions. Other factors impeding the financial inclusion impact of fintech relate to insufficient levels of development in digital payments infrastructure, internet connectivity and broadband penetration. The other constraint to be addressed is related to effectively managing potential risks to financial stability and cybersecurity.[53] On the other hand, J-PAL highlights how the rapid expansion of digital financial services has given rise to a concerning prevalence of vendor overcharging and misconduct, emphasising the critical need for robust consumer protection measures to uphold market integrity and trust.[54]

Studies on financial inclusion, economic growth and poverty

Financial inclusion contributes to economic growth by providing households and businesses better and affordable access to necessary resources for financing their consumption and investment and ultimately boosting economic activities.[55] This is in line with Schumpeter's argument (1911) that the services provided by financial intermediaries stimulate economic development through mobilising savings, evaluating projects, managing risk, monitoring managers and facilitating transactions.[56]

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[51] CSIS. "Leveraging Digital Technologies to Advance Women's Economic Empowerment" (2024). https://csis-website-prod.s3.amazonaws.com/s3fs-public/2024-08/240827_Bandura_Women_Tech.pdf

[52] A. Demirgüç-Kunt et al., "The Global Findex Database 2017: Measuring Financial Inclusion and Opportunities to Expand Access to and Use of Financial Services," *The World Bank Economic Review* 34 (Supplement_1) (2020): S2–S8.

[53] Beirne and Dang, "Digitalization for Enhancing Access to Finance and Inclusive Growth."

[54] J-PAL, "Digital Financial Services to Improve Formalized Access and Inclusion."

[55] M.N. Azimi, "New Insights into the Impact of Financial Inclusion on Economic Growth: A Global Perspective," *PLoS ONE* 17, no. 11 (2022): e0277730, https://doi.org/10.1371/journal.pone.0277730; R.W. Goldsmith, *Financial Structure and Development* (New Haven: Yale University Press, 1969); C. Ifediora et al., "Financial Inclusion and Its Impact on Economic Growth: Empirical Evidence from Sub-Saharan Africa," *Cogent Economics & Finance* 10, no. 1 (2022), https://doi.org/10.1080/23322039.2022.2060551; R.G. King and R. Levine, "Finance and Growth: Schumpeter Might Be Right," *The Quarterly Journal of Economics* 108, no. 3 (1993): 717–37, https://doi.org/10.2307/2118406; M.A. Omar and K. Inaba, "Does Financial Inclusion Reduce Poverty and Income Inequality in Developing Countries? A Panel Data Analysis," *Journal of Economic Structures* 9, no. 1 (2020): 37, https://doi.org/10.1186/s40008-020-00214-4; Sethi and Acharya, "Financial Inclusion and Economic Growth Linkage."

[56] J. Schumpeter, *The Theory of Economic Development* (Cambridge: Harvard University Press, 1911); King and Levine, "Finance and Growth: Schumpeter Might Be Right."

The impact of financial inclusion on economic growth varies; a 1 percent increase in financial inclusion[57] affects economic growth by between 0.022 percent[58] to 2.59 percent.[59] Sethi and Acharya examine the effects in greater detail in 31 economies, including developed and developing economies in 2004–2010, and find that a 1 percent increase in the level of financial inclusion[60] leads to 0.22 percent (in fixed effect) to 2.59 percent (in time fixed effect) increase in real per capita GDP. Meanwhile, Azimi finds that a 1 percent increase in financial inclusion (penetration, availability and usage of financial services) increases the world's economic growth by 0.316 percent.[61] The conclusion is drawn based on 218 economies' data in the 2004–2021 period.

Financial inclusion through credit channels expands new production activities and business. This expansion requires higher employment, as Ploeg believes that financing is effective at stimulating investment, which expands the scope of employment.[62] Fonseca et al. highlight that creating new jobs requires initial capital.[63] Nevertheless, when start-up costs (initial capital) are high, entrepreneurs are discouraged, and the portion of the population who become workers increases, job creation suffers and employment levels fall.

One study suggests that a one unit increase in financial inclusion decreases the unemployment rate by 2.21 units.[64] The study also highlights that financial inclusion increases access and ability to use financial services effectively. People can invest in education and increase their chances to get or create a job. Easy access to loans from formal financial institutions can also encourage the creation of MSMEs. The conclusion is drawn from 35 developing economies data in 2009–2018 by employing the three dimensions of financial services, that is, access, usage and quality.

Similarly, Kim et al. find that finance significantly influences unemployment in 49 developed and developing economies from 1991 to 2014.[65] More specifically, unemployment increases with financial development and concentration in banking markets but decreases with increasing market orientation. It is worth noting that joblessness depends on the flexibility of business, labour markets and credit; whenever regulations to obtain credit are rigid, unemployment increases. Kim et al. note that these effects are more predominant in economies with higher levels of financial and economic

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[57] For this study, financial inclusion is measured by a composite index on various indicators that relate to penetration, availability and usage of financial services combined with a general index. See Ifediora et al., "Financial Inclusion and Its Impact on Economic Growth."
[58] Ifediora et al., "Financial Inclusion and Its Impact on Economic Growth."
[59] Sethi and Acharya, "Financial Inclusion and Economic Growth Linkage."
[60] For this study, financial inclusion is measured by Sarma's index, also known as the Index of Financial Inclusion (IFI). In this index, financial inclusion consists of three dimensions of banking service: (1) banking penetration; (2) availability of banking outlets; and (3) credit to the private sector and deposit mobilised from the private sector as proportion of the economy's GDP. See M. Sarma, "Index of Financial Inclusion – A Measure of Financial Sector Inclusiveness," Berlin Working Papers on Money, Finance, Trade and Development 07/2012, Hochschule fuer Technik und Wirtschaft, Berlin, 2012; Schumpeter, *The Theory of Economic Development.*
[61] Azimi, "New Insights into the Impact of Financial Inclusion on Economic Growth."
[62] F. van der Ploeg, "The Effects of a Tax and Incomes Policy on Government Finance, Employment and Capital Formation," *De Economist* 134, no. 3 (1986): 269–88, https://doi.org/10.1007/BF01856693
[63] R. Fonseca, P. Lopez-Garcia, and C.A. Pissarides, "Entrepreneurship, Start-up Costs and Employment," *European Economic Review* 45, nos 4–6 (2001): 692–705, https://doi.org/10.1016/S0014-2921(01)00131-3
[64] Mehry, Ashraf, and Marwa, "The Impact of Financial Inclusion on Unemployment Rate in Developing Countries."
[65] D.H. Kim, T.C. Chen, and S.C. Lin, "Finance and Unemployment: New Panel Evidence," *Journal of Economic Policy Reform* 22, no. 4 (2019): 307–24, https://doi.org/10.1080/17487870.2018.1451750

development, lower income inequality, higher democracy and greater trade openness than other economies.

While financial inclusion is often associated with employment, such initiatives can have neutral or even adverse effects on productivity if not carefully targeted. For instance, a study on SME policies in Latin America reveals a lack of rigorous evaluation, casting doubt on the effectiveness of these policies in enhancing productivity or generating jobs. Supporting less productive firms can distort resource allocation and ultimately reduce overall productivity. For these policies to be effective, they must have clear objectives, precise targeting and robust evaluation mechanisms to ensure they support firms with real growth potential. Additionally, broader policies that encompass larger firms may yield greater productivity gains, though they run risk of benefiting companies that could thrive without government intervention.[66]

Moreover, financial inclusion improves income distribution and poverty reduction at the same time. Access to the financial system helps reduce income inequality through increased job creation and makes people less vulnerable to unexpected loss of income. The use of financial services (e.g., depositing money into savings accounts or non-cash payments, sending/ receiving remittances, obtaining credit or insurance facility) can play an important role in helping businesses to prosper and raise living standards.[67] Meanwhile, Hussain et al. state that inclusion of a broader population into the financial services network ensures that the benefits of financial services are distributed on an equitable basis across a broader spectrum of the population.[68]

Reductions in rural poverty are linked to higher savings generated by bank branches and credit extension in rural areas. The findings further highlight that an extensive rural branch network allows rural households to obtain credit for productive purposes, thus increasing output per capita. This is concluded by Burgess and Pande who conducted research on rural banks in India.[69] Similarly, Park and Mercado assert that increasing financial inclusion lowers income inequality in Asian developing economies.[70]

In line with that, social transfers, as an important component of poverty alleviation programmes, significantly enhance financial inclusion at the individual level, particularly by increasing account ownership among the poor. There is a noticeable shift in disbursements from social protection programmes, from cash to digital methods, including smartcards, e-vouchers and bank or mobile money accounts. This transition has been expedited by the COVID-19 pandemic and subsequent limitations on physical interaction. Currently, millions of new bank accounts and mobile money accounts are being opened across several APEC economies. The accumulation of financial records

[66] Inter-American Development Bank, *The Age of Productivity: Transforming Economies from the Bottom Up*, ed. Carmen Pagés (New York, NY: Palgrave Macmillan, 2010), https://doi.org/10.1057/9780230107618
[67] Sri Mulyani Indrawati, "Why Financial Inclusion Is a Stepping-stone to Prosperity," World Economic Forum, 24 March 2015, https://www.weforum.org/agenda/2015/03/why-financial-inclusion-is-a-stepping-stone-to-prosperity/
[68] S. Hussain et al., "Financial Inclusion and Economic Growth: Comparative Panel Evidence from Developed and Developing Asian Countries," *Sage Open* 14, no. 1 (2024), https://doi.org/10.1177/21582440241232585
[69] R. Burgess and R. Pande, "Do Rural Banks Matter? Evidence from the Indian Social Banking Experiment," *American Economic Review* 95, no. 3 (2005): 780–95.
[70] C.-Y. Park and R.V. Mercado, Jr, "Financial Inclusion, Poverty, and Income Inequality in Developing Asia," Economics Working Paper 426, Asian Development Bank (ADB), Manila, 2015.

for beneficiaries can facilitate access to small business loans, further deepening financial inclusion and better equipping households to withstand shocks.[71]

On the other hand, Omar and Inaba highlight that financial inclusion alone is not sufficient to affect the real economy at similar scale.[72] The effectiveness of financial inclusion depends on different economic scenarios, factors and conditions. Their study analysed annual panel data from 116 developing economies in Asia, Africa, and Latin America and the Caribbean during the 2004–2016 period using a composite financial inclusion index (CFII) comprising three basic dimensions of financial access: penetration, availability and usage of financial services. A fixed effect estimation shows that financial inclusion has a highly significant negative association with poverty and income inequality, that is, higher access to financial services strongly reduces poverty rates and income inequality in developing economies.

There is evidence that financial inclusion affects economic growth by facilitating higher economic activities among lower-income people. However, the degree of impact of financial inclusion on economic growth depends on the stage of development of the economy. Financial inclusion significantly affects economic growth in developing economies as it simultaneously reduces poverty and income inequality and opens up economic opportunities for lower-income people. However, the effect is insignificant for high-income economies.[73]

FINANCIAL INCLUSION IN APEC: DATA AND EMPIRICAL FINDINGS

Access to financial services

Financial services in an economy are provided by various financial institutions, such as retail and commercial banks, insurance firms and mortgage companies. These financial institutions provide two key linkages that are essential for economic growth. First, they serve an intermediary role between savers (or depositors) and borrowers (or debtors), through the functions of banks, credit unions, cooperatives and similar institutions. Second, they consolidate and manage risk between risk-averse groups and risk-taking groups[74] through the activities of insurance firms or capital market institutions. Together, these financial services enable the risk-taking needed for entrepreneurship and investment while protecting and growing overall wealth.

Digitalisation promotes better access to financial services

The degree of financial inclusion differs across APEC economies. Prior to digitalisation, financial services were mainly delivered through financial institutions, particularly banks and their brick-and-mortar branches. With the technological disruptions to the financial sector, the trend shifted, enabling customers to transition from predominantly cash transactions to cashless transactions and to move away from

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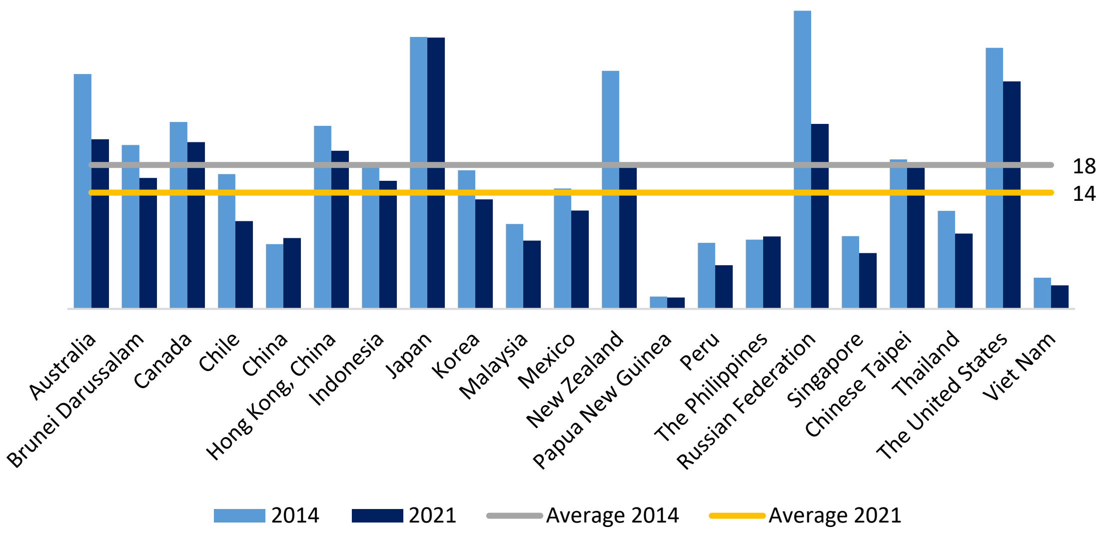
[71] A. Gelb, A. Mukherjee, and B. Webster, "Can Digital G2P Transfers Drive Financial Inclusion and Digital Payments? Evidence from India," Working Paper 618, CGD, Washington, DC, 2022.
[72] Omar and Inaba, "Does Financial Inclusion Reduce Poverty and Income Inequality in Developing Countries?"
[73] S.K. Saha, J. Qin, and K. Inaba, "The Impact of Financial Inclusion on Economic Growth in Developing Countries," *Journal of Accounting, Business and Finance Research* 16, no. 1 (2023): 12–29, https://doi.org/10.55217/102.v16i1.607
[74] I. Asmundson, "What Are Financial Services?" *Finance and Development* 48, no. 1 (2011): 46–7.

traditional bank accounts to digital bank accounts or mobile money accounts.[75] Consequently, there is no necessity for customers to visit a bank to conduct financial transactions. Figure 2.2 shows a declining trend of the number of commercial branches per 100,000 adults from an average of 18 branches in 2014 to 14 branches in 2021. The exception to this trend is China; Japan; Papua New Guinea; and the Philippines where the number of branches remains relatively unchanged. Several factors have contributed to the decline in the number of branches, including increasing adoption of digital payment methods and cost-cutting measures carried out by banks.[76]

Figure 2.2. Number of commercial bank branches per 100,000 adults



Source: International Monetary Fund (IMF) Financial Access Survey; Financial Supervisory Commission (Chinese Taipei).

A similar trend is observed in the number of ATMs, as depicted in Figure 2.3. A rise in cashless transactions, driven by the growth of the digital economy, was among the reasons for the decline. Between 2014 and 2021, nine economies posted a decline in the number of ATMs. Exceptions are seen in China; Mexico; Peru; the Philippines; Chinese Taipei; and Viet Nam where the number of ATMs continued to grow in 2021 compared to 2014. Despite growing cashless transactions in these economies, additional ATM installations could be the result of new market penetration or deployment of new ATM models which allow cash deposits (not only cash withdrawals), reducing the need to visit branches to make deposits.

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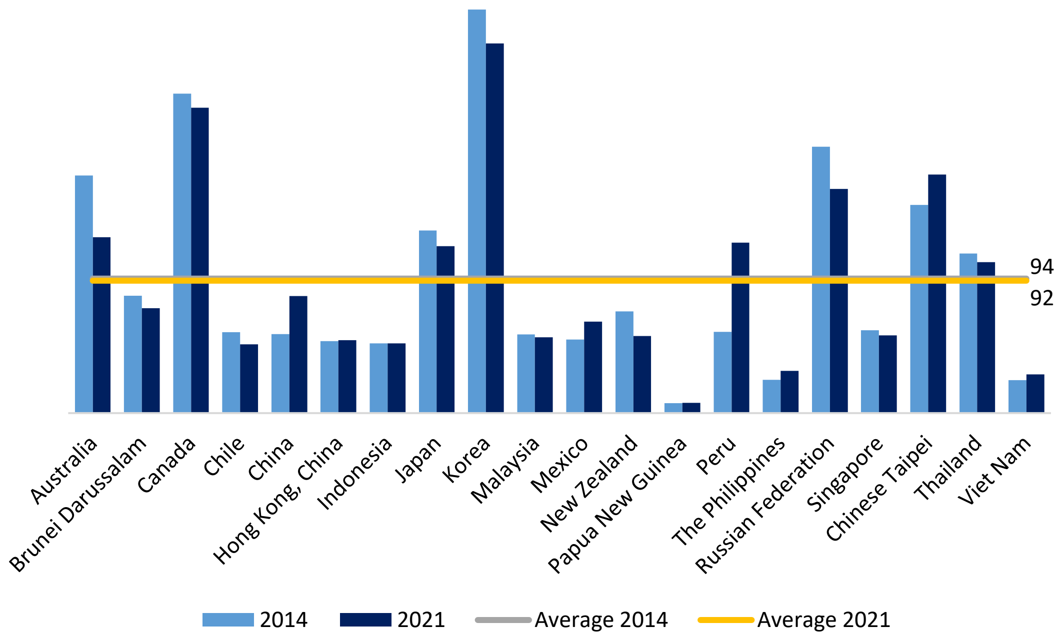
[75] According to the International Monetary Fund (IMF), a mobile money account is an account provided by a mobile network operator or another entity that partners with mobile network operators. A digital banking account is provided by a digital bank. See IMF, "FAS: What Is Mobile Money? How Is It Different from Mobile Banking?" accessed 24 October 2024, https://datahelp.imf.org/knowledgebase/articles/1906552-fas-what-is-mobile-money-how-is-it-different-fro

[76] IMF, "Financial Access Survey: 2022 Trends and Developments" (Washington, DC: IMF, 2022).

Figure 2.3. Number of ATMs per 100,000 adults



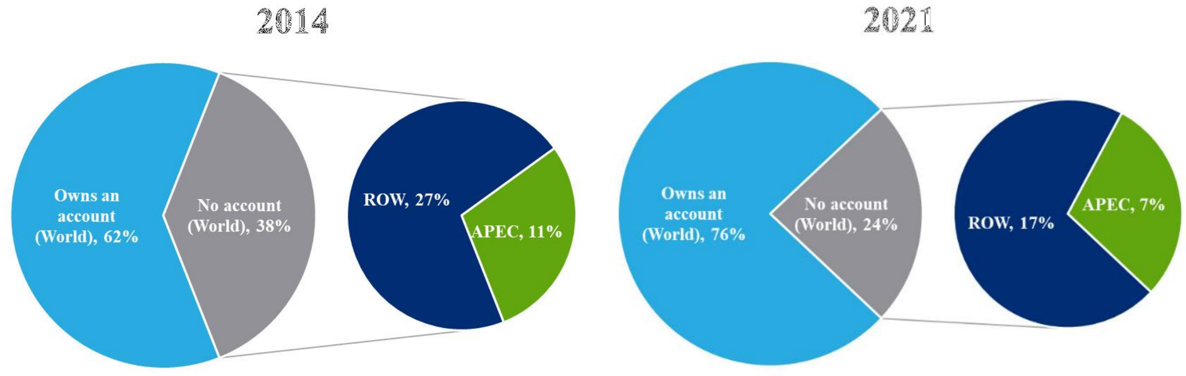
Note: Data are unavailable for the United States.
Source: IMF Financial Access Survey; Financial Supervisory Commission (Chinese Taipei).

Despite the decline in both bank branch and ATM numbers, access to financial services continues to improve thanks to digitalisation. Digital finance,[77] supported by wider internet access and smartphones penetration, enables affordable financial services for customers. Digital finance services accelerated during the COVID-19 pandemic when mobility restrictions forced people to rely on contactless transactions.

Better access to financial services is evident in the percentage of individual account ownership. Figure 2.4 illustrates the share of individual account ownership in APEC economies (both financial institution accounts and mobile accounts). The share of people with no account declined to 7.0 percent in 2021 from 11.0 percent in 2014.

[77] According to the European Union, digital finance is the term used to describe the impact of new technologies on the financial services industry. It includes a variety of products, applications, processes and business models that have transformed the traditional way of providing banking and financial services. See European Commission, "Overview of Digital Finance."

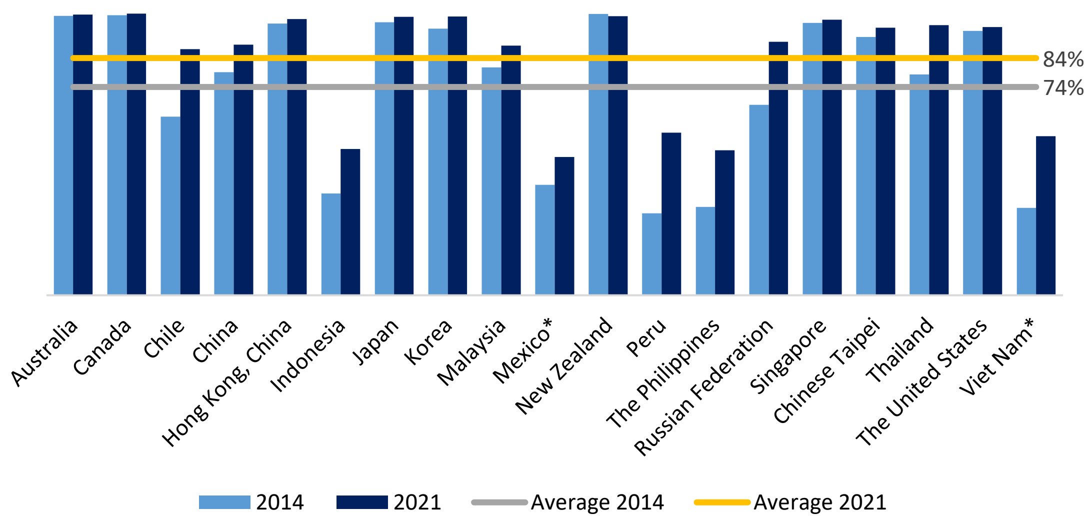
Figure 2.4. Share of population with no account, 2014 and 2021



Note: Brunei Darussalam and Papua New Guinea are not included in the calculation as the data are unavailable.
Source: World Bank Global Findex Database.

Figure 2.5 illustrates the share of population across the APEC economies that owned an account in 2014 and 2021. Account ownership in the APEC region increased, on average, from 74 percent in 2014 to 84 percent in 2021. Of the total 19 economies depicted in Figure 2.5, 10 economies posted a marked increase in the percentage of account ownership. This share is relatively unchanged in economies with already high account ownership: Australia; Canada; Hong Kong, China; Japan; Korea; New Zealand; Singapore; Chinese Taipei; and the United States.

Figure 2.5. Account ownership (% age 15+)



Note: Data are unavailable for Brunei Darussalam and Papua New Guinea.
* The latest data available for Mexico and Viet Nam are from 2022.
Source: World Bank Global Findex Database.

Among the APEC economies, Peru recorded the strongest growth, improving from 36 percent in 2014 to 51 percent in 2021, followed by Viet Nam from 31 percent to 56 percent (see Figure 2.5). In 2015, Peru launched its Financial Inclusion Strategy, which stipulated the government’s commitment to achieve a goal of at least 75 percent of adults with access to a transaction account by 2021.[78] Meanwhile in Viet Nam, the central bank has collaborated with the World Bank Group on devising a comprehensive strategy for financial inclusion since 2016. Viet Nam's strategy was ratified in 2020, with a target of at least 80 percent of adults having bank accounts by 2025.[79] In addition to an increase in bank account ownership, Viet Nam also posted strong growth in mobile account ownership as depicted in Table 2.1.

Besides Viet Nam, Thailand also experienced substantial growth in the number of mobile money accounts, with a 74 percent compound annual growth rate (CAGR) during the period 2014–2021, likely driven by the implementation of the e-Payment Master Plan which was launched as an economy-wide programme in 2017. The government of Thailand encouraged the use of e-payments and urged POS installation among smaller retailers and government agencies. In 2016, the Bank of Thailand introduced PromptPay, which allows customers to transfer and make payments via mobile phones based on their ID number or phone number.[80] As a result, mobile money account ownership for those above 15 years old jumped from 8 percent in 2017 to 60 percent in 2021. This thus supported strong growth in total account ownership in Thailand, from 78 percent of population above 15 years old in 2014 to 96 percent in 2021.[81] This illustrates that access to financial services can be significantly improved by establishing policies that support the provision of mobile money account services.

Table 2.1. Number of mobile money accounts for population age 15+

Economies	2014	2021	CAGR
Chile	525,469	N/A	N/A
Indonesia	814,752	18,824,611	57%
Malaysia	616,066	6,932,260	41%
Mexico*	2,915,006	17,346,024	29%
Peru	0	3,561,866	N/A
The Philippines	2,800,479	16,665,046	29%
The Russian Federation	N/A	38,749,747	N/A
Singapore	288,103	1,526,047	27%
Thailand	722,769	34,947,739	74%
Viet Nam*	346,752	12,310,245	67%

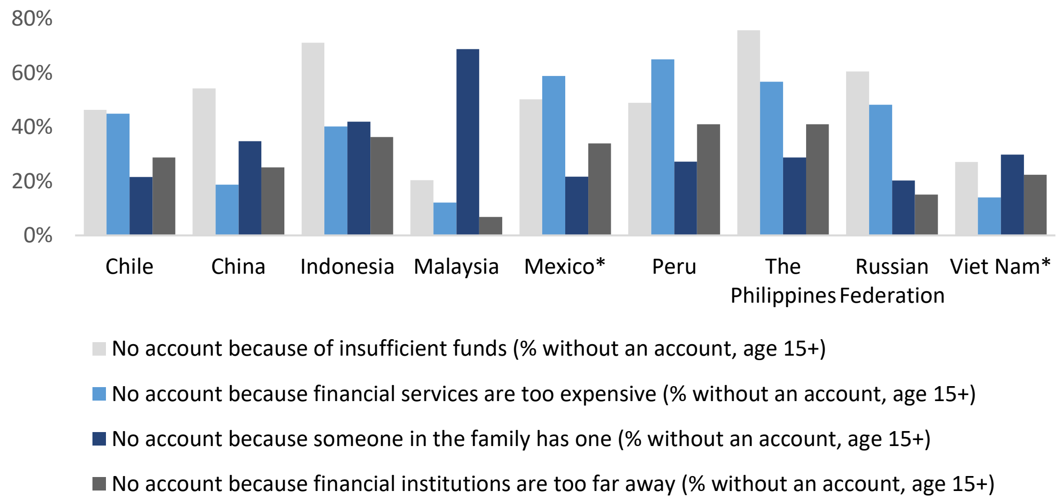
CAGR = compound annual growth rate.
Note: The number of mobile money accounts is calculated by multiplying the adult population (age 15+) by the percentage of respondents who reported personally using a mobile service in the past year. Data are unavailable for Australia; Brunei Darussalam; Canada; Chile (2021); China; Hong Kong, China; Japan; Korea; Papua New Guinea; New Zealand; the Russian Federation (2014); Chinese Taipei; and the United States.
* The latest data available for Mexico and Viet Nam are from 2022.
Source: World Bank Global Findex Database.

[78] World Bank, "Peru Launches National Financial Inclusion Strategy to Expand Financial Inclusion," 5 August 2015, https://www.worldbank.org/en/news/feature/2015/08/05/peru-launches-national-financial-inclusion-strategy-to-expand-financial-inclusion#:~:text=To%20close%20this%20gap%2C%20Peru,a%20transaction%20account%20by%202021
[79] "PM Ratifies National Financial Inclusion Strategy until 2025," *Viet Nam News*, 2 February 2020, https://vietnamnews.vn/economy/591722/pm-ratifies-national-financial-inclusion-strategy-until-2025.html
[80] Bank of Thailand, "PromptPay," accessed 12 October 2024, https://www.bot.or.th/en/financial-innovation/digital-finance/digital-payment/promptpay.html#accordion-15b3f8d52f-item-cb3c3ef862
[81] The contribution of mobile money accounts to total account ownership in Thailand reached 63 percent in 2021, a significant improvement from less than 2 percent in 2014.

Figure 2.5 also highlights five economies with below-average account ownership percentage: Indonesia; Mexico; Peru; the Philippines; and Viet Nam. In these economies, the reasons for not having financial institution accounts are articulated in Figure 2.6. For Indonesia and the Philippines, the primary reasons are insufficient funds. For Mexico and Peru, the reasons are high cost of access to financial services, and for Viet Nam, the reasons are insufficient funds and the belief that having an account is unnecessary since a family member already owns one.

In Mexico, financial services are considered too expensive because banks tend to require minimum deposits, charge high fees, and impose certain penalties on account holders.[82] A similar situation exists in Peru, where major financial products have high transaction fees, even when conducted through internet banking.[83] In Viet Nam, banks tend to not charge opening fees or monthly service fees, but certain service fees will be imposed if a minimum account balance cannot be maintained.[84] The issue in Viet Nam will likely be less relevant in the future as the government has approved an economy-wide target of 80 percent bank account ownership by 2025 with several initiatives to achieve the targets, including streamlining the legal framework to allow easier financial inclusion implementation; diversifying financial service providers and supporting channels to broaden the coverage of financial services and products; upgrading financial infrastructure; and lowering transaction fees.[85]

Figure 2.6. Reasons for not having any financial institution account (% without an account, age 15+), 2021



Note: Data are unavailable for Australia; Brunei Darussalam; Canada; Hong Kong, China; Japan; Korea; Papua New Guinea; New Zealand; Singapore; Chinese Taipei; Thailand; and the United States.
* The latest data available for Mexico and Viet Nam are from 2022.
Source: World Bank Global Findex Database.

[82] M. Perez, "Mexico Seeks to Reduce Consumers' Longstanding Reliance on Cash," *Southwest Economy* (First Quarter 2020).
[83] J. Julião, T. Ayllon, and M. Gaspar, "Financial Inclusion through Digital Banking: The Case of Peru," in *Innovations in Industrial Engineering II (icieng 22): Lecture Notes in Mechanical Engineering*, ed. J. Machado et al. (Cham, Springer: 2022), https://doi.org/10.1007/978-3-031-09360-9_24
[84] R. Efflandrin, "How to Open a Bank Account in Vietnam as an Australian," 25 August 2022, https://wise.com/au/blog/opening-a-bank-account-in-vietnam
[85] *Viet Nam News*, "PM Ratifies National Financial Inclusion Strategy until 2025."

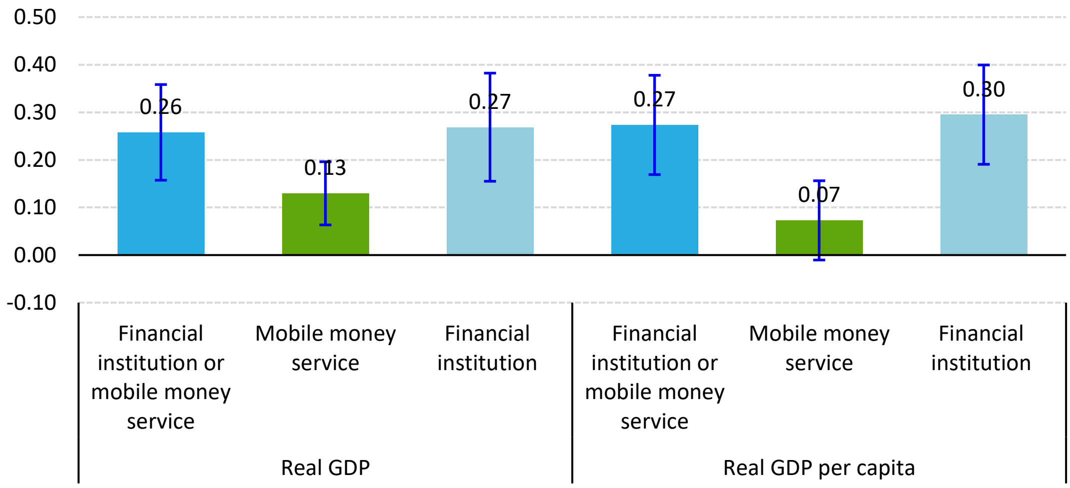
Economic impacts of financial inclusion, access and distribution

Building on the preliminary findings of the previous sections, this section further explores the relationship between financial inclusion and key indicators of economic development: economic growth, employment and poverty. The impacts of financial inclusion are analysed econometrically through fixed effects regression models utilising macroeconomic data from 131 economies across 11 years, combined with data from the Global Findex Database by the World Bank. The analysis yields several notable findings that highlight the importance of improving both the access to finance and its distribution across income groups to bolster economic growth, employment and poverty reduction.

Financial access is a catalyst for economic growth

Policies aimed at achieving financial inclusion predominantly focus on increasing access to financial services to increase the percentage of the population that possesses an account, whether at a financial institution or enabled by mobile technology. Figure 2.7 shows the significant and positive relationship between the percentage of the population that has access to these financial services and real economic growth (total and per capita). The findings reveal that enhancing access to financial services has a positive and significant impact on real economic growth. This is in line with findings by the International Monetary Fund (IMF), which had established linkages between financial inclusion and economic growth based on various macroeconomic indicators.[86]

Figure 2.7. Impact of account ownership (% of population) on GDP



Note: Figures show the percentage impact on real GDP or real GDP per capita of a 1 percentage point increase in account ownership. Lines indicate the 95% confidence interval for the estimated impact. Refer to Table A.1 in the Appendix for complete regression results.
Source: World Bank World Development Indicators; World Bank Global Findex Database; and APEC Policy Support Unit (PSU) staff calculations.

The findings from our analysis also indicate that accounts at financial institutions have a more pronounced impact on growth. For instance, a 10 percentage point increase in the share of the population with accounts at a financial institution leads to a 3.0 percent increase in real GDP per capita a year after. Meanwhile, the same increase in share of

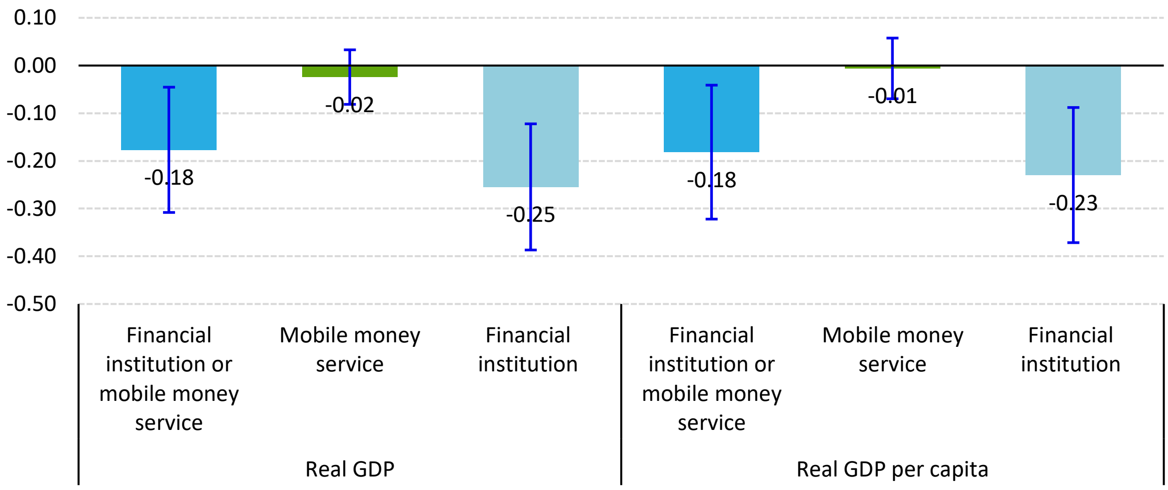
[86] R. Sahay et al., "Rethinking Financial Deepening: Stability and Growth in Emerging Markets," Staff Discussion Note SDN/15/08, IMF, 2015.

population with both types of account (financial institution or mobile) or mobile accounts is associated with a 2.7 percent and 0.7 percent increase in GDP per capita, respectively. Similar patterns are seen with real GDP as a whole, with an increase in accounts at financial institutions having the greatest impact on economic growth, followed by both types of accounts (financial institution or mobile) and mobile accounts.

Distribution of financial access is important for economic growth

While discussions on financial inclusion have predominantly revolved around access and usage, the distribution of this access matters to economic growth too. To explore the link between distribution and economic growth, a concentration index is calculated to measure the degree of inequality in the distribution of accounts. The concentration index[87] is similar to the Gini index, with higher index values indicating more concentration of financial access toward richer individuals. Results of the analysis are presented in Figure 2.8.

Figure 2.8. Impact of distribution of account ownership (concentration index) on GDP



Note: Figures show the percentage impact on real GDP or real GDP per capita of a one-point increase in the concentration index, i.e., more inequality in access to financial accounts. Lines indicate the 95% confidence interval for the estimated impact. Refer to Table A.2 in the Appendix for complete regression results.
Source: World Bank World Development Indicators; World Bank Global Findex Database; and APEC PSU staff calculations.

The findings reveal that distribution matters to strengthening the impact of financial inclusion on the economy. That is, a more equitable distribution of access to financial accounts (i.e., reduction in the concentration index) is associated with higher real GDP and real GDP per capita growth. For example, a ten- point reduction in the concentration index – which implies more equality in access to financial services – is associated with a 2.5 percent increase in real GDP and a 2.3 percent increase in real GDP per capita.

[87] The concentration index is a measure of distribution of any indicator – in this case, access to financial services – across the income spectrum. The index ranges from -1 to +1, with higher (positive) values indicating a pro-rich distribution and lower (negative) values indicating a pro-poor distribution. A concentration index value of zero indicates perfect equality in distribution. The index is calculated using the methodology for grouped data by N. Kakwani, A. Wagstaff and E. van Doorslaer, "Socioeconomic Inequalities in Health: Measurement, Computation, and Statistical Inference," *Journal of Econometrics* 77, no. 1 (1997): 87–103.

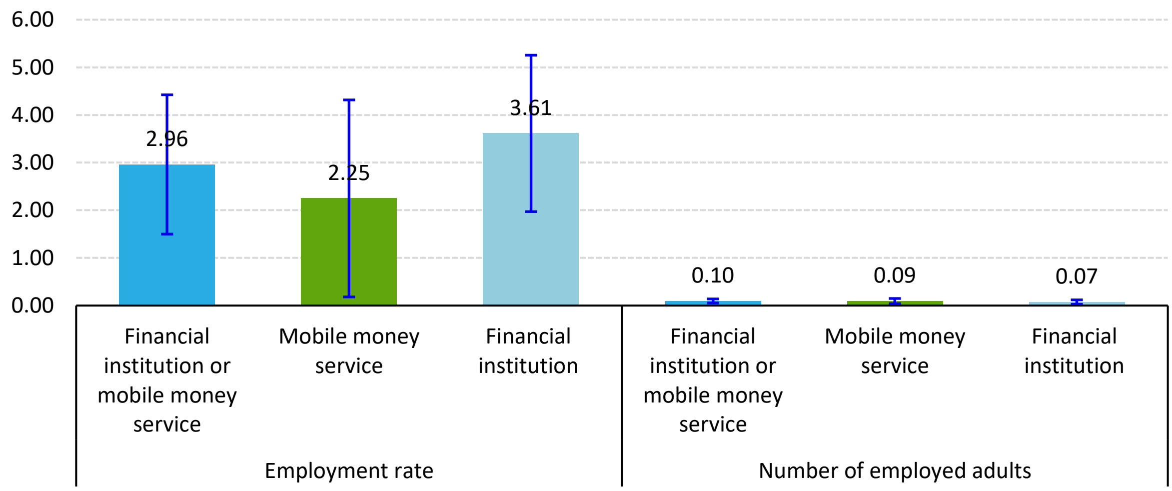
While increasing access to mobile accounts has impacted GDP, changes in their distribution did not appear to have an impact on GDP. Despite the absence of a standalone effect, the distribution of both financial institution accounts and mobile accounts combined continued to have a noticeable impact on economic growth.

Previous studies have shown how the distribution of accounts targeting specific income groups and industries can foster economic productivity. Notably, an experiment in Malawi conducted by the World Bank revealed that providing smallholder cash crop farmers with a type of formal savings account significantly increased their purchase of crop inputs, crop production, and sales.[88] Therefore, the findings from the statistical analysis are corroborated by existing literature, serving to highlight the importance of considering distribution as a crucial aspect of financial inclusion, on par with providing access to finance.

Financial inclusion facilitates jobs creation

As demonstrated in the framework in Figure 2.1, financial inclusion is expected to have a positive impact on employment, and econometric analysis confirms this hypothesis. For this analysis, we look into the statistical relationship between access to finance and jobs in terms of the employment rate and the total number of employed individuals. It is essential to analyse both indicators, as focusing exclusively on one may lead to inconsistent conclusions. For instance, an improvement in the employment rate may not reflect an actual increase in the number of employed adults if there is a simultaneous decline in labour force participation.

Figure 2.9. Impact of account ownership (% of population) on employment



Note: Figures show the percentage impact on employment rate or number of employed adults of a 1 percentage point increase in account ownership. Lines indicate the 95% confidence interval for the estimated impact. Refer to Table A.3 in the Appendix for complete regression results.
Source: World Bank World Development Indicators; World Bank Global Findex Database; and APEC PSU staff calculations.

The results in Figure 2.9 indicate a strong correlation between financial access and employment, with an increase in account ownership positively affecting both the employment rate and the number of employed adults. Regarding the employment rate,

[88] L. Brune et al., “Commitments to Save: A Field Experiment in Rural Malawi,” Policy Research Working Paper 5748, World Bank, 2011.

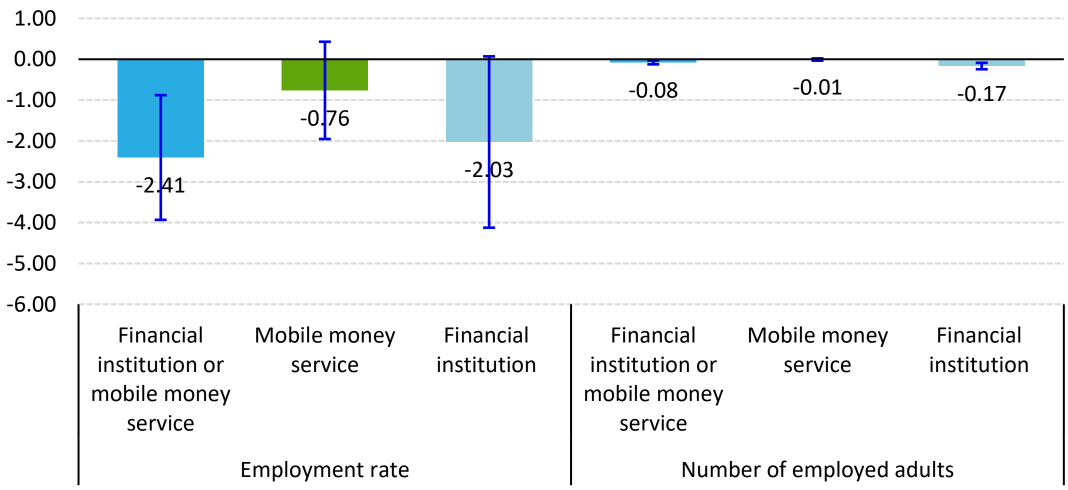
patterns similar to those observed with GDP emerge, where a 10 percentage point increase in the share of the population with an account at a financial institution correlates with a 0.4 percentage point increase in employment rate a year after. The ownership of both types of accounts ranks second, resulting in a 0.3 percentage point increase. Although mobile account ownership has the smallest effect, it still contributes positively, accounting for a 0.2 percentage point increase in the employment rate.

A different pattern emerges when examining the impact on the number of employed adults: ownership of accounts at financial institutions has the least effect, leading to only a 0.7 percent increase in the number of employed adults for every 10 percentage point increase in account ownership. Mobile accounts have a relatively higher impact, with a 0.9 percent in the number of employed adults based on the same 10 percentage point increase. Combined ownership of accounts at both financial institutions and mobile money services produces the most significant effect, with a 1.0 percent increase in the number of employed adults.

Distribution of financial access also contributes to employment

Figure 2.10 shows the analysis between distribution of financial access and employment. It shows that an equitable distribution of finance contributes to improving employment, with nuanced effects depending on the type of accounts and their accessibility to different income groups. Interestingly, the distribution of mobile accounts across income groups does not seem to significantly influence employment figures. However, when considering the distribution of accounts across both financial institutions and mobile money services, there is a discernible impact on employment. Specifically, with a 10 percentage point decrease in the concentration index, that is, when the distribution of these accounts becomes more favourable to lower-income groups, there is a 0.2 percentage point increase in employment rate and a 0.8 percent increase in the number of employed adults the year after.

Figure 2.10. Impact of distribution of account ownership (concentration index) on employment



Note: Figures show the percentage impact on employment rate or number of employed adults of a one-point increase in the concentration index; i.e., more inequality in access to financial accounts. Lines indicate the 95% confidence interval for the estimated impact. Refer to Table A.4 in the Appendix for complete regression results.
Source: World Bank World Development Indicators; World Bank Global Findex Database; and APEC PSU staff calculations.

Furthermore, the distribution of accounts solely at financial institutions is particularly relevant for employment. Not only does it have comparable effects on the employment rate, but it also boasts a more substantial effect on the number of employed adults. When distribution favours lower-income groups, as indicated by a 10 percentage point decrease in the concentration index, there is a 0.2 percentage point increase in the employment rate and 1.7 percent increase the number of employed adults, highlighting the importance of equitable financial access in fostering employment opportunities.

Financial access alone does not reduce poverty

Ensuring access to and usage of financial services for all segments of society is expected to improve savings, including those of low-income households. This, in turn, facilitates their future investments, smoothing consumption and managing financial risks – all of which collectively contribute to poverty reduction.[89] The results in Figure 2.11 show the precise statistical relationship between financial access and poverty, referencing both economy-defined and extreme poverty lines.

The data indicate that an increased portion of the population holding accounts at financial institutions correlates with a decrease in extreme poverty rates. Specifically, a 10 percentage point surge in such account ownership translates to a 0.2 percentage point decline in extreme poverty rate in the following year. Increases in the ownership of both financial institution accounts and mobile accounts combined yielded similar outcomes, also resulting in a 0.2 percentage point reduction in extreme poverty the year after. However, the changes in mobile account ownership alone did not cause any changes to extreme poverty.

In contrast, economy-defined poverty rates reveal a markedly different dynamic compared to that of extreme poverty, growth and unemployment. The model showed that enhanced financial access alone did not have a significant impact on the poverty rate, irrespective of the account type. This reflects the findings of IMF researchers who have highlighted how improving access to finance alone is insufficient to combat inequality.[90] If access is expanded but disproportionately favours those with higher incomes and assets, it could exacerbate inequality by amplifying the returns on capital while widening the wage gap between low- and high-skilled workers. These insights underscore the necessity to evaluate financial inclusion also from the standpoint of distribution.

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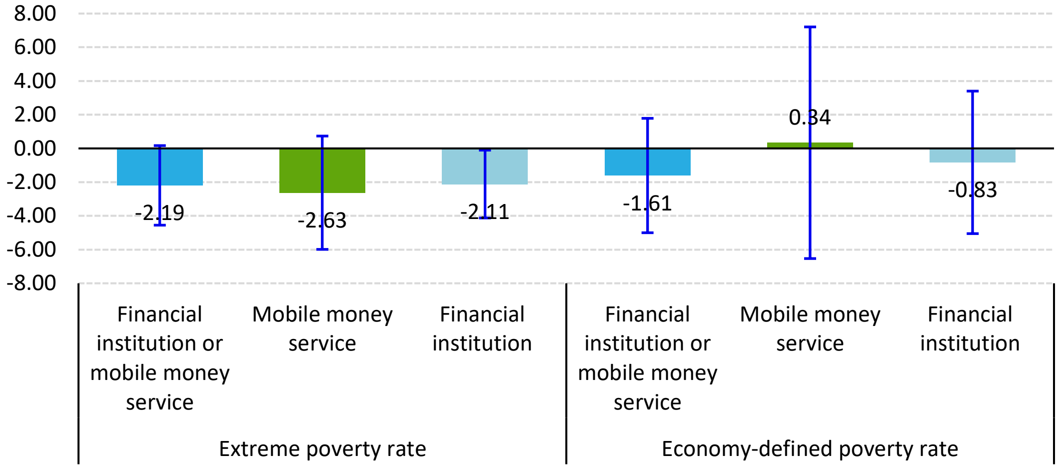
[89] Demirgüç-Kunt et al., "The Global Findex Database 2017: Measuring Financial Inclusion."
[90] E. Dabla-Norris et al., "Causes and Consequences of Income Inequality: A Global Perspective," Staff Discussion Note SDN/15/13, IMF, 2015.

Figure 2.11. Impact of account ownership (% of population) on poverty rate



Note: Figures show the percentage impact on poverty rate of a 1 percentage point increase in account ownership. Lines indicate the 95% confidence interval for the estimated impact. Refer to Table A.5 in the Appendix for complete regression results.
Source: World Bank World Development Indicators; World Bank Global Findex Database; and APEC PSU staff calculations.

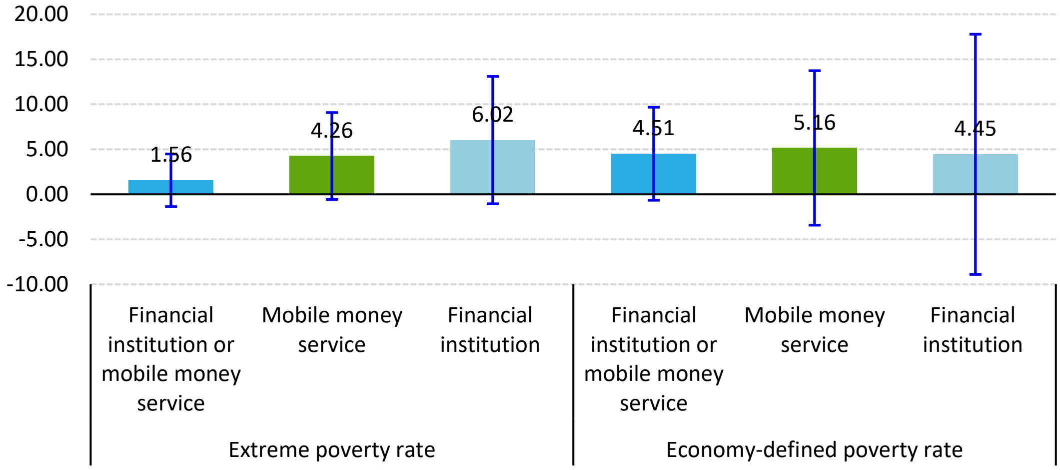
Equitable distribution of financial access is necessary for poverty reduction

Figure 2.12 presents the results of statistical analysis on distribution, confirming that distribution plays a pivotal role in poverty alleviation, including for economy-defined poverty rates. Improving the distribution of financial accounts toward lower-income households by a 10 percentage point dip in the concentration index would lead to a 0.6 percentage point reduction in extreme poverty rate. And, allocating mobile accounts in favour of lower-income demographics would be associated with a 0.4 percentage point decrease in extreme poverty rate. Nonetheless, when both accounts are considered together, these measures did not exhibit a discernible impact on poverty.

While access was found to not affect the economy-defined poverty rate, distribution significantly influences it. A 10 percentage point decrease in the concentration index – that is, improving distribution of financial access to favour low-income groups – can achieve a reduction of 0.5 percentage point in the economy-defined poverty rate for the year after. This finding corroborates previously mentioned findings of Burgess and Pande that had demonstrated that in rural India, an increase in the number of bank branches – and consequently, access to financial services among farmers – led to tangible reductions in rural poverty.[91]

[91] Burgess and Pande, "Do Rural Banks Matter?"

Figure 2.12. Impact of distribution of account ownership (concentration index) on poverty rate



Note: Figures show the percentage impact on poverty rate of a one-point increase in the concentration index, i.e., more inequality in access to financial accounts. Lines indicate the 95% confidence interval for the estimated impact. Refer to Table A.6 in the Appendix for complete regression results.
Source: World Bank World Development Indicators; World Bank Global Findex Database; and APEC PSU staff calculations.

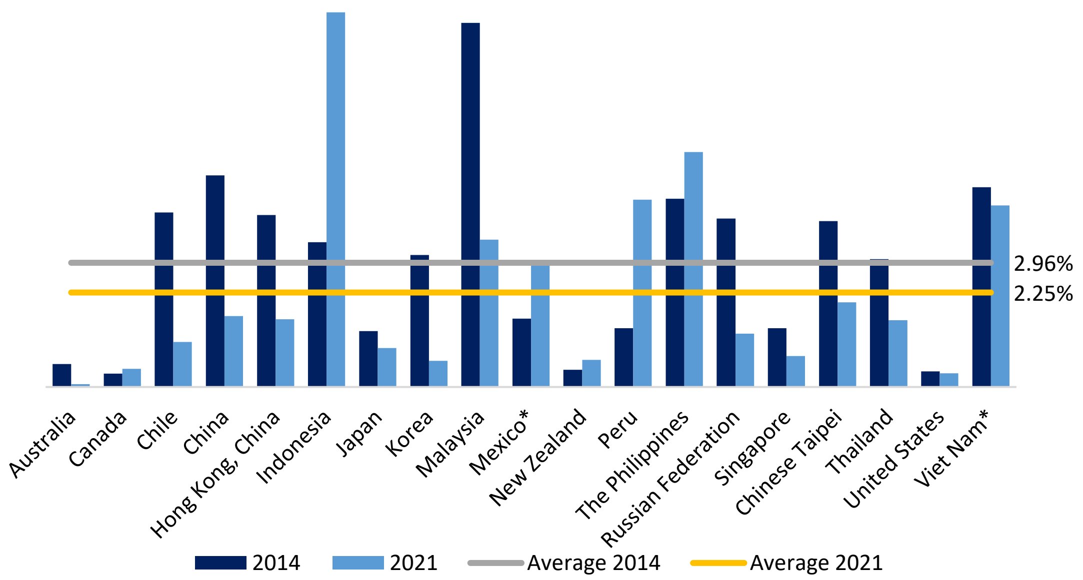
The statistical analyses reiterate the importance of policies that actively encourage improved access to accounts at financial institutions. While mobile money services have either accounted for comparatively smaller effects, their increasing prevalence suggests that their impact may grow in the future, making it essential to continue monitoring the effects of mobile accounts on economic development. Additionally, these findings demonstrate the multifaceted nature of financial inclusion, making it evident that enhancing both access and distribution is crucial in fostering economic growth, improving employment opportunities and facilitating poverty alleviation.

Utilisation of financial services

Encouraging saving and borrowing

Although the percentage of account ownership has improved in the past few years, the usage of financial services continues to remain a challenge. Figure 2.13 illustrates the percentage of respondents with inactive accounts who reported neither a deposit into nor a withdrawal from their account in the past year or making or receiving any kind of digital payment. The number of inactive accounts decreased from an average of 2.96 percent in 2014 to 2.25 percent in 2021. However, some economies marked a significant increase, including Indonesia (from 3.5 percent in 2014 to 8.9 percent in 2021) and Peru (from 1.4 percent to 4.5 percent). Malaysia, on the other hand, managed to bring down its inactive account numbers during 2021, likely due to the disbursement of stimulus packages to support individuals during the pandemic.

Figure 2.13. Has an inactive account (% age 15+)



Note: Data are unavailable for Brunei Darussalam and Papua New Guinea.
* The latest data available for Mexico and Viet Nam are from 2022.
Source: World Bank Global Findex Database.

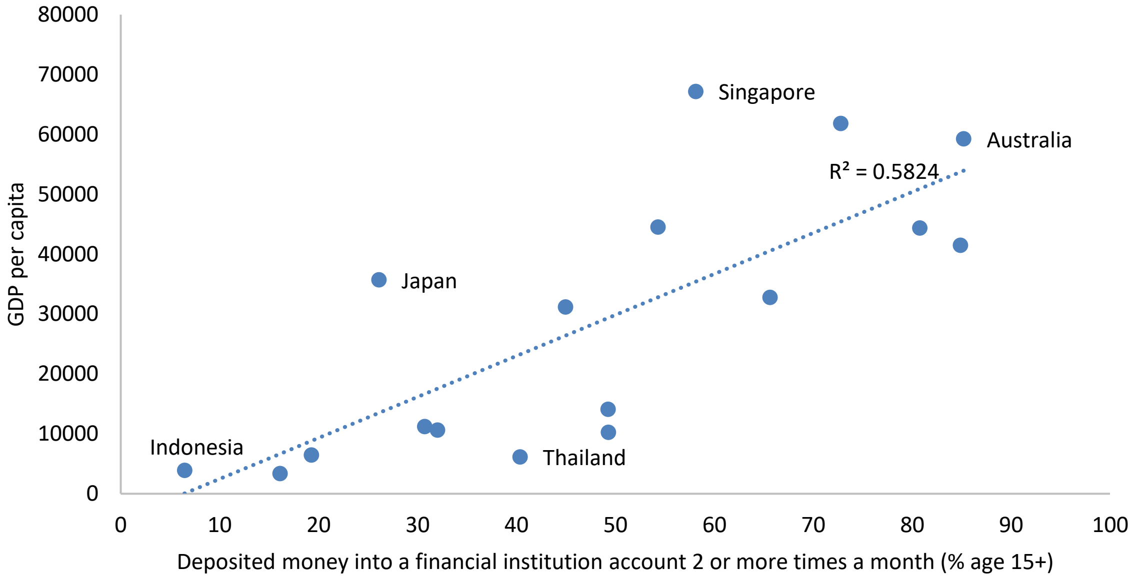
Table 2.2. Percentage of financial institution account ownership and its activities, 2021

Economies	Financial institution account ownership (% age 15+)	Deposited money into a financial institution account 2 or more times a month (% age 15+)
Australia	99%	85%
Canada	98%	81%
Chile	87%	49%
China	89%	31%
Hong Kong, China	98%	54%
Indonesia	51%	6%
Japan	98%	26%
Korea	99%	66%
Malaysia	88%	32%
Mexico*	46%	24%
New Zealand	99%	85%
Peru	56%	19%
The Philippines	46%	16%
The Russian Federation	89%	49%
Singapore	97%	58%
Chinese Taipei	95%	45%
Thailand	94%	40%
The United States	95%	73%
Viet Nam*	56%	19%
AVERAGE	83%	45%

Note: Data are unavailable for Brunei Darussalam and Papua New Guinea.
* The latest data available for Mexico and Viet Nam are from 2022.
Source: World Bank Global Findex Database and Bank of Canada.

An indicator to assess the usage of financial services is the frequency of money deposits into financial accounts of two or more times a month. As discussed in Figure 2.1, deposits are a crucial element of financial inclusion as it helps inject liquidity into the system thus supporting credit for business expansion. But as seen in Table 2.2, the usage of financial accounts remains low in some APEC economies, averaging at 45 percent. This low frequency of deposits is not only true for economies with below 60 percent financial account ownership, like Indonesia (6 percent); Peru (19 percent); and the Philippines (16 percent), but also for economies with over 80 percent account ownership, like Chile (49 percent); China (31 percent); Malaysia (32 percent); and Thailand (40 percent). An active deposit placement requires a sustainable income stream, implying certain income levels and job security. Figure 2.14 illustrates the correlation between GDP per capita and deposit activities by individuals.

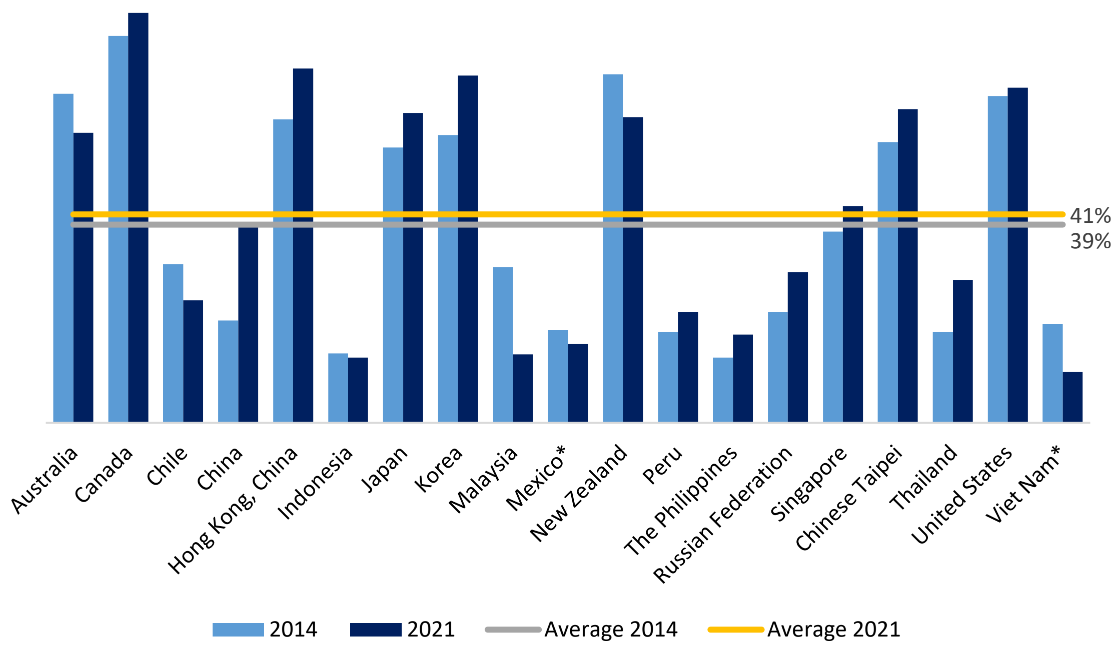
Figure 2.14. Deposited money into a financial institution account two or more times a month (% age 15+) and GDP per capita (constant 2015 USD), 2021



Note: Data are unavailable for Brunei Darussalam and Papua New Guinea
Source: World Bank Global Findex Database; World Bank's World Development Indicators.

Low usage of financial services is not only evident in savings/deposits, but also credit. Figure 2.15 illustrates the percentage of respondents that borrow money from financial institutions in 2014 and 2021. The percentage of respondents who borrowed money from financial institutions increased from 39 percent in 2014 to 41 percent in 2021. Of the total 19 APEC economies, seven economies reported a decline in the percentage of borrowings from financial institutions, namely, Australia; Chile; Indonesia; Malaysia; Mexico; New Zealand; and Viet Nam. This may be caused by stricter loan approval processes during the COVID-19 pandemic to prevent the risk of increased non-performing loans (NPLs).

Figure 2.15. Borrowed any money from financial institution (% age 15+)[92], 2014 and 2021



Notes: Data are unavailable for Brunei Darussalam and Papua New Guinea.
* The latest data available for Mexico and Viet Nam are from 2022.
Source: World Bank Global Findex Database.

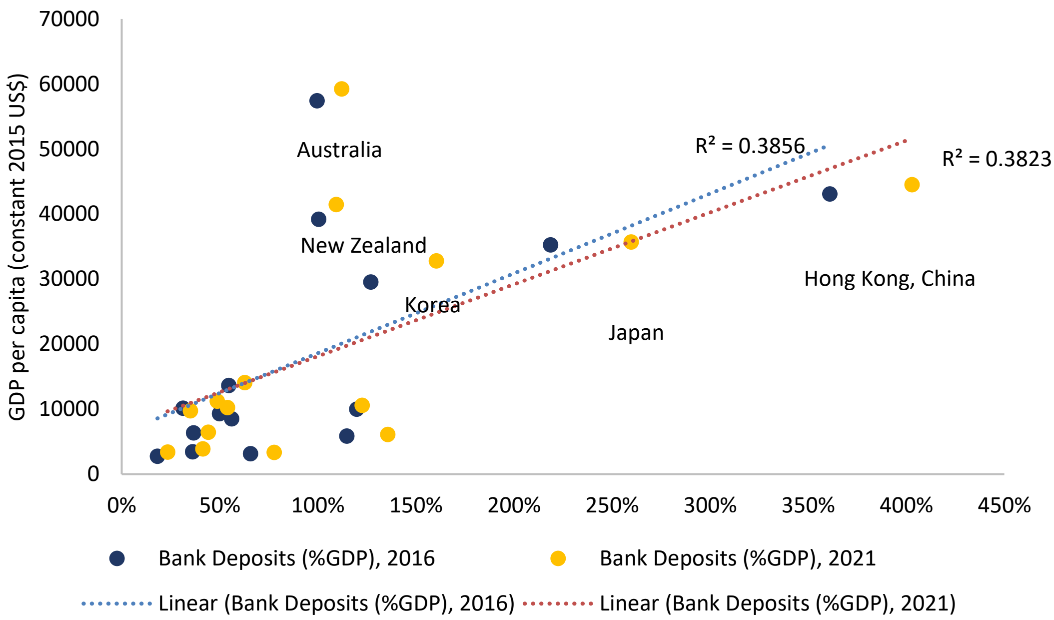
In general, the small percentage of individuals with credit at financial institutions can be attributed to lack of borrowing capacity, which includes factors like low income and lack of collateral, as well as the high cost of acquiring credit, such as high lending rates and significant credit-related fees.

Such low usage of financial services, both in savings and credit, requires policies to stimulate higher economic growth and promote job creation, enabling individuals to achieve sustainable income levels which is necessary to promote an active usage of financial services. In fact, financial inclusion should move beyond access to financial services to active, consistent and informed usage of financial services.[93] Without active usage of financial institution accounts, the advantage of having such accounts cannot be optimised, for both the customers and for the economy. For customers, a high frequency of money deposits implies healthy financial conditions, thus supporting the financial resilience of the customer. For the economy, a high frequency of money deposits feeds liquidity into the financial system which can be channelled to credit or financial instruments that support business expansion or employment. Such credit expansion will contribute to higher economic growth, more employment and a reduction in poverty levels.

[92] Borrowed from a formal financial institution (% age 15+) is defined as the percentage of respondents who report borrowing any money from a bank or another type of financial institution or using a credit card in the past year.
[93] D. Salazar and C. Monteverde, "3 Ways to Advance Usage and Drive Impact in Financial Inclusion," World Bank Blogs, 4 February 2019, https://blogs.worldbank.org/en/allaboutfinance/3-ways-advance-usage-and-drive-impact-financial-inclusion

From a macroeconomic perspective, the usage of financial services, measured by bank deposits as a percentage of GDP, shows a positive correlation with GDP per capita (see Figure 2.16), which supports previous findings at the individual level (Figure 2.14). Increased bank deposits facilitate smoother consumption and investment, thereby boosting economic activity. High bank deposits levels are typically found in high-income economies, such as Hong Kong, China; Japan; and Korea.

Figure 2.16. Bank deposit (% GDP) vs. GDP per capita (constant 2015 USD)



Notes: Data on bank deposits are unavailable for Brunei Darussalam; Canada; Papua New Guinea; Singapore; Chinese Taipei; and the United States.
Source: World Bank Global Financial Development; World Bank World Development Indicators

Boosting mobile account usage through digital and financial literacy

Table 2.3 illustrates data on mobile account ownership and its usage, which are only available for six APEC economies. Thailand has the highest percentage of mobile money account usage, implying the successful implementation of policies to encourage the use of e-payments in the economy. Similar to Malaysia, the government of Thailand also distributed its subsidy through the e-payment system, thus providing a stimulus to people to use digital financial services.

Data on mobile account usage show that there is a discrepancy between high-income economies and developing economies in using mobile account services. This can be due to poorer infrastructure in developing economies, as well as lack of knowledge and skills in using mobile money services, which is generally related to low digital literacy.[94] Closing the digital literacy gap between high-income and middle-income economies, while promoting financial resiliency – particularly for the poor – is

[94] GSMA, "Mobile Money Activity Rates: Which Strategies Should Providers Consider," 20 March 2023, https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/blog/mobile-money-activity-rates-which-strategies-should-providers-consider/

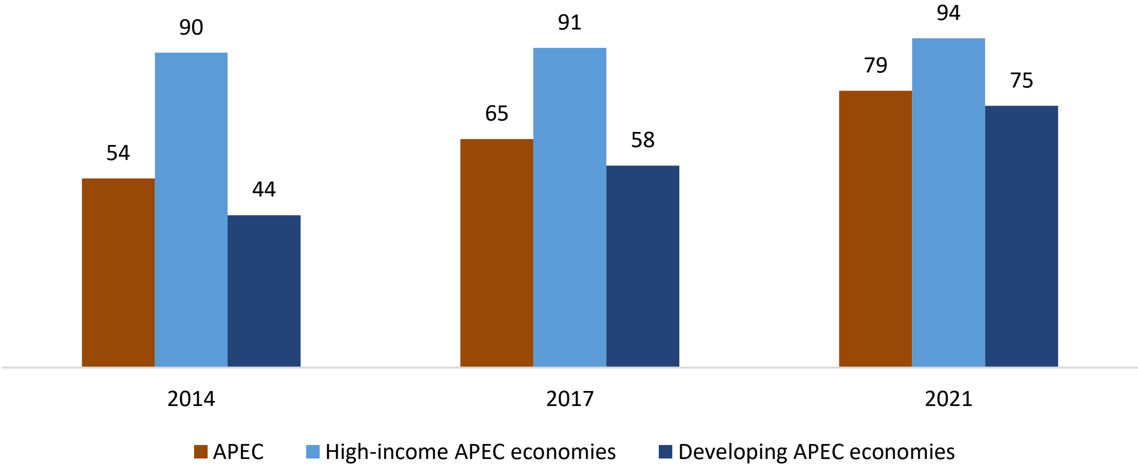
necessary to support higher usage of mobile accounts. Precipitated by the growth of e-commerce platforms and cashless payments, the use of mobile money will continue to increase in the future, which also necessitates financial literacy initiatives to ensure financial resiliency, particularly for low-income people.

Table 2.3. Percentage of mobile money account ownership and usage, 2021

Economies	Mobile money account (% age 15+)	Use a mobile money account 2 or more times a month (% age 15+)
Indonesia	9%	N/A
Malaysia	28%	19%
Mexico*	18%	12%
Peru	14%	6%
The Philippines	22%	13%
The Russian Federation	33%	6%
Singapore	31%	21%
Thailand	60%	26%
Viet Nam*	16%	10%

Note: Use of a mobile money account two or more times a month is defined as the percentage of respondents who report using a mobile money account to make payments, buy things, or send or receive money two or more times a month. Data are unavailable for Australia; Brunei Darussalam; Canada; Chile; China; Hong Kong, China; Japan; Korea; Papua New Guinea; New Zealand; Chinese Taipei; and the United States.
* The latest data available for Mexico and Viet Nam are 2022.
Source: WB Global Findex

Figure 2.17. Advanced and developing economies in usage of mobile accounts, 2014–2021



Notes: Based on adults with an account (%) who have made or received a digital payment in the past year. Data are unavailable for Brunei Darussalam and Papua New Guinea. High-income economies are economies with gross national income (GNI) per capita of more than USD 12,695. There are 11 APEC economies that belong to this category: Australia; Canada; Chile; Hong Kong, China; Japan; Korea; New Zealand; Singapore; Chinese Taipei; and the United States. Developing economies are defined as economies with GNI per capita of between USD 1,046 to USD 12,695. There are 10 APEC economies in this category: China; Indonesia; Malaysia; Mexico; Peru; the Philippines; the Russian Federation; Thailand; and Viet Nam.
Source: World Bank Global Findex Database.

Salazar and Monteverde highlight three ways to advance usage and drive impact in financial inclusion, namely, compelling product development that meet customer need; enhancing financial literacy to bring confidence in the use of financial services; and establishing a robust ecosystem which requires strong collaboration with relevant stakeholders. This will include collaboration with e-commerce players to promote digital payments and with telecommunication providers to ensure seamless financial transactions. [95]

Promoting MSME entrepreneurship

In APEC economies, MSMEs account for more than 97 percent of all businesses and employ a large proportion of the workforce.[96] Table 2.4 illustrates the contribution of MSMEs to employment and the economy based on economy data. Out of 21 APEC economies, thirteen economies can attribute more than 60 percent of employment to MSMEs. Meanwhile, in terms of economic contribution, MSME contribute between 30 to 62 percent in 14 economies.

Table 2.4. Employment and economic contribution of MSMEs in APEC

Economies	Number of employees	Share of total employment (percent)	Year	Economic contribution	SME share of total (percent)	Year
Australia	8,552,100	66.2 %	2022-23	AUD 999.8 billion	55.8%	2022-23
Brunei Darussalam	67,269	57.2%	2022		5.7%	2022
Canada	9,718,627	54.9%	2023	CAD 890.0 billion	55.5%	2020
Chile	6,462,298	46.5%	2022			
China		80.0%	2023		60.0%	2023
Hong Kong, China	1,206,981	44.3%	2023	HKD 724.9 billion	36.5%	2022
Indonesia	119,562,843	96.9%	2019		61.1%	2022
Japan	33,098,442	69.7%	2021	JPY 140.1 trillion	56.0%	2020
Korea	17,439,595	82.7%	2019		48.7%	2020
Malaysia	7,590,000	48.2%	2022	MYR 580.4 billion	38.4%	2022
Mexico	18,418,279	67.9%	2018		45.3%	2018
New Zealand	682,900	27.7%	2023		51.9%	2021
Papua New Guinea						
Peru	10,893,620	90.6%	2022	PEN 76.2 billion	31.4%	2022
The Philippines	5,607,748	65.1%	2022		35.7%	2006
The Russian Federation	31,873,034	42.0%	2023	RUR 29,6 trillion	21.0%	2022
Singapore	2,570,000	71.0%	2022	SGD 273.7 billion	43.0%	2022
Chinese Taipei	9,132,000	80.0%	2022	TWD 28.6 trillion	51.6%	2022
Thailand	12,828,236	71.0%	2022	THB 6.1 million	35.2%	2022
United States	61,608,985	45.9%	2020		43.5%	2019
Viet Nam	6,910,197	47.0%	2020	USD 196.0 billion	50.0%	2022

Source: APEC, "Enhancing MSME Data Interoperability in the APEC Region," (Singapore: APEC, 2024), Tables 3.6 and 3.7, https://www.apec.org/publications/2024/09/enhancing-msme-data-interoperability-in-the-apec-region

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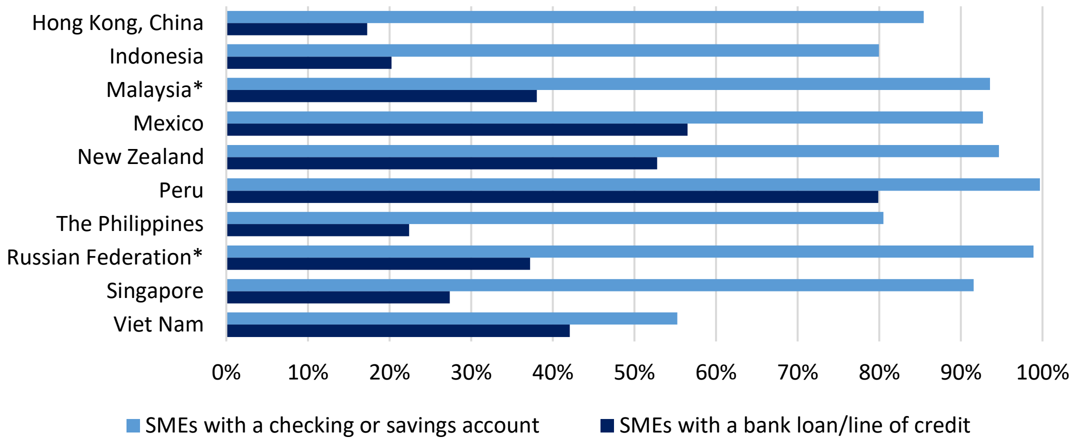
[95] Salazar and C. Monteverde, "3 Ways to Advance Usage and Drive Impact in Financial Inclusion."
[96] APEC, "Small and Medium Enterprises," updated October 2024, https://www.apec.org/groups/som-steering-committee-on-economic-and-technical-cooperation/working-groups/small-and-medium-enterprises

Figure 2.18. SMEs with a checking or savings account and with a bank loan/line of credit (%), 2023



Notes: The World Bank defines SMEs as enterprises with 5–19 employees (small) and 20–99 employees (medium). Data are unavailable for Australia; Brunei Darussalam; Canada; Chile; China; Japan; Korea; Papua New Guinea; Chinese Taipei; Thailand; and the United States.
* The latest data available for Malaysia and the Russian Federation are from 2019.
Source: World Bank Enterprise Survey.

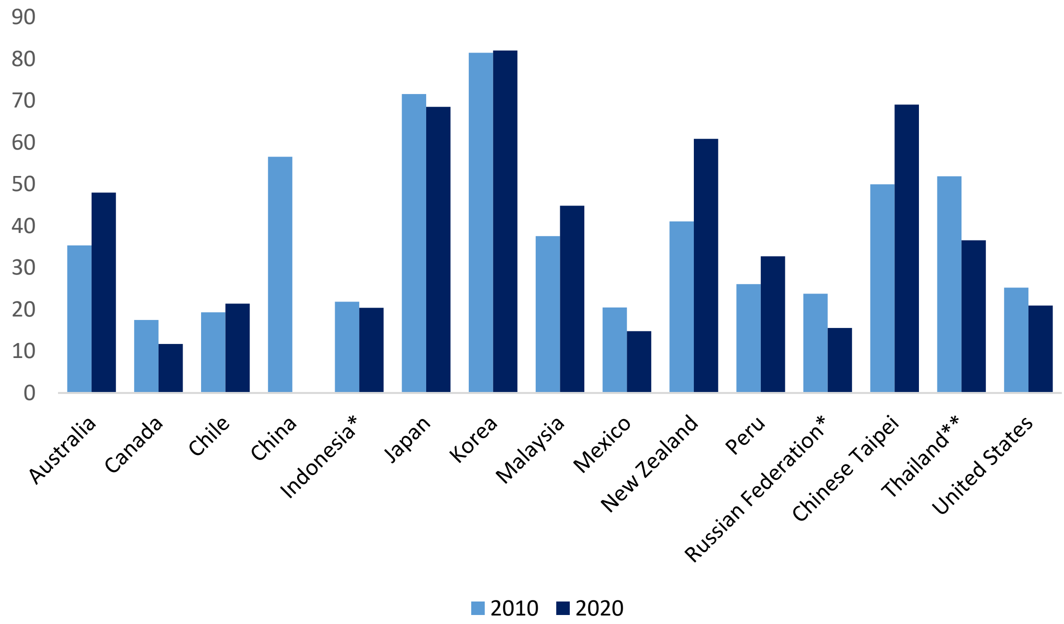
Given their contribution to the economy, MSMEs are the main target for financial inclusion initiatives. However, MSMEs face challenges that differ from larger enterprises. Banks often have limited information on MSMEs compared to large firms, while MSMEs may lack the information needed to navigate financial documents, both of which impede MSMEs from obtaining credit.[97] Figure 2.18 illustrates the proportion of MSMEs that have a checking or savings account and the proportion of MSMEs that have a bank loan. Out of the 10 APEC economies reporting on the financial accounts of MSMEs, Viet Nam has the lowest percentage of SMEs with checking or saving accounts at 55 percent in 2023 (compared with an average of 87 percent). This is plausible as Viet Nam is one of the most cash-dependent economies with 90 percent of transactions conducted in cash.[98]

Furthermore, the gap between checking or savings accounts with loan accounts is wide. Take Hong Kong, China as an example: around 85 percent of SMEs in Hong Kong, China have checking or savings accounts, yet only 17 percent borrow from a bank. A survey conducted by EY Parthenon highlights the difficulties faced by SMEs in obtaining loans.[99] These difficulties are related to collateral requirements, lack of transparency in loan approvals, large amounts of documents required, slow application processes and lack of digitalisation of financial institutions.[100] Singapore has several initiatives to expand MSMEs' access to financial services. A platform called Proxtera, for example, enables MSMEs to connect with global trade and financing opportunities through an open digital network. Proxtera also allows MSMEs to access a broader

[97] World Bank, "The Logic of Targeted SME Support", in World Bank, *The Big Business of Small Enterprises: Evaluation of the World Bank Group Experience with Targeted Support to Small and Medium-size Businesses, 2006–12* (Washington, DC: World Bank, 2014), 1–32, https://ieg.worldbankgroup.org/sites/default/files/Data/reports/chapters/sme_chap1.pdf
[98] K. Das, "Vietnam's Payment Preferences: Four Trends to Watch," Vietnam Briefing, 12 July 2017, https://www.vietnam-briefing.com/news/vietnams-payment-preferences-4-trends-watch.html/
[99] EY Parthenon, "How to Turn Challenges into Analytics-led Innovations? Future of SME Financing" (EY, 2022), https://www.transunion.hk/content/dam/transunion/hk/business/collateral/sheet/hk-future-of-sme-financing.pdf
[100] EY Parthenon, "How to Turn Challenges into Analytics-led Innovations?"

market beyond Singapore, facilitating international trade and significantly expanding their business opportunities.

Figure 2.19. Share of SME outstanding loans (% of total outstanding business loans)



Note: A small and medium enterprise (SME) is defined as an enterprise employing fewer than 250 people. Data are unavailable for Brunei Darussalam; China (2020); Hong Kong, China; Papua New Guinea; the Philippines; Singapore; and Viet Nam.
* Data for Indonesia and the Russian Federation are supplemented with figures from the 2022 dataset.
** Thailand's outstanding loans only include Thai commercial banks, excluding specialised financial institutions.
Source: OECD, "Financing SMEs and Entrepreneurs 2024: An OECD Scoreboard," 2024, https://www.oecd-ilibrary.org/sites/fdacc78c-en/index.html?itemId=/content/component/fdacc78c-en; Chinese Taipei Official Statistics

Usage of financial services by MSMEs, measured by the share of MSME outstanding loans to total business loans, is also low (Figure 2.19). Among the 15 APEC economies with data, only Korea; Japan; and Chinese Taipei had a high share of SME credit to total business loans at 82 percent, 69 percent, and 69 percent, respectively, in 2020. These three economies have notable policies to support their SMEs. Most of these policies are to address information asymmetry, which is a problem for SMEs. Korea developed the Korea Credit Guarantee Fund (KODIT) to guarantee that loans are extended to SMEs, while Japan developed the Credit Risk Database (CRD), which uses big data to support better assessment of MSMEs' credit risk. Japan's CRD association consists of 51 credit guarantee corporations, 99 financial institutions and 5 government-affiliated institutions. It has been collecting MSME data from financial institutions since 1995. This supports MSME financial inclusion as it helps reduce information asymmetry in the MSME segment. This database is also used to develop credit risk scoring and improve MSME guarantee policies.[101] The Philippines also developed its CRD through a collaboration between Bangko Sentral ng Pilipinas (BSP), its central bank, and the Japan International Cooperation Agency (JICA). In March 2023, BSP

[101] L.H. Nguyen and M. Sagara, "Credit Risk Database for SME Financial Inclusion," Working Paper 1111, ADBI, 2020, https://www.adb.org/publications/credit-risk-database-sme-financial-inclusion

completed the construction of its CRD Scoring Model, which employs a data-driven approach to boost lenders' confidence in financing SMEs, particularly those lacking credit history or adequate collateral. BSP and JICA are currently exploring the possibility of implementing the second phase of the CRD to facilitate the project's smooth transition from construction to operation stage. Under this proposed phase, additional services will be developed to promote SME access to finance.

Strengthening financial inclusion for MSMEs is crucial to fostering economic growth considering their sizeable contribution to the economy in the aggregate. Chapter 4 will further elaborate on the policies to improve financial inclusion for MSMEs.

3. LEVERAGING FINANCIAL INCLUSION TO REALISE ECONOMIC POTENTIAL

Groups with untapped economic potential – including women, MSMEs, Indigenous Peoples and people with disabilities – continue to face barriers to full economic and social participation across the APEC region. Included in these barriers are laws, regulations, policies and practices that prevent or complicate efforts from these groups to engage with affordable financial services that appropriately meet their needs. Structural reforms are an effective tool to lower these barriers, thereby supporting the financial inclusion of these groups through enhanced access to and use of financial products and services.

This chapter discusses the benefits of financial inclusion that relate to groups with untapped economic potential, including benefits that flow directly to these groups, as well as benefits that impact an economy as a whole. This chapter also considers how APEC economies use policies, programmes, regulations and resources to enable the financial inclusion of such groups as well as remaining opportunities to further amplify financial inclusion.

CHALLENGES FACED BY GROUPS WITH UNTAPPED ECONOMIC POTENTIAL

Barriers to women's financial inclusion

The existence of barriers to financial inclusion coincides with low usage of financial products and services by groups with untapped economic potential. For example, based on 2021 economy-level data on women over 15 years old averaged across 19 APEC economies, approximately 82 percent held a financial institution account, but only 42 percent saved at a financial institution, and only 63 percent saved money by any means (Figure 3.1).[102] Although trends in women's account ownership and usage are gradually improving across the APEC region, more must be done to both motivate women's increased account ownership and usage overall, and to close the gap between men's and women's account ownership and usage.

While gaps persist, women face difficulties in remaining resilient during times of shock, such as health emergencies and loss of income. Based on 2021 data averaged across 19 APEC economies, 22 percent of women over 15 reported it would be 'very difficult' to come up with emergency funds in 30 days, while 31 percent reported it would be 'somewhat difficult' to do so.[103]

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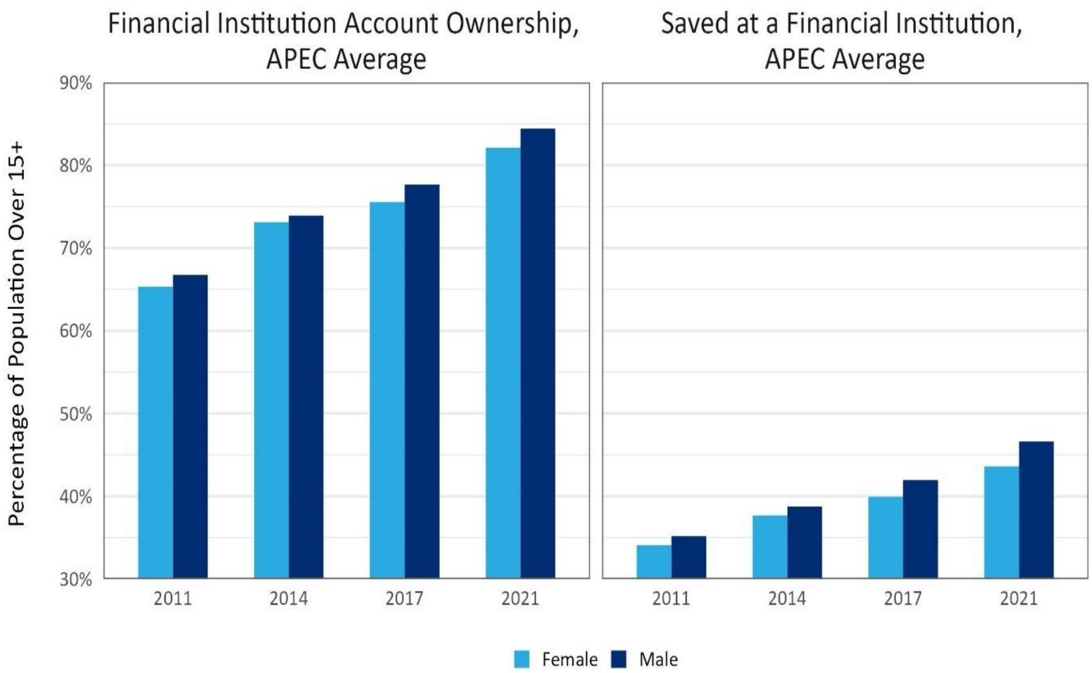
[102] Data are unavailable for Brunei Darussalam and Papua New Guinea. Data from World Bank, *The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19* (Washington, DC: International Bank for Reconstruction and Development/World Bank, 2021), https://www.worldbank.org/en/publication/globalfindex

[103] Data are unavailable for Brunei Darussalam and Papua New Guinea. Data from World Bank, *The Global Findex Database 2021.*

Figure 3.1. Sex-disaggregated financial account ownership and savings across APEC

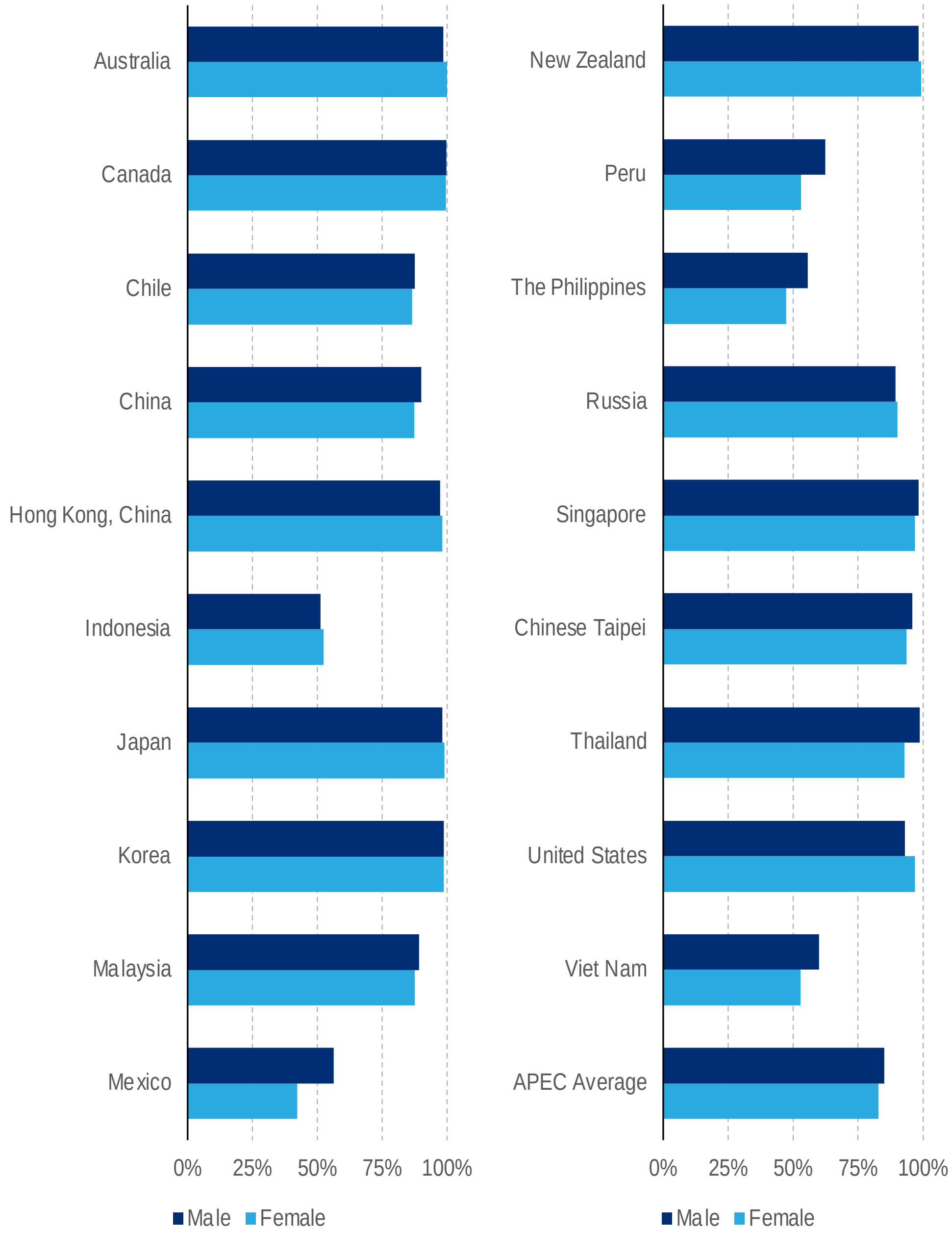


Note: Data are unavailable for Brunei Darussalam and Papua New Guinea. The APEC average is a simple average of available data.
Source: World Bank Global Findex Database.

In addition, the most recent data on financial institution account ownership and mobile money account usage by sex across APEC economies reveal clear patterns and gaps (Figure 3.2). Economies with higher incomes and higher access to financial accounts tend to have more extensive financial systems where both men and women actively participate. Conversely, lower- and middle-income economies tend to exhibit lower account ownership rates among women compared to men, which indicates significant underutilisation of a substantial portion of the population in economic activities.

One dimension of the barriers to financial inclusion are those driven by the legal, regulatory and policy landscapes of APEC economies. These barriers include cases where groups with untapped economic potential face undue restrictions in accessing financial services and products due to the prevailing rules, or lack thereof, that economies use to govern the practices of financial services providers. For example, as reported in the APEC Women and the Economy Dashboard 2023, almost all APEC economies enable women to access bank loans in the same way as men, but only nine of 21 APEC economies have a law enacted against discrimination by creditors on the basis of sex or gender in access to credit (Table 3.1). In absence of these laws, financial services providers can prevent individual women from receiving loans due to social bias and perceived, unsubstantiated risks.

Figure 3.2. Financial institution account ownership and mobile money account usage by sex among APEC economies, 2021/2022 (% age 15+)



Note: Data is unavailable for Brunei Darussalam and Papua New Guinea. The APEC average is a simple average of available data.
Source: World Bank Global Findex Database and APEC PSU staff calculations.

Table 3.1. APEC Women and the Economy Dashboard (WED) 2023: Indicators 1.3.2 and 1.3.3

APEC Economy	WED 1.3.2 SIGI 'access to credit' measurement of women's right and de facto access to bank loans (score)	WED 1.3.3 Existing law against discrimination in access to credit on the basis of sex (Y/N)
Australia	0	Yes
Brunei Darussalam	0	No
Canada	0	Yes
Chile	0	No
China	0	No
Hong Kong, China	0	Yes
Indonesia	0	No
Japan	0	No
Korea	0	No [a]
Malaysia	0	No
Mexico	0	Yes
New Zealand	0	Yes
Papua New Guinea	1	No
Peru	0	Yes
The Philippines	0	Yes
The Russian Federation	0	No [b]
Singapore	0	No
Chinese Taipei	0	No
Thailand	0	No
United States	0	Yes
Viet Nam	0	Yes

Note:
[a] Article 15 (Non-Discrimination) of Korea's Act on the Protection of Financial Consumers (2020, as amended) states, 'In executing a contract for a financial product or for advisory service on financial products, neither a financial product distribution business nor a financial product advisory business shall unfairly discriminate against any financial consumer, without good cause, in regard to terms and conditions of contract on the grounds of gender, educational background, disability, social status, etc.'
[b] Article 19, Clause 3 of the Constitution of the Russian Federation states, 'Men and women have equal rights and freedoms and equal opportunities for their realisation.' This clause should be read in accordance with Article 18, which states, 'The rights and freedoms of an individual and a citizen are directly applicable. They determine the meaning, content, and application of laws, the activities of the legislative and executive branches, local self-government, and are ensured by the judiciary.'

The Social Inclusion and Gender Index (SIGI) score ranges from '0' when women and men have the same rights to open a bank account and obtain credit at a formal financial institution without legal exceptions to '1' when women do not have the same rights as men to open a bank account at a formal financial institution.
Source: APEC, "The APEC Women and the Economy Dashboard 2023" (Singapore: APEC, 2023).

Regulatory and documentary constraints

Regarding the landscape for financial services providers, one economy notes that cumbersome regulatory procedures exist for entities to participate in the financial market. While regulations can help stabilise the financial market to an extent, they create entry barriers for non-established entities that could potentially offer better services for unbanked populations and groups with untapped economic potential.[104] Enhanced competition in the sector may also motivate existing players to expand, innovate and tailor their service offerings to meet the needs of groups with untapped economic potential and absorb these communities into their customer base. As such,

[104] Thailand individual economy report (IER).

one approach toward structural reform for financial inclusion could consider weighing the benefits of such regulations for financial market stability against their costs in terms of competition.

Other barriers relate to infeasible application and documentation requirements for customers to access and use financial products and services. As one economy notes, the process for accessing loans and financial services can be complicated, time-consuming and necessitates specific documentation, such as proof of sufficient income, which may not be readily available for submission.[105] Another economy notes that such requirements result in significant barriers for informal workers, who often do not receive pay slips or other proof of income, and may have unstable income, thereby complicating efforts to secure bank loans.[106] In another economy, as of 2021 reporting, 40 percent of surveyed unbanked individuals cited lack of identification documents as a major barrier to account ownership.[107]

Applications may include other resource requirements, such as collateral for loan applications or capital for investments, that groups with untapped economic potential are unable to provide due to legal barriers or a history of ownership inequities. Some economies have specified legal settings for the administration of Indigenous land, which constrain the use of these lands as loan security and complicates efforts by Indigenous Peoples to realise the financial benefits the land could provide. In some instances, these unique legal settings are in place to protect against the alienation of the land from Indigenous ownership.[108] In addition, financial services providers may not receive or accept non-traditional supporting information to assess applicants' repayment potential. For example, as of 2018, private credit bureaus and public credit registries in seven APEC economies do not collect information from microfinance institutions.[109] As microfinance institutions often focus on providing loans to specific groups with untapped economic potential, the lack of reporting to credit entities significantly hinders the ability of members from these groups to demonstrate creditworthiness, thereby constraining their access to formal loans.

Cost-related barriers

Cost-related barriers disproportionately affect groups with untapped economic potential that, on average, tend to fall in the lower end of an economy's income distribution, leaving them with insufficient funds or less disposable income to use for the administration of financial services. In a survey of individuals over the age of 15 without financial institution accounts that included nine APEC economies, over 40 percent of respondents in five economies did not hold a financial account because financial institutions are too expensive (Figure 3.3). One economy notes that stringent regulations related to customer registration and monitoring have led to increased compliance costs, which deters potential customers from accessing the formal financial system and prevents existing customers from expanding their engagement with

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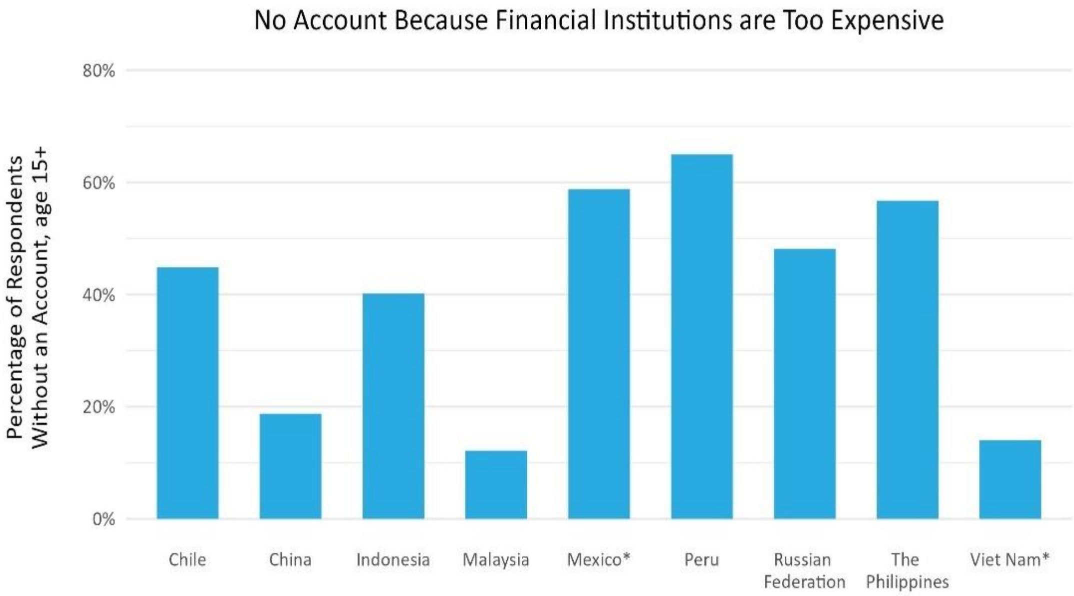
[105] Thailand IER.
[106] Indonesia IER.
[107] Bangko Sentral ng Pilipinas (BSP), "2021 Financial Inclusion Survey" (2021), https://www.bsp.gov.ph/Inclusive%20Finance/Financial%20Inclusion%20Reports%20and%20Publications/2021/2021FISToplineReport.pdf
[108] New Zealand IER.
[109] APEC, "The APEC Women and the Economy Dashboard 2021." https://www.apec.org/Publications/2021/09/The-APEC-Women-and-the-Economy-Dashboard-2021

financial services.[110] Some economies highlight deterioration in access to finance resulting from changes in the macroeconomic environment, which cause persistent high interest rates and increases the cost of borrowing.[111] One economy notes that a greater share of surveyed women-owned MSMEs than men-owned MSMEs cited high interest rates and fees as a significant challenge to achieving their financial objectives.[112]

Figure 3.3. Cost-related barriers to financial inclusion



Data are unavailable for Australia; Brunei Darussalam; Canada; Hong Kong, China; Japan; Korea; New Zealand; Papua New Guinea; Singapore; Chinese Taipei; Thailand; and the US.
* The latest data available for Mexico and Viet Nam are from 2022.
Source: World Bank Global Findex Database.

These financial barriers contribute to a broader pattern of inequality within economies, where access to financial services is significantly stratified by income. The impact of high costs and stringent regulations not only limits individual financial engagement but also exacerbates existing economic divides. This scenario is further reflected in the data on financial institution account ownership by income group (Figure 3.4).

The data show significant disparities in financial institution account ownership between the poorest 40 percent and the richest 60 percent across several economies. In economies with pronounced economic inequality, ownership rates among the poorest 40 percent are lower compared to the richest 60 percent, highlighting substantial gaps in financial inclusion. Conversely, in regions with higher overall financial inclusion, these disparities between income groups tend to be narrower.

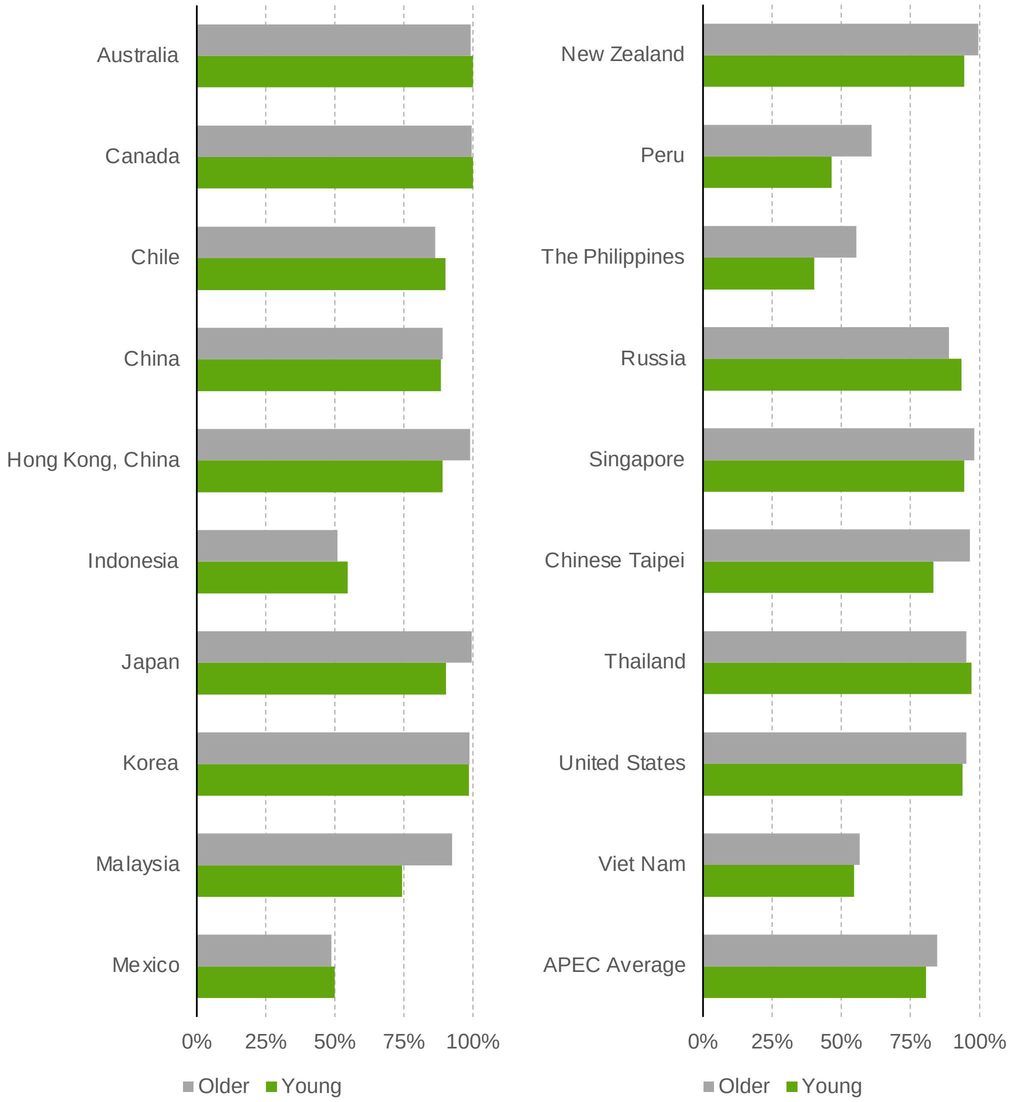
[110] Papua New Guinea IER.
[111] Australia IER; Republic of Korea IER.
[112] The Philippines IER.

Figure 3.4. Financial institution account ownership and mobile money account usage by income group among APEC economies, 2021/2022 (% age 15+)

Note: Data are unavailable for Brunei Darussalam and Papua New Guinea. The APEC average is a simple average of available data.
Source: World Bank Global Findex Database and APEC PSU staff calculations.

In addition, examining financial inclusion across age groups reveals a prevailing trend: in economies with widespread financial inclusion, ownership disparities between younger and older adults tend to narrow, suggesting a more equitable distribution of financial access where ownership rates are generally higher (Figure 3.5). In contrast, regions with less comprehensive financial inclusion often exhibit more pronounced disparities, which typically benefit older adults who have higher ownership rates.

Figure 3.5. Financial institution account ownership and mobile money account usage by age group among APEC economies, 2021/2022 (% according to age group)



Young = people aged 15–24 years old; Older = people ages 25+.
Note: Data are unavailable for Brunei Darussalam and Papua New Guinea. The APEC average is a simple average of available data.
Source: World Bank Global Findex Database and APEC PSU staff calculations.

Physical, social and cultural barriers

It is critical to recognise that, even in cases where governments reduce legal and regulatory burdens, individuals from groups with untapped economic potential may decide to not partake in financial services and products when the real or perceived challenges outweigh the benefits of the available services and products.[113] As such, it is necessary for APEC economies to consider resources and programmes that support the provision of financial services that welcome groups with untapped economic potential and adequately meet their needs. In economies with diverse populations, it could be particularly challenging for consumers from traditionally excluded groups to

[113] G. Amidžić, A. Massara, and A. Mialou, "Assessing Countries' Financial Inclusion Standing – A New Composite Index," Working Paper 14/36, IMF, 2014, https://www.imf.org/external/pubs/ft/wp/2014/wp1436.pdf

find services and products that best suit their needs.[114] Speaking to the dearth of financial products and services tailored to groups with untapped economic potential, one economy notes that the private banking sector is just starting to recognise financial inclusion as a viable business opportunity, and that encouraging the private sector to invest in inclusive financial services could enhance their reach and impact.[115] In addition, both information asymmetry and lack of data on customers from groups with untapped economic potential lead to a lack of tailored financial services and products, and improving transparency and the use of technology can help financial institutions gather data to understand and better serve these clients.[116]

Several economies recognise that a key barrier to financial inclusion, particularly for diverse populations and groups with untapped economic potential, is lack of financial literacy and financial education, including limited awareness of and familiarity with government processes related to the financial services market.[117] In a survey of individuals over the age of 15 without financial institution accounts that included seven APEC economies, less than half of respondents in five economies answered that they could use a financial services account without help if opened.[118] One economy notes that, based on a survey of financial capabilities in 2022, 41 percent of adults in the economy reported a low level of financial education.[119] Another economy notes that, based on a survey in 2022, 44 percent of financially unserved households in the economy attribute their inability to access formal loans to lack of understanding of financial matters.[120] The lack of financial education, as well as underlying social biases held by personnel at financial institutions, can also lead individuals from groups with untapped economic potential to fear possible stigma or judgement regarding their financial situations, thereby disincentivising them from engaging with formal financial systems. As such, training personnel at financial service providers on respectful and responsible engagement with groups with untapped economic potential, such as sensitivity training on engaging with people with disabilities, is a critical step to welcome these groups into the formal financial system.[121]

In cases where physical presence at a financial institution is needed to open and administer an account or to submit a credit application, groups with untapped economic potential face barriers when there are too few physical locations. For example, women, who largely bear the responsibilities of unpaid care and domestic work, have less unallocated time available to travel to financial institution locations. When financial institutions are concentrated in urban areas, they become inaccessible for Indigenous communities as well as individuals living in remote and rural areas.

This urban–rural divide is evident across all APEC economies with available data, where urban areas exhibit higher ownership rates compared to rural areas (Figure 3.6).

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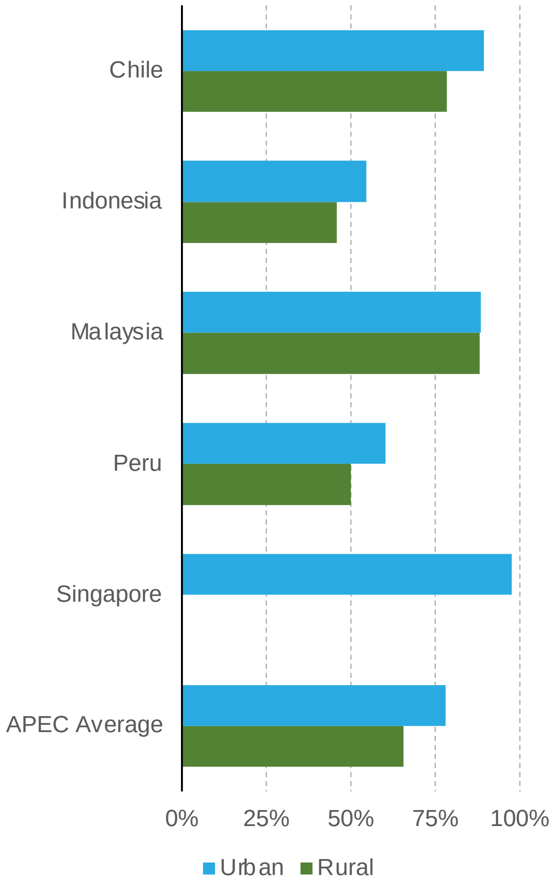
[114] Canada IER.
[115] Chile IER.
[116] Chile IER.
[117] IERs from Australia; Peru; Thailand; the United States.
[118] Data are unavailable for Australia; Brunei Darussalam; Canada; Hong Kong, China; Japan; Korea; Mexico; New Zealand; Papua New Guinea; Singapore; Chinese Taipei; Thailand; the United States; Viet Nam. Data from World Bank, *The Global Findex Database 2021*.
[119] Peru IER.
[120] Thailand IER.
[121] Center for Financial Inclusion, "A New Financial Access Frontier: People with Disabilities," Concept Paper, Center for Financial Inclusion, 2010, https://www.centerforfinancialinclusion.org/wp-content/uploads/2024/02/a-new-financial-access-frontier-updated-april-2011-final.pdf

This suggests the potential economic advantage of urban centres with broader access to financial services. On the other hand, this highlights a significant opportunity to boost economic inclusion and productivity in rural communities by addressing obstacles such as infrastructure gaps, limited financial literacy and access to banking services.

Figure 3.6. Financial institution account ownership and mobile money account usage by location among APEC economies, 2021/2022 (% age 15+)



Note: Data are only available for Chile; Indonesia; Malaysia; Peru; and Singapore. The APEC average is a simple average of available data.
Source: World Bank Global Findex Database and APEC PSU staff calculations.

One economy notes that these issues are exacerbated by limited transport infrastructure.[122] In a survey of individuals over the age of 15 without financial institution accounts that included nine APEC economies, at least a quarter of the respondents in six APEC economies did not hold a financial account because financial institutions were too far away.

[122] Australia IER.

Figure 3.7. Location-based barriers to financial inclusion

Note: Data are unavailable for Australia; Brunei Darussalam; Canada; Hong Kong, China; Japan; Korea; New Zealand; Papua New Guinea; Singapore; Chinese Taipei; Thailand; and the United States.
* The latest data available for Mexico and Viet Nam are from 2022.
Source: World Bank Global Findex Database.

In addition, the lack of enforced requirements for financial institutions to maintain reasonable accommodations for people with disabilities significantly limits these individuals' ability to access financial services.[123] However, to improve access for such groups, it may not be enough to simply remove certain requirements. For example, even if they are allowed to make applications online, they may prefer in-person engagement as they may need support or assistive technologies to access online services.[124]

EMPOWERING GROUPS WITH UNTAPPED ECONOMIC POTENTIAL THROUGH FINANCIAL INCLUSION

Access to financial services enables groups with untapped economic potential to take control of their financial well-being. In doing so, individuals can choose how their money is spent and saved, and better prepare for financial shocks, such as health emergencies. During the COVID-19 pandemic, access to financial services was a key component of governments' dissemination of public services and support payments to cover the daily costs of living, thereby mitigating a large share of the expected increase in poverty and inequality.[125]

Efforts by and in economies to empower groups to realise their full economic potential in this space have shown to be effective. For example, Australia's Closing the Gap policy framework includes a target to provide Indigenous Peoples with access to information and services, which has resulted in outcomes that enable Aboriginal and Torres Strait Islander people to participate in informed decision-making regarding their

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[123] Center for Financial Inclusion, "A New Financial Access Frontier: People with Disabilities."
[124] International Finance Corporation (IFC), "Inclusive Banking: Emerging Practices to Advance the Economic Inclusion of Persons with Disabilities" (IFC, World Bank, 2022), https://www.ifc.org/content/dam/ifc/doc/mgrt/202203-inclusive-banking-for-persons-with-disabilities.pdf
[125] World Bank, *Crisis and Recovery: Learning from COVID-19's Economic Impacts and Policy Responses in East Asia* (Washington, DC: World Bank, 2023), http://hdl.handle.net/10986/39977

own lives.[126] In Chile, an intervention offering free savings accounts to individuals, 91 percent of whom were women, resulted in 20 percent lower short-term debt and less consumption cutbacks associated with a negative income shock as compared to individuals who did not receive the free savings accounts.[127] In other contexts, access to financial accounts by low-income, female heads of households was associated with increased spending on enrichment goods and services, such as education, meat and fish, ceremonies and festivals.[128] However, not all interventions of this nature have proven successful, indicating that simply providing bank accounts is not enough to stimulate conscious spending and saving, and more must be done to understand the barriers that groups with untapped economic potential face regarding account usage.[129]

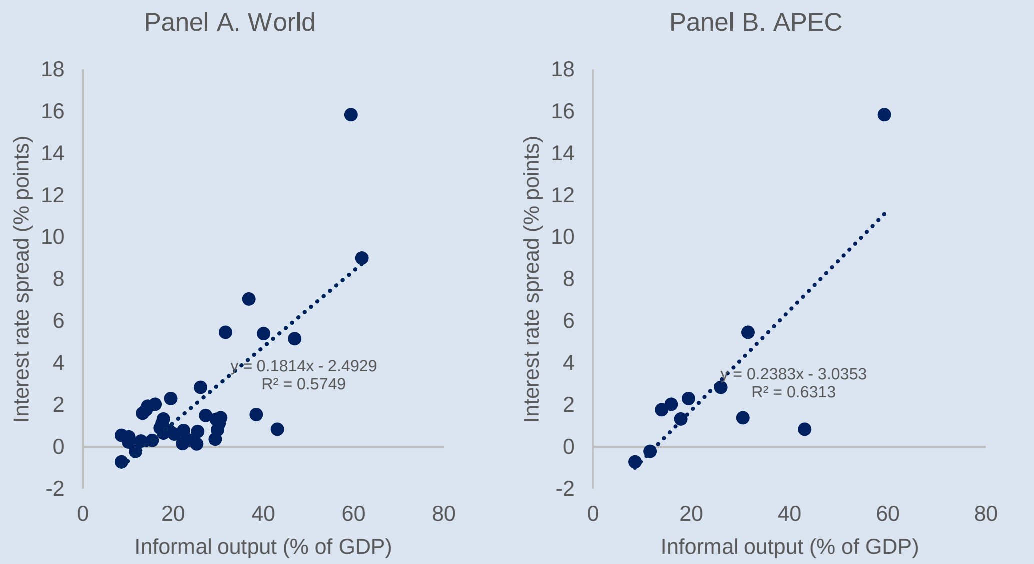
Financial inclusion enables prospective entrepreneurs with untapped economic potential to access affordable loan and credit options, which connects them with the capital necessary to start and grow businesses. Financial inclusion can also lead to informational records on an individual's banking activities and loan repayments, which can support creditworthiness for future entrepreneurial efforts. With greater financial inclusion and access to government-regulated loan and credit options, entrepreneurs from groups with untapped economic potential can reduce their reliance on unregulated, high interest rate, high-fee predatory loans that limit their profitability and introduce substantial risk to their business health. Access to government regulated credit and loan options can also motivate the transition from informality to formality. Likewise, efforts to reduce interest rates faced by MSMEs through greater competition in financial services can reduce demand for informal sector financing (see Box 3.1). Formal loan and credit options are particularly important in times of crisis, such as the COVID-19 pandemic or the Asian Financial Crisis, as some individuals turned to self-employment and new entrepreneurial ventures to remain economically afloat amid job losses in affected sectors.[130] During the COVID-19 pandemic, many of the hardest-hit sectors included a high concentration of women as employees, demonstrating a strong link between financial inclusion for groups with untapped economic potential and economic resiliency in times of crisis.

[126] Australia IER.
[127] F. Kast and D. Pomeranz, "Saving More to Borrow Less: Experimental Evidence from Access to Formal Savings Accounts in Chile," Working Paper 20239, NBER, 2014.
[128] S. Prina, "Banking the Poor via Savings Accounts: Evidence from a Field Experiment," *Journal of Development Economics* 115 (2015): 16–31.
[129] K. Holloway, Z. Niazi, and R. Rouse, "Women's Economic Empowerment through Financial Inclusion: A Review of Existing Evidence and Remaining Knowledge Gaps" (Innovations for Poverty Action, 2017).
[130] International Labour Organization (ILO) and ADB, *Tackling the COVID-19 Youth Unemployment Crisis in Asia and the Pacific* (Bangkok: ILO and Manila: ADB, 2020).

Box 3.1. MSME interest rates and informality

In the transition from informal to formal economy, the interest rate difference between micro, small and medium enterprises (MSMEs) and large firms matters. For example, an APEC Policy Support Unit (PSU) policy brief published in 2024 highlights a link between differential interest rates and informal output.[a] The report indicates that economies are more likely to experience persistent informality when there is a significant disparity between the loan interest rates offered to MSMEs and those offered to large firms. This interest rate gap can deter MSMEs from using formal financial services, leading them to rely on informal economic activities.

Figure 3.8. Informality and interest rate spread between MSMEs and large firms



Source: Kuriyama and Simanjuntak (2024)

Because formal financial institutions often fall short in addressing the unique financing needs of MSMEs, informal finance – characterised by social network relationships and local connections – has become an essential channel for MSME funding.[b] The reliance on informal financial networks becomes an important alternative as these networks are better suited to navigate the challenges that formal institutions might overlook.

Source:
[a] C. Kuriyama and E.M. Simanjuntak, "Addressing Informality: Transitioning to the Formal Economy," Policy Brief 57, APEC Policy Support Unit, Singapore, 2024, https://www.apec.org/publications/2024/02/addressing-informality-transitioning-to-the-formal-economy
[b] F. Yang et al., "The Impacts on Informal Financing Strategy of Small and Micro Enterprises by Interest Rate Risks and Public Health Emergencies," *International Entrepreneurship and Management Journal* 19 (2023): 1673–705, https://doi.org/10.1007/s11365-023-00872-3

Some economies recognise the personal- and economy-level gains of entrepreneurship from groups with untapped economic potential and encouraged these efforts by offering targeted loans to these groups. For example, through the injection of capital, Chinese Taipei has substantially boosted the creation and growth of Indigenous businesses, which surged in number from 8,078 entities in 2016 to 21,481 entities by February

2024.[131] This goes hand in hand with the volume of loans provided by the Indigenous Comprehensive Development Fund, which saw a substantial increase of 86 percent from USD 15.43 million in 2014 to USD 28.75 million in 2023.[132] However, it is critical to note that solely earmarking funds for groups with untapped potential is not enough. Economies must couple these efforts with reforms and practices that connect these groups with untapped economic potential to the loan options, for example, by enhancing public outreach and information sharing, setting transparent and feasible application requirements, and reducing bottlenecks in the application process.

Promoting entrepreneurship and formalisation

Groups with untapped economic potential are historically concentrated in specific industries, including services and certain manufacturing sectors, such as apparel, textiles and handicrafts. By enabling financial inclusion for groups with untapped economic potential, economies can support growth in these sectors, thereby contributing to overarching economic growth.[133] Through this approach, the economic gains resulting from strengthening these sectors flow to groups with untapped potential, thereby reducing inequality.

Throughout recent years, economies in the region have implemented different policies and programmes focused on leveraging economic inclusion of groups with untapped economic potential, which have produced impacts not only for the newly integrated financial customers, but also for the economy as a whole, since individuals with new access to financial services can be more involved with the economy. These policies were of special importance amid the effects of the COVID-19 pandemic and are still significant under the higher interest rate environment. One economy notes that, when MSMEs receive access to financial risk management tools, they are better equipped to withstand a global pandemic or other unforeseen circumstances, recover quickly and sustain operations, thereby continuing to contribute to the economy.[134]

The policies implemented by Chinese Taipei show a direct relation between programmes that promote the inclusion of untapped economic populations and its sustainable growth, given that from 2014 to current, ‘Indigenous employment has increased by 18.6 percent, a significant rise compared to the domestic growth rate of 3.2 percent during the same period’.[135] Another example is that ‘service sector employment has increased by 13.2 percent, which shows the different employment opportunities for Indigenous Peoples brought about by the industry programs compared to the domestic growth rate of 2.3 percent during the same period’.[136]

In the absence of financial inclusion, those excluded from banking systems are forced to keep their cash on hand, making their savings hard to track and more susceptible to theft, which may disincentivise savings and investment by groups with untapped economic potential. On the other hand, financial inclusion eases the process to save toward personal investments, such as investments into education and health. Healthier

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131 Chinese Taipei IER.
132 Chinese Taipei IER.
133 United Nations Capital Development Fund (UNCDF), *Financial Inclusion through an Inclusive Growth Lens*, MAP Global Insights Series Vol. 3, Note 1 (New York, NY: UNCDF, 2020).
134 Singapore IER.
135 Chinese Taipei IER.
136 Chinese Taipei IER.

and more educated individuals contribute to a healthier and more educated workforce for the economy.

For entrepreneurs, the ability to save in a bank account and to access formal loan and credit options facilitate capital accumulation for investments into new equipment and technologies that enhance productivity. One economy notes that financial inclusion opens opportunities for innovation and entrepreneurship, which facilitate broad-based economic growth, by providing MSMEs with the necessary resources to operate their businesses.[137] These enhancements lead to an increase in output and economies of scale, which benefit GDP. An economic impact assessment of inclusive structural reforms in the APEC region suggests that APEC economies with a law prohibiting discrimination against women in access to credit is associated with a 1.54 percent higher annual GDP growth rate on average as compared to economies without such law.[138]

Finally, an emerging broad-based benefit of financial inclusion for APEC economies relates to the transition of informal economic actors to the formal sphere. Promoting financial inclusion can open financing options to firms owned or led by individuals from groups with untapped economic potential, thereby incentivising informal businesses to formalise. Firms that switch from informality to formality are associated with better performance – in terms of revenue, profits and value-add – than informal firms, generating gains to the business owners and the economy as a whole.[139] In addition, by bringing informal businesses into the formal economy, economies benefit from an increased tax base that brings extra revenue to the government which can be redirected to improve public infrastructure and services. Formalisation also promotes fair competition among businesses and provides governments with the information that is necessary to be responsive to firms' needs.[140]

Designing inclusive financial products and services

APEC economies demonstrate useful strategies to leverage structural reform to support the financial inclusion of groups with untapped economic potential, and to strengthen these efforts through enhanced education and stakeholder engagement, among other strategies. In the Philippines, the BSP Regulatory Sandbox Framework connects groups with untapped economic potential to the formal financial system by enabling financial institutions to explore new approaches under the supervision of BSP, its central bank. This approach promotes a supportive environment for the creation of tailored financial products and services that meet market gaps and the needs of groups with untapped economic potential.[141]

In Australia, the Australian Securities and Investments Commission (ASIC) has had a dedicated Indigenous Outreach Programme (IOP) since 2009.[142] The programme

[137] Singapore IER.
[138] T. Perselay, C. Rubin, and K. Sahai, "Gender and Structural Reform: Achieving Economic Growth through Inclusive Policies" (Singapore: APEC, 2022), https://www.apec.org/publications/2022/10/gender-and-structural-reform-achieving-economic-growth-through-inclusive-policies
[139] A. Boly, "On the Benefits of Formalization: Panel Evidence from Vietnam," Working Paper 2015/038, United Nations University (UNU) World Institute for Development Economics Research (WIDER), 2015.
[140] ILO, "Enterprise Formalization," 2017, https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed_emp/@emp_ent/@ifp_seed/documents/publication/wcms_544828.pdf
[141] The Philippines IER.
[142] Australia IER.

regularly undertakes outreach trips to urban, rural and remote Indigenous communities to provide insights on financial services challenges and experiences impacting Indigenous consumers and investors. They have also, through the Reconciliation Action Plan worked toward the inclusion of the Aboriginal and Torres Strait Islander peoples, recognising that 'the continuous uncertainty, disempowerment, and exclusion from engaging in the financial system has resulted in often lower levels of financial wellbeing and poor financial outcomes for First Nations peoples. In turn, this has further impact on an individual's overall wellbeing, mental health, and livelihood'. [143] This shows that the efficiency of a policy or an intervention is higher when it is done with the involvement and participation of all affected actors.

In 2023, ASIC introduced the Indigenous Financial Services Framework to incorporate insights gained through extensive consultations with First Nations peoples. This framework acknowledges the unique governance structures, economies and knowledge systems of First Nations communities. Also in Australia, the IOP is a specialised team dedicated to understanding and addressing the needs of First Nations investors and consumers in a culturally sensitive manner.[144]

Aligned with the amended Act for Eliminating Discrimination against Persons with Disabilities, Japan's Financial Services Agency (FSA) encourages financial institutions and trade associations to remove barriers for people with disabilities. Strategies include developing facilities that can be accessed by people with disabilities and training employees in new skills to support customers with disabilities, such as reading and writing on behalf of people with disabilities and using telephone relay services.[145]

In Peru, financial inclusion has grown significantly in terms of the supply of financial system channels, registering an increase in the number of channel points per 100,000 adult inhabitants from 900 in 2018 to 1,574 in 2023, and in the holding of deposit and/or credit accounts of companies in the financial system, going from 38 percent in 2018 to 56 percent in 2023.[146] This has led to important benefits for the economic growth and general well-being of Peru's population, in addition to contributing to reducing poverty and equalising opportunities. Finally, Peru has been able to establish a coordination space for different actors involved in promoting inclusion through the formation of the Multisector Commission for Financial Inclusion (CMIF) in charge of the coordination, consultation and participation of the public and private sectors, to promote access and responsible use of comprehensive financial services.

Indonesia's Strategy for Financial Inclusion (SNKI) guides the design of individual programmes and policies for financial inclusion, and provides unified direction, measurable goals and strengthened collaboration to create approaches that meet the specific needs of diverse populations. On access to credit specifically, the Macroprudential Inclusive Financing Ratio (RPIM) policy requires banks to channel at least 30 percent of the total credit they provide to MSMEs by 2024.[147] Regarding general access to financial services, the Financial Services without Offices for Financial Inclusion (*Agen Laku Pandai*) programme expands access to simple and easy-to-use

[143] Australia IER.
[144] Australia – Case Study.
[145] Japan IER.
[146] Peru – Case Study / IER.
[147] Peru – Case Study / IER.

financial services that are tailored to the needs of groups with untapped economic potential, particularly individuals in remote areas. By offering services through grocery stores, stalls and individual agents, the programme facilitates increased economic engagement by remote communities, thereby driving economic growth and equitable development.[148]

The Philippines, through the BSP, has also pursued regulations to enable agent banking. These regulations support consumers with untapped economic potential to safely perform banking transactions in locations where establishing physical branches would be infeasible. Anecdotal evidence from the Philippines suggests that stores acting informally as cash-out points can charge fees as high as 10 percent of the amount being withdrawn. Therefore, these regulations 'have made serving the unbanked more viable and sustainable, contributing to a broader reach of financial services and supporting greater financial inclusion for previously underserved areas'.[149]

Another good practice has been developed by Chilewith the implementation of a simplified account with extensive coverage by BancoEstado, called CuentaRUT.[150] This product is characterised by its easy opening process and has allowed almost full access to the population eligible to operate debit accounts, even enabling the payment of social benefits from the government through the account.

Some economies have undertaken approaches to support credit-seekers that are historically perceived as high risk. The Enterprise Financing Scheme (EFS) in Singapore enables enterprises to access financing more readily by offering loans in seven areas of MSME financing needs. Through this scheme, the government shares the loan default risk in the event of MSME insolvency.[151] In addition, Singapore-based financial institutions support government priorities to enhance women's access to financial services. For example, the Oversea-Chinese Banking Corporation (OCBC) Women Entrepreneurs Programme supports women entrepreneurs by offering start-up financing opportunities, educational workshops and opportunities for networking and mentorship by successful female entrepreneurs.[152]

In Hong Kong, China, the SME Financing Guarantee Scheme (SFGS) helps SMEs attain commercial loans, including loans with government guarantee levels of 80 percent, 90 percent and 100 percent.[153] In the Philippines, the Credit Risk Database and Credit Surety Fund serve to reduce the costs and risks that have obstructed lending to MSMEs and the agriculture sector.[154] In Korea, the Korea Credit Guarantee Fund (KODIT) contributes to the growth of SMEs and the development of the economy by providing comprehensive support to SMEs, including credit guarantees to facilitate business financing, and support for start-ups, ranging from start-up counselling to post-startup financing, and advisory services.[155]

[148] Indonesia IER.
[149] The Philippines IER.
[150] Chile IER.
[151] Singapore IER.
[152] Singapore IER.
[153] Hong Kong, China IER.
[154] The Philippines IER.
[155] Korea IER.

Ensuring utilisation of financial services

It is critical to note the distinction between access and usage of financial products and services. Merely providing bank accounts to all adults falls short of achieving the full benefits of financial inclusion. Access must be accompanied by comprehensive strategies aimed at fostering utilisation. These strategies should encompass tackling issues such as low financial literacy, distrust in financial institutions, inadequate training of staff, social stigma and insufficient physical access.

For instance, insights from the Bank of Thailand reveal significant engagement with formal financial institutions among Thai households, with over 97 percent participating in various interactions.[156] However, this engagement primarily revolves around basic services like savings accounts and money transfers. More advanced services, such as loans, are utilised by only 42 percent of surveyed households, while investment opportunities like mutual funds and bonds are significantly underutilised, highlighting a disparity in financial inclusion efforts.

Efforts to expand loan and credit access to groups with untapped economic potential must go hand in hand with initiatives to enhance their financial management capabilities. Groups with untapped economic potential often lack access to financial education, leaving them ill-equipped to comprehend the terms and implications of the financial products they utilise. Without adequate understanding, recipients of loans are susceptible to financial instability, posing risks not only to their own economic well-being but also to the broader economy by dampening lending and spending activities.

Also, financial institutions must actively involve users in understanding the terminologies and intricacies of the financial system. The responsibility lies not solely with consumers but also with service providers who must offer transparent information about their offerings. Understanding and catering to the diverse needs of clients, considering their varying profiles and demographic characteristics, is crucial. This approach fosters empowerment among users and cultivates trust in financial institutions, enabling individuals to maximise the benefits of the financial system.

The government of Canada had adopted the first Financial Literacy Strategy (2015–2020), which emphasised providing individual consumers with the knowledge, skills and confidence needed to make informed financial decisions and improve their financial well-being.[1] Subsequently, Canada adopted an updated financial literacy strategy (2021-2026) that reinforces the idea that, in order to build financial resilience, greater attention must be given to the systemic and structural barriers that prevent users from accessing better financial services.[2] Along with this, the Financial Consumer Agency of Canada (FCAC) has also developed interventions in order to improve the financial resilience of Canadians.

Mexico has developed the Policy for Financial Inclusion 2020–2024 with the objective of increasing access to and efficient usage of the financial system, focusing on the consumer side but also on the ability of consumers to be part of the system.[157]

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[156] Thailand IER.
[1] Canada – Case Study.
[2] Canada IER.
[157] Mexico IER.

Indonesia's Financial Services Authority (OJK) implements financial literacy programmes that aim to empower groups with untapped economic potential, such as women and individuals in remote and rural communities, to enable informed financial decision-making and active participation in financial systems.[158]

In addition, it is essential to recognise the role of technology in enhancing financial inclusion. Digital innovations, such as mobile banking and online financial management tools, can bridge geographical barriers and provide convenient access to financial services. However, it is crucial to ensure that these technological solutions are accessible and user-friendly for all segments of the population, including those with limited digital literacy or physical disabilities. Also, economies should consider that this sector is one that is continually evolving, and that innovation is part of its nature. By recognising this, they will be able to discuss policies that work together with that transformation. For instance, the Russian Federation recognised that the improvement of financial cyber literacy in the area of secure utilisation of digital payment tools is vital as fast development of digital technologies could lead to an increase in fraudulent activities.[159]

Across the APEC economies, there is a growing recognition, evidenced by various programmes, of the need for enhanced educational support for individuals hesitant to engage with financial services. As discussed, developing comprehensive financial literacy programmes is imperative. These programmes aim to assist individuals who are currently excluded from the financial sector or those who underutilise its offerings, ensuring they can fully leverage the benefits it provides. For example, in 2023, Chile established the Electronic Family Wallet (BFE), a pioneer initiative that provides a monthly government-funded allowance to help households offset rising food prices.[160] With this, people with scarce resources have the ability to digitally access the funds provided by the government.

Furthermore, fostering partnerships between governments, financial institutions, non-profit organisations and community groups is vital for advancing financial inclusion agendas. Collaborative efforts can pool resources, share best practices and tailor interventions to address specific needs within different communities. By working together, stakeholders can create a more inclusive and resilient financial ecosystem that empowers individuals and promotes economic growth.

Digitalisation for financial inclusion

The digitalisation of financial products and services has the potential to revolutionise financial inclusion by reducing barriers to access and expanding opportunities for groups with untapped economic potential. Digital financial services and products reduce transaction costs and mitigate the need for physical access in order to participate in the financial system. These features are particularly important for groups with untapped economic potential that may be excluded from the financial system due to cost burdens and a lack of convenient physical locations. Hong Kong, China has pursued active expansion of mobile branches and digital banking channels, such as video teller machines, to help meet the needs of groups with untapped economic

[158] Indonesia IER.
[159] Russia IER.
[160] Chile – Case Study.

potential.[161] Digital tools can also support finance-seekers that do not have sufficient financing options within their own economy. For example, the web-based platform Proxtera – a Business Sans Borders (BSB) initiative launched by the Monetary Authority of Singapore (MAS) and the Infocomm Media Development Authority (IMDA) – connects MSMEs with cross-border financing opportunities across eight economies.[162]

Digital tools such as transaction monitoring and personally controlled spending caps can also help promote healthy financial habits and the responsible usage of financial products and services. Other digital tools, including artificial intelligence (AI) and chat-based support, text-to-speech digital processes and contactless payments, open new avenues to enable accessibility, particularly for the elderly and people with disabilities. One economy notes that promoting the effective use and innovation of digital identification (digital IDs) can help surmount document-related barriers for unbanked individuals; facilitate digital financial transactions; and enable secure, customer-permissioned data sharing for personalised financial services and streamlined credit applications.[163] The integration of financial products and services with digital technologies, such as mobile phone-based financial accounts, can also enable innovative ways for individuals to demonstrate creditworthiness.

However, realising this potential requires a concerted effort to address the challenges associated with digitalisation and ensure that all individuals have equal access to the benefits of digital financial services and products. As such, it is important to acknowledge that digital divides by sex, age, educational level, income, area of residence and other socioeconomic factors, also lead to unequal access to financial inclusion-related knowledge and resources.[164] The existing digital divide, characterised by disparities in access to and proficiency with digital technologies, poses a significant barrier to financial inclusion. Groups with untapped economic potential, including low-income individuals, rural communities and older adults, may lack the necessary digital skills and infrastructure to fully participate in digital financial services. To address these challenges, comprehensive digital literacy programmes targeting groups with untapped economic potential should be implemented to enhance digital skills and confidence. In addition, data privacy and security concerns are paramount, especially for groups with untapped economic potential who may be at greater risk of exploitation and scams by bad actors. Ensuring robust data privacy protections is essential to building trust and confidence in digital financial systems.

Considering the rise in digitalisation, enabling widespread access to affordable, responsible digital tools and services from all financial services providers is critical for promoting financial inclusion. More specifically, small-scale lenders and microfinance institutions serving groups with untapped economic potential often face challenges in adopting digital technologies due to cost constraints and limited technical expertise, complicating efforts by these institutions to compete with large banks and effectively deliver tailored financial services to groups with untapped economic potential. Particularly during the COVID-19 pandemic when physical financial services options were not available – and in the absence of these regulated, tailored, non-burdensome

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[161] Hong Kong, China IER.
[162] Singapore IER.
[163] The Philippines IER.
[164] Chinese Taipei IER.

options – some individuals from groups with untapped economic potential turned to illegal or unregulated online lending that subject individuals to high interest rates, high fees, threats and harassment.[165]

As such, economies must consider how to equip small-scale banks and lenders with the digital tools to remain in the financial marketplace. Additionally, providing subsidies and incentives for small-scale lenders and microfinance institutions to invest in digital infrastructure and technology adoption can help bridge the digital divide and expand access to financial services for all. Fostering partnerships between traditional financial institutions, government agencies and fintech companies can also play a crucial role in promoting financial inclusion through digitalisation. Community banking initiatives that leverage digital technologies to provide localised financial services to underserved areas are another effective strategy for promoting financial inclusion. By implementing targeted strategies, fostering collaboration among stakeholders and leveraging innovative solutions, it is possible to harness the power of digital technologies to create a more inclusive and equitable financial ecosystem for all.

Chile in 2023 enacted the Fintech Law, which aims to promote financial competition and inclusion through innovation and technology in the provision of financial services.[166] This new policy is expected to promote an increase in market access and competition and bolster innovation and financial inclusion, among other outcomes. Also, a UN Capital Development Fund (UNCDF) study for Papua New Guinea reveals that 'digital financial services, including mobile money accounts, provide significant opportunity to ensure more women have access to capital-building tools. Furthermore, access to smartphones, digital devices and data services has had a positive impact on digital and financial literacy progress. The uptake of this depends on access to digital tools (smartphones) and Internet'.[167] To enhance digital financial literacy, Singapore, in collaboration with the United Nations Development Programme (UNDP) and the International Finance Corporation (IFC), developed the SME Financial Empowerment Programme.[168] This open financial education learning hub has reached 7,000 MSMEs across 61 economies, and provides 'foundational digital literacy and a good understanding of essential financial services to thrive in the growing digital economy'.[169]

With the emergence of new technologies, such as AI and blockchains, there is a risk that the gap between financially educated people and those that are not currently integrated into the system could deepen. In response, Korea is providing financial education 'to those with low financial access, and efforts are being made to improve the convenience of financial use by launching services related to fintech and open finance, recognizing technological development as a threat but embracing it as an opportunity'.[170]

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[165] J. Isern et al., "Rebuilding After COVID: Financial Inclusion across Asia," Policy Brief, Martindale Center for the Study of Private Enterprise, 2022, https://business.lehigh.edu/sites/default/files/2022-11/Martindale%20Policy%20Brief%20Perspectives%20from%20Asia%20Aug%202022_0.pdf
[166] Chile IER.
[167] Papua New Guinea IER; UNCDF, "Assessing Digital and Financial Literacy in Papua New Guinea: Survey on Knowledge, Skills and Access" (UN, 2023), https://www.uncdf.org/article/8648/assessing-digital-and-financial-literacy-in-papua-new-guinea-survey-on-knowledge-skills-and-access
[168] Singapore IER.
[169] SME Financial Empowerment, "Empower Your Business with SFE," accessed 12 October 2024, https://www.smefe.org
[170] Korea IER.

4. HOW APEC ECONOMIES UTILISE STRUCTURAL REFORM TO INCREASE FINANCIAL INCLUSION

In its 2017 Leaders' Declaration, APEC highlighted that the objective of financial inclusion is to strengthen the capacity of financial institutions to promote and expand access to banking, insurance and financial services, while increasing the financial literacy and capability of all to access finance.[171] Efforts to increase financial inclusion are expected to drive an economy toward sustainable, resilient and inclusive growth, by implementing a set of policies and programmes to put this agenda front and centre as well as by enacting structural reforms to improve the financial system to meet the needs of all people and businesses.

All APEC economies have integrated financial inclusion into their economy-wide overarching policies in the form of laws or strategies (Table 4.1). Most APEC economies have either developed standalone strategies – such as financial inclusion strategies – or integrated their financial inclusion action plan into broader policies/strategies, most notably in the form of financial sector strategies. Other economies have focused on certain streams, such as customer protection or financial literacy/education, as means to attain financial inclusion. In the case of Japan, despite the lack of a standalone policy or strategy in this area, the economy does have several policy streams to address social issues related to financial exclusion.[172] Some economies have taken further steps by establishing dedicated agencies or bodies, such as Chile's Advisory Commission for Financial Inclusion; Japan Financial Literacy and Education Corporation; and Korea Inclusive Finance Agency.

Table 4.1. Financial inclusion laws or strategies in APEC economies

Economy	Financial Inclusion Laws/Strategies
Australia	• Principles and Report on Innovative Financial Inclusion from the Access through Innovation Sub-group of the G20 Financial Inclusion Experts Group 2010 • Financial Inclusion Action Plan (FIAP) 2016
Brunei Darussalam	• Brunei Vision 2035 • Financial Sector Blueprint 2016–2025
Canada	• 2021–2026 Strategic Plan: Leadership and Innovation in Financial Customer Protection
Chile	• Establishment of the Advisory Commission for Financial Inclusion in 2014 • Financial Education Strategy 2018
China	• 13th Five-Year Plan 2016 • Plan for Promoting the Development of Inclusive Finance (2016-2020)
Hong Kong, China	• Treat Customers Fairly (TCF) Charter 2013

[171] APEC, "APEC Leaders' Declaration 2017: Annex A: APEC Action Agenda on Advancing Economic, Financial, and Social Inclusion in the APEC Region," 2017.
[172] Japan NPO Center, "Financial Inclusion and Japanese Society," Working Paper 1, Japan NPO Center, Tokyo, 2016.

Economy	Financial Inclusion Laws/Strategies
	• Hong Kong Monetary Authority's Priorities for 2023 and Beyond
Indonesia	• Presidential Regulation No. 114 Year 2020 on Strategy for Financial Inclusion
Japan[1]	• Long-Term Care Insurance System 2000 • Establishment of a Taskforce for Issues related to Multiple-Debtor under Policy Framework 2007 • Comprehensive and Systematic Financial Education Curricula and Financial Education Guidelines for K-12 Students to Retired • Initiatives for Training Teachers and Dispatching Specialists • Money Lending Business Act • Investment Act • Interest Rate Restriction Act • Law for Supporting the Independence of People in Need 2015 • Establishment of Japan Financial Literacy and Education Corporation (J-FLEC) in 2024
Korea	• Microfinance Support Act 2016 • Establishment of Korea Inclusive Finance Agency 2016
Malaysia	• Central Bank Act 2009 • Financial Sector Blueprint 2022–2026
Mexico	• Development Plan for 2019–2024 • Financial Inclusion Policy (PNIF) 2020–2024
New Zealand	• Deposit Takers Act 2023 • Financial Policy Remit 2022 • Reserve Bank of New Zealand's Approach on Financial Inclusion 2023 • Council of Financial Regulators' Financial Inclusion Priority Theme 2022
Papua New Guinea	• Development Strategic Plan 2010–2030 • Financial Inclusion Strategy 2016–2020
Peru	• Vision 2050 • Development Strategic Plan 2030 • The 2nd Financial Inclusion Policy (S.D. No. 255-2019-EF) • Multisectoral Strategic Plan 2030 (S.D. No. 112-2021-EF)
The Philippines	• Memorandum Circular No. 97 on Institutionalising Whole-of-Government Support for the Strategy for Financial Inclusion 2022–2028 • Strategy for Financial Inclusion 2022–2028
The Russian Federation	• Strategy for the Development of the Financial Market of the Russian Federation until 2030 • Russian Financial Market Development Programme 2024–2026 • Financial Inclusion Strategy of the Russian Federation for 2018–2020 (extended through 2021) • Priorities of the Financial Inclusion Programme of the Russian Federation for 2022–2024
Singapore	• The Financial Services and Markets Act 2022 (FSMA)
Chinese Taipei	• Financial Consumer Protection Act 2011 • Financial Inclusion Indicators • Principles for Financial Service Enterprises to Treat Customers Fairly • Financial Literacy Promotion Plan 2024–2026
Thailand	• Financial Sector Master Plan Phase I (2004–2008) • Financial Sector Master Plan Phase II (2010–2014)

Economy	Financial Inclusion Laws/Strategies
	• Financial Sector Master Plan Phase III (2016–2020) • Financial Landscape Consultation Paper (2022–Present)
United States	• The Financial Services and General Government Appropriations Act 2023 (FSGG), enacted 29 December 2022 • Economic Inclusion Strategic Plan, 2024
Viet Nam	• Decision No. 149/QD-TTg 2020 Approving the Financial Inclusion Strategy through 2025

Source: Authors' compilation.

Complementing the overarching policy or the abovementioned strategies, APEC economies have also implemented supporting policies and detailed programmes to achieve specific objectives related to financial inclusion. On the supply side, APEC economies have focused on making financial products and services more accessible to those who are currently unserved or underserved. This strategy includes expanding coverage to widen the reach to communities either through physical presence or digital presence, as well as expanding the supply of inclusive and innovative financial services by allocating more financial resources to targeted areas/groups and utilising emerging technology. On the demand side, policy interventions are directed to meet the needs of communities with untapped economic potential by addressing underlying challenges to access financial services and improving financial literacy.

This study presents key policies and programmes on financial inclusion in the following structure (see Table 4.2). Supply-side interventions are covered in policies that facilitate access to financial products and services, and those that support access to credit. Demand-side interventions are elaborated in policies that address untapped economic potential.

Table 4.2. Mapping of key policies/programmes on financial inclusion in APEC economies

Areas	Policies or Programmes in APEC Economies
1. Policies that facilitate access to financial products and services	(1) Policies or programmes in promoting financial products and services for those from rural areas
	(2) Acts or laws supporting digital banking provision
	(3) Acts or laws supporting digital payment system
	(4) Policies or programmes in digitised finance or open finance
2. Policies that support access to credit	(1) Policies or programmes that provide easy access to credit
	(2) Policies or programmes that provide affordable access to credit
	(3) Policies or programmes that provide innovative lending services
3. Policies that address untapped economic potential	(1) Acts or laws affirming that women, Indigenous Peoples and people with disabilities can access financial products and services
	(2) Programmes supporting alternative financing for MSMEs
	(3) Policies or programmes supporting financial literacy

MSME=micro, small and medium enterprise.
Source: Authors' compilation.

FACILITATING ACCESS TO FINANCIAL PRODUCTS AND SERVICES

Promoting financial products and services for people in rural areas

In the past, access to financial products and services has been limited to brick-and-mortar banks, which require a lot of investment to build the physical infrastructure. As a result, bank branches tended to be opened in more profitable urban areas, and accessing banks remained costly for people in remote rural areas. Ayyagari and Beck have observed that the cost of access due to geography has been the main barrier to account penetration, second only to lack of funds in developing Asia.[173] This is further confirmed by Adil and Jalil who highlight that the greater the size, geographic reach and demographic reach of banks, the greater their contribution to financial inclusion.[174]

To address communities in rural or remote areas, governments in APEC economies have various strategies. Firstly, they offer tailored products that fit the different needs of people, particularly those in rural areas who often have limited financial literacy and capacity. Furthermore, the service offerings are delivered in accessible ways, such as by expanding physical presence in relevant formats to maintain proximity with customers.

Many APEC economies, through their government-owned banks or regulatory framework, introduced simple or basic accounts to improve accessibility of banking services. Chile's government-owned bank BancoEstado is mandated to expand its geographic coverage to serve all people, including the unbanked and SMEs. In 2006, the bank introduced a simplified account with extensive coverage, called CuentaRUT, characterised by its easy opening process, no income requirement and zero transaction costs. This system also enables the payment of social benefits from the government. With 11.4 million saving account clients – representing 95 percent market coverage[175] – and presence in all areas of Chile, thanks to the growing number of branches or correspondent banking network called CajaVecina, BancoEstado has played a crucial role in improving financial inclusion in the economy.

Access to banking services for Indonesian rural communities has long been facilitated by Bank Rakyat Indonesia (BRI), a government-owned bank. BRI offers special savings accounts for the rural population, called Simpedes, with a simplified opening process, no minimum balance, and no limit on deposit and withdrawal frequency. In addition, the bank provides BRI Terrace (*Teras* BRI) service dedicated to reaching communities in remote areas by land vehicles and coastal communities in remote islands by boat. By 2023, BRI Terrace was available at 977 service points, including 115 points on mobile vehicles and 4 points on boats. Throughout the year, BRI Terrace points on boats served 37,669 saving accounts with a total transaction volume of IDR 83 billion and 2,756 debtors with total credit of IDR 83 billion,[176] ensuring that banking services are accessible to communities in islands that are otherwise unserved.

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[173] M. Ayyagari and T. Beck, "Financial Inclusion in Asia: An Overview," Economics Working Paper 449, ADB, Manila, 2015, https://www.adb.org/sites/default/files/publication/173377/ewp-449.pdf
[174] F. Adil and A. Jalil, "Determining the Financial Inclusion Output of Banking Sector of Pakistan – Supply-side Analysis," *Economies* 8, no. 2 (2020): 42, https://doi.org/10.3390/ECONOMIES8020042
[175] Data as of 31 July 2023 from BancoEstado corporate presentation in November 2023.
[176] Bank Rakyat Indonesia (BRI), "Sustainability Report 2023: Great Resilience, Strong Sustainability" (BRI, 2023), https://www.ir-bri.com/misc/SR/SR-2023-EN.pdf

The government of the Philippines, through its central bank, BSP, introduced the framework for the Basic Deposit Account (BDA) in 2018 to promote universal access to formal financial products and services. The BDA is a deposit product that has a low account opening balance requirement, no maintaining balance, no dormancy charges and simplified identification requirements. The number of BDAs has surged from 659,000 in 2018 to over 24 million in 2023, bringing more people into the formal financial system and expanding their access to additional financial services. To expand access of unbanked segments to low-cost touch points, BSP implemented regulations on agent banking. This service channel enables consumers to perform basic essential banking transactions, such as deposits, withdrawals and bill payment. Through the agent network, financial institutions can reach underserved areas where establishing physical branches may be economically unfeasible.

Structural reforms to improve accessibility of financial services may also be initiated directly through government-led policies and programmes that focus on empowering rural communities. Since 2015, the government of China has implemented the Plan for Promoting the Development of Inclusive Finance (2016–2020), encouraging banks and financial institutions to expand their service coverage and accessibility, including to rural areas. Banks were guided to allocate more credit resources to SMEs, farmers and other vulnerable groups, along with increased small re-lending and re-discounting to support agriculture, so as to reduce financing costs. On the demand side, the government used monetary policy tools such as the differentiated reserve requirement ratio to support financial institutions and private capital to spur the development of inclusive finance, ensuring the accessibility of basic financial services to people in need. In terms of infrastructure, the government of China strengthened sharing of credit information among SMEs and rural households, improved the rural payment environment, upgraded the credit information system and statistical system for inclusive finance, and promoted a balanced distribution of financial resources.

Implementation of the plan has contributed to improving financial inclusion. As reported in China's IER, the number of commercial bank branches per 1,000 square kilometres in China increased to 10.83 in 2021, from 10.21 in 2015. The number of commercial bank branches per 100,000 adults also increased to 8.78 in 2021 as compared to 8.53 in 2015. In rural areas, the number of branches (of financial institutions) per 10,000 people generally increased, with a cumulative increase of more than 100 percent in 11 provinces, and more than 50 percent in five provinces. By the end of 2023, rural bank coverage reached 97.93 percent, an increase of about 2 percentage points compared to that in 2017.

Strategies to widen the presence of financial services in rural communities are not a feature of developing economies only. Following the declining presence of bank branch networks in Australia amid shifts in consumer demand and regulatory pressure for consolidation, Bank@Post was recognised as an alternative to bank branches, particularly in remote locations.[177] This banking service is provided through Australia Post on behalf of some banks and other financial institutions, allowing customers to conduct a range of essential banking services – including withdrawal, deposit, credit card deposits and balances inquiry – as well as payment of bills at the nearest post

[177] Treasury Australia, "Regional Banking Taskforce: Final Report" (Australian Government, 2022), https://treasury.gov.au/sites/default/files/2022-09/p2022-260600-final-report.pdf

offices. In 2023, Bank@Post handled over 16 million transactions, a 7 percent increase from that of 2022, providing banking services on behalf of over 80 financial institutions at more than 3,400 post offices across Australia.[178]

Support from governments to improve financial services coverage in targeted areas can take the form of requirement relaxation. In encouraging financial institutions to expand their services, the government of Chinese Taipei introduced the Regulations Governing Domestic Branches of Financial Institutions, which stipulate that financial institutions applying to set up new branches in underbanked areas to benefit urban–rural balanced development can apply to establish new branches in these areas anytime with flexible requirements.

Supporting digital banking provisions

The development of digital technology allows cost-efficient network expansion through mobile or internet banking services. The use of technology reduces the marginal costs of administering bank accounts and opens finance to anyone with a mobile phone.[179] Digital financial solutions may contribute to financial inclusion, as affordable banking systems could ease the provision of banking services to the world's unbanked population.[180] However, the increasing application of digital technology in financial services can also come with concerns about data security and privacy threats from various sources, such as hacking and cybercrime.[181] By leveraging technology and data-driven analysis to support fast and accurate decisions without the requirement to operate costly physical branches, alternative digital solutions can keep cost of services low, thus improving the ability of financial institutions to provide affordable offerings for a wider customer base, including the underserved and unbanked.

Digital banks, also referred to as internet-only banks, virtual banks or neo-banks,[182] provide products and services similar to traditional banks but employ virtual channels for distribution. Utilising multiple facets of technology in performing analytics as well as product and market development, the digital banks that have emerged across APEC economies have undeniably brought positive impacts in terms of improving access to financial services and quality of delivery. For example, Chile's first neobank MACH by Banco de Crédito e Inversiones (BCI) has over 3 million registered customers, 2 million of whom are first-time account holders. It is a notable contribution to financial inclusion. According to an Inter-American Development Bank report, Chile had, as of 2021, the strongest financial inclusion metric in Latin America, with 74.3 percent of its population having access to bank accounts.[183]

[178] Australia Post, "Annual Report 2023: Delivering a Better Tomorrow" (Melbourne: Australia Post, 2023), https://auspost.com.au/content/dam/auspost_corp/media/documents/2023-australia-post-annual-report.pdf
[179] N. Mallat, M. Rossi, and V.K. Tuunainen, "Mobile Banking Services." *Communications of the ACM* 47, no. 5 (2004): 42, https://cacm.acm.org/research/mobile-banking-services/
[180] I. Song and J. Vong, "Affective Core-banking Services for Microfinance," in *Computer and Information Science: Studies in Computational Intelligence*, vol. 493, ed. R. Lee (Heidelberg: Springer, 2013): 91–102. https://doi.org/10.1007/978-3-319-00804-2_7
[181] M.A.K. Nurmara et al., "A Review of Security in Financial Technology," *Procedia Computer Science* 277 (2023): 958–65, https://doi.org/10.1016/j.procs.2023.10.603
[182] The terms digital bank, internet-only bank, virtual bank and neo-bank will be used interchangeably, depending on the term used in the formal document of the respective APEC economy.
[183] World Bank, "The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19," accessed 24 October 2024, https://globalfindex.worldbank.org

The rise of virtual banking in Hong Kong, China is backed by the Fintech 2025 Strategy of the Hong Kong Monetary Authority, which envisions that the future of banking is based on technology. Virtual banking is expected to promote financial inclusion in the economy, a requirement explicitly stated in their licensing, along with other technical requirements such as having no physical branches, participation of technology companies and a prudent risk management framework. The emergence of virtual banks in Hong Kong, China has resulted in positive spillover effects to the overall banking landscape in the economy. As licensing requirements for virtual banks do not allow these banks to charge low-balance fees or maintain minimum balance requirements, 80 percent of major incumbent retail banks in Hong Kong, China, as of October 2020, have removed their minimum account balance requirements for various categories of retail banking products. This has made bank accounts even more accessible, serving as a gateway to a wider range of financial services.[184]

Digital banking requires close collaboration with technology partners to bring added value to service offerings. Under the Plan for Promoting the Development of Inclusive Finance (2016–2020), the government of China encourages technology and product innovation to promote financial inclusion. The three largest virtual banks in China have leveraged their affiliation with business groups that are already established as technology platforms. WeBank by Tencent is the first digital bank in China, growing very quickly in terms of users and assets by promoting loan services on WeChat and QQ, the dominant social media apps in China with 800 million users. MYbank by Alibaba employs big data algorithms to expedite the loan application process, expecting that in the future users will only need to spend three minutes on a two-step process to obtain a loan. Baixin Bank by Baidu leverages user behaviour analytics to personalise its services and assist on risk management measures.

Despite the emerging wave of digital adoption in financial services delivery, penetration to selected segments, especially the elderly, remains challenging. For instance, people in Japan tend to use offline financial services, especially the senior generation, driven by satisfactory access to ATMs, security concerns and cumbersome registration for internet banking services.[185] Extra effort is needed to educate the senior population to onboard them onto digital banking technologies. Singapore's DBS Bank collaborated with the Government Technology Agency during the COVID-19 pandemic in 2020 to pilot face verification technology that aims to benefit more than 1 million DBS customers who hold SingPass, Singapore's digital ID, and do not use digital banking services, of whom over 60 percent are seniors aged 62 and above.[186] The easy and seamless verification experience is expected to support first-time online onboarding while fostering resilient digital habits for years to come.

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[184] S. Chen et al., "Virtual Banking and Beyond," Paper 120, Bank for International Settlements (BIS), 2022.
[185] T. Hashimoto, "FinTech and Its Regulatory Framework in Japan," presentation, 28 September 2017, https://www.unescap.org/sites/default/files/Session%206_Takashi%20Hashimoto.pdf
[186] DBS, "DBS and GovTech to Pilot SingPass Face Verification Technology for Faster Digital Banking Sign-ups," 29 July 2020, https://www.dbs.com/newsroom/DBS_and_GovTech_to_pilot_SingPass_face_verification_technology_for_faster_digital_banking_sign_ups

Box 4.1. Regulating digital banks in the financial system

Many economies establish separate regulatory regimes for digital banking as it differs from traditional banks in its nature and business model. APEC economies apply different types of strategies to regulate digital banking licensing in the industry, such as granting a new licensing category specific to digital banks or integrating digital banking regulations under existing traditional banking licences.

Some APEC economies have introduced separate licensing for digital banking, in which issuance of licenses are limited and closely overseen by the regulator. Member economies that implement this practice include China; Hong Kong, China; Korea; Malaysia; the Philippines; Singapore; Chinese Taipei; and Thailand. Having launched the framework and mechanism for virtual bank licensing in March 2024, the government of Thailand aims to drive virtual banks to offer a full range of financial services that are appropriate to each customer segment, especially to help the underserved and unserved segments of retail and small and medium enterprise (SME) customers to do business and promote financial discipline.

As digital banks are only made possible with the convergence of finance and technology, laws on establishing digital banks should provide for special cases that differentiate digital banks from traditional commercial banks. Korea's Internet-only Bank Act (2018) was introduced to build a foundation for the operation of internet-only banks by, among others, easing the shareholding restrictions for non-financial companies, lowering the minimum capital requirement, allowing the same business scope as commercial banks and allowing a grace period for prudential regulations.[a] While permitting non-financial companies to take a majority stake of up to 60 percent, Chinese Taipei's Internet-only Banking License Policy (2018) requires at least one traditional bank or financial holding company as a key shareholder and a minimum paid-up capital similar to that of other commercial banks. Other economies that apply the minimum capital requirement in parity with that of traditional banks include Hong Kong, China, while Singapore and Malaysia allow the fulfilment of minimum capital requirement in stages.

The other common practice is to regulate digital banking under existing banking regulatory frameworks with some adjustments, as applied in Australia; Canada; Indonesia; Japan; New Zealand; the Russian Federation; the United States; and Viet Nam. To allow new entrants, including digital banks, the government of Australia introduced a licensing regime with a restricted phase of limited activity for the first two years, before becoming a fully licensed bank. In the US, digital banks often start with an alternative licence, such as for e-payments, before applying for additional licences to introduce new service offerings. In Indonesia, digital banks are licensed as commercial banks with some specific provisions regulating digital services. Meanwhile in Viet Nam, digital banks are only allowed to operate as offshoots of or in partnership with existing traditional banks.[b]

There are also some economies where a regulatory framework for digital banks have yet to be introduced but remains under consideration, such as Brunei Darussalam; Papua New Guinea; Peru; and New Zealand. Through Legislative Decree 1531, Peru modified the Banking Law in 2022 to drive entry of digital banks to the industry, including the authorisation of 100 percent digital operations that allow financial institutions to serve customers digitally without a main office or premises to display the authorisation resolution. The government of Papua New Guinea, through the Regulatory Sandbox, is planting the seeds for a digital banking ecosystem by setting a technological enabler for biometric identity verification. Digizen's Digital Bank ID was approved for banking in Papua New Guinea, following its graduation from the Regulatory Sandbox. This technology enables the issuance of digital bank ID cards that can subsequently be used to open bank accounts. Thanks to the fully digital process, establishing a verified identity and opening a bank account takes only minutes, where previously it took months, removing a significant barrier for rural villagers.

Source:
[a] Y. Choi, "Digital Banks: Lessons from Korea" (World Bank Group Korea Office, 2020), https://documents1.worldbank.org/curated/en/579871603861444098/pdf/Digital-Banks-Lessons-from-Korea.pdf
[b] APEC, "APEC FinTech Scoping Study" (APEC, 2023), https://www.apec.org/docs/default-source/publications/2023/3/apec-fintech-scoping-study/223_ec_apec-fintech-scoping-study.pdf?sfvrsn=95a57a3e_2

Supporting digital payment systems

Digital payment as a pathway to financial inclusion

The growing use of the internet and digital transactions fuelled by burgeoning e-commerce platforms and the proliferation of affordable smartphones has created demand for digital payment systems. For people with limited money to save, opening an account in a formal financial institution may be cumbersome due to administrative requirements (such as identity card, photograph, etc.), while opening a digital payment account (e-wallet) may be far simpler. With the use of digital accounts over time and with the help of complementary policies, users may be able to build financial profiles with their payment service providers, enabling better accessibility to other financial services in the future.

Economies with stronger foundational policies and regulations are observed to have a higher volume of digital transactions, which ultimately contributes to economic growth.[187] In promoting the growth of digital payments, many APEC economies outline their visions and key strategies into an overarching framework, which then materialise as digital payment systems. To ensure wider adoption and convenience for users, thus promoting financial inclusion, governments often strive to create standardised systems that work across different payment platforms and financial institutions. Government-backed digital payment systems can be found in Indonesia; Malaysia; the Philippines; and Mexico, among others, while privately led systems can be found in Singapore; and the United States.[188] Collaboration between the public sector and the private sector is seen in Australia; Thailand; and Viet Nam.[189]

In Indonesia, the Payment System Blueprint 2025 sets the digital payment policy direction to achieve the following objectives: (1) integrate digital economy and finance within the economy; (2) transform digital banking; (3) interlink fintech and banks; (4)

[187] APEC, "APEC FinTech Scoping Study" (APEC, 2023), https://www.apec.org/docs/default-source/publications/2023/3/apec-fintech-scoping-study/223_ec_apec-fintech-scoping-study.pdf?sfvrsn=95a57a3e_2
[188] K. Suominen, "Uptake, Use, and Inclusion Gains from Fast Payment Systems – Early Comparative Data," Center for Strategic and International Studies, Washington, DC, 2024, https://csis-website-prod.s3.amazonaws.com/s3fs-public/2024-04/240418_Suominen_Fast_Payment.pdf?VersionId=krMpb1rT47.Rl0HYlChnJErM4DUAuuXI
[189] Suominen, "Uptake, Use, and Inclusion Gains from Fast Payment Systems."

balance innovation and stability; and (5) promote the interests of the economy on cross-border payments.[190] In 2019, Bank Indonesia launched the Quick Response Code Indonesia Standard (QRIS) as an economy-wide standardised payment system, enabling interconnectivity and interoperability of QR-code-facilitated payments securely among different digital payment system providers. Starting off with 1.2 million merchants in January 2020, QRIS increased the number of participating merchants to 26.7 million by June 2023.[191] The universality and ease of use of QRIS also promotes financial inclusion for MSMEs via adoption of the cashless payment system. In 2022, micro enterprises contributed to 34.5 percent of QRIS' total transaction volume, followed by medium enterprises (28.3 percent), and small enterprises (23.0 percent).[192]

A similar system that employs an economy-wide QR code standard is found in the Philippines. The Philippines established the Digital Payments Transformation Roadmap (DPTR) 2020–2023 to achieve the interconnected policy objectives of accelerating payment digitalisation and expanding financial inclusion in the economy. First launched in November 2019, QR Ph has now been widely adopted by financial institutions in the Philippines, enabling convenient person-to-person and person-to-merchant payments in real time. Its role aligns with the DPTR 2020–2023, which aims to convert 50 percent of total retail payments into digital payments and expand the financially included to 70 percent of Filipino adults by 2023. In 2022, the share of digital payments volume over total retail payments grew considerably to 42.1 percent, compared to 10 percent in 2018. The greater digital payment adoption was driven mainly by merchant payments and person-to-person fund transfers supported by QR Ph implementation.[193]

Digital payment systems can also be utilised to distribute government assistance, as seen in some APEC economies. In Thailand, the e-payment initiative known as PromptPay enables the transfer of funds and payments using mobile numbers or identification numbers. PromptPay also serves as the main channel for the government to disburse welfare payments to low-income individuals and provide direct assistance to those affected by the COVID-19 pandemic. Over time, this initiative has compelled commercial banks to reduce or even eliminate transfer fees, thereby facilitating the adoption of internet and mobile banking services and reducing barriers to financial inclusion. Similarly in Chile, the Electronic Family Wallet (BFE) is a pioneering initiative. It provided a monthly government-funded allowance to help households offset rising food prices throughout 2023. The funds were disbursed directly to recipients' mobile devices for purchasing food with electronic payments and cannot be exchanged for cash. This system ensures timely, efficient and secure delivery of financial aid to those in need.[194]

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[190] APEC, "Strategies and Initiatives on Digital Financial Inclusion: Lessons from Experiences of APEC Economies" (Singapore: APEC, 2022), https://www.apec.org/docs/default-source/publications/2022/12/strategies-and-initiatives-on-digital-financial-inclusion-lessons-from-experiences-of-apec-economies/222_fmp_strategies-and-initiatives-on-digital-financial-inclusion.pdf?sfvrsn=77e0fd25

[191] Central Bank of Indonesia, "Cara Membuat QRIS All Payment untuk Usaha [How to Register QRIS All Payment for Business]," 2023.

[192] Indonesian Payment System Association (ASPI), "Buletin Statistik ASPI Triwulan 1-202 [ASPI Statistics Bulletin First Quarter 2023]," 2023, https://www.aspi-indonesia.or.id/buletin-statistik-aspi-triwulan-1-2023/

[193] Bangko Sentral ng Pilipinas (BSP), "2022 Status of Digital Payments" (BSP, 2023), https://www.bsp.gov.ph/PaymentAndSettlement/2022_Report_on_E-payments_Measurement.pdf

[194] Chile Atiende, "Bolsillo Familiar Electrónico [Electronic Family Wallet]," 27 August 2024, https://www.chileatiende.gob.cl/fichas/115303-bolsillo-familiar-electronico; S. Dote, "Bolsillo Familiar

Managing rising risks from digital payment transactions

The vast growth in digital transactions presents challenges to digital payment service providers, including how to ensure the safety and reliability of payments, the interoperability of bank and non-bank financial service providers, mitigation of risk to personal data and privacy, and adequate ICT infrastructure and power supply. On the demand side, cash-based transactions remain popular in many developing economies driven by lack of trust, perceived safety, financial illiteracy, sociocultural factors favouring face-to face interactions, slow or no internet connections, and inadequate product design.[195]

Evolving technologies permit retail payment activities to be performed in new and innovative ways carries many benefits. The lack of requirements and supervision increases risks to Canadians using these services such as the risk of financial loss in instances of business insolvency and threats to the security of personal and financial information of Canadians. To address concerns, the government of Canada enacted the Retail Payment Activities Act in 2021 to introduce a new retail payment supervisory regime for payment service providers, such as payment processors and digital wallets. The final Retail Payment Activities Regulations was released in November 2023 and includes standards for operational risk management, requirements to safeguard end-user (payer and payee) funds, requirements regarding the registration of payment service providers with the Bank of Canada, reporting requirements, and penalties for violating these requirements.

Most economies do not allow non-bank payment services providers (NBPSPs) to access central bank-provided services or accounts as access is governed by regulatory requirements such as minimum capital and liquidity requirements. It also involves compliance with technical standards that aim to ensure the safety and efficiency of payment infrastructures and markets. However, some economies allow NBPSPs to access payment services provided by central banks, such as in Hong Kong, China and Singapore. In Hong Kong, China; Alipay and WeChat are two of the 12 NBPSPs that have obtained access to the Hong Kong Monetary Authority's Faster Payment System. Additionally, in November 2020, the Monetary Authority of Singapore allowed non-banks to access the FAST and PayNow retail payments systems, which are owned and operated commercially. These economies emphasise the importance of competition, innovation and generally levelling the playing field between incumbent providers and new ones.[196]

Electrónico: cómo se cobrará el beneficio estatal en Chile durante 2024 [Electronic Family Wallet: How the State Benefit Will Be Collected in Chile during 2024]," El País, 23 January 2024, https://elpais.com/chile/2024-01-23/bolsillo-familiar-electronico-como-se-cobrara-el-beneficio-estatal-en-chile-durante-2024.html

[195] WEF, "Addressing E-Payment Challenges in Global E-Commerce," White Paper, WEF, Geneva, 2018.

[196] J. Ehrentraud et al., "Fintech and Payments: Regulating Digital Payment Services and E-money," Bank for International Settlements, 2021, https://www.bis.org/fsi/publ/insights33.pdf

Supporting open finance

In the increasingly connected financial ecosystem, the integration of services offered by multiple financial institutions and technology providers may be helpful to improve usage and quality of delivery – the other indicators of financial inclusion besides access. Fintech, digitised finance and open finance have led to innovative business models as well as financial products and services that challenge existing regulatory approaches. On the other hand, the benefits of open finance will only be realised if stringent safeguards are in place to ensure consumer protection and privacy, cybersecurity and operational resilience.[197] Many APEC economies have addressed this growing trend by establishing regulatory frameworks and collaborating with financial institutions and technology companies.

The growing interest in open finance is supported by its incorporation into the overarching policies on fintech that have been adopted by many economies. For example, the government of Chile enacted the Fintech Law in 2023 to promote financial competition and inclusion through innovation and technology. When fully implemented, this law is expected to deliver several significant benefits, including an open finance system, which will address significant information asymmetries, giving consumers and businesses greater control and autonomy over their financial data and information. Furthermore, some economies have specifically created a policy framework for open finance. The Bank of Thailand, for instance, encourages the financial sector to leverage technology and data to bridge financial inclusion gaps by outlining three key directions dubbed the 3 Opens (Open Infrastructure, Open Data and Open Competition). The 3 Opens initiative, introduced in early 2021, promoted digital innovation and expansion of digitally enabled financial services in the economy. This has enabled QR payment linkages with six neighbouring economies and the pilot testing of real-time cross-border payments, while providing information for a draft regulation on virtual banks.[198]

Data sharing and open data are key drivers in encouraging the development of innovative solutions to promote financial inclusion. Building a robust and secure data infrastructure is one of the focuses of the Fintech 2025 strategy launched by the Hong Kong Monetary Authority. The government data are made available to the public for free use via the open data portal data.gov.hk.[199] Data sharing among government bureaus/departments will then be facilitated by the Consented Data Exchange Gateway (CDEG), which is projected to be rolled out by the end of 2024. Furthermore, the government launched the Commercial Data Interchange (CDI) in 2022 to effectively facilitate the ability of enterprises (in particular SMEs) to share with banks their commercial data from different data sources, thereby enhancing their access to more financial services. By enabling SMEs to apply for bank loans using alternative data exchanged on CDI, as of June 2024, this infrastructure has supported more than 27,000 loan applications and reviews with an estimated approved credit amount of HKD 23.8 billion. As one of the key initiatives under the Fintech 2025 strategy, CDI promotes

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[197] Organisation for Economic Co-operation and Development (OECD), "Open Finance Policy Considerations," OECD Business and Finance Policy Papers, OECD Publishing, Paris, 2023, https://doi.org/10.1787/19ef3608-en
[198] Bank of Thailand, "The Bank of Thailand Issues a Public Consultation on Open Data for Consumer Empowerment," press release, 30 November 2023, https://www.bot.or.th/en/news-and-media/news/news-20231130.html
[199] As of February 2024, there are 5,360 data sets available on data.gov.hk, and more than 310 data sets are estimated to be available from 2024 to 2026.

more efficient financial intermediation in the banking system and enhances financial inclusion in Hong Kong, China.

Specifically in banking services, open banking refers to the use of a software interface, such as application programming interfaces (APIs), to share financial data and services with third parties, who typically provide technology, services or apps to bank customers who utilise the shared financial data and services. Many APEC economies have implemented open banking governance frameworks, including Australia; China; Hong Kong, China; Japan; Korea; Malaysia; New Zealand; the Russian Federation; Singapore; and Chinese Taipei. Meanwhile, Canada; Chile; Indonesia; Mexico; Peru; the Philippines;[200] and the United States are currently developing their open banking framework.[201]

The government of Korea through the Financial Services Commission (FSC) promotes innovation in financial services by establishing open banking systems that mandate commercial banks to open their payment networks to both authorised fintech companies and other banks. At the initial launch of the open banking system in December 2019, 16 banks and 31 fintech companies were involved in controlled testing. Within two years of implementation, service availability was expanded to a total of 120 financial institutions and fintech companies. Having over two-thirds of the adult population using open banking services, Korea has among the highest open banking adoption rates globally, which leads to innovative financial products and services as well as constructive competition that benefits consumers with lower costs and a wider range of financial products. The legal framework for the open banking system was formalised by amending the Electronic Financial Transactions Act of 2006. A notable feature of the successful open banking implementation in Korea is its focus on relevant data and security protection, ensuring users confidence in the service. Customers must explicitly grant consent for financial data sharing with third-party providers, and all information on how data is being used and by whom must be conveyed to customers in a clear and transparent way.

In practice, the implementation of open finance requires multistakeholder collaboration. Singapore’s API Exchange (APIX) Innovation Sandbox and Marketplace was established by the Monetary Authority of Singapore, the International Finance Corporation (IFC) and the ASEAN Bankers Association to foster innovation and collaboration between financial institutions and fintech companies to exchange ideas in a community-led environment, as well as co-design new financial products and services within a cloud-based and secure sandbox. APIX has generated various innovative solutions that foster financial inclusion. For example, supporting the Philippines’ Cantilan Bank in quickening its integration and collaboration process with third-party fintech companies via APIs on the platform led to increased digitalisation and the bank’s mobile app reaching groups with untapped economic potential in the Philippines.

The implementation of open finance requires attention to data security standards and regulations to protect customer privacy and ensure the secure handling of confidential

[200] BSP has adopted the three-year Open Finance Roadmap 2021–2024 to establish a more defined programme for the implementation of open finance in the Philippines. The BSP also launched the PH Open Finance Pilot in June 2023 to develop technical and operational standards for an open finance ecosystem in the country.
[201] Data from Open Banking Map, accessed 15 May 2024, http://www.openbankingmap.com/

financial information. The government of Australia launched the Consumer Data Rights (CDR) in 2020, which includes open banking as a key component. CDR requires banks to share customer data with authorised third-party providers upon customer consent. When customers opt-in to share data with an accredited provider via CDR, data will be securely transferred from existing providers. This mechanism gives customers the ability to more safely share the data that Australian business hold about them for their own benefit, such as to easily compare products and services, access better value and improved service, as well as assist financial and cashflow management. At its launch in 2020, the framework was rolled out in the banking sector, where CDR was open only to customers of the big four banks and limited to the sharing of specified data sets. By 2023, CDR has been expanded to the energy sector and is expected to be further developed for the non-bank lending sector.

SUPPORTING ACCESS TO CREDIT

Credit guarantee schemes

While access to financial services has significantly improved due to digital finance, access to credit remains a challenge. This is true for both SMEs and groups with untapped economic potential. Access to credit has become one of the key constraints for SMEs to grow, while for individuals, difficulties in accessing credit may limit their capacity to improve their welfare.

The challenges SMEs face in obtaining financing are mainly due to the perceived higher risk and their lack of collateral.[202] To address this issue, some APEC economies have developed public credit guarantee schemes, which allow the transfer of risk to the guarantor thus making lending to SMEs more attractive from the perspective of lenders. Besides reducing the risk of SME lending, the presence of public credit guarantee schemes could reduce the need to have high collateral as the risk of loan default is mostly covered by the guarantor.

The design of credit guarantee schemes varies across APEC economies, particularly in the management structure, operating rules and the characteristics of the guarantee, including the coverage ratio and pricing.[203] The design is important in determining the sustainability of a programme. In their survey of 15 public credit guarantee institutions, Beck et al. find that 11 reported operating losses. The average fee charged to lenders was 1.5 percent, as opposed to the 9 percent administrative costs and 5 percent credit losses.[204] Although the main role of these institutions is to allow easier access to credit for SMEs, thus fostering inclusive growth, the right pricing formula is imperative to ensure sustainability.

Furthermore, reducing the percentage of credit losses is also important, which requires proper mechanisms to assess the probability of loan default. Loan assessments are usually carried out by participating lenders as they already have a credit appraisal

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[202] OECD, "Facilitating Access to Finance: Discussion Paper on Credit Guarantee Schemes." (OECD, 2010), https://www.oecd.org/global-relations/45324327.pdf

[203] A. de la Torre, J.C. Gozzi, and S.L. Schmukler, "Credit Guarantees: FOGAPE's Experience in Chile," in *Innovative Experiences in Access to Finance: Market-Friendly Roles for the Visible Hand? Latin American Development Forum* (Washington, DC: World Bank, 2017).

[204] T. Beck, L.F. Klapper, and J.C. Mendoza, "The Typology of Partial Credit Guarantee Funds around the World," *Journal of Financial Stability* 6, no. 1 (2010): 10–25. https://doi.org/10.1016/j.jfs.2008.12.003

infrastructure in place.[205] However, there are some public guarantee institutions which conduct their credit assessment internally, such as Korea Credit Guarantee Fund (KODIT) in Korea.

As the coverage ratio (percentage of guaranteed loans to total loans) is usually less than 100 percent, a part of the credit risk is actually assumed by the participating financial institutions. This will encourage lenders to properly assess loans as they also need to cover some of the losses in case of loan default. In addition to that, the right fee structure needs to be in place to prevent moral hazard. For example, participating lenders with historically high default rates should be imposed certain penalty fees to remain in the ecosystem. Yet, such penalties will only work if the benefit of joining the programme outweighs the cost. One of the important measures for the programme to function is the claims process in the case of loan defaults. A long claims process may undermine confidence toward the programme.

One notable example is KODIT, the credit guarantee scheme developed in Korea, which scores the highest share of outstanding SME loans to total business loans at 82 percent in 2023. KODIT provides guarantees for start-ups, innovative firms and SMEs without collateral.[206] The scheme involves a series of interactions among three parties, that is, the guarantor (KODIT), the debtor (SMEs) and the creditor (banks, enterprises, etc). First, SMEs must submit a guarantee application in person at a KODIT branch. KODIT will carry out preliminary checks and gather the data required for credit review and guarantee evaluation. If the application is accepted, a letter of credit guarantee will be issued by KODIT for the applicants to obtain loans from banks or other financial institutions. If the debtor defaults, KODIT will be responsible for paying the guarantee obligation to financial institutions in place of the debtor.[207] In 2022, the total outstanding guarantees reached USD 66.6 billion accounting for approximately 9 percent of total SME loans in Korea.[208]

In addition to KODIT, Korea also has a credit guarantee programme specifically to provide support to tech SMEs with limited collateral to obtain credit. The programme falls under the Korea Technology Finance Corporation (KOTEC), which was established in 1989. KOTEC evaluates the potential of technologies owned by SMEs and provides guarantees based on technical valuation. The guarantee applies as long as the SME's technology projects are deemed viable through technology assessments.[209]

Besides Korea, Chinese Taipei also developed a similar scheme, that is, the Small and Medium Enterprise Credit Guarantee Fund (TSMEG). This entity aims to provide credit guarantees to SMEs that lack the collateral to obtain credit from financial institutions. The loans are extended by banks and TSMEG will share the banks' risks associated with their exposure to SMEs. In 2023, the total credit guarantee disbursed by TSMEG

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[205] de la Torre, Gozzi and Shmukler, "Credit Guarantees: FOGAPE's Experience in Chile."
[206] Korea IER.
[207] Korea Credit Guarantee Fund (KODIT), "Credit Guarantee," accessed 12 October 2024, https://www.kodit.co.kr/koditEng/cm/cntnts/cntntsView.do?mi=2770&cntntsId=11562#:~:text=Credit%20guarantee%20services%20involve%20a,in%20place%20of%20the%20debtor
[208] Total loans to SMEs in 2022 reached USD 778 billion. See KODIT, "2022 Annual Report: Korea Credit Guarantee Fund" (Daegu: KODIT, 2023), https://www.kodit.co.kr/koditEng/cm/cntnts/cntntsView.do?mi=2778&cntntsId=11484
[209] Korea IER.

reached TWD 1,716 billion (USD 53 billion)[210] or 16.3 percent of total loans extended to SMEs in Chinese Taipei.[211] In all, SME loans in Chinese Taipei accounted for 65.21 percent in 2023 of total business loans, among the highest in APEC economies.

Chile also has a credit guarantee scheme called FOGAPE. Established in 1982 and re-launched in 2000, FOGAPE provides partial guarantees to micro and small firms. FOGAPE has designed an incentive structure for lenders that limits transfer of risk while also keeping its operating cost low.[212] The maximum coverage rate is 80 percent for loans below USD 120,000 and 50 percent for loans above that. FOGAPE charges a commission of 1 to 2 percent of the credit to be guaranteed. The share of SME outstanding loans in Chile was 19.3 percent (2022).[213]

Similarly, the Philippines runs the MSME Credit Guarantee Program (MCGP) organised under the Philippine Guarantee Corporation.[214] The loan is extended by selected lenders with the maximum loan amount being PHP 50 million per borrower. Around 50 percent of the principal amount is guaranteed by the institution. This programme targets businesses affected by the COVID-19 pandemic. As of March 2022, the gross cumulative loans guaranteed by the MCGP reached PHP 2.95 billion (USD 51.5 million) with a total of 20,310 entrepreneurs as debtors.[215]

Another notable credit guarantee scheme called the SME Financing Guarantee Scheme (SFGS) was introduced by Hong Kong, China in 2012 to help SMEs obtaining commercial loans. As SMEs have been hard-hit by the COVID-19 pandemic and global economic slowdown, Hong Kong, China continued enhancing the SFGS, such as by offering higher ratios of government guarantee, from the initial 80 percent of the loan amount to 90 percent and 100 percent, raising the maximum loan amount per enterprise, and introducing a principal moratorium arrangement. Hong Kong, China has further extended the application period for the 80 percent and 90 percent guarantee products under the SFGS for two years to end March 2026. The SFGS has been well received by the business sector as reflected in the total approved loans of more than HKD 274 billion by end of February 2024, benefitting over 61,000 enterprises.[216]

Singapore also has similar initiative called the Enterprise Financing Scheme (EFS), a government scheme that helps local enterprises to access financing across all stages of growth.[217] The initiative covers seven areas aimed at supporting MSMEs' financing

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[210] Small and Medium Enterprise Credit Guarantee Fund (TSMEG), Chinese Taipei, "TSMEG 2023 Annual Report" (Taipei: TSMEG, 2024), https://www.smeg.org.tw/en/basic/?mode=detail&node=219
[211] Total loans to SMEs by domestic banks in 2022 reached TWD 9,134 billion. See Financial Services Commission (FSC), Chinese Taipei, "Outstanding SME Loans by Domestic Banks as of September 2022," 1 November 2022, https://www.banking.gov.tw/en/home.jsp?id=30&parentpath=0,3&mcustomize=multimessage_view.jsp&dataserno=202211010004&dtable=News
[212] de la Torre, Gozzi and Shmukler, "Credit Guarantees: FOGAPE's Experience in Chile."
[213] OECD, "Chile," in *Financing SMEs and Entrepreneurs 2024: An OECD Scoreboard* (Paris: OECD, 2024), https://doi.org/10.1787/d4725689-en
[214] The Philippine Guarantee Corporation is a government-owned and -controlled corporation attached to the Philippines Department of Finance.
[215] Department of Finance, Philippines, "PHILGUARANTEE Records P3-B in Guaranteed MSME Loans since Start of Pandemic," 4 April 2022, https://www.dof.gov.ph/philguarantee-records-p3-b-in-guaranteed-msme-loans-since-start-of-pandemic/
[216] Hong Kong, China IER.
[217] Singapore IER.

needs, namely, green loans, working capital loans, fixed asset loans, venture debt loans, trade loans, project loans, and mergers and acquisitions (M&A) loans. Under the EFS, EnterpriseSG (a government statutory board) shares the loan default risk with participating financial institutions, reducing barriers for MSMEs to access credit.

Table 4.3 summarises the five public credit guarantee schemes mentioned above. While the design may vary among economies, the contribution of these schemes to SME loans is sizeable in some APEC economies. Having been long established, Korea's KODIT and Chinese Taipei's TSMEG have impacted many SME businesses, although Hong Kong, China also managed to record strong participation with over 60,000 local SMEs benefitting from its programme. In other words, the provision of credit guarantee schemes may become an alternative solution to provide easy access to credit for SMEs.

Table 4.3. Summary of credit guarantee schemes in selected APEC economies

	Chile **Small Enterprise Guarantee Fund (FOGAPE)**	**Hong Kong, China** **SME Financing Guarantee Scheme (SFGS)**	**Korea** **Credit Guarantee Fund (KODIT)**	**The Philippines** **MSME Credit Guarantee Program (MCGP)**	**Chinese Taipei** **Small and Medium Enterprise Credit Guarantee Fund (TSMEG)**	**Singapore** **Enterprise Financing Scheme (EFS)**
Year established	1980	2011	1976	2020	1974	2019
Mechanism	FOGAPE selects the eligible FIs through auction. Borrowers then apply to the selected FIs.	Borrowers submit the guarantee applications and relevant supporting documents to the lending institutions. Lending institutions are required to exercise professional knowledge, judgement and due diligence in processing applications for loans to be guaranteed under the SFGS, and submit the verified applications with all the required documents to HKMCI for review and	Borrowers apply directly to a KODIT branch or online.	*N/A*	**(a) Indirect Guarantee**: Apply to contracted financial institutions FIs[1]. If eligible, the FI will forward the applications to TSMEG. **(b) Direct Guarantee**: Apply to TSMEG directly. **(c) Co-guarantee[2]:** Apply to donating institutions.	Enterprises apply for the loan to the participating FIs. Once the application is approved, the government, through EnterpriseSG, shares the risk of the loan with the participating FIs.[5] The risk-share varies based on loan type.

	Chile **Small Enterprise Guarantee Fund (FOGAPE)**	**Hong Kong, China** **SME Financing Guarantee Scheme (SFGS)**	**Korea** **Credit Guarantee Fund (KODIT)**	**The Philippines** **MSME Credit Guarantee Program (MCGP)**	**Chinese Taipei** **Small and Medium Enterprise Credit Guarantee Fund (TSMEG)**	**Singapore** **Enterprise Financing Scheme (EFS)**
		final approval.				
Parties performing credit assessment	*N/A*	HKMCI and lending institutions	KODIT	Philippine Guarantee Corporation	Selected FI	Participating FI
Guarantee fee[3]	Up to a maximum 2% per annum	**(a) 80% Guarantee Product:** up to 0.45% per annum of the loan amount. **(b) 90% Guarantee Product:** up to 0.36% per annum of the loan amount for borrowers with more than 3 years operation history in Hong Kong, China and up to 0.45% per annum of the loan amount for borrowers of 3 years or less operation history in Hong Kong, China. **(c) Special 100% Guarantee:** not applicable.	0.5–3.0% per annum[4]	1% per annum	**(a) For programmes supported by SME fund**: 0.375–1.375% per annum. **(b) For programmes supported by separate funds**: may vary based on program content.	*N/A*
Contribu-tion of guaranteed loans to total	*N/A*	8.9% of total SME loans (2024)	8.57% of total SME loans (2022)	0.6% of total MSME outstanding loans (2022)	16.3% of total SME loans (2023)	*N/A*
Number of SMEs joining the programme	*N/A*	More than 64,000 local SMEs (as at end of September 2024).	205,361 businesses (1976–2015)	20,310 entrepreneurs (2020–2022)	731,224 enterprises (1974–June 2024)	8,400 enterprises (2023)

FI=financial institution; HKMCI= HKMC Insurance; SME=small and medium enterprise
Note:
1. FIs that are eligible for the guarantee service are institutions that have signed the Entrustment Contract with TSMEG. The contracted FIs are supposed to make donations to TSMEG when they enter into the Entrustment Contract. Currently, TSMEG has signed contracts with 45 domestic and foreign FIs.
2. The co-guarantee programme is designed to cooperate with government agencies, local governments, public and private enterprises which donate funds.
3. Guarantee fee refers to the charges paid by guaranteed enterprises for guaranteeing liabilities.
4. Larger enterprises are charged a fee 0.5% higher than SMEs.
5. When defaults occur, the participating FIs are obligated to follow their standard commercial recovery procedure before submitting a claim to EnterpriseSG for the unrecovered amount.

Source: Authors' compilation.

Mandatory allocation of credit for MSMEs

An alternative approach employed to support improved access to credit for MSMEs is the mandatory allocation of credit. An example of such a structural reform is the Philippines' Magna Carta for Small Enterprises 1991 (RA 6977) and its subsequent implementing rules and regulations, mandating lending institutions to reserve at least 8 percent of their total loan portfolio for micro and small enterprises, and at least 2 percent for medium enterprises.[218]

While mandatory credit allocations have been shown to result in socially desirable outcomes,[219] their long-term effectiveness is uncertain. In the case of the Philippines, financing to MSMEs had initially experienced moderate growth of 24.3 percent between 1990 and 2010, averaging a 2.32 percent increase per year.[220] However, actual credit allocations declined in the past decade. For micro- and small-sized enterprises actual credit allocations have fallen below the mandated 8 percent since 2011 – even reaching an all-time low of 2 percent in 2021. Meanwhile, allocations for medium-sized enterprises remained above the 2 percent requirement, but has gradually declined from 8 percent in 2010 to 3 percent in 2021.[221]

Even when credit allocation had remained in compliance with the mandated requirements, a joint paper by the Ateneo Center for Research and Development (ACERD) and the Financial Executives Institute of the Philippines (FINEX) observes that the biggest challenge faced by MSMEs in the Philippines was not the supply of funds available for MSMEs, but rather the difficulty in accessing them.[222] The source of these challenges echoes those previously mentioned, such as stringent requirements for borrowing, the need for collateral, and high interest rates.[223] Therefore, while

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[218] In tandem, the Philippine Innovation Act 2019 (RA 11293) introduced the requirement for all banking institutions to set aside at least 4 percent of total loanable funds for innovation development credit.

[219] N.G. Mankiw, "The Allocation of Credit and Financial Collapse," *Quarterly Journal of Economics* 101, no. 3 (1986): 455–70; J.E. Stiglitz and A. Weiss, "Credit Rationing in Markets with Imperfect Information," *The American Economic Review* 71, no. 3 (1981): 393–410.

[220] N. Khor, R. Jacildo, and R. Tacneng, "Assessing Mandated Credit Programs: Case Study of the Magna Carta in the Philippines," Economics Working Paper 463, ADB, Manila, 2015, https://hdl.handle.net/11540/5270

[221] L. Dumlao, "Mandatory Loan Distribution and Government Guarantee in the Philippines," *Financial and Credit Activity Problems of Theory and Practice* 2, no. 55 (2024): 48–63. https://doi.org/10.55643/fcaptp.2.55.2024.4322

[222] Ateneo Center for Research and Development (ACERD) and the Financial Executives Institute of the Philippines (FINEX), "Making SMEs Work, Making SMEs Create Work: Job Creation through Small and Medium Enterprise Development" (ACERD and FINEX, 2006).

[223] R.M. Aldaba, "SMEs Access to Finance: Philippines," in *Small and Medium Enterprises (SMEs) Access to Finance in Selected East Asian Economies*, Research Project Report 2010-14, ed. C. Harvie, S. Oum, and D.A. Narjoko (Jakarta: ERIA, 2011).

improving the availability of credit is a crucial endeavour, it is first necessary to reduce the cost of financial services and improve the utilisation of credit for such measures to more effectively improve financial inclusion.

The mandatory credit allocation of 8 percent of a lending institution's total loan portfolio to micro and small enterprises and 2 percent to medium enterprises lapsed in June 2018. However, the BSP continues to monitor this through its Financial Inclusion Dashboard.

The Indonesian central bank also mandates banks to channel at least 30 percent of their total credit to MSMEs by 2024 under the Macroprudential Inclusive Financing Ratio (RPIM) policy. The RPIM policy facilitates MSME's access to financing and encourages banks to develop innovative financial products and services to serve MSMEs.[224]

The implementation of the RPIM policy may pose a challenge due to differentiation in banks' financing strategies. For example, banks that primarily focus on corporate business will likely struggle to meet the target. In addition, the effectiveness of this policy must also consider the development or growth of the MSME sector (demand side). A growing MSME sector can drive greater demand for credit.[225]

However, banks remain committed to meeting the targets set in the RPIM policy. As of December 2023, the total outstanding MSME credits of commercial banks reached IDR 1,460 trillion (USD 93.7 billion), a 19.3 percent growth since the policy was released in 2021.[226] As of 2022, total MSME loans reached 21 percent to total loans outstanding.[227]

Affordable access to credit through microfinance

Another area worth exploring concerning access to credit is microfinance policy. Microfinance has been a widely recognised as a tool to reduce poverty, thus supporting inclusive growth. It is largely developed in some APEC economies, but the business models may differ from one economy to another. In general, providing credit for the poor involves small loan amounts, resulting in disproportionately high overhead costs per unit of loan. This eventually leads to high lending rates. At the same time, risk assessment is also difficult to perform as the majority of the poor do not have proper accounting records. As a result, government intervention is necessary, which usually comes in the form of interest rate subsidies or credit guarantees.

Take the example of Viet Nam, which has promoted a microfinance initiative since 2000. In Viet Nam, the microfinance service is mainly rendered by government-owned and government-supported banks. The main provider of microfinance is the Viet Nam

[224] Indonesia IER.
[225] "Perbedaan Bisnis Bank dan Tantangan Peningkatan Rasio Kredit UMKM [Differences in Bank Business Models and the Challenges of Increasing the MSME Loan Ratio]," *CNBC Indonesia*, 22 September 2021, https://www.cnbcindonesia.com/market/20210922131714-19-278246/perbedaan-bisnis-banktantangan-peningkatan-rasio-kredit-umkm
[226] Central Bank of Indonesia, "Posisi Kredit Usaha Mikro Kecil daa Menengah Bank Umum (UMKM) [Micro, Small, and Medium Enterprise (MSME)'s Outstanding Loans in Commercial Banks]," accessed 24 October 2024, https://www.bi.go.id/SEKI/tabel/TABEL1_16.pdf
[227] ADB, "Asia SME Monitor 2023 – Table 1: MSME Definition," ADB, 2023, https://data.adb.org/media/11856/download

Bank for Social Policies (VBSP) and two other government-supported banks serving farmers and rural economic actors, namely AgriBank and Co-op Bank. Besides these institutions, there are also several non-government microfinance organisations (MFOs) that have become microfinance providers.[228] The interest rates charged to microfinance borrowers are subsidised by the government, and range from a quarter to half of prevailing commercial rates. The government has shown its support for the development of microfinance through Decree 28/2005/ND-CP on the organisation and operation of microfinance institutions in Viet Nam and Decision. 2195/QD-TTg on approving the proposal on the design and development of a microfinance system in Viet Nam up to 2020. However, a 2021 report by Bevacqua, Nguyen and Lambert highlights the sector's underperformance compared with its peers.[229] There are two reasons for such underperformance: limited access to funds and lack of a commercial mindset. This has led to a growing interest in developing a commercially viable microfinance sector.[230]

Another APEC economy implementing subsidised microfinance loans is Indonesia through KUR (*Kredit Usaha Rakyat* / People's Business Credit) which started in 2007. The programme provides micro businesses with loans up to a maximum of IDR 50 million (USD 3,118) with the interest rates charged to borrowers determined by the government. The difference between the lending rates set by the government and commercial rates will be paid by the government to the participating banks. Additionally, these loans are also partially guaranteed by the government through the bank's credit insurance. The government sets a maximum KUR disbursement target every year. KUR is disbursed through several banks in Indonesia, but mostly through Bank Rakyat Indonesia (BRI), a government-owned bank with long experience in micro loans. BRI has an extensive network of branches across Indonesia, including in remote areas. Prior to the establishment of KUR, BRI provided micro loans at commercial rates at up to three times the standard SME rates. The borrowers, who mainly reside in rural areas, take the loans as long as they have capacity to pay the monthly credit instalment. For them, the interest rates charged by BRI are much better than the interest charged by loan sharks. As of December 2023, the KUR programme has disbursed loans worth IDR 255.8 trillion (USD 15.9 million) to 4.57 million debtors.[231]

Besides KUR, Indonesia also has the Ultra Micro Lending Programme, UMi, which targets those who are not covered by banks under the KUR programme. UMi is run under Indonesia's Government Investment Center (PIP). UMi is extended by non-bank financial institutions with a maximum loan per borrower set at IDR 10 million (USD 623). Besides loans, UMi also provides training and assistance. For the period 2017–2023, the number of debtors reached 9.48 million in 509 districts/cities in Indonesia with a total disbursed loan amount of IDR 37.31 trillion (USD 2.3 million).

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[228] R. Bevacqua, D. Nguyen, and D. Lambert, "Reimagining Viet Nam's Microfinance Sector Recommendations for Institutional and Legal Reforms," Southeast Asia Working Paper 20, ADB, Manila, 2021, https://www.adb.org/sites/default/files/publication/752541/sewp-020-reimagining-viet-nam-microfinance-sector.pdf

[229] Bevacqua, Nguyen and Lambert, "Reimagining Viet Nam's Microfinance Sector."

[230] CGAP, "Microfinance in Vietnam – Policy Assessment," CGAP, 2009, https://www.findevgateway.org/sites/default/files/publications/files/mfg-en-paper-microfinance-in-vietnam-policy-assessment-2009.pdf

[231] M. Suhayati, "Penurunan Penyaluran Kredit Usaha Rakyat Tahun 2023 [Decline in People's Business Credit (KUR) Distribution in 2023]," Center for Research, Parliamentary Expertise Agency, Indonesian House of Representatives, Jakarta, 2024, https://berkas.dpr.go.id/pusaka/files/isu_sepekan/Isu%20Sepekan---III-PUSLIT-Januari-2024-241.pdf

Another interesting policy related to microfinance was developed by Thailand through The Thailand Village Fund. Established in 2001, this initiative aligns with the overarching goal of the Thai government to reduce poverty and stimulate economic growth in rural areas.[232] The Village Fund provides microloans to villagers for various purposes, including agricultural activities, small businesses and household expenses. The microloans enable people who may not have access to traditional banking services to invest in income-generating activities for their livelihoods. Since 2001, Village Fund Committees have been established in 92 percent of the villages and urban communities in Thailand. By May 2005, around 99 percent of all villages had a village fund in operation with initial working capital provided by the government. The Thailand Village Fund is essentially a decentralised and locally run fund. The local Village Fund committees have discretion in setting lending rates, maximum loan amounts, and loan terms.[233]

Peru has a somewhat different story concerning microfinance development. In mid 2009, Peru had 221 regulated and unregulated microfinance lenders. The average growth of this lending has been estimated to reach 19 percent annually over two decades. Peru is considered to have the best regulatory and legal environment for microfinance in Latin America, based on ratings by the Economist Intelligence Unit.[234] Despite its successful operation, microlending in Peru has been largely concentrated in urban areas while those living in rural areas, a quarter of the economy's population, remain unserved. Local microfinance institutions lack knowledge about agricultural lending, which make them reluctant to lend to rural borrowers.[235]

To address this issue, the Peruvian government has developed initiatives for the rural sector through Agrobanco, the government-run agriculture bank, whose main objective is to promote and facilitate credit being extended to the agricultural sector.[236] The Peruvian government has injected PEN 100 million (USD 26.9 million) into the Fund for Financial Inclusion of Small Agricultural Producers (FIFPPA) to reduce lending rates, making credit from Agrobanco more affordable for small agricultural producers. The agricultural sector employs more than a third of Peruvians living in rural areas, and many of the small-scale farmers need support to gain access to affordable credit.[237] Similarly, Fondo Agroperú seeks to provide guarantees to cover credit risks and direct financing to small farmers. Through this fund, as of 21 July 2024, PEN 1,842 million has been disbursed at an average interest rate of 3.5 percent for a total of 164,890 loans to small farmers.

Papua New Guinea, through the Bank of Papua New Guinea, also promotes initiatives to address financial exclusion through the Microfinance Expansion Programme.

[232] Thailand IER.
[233] J. Boonperm et al., "Appraising the Thailand Village Fund," Policy Research Working Paper 5998, 2012.
[234] L. Conger, P. Inga, and R. Webb, *The Mustard Tree. A History of Microfinance in Peru* (Lima: Universidad de San Martin de Porres, 2009).
[235] M. Spahr, "Microfinance: Making Microcredit Accessible for the Poor in Rural Peru," IFC, 2013, https://documents.worldbank.org/en/publication/documents-reports/documentdetail/334101468284113445/microfinance-making-microcredit-accessible-for-the-poor-in-rural-peru
[236] Peru IER.
[237] eco.business Fund, "eco.business Fund Supports Peruvian Small-scale farmers with a USD 20 Million Loan," 21 December 2023, https://www.ecobusiness.fund/en/press/ecobusiness-fund-supports-peruvian-small-scale-farmers-with-a-usd-20-million-loan

Supported by technical assistance from the Asian Development Bank (ADB), the objective of this programme is to expand physical access to financial services across the vast rural population of Papua New Guinea. The Microfinance Expansion Programme was rolled out under four core work streams: (1) streamlining regulations; (2) investing in financial infrastructure; (3) promoting financial literacy; and (4) expanding access to modern banking technologies. This resulted in the creation and establishment of over five microfinance companies and micro banks with branches throughout Papua New Guinea.[238]

The success of a microfinance business model depends on the characteristics of each economy. Approximately 47 percent of the population in Thailand live in rural areas,[239] therefore initiatives to empower people in rural areas are crucial to support economic development. Another challenge related to microfinance is possible overleverage or misuse of the borrowing. This requires initiatives to boost financial literacy to ensure the sustainability of microfinance operations.

Innovative lending services through fintech

Rapid innovations in technology have affected the financial sector. The growth of fintech services has disrupted the traditional financial services sector by offering more affordable and convenient financial services to customers.[240] Consequently, regulatory reforms have been promoted across APEC economies to spur the growth of fintech services, including the establishment of regulatory sandboxes.

A regulatory sandbox generally refers to a regulatory tool that allows a fintech applicant to test a technological innovation to deliver financial products and services within a controlled environment for a certain period of time. After successful testing and exiting from the sandbox, the fintech applicant then needs to comply with the prevailing regulatory requirements.[241] Several APEC economies have implemented regulatory sandboxes, including Brunei Darussalam (2017); Indonesia (2017); Korea (2016); the Philippines (2022); and Singapore (2016);. The result has been significant for economies such as Korea, which successfully launched 180 innovative financial services as of March 2024. Brunei Darussalam introduced one fintech company called JanaKapital, offering Islamic peer-to-peer lending under the Brunei Darussalam Central Bank (BDCB) Fintech Regulatory Sandbox.[242]

Fintech services can be classified into four broad segments: (1) payment services; (2) digital banking and alternative finance, including digital banks and alternative financial services like digital lending; (3) WealthTech, such as robo-advisors, trading platforms, etc; and (4) other innovations, such as InsurTech, RegTech, etc.[243] Peer-to-peer (P2P) lending is one of the most popular types of digital lending services, connecting lenders directly to borrowers through a website or app. P2P lending has become an attractive

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[238] Papua New Guinea – Case Study.
[239] The World Bank's World Development Indicators.
[240] I. Bhattacharjee et al., "The Rise of Fintech: Disrupting Traditional Financial Services," *Educational Administration: Theory and Practice* 30, no. 4 (2024): 89–97, https://doi.org/10.53555/kuey.v30i4.1408
[241] C.M. Leong, L.M. Yap, and Y.L. Shan, "Fintech in Singapore Today – A Look at the Fintech Regulatory Environment, and What You Need to Know," Withersworldwide, 3 January 2023, https://www.withersworldwide.com/en-gb/insight/read/fintech-today-a-look-at-fintech-regulatory-environment-and-what-you-need-to-know
[242] Brunei Darussalam IER.
[243] APEC, "APEC FinTech Scoping Study."

tool for SMEs as well as individuals to access credit due to its simplicity (unsecured or no collateral required) and fast credit approval processes. For borrowers, P2P lending provides alternative financing, while for lenders, P2P lending can offer higher returns, making it a good investment. These reasons have supported the rapid development of this sector.

Among APEC economies, the United States has the largest number of P2P platforms. From the beginning, the US has applied strict regulations for P2P lending firms, although these were not formulated through a regulatory sandbox. The US Securities and Exchange Commission (SEC) oversees the investment side of the platforms (i.e., the lenders) while the Consumer Financial Protection Bureau and the Federal Trade Commission oversee the borrowing side (i.e., borrowers). The SEC prohibits P2P platforms from crediting the borrower's loan directly to the lender. Instead, the P2P platform requests a bank to create a loan to the borrower from the platform. The platform then issues a debt security to the lender.[244] On the one hand, strict regulation is important to protect the sector's sustainability; on the other hand, it may discourage new entrants who can also contribute to the economy. In the US, the majority of P2P loans are extended to individual consumers with only a small fraction is extended to support businesses.[245]

Besides the United States, P2P platforms have grown rapidly in other APEC economies, such as Korea and Indonesia. Prior to the issuance of The Act on the Online Investment-linked Finance and Protection of Users legislation in October 2019, P2P lending in Korea has largely been unregulated. This led to problems, including fraud and high delinquency rates.[246] Following the legislation, P2P lending firms must be registered and are required to have a minimum paid-in capital of KRW 500 million. This is intended to rein in fraudulent practices and protect customers.[247]

Indonesia has also developed policy initiatives to promote the growth of innovative financial/lending services, supported by the Financial Service Authority (OJK) regulation OJK Regulation 3 of 2024 concerning the implementation of financial sector technology innovation. According to PwC,[248] 74 percent of MSMEs had no access to credit in 2018. Fintech lending can become an enabler for better access to financing for MSMEs. Based on the 2024 survey, P2P lending users reached 8.86 million people (or 4.2 percent of the total population aged over 15). Despite this strong growth, illegal P2P lending has also increased. In 2023, OJK reported that it terminated 6,680 illegal online loans and personal loans from illegal P2P lending schemes. Customers are able to file complaints with OJK regarding illegal P2P lending schemes including, among others,

[244] N. Nemoto, D. Storey, and B. Huang, "Optimal Regulation of P2P Lending for Small and Medium-sized Enterprises," Working Paper 912, ADBI, Tokyo, 2019, https://www.adb.org/sites/default/files/publication/478611/adbi-wp912.pdf
[245] Nemoto, Storey, and Huang, "Optimal Regulation of P2P Lending."
[246] "South Korea Passes New Law on P2P Lending," *Asian Banking & Finance*, 2020, https://asianbankingandfinance.net/lending-credit/news/south-korea-passes-new-law-p2p-lending
[247] *Asian Banking & Finance*, "South Korea Passes New Law on P2P Lending."
[248] PwC, "Indonesia's Fintech Lending: Driving Economic Growth through Financial Inclusion," (Jakarta: PwC Indonesia, 2019), https://www.pwc.com/id/en/industry-sectors/financial-services/fintech-lending.html#:~:text=Indonesia's%20Fintech%20Lending%20industry%20has,the%20first%20quarter%20of%202019

complaints about loan disbursements without customers' consent, threats of personal data disclosure (doxing) or threatening collection calls.[249]

Singapore also shows rapid development in P2P lending with the largest exposure at SGD 83.82 million, becoming home to large P2P lending platforms. Singapore has the leading SME digital financing platform in Southeast Asia called Funding Societies, which connects startups with individual and institutional lenders. Through its smooth online process and fast disbursement, it has become the preferred option for startups searching for working capital loans, invoice financing or business term loans.[250]

Without strong regulatory support, the P2P sector is prone to fraudulent practices. In November 2020, the China Banking and Insurance Regulatory Commission (CBRIC) announced that P2P platforms are no longer allowed in China.[251] With burgeoning bad practices, many P2P platforms collapsed in China. China then transformed its P2P lending market in 2015, with the People's Bank of China (PBOC) issuing the Guidelines for Promoting the Healthy Development of Internet Finance. Yet, the number of troubled platforms has continued to rise. Huang highlights that the main reason for the collapses is the changing role of such platforms, from being an information intermediary to offering principal guarantee terms, thus assuming the credit risk.[252]

While P2P lending can provide wider access to credit, there needs to be proper regulation in place to prevent and address fraud cases and promote transparency in the sector. Regulatory readiness ultimately affects how P2P lending develops in an economy. Striking the right balance between fostering growth and managing risk is important to secure the sustainability of the sector.

ADDRESSING INCLUSION CHALLENGES AND PROMOTING FINANCIAL LITERACY

Improving access for women and others with untapped economic potential

Concerted efforts to support women's access to the financial system

While access to financial services has improved due to digitalisation, access to capital remains a challenge for women. Manji finds that women in the developing world might be unfairly categorised as risky borrowers due to their lack of credit history or their predominance in the informal sectors of the economy.[253] Should they be able to obtain

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[249] Financial Services Authority, Indonesia (OJK), Indonesia, "Satgas Pasti Blokir 22 Entitas Penawaran Investasi Kegiatan Keuangan Ilegal Serta 625 Pinjol Ilegal dan Pinpri [The Investment Alert Task Force (Satgas) Blocks 22 Entities Offering Illegal Investment and Financial Activities, as well as 625 Illegal Online Lending Platforms and Illegal Personal Loan Providers]," 30 December 2023, https://ojk.go.id/id/berita-dan-kegiatan/info-terkini/Pages/Satgas-Pasti-Blokir-22-Entitas-Penawaran-Investasi-Kegiatan-Keuangan-Ilegal-Serta-625-Pinjol-Ilegal-dan-Pinpri.aspx

[250] Funding Societies, "Funding Societies: Our Progress," accessed 12 October 2024, https://fundingsocieties.com/progress

[251] Y. Huang, "Why Did the Peer-to-Peer Lending Market Fail in China?" Thought Leadership Brief 61, HKUST Institute for Emerging Market Studies (IEMS), Kowloon, 2022, https://iems.ust.hk/assets/publications/thought-leadership-briefs/2022/hkustiems-huang-why-did-the-peer-to-peer-lending-market-fail-in-china-tlb61.pdf

[252] Huang, "Why Did the Peer-to-Peer Lending Market Fail in China?"

[253] A. Manji, "Eliminating Poverty? 'Financial Inclusion', Access to Land, and Gender Equality in International Development," *Modern Law Review* 73, no. 6 (2010): 985–1004; UN, "Millennium Development Goals and Beyond 2015," accessed 12 October 2024, http://www.un.org/millenniumgoals/

credit, they would receive it on unfavourable terms. Demirguc-Kunt et al. find that women are more likely to be excluded from the formal financial sector in economies with laws and norms that discriminate against women.[254] When women get a smaller share of inheritance, for example, it makes it more difficult for them to obtain collateral-based credit because they would tend to have fewer assets under their own name compared to men.

APEC economies have developed various programmes to address the gender inequality in the financial system, promoting initiatives that support women's access to financial services, access to capital, or capacity building. In Papua New Guinea, for example, women are 29 percent less likely than men to have access to financial services, which is attributed to their poor financial management and digital skills. Papua New Guinea's Financial Inclusion Strategy 2023–2027 has an overall objective to reach 2 million unbanked people by 2027, 50 percent of whom will be women. Women's Micro Bank, branded as Mama Bank, is the only licensed financial institution in Papua New Guinea with an explicit focus on women. It developed a tailored savings product named Palm Saver that blends contractual savings and investment for regular income earners. Customers would commit to a fixed amount being deducted from their income by authorised payment providers, with the amount then deposited into their account at Mama Bank. In addition, business development training and financial literacy training are also included in the programme.

Gender digital inequality is one of the barriers to financial inclusion in Mexico. In 2020, 52.9 percent of Mexican men have internet access compared to 48.4 percent of women. In 2023, the government of Mexico, in partnership with Google, launched the joint programme 'Women, Strength of the Southeast' (*Mujeres, Fuerza del Sureste*), extending tailored support for women-led microbusinesses in five states of the Southeastern region of Mexico to promote their access to loans for the first time using digital devices and under preferrable conditions, such as an interest rate of 5 percentage points below the market rate, without any collateral. The goal of the programme is for 9,300 women to have access to finance and 2,700 women to benefit from a training scheme by the end of 2025. Furthermore, the government of Mexico has implemented the Women in Digital Transformation strategy since 2020 to boost women's participation in the digital market, providing virtual training for women microentrepreneurs and entrepreneurs on topics related to digital skills, business administration, financial education, migration to e-commerce platforms, empowerment, leadership, and autonomy of women. The programme has been successfully run for seven rounds and impacted more than 2,500 women graduates.

New Zealand recognises that financial inclusion is a barrier to women's economic empowerment and women's access to trade and investment. For instance, the free trade agreement between New Zealand and the United Kingdom (UK) includes a chapter on trade and gender equality. Incorporated within this chapter is a commitment to take steps toward increasing women's participation in trade and investment, including by identifying the range of barriers that limit opportunities for women in the economy. A report on New Zealand Women in Export Trade has identified access to capital as a

[254] D. Singer, A. Demirguc-Kunt, and L. Klapper, "Financial Inclusion and Legal Discrimination against Women: Evidence from Developing Countries," Policy Research Working Paper 6416, World Bank, Washington DC, 2013, http://econ.worldbank.org

barrier for women in export for various reasons, among others, not having the right networks to access finance and limited information for SMEs on finance. To reduce these barriers, New Zealand has committed to cooperate on promoting financial inclusion and literacy, access to relevant financing and financial assistance in its free trade agreements with the European Union (EU) and the UK. To supporting women in raising capital, New Zealand Trade and Enterprise hosts several annual investment showcases each year, including the InvestHER showcase presented in partnership with ArcAngels, a fund that was established specifically to invest in female entrepreneurs.

Another example of an initiative that promotes network access for women is the Women's Business Centres (WBCs) in the US. In 2023, the Small Business Administration launched the largest expansion of WBCs in 30 years to support the centre's role in serving women-owned businesses and entrepreneurs through one-on-one counselling, training, networking, workshops, technical assistance and mentoring on business development topics, including financial management and access to finance.

Advancing women's equality in Canada has the potential to add 0.6 percent to annual GDP growth,[255] emphasising the huge economic opportunity implied by improving financial inclusion for women. The Financial Consumer Agency of Canada (FCAC) tested the effectiveness of introducing financial literacy modules designed for children and youth through a gamified platform using pre-test and post-test design. With the goal to boost financial knowledge and confidence, particularly for girls and young women, the interventions were successful in helping reduce the gender inequality. Similar interventions were designed and tested for young women aged 16–25, using a randomised, controlled trial design and longitudinal surveys to assess the impact on financial confidence and behaviours. These experiments highlight the importance of just-in-time information to promote positive outcomes and facilitate financial inclusion of diverse consumer groups. It is important to assess consumers' needs and pain points, to meet consumers where they are and to measure the outcomes of interventions to understand what works and what does not.

Supporting Indigenous Peoples to thrive financially

The accessibility of financial services and banking solutions for Indigenous Peoples is profoundly affected by systemic barriers. For example, restrictions on collateralising reserve land have hindered access to capital for Indigenous Peoples. To overcome this unique barrier, APEC economies have developed strategies and programmes to improve accessibility for these communities.

Closing the Gap is Australia's overarching policy framework to improve the lives of Indigenous communities, with two out of its 19 economy-wide socioeconomic targets directly related to financial inclusion. Additionally, the government of Australia introduced the Indigenous Consumer Strategy in 2005 and Indigenous Financial Services Framework in 2023 to build a better understanding of the experiences of Indigenous Peoples with the financial system and improve market outcomes for Indigenous consumers. In supporting small businesses, Indigenous Business Australia (IBA) offers the Business Loan Package to assist with loans ranging from AUD 10,000 to AUD 5 million for working capital requirement and capital expenditure. IBA also

[255] McKinsey Global Institute, "The Power of Parity: Advancing Women's Equality in Canada" (McKinsey Global Institute, 2017).

created a new startup package (IBA Start-Up Finance Package), comprising of a blend of grants and unsecured loans, for Aboriginal and Torres Strait Islander entrepreneurs to help make their business ideas a reality. According to survey results, programmes provided by IBA have been able to assist Indigenous business owners in expanding their business while enhancing their ability to manage financial risks and make sound financial decisions.

Access to capital has been a longstanding, complex problem for the Māori, the Indigenous Peoples of New Zealand. In late 2022, the Reserve Bank of New Zealand released an issues paper on Māori Access to Capital, which triggered a joint work programme between the government, Iwi and the Reserve Bank of New Zealand. Jointly and individually, these organisations have been working toward several tailored programmes to reduce unnecessary barriers affecting Māori access to capital. The Reserve Bank of New Zealand has been working with the banking sector to improve the quality of data collected on Māori firms and it has supported banks to review their credit risk assessments for lending on whenua Māori (Māori-owned land or property). The issues paper on access to capital was a signal that has encouraged the banking sector to improve their Māori cultural capability, which will hopefully improve the suitability of financial products and services for Indigenous communities. In addition, the government has introduced programmes specifically to provide support for Māori agribusinesses and landowners, including programmes to support one-on-one advice, agribusiness workforce development and innovation, as well as responses to climate change challenges, to improve the productivity and financial capability of the Māori.

In the US, the government created the Access to Capital Clearinghouse as a single source of reliable reference for Tribes when researching federal funding opportunities. The platform hosts federal funding opportunities from over 15 federal agencies and 60 offices, comprising a diverse range of grants, loans, loan guarantees, tax credits, cost sharing, technical assistance, vouchers, and more.

Indigenous Peoples make up 5 percent of the Canadian population, yet they account for around 2.2 percent of GDP.[256] FCAC chairs the Financial Literacy Working Group for Indigenous Peoples, which was established to assist FCAC in responding to the financial literacy needs of Indigenous Peoples and includes leaders from a broad representation of Indigenous and non-Indigenous organisations.

Improving inclusivity for people with disabilities and the elderly

For people with disabilities, accessing financial services that are largely delivered in physical settings can be discouraging. To improve financial accessibility for people with disabilities, governments have introduced legal frameworks to implement inclusive services and infrastructure for financial institutions to serve customers of all abilities. The trade association for Australia’s banking industry has developed the Accessibility and Inclusion Principles for Banking Services to promote equitable access, usability and inclusivity for customers with disability and their careers. It provides guidance for Australian banks to ensure that their digital and physical offerings are designed to accommodate customers with disabilities. Similarly, the government of Japan promotes further efforts by financial institutions and trade associations to remove

[256] A. Chernoff and C. Cheung, “An Overview of Indigenous Economies within Canada,” Staff Discussion Paper 2023-25, Bank of Canada, Ottawa, 2023.

social barriers in light of the amended Act for Eliminating Discrimination against Persons with Disabilities.

Starting from 2017, the Bank of Russia has issued a series of recommendations for credit and non-credit financial institutions related to the creation of a barrier-free financial environment for people with disabilities, people with limited mobility and the elderly population, including recommendations on the accessibility of remote servicing channels. These efforts include developing facilities friendly to people with disabilities, holding seminars for frontline employees about how to write and read on behalf of people with disabilities, and utilising telephone relay services.

Tailored products and services play important roles in improving accessibility for people with disabilities. The government of Thailand introduced the Department of Empowerment of Person with Disabilities (DEP) Fund, offering loans for self-employment and business expansion up to a maximum of THB 60,000 and THB 1 million respectively with repayment schedules extending to five years without interest. In reaching out to customers with disabilities, customised content delivery should be taken into consideration. For example, the Central Bank of the Russian Federation provides a special section in the education website, Financial Culture.[257] The section is accessible to blind and visually impaired people (through a series of audio lectures) and for deaf and hard of hearing people (through video materials in sign language). It also contains materials in an easy-for-reading format for people with mental disabilities. About 1 million users visit the website every month on average. Another practice can be found in Chile, where BancoEstado made adjustments to their network of 600 ATMs economy-wide to include machines with an audible system that provides voice-based instructions (‘Audible ATM’), giving blind people greater security and autonomy to carry out their transactions.

The population of people aged 60 years and over was 1 billion in 2020, and it is expected to increase to 1.4 billion in 2030. Representing a big and increasing customer base, the elderly segment has considerable economic potential for financial services. In responding to unique needs and challenges faced by the elderly, APEC economies have introduced senior-friendly financial products and services to promote financial inclusion. The government of Hong Kong, China, for instance, has issued nine batches of Silver Bonds from 2016 to 2024. The Silver Bond features coupon payment linked to average annual inflation with downside protection of a minimum interest rate. Since its 2021 issuance, the eligible age for subscription has been lowered from 65 years or above to 60 or above. As Silver Bonds were warmly welcomed by the public,[258] the government of Hong Kong, China further issued HKD 55 billion of these bonds in 2024. Another example is from Japan where the government established a guardianship system to assist the elderly in managing their financial assets. The Financial Services Agency (FSA) actively engages in dialogues with financial institutions and trade associations to promote Guardianship Support Deposits and Guardianship Support Trusts, to improve customer convenience and prevent issues when family members or other guardians perform transactions on behalf of elderly customers with reduced cognitive abilities.

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[257] The Russian Federation, “Financial Culture” (in Russian), accessed 12 October 2024, https://fincult.info

[258] The retail bonds (iBonds, Silver Bonds and retail green bonds) were well received by the public. The highest number of subscribers for such issuances was over 700,000, representing about a tenth of the population of Hong Kong, China.

Providing alternative financing for MSMEs

Despite their strong contribution to economic growth and employment, MSMEs continue to face challenges in accessing financing options to grow their business. Several issues stand out, such as how lenders perceive these small businesses as risky borrowers engaged in less-than-desirable organisational practices, and how such firms face regulatory bottlenecks and financial structures in Asia and the Pacific, which hinder their access to finance.[259] Micro and small entrepreneurs, in particular, face barriers to financial inclusion due to lack of collateral, credit history and financial literacy, along with regulatory hurdles and cultural preference for informal lending. These limit their access to formal financial services, hindering their growth and perpetuating cycles of poverty. To address these problems, there is a need to provide greater access to the financial system, to simplify regulatory processes and to design tailored financial products to meet the specific needs of MSMEs. In most economies where banks dominate the financial ecosystem, other avenues of lending, such as nonbanking financial institutions, venture capital or capital markets, may become an alternative solution for MSME financing.

Equity crowdfunding for small businesses

Equity crowdfunding is a financial service where startups and small businesses may raise equity funds, generally from a large number of investors that invest small amounts of money in exchange for a portion of the business and future profits. Likewise, debt crowdfunding raises funds from a large number of people, but instead of equity they receive the principal with interest at a certain date. The main difference in the two types of crowdfunding is the sharing of risk: equity crowdfunding shares risk across a large pool of investors, while risk is mainly borne by the business owner in the case of debt crowdfunding.

While both forms of crowdfunding can have benefits for startups and small businesses depending on their business model, risk appetite and cash flow predictability, it has been observed that equity crowdfunding can complement or substitute for seed funding, particularly for entrepreneurial ventures and startups that have difficulties raising capital from traditional sources (bank loans, venture capital, business angels, public programmes) because they are too innovative to be understood, too complex, too risky or simply because their business plans are poorly presented.[260] A study of small firms operating in the UK by Eldridge, Nisar and Torchia find that equity crowdfunding has a positive impact on the growth opportunity as well as performance of small firms. [261]

To boost the development of equity crowdfunding, many APEC economies have amended their existing regulatory frameworks on investment and financial markets. In the US, the 2012 Jump-start Our Business Start-ups (JOBS) Act provides explicit legal support to investment crowdfunding, defining the rules that apply to different types of

[259] ADB, "Financing Small and Medium-Sized Enterprises in Asia and the Pacific: Credit Guarantee Schemes" (Manila: ADB, 2022), http://dx.doi.org/10.22617/TCS220030-2
[260] J. Hemer, "Snapshot on Crowdfunding," Working Papers "Firms and Region" R2/2011, Fraunhofer Institute for Systems and Innovation Research (ISI), 2011.
[261] D. Eldridge, T.M. Nisar, and M. Torchia, "What Impact Does Equity Crowdfunding Have on SME Innovation and Growth? An Empirical Study," *Small Business Economics* 56, no. 1 (2021): 105–20, https://doi.org/10.1007/s11187-019-00210-4

investors (e.g., income profile and accreditation status) and companies that are raising funds (e.g., number of shareholders, fundraising amount).[262] The government of Canada, through the Instrument 45-110 Start-up Crowdfunding Registration and Prospectus Exemptions, harmonised new rules to expand the ability of small businesses and startups to use securities to gain access to capital. The new rules replace the local startup crowdfunding regulations in force on a province-by-province basis.

In 2014, New Zealand through the Financial Market Conduct Regulations set out the licensing requirements for prospective equity crowdfunding and P2P lending platform operators. Throughout 2021–2022, New Zealand recorded six licensed providers of crowdfunding and eight licensed providers of P2P lending, successfully raising NZD 47 million (USD 28.7 million) crowdfunding from investors and a total value of outstanding loans of NZD 682.4 million (USD 417.2 million).[263]

In Australia, the Corporations Amendment (Crowd-sourced Funding) Act 2017 is the regulatory basis for crowdfunding. The Act reduced the regulatory requirements for public fundraising while maintaining investor protection measures. This regulation has supported fundraising of innovative startups in Australia. One of the first campaigns was Australia's first neobank, Xinja, which successfully raised AUD 2.4 million through the crowdfunding platform Equitise. In April 2018, solar power retailer DC Power Co raised AUD 2.2 million via the OnMarket crowdfunding platform, attracting more than 15,000 investors, making it the world's largest equity crowdfunding offer by number of investors.[264]

Other practices found across APEC economies include the establishment of dedicated stock exchanges to provide SMEs with a platform to facilitate raising of capital at a lower paid-up capital than in the regular stock exchange. The government of Thailand, for example, established Market for Alternative Investment (MAI) Exchange in 1998 as a stock exchange for smaller firms, separate from the Stock Exchange of Thailand. In 2023, there were 212 companies listed on MAI. Similarly, the GEM is a market segment or second board of the Hong Kong Stock Exchange that caters to SMEs. GEM offers lower eligibility criteria as compared to the Main Board, making it an attractive avenue to access public capital for SMEs with high growth potential. Since its establishment in 1999–2023, GEM has successfully raised around USD 28.2 billion for SMEs through initial public offerings (IPOs) and secondary public offerings. GEM is considered one of the world's most successful examples of SME stock markets.[265]

Leveraging movable assets and future revenues for fundraising

While immovable assets, such as properties, are widely accepted as collateral for traditional loans, the use of movable assets may become an alternative collateral or underlying asset for MSME loans. As part of the implementation of the strategic thrusts

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[262] OECD, "Crowdfunding for SMEs," in *New Approaches to SME and Entrepreneurship Financing: Broadening the Range of Instruments* (Paris: OECD, 2015), 81–92, https://doi.org/10.1787/9789264240957-8-en

[263] Financial Markets Authority (FMA), New Zealand, "Peer-to-Peer Lending and Crowdfunding: Sector Snapshot," 2022, https://www.fma.govt.nz/assets/Reports/Crowdfunding-and-Peer-to-Peer-Report.pdf

[264] Australian Institute of Company Directors, "How Crowdfunding Can Change the Future for SMEs," 1 May 2019, https://www.aicd.com.au/finance-governance/raising-capital/crowdfunding/how-crowdfunding-can-change-the-future-for-smes.html

[265] T. Nguyen et al., "Growth Enterprise Market in Hong Kong: Efficiency Evolution and Long Memory in Return and Volatility," *Journal of Asian Business and Economic Studies* 27, no. 1 (2020): 19–34, https://doi.org/10.1108/JABES-01-2019-0009

of the Strategy for Financial Inclusion 2022–2028, the central bank of the Philippines promotes movable asset financing as an innovative financing approach to enable banks to channel their resources to unserved and underserved market segments, to whom most financial service providers are unable to cater by using traditional lending approaches. Leveraging on movable assets – such as receivables, warehouse receipts, inventory flows and supply chain relationships – is expected to boost lending to MSMEs and agriculture as the targeted segments/sectors. It covers innovative financing approaches such as supply chain financing and warehouse receipts financing.

Factoring is also a growing source of external financing for corporations and SMEs. What is unique about factoring is that the credit provided by a lender is explicitly linked to the value of an accounts receivable (usually in the form of invoices) and not the debtor's overall creditworthiness. Factoring may be particularly useful in economies with weak judicial enforcement and imperfect records of upholding seniority claims, because receivables are sold, rather than collateralised, and factored receivables are not part of the estate of a bankrupt SME. [266]

Governments across APEC economies have introduced factoring as alternative financing for MSMEs. As part of the implementation of measures to improve levels of financial inclusion, the government of Peru, for example, has established mechanisms to financially include different sectors, such as SMEs, under the MYPE Business Promotion Programme – IMPULSO MYPERU. Additional measures to continue promoting financing alternatives for MSMEs are also implemented through dissemination and training on financial instruments such as factoring at the domestic level.

In addition to a legal framework, reliable and accessible credit information is a crucial enabling condition to boost factoring. Many emerging economies have established a central registry for accounts receivable, enabling potential lenders and other interested parties, especially factors, to be notified of existing security interests and to assist in establishing the rank of creditors over the security interest. In 2007, China, for example, created an economy-wide registry with an internet-based filing system, easily accessible online and centralising all information into one platform, making it one of the best practices in the industry. Brunei Darussalam and Malaysia have proposed a legal framework for a collateral registry, which is accessible to the public in real time, where a creditor can claim movable property used as collateral. Under this framework, a unified electronic collateral registry may also support the factoring industry by ensuring transparency.[267]

Supporting financial literacy

To support sustainable demand for financial products and services, initiatives in improving financial literacy are required, especially for underbanked communities. Hasan, Le and Hoque show that financial literacy is considered a key factor to

[266] L. Klapper, "The Role of Factoring for Financing Small and Medium Enterprises," Policy Research Working Paper 3593, World Bank, Washington, DC, 2005, https://documents1.worldbank.org/curated/ar/844291468321884034/pdf/wps3593.pdf

[267] OECD, "Alternative Financing Instruments for ASEAN SMEs" (OECD, 2020), https://asean.org/wp-content/uploads/2012/05/Alternative-Financing-Instruments-for-ASEAN-SMEs.pdf

enhancing financial inclusion.[268] People who have adequate knowledge of different financial services have a greater possibility of obtaining and expanding their financial access. For rural and low-income people, in particular, who have limited awareness about banking services and activities, better financial knowledge provides them with opportunities to be included in formal financial services.

Financial mis-selling/fraud/abuse and the high complexity of financial services constitute the most important and unequivocal drivers for the development of financial education policies and activities in the vast majority of APEC economies. Personal/household over-indebtedness is also perceived as being among the most important motives. [269]For these reasons, policies and programmes to support financial literacy play an important role in scaffolding initiatives on financial inclusion.

Regulatory frameworks and structures to support financial literacy

All APEC economies, except Viet Nam, have implemented or are currently designing economy-wide strategies for financial education. Among the economies that have already implemented one, most have established a standalone or dedicated frameworks for financial education, with only Papua New Guinea mainstreaming this topic into the wider policy, namely, the Financial Inclusion Strategy.[270]

Many APEC economies established dedicated agencies or institutions to focus on financial literacy initiatives. The United States's Financial Literacy and Education Commission (FLEC) was founded in 2003 to set strategic directions for policy, education, practice, research, and coordination so that all Americans make informed financial decisions. Similarly, the government of Japan has decided to set up a new organisation, Japan Financial Literacy and Education Corporation (J-FLEC), that will provide and promote financial education to improve people's financial literacy, expected to be in full operation in August 2024.

As financial literacy requires close collaboration with other government bodies, a dedicated agency may serve as a champion in pushing the financial literacy agenda. In Malaysia, the Financial Education Network (FEN) was established to coordinate and drive Malaysia's financial education strategy by serving as an inter-agency platform to work with relevant government offices, industry associations, consumer groups and other key stakeholders.[271] Established in 2017, Brunei Darussalam's Financial Literacy Council (NFLC) consist of a number of government agencies, statutory bodies and financial associations.

Following the implementation of policies and programmes to support financial education, initiatives to measure and monitor the impact have become important. The Russian Federation is developing a new comprehensive methodology called the financial culture index as part of the implementation of its Strategy on Improving Financial Literacy and Developing Financial Culture until 2030.

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[268] M. Hasan, T. Le, and A. Hoque, "How Does Financial Literacy Impact on Inclusive Finance?" *Financial Innovation* 7, no. 1 (2021): 40, https://doi.org/10.1186/s40854-021-00259-9

[269] OECD, "OECD/INFE Report on Financial Education in APEC Economies: Policy and Practice in a Digital World" (Paris: OECD, 2019), https://doi.org/10.1787/67dcc865-en

[270] APEC, "APEC Financial Inclusion Capacity Building Package – Synthesis Report" (Singapore: APEC, 2019).

[271] APEC, "Strategies and Initiatives on Digital Financial Inclusion: Lessons from Experiences."

Financial education programmes and resources to assist people in making informed decisions

The US provides financial literacy programmes to help people of all ages enhance their financial skills and create positive banking relationships. Since 2001, the financial education program called Money Smart, initiated by the Federal Deposit Insurance Corporation (FDIC), has provided a variety of curriculums tailored for different audiences through Money Smart for Young People, Money Smart for Young Adults, Money Smart for Adults, Money Smart for Older Adults, and Money Smart for Small Business. At the same time, targeted programmes are also in place to assist specific needs of groups with untapped economic potential. In promoting equitable access to affordable housing and supporting financial literacy for first-time homebuyers, the US Federal Housing Finance Agency (FHFA) launched Fair Lending, Fair Housing, and Equitable Housing Finance Plans. FHFA Fannie Mae and Freddie Mac have served almost 2.6 million families, educating consumers, reducing costs, introducing innovation into underwriting, and combatting appraisal bias.[272]

The Peruvian government undertook efforts to provide financial education and productive training to populations in rural areas with low levels of financial inclusion through the Inclusive Fund for Rural Business Development (FIDER). Mexico's Commission for the Protection and Defense of Financial Services Users (Condusef) organises an annual event on financial culture activities, called the Week of Financial Inclusion. In 2022, more than 1.3 million people attended this event in a hybrid format.

Providing reliable and unbiased sources of information to support financial decision-making is also another concern that APEC economies have tried to tackle. In Canada, FCAC produces a broad range of interactive online tools and consumer information to help consumers make informed decisions. Financial Literacy Month is celebrated each November to strengthen financial literacy of individuals and families. The government of Australia developed Moneysmart – an online resource with tools, calculators and guidance – to support people in managing their finances and improving their financial literacy, by providing resources for teachers and tailored advice for Indigenous Peoples. Meanwhile, MyMoneySense is a financial planning digital service that enables personalised and actionable guidance for Singaporeans to navigate their financial planning across different life stages, by automatically consolidating financial data from government and banks through the Singapore Financial Data Exchange (SGFinDex).

Instilling financial literacy in schools

To foster early literacy, many APEC economies have seen the implementation financial education targeting children at their school age. Talk Money is Australia's financial education programme for school students to learn about money, equipped with workshops for students in Years 5 to 10 to reinforce their learning in class and at home. In Canada, Talk with Our Kids about Money Day is a programme initiated by the Canadian Foundation for Economic Education that discusses money with parents,

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[272] Federal Housing Finance Agency (FHFA), US, "FHFA Announces Release of Fair Lending Final Rule," press release, 29 April 2024, https://business.cch.com/BFLD/FHFAAnnouncesReleaseofFairLendingFinalRule_FederalHousingFinanceAgency.pdf

teachers and students. As of 2018, around 7,000 schools and 600,000 students have participated in this programme. Initiatives that approach financial education through games can be found in Japan. The MoneyConnection programme by Sodateage Net organises workshops for Japanese high school students to teach them how to earn and manage money by using game style materials to attract participants' interest.[273]

Some APEC economies have established formal curriculums or education systems on financial topics. In the Russian Federation, a comprehensive system of education for youth has been implemented through systematic implementation of financial literacy elements at all education levels. The Strategy for Improving Financial Literacy 2017–2023 has been implemented with the aim of introducing financial literacy education at all levels and implementing a regional financial literacy programme. Universities established five federal-level methodological centres for improving financial literacy through outreach to different segments of the population. More than 135,000 teachers were trained under professional development programmes containing financial literacy elements, over 60 million people were covered by the financial education information campaign, and more than 11,000 people participated as financial education volunteers across the economy.

Similarly, financial literacy resources are available for schools at all education levels in Brunei Darussalam, with financial education originally introduced in the upper secondary level since the 1980s, and in the primary and lower secondary education levels in 2009. In 2021, the Financial Literacy Council launched the Brunei Darussalam Financial Literacy Competency Framework for School Children and Adults, which contains different financial themes and actions as a reference for financial education providers, such as government bodies, policymakers, non-governmental organisations (NGOs), financial institutions, etc. This effort will be gradually implemented for different age groups in the years to come. Meanwhile, the government of Peru is currently designing the Financial Education System as a guideline for financial education interventions and to provide priorities on topics and groups that require reinforcement.

Box 4.2. Educating the young generation for responsible financial decisions

Online-based lending and investment platforms attract consumers with their ease of making applications and promises of high returns. However, low levels of financial literacy can lead consumers to make poor financial decisions, accumulate excessive debt or become victims of investment fraud. Young people, driven by digital technology and seeking instant gratification, often lack financial literacy, especially in understanding risks. This lack of financial knowledge, combined with the allure of easy access to funds, has made the youth a significant market for online lending and investment services, despite the high lending interest rates and hidden fees that can lead to debt traps and investment scam losses.

Indonesia's Financial Services Authority (OJK) reports that the 19–34 age group dominates non-performing loans (NPLs) on online lending platforms, accounting for 57.69 percent of the total. The majority of these loans are used for leisure activities rather than for essential needs.[a] Lax regulations on financial promotion, which allow anyone, including social media influencers, to promote financial services regardless

[273] Japan NPO Center, "Financial Inclusion and Japanese Society."

of their expertise or credibility, have also contributed to the increasing use of these platforms by youth.[b] Irresponsible spending among the youth is exacerbated by the integration of e-commerce with pay-later platforms.[c] The problem is worsened by illegal online lending platforms where lenders terrorise debtors and violate their data privacy.

OJK has been improving financial literacy through various programmes, as outlined in the regulation on Increasing Financial Literacy and Inclusion in the Financial Services Sector for Consumers and/or the Community. The priority targets for financial inclusion include women, students, college students, micro, small and medium enterprise (MSMEs) and rural communities. The triennial Survey of Financial Literacy and Inclusion indicates that the financial literacy index reached 49.68 percent in 2022, a 9.11 percent increase from that of 2019.[d] The gap in financial literacy between urban and rural areas narrowed to 2.10 percent in 2022 from 6.88 percent in 2019 . Efforts in improving financial literacy are also accompanied by strict monitoring on the supply side. In April 2024, the OJK terminated 537 illegal online lending platforms and 17 illegal online investment entities. Since 2017, up to 31 March 2024, the OJK has shut down 1,235 illegal investment entities and 7,576 illegal online loan entities.[e]

To educate the young generation, many provinces in Canada, including Ontario, have integrated financial literacy into the curriculum for students in Grades 4 to 12 since 2011. These initiatives aim to equip youth with the critical money-management skills needed to navigate today's complex financial world. The integration of financial literacy into the curriculum was a key recommendation from the Curriculum Council and the report of the Working Group on Financial Literacy.[g] Furthermore, starting in September 2025, Ontario students must earn a new financial literacy graduation requirement as part of their compulsory Grade 10 mathematics course, requiring a mark of 70 percent or higher to pass.[h]

Source:
[a] R. Anggraeni, "Biang Kerok Kredit Macet Pinjol Anak Muda, Dari Konser Hingga Staycation [The Root Cause of Non-performing Online Lending among Youth, from Concert to Staycation]," *bisnis.com*, 6 February 2024, https://finansial.bisnis.com/read/20240206/563/1738510/biang-kerok-kredit-macet-pinjol-anak-muda-dari-konser-hingga-staycation
[b] A.N.A. Sukma, "'Pinjol': The Challenges and Perils of Online Lending in Indonesia," *The Jakarta Post*, 22 September 2023, https://www.thejakartapost.com/opinion/2023/09/22/pinjol-the-challenges-and-perils-of-online-lending-in-indonesia.html
[c] A. Budiman, "Milenial dan Gen Z Terjerat Pusaran Utang Pinjol [Millenials and Gen Z Trapped in Online lending]," *VOA Indonesia*, 12 March 2024, https://www.voaindonesia.com/a/milenial-dan-gen-z-terjerat-pusaran-utang-pinjol/7522571.html
[d] Financial Services Authority, Indonesia (OJK), "Survei Nasional Literasi Dan Inklusi Keuangan Tahun 2022 [National Survey on Literacy and Financial Inclusion 2022]," press release, 22 November 2022, https://ojk.go.id/id/berita-dan-kegiatan/siaran-pers/Pages/Survei-Nasional-Literasi-dan-Inklusi-Keuangan-Tahun-2022.aspx
[e] OJK, "Satgas Pasti Blokir 585 Pinjol Ilegal Dan Pinpri Serta 17 Investasi Ilegal [The Investment Alert Task Force (Satgas) Blocked 585 Illegal Online Lending and Financial Activities and 17 Illegal Investments]," 18 April 2024, https://ojk.go.id/id/berita-dan-kegiatan/info-terkini/Pages/Satgas-Pasti-Blokir-585-Pinjol-Ilegal-dan-Pinpri-serta-17-Investasi-Ilegal.aspx
[f] TD Bank Group, "Young Adults Are Prime Targets for Fraud on Social Media, but Many Are Too Embarrassed to Admit They've Been a Victim of a Scam: TD Survey," 28 February 2024, https://stories.td.com/ca/en/news/2024-02-28-young-adults-are-prime-targets-for-fraud-on-social-media-2c-bu
[g] Government of Ontario, "Financial Literacy Part of Student Success and Strong Economy," press release, 9 November 2010, https://news.ontario.ca/en/release/15000/financial-literacy-part-of-student-success-and-strong-economy
[h] Government of Ontario, "Financial Literacy Education in Schools," updated 30 May 2024, https://www.ontario.ca/page/financial-literacy-education-schools

Financial coaching through counselling programmes

In addition to financial education programmes, some APEC economies also provide literacy initiatives through coaching and counselling. The financial coaching method views clients as capable and cognisant participants who are able to identify their own financial problems, thus indirectly giving them the opportunity to achieve financial goals, without explicitly dictating the entire process. In contrast to other forms of financial education, this method helps clients learn the habits of making careful financial decisions independently, which in turn will improve their financial well-being.[274]

The government of Chinese Taipei provides Indigenous Financial Service Counsellors on-site in every district who offer integrated and real-time financial services that are proactive and thorough with a local perspective, bridging the communication gap between Indigenous Peoples and financial institutions, while shortening the loan application process to increase application efficiency. Counselling resources for businesses are also made available through various programmes that are tailored and culturally specific to assist Indigenous Peoples in starting up a business, building R&D capabilities, training, improving business operations, and enhancing leadership skills.

The counselling approach is also relevant to assist people who already face specific issues that require personalised support. In Korea, the Credit Counseling and Recovery Service (CCRS) is a statutory body that is mandated to support groups with untapped economic potential not only with low-interest financing and debt restructuring, but also with various non-financial services such as employment counselling and financial education. Similarly, in Australia, the Financial Wellbeing and Capability Activity Programme provides support to eligible individuals and families experiencing financial crises through financial counselling, financial literacy education and access to financial services, including microfinance products with low or no interest and a matched savings programme. Meanwhile, New Zealand employs a support group approach, MoneyMates, to facilitate community-based sharing and learning sessions about money and finance, targeting people living in low-income households experiencing financial hardship.

[274] J.M. Loomis, "Rescaling and Reframing Poverty: Financial Coaching and the Pedagogical Spaces of Financial Inclusion in Boston, Massachusetts," *Geoforum* 95 (2018): 143–52, https://doi.org/10.1016/j.geoforum.2018.06.014

5. KEY FINDINGS AND POLICY RECOMMENDATIONS

Financial inclusion is crucial for economic growth. The synergistic relationship between financial inclusion and economic growth and development has been demonstrated in tomes of research and decades of data. The intuition is simple enough: financial inclusion provides access to financial services such as savings, insurance and credit services. In turn, access to savings and insurance helps households grow wealth and smooth consumption, while access to credit can support entrepreneurial activity and business expansion. This creates opportunities for employment and output expansion, while helping mitigate risks across the economic system. Indeed, if money is the lifeblood of the economy, then financial inclusion is what ensures its proper circulation.

- **Ensure the stability of the financial sector.** The strength and stability of financial systems is the cornerstone of financial inclusion. Prudent macroprudential policies, financial market safeguards, and mechanisms for financial consumer protection are the necessary conditions for financial inclusion. These are essential to build trust in financial institutions such as banks, credit unions or insurance agencies. While financial market regulation is mainly the remit of central banks, finance ministries and financial market authorities, structural reform can also play a role in strengthening financial markets such as by strengthening corporate governance, ensuring business transparency and accountability, and applying the principles of good regulatory practice to financial oversight.

- **Bring down the cost of financial services.** Costs come in many forms. For depositors, these costs include minimum deposit requirements, account maintenance fees, withdrawal fees and other service fees. For borrowers, these costs include interest rates, appraisal fees, legal fees and other service fees. For insurance contracts, these costs are mainly in the form of premiums and lock-in costs. Cost of visiting a bank branch in terms of time and transportation could also be considered as transaction costs of financial services. While financial institutions need to recoup the costs of providing services, measures could be taken to ensure financial services costs are kept reasonable.

- **Promote competition and innovation while safeguarding stability and security.** Competition in the financial sector will motivate financial institutions to expand, innovate, and improve their services to meet the needs of clients, including groups with untapped economic potential. Competition will also encourage operational efficiency, reducing costs associated with service provision. However, incentivising competition and innovation will need to be balanced with ensuring that firms adhere to their regulatory responsibilities and manage risk appropriately.

    - ***Creating regulatory sandboxes*** to test new ideas is one such strategy. Providing a space to test new financial products and services without putting the sector at risk can support responsible innovation. This is where regulatory sandboxes can help financial inclusion. For example, the emergence of fintech lending services, including peer-to-peer (P2P) lending, may promote greater access to finance for micro, small and medium enterprises (MSMEs), but such services could also be prone to fraudulent practices. Regulatory sandboxes can provide the flexibility to test out P2P lending without putting the wider financial market at risk. However, sandboxes can be expensive and diverse in design, and require significant resources dedicated to supporting a small number of firms. They may not be appropriate in certain jurisdictions.

- **Reduce barriers to financing for MSMEs.** Despite their significant contribution to the economy and employment, MSMEs continue to face challenges in accessing credit. The percentage of loans to MSMEs to total loans has remained low in most APEC economies, mainly due to lack of collateral and inadequate financial records. Information asymmetry persists for MSMEs, making it difficult for lenders to adequately assess their risk. Targeted policy measures to improve MSMEs' access to credit could help. For example, some APEC economies have developed public credit guarantee schemes which allow the transfer of risk to the guarantor, making lending to MSMEs more attractive. Developing a financial data infrastructure that is accessible for MSMEs will also help address information asymmetry issues.

    - ***Look closely into microfinance.*** One avenue for reducing the cost of credit to MSMEs and poorer households is microfinance. Policies supporting microfinance are largely well developed in APEC economies, although business models may differ. In some economies, microloans are extended through government-owned institutions and the lending rate is usually subsidised by the government. In others, microfinance schemes are run by private financial institutions or credit unions.

    - ***Consider alternative financing options.*** APEC economies could also support the growth of alternative financing options for MSMEs, including those enabled by digital technology or fintech. While crowdfunding has been around for a few decades, economies such as Hong Kong, China and Thailand are experimenting with the establishment of a dedicated stock exchange for raising capital for MSMEs. Alternative financing modalities for MSMEs include factoring – essentially the use of accounts receivable as collateral for loans – supported by risk-mitigating supporting infrastructure such as a central registry for accounts receivable and digital factoring. Other innovative financing options for MSMEs, such as zero-coupon convertible notes or crowdlending, could also be explored further.

- **Digitalise financial services.** Digitalisation of finance can broaden the array of available financial services, may bring down the cost of financial service delivery and can offer alternative options for groups with untapped economic potential. Digital innovation in finance could help in the targeted delivery of financial services – as well as social protection, as was seen during the COVID-

19 pandemic – to specific sectors needing assistance. At the same time, cybercrime and hacking are real and growing concerns, and digital tools also need to ensure cybersecurity and protect personal data. Access to financial services has also been expanded through digital banks. The rise of digital banks brought positive impacts in terms of improving access to financial services and the quality of delivery in some jurisdictions. Together with other digital finance operators, digital payments have enabled the growth of digital transactions fuelled by burgeoning e-commerce platforms. However, challenges that arise from digital payment services, including ensuring the safety and reliability of digital payments, need to be addressed with proper regulation and oversight.

Inclusion is central to financial inclusion. As in all policies related to inclusion, financial inclusion should be a deliberate and deliberative process. Inclusion does not spontaneously happen; it needs to be built in from the start and actively implemented. As the data and econometric analysis show, financial access alone is not enough; distribution matters too. Ensuring that access to financial services and credit reaches all segments of the population – with emphasis on groups with untapped economic potential – is what puts inclusion in financial inclusion.

- **Remove structural barriers to financial inclusion.** Eliminating avenues for financial discrimination – if it still exists in law or practice – should be a priority. This involves not only removing laws that bar certain groups from accessing financial services, but also enacting laws that explicitly prohibit discrimination such as those based on gender or other demographic characteristics. While financial institutions rightly conduct know your client (KYC) checks and creditworthiness assessments, safeguards should be in place to ensure that these are not discriminatory in practice.

- **Promote ease of doing finance.** For many groups with untapped economic potential, such as those in rural or remote areas, Indigenous Peoples and those in the informal sector, a lack of registration papers or identification documents can be a barrier to accessing financial services. While financial institutions need to know their clients, efforts could be made to reduce the documentary requirements of transactions while maintaining high compliance standards. For example, in cases where paper documents are lost, the use of digital identification could be enabled. Alternatives to formal documents could also be considered, such as in some economies where mobile phones subscriptions have enabled client identification and access to digital wallets.

- **Consider the specific needs of groups with untapped economic potential.** Groups with untapped economic potential remain untapped because of factors that exclude their participation in the economy. As described in individual economy reports (IERs) from some APEC economies, reasons for this exclusion could be historical, cultural, structural and others. The specific barriers facing these groups require specific action to ensure financial inclusion.

- ***Address cultural and language barriers.*** Differences in culture or language could present barriers to financial services. For example, some cultures may view the collection of interest on loans as usurious while other cultures may view account ownership in collective terms rather than personal property. Language can also be a barrier especially for people from linguistic minorities who may struggle with the language of business. Depending on an economy's context, culturally sensitive and multilingual financial services could provide financial inclusion for groups with untapped economic potential.

- ***Provide reasonable accommodation.*** The needs of persons with disabilities (PWDs) and the elderly also need to be considered in the context of financial inclusion. Reasonable accommodation for PWDs and accessibility for elderly clients should be part of financial inclusion efforts, such as ensuring the accessibility of spaces, use of augmentative and alternative communication (e.g., sign language or braille) and use of assistive technology to enable financial transactions.

- ***Conduct sensitivity training for financial personnel.*** Ultimately, banking and finance are human interactions: the clients are humans and the financial institution is managed by humans. Financial institutions will need to be cognisant of the issues faced by groups with untapped economic potential and be sensitive to their needs. Even as more operations are digitalised, the underlying processes, algorithms and even artificial intelligence tools will need to be sensitive to real human situations and circumstances.

Utilisation of financial services matters. Having an account alone is not enough. Active usage of financial accounts is crucial to activate the economy, without which the advantages of account ownership can stay unrealised. Promoting utilisation requires policies that can stimulate higher economic growth and promote job creation, enabling individuals and firms to achieve the sustainable income levels that are necessary to promote active usage of financial services.

- **Promote financial literacy.** Financial literacy is an enabler of sustainable demand for financial products and services. Almost all APEC economies have integrated financial education as part of their financial inclusion strategy. These financial education programmes are available for all ages, and some are tailored to specific needs of the vulnerable communities. Some economies even established formal curriculums or education systems on financial topics as part of formal schooling. In addition to financial education programmes, other formats that have been effective in enhancing financial literacy include counselling and support groups, especially to help with specific financial issues that require personalised support.

- **Facilitate entrepreneurial opportunity.** Financial inclusion does not end with signing the check. A holistic approach will also consider the utilisation of this credit through entrepreneurship support, networking, information sharing and capacity building – issues especially important for MSMEs and groups with untapped economic potential. Supporting the success of MSMEs will not only increase the likelihood of loan repayment, but also ensure sustained demand for financial services.

APPENDIX A.

Table A.1. Impact of account ownership on economic growth[275]

	Dependent variables					
	Log of Real GDP			**Log of Real GDP per capita**		
	(1)	(2)	(3)	(4)	(5)	(6)
Account ownership: financial institution or mobile money service (% of population)	0.26*** (0.05)			0.27*** (0.05)		
Account ownership: mobile money service (% of population)		0.13*** (0.03)			0.07* (0.04)	
Account ownership: financial institution (% of population)			0.27*** (0.06)			0.30*** (0.05)
Consumption	-0.57*** (0.18)	-0.16 (0.16)	-0.55*** (0.19)	-0.34*** (0.08)	0.02 (0.07)	-0.23*** (0.07)
Investment	-0.06*** (0.02)	-0.05 (0.03)	-0.06*** (0.02)	-0.03** (0.01)	0.01 (0.03)	-0.02 (0.01)
Government expenditure	0.13*** (0.04)	0.04 (0.03)	0.12*** (0.04)	0.12*** (0.03)	0.05* (0.03)	0.11*** (0.03)
Exports	-0.12*** (0.03)	-0.16*** (0.04)	-0.13*** (0.04)	-0.08*** (0.02)	-0.09*** (0.03)	-0.06*** (0.02)
Imports	0.10*** (0.03)	0.04 (0.04)	0.09*** (0.03)	0.08*** (0.03)	-0.01 (0.02)	0.06** (0.02)
Previous year's real GDP per capita				0.95*** (0.07)	0.66*** (0.13)	0.82*** (0.07)
Previous year's real GDP	1.24*** (0.18)	1.05*** (0.17)	1.29*** (0.19)			
Constant	6.87*** (1.08)	5.55*** (0.80)	5.82*** (0.92)	6.71*** (1.31)	2.96** (1.34)	5.01*** (0.98)
Observations	1,212	426	1,212	1,213	426	1,213
Number of economies	131	66	131	131	66	131

GDP=gross domestic product

Note: All regressions use fixed effect models; Arellano-Bond estimation for reverse causality; robust standard errors; and controls for economy-specific idiosyncrasies. Economy dummy variables are suppressed for brevity. *** = significant at p<0.01, ** = significant at p<0.05, and * = significant at p<0.1.

Source: World Bank World Development Indicators; World Bank Global Findex Database; and APEC Policy Support Unit (PSU) staff calculations.

[275] All regressors are lagged one year and expressed in log values, except those indicated otherwise.

Table A.2. Impact of account ownership distribution on economic growth[276]

	Dependent variables **Log of Real GDP**			**Log of Real GDP per capita**		
	(1)	(2)	(3)	(4)	(5)	(6)
Distribution of accounts: financial institution or mobile money service (concentration index)	-0.18*** (0.07)			-0.18** (0.07)		
Distribution of accounts: mobile money service (concentration index)		-0.02 (0.03)			-0.01 (0.03)	
Distribution of accounts: financial institution (concentration index)			-0.25*** (0.07)			-0.23*** (0.07)
Consumption	-0.49*** (0.18)	-0.08 (0.17)	-0.31** (0.13)	-0.20*** (0.07)	0.07 (0.06)	-0.08 (0.06)
Investment	-0.05*** (0.02)	-0.05 (0.04)	-0.02 (0.02)	-0.02 (0.02)	0.03 (0.03)	0.01 (0.02)
Government expenditure	0.13*** (0.04)	0.04 (0.03)	0.09** (0.04)	0.12*** (0.04)	0.06* (0.03)	0.09*** (0.04)
Exports	-0.11*** (0.03)	-0.13*** (0.04)	-0.15*** (0.02)	-0.06*** (0.02)	-0.06** (0.03)	-0.10*** (0.02)
Imports	0.09*** (0.03)	0.02 (0.04)	0.02 (0.02)	0.05** (0.03)	-0.03 (0.02)	0.00 (0.02)
Previous year's real GDP per capita				0.88*** (0.07)	0.53*** (0.11)	0.75*** (0.08)
Previous year's real GDP	1.25*** (0.16)	1.01*** (0.18)	1.14*** (0.12)			
Constant	4.80*** (0.82)	4.76*** (0.77)	6.00*** (0.74)	4.02*** (1.01)	2.17** (1.02)	4.12*** (0.91)
Observations	1,128	393	762	1,129	393	763
Number of economies	124	62	118	124	62	118

GDP=gross domestic product

Note: All regressions use fixed effect models; Arellano-Bond estimation for reverse causality; robust standard errors; and controls for economy-specific idiosyncrasies. Economy dummy variables are suppressed for brevity. Concentration indexes are calculated at the quintile level using the grouped data methodology in N. Kakwani, A. Wagstaff and E. van Doorslaer, "Socioeconomic Inequalities in Health: Measurement, Computation, and Statistical Inference," *Journal of Econometrics* 77, no. 1 (1997): 87–103.

*** = significant at p<0.01, ** = significant at p<0.05, and * = significant at p<0.1.

Source: World Bank World Development Indicators; World Bank Global Findex Database; and APEC PSU staff calculations.

[276] All regressors are lagged one year and expressed in log values, except those indicated otherwise.

Table A.3. Impact of account ownership on employment[277]

	Dependent variables					
	Employment rate (%)			**Log of Number of employed adults**		
	(1)	(2)	(3)	(4)	(5)	(6)
Account ownership: financial institution or mobile money service (% of population)	2.96*** (0.75)			0.10*** (0.02)		
Account ownership: mobile money service (% of population)		2.25** (1.05)			0.09*** (0.03)	
Account ownership: financial institution (% of population)			3.61*** (0.84)			0.07*** (0.02)
Consumption	-3.78*** (1.10)	-3.54*** (1.09)	-3.46*** (1.02)	-0.04 (0.03)	0.05 (0.04)	-0.03 (0.03)
Investment	-1.36*** (0.38)	0.44 (0.52)	-1.34*** (0.38)	-0.03** (0.01)	-0.02* (0.01)	-0.03*** (0.01)
Government expenditure	0.47 (0.33)	0.97* (0.50)	0.36 (0.31)	0.02 (0.01)	0.02 (0.02)	0.02 (0.01)
Exports	0.08 (0.31)	0.00 (0.47)	0.13 (0.31)	-0.03** (0.01)	-0.03* (0.01)	-0.02** (0.01)
Imports	2.40*** (0.78)	-0.14 (0.64)	2.36*** (0.78)	0.03** (0.01)	0.01 (0.02)	0.03* (0.01)
Previous year's employment rate (%)	0.86*** (0.03)	0.54*** (0.08)	0.84*** (0.03)			
Previous year's number of employed adults				0.92*** (0.05)	0.80*** (0.06)	0.97*** (0.05)
Constant	66.89*** (15.46)	100.21*** (24.00)	61.56*** (13.52)	2.53*** (0.66)	3.50*** (0.89)	1.51*** (0.54)
Observations	1,217	437	1,217	1,217	437	1,217
Number of economies	130	66	130	130	66	130

Notes: All regressions use fixed effect models; Arellano-Bond estimation for reverse causality; robust standard errors; and controls for economy-specific idiosyncrasies. Economy dummy variables are suppressed for brevity. *** = significant at p<0.01, ** = significant at p<0.05, and * = significant at p<0.1.
Source: World Bank World Development Indicators; World Bank Global Findex Database; and APEC PSU staff calculations.

[277] All regressors are lagged one year and expressed in log values, except those indicated otherwise.

Table A.4. Impact of account ownership distribution on employment[278]

	Dependent variables					
	Employment rate (%)			**Log of Number of employed adults**		
	(1)	(2)	(3)	(4)	(5)	(6)
Distribution of accounts: financial institution or mobile money service (concentration index)	-2.41*** (0.78)			-0.08*** (0.02)		
Distribution of accounts: mobile money service (concentration index)		-0.76 (0.61)			-0.01 (0.01)	
Distribution of accounts: financial institution (concentration index)			-2.03* (1.07)			-0.17*** (0.04)
Consumption	-2.77*** (0.90)	-2.61** (1.08)	-1.13* (0.66)	-0.00 (0.03)	0.08* (0.04)	-0.01 (0.04)
Investment	-1.33*** (0.40)	0.60 (0.56)	-0.66** (0.32)	-0.03** (0.01)	-0.03** (0.01)	-0.03** (0.01)
Government expenditure	0.44 (0.34)	0.92* (0.50)	0.22 (0.37)	0.02 (0.02)	0.02 (0.02)	0.02 (0.02)
Exports	0.16 (0.32)	0.27 (0.51)	-0.50 (0.34)	-0.02** (0.01)	-0.02 (0.02)	-0.05*** (0.01)
Imports	2.39*** (0.78)	-0.43 (0.62)	1.13** (0.46)	0.03* (0.02)	0.00 (0.02)	0.03* (0.02)
Previous year's employment rate (%)	0.86*** (0.03)	0.49*** (0.08)	0.73*** (0.05)			
Previous year's number of employed adults				0.92*** (0.05)	0.86*** (0.07)	0.91*** (0.06)
Constant	41.99*** (10.83)	80.16*** (23.75)	48.83*** (13.22)	1.75*** (0.57)	1.90*** (0.71)	2.79*** (0.81)
Observations	1,136	403	769	1,136	403	769
Number of economies	123	62	117	123	62	117

Notes: All regressions use fixed effect models; Arellano-Bond estimation for reverse causality; robust standard errors; and controls for economy-specific idiosyncrasies. Economy dummy variables are suppressed for brevity. Concentration indexes are calculated at the quintile level using the grouped data methodology in N. Kakwani, A. Wagstaff and E. van Doorslaer, "Socioeconomic Inequalities in Health: Measurement, Computation, and Statistical Inference," *Journal of Econometrics* 77, no. 1 (1997): 87–103.
*** = significant at p<0.01, ** = significant at p<0.05, and * = significant at p<0.1.
Source: World Bank World Development Indicators; World Bank Global Findex Database; and APEC PSU staff calculations.

[278] All regressors are lagged one year and expressed in log values, except those indicated otherwise.

Table A.5. Impact of account ownership on poverty[279]

	Dependent variables **Extreme poverty rate**[280] **(%)**			**Economy-defined poverty rate**[281] **(%)**		
	(1)	(2)	(3)	(4)	(5)	(6)
Account ownership: financial institution or mobile money service (% of population)	-2.19* (1.20)			0.34 (3.50)		
Account ownership: mobile money service (% of population)		-2.63 (1.72)			0.34 (3.50)	
Account ownership: financial institution (% of population)			-2.11** (1.03)			-0.83 (2.16)
Consumption	0.99 (1.14)	-0.59 (1.62)	0.78 (1.03)	-1.37 (1.43)	-0.86 (4.67)	-1.64 (1.32)
Investment	0.76 (0.55)	1.58** (0.79)	0.76 (0.53)	-0.02 (0.94)	-0.85 (1.59)	-0.14 (0.97)
Government expenditure	0.08 (0.96)	0.54 (0.70)	0.02 (0.87)	0.01 (0.92)	-0.65 (1.62)	-0.34 (0.96)
Exports	0.03 (0.39)	1.82 (1.17)	-0.05 (0.38)	1.77 (1.26)	3.13** (1.57)	1.60 (1.23)
Imports	-0.32 (0.74)	-1.49 (1.28)	-0.29 (0.68)	-1.16 (1.14)	-1.26 (1.68)	-0.88 (1.11)
Previous year's extreme poverty rate (%)	0.87*** (0.03)	0.79*** (0.03)	0.88*** (0.03)			
Previous year's economy-defined poverty rate (%)				0.41*** (0.04)	0.42*** (0.09)	0.41*** (0.04)
Constant	-35.49 (25.30)	-39.50 (41.96)	-27.58 (21.88)	34.52 (32.07)	26.98 (94.76)	48.93 (31.56)
Observations	842	258	842	515	135	515
Number of economies	114	51	114	86	36	86

Notes: All regressions use fixed effect models; Arellano-Bond estimation for reverse causality; robust standard errors; and controls for economy-specific idiosyncrasies. Economy dummy variables are suppressed for brevity. *** = significant at p<0.01, ** = significant at p<0.05, and * = significant at p<0.1.

Source: World Bank World Development Indicators, World Bank Global Findex Database, and APEC Policy Support Unit staff calculations.

[279] All regressors are lagged one year and expressed in log values, except those indicated otherwise.
[280] The extreme poverty line is defined as the demographic living on less than $2.15 per day.
[281] The economy-defined poverty line is based on poverty lines established by each economy individually.

Table A.6. Impact of distribution of account ownership on poverty[282]

	Dependent variables **Extreme poverty rate**[283] **(%)**			**Economy-defined poverty rate**[284] **(%)**		
	(1)	(2)	(3)	(4)	(5)	(6)
Distribution of accounts: financial institution or mobile money service (concentration index)	1.56 (1.49)			4.51* (2.64)		
Distribution of accounts: mobile money service (concentration index)		4.26* (2.46)			5.16 (4.38)	
Distribution of accounts: financial institution (concentration index)			6.02* (3.61)			4.45 (6.81)
Consumption	-0.17 (0.89)	-1.03 (1.72)	-1.50 (1.38)	-0.75 (1.76)	0.25 (4.60)	1.27 (4.30)
Investment	0.97 (0.60)	2.20** (1.04)	1.74** (0.85)	-0.25 (1.10)	-0.82 (1.38)	-1.00 (1.34)
Government expenditure	0.21 (0.97)	-0.48 (1.13)	0.56 (0.79)	-0.33 (0.93)	-1.76 (2.69)	0.17 (1.52)
Exports	-0.13 (0.40)	1.48 (1.03)	1.55 (1.02)	1.93 (1.43)	3.01 (2.13)	3.49** (1.63)
Imports	-0.42 (0.89)	-1.52 (1.24)	-1.59 (1.11)	-0.80 (1.28)	-0.65 (1.37)	-2.37 (1.48)
Previous year's extreme poverty rate (%)	0.88*** (0.03)	0.80*** (0.02)	0.79*** (0.03)			
Previous year's economy-defined poverty rate (%)				0.42*** (0.05)	0.41*** (0.08)	0.28*** (0.05)
Constant	-9.78 (19.29)	-12.38 (37.90)	-15.31 (37.02)	18.42 (39.31)	12.55 (90.94)	-23.95 (74.68)
Observations	775	230	479	464	114	299
Number of economies	106	47	92	78	32	67

Notes: All regressions use fixed effect models; Arellano-Bond estimation for reverse causality; robust standard errors; and controls for economy-specific idiosyncrasies. Economy dummy variables are suppressed for brevity. Concentration indexes are calculated at the quintile level using the grouped data methodology in N. Kakwani, A. Wagstaff and E. van Doorslaer, "Socioeconomic Inequalities in Health: Measurement, Computation, and Statistical Inference," *Journal of Econometrics* 77, no. 1 (1997): 87–103.
*** = significant at $p<0.01$, ** = significant at $p<0.05$, and * = significant at $p<0.1$.
Source: World Bank World Development Indicators; World Bank Global Findex Database; and APEC PSU staff calculations.

[282] All regressors are lagged one year and expressed in log values, except those indicated otherwise.
[283] The extreme poverty line is defined as the demographic living on less than $2.15 per day.
[284] The economy-defined poverty line is based on poverty lines established by each economy individually.

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