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# Executive summary

Traditionally, banks operating in emerging markets (EMs) have not viewed financially excluded individuals, and micro, small and medium enterprises (MSMEs) as profitable target customer segments.

However, technological advances are increasingly reducing the cost of serving these customers and opening up a potentially significant growth opportunity for banks. EY believes that driving greater financial inclusion will not only generate sizable economic benefits – boosting gross domestic product (GDP) by up to 14% in large developing economies such as India, and 30% in frontier markets, such as Kenya – but could also increase banking revenues by US\$200b.

However, improving financial inclusion will be easier in some markets than others. This report identifies the types of market infrastructure and government policies that will make it easier for banks to rapidly expand financial inclusion through innovative strategies, such as:

- Customizing offerings
- ► Developing innovative channel strategies
- ► Employing creative risk mitigation and credit profiling techniques

Institutions that act now to increase financial inclusion will be well-placed to dominate retail and MSME banking in EMs for years to come.

# Financial inclusion **Key facts**



#### What is financial inclusion?

Financial inclusion is the provision of affordable, accessible and relevant financial products to individuals and businesses that had previously not been able to access these products.

#### Why is inclusion important?

# To smooth income trends To obtain financing to grow businesses To protect against natural and man-made disasters To save for family celebrations and other life events (births, weddings and funerals)

#### Why are they excluded?



#### Who are the financially excluded?



200+ million
micro, small and medium enterprises without
access to banking services

Source: MSME: Finance expanding opportunities and creating jobs, World Bank



#### Where are the financially excluded?

Financially excluded MSMEs are predominantly located in EMs. More than 40% of MSMEs in the least developed countries reported challenges in obtaining financing, as compared with 30% in middle-income countries and just 15% in high-income regions.

Figure 1. Seventy-five percent of the financially excluded individuals reside within 25 countries



Percentage of financially excluded individuals globally

Source: The World Bank Group

# The opportunity **How much?**

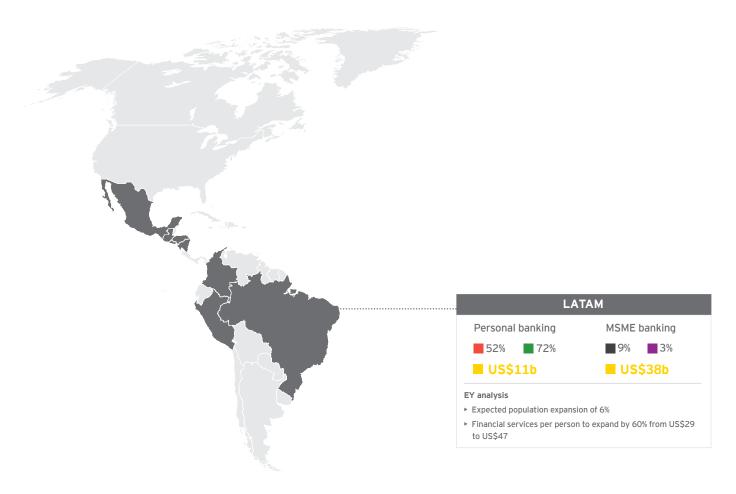


EY estimates that banks could generate incremental annual revenue of US\$200b by better serving financially excluded individuals and MSMEs in 60 emerging countries (Figure 2). This is equivalent to 20% of EM banks' 2016 revenues.

Effective inclusion of individuals could generate US\$24b in revenues, while reducing the credit value gap (CVG) for MSMEs could contribute US\$176b.

Please see page 18 for the methodology and assumptions for the revenue projections in Figure 2.

Figure 2. Potentially US\$200b in additional annual revenue for banks in 60 EMs



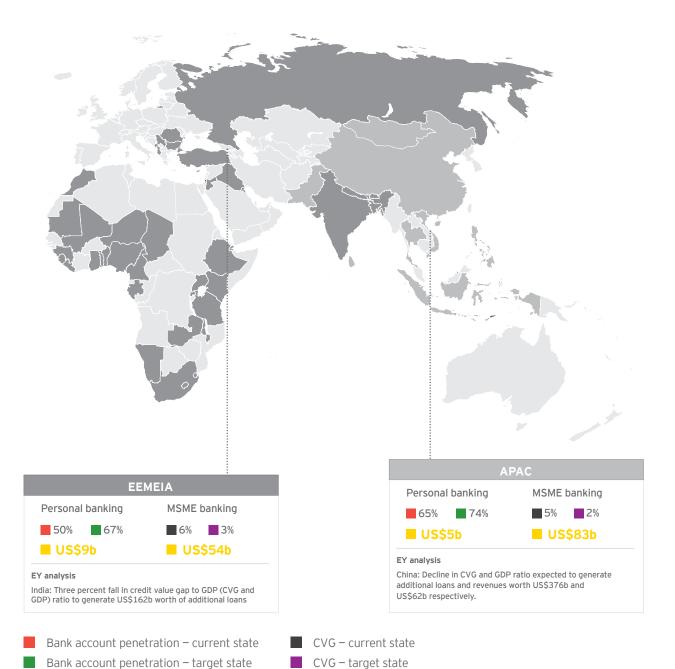
Note:

LATAM: Latin America

EEMEIA: Eastern Europe, Middle East, India and Africa

APAC: Asia-Pacific





Potential banking revenues calculated on additional loans and increased consumption of financial services

# The opportunity Where?



Banks' financial inclusion growth opportunities will be the greatest in markets that embrace technology-led innovation, and which have a clear and supportive policy framework for financial stability.

1

#### Technology and infrastructure drivers

- ▶ High levels of mobile adoption and e-payments: As mobile devices become more affordable and network coverage expands, digital connectivity of financially excluded individuals and MSMEs is improving. The well documented growth of m-Pesa has transformed access to financial services by providing an entry-level e-payment platform to the majority of the Kenyan population. High levels of mobile adoption, coupled with government action to digitalize payments (e.g., government-to-person (G2P) direct cash assistance programs) could be a catalyst for low-income communities to adopt financial services. For example, the Bolsa Família program in Brazil delivers financial assistance to one-third of the population via digital payments into a card or bank account.
- National digital identity (ID) systems: Government-issued biometric ID programs are being explored by an increasing number of countries. India's Aadhaar system, for example, provides real-time verification of identities using a fingerprint scan, iris scan or digital face print. Among others, Aadhaar enables the direct transfer of government subsidies and unemployment benefits. Banks could leverage such biometric ID programs to verify customers at ATMs or service counters and widen access to financial services.
- ► Credit data infrastructure: The absence of traditional credit data for financially excluded individuals and MSMEs is a major barrier to accessing financing. Some countries have formed MSME credit registries to enable the collation of reliable and transparent data that potential lenders can use to facilitate loan applications. Banks seeking to boost lending to underserved segments could use these registries to address information asymmetry and reduce their cost to serve.

- ▶ Open access to digital data: Innovative use of new data sources, such as social media profiles, can provide greater behavioral analysis that can provide financial inclusion.

  Meanwhile, open application programming interfaces (APIs) allow financial institutions to collaborate with FinTechs, governments and external partners on innovative mobile applications and digital payment solutions. Such collaboration can lower the cost of customer acquisition and foster financial inclusion. The Digital India service provides a good example of the benefits of open access to digital data in the development of banking apps − particularly in the areas of security, authentication, e-signature capabilities and unified payment interfaces.
- Currency digitization: Virtual currencies have the potential to improve transaction oversight, which would reduce fraud and counterfeiting. The Bank for International Settlements released a note in September 2017 urging central banks to consider issuing digital currencies, with India reportedly weighing options for releasing its own cryptocurrency, Lakshmi. Digital currencies would lower transaction costs and drive financial inclusion, but require tight regulation, including linkage to fiat money, and an innovative response from banks that wish to remain relevant.

A combination of these new technologies can radically improve financial inclusion. As new technology infrastructure increasingly permits the secure exchange of up-to-date customer information, we expect MSMEs to seek standardized and simplified means to identify and verify themselves with a range of parties. Concepts such as a Digital Passport (see Figure 3), a distributed mechanism for trusted and secure customer information exchange between multiple providers, would enable easier identification and vetting, help build credit histories and make it easier for customers to switch providers by facilitating Know Your Customer (KYC) and onboarding processes.

Figure 3: Illustration of the Digital Passport concept



Source: EY

2

#### Policy and systemic drivers

- ➤ Strong customer safeguards: Low-income consumers are particularly susceptible to aggressive and predatory sales and collection practices. Thus, implementing and enforcing stringent consumer protection laws with strong transparency and disclosure, financial integrity, and effective recourse mechanisms for grievances could build trust in banks and encourage greater financial inclusion. This also includes simplifying legal documents using plain and understandable language.
- Responsible financial literacy programs: Basic education on financial offerings can help individuals and MSMEs understand the value of having access to the financial system, which may improve money management. Financial literacy programs are typically government-initiated, such as Bangko Sentral ng Pilipinas', move to establish a dedicated advocacy unit to address all inclusion initiatives and drive financial awareness in the Philippines. Banks can seek to support and leverage such state programs to deepen relationships and foster customer loyalty.
- Bankruptcy regimes: Countries that regulate the wind-down of failed companies and ventures, support creditor rights, and help to resolve claims in an orderly and unbiased manner are driving financial inclusion. Insolvency regimes protect lenders and raise willingness to provide credit to MSMEs.
- Regulatory incentives for banks: Recognizing that onerous regulations can be a barrier to financial inclusion, some governments have moved to ease selected rules. Examples include the Reserve Bank of India's simplification of onboarding requirements for no-frills accounts, and measures in Brazil, Peru, Colombia and Mexico that reduce KYC documentation for small balance accounts

- with correspondent agents. Government-backed funds to guarantee loans to MSMEs also can facilitate enterprise financial inclusion by eliminating collateral requirements. Funds such as India's "Credit Guarantee Fund Scheme for Small Industries" for instance, covers credit facilities of up to INR200,000 (US\$307,000) without requiring collateral or third-party guarantees. Such guarantees insulate banks from losses related to potential defaults by MSMEs.
- ► **Diverse financial ecosystems:** Increased provision of financial services by nongovernmental organizations (NGOs), e-commerce firms, FinTechs, retailers, and telecommunication companies has a direct impact on expanding financial inclusion. Consequently, a vibrant startup community with access to diverse sources of capital is an important enabler. For example, China's leading internet and mobile payment platforms (Alibaba's Alipay and Tencent's Wechat Pay) enabled US\$2.9t in digital payments in 2016, raising China's e-payments value 20 fold in just four years. Digital finance dramatically helps increase sales revenues and access to capital for small merchants, while platforms such as Alibaba's Yu'e Bao make financial investments more accessible for lower-income communities. Both of these tremendously enhance financial inclusion in EMs such as China.
- ▶ Interoperable financial systems: Interoperability allows for a collaborative financial system, enabling users on multiple digital networks to transact across platforms. For example, Peru's Government, its financial sector and four main telecommunications providers launched Modelo Peru in 2016 to establish an interoperable mobile payment platform for customers to transact across mobile networks and financial providers. This facilitates the use of mobile wallets offered by e-money issuers and promotes greater inclusion.

This table highlights how the 10 markets with the greatest potential revenues from financial inclusion are embracing innovative technology and developing policy to increase financial inclusion.

Table 1. EY financial inclusion heatmap

	Country	Size of opportunity by 2020 (US\$m)	Technology drivers				Policy drivers						
			High mobile adoption and e-payments	National digital ID schemes	Open digital data	Planned adoption of digital currency	Strong customer safeguards	Financial literacy programs	Credit registries and bankruptcy regimes	Regulatory policies and incentives	Diverse financial ecosystems	Interoperable financial systems	Country's scorecard for inclusion revenue potential
1	China	63,444											
2	India	27,031											
3	Brazil	20,545											
4	Colombia	13,850											
5	Thailand	8,519											
6	Turkey	7,932											
7	Mexico	7,606											
8	Vietnam	5,006											
9	Nigeria	4,983											
10	Russia	4,637											

Source: EY analysis

## The opportunity How?



In markets with the right infrastructure and policies, banks will need to adapt their operations to achieve profitable financial inclusion. We believe that those that focus on the following three actions will be most successful:

1

#### Customize offerings – to raise relevance and deepen account adoption

While regulators in certain markets require banks to offer basic accounts, simplify onerous documentation or allow correspondent banking to increase financial inclusion, such measures do not always deliver the desired results. Standardized accounts may not meet the specific needs of certain communities. For example, a traditional monthly

loan payment may not be possible when an individual or MSME relies on a seasonal income stream. This can result in underutilization of such accounts and may leave customers not truly financially included.

To drive financial inclusion, banks must structure highly relevant and potentially simplified financial solutions that meet the specific needs of their customers at an affordable cost. This requires building deeper customer understanding and a compelling customer proposition. Examples include savings accounts with insurance coverage, community savings accounts, personalized credit facilities, affordable trade financing, equipment purchase facilities or unsecured loans for MSMEs. By assuring that their product portfolios have a sufficient mix of innovative products and services, institutions can earn the loyalty of newly onboarded customers and drive cross- and up-sell opportunities.

#### Customized offering initiatives

In Kenya and Uganda, Barclays provides poor communities with a low-cost group savings account. This gateway product fosters trust among customers, many of whom will use credit products in the future. Within two years of its roll out in Kenya, savings has grown to more than £124,000 (US\$164,000) - making over £173,000 (US\$229,000) available in loans back to the community.

In India, Jammu and Kashmir Bank, and PNB MetLife Insurance launched the JKB Family Protection Savings Bank Account that bundles low-cost insurance protection with the benefits of a savings bank account. The banks expect this product to generate new business prospects of up to US\$2b.

In Kenya, Umati Capital has created an app called Umati Application, which offers supply chain financing, a product that gives small businesses credit to pay up to 80% of their suppliers' invoices in days. This results in fewer past due statements, more loyal suppliers and smoother income flows.

In Zimbabwe, Econet Wireless has created a weather-indexed microinsurance cover called EcoFarmer for small farmers for as little as US\$0.08 per day that would be deducted from their prepaid phone account. This allows them to make claims of up to US\$100 for every 10kg of seeds planted that resulted in failed crops. Within a year of launch, approximately 1,100 farmers have signed up for this program. Membership includes farming best practice training, funeral insurance and membership with the Zimbabwe Farmers' Union.

In India, Punjab National Bank has collaborated with an NGO to offer a "rickshaw finance scheme" in 100 Indian cities. The program helps pullers own their rickshaw after three years and provides additional options for small personal credit facilities and medical insurance. Within four years of launch, the bank allocated almost US\$1.5m to purchase more than 10,000 rickshaws.

#### Innovate channels – to reach more customers at lower cost

Digital channels provide greater convenience for customers at a lower cost for banks and have been instrumental in helping providers overcome challenges related to infrastructure and geography in many developing countries. Moreover, digital technology can streamline the lending process, enable direct origination of loans and significantly reduce decision times, while also enabling greater transaction volume.

Figure 4: Cost to serve customers through different bank channels (US\$)



However, while Figure 4 indicates that digital channels may be the lowest cost to operate, effective financial inclusion will likely require a "bricks-and-clicks" distribution model that includes a physical branch presence to build trust and confidence, perhaps supplemented by correspondent agents (such as post offices and supermarkets). Such a model can still operate efficiently if automation is employed effectively. For example, in dense urban areas, banks could build no-frills mini branches or kiosks that offer standard products. Similarly, a correspondent agent model could serve as a local touchpoint for offering basic financial services in previously unbanked towns and provinces. Partnerships with correspondent agents can also lead to integrated product or service offerings that deliver greater value to new banking customers. Physical locations could further promote financial literacy awareness and drive future demand for banking products.

Source: Value Partners

#### Innovative channel initiative

In Kenya, Musoni, a digital microfinance institution, uses a mobile platform to disburse loans within 72 hours and collect payments. Seven years after commencing operations, Musoni has disbursed over 110,000 loans worth in excess of US\$25m.

In Bangladesh, the payment company bKash allows people to exchange hard currency for e-money through a network of community-based agents. Launched in 2011, bKash now has more than 80% market share for mobile financial services in Bangladesh.

In Colombia, the telecom company Tigo-Une has converted 13,000 pay phones into "payphone banks," allowing underserved customers to deposit coin-denominated daily earnings into their own microsavings accounts. These accounts can be used to pay utility bills or apply for microloans at appliance stores.

In Brazil, Banco Bradesco launched satellite-linked riverboat banks to cover 1,600km across 11 cities, and served more than 50 riverside communities along the Solimões river. On its very first trip, 200 new accounts were opened.

In Indonesia, Bank Rakyat's floating bank branches brings financial services to inhabitants of the country's remote islands. Subsequently in 2016, the bank also launched its own satellite to provide reliable connectivity to support these floating banks and other self-service banking stations in villages.

In Kenya, Equity Bank uses wifi-connected armored trucks to provide banking access to customers in areas without physical outlets. Within a year of introduction of this roaming banking service, Equity Bank raised its customer base by 134%, equivalent to 344,000 new customers.

In India, SMEcorner.com is a leading MSME loan platform for small unbanked enterprises to connect with lenders online. This provides them with an avenue to source for loans efficiently at borrowing rates that are more reasonable than unregulated moneylenders.

In Egypt, Dopay allows small businesses to pay staff via a Dopay account that is linked to a debit card, and for MSME and individual users to pay bills or transfer money to others. Launched in 2014, Dopay had 20,000 staff from MSME customers on its payroll system and issued 2,000 cards by the beginning of 2016.

#### Creatively mitigate risk – to address absence of credit histories

Many financially excluded individuals and MSMEs do not have the financial track record that banks traditionally rely on to support lending decisions, nor do they necessarily have access to proven identity, address and security details. This effectively cuts off their access to bank credit. To illustrate, agriculture contributes approximately 10% of China's GDP and yet loans to the sector account for just 1% of the commercial banking credit portfolios. Farmers' access to conventional bank loans has been limited by the lack of typical credit scoring data and consequently, many are forced to secure credit from "shadow banks" and pay exorbitant rates of up to 60% p.a. during the planting season. By developing creative credit profiling techniques, banks could boost lending to the sector and help close the CNY3t (US\$441b) financing gap to China's agricultural sector.

Nonbanks are pioneering in this space, developing new underwriting and credit scoring analytics for individuals and businesses. These are exploring nontraditional data, such as consumers' internet footprint, social media usage, psychometric test results and biometric digital trails, as data sources to assess lending risk. Many MSMEs also have digital footprints related to e-commerce, so reviewing their customers' feedback on product and service credibility can provide data to evaluate business viability and creditworthiness. Banks should partner with or emulate these nonbank counterparts to develop innovative techniques to fill potential customers' credit history gap.

#### Creative risk mitigation initiatives

In China, the agriculture FinTech company Nongfenqi assesses creditworthiness of customers through conversations with their business partners, customers and fellow villagers. Analyzing customers' reputations anecdotally has resulted in a default rate of just 0.1% on loans made to over 20,000 farmers as of early 2017.

In India, CreditVidya assesses lending risk by analyzing consumers' internet footprint, social media usage and psychometric test results. Within two years, the company has five million customers and partnerships with over 20 leading financial institutions.

In a number of markets, FICO collaborates with psychometric credit scoring partner EFL Global to send psychological questionnaires to potential borrowers via their mobile phones. Using this technique, it validated over one billion individuals for more than US\$1.6b in loans from 35 financial institutions within the 12 months to October 2017. Partner banks were able to use risk-based pricing, with defaults remaining manageable at low single digits in India to low double digits in Brazil.

In India, FinTech Signzy provides cloud API-based background checks on digital identification, forgery detection and contract management system services. This has helped reduce the identification and verification process for some banks from approximately two weeks to two days.

In India, Aye Finance is a small businesses lender that develops credit assessment processes using business and behavioral data, trade associations and referrals, coupled with modern workflow automation. It has disbursed US\$32m of loans to MSMEs in India since 2014.

In Mexico, Konfio is an online lending platform that measures credit worthiness of MSMEs through a proprietary algorithm that uses more than 5,000 biographical, social and financial data points to create a single credit measure. Since launching its first product in 2014, Konfio has originated more than 50,000 business loans.

In Kenya, Kopo Kopo, a business management software provider offers unsecured cash advances to merchants accepting electronic payments via its system within 24 hours, aligning their expected cash flows to loan repayments. It facilitated loans of over US\$2m to almost 600 merchants within a year of launch.

## The opportunity Who?



The approach a financial institution takes to driving inclusion depends on its business model. Some may prefer to focus on developing innovative products or credit-scoring techniques, while others opt to transform delivery channels (see Figure 5). For example, microfinance institutions are already aligned to small customers, which places them in a suitable position to focus on customizing products. In contrast, telecommunication companies and FinTechs are probably better suited to utilize innovative channels and alternative credit-scoring techniques.

While these nonbank financial companies and ecosystem players stand to benefit, EY expects domestic and regional banks, with established brands and branch networks, to be the primary winners of that US\$200b revenue opportunity presented by greater financial inclusion.

There has never been a better time to seek revenue growth through financial inclusion. Banks that seize this opportunity today – and are able to strategically customize offerings, utilize innovate channels and creatively mitigate risk – will be well positioned to capture market share and play a transformative role in the growth of EMs for years to come.

Telecom players

Figure 5: Approaches to inclusion

### **Customize offerings** Innovate channels Creatively mitigate risk Specialist finance institutions Domestic banks Microfinance Additional revenues through higher financial inclusion institutions Regional banks FinTechs

**Action points** 

Source: EY analysis



# Financial inclusion In practice



#### African Bank

This leading South African retail bank offers personal loans, savings and insurance to lower-earning customer segments with the goal of delivering greater value. African Bank recognizes that their retail banking platform needs to extend to transactional banking in order to service the full banking needs of their customer base, inspired by their brand's purpose to enable "humanity through banking." The aim is to bring lower-cost banking to a wider population in South Africa, where as many as 15 to 20 million people are not regular users of banking and financial services.

#### Driving financial inclusion

African Bank's journey toward a transaction bank started with the understanding that customers across all income levels are increasingly empowered. They expect to bank on their terms, anytime and anywhere, and to be in control of their banking experience. Consumers are increasingly using digital platforms as the primary access channel for transactions.

African Bank's executive team recognized that more of the population in South Africa needs to participate in the economy to build financial security, and that there is an opportunity for a new bank to playing a more proactive part in creating financial inclusion.

The banking landscape in South Africa is characterized by several large incumbent banks that lower-earning customers often perceive to be expensive, and that are challenged by high structural costs driven by their legacy. This makes it harder for incumbent banks to address financial inclusion adequately.

#### The opportunity

African Bank believes that they could build and launch a transaction bank product that would resonate with the potential target market by:

- ► Creating low-cost banking, where transaction fees are transparent and easy to understand
- ► Enabling convenient and easy-to-use transaction banking that provides a gateway to other products or services – all delivered on a low-cost digital platform
- ► Drawing the community into each customer's banking life, bringing transaction services to a wider population
- ► Driving value across the customer's banking needs through convergence-based collaboration with insurance and telecommunication providers, enabling customers to make their money go further
- ► Building customer financial literacy and security that enables more customers to participate more actively in the South African economy



#### Enabling customer financial security

African Bank is built on a next generation digital omni-channel banking platform that will drive the cost of banking down, while enabling products that are simpler to use. The platform will integrate existing loan-based products and enable an ecosystem that brings greater value to the customer. Unlike traditional banks, it will drive a culture of constant innovation and operate in a lean, flexible and agile manner. This will allow African Bank to respond to customers' changing needs, drive future product innovation and understand their customers better – remaining true to their brand's promise.

#### How EY contributed

As a strategic advisor to African Bank, EY facilitated an agile, workshop-based approach to develop and refine the strategy for the transaction bank. This included building the operating model and process architecture, implementing the road map, and assisting in defining the customer value proposition and experience.

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#### Methodology and assumptions for revenue projections:

Personal banking: Projected revenues are based on the expected per capita financial consumption adjusted for inflation levels, population growth and estimated bank account penetration for the 60 EMs in our analysis. In countries where banking account penetration currently falls under 50% (e.g., in Bangladesh), we assume that account adoption will increase by 25% in 2020. Given proactive financial inclusion measures, we anticipate that the percentage of population aged above 15 with an account would rise from 31% (2014) to 56% (2020). In contrast, countries with a higher-base penetration rate of 50% to 70% will see adoption increase relatively less (by 15%). Those already over 70% adoption rates (such as Kenya's 74%) are expected to see the most measured increases of 5% by 2020.

MSME banking: The World Bank estimates there are 200 to 245 million MSMEs in developing economies with unserved or underserved financing needs. We modeled revenues from MSME banking by closing the demand-supply credit shortfall. This is calculated using the projected credit business opportunity for each country based on expected GDP in 2020, multiplied by aggregated interest from loans and noninterest spreads from fee-based services. Similar to the personal banking segment, we have assumed reasonable reduction in the credit gap to GDP ratio for each country depending on base values.

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