

Project Blue Emerging Markets

***Geared up for
growth: Shaping a
fit for purpose
financial system***



A 'fit for purpose' financial system is essential in promoting inclusive and sustainable growth within emerging markets. How do leading markets rate against fit for purpose targets? How can policymakers, regulators and financial services organisations actively shape a fit for purpose financial system?

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Foreword:

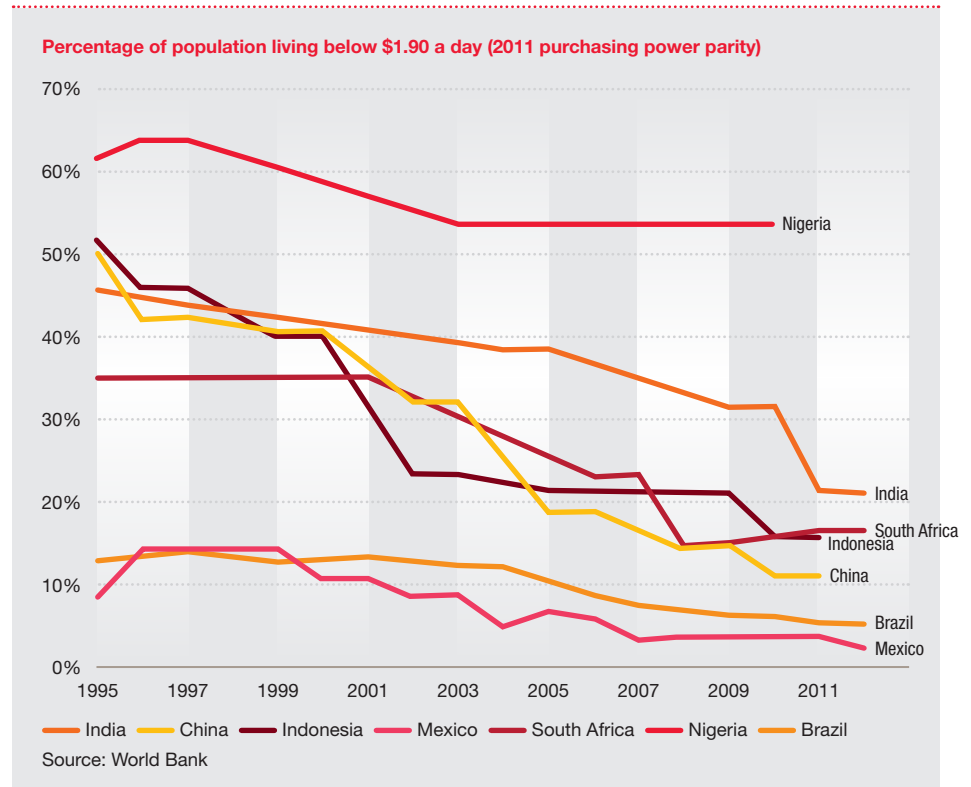
Financial systems matter

In Geared up for growth: Shaping a fit for purpose financial system, we set out what an efficient, resilient and inclusive – ‘fit for purpose’ – financial system looks like across eight key dimension and how leading emerging markets rate against fit for purpose targets.

Growth in emerging markets continues to outstrip developed counterparts¹ and hundreds of millions of people have been lifted out of poverty (see Figure 1).

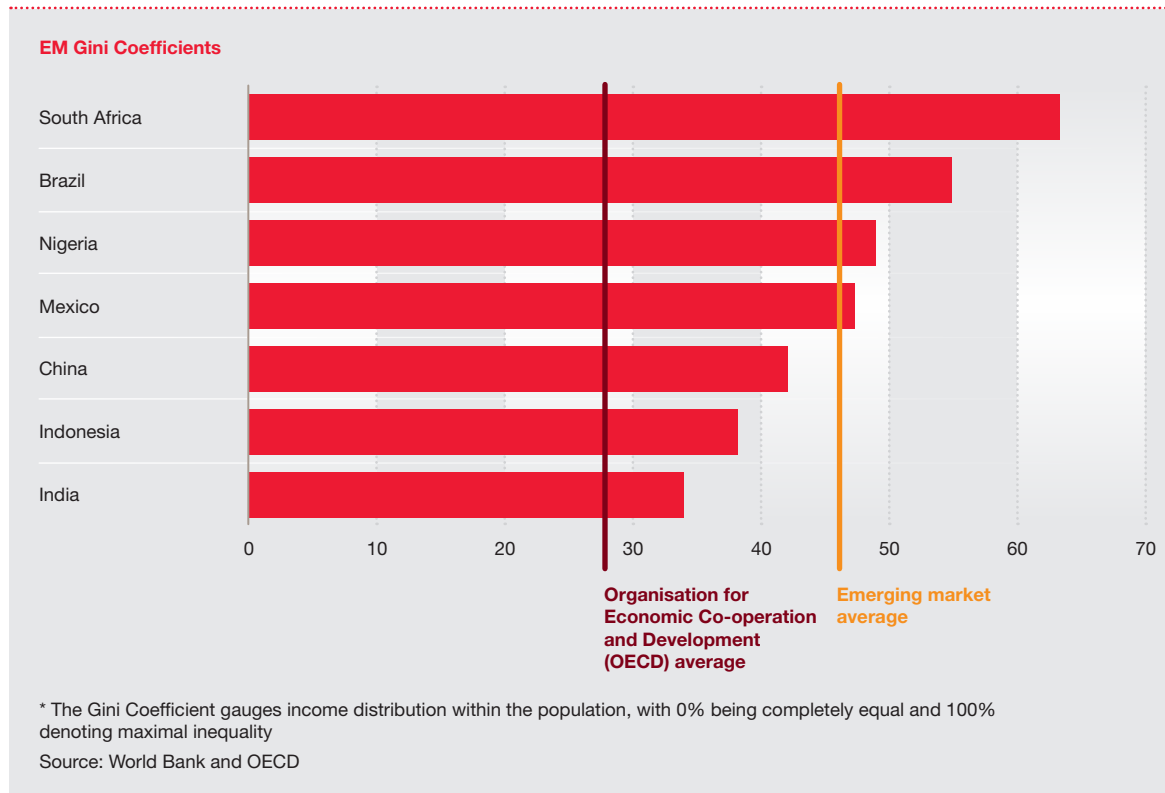
Yet, emerging market economies remain fragile in areas ranging from their susceptibility to commodity price movements to their limited resilience against natural catastrophes. Restricted access to finance is holding back investment in both business expansion and infrastructure. And income inequality is significantly higher than developed counterparts (see Figure 2).

Figure 1: Poverty reduction

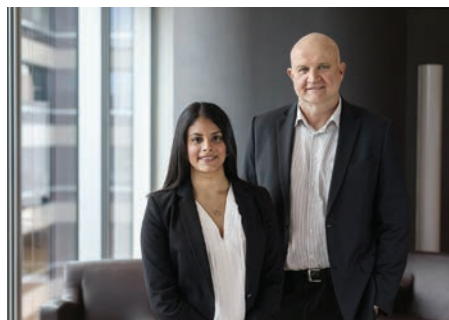


¹ International Monetary Fund World Economic Outlook, January 2016 (www.imf.org/external/pubs/ft/weo/2016/update/01/)

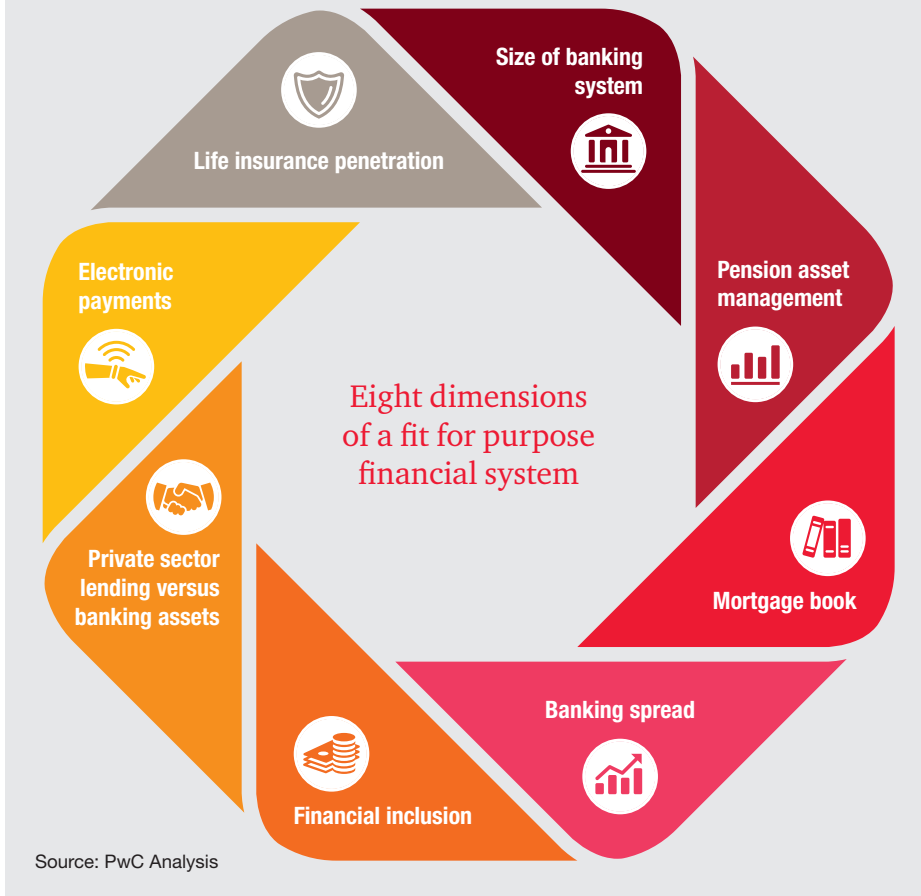
Figure 2: Income inequality*



Financial system development is critical in tackling poverty and sustaining economic growth over the long-term. Drawing on the research, analysis and experience of our experts from around the world, this paper seeks to define the end goal of a fit for purpose financial system and set targets against which current state and future progress can be gauged in seven leading emerging markets (see Figure 3). A fit for purpose financial system fosters inclusion, investment, access to credit and support for people when they retire, while promoting efficiency and protecting against systemic risks.



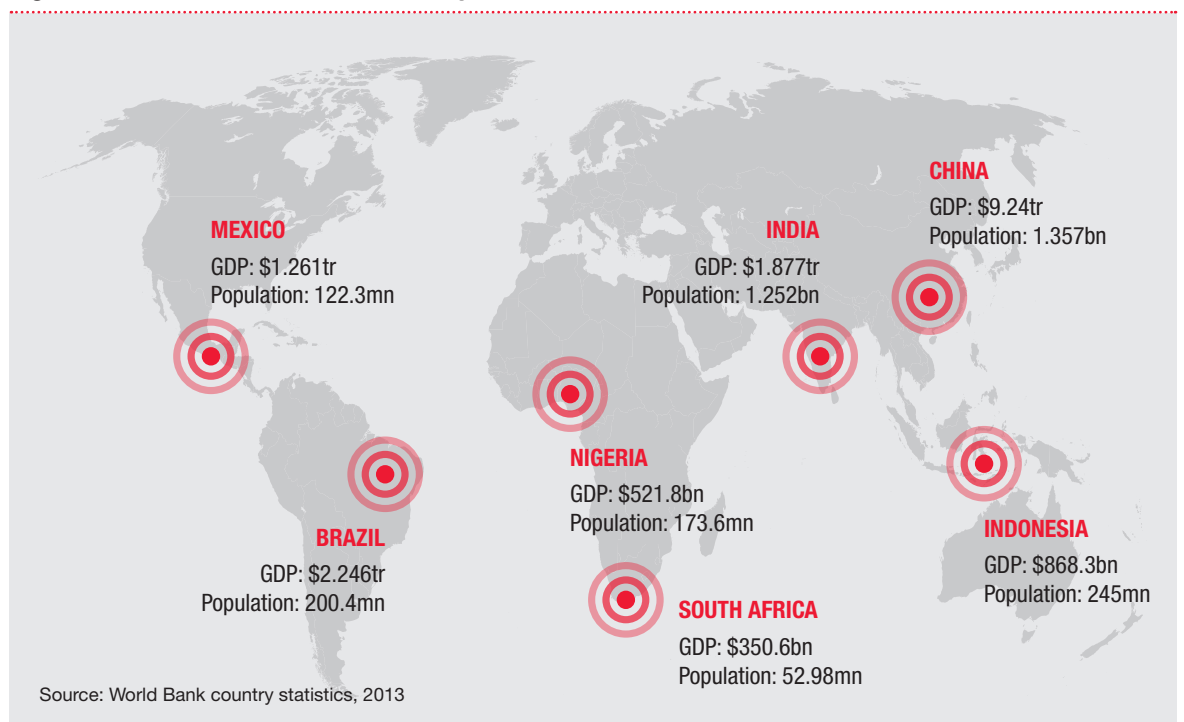
Eight dimensions of a fit for purpose financial system

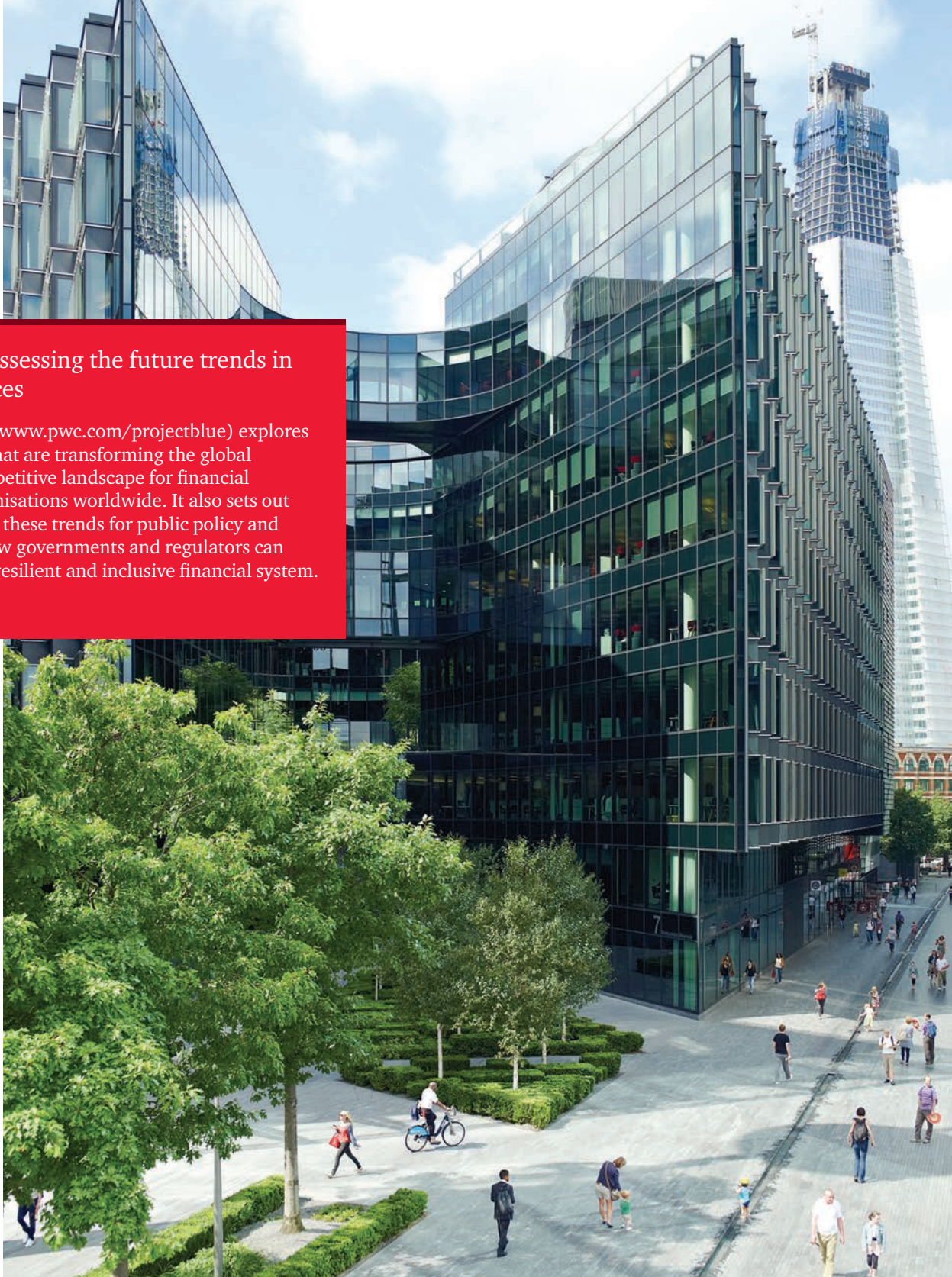


Rather than being scientific, the targets within this framework are a reasonable assessment based on practical experience of what supports inclusive and sustainable growth in different markets.

Our fit for purpose framework aims to help finance ministries and regulators actively shape financial system development by identifying gaps, defining priorities and learning from the experience of counterparts in other markets. It can also help to identify commercial opportunities for both domestic and international groups, along with FinTech innovators looking to bridge gaps and accelerate development.

Figure 3: The seven markets in our analysis





Project Blue: Assessing the future trends in financial services

PwC Project Blue (www.pwc.com/projectblue) explores the major trends that are transforming the global economy and competitive landscape for financial services (FS) organisations worldwide. It also sets out the implications of these trends for public policy and regulation, and how governments and regulators can forge an efficient, resilient and inclusive financial system.

Oiling the wheels: How a fit for purpose financial system boosts growth

Markets need a robust and broad-based financial infrastructure to channel funds efficiently, draw people into the market economy and enable them to share in the benefits.

Emerging markets have been spearheading global growth in the twenty-first century. Natural advantages can include the availability of raw materials or the demographic dividend of young and expanding populations. Fast expanding middle classes are boosting consumer demand. Digital connectivity is also fostering innovation, with developments in areas such as mobile banking leapfrogging more legacy system-dependent mature markets. The combined GDP of the seven largest 'E7' emerging economies (China, India, Brazil, Russia, Indonesia, Mexico and Turkey) has already overtaken their G7 developed counterparts (US, Japan, Germany, UK, France, Italy and Canada) in purchasing power parity terms and by 2050 we anticipate that E7 GDP will be around twice as big as G7 GDP².

A fit for purpose financial system is essential in meeting increasing demand, be this consumer credit or wealth protection. Businesses need finance to innovate and expand. Financial development can also boost long-term prosperity by encouraging commercial diversification, reducing reliance on commodities and making it easier to bounce back from market shocks and natural catastrophes. It also works at a personal level by enabling people to own their own home, protect their families' health and plan for a financially secure retirement.

Financial system development is a lead indicator of growth and prosperity

Academic studies have shown that the financial system development is a precursor ('lead indicator') rather than just a by-product ('lag indicator') of economic growth.

Financial sector development fosters economic growth and reduces poverty by broadening access to finance and allocating society's savings more efficiently³.

Availability of finance may not in itself be the key. Rather intermediation works best when it's built around the solid foundations of stability, trust and transparency. A 2004 study found that financial system development has larger effects on growth when the system is embedded within a sound institutional framework. This is particularly true for poor countries, where more finance without sound institutions is likely to fail in boosting growth⁴.

² The world in 2050: Will the shift in economic power continue, PwC, 2015 (www.pwc.com/gx/en/issues/the-economy/assets/world-in-2050-february-2015.pdf)









³ 'Creating an Efficient Financial System: Challenges in a Global Economy', Thorsten Beck, 2006 (elibrary.worldbank.org/doi/abs/10.1596/1813-9450-3856)

⁴ 'Finance, institutions and economic development', Panicos Demetriades and Siong Hook Law, International Journal of Finance & Economics, 2004 (www.le.ac.uk/economics/research/RePEc/lec/leecon/dp04-5.pdf)

What does fit for purpose look like?

Figure 4 sets out what we believe are the dimensions of a financial system capable of delivering these long-term benefits and the fit for purpose targets to aim for.

Figure 4: The dimensions and targets for a fit for purpose financial system

	How is the metric measured ?	PwC viewpoint	Fit-for-purpose target
 Size of the banking system	Measured as the value of banking assets as a percentage of GDP	Banking sector should not be too large compared to economy	100%
 Pension asset management	Measured as pension funds under management as a percentage of GDP	Higher ratio lowers the dependency of ageing population on the working population	50%
 Mortgage book	Measured as residential real estate loans as a percentage of total loans	A well-functioning housing sector improves personal consumption and is critical to the overall health of the economy	50%
 Banking spread	Measured as the difference between lending and deposit rates	A lower price of banking improves borrowers' ability to service debt	3%
 Financial inclusion	Measured as the percentage of people having access to formal banking services	Financial inclusion leads to higher productivity	80%
 Private sector lending versus banking assets	Measured as credit to private sector relative to bank assets	Lending to the private sector drives growth	50%
 Electronic payments	Measured as electronic transactions as a percentage of total transactions	Electronic transactions curtail black economy and give a boost to the economic growth	90%
 Life insurance penetration	Measured as life insurance premiums as a percentage of GDP	Higher ratio demonstrates quality of social security and enablement	20%

Source: PwC analysis









Given the interdependence of these dimensions, it's important to ensure that oversight and direction are closely co-ordinated. Financial inclusion stimulates mortgage and pension demand, for example. It also stimulates savings, productivity and tax receipts, and hence further inclusion and economic growth.

And the necessary development isn't just a matter of following developed markets. The pace of growth and transformation in emerging markets is much faster than developed market counterparts, which presents challenges that have never been confronted before, but also creates openings for new and innovative solutions.

Gauging progress: On course or off track?

Our assessment highlights considerable room for further development in key areas ranging from financial inclusion to pensions and protection (see Figure 5).

Figure 5: Progress against targets

	Fit-for-Purpose Target	Brazil	South Africa	Mexico	Indonesia	Nigeria	China	India
 Size of the banking system	100%	127%	109%	41%	55%	30%	257%	96%
 Pension asset management	50%	14%	42%	12%	2%	6%	1%	1%
 Mortgage book	50%	14%	25%	16%	8%	7%	20%	10%
 Banking spread	3%	22%	3%	3%	4%	7%	3%	5%
 Financial inclusion	80%	68%	70%	39%	36%	44%	79%	53%
 Private sector lending versus banking assets*	50%	54%	139%	77%	67%	49%	55%	54%
 Electronic payments	90%	57%	43%	53%	31%	10%	55%	32%
 Life insurance penetration	20%	4%	14%	2%	2%	0%	3%	3%

Source: PwC Analysis

Broadly on target – supports inclusive and sustainable growth
 Moving in right direction, but more work needed
 Significantly below target – impedes inclusive and sustainable growth
 Comparatively high – raises systemic concerns

*The number also includes lending from financial corporations other than banks where data is available like finance and leasing companies, money lenders, insurance corporations, pension funds, and foreign exchange companies; causing it to be more than 100% in some cases

Size of the banking system

High levels of banking assets can help to ensure a steady supply of finance for economic growth. In practice, however, there is a trade-off between economic efficiency and financial stability – the size needs to be right rather than just big.

Progress against target

Markets are using innovative technologies (e.g. mobile payments) to expand their banking systems and increase sophistication. Yet vulnerabilities are evident in some markets (e.g. household debt in Brazil). The high level of assets in comparison to GDP in China could pose systemic risks, especially if the economy slows and defaults rise.

Chinese banking: Too big to be fit?

China's banks are facing a troubling collision of swelling balance sheets, high corporate debt levels and a gathering rise in insolvency and default.

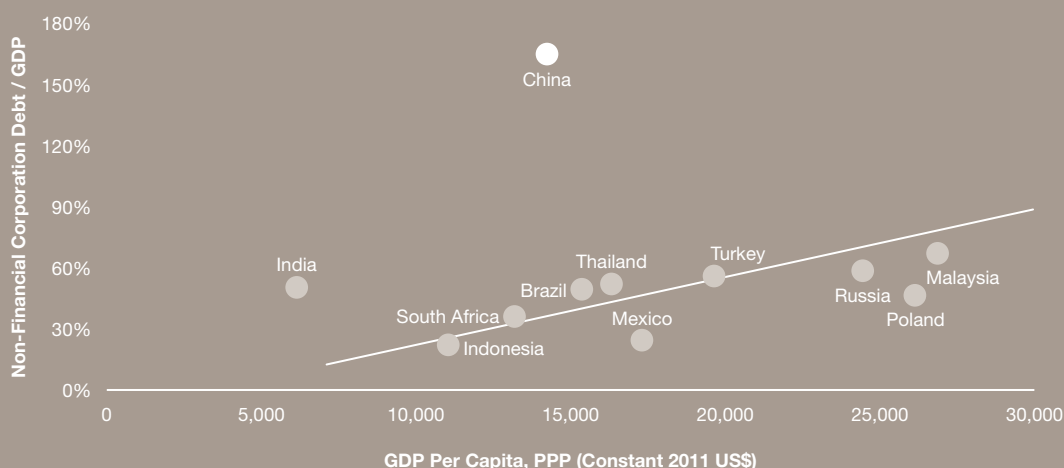
China's four largest banks control the equivalent of more than \$11 trillion in assets⁵. Assets have expanded rapidly on the back of the country's fast economic growth and high national savings rate (nearly 49% of GDP in 2014⁶).

However, state ownership requires banks to channel a lot of their lending to other publically-owned companies, some of whom may not be financially strong enough to repay the loans. The ratio of nonperforming to total loans for Chinese banks is reported to be around 1.75%, an 11-year high⁷, though some analysts believe that the true scale of the bad debts is much higher than the official figures.

As the government strives to hold down unemployment, it has preferred to keep poorly performing state enterprises afloat rather than allow them to go under. Yet a 50% year-on-year rise in insolvencies in the first quarter of 2016⁸ suggests that weeding out could soon gather pace, albeit most of the companies that have been allowed to go to the wall are small and employ few people.

Total credit provided to the non-financial sector in China is about two-and-a-half times GDP⁹. A very high ratio of credit to GDP needs attention from regulators. Chinese credit to the corporate sector is already much higher than most other emerging markets (165% of GDP at the end of 2015, compared to an average of 101%)¹⁰. The slowing domestic and global economy has led to lower returns for these companies, making it harder for them to meet their debt repayments.

Figure 6: Credit to the non-financial sector versus GDP per capita



Source: Bank for International Settlements and World Bank

5 S&P Global Market Intelligence 'Largest 100 banks in the world', 12 April 2016

6 World Bank national accounts data (data.worldbank.org/indicator/NY.GNS.ICTR.ZS?locations=CN)

7 Reuters, 12 May 2016 (www.reuters.com/article/china-economy-loans-idUSL3N18935N)

8 Financial Times, 23 June 2016 (www.ft.com/cms/s/0/70aec7b2-3869-11e6-a780-b48ed7b6126f.html#axzz4KgLwDmRV)

9 Bank for International Settlements update 6 June 2016 (www.bis.org/statistics/totcredit.htm?m=6%7C326)

10 Bank for International Settlements update 6 June 2016 (www.bis.org/statistics/totcredit.htm?m=6%7C326)

Pension asset management

Why it's important?

Markets need to provide for increasingly ageing populations¹¹. Older people could once rely on their extended families for support. Now, the influx of people from the countryside into cities is breaking up extended families, and hence increasing the need for life and pensions cover.

Progress against target

With the exception of South Africa, markets have yet to achieve strong, reliable pension provision for their populations.

Although households in emerging markets often have higher rates of savings, they tend to prefer bank deposits over mutual and pension funds. This highlights the importance of boosting fund management opportunities and the capital markets to support them. Further priorities include improving awareness, trust and financial literacy within the population.

¹¹ A declining working age population is often seen as a developed world phenomenon, but China is now beginning to follow suit. In 2000, there were six workers in China for every person aged over 60. By 2030, there will be barely two – Guardian, 20 March 2012 (www.theguardian.com/world/2012/mar/20/china-next-generation-ageing-population). Others will follow suit as urbanisation puts a break on family sizes and economic development improves health and longevity.

Nigeria demonstrates success of auto-enrolment model

Fostering trust has been critical to the success of Nigeria's compulsory contributory pension.

Launched in 2004 and updated in 2014, the scheme requires employers and employees to contribute 10% and 8% respectively towards a pension. Employers can opt to pay all the contributions themselves.

The fast growing scheme now has nearly seven million participants (see Figure 7) and pension fund assets of more than \$25 billion (as at June 2016). Tight regulation means that both employers and employees feel their money is protected against fraud and risks are controlled. This includes ensuring that money is held by licensed custodians rather than financial advisors. At least 70% of assets must also be invested in government securities and people can see every month how much money they have for their pension.

Growth in assets and take-up

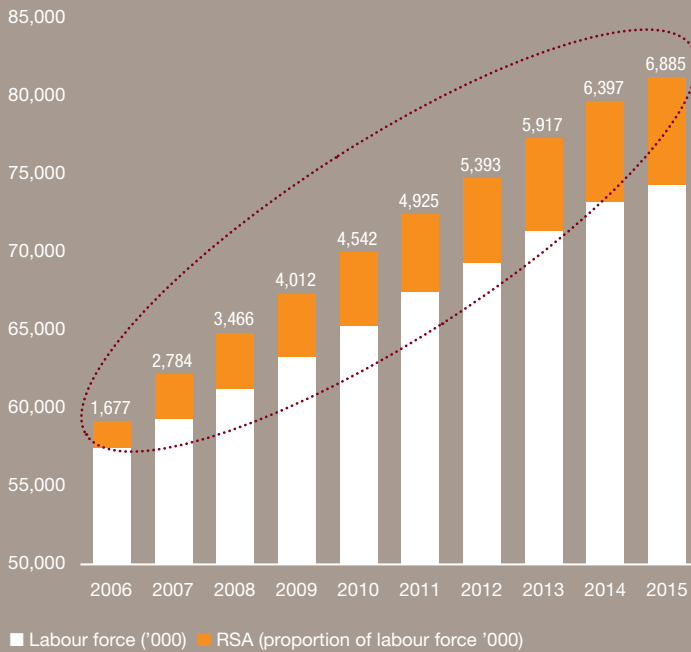
Comparisons with other markets highlight the potential for further growth (see Figure 8). The government has set a target of 20 million enrolees by 2018. To achieve this, it will need to boost take-up among people who work in the informal sector, which employs nearly 60 million people (70% of the working population)¹². Initiatives include voluntary defined contribution micro-pension schemes, which are specially designed for casual labourers and people working for multiple employers. In making these schemes a success, it will be important to learn from the challenges faced in launching micro-pensions in comparable markets such as Kenya and India.

Room for growth

By holding more than a third of government securities, the knock-on benefit of the scheme is in helping to fund government investments. It also spurs the banks that had previously relied on these investments as a major source of income to switch resources to commercial lending.

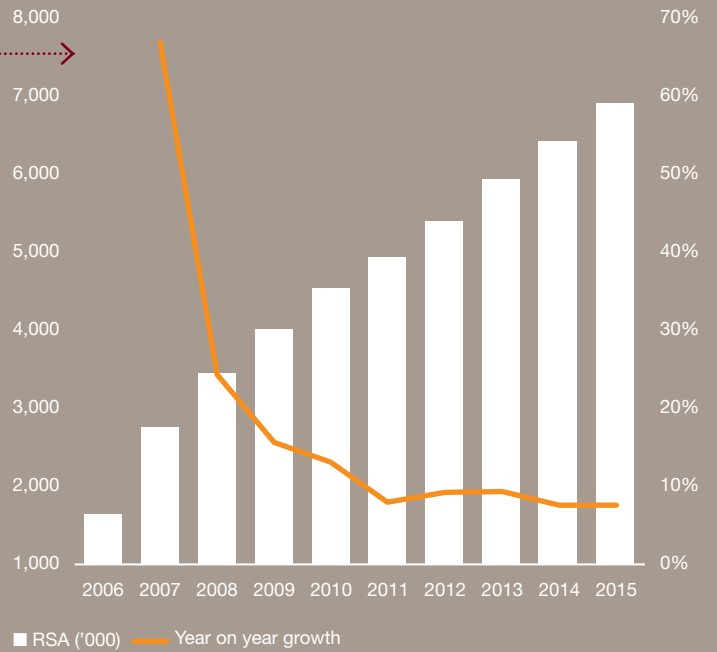
¹² PwC analysis

Figure 7: Retirement savings accounts (RSA) as proportion of labour force in Nigeria



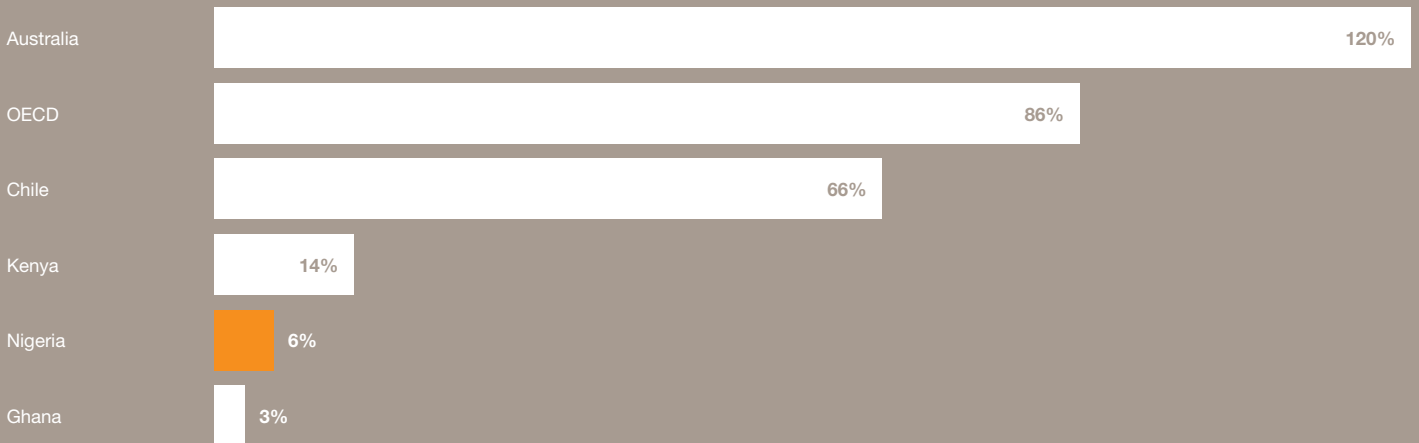
Source: PwC analysis

Trend in retirement savings accounts (RSA) in Nigeria



Source: PwC analysis

Figure 8: Pension fund assets (% of GDP) – select region/countries



Source: PwC analysis

Mortgage book

Why it's important?

In societies facing rapid urbanisation (see Figure 9) and population growth (see Figure 10), development of mortgage lending is vital in stimulating investment in house building and access to housing.

Progress against target

Mortgage market development is required across the board. In Nigeria, for example, mortgage loans to GDP is less than 1%. Key issues include deficiencies and complications in land registration, house construction costs and access to long-term finance. While some governments (e.g. Nigeria) are spearheading mortgage access by creating a public refinancing company, others have let market forces and new demand for mortgage loans gradually increase the supply.

Banking spread

Why it's important?

A low banking spread (difference between bank lending and deposit rates) encourages demand for lending and stimulates economic activity.

Progress against target

Banking spread is low in most emerging markets, though Brazil and, to a lesser extent, Nigeria are notable exceptions. Policymakers are keen to keep spreads low, with Brazil actively working to reduce it.

Figure 9: Accelerating urbanisation

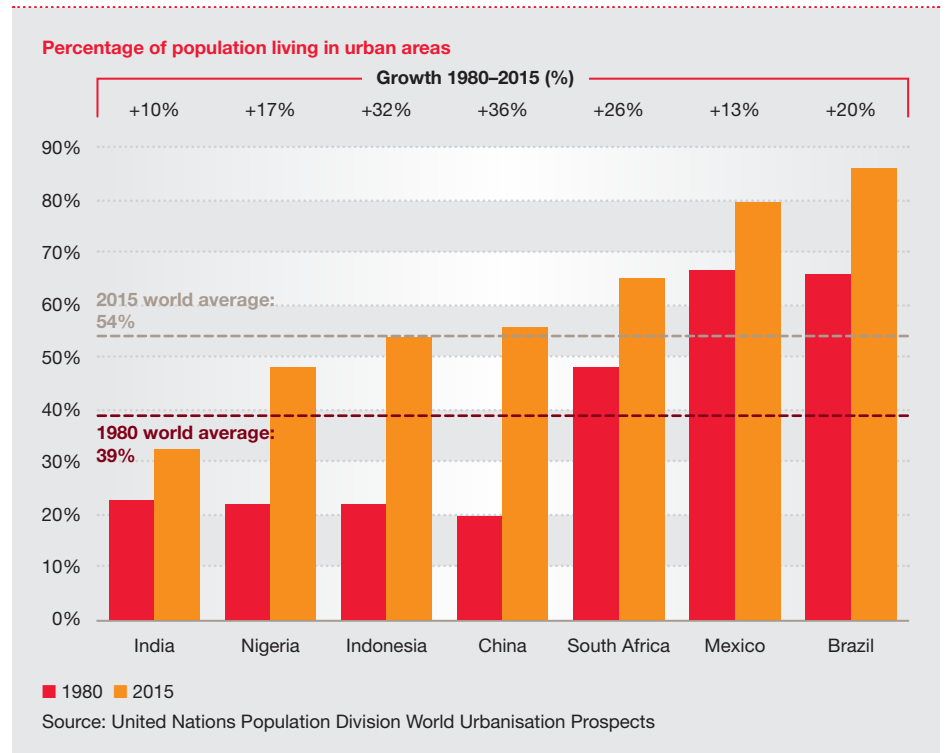
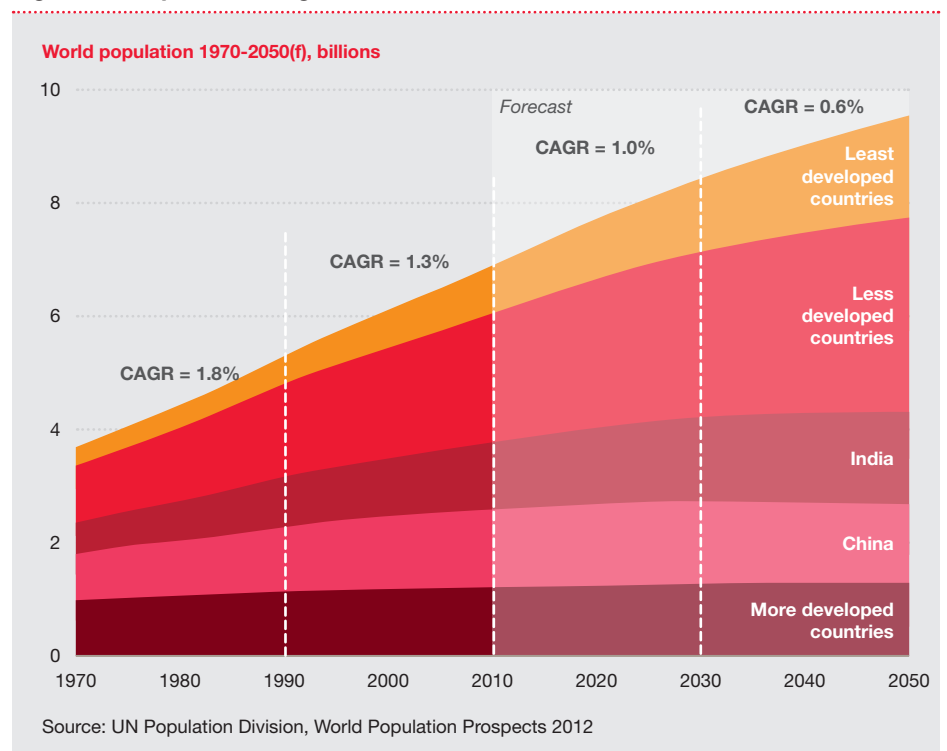


Figure 10: Population surge



Innovation, regulation and inclusion in India

Strong innovation coupled with regulatory support is proving to be a boon for financial inclusion in India. Government reforms including Jan Dhan accounts, the Aadhaar identity infrastructure and the spread of mobile phones (JAM) have caught the attention of policymakers and technology innovators alike. Financial technology players are using these three pillars to devise products and services to cater to poor and excluded citizens.

While mobile is proving to be a convenient and personalised means of financial access, Aadhaar is providing citizens with secure and cost-effective biometrically-linked digital identification. The Prime Minister's Jan Dhan Yojana offers no-frills basic bank accounts, along with accidental death insurance to over 250 million people¹³.

These bank accounts have been linked to the citizen's aadhaar number via a payment bridge to route intended benefits to low-income citizens and make these small accounts viable. The new connectivity solutions and smartphones will allow more and more people access to financial transactions around the clock in the near future. With a young population, and the regulatory body that is coming up with consultative papers exploring the applicability of alternate lending¹⁴ and blockchain, India has the right profile to adopt this technology-driven change.



13 www.pmjdy.gov.in/account

14 RBI: Consultative paper on P2P lending, 2016 (rbidocs.rbi.org.in/rdocs/content/pdfs/CPERR280416.pdf)

Financial inclusion

Why it's important?

Financial inclusion is essential as it fuels economic activity and allows people from all parts of society to participate in and benefit from the market economy.

Progress against target

All seven of these emerging markets recognise the need to boost low levels of inclusion. Most are looking to digital innovation to bring more people into the financial system. Many are also pursuing government programmes focused on expanding access to banking among remote locations and low-income citizens.

Private sector lending versus banking assets

Why it's important?

Lending to the private sector drives growth, and a strong private sector leads to a more robust economy as a whole.

Progress against target

Private sector lending is the only category in which all the markets met the fit for purpose target apart from South Africa which reflects high levels of indebtedness.

In other countries, steps to further boost lending are in train including market deregulation, shifts in priority lending criteria and encouraging private sector banks to take on more credit (privately owned banks now provide more loans than state-run counterparts in India, for example¹⁵). High levels of indebtedness and default (e.g. South Africa) could slow growth, however. Over indebtedness affects the ability to service debt, take credit or save.

Rapid increase in unsecured lending has been a cause of concern in South Africa for the past few years, but is now appearing to subside.

15 Livemint: Indian private bank new loans outpace state-owned rivals for first time, June 2016 (based on Reserve Bank of India data and Finance Ministry review of the public sector banks in India)

Regulators driving electronic payments in India

The Indian payments industry stands out from its emerging market counterparts by driving above-average growth in non-cash payments.

Initiatives include the Bharat Bill Payment System (BBPS), which allows users to pay all bills via a single platform. The scheme will move a large portion of the bill payments online in the coming years through a layer of interoperability created between various bill payments platforms.

Such initiatives have triggered the strong adoption of electronic payments and the rise of new market entrants. Mobile banking transactions tripled between 2012 and 2014 to reach 150 million¹⁶. And the number of mobile money transfers has now surpassed mobile banking transactions.

To discover more about development and innovation in emerging markets payments, see *Emerging markets: Driving the payments transformation* (www.pwc.com/gx/en/industries/financial-services/publications/emerging-markets-driving-payments.html).



¹⁶ Reserve Bank of India Statistics

Electronic payments

Why it's important?

Electronic payments accelerate economic development and open access to financial services to underserved communities.

Progress against target

Increased use of payment cards is driving growth in electronic payments, but there is still considerable room for development as only three markets are above 50%, while the lowest, Nigeria, is at just 10%.

Governments are promoting electronic payments through new licences, identification initiatives (e.g. India) and tax incentives, recognising their ability to strengthen the economy and curtail the black economy. Many governments have seen direct benefits from promoting e-payments such as savings on transfer payments in Mexico.

Life insurance penetration

Why it's important?

Increase in take-up of life insurance goes hand-in-hand with economic growth as it encourages people to accumulate wealth and manage risks more efficiently.

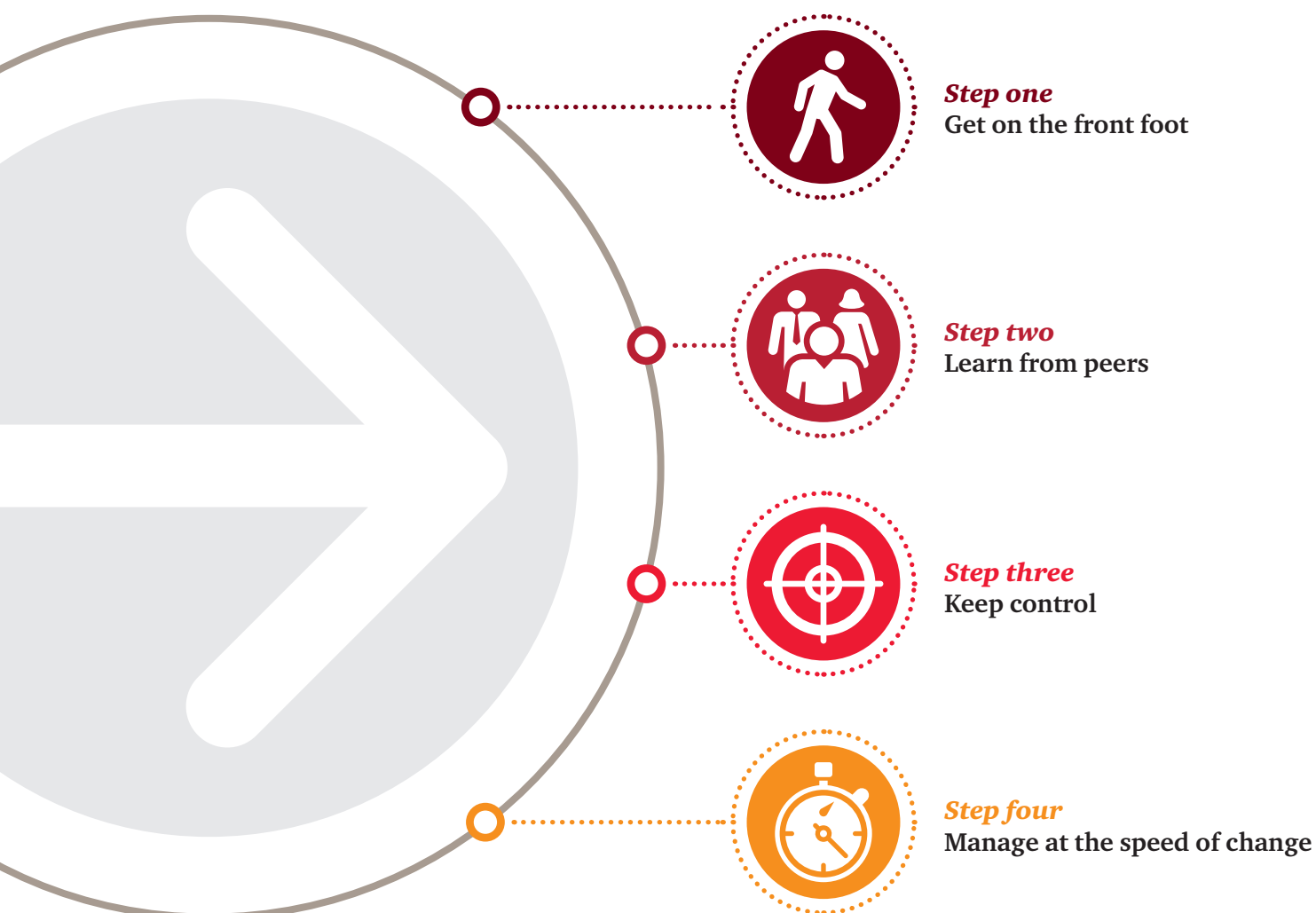
Progress against target

While underdeveloped, growth is accelerating. Life insurance premiums in emerging markets are forecast to grow by more than 10% in both 2016 and 2017¹⁷, underpinned by digital technologies and the adoption of more customer-centric models. Insurers can take advantage of more wealth to protect within the middle class, a low rate of penetration of insurance products and services, and government support to introduce insurance products to people in rural areas.

¹⁷ Swiss Re annual insurance outlook, 24 November 2015 (www.swissre.com/media/news_releases/A_strengthening_economy_to_support_insurance_industry_growth.html)

Active steps:

How can you create a fit for purpose financial system?



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Step one

Get on the front foot

The development of a fit for purpose financial system isn't organic or passive. You shape it. Regulators across different market sectors should work together, reflecting the interdependence between the different dimensions.

Market participants are clearly in competition, but there are also areas where co-operation is necessary such as fostering trust, strengthening cyber security or promoting development of an effective payments infrastructure.

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Step two

Learn from peers

Our analysis shows that some markets are ahead of others in different dimensions. What can you learn from their experience?

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Step three

Keep control

Strong regulation and enforcement are essential for financial systems to develop. Poor regulation leads to financial crises.

Keeping control isn't just about setting rules, but working with market participants to develop the reporting and early warnings systems to detect threats and weaknesses.

Financial services organisations, domestic and international, should support overall financial system policy and contribute to development as part of their licence to operate.

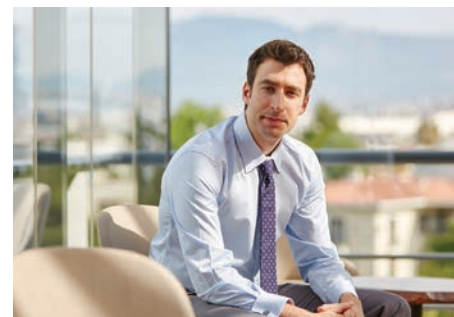
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Step four

Manage at the speed of change

Without ageing legacy systems to hold them back, FS businesses in emerging markets have clean sheets upon which to harness the latest developments in technology and develop their own distinctive business models¹⁸. Many of the ground-breaking innovations in FS are being spearheaded in Asia and other emerging markets¹⁹.

The central challenge is how to manage the strategic, operational and cyber/financial crime²⁰ risks stemming from the accelerating pace of change. Developing the necessary risk capabilities requires an urgent and significant increase in investment in recruitment, training and systems development.



18 We further explore the transformational potential of FinTech within emerging and wider global markets in 'Blurred Lines: How FinTech is shaping financial services', PwC, March 2016 (www.pwc.com/fintechreport).

19 We further explore Asia's place at the cutting edge of innovation in 'Financial Services Technology 2020 and Beyond: Embracing disruption', PwC, July 2016 (www.pwc.com/gx/en/financial-services/assets/pdf/technology2020-and-beyond.pdf).

20 'Time to change tack', which sets out the financial services findings from our Global Economic Crime Survey 2016, highlights the need for new thinking in areas ranging from AML vetting to detection methods to keep pace with both the increasing threats and compliance demands (www.pwc.com/gx/en/assets/gecs/gecs-fs-industry-cut-2016.pdf).

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