The commercial viability of financial inclusion

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Abstract

Mobile phone penetration, regulatory trends, technological efficiencies and the development of low-value payments infrastructures now make it feasible for financial institutions to deliver financial services to more people in more places. With a few basic prerequisites in place, financial institutions are now able to develop commercially viable approaches to financial inclusion. However, they must first rethink traditional notions of 'viability' and approach inclusion as a long-term strategic play rather than a short-term profit play. Moreover, the regulatory and infrastructure hurdles are so significant that achieving scale will require public–private partnership. The financial services industry is characterised by its focus on short-term financial metrics and quarterly reporting. Because financial inclusion efforts are a longer-term play, they are typically relegated to CSR initiatives. The model described here allows for a longer-term, strategic approach to product and service development within a financial institution's core business functions. Using the example of goMoney, a mobile banking platform launched by Australia and New Zealand Banking Group, this paper makes the case for evaluating financial inclusion efforts through the lens of market-level P&L, rather than firm-level profits. It proposes a model that considers a combination of above-the-line returns, alongside social, relationship and regulatory returns that affect the economic activity of communities and nations.

Keywords: Financial inclusion, mobile banking, unbanked, payments infrastructure

INTRODUCTION

It is difficult for many people to imagine a situation in which their children's school closes for an entire week because the teachers had to leave town in the middle of the term. Until recently, this was the case in the Solomon Islands. School was suspended, and students waited while Donald Beto, a secondary school teacher in a remote part of the Solomon Islands, made a week-long journey to collect his pay.

Now Mr Beto is paid remotely through his mobile phone. When he needs cash, he travels to a bank-affiliated merchant, 45 minutes from his own village and withdraws the money he needs.

Mr Beto is one of over 100,000 users of the Australia and New Zealand Banking Group (ANZ) goMoney service, a mobile banking platform designed for previously unbanked populations in the Pacific Islands. According to Mr Beto, 'The technology, it really makes a difference because I have enough time to be with the kids in the classroom'.

For Mr Beto and his students, the transition to mobile banking has had a profound impact on their everyday lives. This would not have been possible just a few years ago.

For decades, it has been argued that formal financial institutions should do more to reach the unbanked. One way or another, the argument went, banks were the ones with the infrastructure and expertise to deliver the most needed banking services. The reality, however, is that billions of people with varying degrees of wealth live as Mr Beto does — in areas of the world underserved by formal financial institutions. Suggesting that banks could find a way to thrive in every community was akin to arguing that a large grocery chain should meet every community's nutrition needs. The traditional retail banking model, grounded in branch networks, never would have survived.

Fortunately, this is no longer the case. A variety of regulatory, technological and contextual factors have come together to make it feasible for financial institutions to offer financial services to more people in more places. Financial institutions are now in a position to deliver on the real promise of financial inclusion, leveraging financial literacy education to establish and grow customer relationships, along with providing easier forms of banking access that leverage the growth in mobile penetration — eventually transitioning today's participants in the informal economy into tomorrow's merchants, savers, borrowers and investors.

This paper proposes a model for financial inclusion that resets traditionally held notions of 'commercial viability' for financial institutions. In brief, it argues that

- Financial institutions are closer to the commercial viability of financial inclusion than ever before. For a variety of reasons, which will be discussed here, financial institutions are in a position to realise profitability and long-term economic returns.
- To achieve commercial viability, financial institutions must approach inclusion as a long-term strategic play rather than a short-term profit play. To maximise their return, financial institutions must re-examine expectations, timelines and metrics around commercial viability.
- Public–private partnership is essential. Financial institutions have the experience and the infrastructure to deliver the broadest range of services and drive innovation within the context of appropriate, measured regulatory frameworks. At the same time, governments can drive the development of the necessary regulation, infrastructure and incentives to make financial inclusion a reality.

FINANCIAL INCLUSION IN THE PACIFIC: ANZ GOMONEY

In 2013, Australia and New Zealand Banking Group (ANZ) launched goMoney — a mobile phone banking platform — in four Pacific Island nations: Papua New Guinea; Samoa; Solomon Islands; and Vanuatu. These countries are all characterised by young, poor and relatively isolated populations. Informal cash economies are the norm, and people are heavily dependent on remittances. Importantly, far more people have access to mobile phones than to bank accounts.

ANZ goMoney in the Pacific allows individuals to open and maintain real bank accounts 'on the spot' without going to a branch. Primary features include: top-up of mobile minutes; person-to-person payments; bill payments; and local remittances. Local merchants are enrolled as agents and are able to take cash deposits, facilitate cash withdrawals and accept payments for goods and services made using a mobile phone.

This paper draws on the experiences of ANZ Pacific to illustrate some of the key points. While the ANZ programmes are relatively new, the implementation of ANZ goMoney among unbanked populations provides important insights for those interested in sustainable, viable financial inclusion.

In the spirit of full disclosure, it must be noted that ANZ uses technology licensed from Fiserv (the authors' institution) as the mobile platform behind ANZ goMoney.

VIABILITY IS ON THE HORIZON

A confluence of factors exists to make sustainable financial inclusion more realistic and more viable than it has been in the past.

- *Far more people have mobile phones in emerging markets than have bank accounts.* Consumers in developing countries accounted for nearly eight in ten mobile subscriptions globally in 2014, and mobile penetration[1] in the developing world is above 90 per cent.[2] At the same time, only 54 per cent of adults in developing countries have bank accounts, including only 43 per cent of the people in the lowest income quintile.[3] It is also important to note that, while bank account penetration has increased — globally by 20 per cent between 2011 and 2014 — 15 per cent of global accounts are actually dormant.[4]
- *Governments and central banks are increasingly driven to formalise financial services, and they recognise financial institutions as one of their best available tools to do that.* Central governments are investing in payments infrastructure. For example, CGAP reports that 33 countries in sub-Saharan Africa have started to modernise their payment systems, including implementation of ACH and real-time gross settlement systems.[5] These infrastructure investments are taking place throughout the developing world for many of the same reasons wealthier nations started investing in payments infrastructure in the 1980s — these include the fact that governments are particularly interested in understanding who is moving money within their borders, tax and revenue interests are far more easily tracked through a formal infrastructure, and faster transaction times lead to increased efficiency. In addition, reducing the reliance on cash in the economy provides cost benefits, owing to the relatively high cost of printing, tracking and recycling cash in these developing economies.

  Over the past several years, central banks from Brazil to Uganda started to regulate the activities of non-banks and mobile network operators (MNOs) more closely. These developments are seen as strong signals that governments are progressing toward a higher-level view of their role in facilitating financial inclusion. It is perhaps not coincidental that ANZ goMoney was launched in Papua New Guinea only after the country's central bank issued legislation in 2012 requiring all non-banks seeking to provide mobile banking services to be licensed under the Banks and Financial Institutions Act.

In other cases, governments are developing financial inclusion programmes that financial institutions are then incentivised to execute. One recent example of this is in Indonesia, where the Laku Pandai programme — initially managed by four banks — has an ambitious target to cover 75 per cent of the country by 2018.[6]

- *Financial inclusion is broadly seen by governments and many others as a way to achieve a better standard of living for all.* The past decade has brought about a deeper understanding of financial inclusion's role in reducing income inequality and promoting better standards of living for all. Commitment at the country level is evident in the 50 countries that have set financial inclusion benchmarks with the World Bank in recent years.[7] Another influential example is the 2010 addition of financial inclusion among the main pillars of the G20's global action plan.[8]
- *Technological efficiencies have emerged, making it more practical for financial institutions to reach more people in more places.* Reaching the unbanked with branch-centred solutions, particularly those in remote areas, has always been cost-prohibitive. Even when mobile networks started to proliferate, financial institutions were challenged to create tools that could span different markets, carriers and phone types. Now banks are deploying third-party technology solutions that can be deployed across multiple MNOs and work across a wide range of mobile handsets in developing and developed countries alike.
- *The environment for MNOs as financial services providers is shifting.* In some countries, MNOs added a financial services component to their traditional product offerings. They began by providing top-up options and added features such as bill payments through carrier billing over time. One could argue that this was not as much about financial inclusion as it was simply about responding to a market need, and one that came with decent margins.

  The ability of MNOs to continue to provide these services, however, is not sustainable. The evolution of the market and regulatory infrastructure will require MNOs that want to continue to offer banking services to behave a lot more like banks and be regulated accordingly. This is already evident in one of the most successful models, M-PESA, which now operates under a number of prudential regulations and with the oversight of Kenya's Central Bank.[9]

  Importantly, there are several opportunities in this space that MNOs are not positioned to address. First, most MNOs lack the expertise to provide financial literacy education, which is a critical component of long-term financial inclusion and development of customers. This is an area of significant interest to governments, non-governmental organisations (NGOs) and communities. Second, MNOs do not have the structures in place to provide broader banking services such as loans and credit.

Finally, based on the experiences of many developed countries, one could predict that smartphones will one day extend into even the most remote regions of emerging markets eventually. Though that day may be years away, the practical implication for MNOs is that it will erode their profit model. Instead of deriving voice, data and commission-based revenues (eg through bill payments), users will access financial services from any hotspot, affecting commission and/or data revenue.

It is possible for some MNOs work effectively in this space. To do so, however, they will need to make the move toward being regulated and structured as financial services providers — just as M-PESA did in Kenya. The shifting policy environment and technological advances are such that most MNOs will add the most value as a delivery mechanism. To that end, there is ample room for cooperation in this space, with financial institutions developing and managing the actual regulated services, and MNOs marketing the service to customers.

At the same time, financial institutions now have a significant opportunity to provide people with more robust financial services and advice as they move through their lives. It is a journey that enables a deeper customer relationship over time — from unbanked to mobile wallet services and payments options, to savings, to credit and loans, eventually leading to a full-scale relationship with the bank.

More so than ever before, the current regulatory, technological, social and infrastructure framework creates a favourable outlook for financial institutions to realise commercial viability of financial inclusion, particularly when leveraging the mobile channel. There is one significant caveat. It requires the banking industry to rethink how it defines commercial viability.

REDEFINING COMMERCIAL VIABILITY

The entry point for most financial institutions to take on any new product or service offering is firm-level profit and loss (P&L). Put simply: Will the offering make money? And if so, how soon?

Financial institutions are conditioned, incentivised and set up to look at firm-level P&L. A responsibility to shareholders favours funding programmes that drive key metrics such as: increasing net interest margin, growing deposits, minimising non-performing assets, lowering TCO, increasing customer profitability, and lower customer acquisition costs. History has shown that this is not a realistic set of metrics against which to measure the success of any financial inclusion programme. Many mobile banking implementations take years to reach the scale necessary to be profitable. Given the quarter-by-quarter nature of reporting financial performance and the fact that banks prioritise investments based on payback periods, anything over three years usually becomes untenable. It is therefore not hard to understand why banks have a tough time building sustainable financial inclusion programmes outside CSR initiatives.

The challenges described above have always been the hurdle for initiatives that support financial inclusion. Broadly speaking, if an institution looks at financial inclusion purely through a traditional P&L lens, it would be challenged to commit to it in a significant way. The profits are simply too far off.

A NEW MODEL IS REQUIRED: MARKET-LEVEL P&L

The benefits of financial inclusion are much more significant than the typical quarterly metrics on customer tenure and revenue-generation would suggest. Achieving commercial sustainability for products that foster financial inclusion requires that efforts be measured through a much larger prism, and that any related investments be aligned against metrics that track the overall health of the market.

Market-level P&L in this context is an investment in human capital that results in a combination of above-the-line returns, along with returns related to social and economic development, stakeholder relationships and a regulatory environment that supports investments in financial inclusion. Taken together, these affect the economic activity of a nation. While this is a relatively nascent area of study, proof points are emerging. For example:

- The IMF reports a significant correlation between increases in deposit-holding in emerging markets and GDP, noting for example: 'Among African countries reporting data on commercial bank depositors, for instance, depositors per 1,000 adults experienced a five-fold increase from 2004 to 2013, while simultaneously achieving a 40-per cent growth in real GDP per capita.'[10]
- In Kenya, mobile money represents 6.59 per cent of the national payments system's throughput. This is a massive amount of money — much of which was probably once unaccounted for and written off as part of an informal economy.
- A recent Ernst & Young report argued that the expansion of the middle class in developing economies will increase demand for financial products and services, ultimately driving growth at both the corporate and country levels.[11]
- At the 2014 G20 meeting, the Chairman of the Monetary Board of the Philippines argued that the availability of mobile banking in emerging markets 'could generate $5 billion in annual revenue plus another $3 billion indirectly'.[12]

Market-level metrics are, by definition, considerable in scope. They would broadly affect not only the bottom line of a financial institution, but also its reputation. As such, it could be argued that such efforts should be addressed at the board level rather than at the business unit level, which is often responsible for investment decisions that extend to the broader community.

> 'In the Pacific, you'll be amazed with how many women are involved in small businesses — today's small business is tomorrow's medium one — which could be a conglomerate in time, so you have to help these small businesses.' (Vishnu Mohan, CEO, ANZ Pacific)

Key measures for financial inclusion

Institutions that effectively implement financial inclusion strategies will look towards driving both micro- and market-level metrics. Micro-level metrics are not materially different from the traditional P&L model, although performance targets are both short and long term. See Table 1 for an example.

ANZ offers a useful example of how one institution can build a sustainable approach to financial inclusion in its key markets. They have been able to leverage and encourage a supportive regulatory environment, as well as test delivery mechanisms in a market they could manage within their proprietary ecosystem. The successes and lessons learned can inform efforts in large markets such as India, China and Mexico that will need to involve multiple actors to achieve scale. Market-level metrics include the social and economic impacts to families, communities and nations. For example:

- *Poverty reduction:* Access to financial services enables income growth. A study found that rural Kenyans participating in M-PESA saw increases in income of 5–30 per cent.[13] With this growth

Table 1: What ANZ considers with goMoney

Metric	*Short-term return*	*Long-term target*
Number of customers	ANZ has reached 125,000 customers in its first 18 months, including 70,000 who had no prior relationship with the bank, the majority of which were previously unbanked	Decreasing the number of unbanked residents contributes to social benchmarks including: • Growth in financial literacy • Greater security when conducting financial and money movement transactions • Improves cash-management efficiency for customers (as in the example of Mr Beto) *Market-level impact:* These types of outcomes have been shown to contribute to poverty reduction and women's empowerment, while decreasing the size of the informal economy.
Engagement of customers (eg how and how often they use the service)	• Customer balances • Active customers vs registered customers • Transaction volumes by type – eg top-up, remittances, deposits, withdrawals • Transactions per active and registered customers	Engagement levels evolve over time, enabling customers to build credit and access other financial services products. This drives greater household consumption and small business growth. *Market-level impact:* These activities contribute to improved outcomes related to poverty, community development and GDP growth.
Merchant relationships	More than 400 merchants maintain merchant accounts and accept customer payments and support customer withdrawals and deposits.	Merchants will have access to credit, enabling more efficient cash flows. This could provide them with the ability to extend credit to their customers as well in the form of extended payment options. *Market-level impact:* Formalised, non-cash transactions create a more efficient local economy, and support improved currency and tax management by shrinking the informal economy.
Revenue generation/cost savings	System allows for far more efficient payments, eg ANZ is able to handle school payroll distribution from the government. This type of service could be extended to other organisations in the region, such as companies that previously delivered payroll to remote regions by helicopter.	ANZ expects the Pacific region to undergo significant infrastructure improvements in the coming years, so the bank expects to leverage its commercial products and services to finance infrastructure development. ANZ is also leveraging its expertise to help banks outside its operating area to develop mobile banking initiatives in other emerging markets. *Market-level impact:* Leveraging ANZ expertise and commercial competencies supports community and economic development, as well as scaling up financial inclusion programmes. More efficient payment systems support increased tax revenue, growth of the formal economy and decrease leakage across all government payment channels.
Number of transactions	Close to 2.5 million ANZ goMoney mobile banking transactions have been supported since 2013. This is an incremental shift based solely on the new services being provided.	Transaction volume will grow alongside transaction types. *Market-level impact:* Decreases the cost of currency management, increases the ability to track money-flows in and out of the market, which increases transparency while decreasing corruption.

comes the potential for a higher rate of savings and, ultimately, use of more revenue-generating financial services. One interesting study in Sri Lanka found that access to savings products actually increased the amount of money participants saved and spent simply because of an increase in productivity. The authors theorise that access to savings products incentivised participants to generate more income.[14] In Mexico, banking services for low-income customers resulted in a 7.6 per cent increase in informal business owners and a 7 per cent increase in average income, according to the World Bank.[15]

- *GDP growth:* There is a correlation between the percentage of people with access to bank accounts and GDP. For example, the *Wall Street Journal* recently reported that, of the ten least developed economies in Asia, nine had the lowest rates of formal banking.[16]
- *Cost savings for governments:* Many governments are now implementing G2P (government-to-person) payments exclusively through electronic disbursement. These can include everything from government payrolls to social welfare payments. The results have been significant. For example, in Brazil, the administrative costs of the state welfare programme have been reduced from 14.7 per cent to 2.6 per cent of the transfer amount.[17] This is also an issue of portionality. If issues such as efficient management of currency and electronification of government payments can deliver cost savings, those funds can be reallocated to more financial inclusion efforts — presumably resulting in compounding returns in the future.
- *Number of women with access to financial services:* This is a core indicator of the financial security of families and a key opportunity for all. Women are more likely than men to work in the informal, cash-based economy[18] and are least likely to have access to financial services.[19]
- *Community impacts:* These can encompass more obvious issues of safety and security, along with the reduction of some of the lesser-known social costs of financial exclusion. For example, one of the issues ANZ observed was a matter of distance. Teachers in remote rural areas could sometimes travel for up to a week, simply to collect their pay. These travel days resulted in down time for students, resulting in a significant impact on the entire community.

THE KEY INGREDIENT: IMPLEMENTATION IN PUBLIC–PRIVATE PARTNERSHIP

Public–private partnership is a prerequisite for any financial inclusion activity to go from a firm-level to a market-level P&L.

First, governments have a significant impact on people's need for formal financial services. Consider the examples of India and Mexico where governments are migrating all G2P payments to electronic disbursement. In these cases, beneficiaries need to open deposit accounts despite the fact that many people lack traditional identification. This compels collaboration on issues such as development of national identification systems, investment in appropriate and timely payments infrastructure and delivery of financial services education.

The second issue to consider as it relates to public–private partnership is the sheer scope of the challenges that financial institutions will face. The obstacles are as varied as the communities that financial institutions are looking to serve. Attempting to solve them alone is not likely to be a practical (or successful) endeavour.

Consider the challenges ANZ faced in Papua New Guinea:

- Over 820 languages are spoken.
- Many of the most remote areas of the Pacific Islands are reachable only by sea or air.
- Customer identification and documentation are not generally consistent with retail banks' strict know your customer (KYC) requirements.
- It is not uncommon for a person not to know their date of birth.

In the case of ANZ, the pace of growth must be carefully managed for reasons that go beyond geographic, cultural and regulatory challenges. Practically speaking, for the programme to work, the agent network requires liquidity. If the agent network grows too quickly, an oversupply of agents could operate with too few transacting customers. Under those conditions, there is no incentive for an agent to maintain liquidity. These are challenges that similar programmes have faced in other countries. In ANZ's case, the bank monitors cash usage (cash in and cash out) daily, and works with agents to ensure that liquidity management is a key performance indicator for agents.

Establishing a sales and agent network, revising KYC and transaction policies, conducting grassroots marketing, and providing continuing financial services education are just a few of the issues that had to be dealt with.

In the case of ANZ, partnership came in the form of collaboration with regulators and NGOs in the Pacific Islands, as well as through a three-year memorandum of understanding with the Australian government that outlines areas for cooperation, including financial literacy and joint financing of necessary infrastructure efforts.

Importantly, governments are also in a position to develop a low-value payments infrastructure. The development of a cost effective, real-time, low-value inter-bank payments infrastructure in any market is a critical foundational element to ensure that all money movement use cases targeting the bottom of the pyramid are successful.

Finally, it must be stated that, while the role of governments is critical, all too often governments err on the side of overregulation, which inhibits the very innovation that their regulation was designed to instigate. Private-sector actors need the freedom to innovate if a commercially viable approach to financial inclusion is to be found. Broadly speaking, the regulatory focus should be on developing the necessary infrastructure and consumer safeguards, as well as a level playing field for the variety of service providers who want to participate. This could be an opportunity for development institutions (World Bank, Women's World Banking, Bill & Melinda Gates Foundation, and the like) to develop a joint blueprint for national governments and the private sector to follow. Some level of standardisation will support speed-to-market and unleash the network effect versus wasting valuable resources in the development of numerous bespoke closed-loop networks that limit the reach their customers desperately need.

Prerequisites for market selection

Even with market evolutions that have drastically increased the likelihood of true financial inclusion, mobile financial services still pose significant implementation challenges.

Experience suggests that there are a certain set of critical factors that must be present in any geography for a financial institution to have a realistic chance of scale and success. These include:

(1) High rates of mobile penetration. Smartphone ownership and internet access are not prerequisites, because

mobile banking can be delivered in full by USSD or SMS. Mobile-phone ownership, however, is a non-negotiable success factor upfront.

(2) A low-cost, low-value inter-bank transactional platform to enable real-time money movement. Target markets must have a modernised payments and clearing system that enables low-value transactions to move seamlessly between accounts regardless of channel or application of origin. This is the responsibility of governments and is not something the private sector could practically take on even if it wanted to.

(3) KYC hurdles need to be addressed and rationalised to align with customers' needs. Traditional identification standards are not always appropriate in financial inclusion efforts, and there are many models of revised norms that can be adopted. In the case of ANZ in the Pacific, traditional standards were modified for transactions under a certain dollar value. In India, eased KYC norms and the introduction of a national identification system have created a more positive enabling environment for financial inclusion.[20]

(4) Establishment of a market framework that tracks the macro-level impact (ie GDP growth, increased tax receipts, lower leakage of subsidies, decreased cost of cash) of financial inclusion initiatives in a given market and creates a mechanism where the incremental wealth generated in the market is shared by the participants. This will enable the creation of less bespoke and closed loop initiatives that fail due to simple lack of scale.

It is useful to point out that the prerequisites are largely outside a financial institution's control. These are factors that are driven by other stakeholders and must be in place prior to market entry. Considering these fundamentals upfront will place financial institutions in a better position to package products that have the potential to be locally relevant, commercially viable and financially inclusive.

THE TIME HAS COME FOR BANKS TO DELIVER PROFITABLY ON THE PROMISE OF FINANCIAL INCLUSION

Since the term 'financial inclusion' emerged decades ago, financial institutions have been viewed as a promising delivery mechanism. Early on, that optimism may have been misplaced. The traditional branch model did not foster the delivery of financial services to everyone, everywhere. A lack of payments infrastructure prohibited the delivery of services that the poorest customers would need most (namely low-value, real-time money movement). Community trust and communications mechanisms were, at best, impractical to foster. Banks had a great deal to offer — lower-cost products, the safety net of formal financial services and financial literacy education — but no legitimate delivery mechanism.

Mobile penetration has changed the equation. Combined with regulatory changes and other technology efficiencies, mobile presents a long-awaited opportunity for financial institutions to reach two billion new customers.[21]

To do so, financial institutions need to take a broader view of success — targeting returns that will take longer to realise, but are also much larger in scope. At the same time, unique cultural, regulatory and infrastructure challenges set the stage for a final requirement: effective public–private partnership. Financial inclusion simply cannot exist without it.

Financial inclusion is not an easy proposition, and there are no silver bullets. It requires significant commitment from a strategic standpoint, and the challenges should not be underestimated. But examples such as ANZ and other financial institutions are demonstrating that it is not only possible, it can deliver far-reaching returns to all stakeholders.

References and Notes

(1) People frequently have more than one subscription, and providers are not always quick to remove inactive accounts, so the figures reported here are high.

(2) 'Global Mobile Statistics 2014 Part A: Mobile Subscribers; Handset Market Share; Mobile Operators', available at: http://mobiforge.com/research-analysis/global-mobile-statistics-2014-part-a-mobile-subscribers-handset-market-share-mobile-operators (accessed 23rd April, 2015).

(3) Demirguc-Kunt, A., Klapper, L., Singer, D. and Van Oudheusden, P. (2015), 'The Global Findex Database 2014: Measuring Financial Inclusion Around the World (No. 7255)', World Bank, Washington, DC.

(4) *Ibid*.

(5) 'Payments and Infrastructure', available at http://www.cgap.org/topics/payments-and-infrastructure, (accessed 13th April, 2015).

(6) 'Press Release: OJK Inaugurates Laku Pandai Program', available at: http://www.ojk.go.id/en/press-release-ojk-inaugurates-laku-pandai-program (accessed 14th April, 2015).

(7) World Bank (2014), '2014 Global Financial Development Report: Financial Inclusion', World Bank, Washington, DC.

(8) Culpeper, R. (2012), 'The Role of the G20 in Enhancing Financial Inclusion', Heinrich Böll Stiftung, The Green Political Foundation, Washington, DC.

(9) Mbiti, I., and Weil, D. N. (2011), 'Mobile banking: The Impact of M-Pesa in Kenya (No. W17129)', National Bureau of Economic Research, Cambridge, MA.

(10) 'International Monetary Fund. Financial Access Survey', available at: http://www.imf.org/external/np/sec/pr/2014/pr14425.htm (accessed 9th June, 2015).

(11) EY (2014), 'Banking in Emerging Markets: Investing for Success', EYGM Limited, New York, NY.

(12) 'Financial Inclusion Will Boost GDP', available at: http://www.australianbankingfinance.com/banking/financial-inclusion-will-boost-gdp (accessed 14th April, 2015).

(13) 'Why Does Kenya Lead the World in Mobile Money', available at: http://www.economist.com/blogs/economist-explains/2013/05/economist-explains-18, (accessed 14th April, 2015).

(14) 'Doorstep Banking in Rural Sri Lanka Increases Customer Savings … and Income', available at: http://www.voxeu.org/article/doorstep-banking-increases-savings-and-income-evidence-sri-lanka (accessed 14th April, 2015).

(15) Bruhn, M. and Love, I. (2009), 'The Economic Impact of Banking the Unbanked: Evidence from Mexico', World Bank, Washington, DC.

(16) 'Asia Steps Up Efforts to Reach the "Unbanked"', available at: http://www.wsj.com/articles/asia-steps-up-efforts-to-reach-the-unbanked-1426627801 (accessed 14th April, 2015).

(17) 'G2P Electronic Payments Leading to Increased Aid and Inclusion in LAC', available at: http://cfi-blog.org/2013/10/09/g2p-electronic-payments-leading-to-increased-aid-and-inclusion-in-lac/ (accessed 14th April, 2015).

(18) Elborgh-Woytek, M. K., Newiak, M. M., Kochhar, M. K., Fabrizio, M. S., Kpodar, K., Wingender, M. P., Clements, B. and Schwartz, M. G. (2013), 'Women, Work, and the Economy: Macroeconomic Gains from Gender Equity', International Monetary Fund, Washington, DC.

(19) Demirguc-Kunt *et al.*, ref. 3 above.

(20) 'Financial Inclusion — Journey So Far and Road Ahead', available at: http://rbi.org.in/scripts/BS_SpeechesView.aspx?Id=858 (accessed 14th April, 2015).

(21) Demirguc-Kunt *et al.*, ref. 3 above.