

Weathering the storm

Asia-Pacific Banking Review 2016

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Executive Summary

Over the past decade, banks in the Asia-Pacific region have propelled a global industry to profit pools of more than \$1 trillion in 2015. In that year, 46 percent of the global banking profit pool came from the region, a significant increase from 28 percent share in 2005. The bulk of this expansion came from volume growth linked to dynamic economies throughout Asia-Pacific, but especially in China, which accounted for about half the region's banking revenue pool in 2015.

But the momentum from this golden decade is already fading, with margins and returns on equity (ROE), to cite just two metrics, moving lower. We are seeing the beginnings of a decline, with ROE in Asia-Pacific falling from 15 percent in 2013 to 14 percent in 2014. The region and its financial industry seem to be settling into a new era of slower growth rates for the region's banks and increased challenges in generating economic profits.

Asia-Pacific is a diverse region, of course, and each national economy has its own advantages and challenges. For example, the level of connectivity ranges widely, with smartphone penetration in Singapore at 73 percent in 2015 compared with just 15 percent in India.¹ Income per capita in 2014 ranged from \$47,745 in Australia to \$1,352 in India. While each country presents a unique situation, banks in every Asia-Pacific country will be affected by three threats now taking shape:

- *Slowing macroeconomic growth:* The economic slowdown rolling across the region will affect banks and their customers, especially in the corporate sector. In China, for example, real GDP growth rates fell below 7 percent for the first time since 2000, hitting 6.9 percent in 2015. We also expect banking profit growth to slow from 10 percent annually between 2011 and 2014 to 3 percent between 2016 and 2021.
- *Attackers from outside the industry disrupting financial services:* FinTechs—start-up technology companies offering financial products such as payment systems and lending platforms—and established companies from outside the industry, such as Alibaba, are encroaching into traditional banking territory.
- *Weakening balance sheets:* An increasing volume of non-performing loans is putting added stress on banks, as interest-coverage ratios are declining at large companies throughout the region, especially in China and India. McKinsey analysis indicates banks in Asia need to raise \$400 billion to \$600 billion in additional capital by 2020 to cover losses from non-performing loans while maintaining capital adequacy ratios.

These three threats could come together in a powerful storm with the potential to cripple ROEs by 2018. Indeed, banks are already seeing the impact of the changing environment. Our analysis of 328 banks in the region showed that while 39 percent posted an economic profit in the period from 2003 to 2006, only 28 percent did so from 2011 to 2014.

Banks that simply try to wait out the storm will likely find themselves struggling for survival, but those that take action can uncover growth opportunities and measures that could help rekindle their momentum. Our analysis and experience suggest that four imperatives must be understood and addressed for banks to gain strength amid the turbulence:

- *Focused growth:* Banks should explore three clear pockets of growth – services for the unbanked and underbanked, an expanding affluent middle class, and the emerging importance of small and midsized enterprises to corporate banking. The choice will depend largely on a bank's capabilities and strategy, with some universal banks pursuing them all.

- *Drive a value-focused digital transformation:* With margins under pressure, banks must rapidly drive digitization, especially to control costs. Approaches will vary, but include building new digital businesses and using digital technologies to transform existing systems and customer journeys.
- *Strengthening balance sheets:* Banks must also find ways to strengthen their balance sheets by addressing the growing volume of non-performing assets. Banks can explore creating asset management companies as a short-term solution, while working to improve risk management provides a longer term fix.
- *Enabling the organization:* Banking organizations must adapt to the new environment. In particular, they should build partnership skills and form alliances with FinTechs and others to create and enable a digital ecosystem. The organization also needs to become more flexible and nimble to bring out new products and services much faster than in the past. And finally, banks must revise their approach to talent and culture, creating room for innovation.

The coming storm is potent and is a clear threat to most banks in Asia-Pacific. But it may also provide the kind of significant industry disruption that creates opportunity for those that recognize it. The most aggressive banks will not merely survive the turbulence; they will be strengthened by it.



Entering the storm

The Asia-Pacific banking sector is emerging from a golden decade that saw it become a dominant force in the global industry. In this chapter, we will trace its rapid growth over the past decade and its recent decline. A look at banks' economic profit shows an industry that is already weaker than many suspect.

What Goes Up

Driven largely by China, Asia-Pacific became one of the largest sources of global banking profits and will likely continue to deliver the bulk of industry expansion in coming years, even as the glow of the golden decade diminishes.

Between 2005 and 2015, the share of global after-tax profits in banking generated by Asia-Pacific increased significantly from 28 percent to 46 percent (Exhibit 1).² Powerful growth in Asia-Pacific was the primary factor that brought the global profit pool above \$1 trillion. However, initial signs of a decline appeared in 2015 when global and Asia-Pacific profit pools edged lower. Profit pools in Asia Pacific fell from \$548 billion to

\$538 billion from 2014 to 2015, the first decline since 2009 amid the aftermath of the global economic crisis.

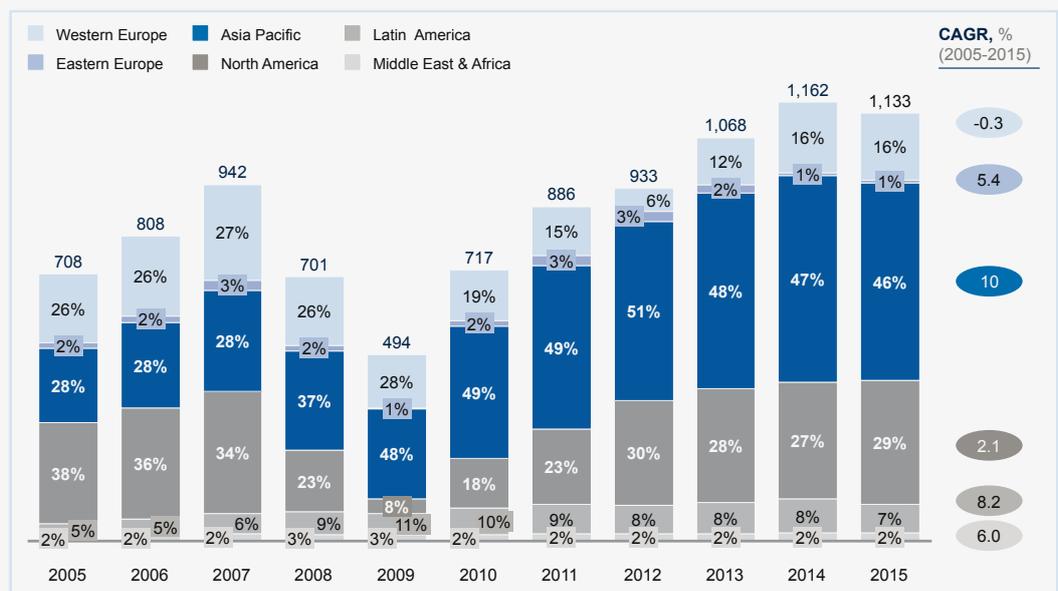
A deeper look shows that while China has been the clear powerhouse in the region, profit pools in other countries have also posted strong growth in recent years and emerging markets taken together have been especially robust (Exhibit 2). In Australia, for example, profit pools grew by about 7 percent a year between 2005 and 2015 even as its share of regional profits remained relatively small. The Australian market is more mature than most others in the region, and competition more intense.

Unique domestic factors plagued Japan during the period, shrinking profit pools there, but profits expanded in all other countries. In the other developed markets—Hong Kong, New Zealand, Singapore, South Korea, and Taiwan—profits grew on average by 4 percent a year, and in the other emerging countries, including Indonesia, Malaysia, Thailand and Vietnam, they grew on average by 15 percent a year.

Exhibit 1

Asia-Pacific has propelled global banking over the past decade

Global banking profits after tax¹, \$ billions



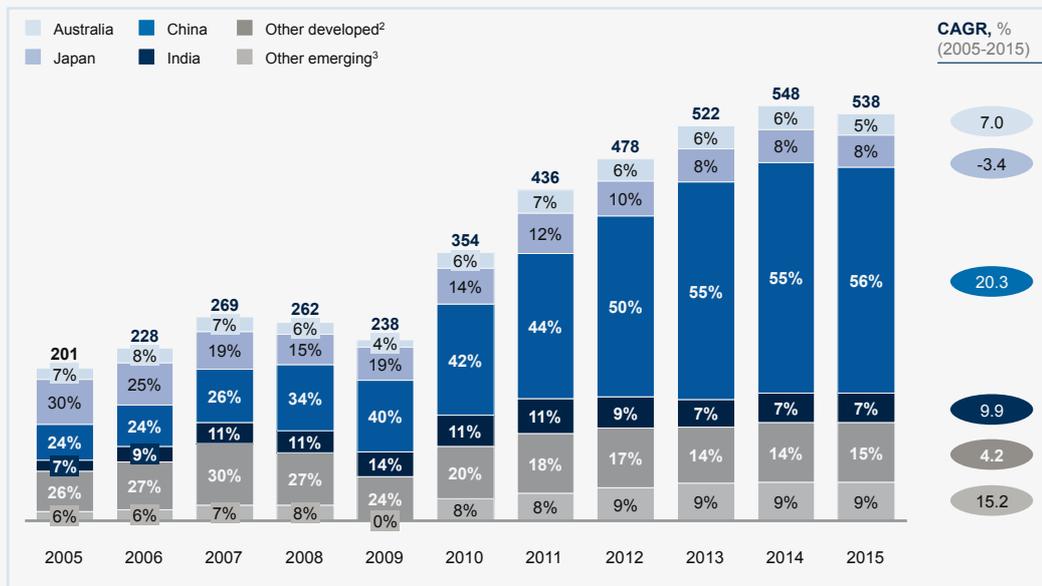
¹ Total profit pools of all customer-driven banking activities, including Retail and Institutional Asset Management

SOURCE: McKinsey Panorama

Exhibit 2

China has driven profits, though growth slowed in 2015

USD billions, profit after tax¹



¹ Total profit pools of all customer-driven banking activities, including Retail and Institutional Asset Management

² Hong Kong, Singapore, Taiwan, South Korea, New Zealand

³ Malaysia, Indonesia, Thailand, Vietnam, Rest of Asia

SOURCE: McKinsey Panorama

Since the 2008 global economic crisis Asia-Pacific has consistently delivered far higher ROE than other regions, largely driven by emerging markets (Exhibit 3). In 2014, ROE in Asia-Pacific was almost twice that of the rest of the world. Indonesia, China and other emerging markets in the region posted especially strong growth in 2014.³

The bulk of banking growth between 2005 and 2015 was fueled by increased volume linked closely to robust economies. An expanding market for loans, deposits, and other financial instruments contributed the vast majority of the sector's increase in after-tax profit over the period.

Not surprisingly, China has been at the center of this growth, and by 2015 accounted for more than half of regional revenues. China's share of global banking profits rose from 7 percent in 2005 to 26 percent in 2015, while the share delivered by the rest of Asia-Pacific hovered between 21 and 29 percent in the same time period. China's growth was pushed by underlying economic expansion, as well as consistent reforms. In one illustration of

the country's growing importance, China's share of global GDP increased from 5 percent in 2005 to 15 percent in 2015.⁴

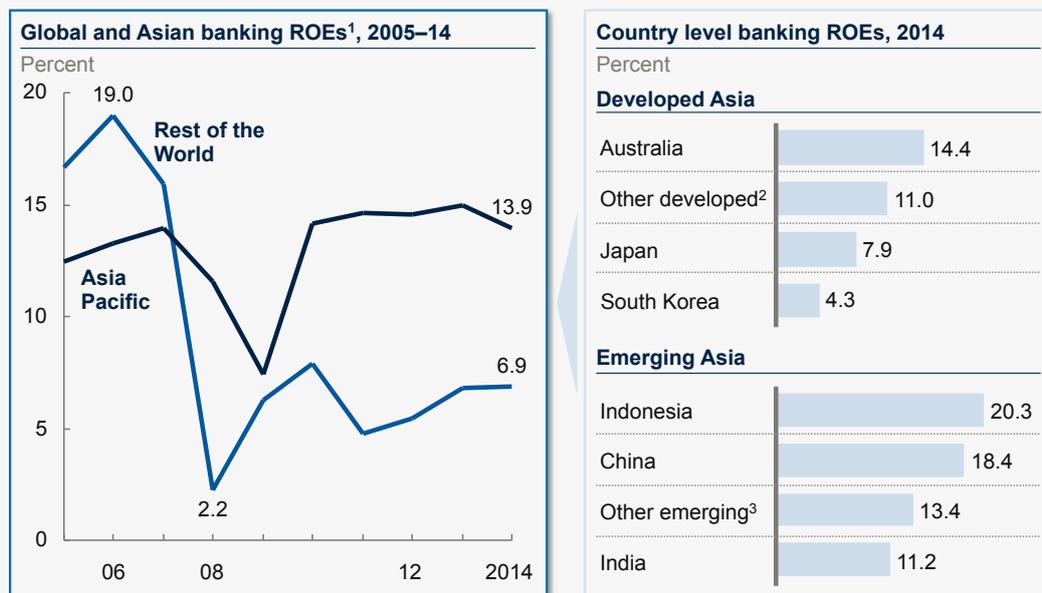
In just six years—between 2009 and 2015—the banking revenue pool in China tripled, expanding from \$271 billion to \$834 billion (Exhibit 4). Other major markets in Asia-Pacific witnessed much slower growth. Although wholesale banking remained the bedrock of the sector in China, it fell from 77 percent of the total banking revenue pool to 69 percent, while retail banking posted significant growth.

Coming back to earth

Even as profits have grown, in half the Asia-Pacific markets studied ROE declined between 2005 and 2014 (See box, "A challenging decade," on pages 10–11). Throughout the region, squeezed margins put pressure on bank profitability, although other factors, such as the cost of risk and taxes were also culpable.

Exhibit 3

Since 2008, Asia-Pacific has outperformed the rest of the world

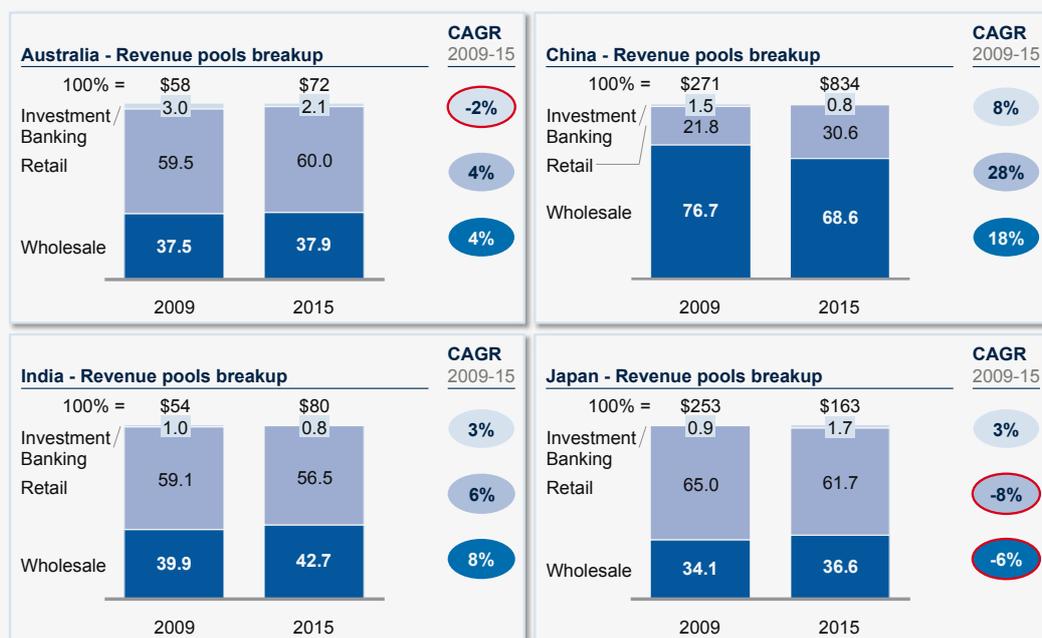


1 Based on a sample of listed banks with >\$10 billion in assets
 2 Hong Kong, Singapore, Taiwan
 3 Kazakhstan, Malaysia, Pakistan, Philippines, Thailand, Vietnam

SOURCE: Thomson Reuters; McKinsey Panorama

Exhibit 4

China has been the main driver of growth; retail has grown faster than wholesale



SOURCE: McKinsey Panorama

A challenging decade

We have conducted in-depth industry analysis on changes in ROE across Asia-Pacific between 2005 and 2014 highlighting the varied challenges each of the region's 14 markets faced over the period (Exhibit A). Factors behind these shifts include margin compression, increasing risk cost, and declining cost efficiencies. Several markets recorded significant changes over the decade. While ROEs declined in many individual markets, they finished the decade above 10 percent in almost all countries, with the notable exceptions of Japan, South Korea, and Taiwan.

More specifically:

Australia – While remaining relatively high, ROE in Australia has edged downward since 2005. Overall sector strength in the country and competition that focused on customer experience helped keep margins attractive, but pricing pressure in a crowded market, particularly for home loans, began to emerge. Despite the falling ROE, the price-to-book multiple for the sector remained around 2, suggesting high investor confidence in the sector's growth potential.

India – Strong margin compression took its toll on ROE in India during the period. ROE dropped from 20 percent in 2005 to 11 percent in 2014, largely a result of significant deterioration of net interest margins. In addition, non-performing assets have been increasing at an unprecedented pace, taking a toll on profitability. The Reserve Bank of India has asked the banks to clean up their balance sheets by first quarter 2017, which will translate into huge capital requirements for banks given their weak profitability and insufficient provisioning.⁵

Indonesia – ROE rose from 15 percent to 20 percent over the period in Indonesia, backed by strong credit growth and consistently high

margins. The sector appears well capitalized and profitable, although the picture could be skewed by the dominance of large banks. Indonesia's biggest banks posted twice the return on assets, about 3 percent, as the country's smaller banks, about 1.5 percent.⁶ Smaller banks could face increasing volumes of non-performing loans and restricted capital under current macro-economic volatility and the currency's depreciation.

Japan – ROE in the banking sector was stable over the decade studied, held steady by increasing cost efficiencies negating significant margin compressions. From 2005 to 2014, Japanese banks operated in a very low interest-rate regime, which severely affected net interest income and forced banks to focus on cutting costs to increase efficiencies. Banks in Japan have been looking for new sources of revenues, and some have begun overseas expansion, doubling the share of overseas loans in their lending portfolios from less than 20 percent in 2009.⁷

Singapore – ROE climbed from 9 percent to 12 percent over the decade, largely because of efficiency improvements. Because mortgages came under tougher regulations during the period, most of the loan growth was driven by short-term loans.⁸ The trend is expected to result in higher provisions from current levels of about 30 basis points of loans. Despite the volatility, investor confidence in sector growth remained relatively optimistic, with the price-to-book multiple at 1.4.

Vietnam – Over the same period, ROE in Vietnam fell from 28 percent to 11 percent. The country experienced a dramatic boom-and-bust cycle during this time, with recent strong performance challenged by high levels of non-performing loans and increased risk costs that followed a rapid expansion of credit.

Exhibit A

Profits have grown but ROEs are mixed

ROE for Asian countries¹, 2005–14, percentage points

Below -2% Between -2% and 2% Above 2%

	2005 %	+	Margin	+	Risk cost ²	+	Cost efficiency ³	+	Taxes	+	Fines and others ⁴	+	Capital	=	2014 %
Australia	16.9%		-16.9%		0.6%		7.8%		1.3%		3.7%		1.0%		14.4% ▼
China	18.6%		-1.9%		1.1%		7.1%		1.2%		0.6%		-8.4%		18.4% ▼
Hong Kong	11.2%		-0.2%		-0.4%		-0.7%		0.1%		0.1%		1.7%		11.8% ▲
India	19.5%		-20.4%		0.6%		16.5%		-2.5%		-0.5%		-2.1%		11.2% ▼
Indonesia	15.0%		9.7%		-0.7%		0.9%		0.5%		-0.2%		-4.7%		20.3% ▲
Japan ⁵	7.6%		-12.0%		2.4%		12.0%		-0.2%		-0.2%		-1.8%		7.9% ▲
Malaysia	11.2%		-7.9%		7.5%		1.4%		0.5%		1.5%		-1.0%		13.2% ▲
Pakistan	24.7%		-7.0%		2.2%		-2.0%		2.3%		0.0%		-3.9%		16.4% ▼
Philippines	10.6%		-8.5%		2.8%		6.7%		1.3%		-0.2%		-0.1%		12.5% ▲
Singapore	8.9%		-2.5%		-0.6%		3.5%		0.8%		0.3%		1.4%		11.8% ▲
South Korea ⁶	21.3%		-15.6%		-1.5%		5.2%		1.9%		-5.6%		-1.4%		4.3% ▼
Taiwan	2.5%		-5.4%		13.7%		-4.4%		-1.3%		5.4%		-0.7%		9.8% ▲
Thailand	17.0%		5.8%		-2.6%		0.0%		-1.7%		-0.9%		-2.0%		15.6% ▼
Vietnam ⁷	27.5%		-8.5%		0.7%		-2.6%		5.5%		-7.1%		-5.1%		10.5% ▼

1 Based on a sample of listed banks with >\$10 billion in assets 2 Loan loss provisions to average assets

3 Non-interest expense to average total assets

4 Includes the residual after operating expenses and taxes 5 2005 ROE for Japan does not include non-bank consumer finance data 6 South Korean figures are based on South Korean FSS' combined industry P&L 7 2006-2014 period, as no data is available for a longer timeframe

SOURCE: Thomson Reuters; FSS South Korea; McKinsey Panorama



Reduced margins can be attributed in part to increased competition from companies both within and outside the traditional banking sector, a trend that has been encouraged by regulatory changes. For instance, Indonesia has issued licenses to banks with no branches⁹, and Taiwan has started deregulating online banking, mobile payment systems, and third-party payments systems.¹⁰ China has given licenses for financial products to non-banking technology companies, such as Alibaba and Tencent, and India is pushing cashless payment systems and other innovations, for example, by recently licensing 11 payments banks¹¹ and 10 small banks.¹²

With margins falling, Asia-Pacific is beginning to resemble the rest of the global industry. After rapid expansion from 2002 to 2007 and hardship following the 2008 economic crisis, the global sector appears to be settling into a new reality characterized by modest growth and steady ROE. As Asia-Pacific banking has converged with the rest of the world, average annual revenue growth rates

halved, dropping from almost 13 percent in 2005 to 2008 to 6 percent in 2012 to 2014 (Exhibit 5). In addition, price-to-book multiples in emerging Asia-Pacific fell in line with patterns seen in developed countries in the region and the rest of the world.

Just as it led growth in the halcyon years, China has led the deceleration. Slower macroeconomic growth in China has drastically changed the environment for many industries, including finance.

Weakening health

A detailed look at the economic profit (EP) generated by banks in Asia-Pacific reveals the urgency of the new environment. EP measures operating profit after deducting cost of capital and adjusting for taxes. Previous McKinsey research has established that in almost every industry, including banking, the distribution of EP takes the form of a power curve, in which a few companies claim the vast majority of EP, most companies make or lose a little, and a few companies suffer significant economic losses.¹³

Exhibit 5

Asian banks are falling in line with the new reality

Percent



Country level revenue ¹ CAGRs				
	2005-08		2008-12	2012-14
Developed Asia				
Australia	14.7	▼▼	7.2	▼▼ 0.1
Japan	0.3	▲	2.0	▼▼ -11.4
South Korea	6.5	▼▼	2.6	▲▲ 7.1
Hong Kong	9.9	▼	6.0	▲▲ 10.9
New Zealand	14.7	▼▼	-4.7	▲▲ 4.6
Singapore	12.2	▼	8.1	▲ 11.4
Taiwan	9.9	▼▼	4.1	▼▼ -13.7
Emerging Asia				
China	31.1	▼▼	22.7	▼▼ 14.0
Indonesia	20.1	▲	20.1	▼▼ 1.1
India	12.4	▲	12.4	▼▼ 4.9
Malaysia	19.4	▼▼	7.7	▼▼ 3.5
Rest of Asia	35.3	▼▼	3.8	▲▲ 12.1
Thailand	19.2	▼▼	12.7	▼▼ 9.1
Vietnam	3.1	▲▲	35.4	▼▼ 7.4

¹ Revenue before risk costs; Market level revenue pools

SOURCE: McKinsey Panorama

EP has declined rapidly in Asia-Pacific in recent years. A study of 328 banks in the region showed how generating positive EP is becoming increasingly difficult when comparing the periods 2003 to 2006 and 2011 to 2014 (Exhibit 6). In the first period, 39 percent of banks achieved EP, but by the later period only 28 percent did so.

The change clearly illustrates the increased difficulties banks in the region are facing. The study also highlighted the extraordinary volatility that characterizes Asia-Pacific banking (Exhibit 7).

Eighty-six percent of the banks that were in the top quartile of the EP power curve in the first period had fallen out of the quartile by the second.

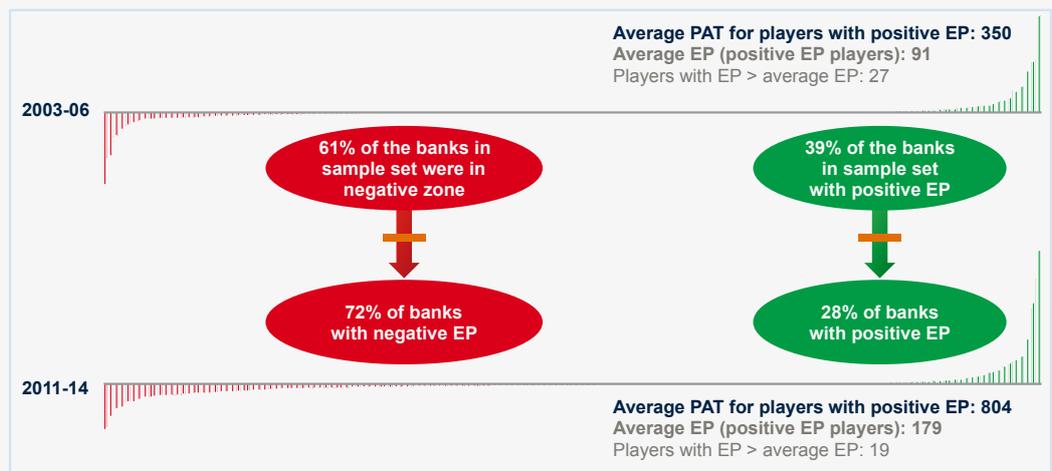
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Looking forward, Asia-Pacific will likely continue to drive global growth, especially as its emerging markets continue to expand. But the heady years of robust growth are likely over. And as banks adjust to their new trajectories, three factors that threaten their profitability further have appeared on the horizon.

Exhibit 6

Generating economic profit has become tougher over the past few years

Average economic profit \$ Millions, N=328, Asia Pacific

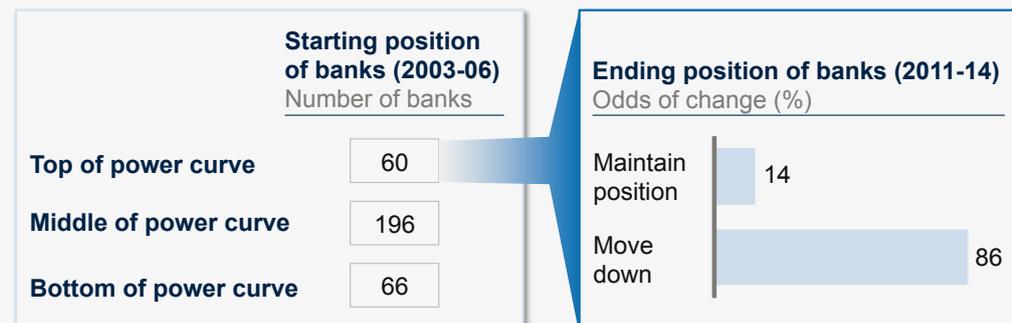


SOURCE: McKinsey Corporate Performance Analytical Tool

Exhibit 7

Only 14% of banks were able to stay at the top of the power curve

All banks N=328



SOURCE: McKinsey Corporate Performance Analytical Tool



A trinity of threats

As banks in Asia-Pacific settle into the new reality, three formidable challenges are forming that will make it nearly impossible for banks to sustain the status quo profitably. These developments—slowing macroeconomic growth, new attackers that are taking away customers and reducing margins, and balance sheets weakened by a rise in non-performing loans—will test traditional business models and growth strategies.

Slowing economies

The 2008 global economic crisis sent shockwaves throughout many industries and had a particularly profound impact on banking. The eight years since have been characterized by slower revenue growth.

With the notable exception of Vietnam, every major Asian economy is struggling broadly to adapt to the new global environment. Foreign exchange rates and equity markets have been especially vulnerable, but industrial production and trade flows have also suffered.

The slowdown has been led by China, which hit an inflection point in 2015, when foreign exchange reserves fell 13 percent (Exhibit 8). Economic growth had already slowed a few years earlier, but hit a 25-year low of 6.9 percent in 2015. The macroeconomic slowdown was followed by weakening investment and exports, while employment and wage growth rates also dropped.

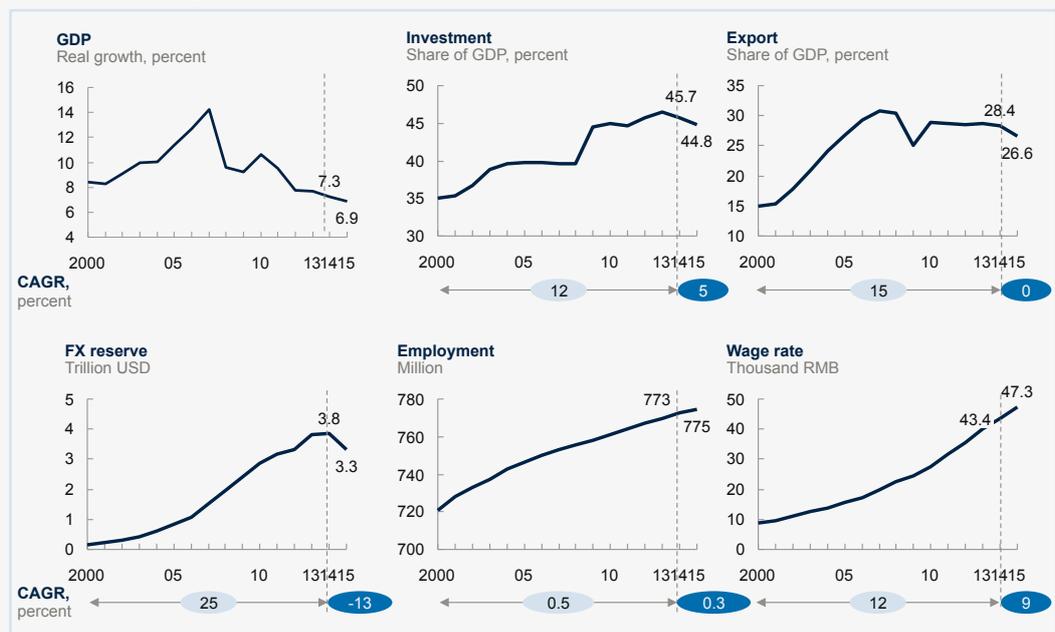
There is no indication that the situation will improve soon. Our analysis suggests that annual growth in net banking profit in China will drop from a recent rate of 10 percent to 3 percent between 2016 and 2021 (Exhibit 9). At the same time, net interest margin is expected to drop a further 4 percent annually between 2016 and 2021 after falling by 6 percent a year from 2011 to 2016.

New attackers

Across Asia-Pacific, technology start-ups, commonly known as FinTechs, as well as more established digital companies like Alibaba and Tencent, are offering financial services from mortgages to payment systems. Often, regulatory

Exhibit 8

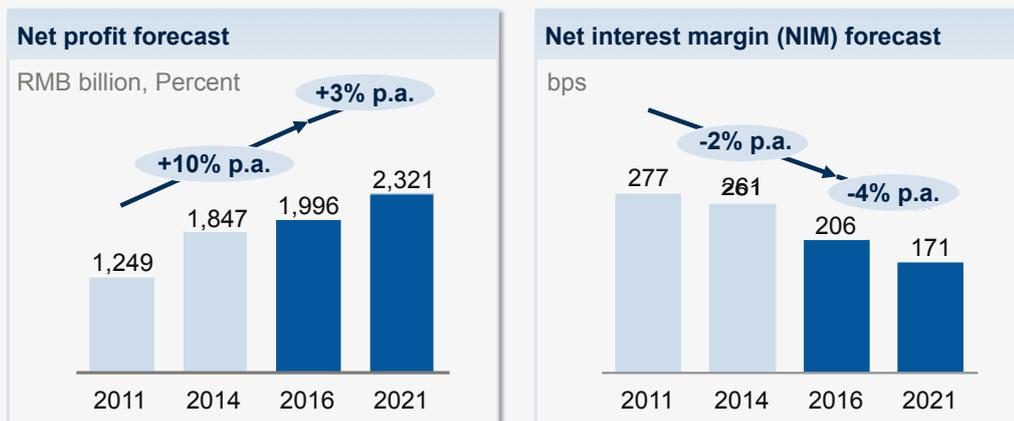
For China, 2015 was an inflection point toward a different phase of economic growth



SOURCE: McKinsey Global Institute

Exhibit 9

As a consequence, profit growth is likely to slow, with interest deregulation compressing margins



SOURCE: PBOC; CBRC

changes—designed for instance to reach unbanked populations—have supported the entry of these new attackers.

The rise of FinTechs has pressured banking profit pools and taken away customers. Retail services are a particular target, though there is a steady emergence of solutions that focus on small and mid-sized enterprises (SMEs), as well as encroachments into capital markets.

These new attackers have proven proficient at growing to scale quickly, often with the backing of venture-capital funds. For example, Alipay, a subsidiary of Chinese e-commerce giant Alibaba, was founded in 2004 and by 2016 had more than 800 million registered accounts.¹⁴ WeChat, the social media wing of China's Tencent, said in early 2016 that it would invest \$15 million to expand its e-wallet business. About three years after its launch, the payment system reported 300 million users, with payments accepted at 300,000 offline stores.¹⁵ Ant Financial, a spin-off of Alibaba, recently raised \$4.5 billion in the world's largest private fundraising round for an Internet company.¹⁶ Propelling the surge, venture-capital funding of Asian FinTechs increased significantly from \$5 billion to \$40 billion from 2012 to 2015, with number of deals more than doubling over the same time period.¹⁷

FinTechs and established technology companies alike are benefitting from financial customers that are becoming more comfortable banking through digital channels. Most developed markets in Asia-Pacific have witnessed a strong increase in the use of online banking in recent years. A series of McKinsey surveys showed that between 2007 and 2014 online banking has grown by more than 60 percent in Hong Kong, Singapore, and South Korea, and by more than 80 percent in Taiwan.¹⁸

Emerging markets in Asia-Pacific also saw a rise, though at a slower pace. In China, 53 percent more of the survey respondents in 2014 said they had used digital banking than those in 2007. In Vietnam the survey showed a 35-percent increase; in Malaysia, a 29-percent increase; and in Indonesia, a 28-percent increase.

Underscoring the threat to traditional banks, the survey showed that 83 percent of the respondents in developed markets in Asia-Pacific and 56 percent of those in emerging markets said they might be willing to open an account with a bank that offered advanced digital services. Across Asia, the survey showed that savings and time deposit accounts were most at risk from online financial attackers, as well as credit card services. In deposit accounts, more than half

of the respondents throughout the region said they would consider shifting balances to a strong online offer, with between a third and half of current balances at risk of transfer (Exhibit 10).

A separate analysis of potential banking revenues at risk in an unmitigated scenario found that \$400 billion of banking revenues in Asia-Pacific could be at risk (Exhibit 11).¹⁹ The analysis suggests that price erosion—rather than business migrating to start-ups—would account for the bulk of the potential losses.

Overall, the impact on incumbent banks in Asia-Pacific could be massive. For example, if these attackers cause margin compression of 20 percent, banks in several countries would have to cut costs by more than 20 percent to avoid a drop in return on equity (Exhibit 12). Some countries, such as Singapore, South Korea, and Vietnam, would be especially hard hit.

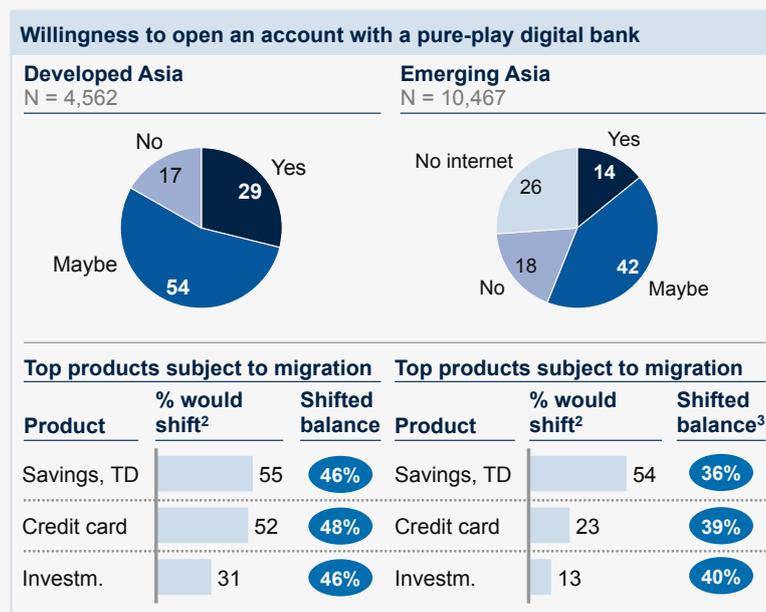
Weakening balance sheets

Bank balance sheets are coming under increasing stress as a result of weakening loan portfolios. In Asia-Pacific, stressed assets—non-performing loans and restructured loans—have grown rapidly in recent years. In China, India, Indonesia, and Japan, the value of stressed assets grew by \$90 billion between 2011 and 2015, reaching a combined total of about \$400 billion (Exhibit 13). Between 2007 and 2011, the stressed assets in these countries grew by 0.1 percent per annum, while between 2011 and 2015 they grew by 6.9 percent per annum.

China has been especially hard hit. Of the five banks in Asia with the greatest absolute burden of non-performing loans in 2014, four were in China. Each of these had a non-performing loan portfolio of more than \$16 billion. Indeed, China accounted for 43 percent of non-performing loans across Asia in 2014, well ahead of Japan with 27 percent. In particular, China's banking sector's had 45 trillion renminbi or about \$7 trillion worth of exposure to

Exhibit 10

Customers show a willingness to switch to digital banks



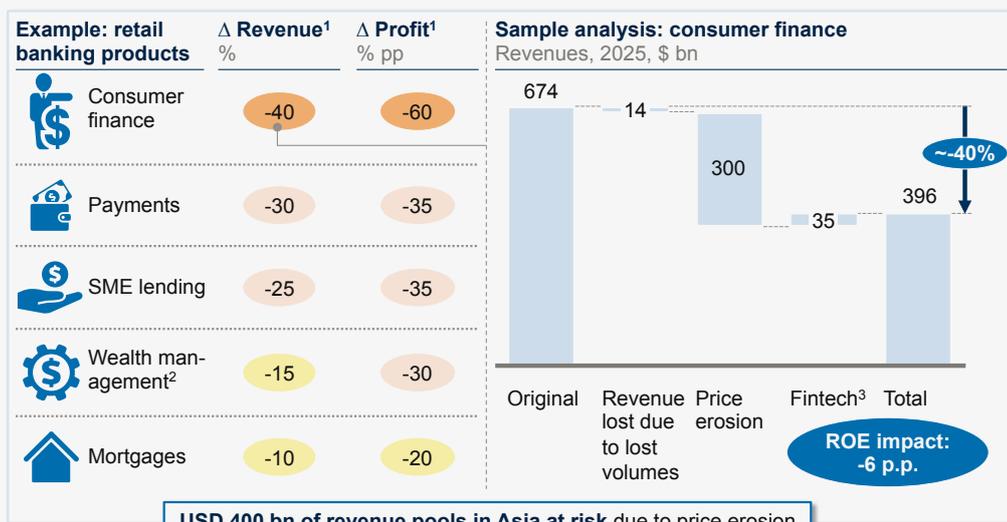
SOURCE: McKinsey PFS Digital Banking Survey 2014

Exhibit 11

20% to 60% of profits at risk across a range of product categories

UNMITIGATED SCENARIO, DIRECTIONAL FORECASTS

Expected “value at risk” of banking revenues and ROE by 2025, selected example retail products



USD 400 bn of revenue pools in Asia at risk due to price erosion with SME comprising of ~45% of this revenue pools at risk

SOURCE: McKinsey Panorama

Exhibit 12

Significant cost cuts will be required to maintain ROEs

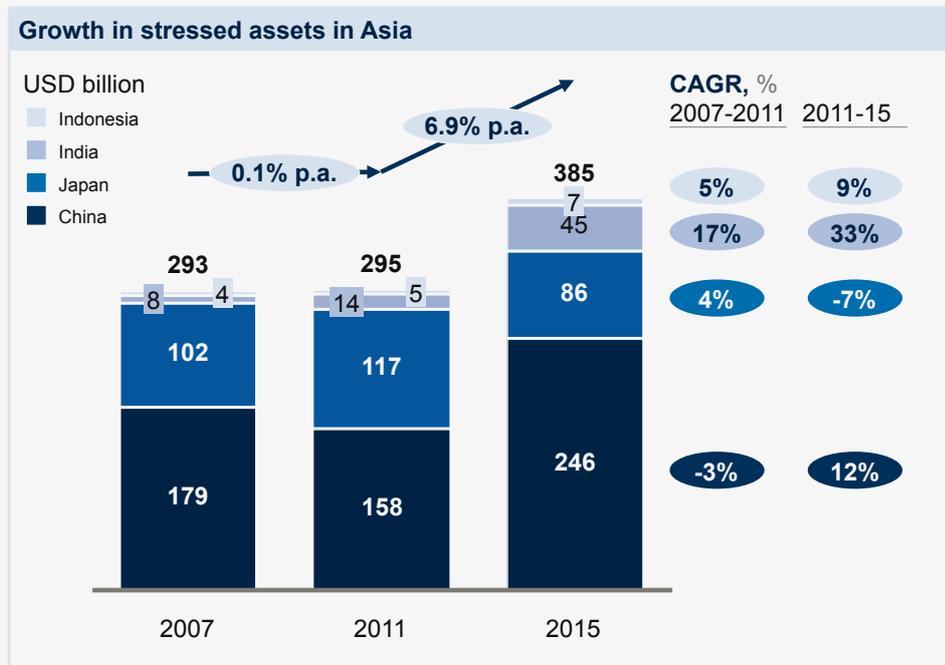
Countries	Current situation		Unmitigated scenario: 20% margin compression		Mitigated scenario: Cost to be reduced to maintain current RoE despite margin compression	Absolute cost reduction ¹ \$ billion
	C/I	RoE	C/I	RoE		
Australia	52	14	65	12	12%	~0.8
China	44	18	58	14	21%	~5.0
Hong Kong	53	12	67	8	24%	~0.2
India	68	11	90	4	23%	~0.7
Indonesia	53	20	68	14	22%	~0.3
Japan	68	8	85	5	13%	~2.0
Malaysia	52	13	65	10	18%	~0.3
Singapore	48	12	61	8	25%	~0.6
South Korea	70	4	95	1	27%	~1.0
Taiwan	65	10	82	5	22%	~0.3
Thailand	54	16	70	10	23%	~0.3
Vietnam	67	11	88	4	26%	~0.1

¹ Based on average cost for top 5 banks by assets

SOURCE: McKinsey Panorama

Exhibit 13

Stressed assets have been piling up quickly over the past 4 years



SOURCE: Central banks

the shadow banking sector, 46 percent of which is direct exposure through wealth management products or trust loans, both of which were concentrated in high risk sectors such as real estate and construction, and have maturity mismatch risks. More than 90 percent of wealth management products had maturity of less than 12 months.²⁰

Meanwhile, across Asia-Pacific average corporate interest-coverage ratios for the top 250 companies by market capitalization have fallen sharply since 2010. Developed markets have actually improved, but the average has been dragged down by large declines in emerging economies (Exhibit 14).

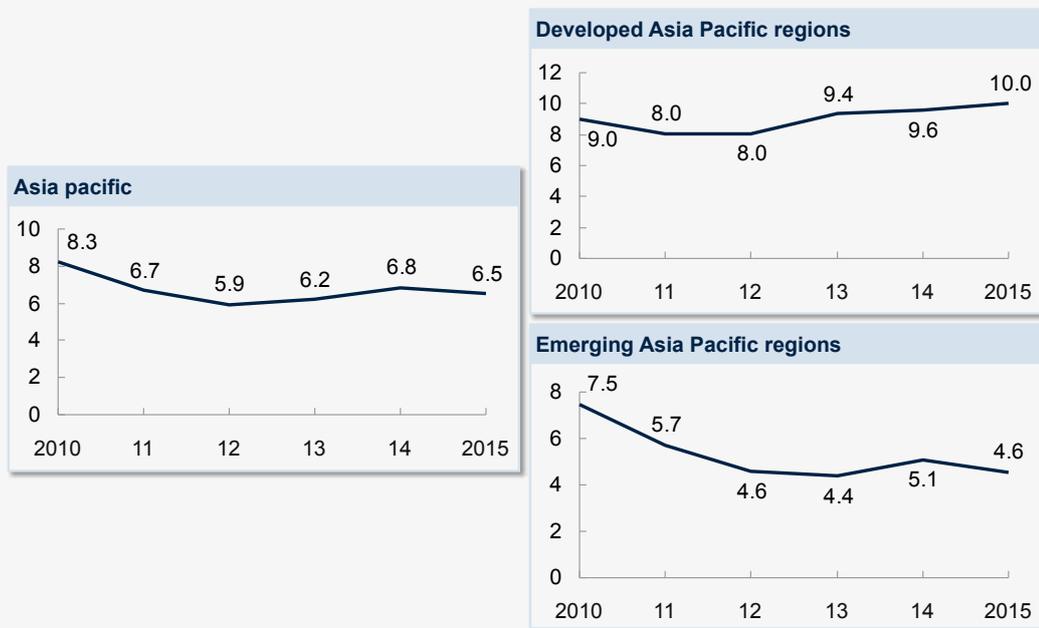
These developments are especially harmful for banks in the region, which typically struggle to collect debt. Creditors in South and East Asia, for example, only recover about a third of debt from insolvent companies on average, compared with a recovery rate of more than 80 percent in the United States. Banks in countries like the Philippines and Vietnam recover barely 20 percent of their lent funds after an insolvency.²¹

To cover losses from non-performing loans while maintaining current capital adequacy ratios, which include a buffer to Basel III capital requirements, banks in Asia will likely need to raise \$400 billion to \$600 billion in additional capital by 2020.²² But with their recent weakness, these banks are much less attractive for investors. And even in better times, banks did not reward investors very well. Between 2000 and 2016, our analysis indicates that average total returns to shareholders for banks in Asia-Pacific were 5.1 percent, much less than 9.4 percent for energy companies, 8.3 percent for healthcare, and more than 6 percent for a handful of other industries.²³

Regulatory efforts across many markets could also exacerbate the impact of these threats by creating a multiplier effect. For example, many regulators are requiring banks to maintain higher capital and liquidity buffers, with additional requirements placed on systemically important institutions. Such efforts make it harder for banks to generate healthy ROEs. In addition, well-publicized penalties, such as Standard

Exhibit 14

Interest-coverage ratio has fallen in emerging markets



1 Based on top 250 companies by market cap in each country

SOURCE: McKinsey Corporate Performance Analytical Tool

Chartered's \$300 million fine in 2014 related to anti-money laundering rules in the United States, have led to a much stronger emphasis on strengthening compliance regulations for financial institutions.

Regulatory fees are also increasing, and the scope of regulatory focus continues to expand.²⁴ Bank secrecy and anti-money laundering rules are continually being revised, broadened, and enforced. For example, in 2016 the Monetary Authority of Singapore shut down the BSI Bank's operations in the country and imposed penalties of about \$10 million for breaching money-laundering rules.²⁵

To adapt to this regulatory environment, banks must hire personnel to ensure they meet the compliance standards and also invest in the necessary systems and processes. The added due diligence makes it harder for banks to offer customers an experience as seamless and friendly as the newer internet-based start-ups.

□□□

Slower macroeconomic growth, increased competition from outside the industry, and weakened balance sheets are putting significant banking value at risk. But by successfully navigating the storm, as we discuss next, banks can uncover tremendous opportunities and strengthen their organizations.





Navigating the storm

The best banks in Asia-Pacific will not just survive the coming storm, they will own it. By focusing on four imperatives in particular—capturing new growth opportunities, driving digitization, strengthening their balance sheets, and creating an organization that enables success in the new environment—the best banks will emerge from the approaching turbulence stronger than before.

Growth pockets

While the pace of growth in general is slowing across the region, certain promising segments remain underserved by most financial institutions. Tapping into these growth pockets – the unbanked and underbanked, a thriving affluent middle class, and small and mid-sized businesses – can help banks rekindle bank momentum even as they face macroeconomic and sectoral challenges. While these growth pockets will be seen throughout the region, they will be more significant in some countries than in others. For example, bringing services to the unbanked is a priority in countries like India and Indonesia, but much less important in Australia and Japan.

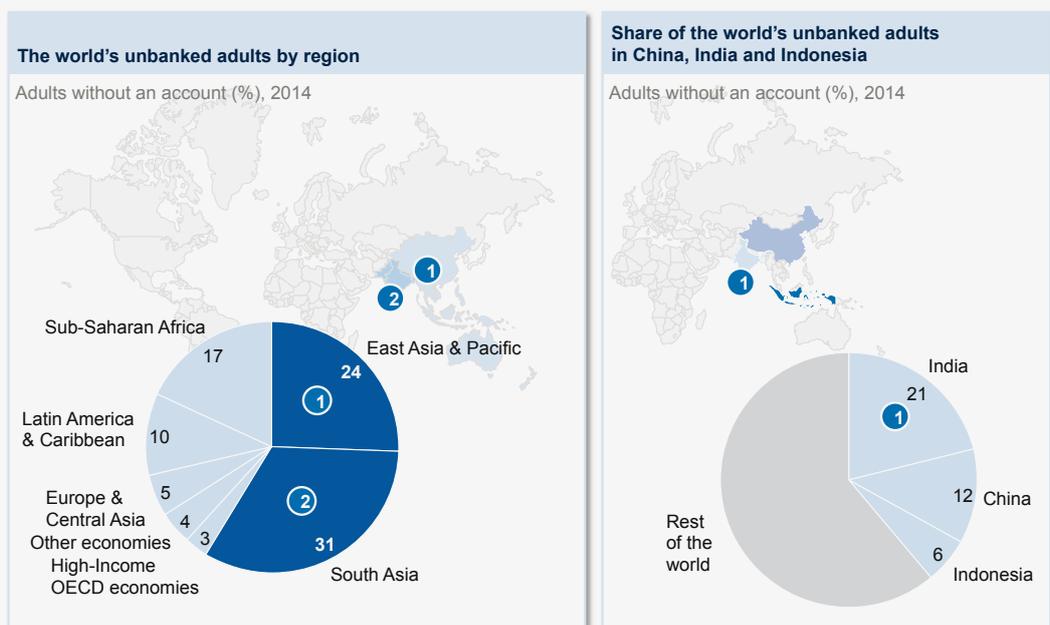
Reaching the unbanked and underbanked

Throughout the world, about 2 billion adults do not have a formal relationship with a bank, and more than half these unbanked individuals—about 1.1 billion—live in Asia-Pacific (Exhibit 15).²⁶ Indeed, a little more than a third live in just three countries: China, India, and Indonesia. Serving this large, latent market would not only create significant business opportunities, but would also address growing regulatory pressure to bring formal financial services to these populations, composed largely of low-income households.

In a 2014 report, the World Bank found that only a small percentage of respondents, about 4 percent, said the only reason they had no bank account was because they didn't need one.²⁷ "This points once again to the potential demand for account ownership that is likely to emerge as barriers of cost and distance are reduced," the World Bank said, noting that it also argues against the suggestion that many of the unbanked simply don't want accounts.

Exhibit 15

55% of the global unbanked population resides in Asia Pacific



Note: "Other economies" include high-income non OECD economies, Algeria and Tunisia

SOURCE: World Bank Global Findex database

Governments are actively working to include the unbanked and underbanked as a matter of socio-economic policy, to bolster economic growth and combat income inequality. Countries, including China and India, are issuing licenses to new banks, FinTechs, and other non-banks as they attempt to make banking services more inclusive. Partly as a result, banking penetration in China rose 15 percentage points between 2011 and 2014 to reach 79 percent of the adult population, including 72 percent of the poorest segments. In India, penetration rose 18 percentage points to 53 percent of the adult population over the same period, including 44 percent of the poorest households.²⁸

Some government initiatives seek to ease current manual processes for know-your-customer requirements. These measures were designed to combat money laundering, but are often a hurdle for low-income individuals who do not have proper identification. For example, India has approved using biometric identification to satisfy these requirements when opening an account.²⁹

Securing proper identification is just one of several obstacles banks face in opening their services to the unbanked and underbanked. Since these customer segments are generally low-income households, their economic value is limited and rigid cost controls are needed just to break even on product offerings. In addition, the credit infrastructure, such as a ratings system, is underdeveloped for the lowest income segments, increasing the risks of lending.

But some banks are making great strides in overcoming these challenges. For example, Bandhan Bank of India, founded as a micro-finance company in 2001, has created a distribution network with 2,000 outlets and reached more than 6 million customers. Bandhan overcame the challenges of serving lower-income households in part with a strategy that had tight cost controls as well as a unique staffing model—hiring field workers from among the low-income communities who could empathize with borrower needs. The strategy helped build lending volume quickly, while managing operational costs and

keeping employee attrition in check.³⁰ Bandhan's group lending model has also been effective in using peer pressure to ensure repayments; its repayment rate is 99.5 percent.³¹

In another example from India, FINO PayTech offers low-cost payment products to businesses and government agencies. Its model includes offering a single card for all financial products, incorporating biometric data to ensure the security of transactions, and using data collected from card use to support other businesses, such as risk scoring. Founded in 2006, the company served nearly 78 million customers from 450 branches in 14 Indian states in 2015.³²

Banks in Asia-Pacific will need to take advantage of new technologies to profitably bring the unbanked and underbanked a fuller range of financial products and services. Continuing with India, the country offers a clear illustration of how technology can bring banking services to lower-income households. About 1 billion people in India have been issued unique identification numbers incorporating biometric data, which can enable access to credit and banking services.³³ At the same time, smartphone penetration is increasing quickly, reaching almost 500 million unique subscribers in 2015.³⁴ Moreover, applications such as the United Payments Interface allow customers to use their phones as digital bank debit cards, as well as to access online banking services.

Other new technologies that could trigger significant disruption include the use of mobile phone data, which mobile operators collect, as a substitute for traditional credit ratings for a variety of financial services, including credit cards and small loans. Among the data banks can slot into algorithms are overall usage, time of day for calls, the initiator of the call, frequency of topping up pre-paid plans, and location.

Other new approaches to risk assessment include payment history for utilities and education, social media activity and network, and online shopping habits. Banks in many emerging markets have shown that these modern metrics are reasonable supplements to traditional credit ratings.

Serving a wealthier middle class

The rapid rise of an affluent middle class in Asia-Pacific presents a significant opportunity for banks. By 2020, we estimate that 14 percent of the global assets held by affluent households, those earning \$100,000 to \$1 million a year, will be in Asia-Pacific, excluding Japan (Exhibit 16). The region will become the world's largest affluent market, easily surpassing North America, which is projected to hold 11 percent of the world's affluent market's assets by then.

Assets held by China's affluent class will likely grow by about \$3.4 trillion between 2014 and 2020 and will account for most of the region's growth. India's affluent-class assets are expected to expand by nearly \$1 trillion during the period.

Asia's banks will benefit hugely. By 2020 revenues from affluent class households are expected to reach \$141 billion, about 12 percent more than the revenues brought in by serving high-net worth households. Annual revenue growth from the segment is expected to exceed 10 percent in

China, India, and South Korea between 2014 and 2020, with other markets also expected to show strong growth.³⁵

Affluent households have specific financial needs. Wealthier households want investment products tailored to their situation – for example whether they are building a career or nearing retirement – and guidance in investing abroad. They are also looking for experienced and knowledgeable bank representatives who clearly understand their risk profiles and investment expectations and can offer personal advice.

But studies³⁶ have shown that the valuable affluent segment is generally frustrated by services offered at their financial institutions. In a 2014 McKinsey survey in China, for example, almost half the affluent respondents said they were disappointed by the limited financial offers available and about a quarter said their financial advisors were inadequate, often because they were too young or didn't understand the client's needs. They also complained about channel availability and a lack of

Exhibit 16

Asia is projected to become the largest affluent market in the world



¹ PFA is personal financial assets and includes onshore liquid for Households with 100k-1 mn USD

SOURCE: McKinsey Global Wealth Pools

convenience, such as Web sites that were difficult to navigate, as well as a scarcity of value-added services, such as foreign investment opportunities.

One cause of affluent dissatisfaction is likely that many banks in Asia-Pacific make little effort to differentiate their products from those offered by competitors. For example, a review of premium credit-card offers from major banks in India showed almost identical terms. With the affluent middle class yearning for a wider range of products and services and special treatment, such plain-vanilla approaches to product portfolios will continue to displease them.

To tap into this lucrative segment, banks will need to fundamentally improve their service levels while keeping costs in check. Digital technologies and modern platforms will be crucial to creating this balance. Benefits they offer include seamless interactions with customers over multiple channels, speedier and more efficient processes, and big-data analytics that can provide recommendations to customers on investments and the next product to buy.

Focusing on small and mid-sized enterprises

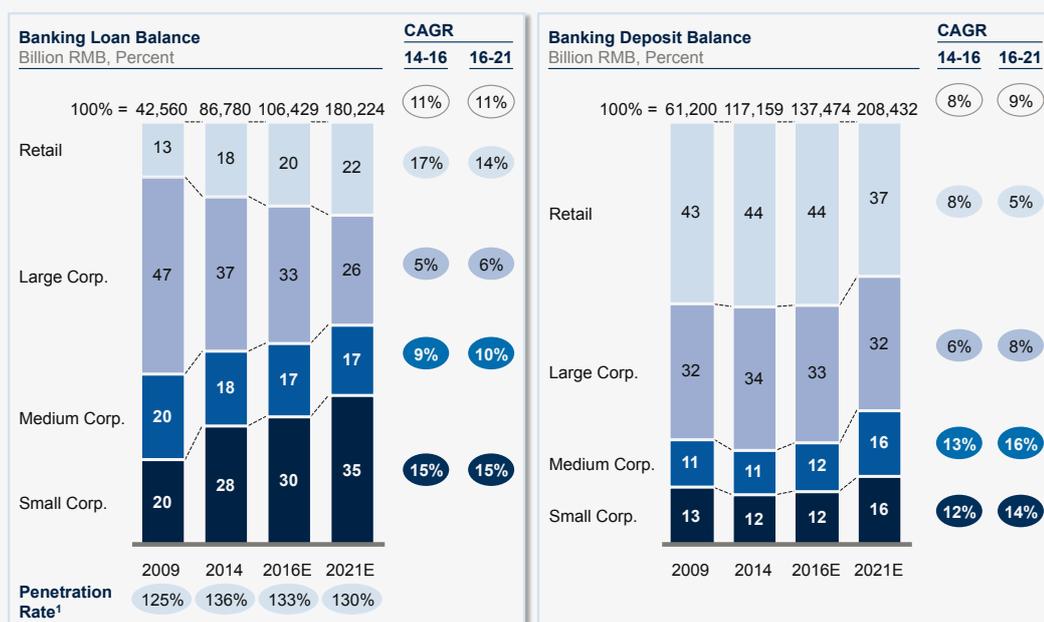
As discussed, corporations are struggling amid slowing economic growth in the region, and their problems are reflected in the banking sector by lower profitability and increased non-performing loans. But despite these travails, corporate banking will continue to tower above retail banking in the region, with small and mid-sized enterprises (SMEs) drawing increasing interest.

China offers one example of the trend. Between 2009 and 2016, retail banking slowly took market share away from corporate banking, but still accounted for only 20 percent of the market's outstanding loan balance (Exhibit 17). By 2021, we estimate that corporate banking will remain dominant, encompassing 78 percent of the country's lending.

Within corporate banking, however, a more nuanced story appears. In 2009, large corporations held about 47 percent of total outstanding loans, compared with about 40 percent held by SMEs. By 2016, balances held by SMEs surpassed those held by large corporations, and the trend is expected

Exhibit 17

SMEs will drive growth in China



¹ Penetration Rate = Loan Outstanding/GDP

SOURCE: PBOC; CBRC

to continue into 2021, when SMEs are expected to hold more than half total outstanding loans.

Trends in deposits in China are slightly different, but also illustrate the growing importance of SMEs. Deposit shares held by different segments remained relatively stable between 2009 and 2016. However, in the next five years—2016 to 2021—deposit balances held by SMEs are expected to grow almost twice as fast as those held by large corporations, largely a result of stronger growth in these businesses.

As lending to SMEs grows by more than 10 percent a year, banks will be challenged to meet the demand, especially amid competition from FinTechs and other attackers from outside the industry. For example, a survey in India in 2013 showed that 43 percent of lending to SMEs came from informal sources, such as family and friends (Exhibit 18).

Of those companies that turned to informal financing, the most common reason given was that they could not raise the collateral required by banks. High interest rates, indebtedness, and

processing demands were also frequently cited reasons for bypassing formal lenders.

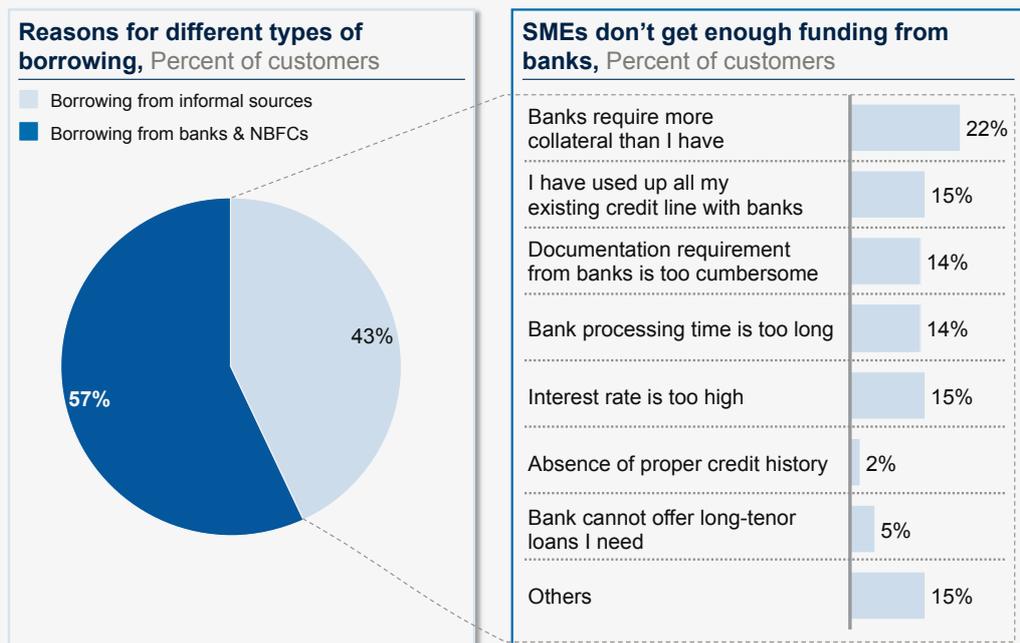
To help break the logjam, banks can develop an end-to-end, digital approach that addresses the entire SME ecosystem and captures value all along the supply chain. Working with core companies as anchors, banks can reach out to their suppliers and distributors to provide products and services that are backed by the overall system, offering efficiencies and lower costs throughout. The system would stretch from order financing for suppliers to prepaid financing for distributors.

Taking an e-commerce digital ecosystem as an example, benefits would accrue to banks, platform providers, and the online merchants. For example, the merchants would get easier access to credit, enabling increased sales through the platform. Further enabled by the platform, banks could get access to digitally savvy customers using integrated digital wallets and loyalty programs. With a corporate cash management solution, platform players would also gain efficiencies through integrated payment systems, access to

Exhibit 18

SMEs involved in the new ecosystems are credit-hungry

INDIA EXAMPLE



SOURCE: McKinsey Bancon survey

working capital, and management information systems supported by the bank

Banks, for their part, connect to an ecosystem that can provide rapid customer acquisition, particularly for services like payments and credit provision. Data gleaned from the partnership could also be valuable: transaction data could be fed into underwriting models to improve risk assessment, while analysis of merchant data could show opportunities for cross selling.

Ant Financial in China shows the potential. Ant Financial provides working-capital loans to merchants using the e-commerce platform of its former parent company, Alibaba. Powered by big data analytics, Ant Financial can offer rapid loan decisions by leveraging payment histories on Alipay, as well as data from the 37 million small businesses that buy and sell goods on Alibaba's shopping websites. Credit scores can be calculated that factor in a user's credit history, online shopping preferences, repayment ability, personal information and online social networking activity. Ant Financial had more than 400 million annual active users in 2016.³⁷

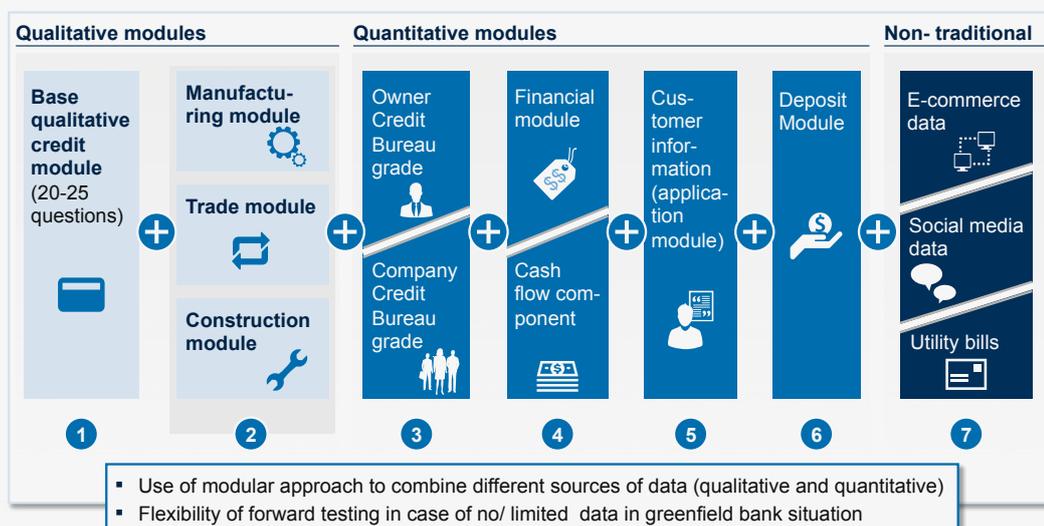
Taking a deeper look at risk, some banks with a segmented approach to risk assessment are coming up with more predictive results, particularly for SMEs without long borrowing track records (Exhibit 19). Such an approach weighs traditional data, such as information provided on applications, credit ratings, and cash flow, as well as non-traditional sources, such as e-commerce and social media activity.

Banks wishing to claim a significant share of the growing SME market must move quickly because FinTechs and others are already making inroads. Some are targeting specific niches along the value chain, such as document tracking and authentication or payment and settlement systems, and others offer a more complete range of services. Each model is siphoning value from traditional banking revenue streams.

Dianrong in China, for example, has established a peer-to-peer online market place for SME loans, providing credit ratings and risk controls on each loan.³⁸ The company, founded in 2012, brokered more than \$1 billion in loans in 2015. Ppdai and Renrendai are similar SME lending clubs that have appeared in China.

Exhibit 19

A new underwriting approach uses a range of predictive information



SOURCE: McKinsey & Company

Many banks will not be able to act immediately across the three growth opportunities we have outlined above. Instead, they will have to select a portfolio of staged initiatives based on their strategic goals and core capabilities. As they move further toward capturing the full potential of these opportunities, they will need to systematically develop capabilities to meet new challenges.

Driving value through digital transformation

As competition from FinTechs and others increases and the economic environment puts continued pressure on margins, digital transformation will be crucial for Asia-Pacific banks to secure their profitability and revive their growth momentum. Turning to new technologies will not only help banks regain cost leadership, it will also better position them to meet changing customer needs in an increasingly digital world.

Two options are available. In one, banks can build new digital businesses by partnering with various digital players or by developing them using their own capabilities. In the second, banks can focus on digitizing specific end-to-end processes and improving customer experiences with the new

technologies, which would require a complete understanding of current processes to determine where costs can be eliminated, efficiencies enhanced, and customer experiences improved.

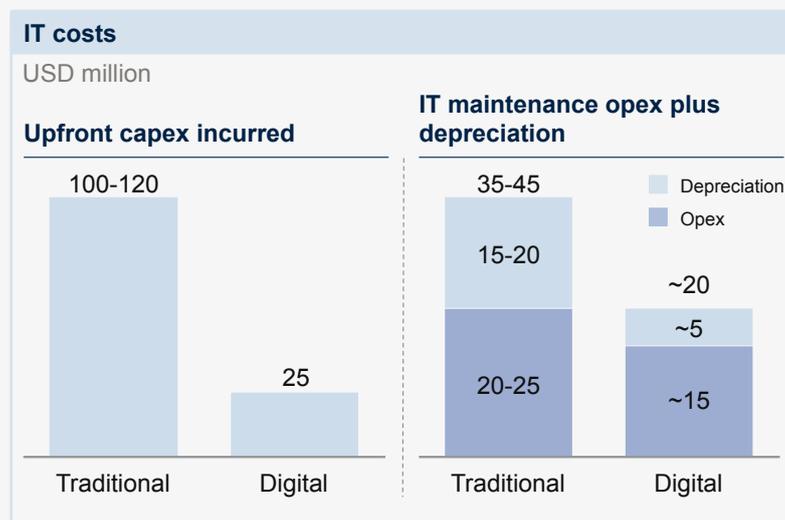
Creating a stand-alone digital business can serve an evolving set of customer expectations quickly and effectively. In surveys, banking customers in Asia-Pacific frequently list limited digital financial offerings and unsatisfactory service as major sources of frustration. This is especially true in emerging markets. A well-designed digital bank could address these disappointments and rapidly build a loyal customer base.

Digital banks are much less expensive to build than traditional financial institutions. Capital and operating expenses are much lower, and not just because no branches are needed (Exhibit 20). Lower costs also result from simplified product portfolios, streamlined processes, and IT options, such as vendor-hosted systems, that avoid the expense of traditional IT systems.³⁹

The second option, remastering processes using digital technologies, can deliver immense value, especially when the targeted processes are

Exhibit 20

Digital-only banks are cheaper to build and operate



SOURCE: "Building a Digital Banking Business" article by Sonia Barquin and Vinayak HV, April 2016

carefully selected. Typically, a large universal bank will have 600 or more processes, but of these the top 20 to 30 processes account for up to half the costs and 80 to 90 percent of customer activity. These major processes include account opening, mortgages and lending, and customer enquiries, among others. Fully or partially automating these processes could cut their costs by up to 30 percent.

Digitizing processes can also improve customer experiences. Digital technologies have changed how consumers shop across all categories, including financial services, and banks must craft end-to-end consumer experiences that match these new behaviors and eliminate frustrations, especially at the front line. Increasingly, customers begin making decisions on financial products and services by visiting bank Web sites and other online resources, and they expect a fast and smooth process over their preferred channels to complete the transaction.

Along the way to a purchase, there are ample opportunities for banks to disappoint potential clients. Financial customers have expressed frustration if, as commonly happens, opening an account takes 60 to 90 minutes at a bank branch, if business loans take up to 20 days for approvals, if mortgages need up to two weeks to close, or if it takes nearly a month to complete an investment transaction.

Banks can lower these obstacles in a variety of ways that together create an integrated and efficient consumer experience. A consumer-centric approach demands a profound understanding of customer needs, desires, emotions, and behaviors. These insights would be gathered, for instance, through an iterative product-development approach that uses a variety of techniques including ethnographic research, shadowing, interviews and rapid prototype testing. Once insights are developed, banks must design their offerings around them.

Relationship managers must also have this information available over a variety of channels,

such as smartphones, tablets, and personal computers. Easy-to-use apps should provide them with an overview of market and industry trends, financial benchmarks, and tools to help evaluate loan applications and to generate tailored recommendations. A digitally enabled manager should be able to craft a personal plan for a client after a 90- to 120-minute conversation.

Bringing it all together, banks can create smooth and painless customer experiences that increase business and satisfaction levels. For example, Puhui Finance, a unit of Chinese insurer Ping An, can approve unsecured loans in as little as six minutes using data from online applications and external sources and attracted more than 50,000 clients within two months of the service's launch.

In developed markets, where more customers are looking for personal financial advice, banks are finding that remote advisory centers can be cost-effective. Unlike branches, these centers focus on offering tailored financial advice on complex products, such as wealth management and mortgages, using digital and personal channels. At one European bank, clients served through remote advisory centers were almost three times as likely to have contact with the bank as those served by branches. Cost to serve at remote centers was also half that of branches, and margin growth was 9 percentage points higher.

Many major banks have already made significant investments to digitize their systems and processes. JP Morgan Chase, for example, is expected to spend \$3 billion on technology in 2016.⁴⁰ In 2015, the bank—the largest in the United States—opened a 125,000-square-foot technology hub in New York, essentially an in-house FinTech. The hub houses about 700 workers, including designers, coders, and analytics experts. HSBC has invested \$1 billion in a digitization and automation program to capture cost savings through optimizing end-to-end processes in its branch network, modernizing its mainframes, adopting cloud-based systems for non-critical tasks, eliminating 750 legacy systems and applications, and introducing a new

core banking system.⁴¹ In Singapore, DBS Bank spends about \$600 million a year on technology, not including a special \$200 million initiative in digital technology, and has said that more than 90 percent of these expenditures go toward middle- and back-office processes.⁴²

Strengthen the balance sheet

In Asia-Pacific, stressed assets – non-performing and restructured loans – have grown rapidly in recent years. Between 2007 and 2011, stressed assets in China, India, Indonesia and Japan grew by 0.1 percent per annum, while between 2011 and 2015 they grew by 6.9 percent per annum. A majority of these stressed assets have been in the wholesale banking portfolios of banks, lending to SMEs and larger corporations. Interest-coverage ratios of large corporations have fallen significantly since 2010, and corporate balance sheets have been weakened by the global economic slump, the regional slowdown, and volatile commodity prices, among other factors.

To strengthen their balance sheets, banks will have to fundamentally rethink their approach to credit underwriting and stressed asset management, especially in the wholesale banking segment. The solution must be a mix of near-term solutions and longer-term structural efforts, as well as working with other banks or state agencies to create structural stability to manage the stress.

In the near term, banks should explore new ways to reduce portfolio risk and manage stressed assets. Measures to reduce portfolio risk center on a clearer definition of the bank's individual risk appetite with a statement that includes specific exposure standards in terms of individual companies, customer segments, and corporate segments. The plan should outline specific targets for reducing portfolio risk covering metrics such as ratings distributions for new loans and renewals and the appropriate mix between short- and long-term lending and between liquid and illiquid collateral.

To implement the precepts of their risk appetite statement, banks must overhaul their

underwriting workflows to ensure that officers are adhering to the new risk standards, communicate the new policies to the frontline sales force, and offer appropriate training, especially in emerging markets. Banks must be certain the new approach to risk is understood at all levels of the organization. Digitization can complement such an overhaul by not only increasing efficiency but also effectiveness of the credit process.

In addition, banks should consider augmenting performance evaluation metrics to incorporate forward-looking measures, such as risk-adjusted return on capital. The change would ensure that both sales and approval teams focus on improving future portfolio distribution, instead of looking only on realized losses, which could vary significantly from one quarter to the next.

Also in the near term, banks can consider setting up an in-house asset management company (AMC) to handle troubled assets. Assets would be turned over to this unit when they become non-performing or are in danger of doing so. The unit – which can function under a range of organizational structures – then works individually with borrowers to find a solution, such as restructuring or additional time to repay. These troubled assets could be liquidated or sold, but the primary goal is to recover them and return them to the bank's normal operations. A significant benefit of such AMCs is to create a clear division of labor: while AMC managers focus on recovering stressed assets, managers elsewhere in the bank can concentrate on rebuilding the banks and generating new business.

In addition, an AMC nurtures critical specialist capabilities, such as in corporate turnarounds or debt restructuring, that are needed to manage troubled assets. Banks can move quickly by bringing these skills in through external hires or develop them internally. Separating troubled assets from a bank's normal operations can also help the market to more accurately assess the value of a bank, an important consideration when the banks need to raise capital. In addition, removing bad loans from the original credit

officers can strengthen credit discipline and enable more objective and drastic measures to recover and manage these loans.

China's Cinda Asset Management Company is an extreme and successful example of how an independent AMC can relieve the stress from non-performing loans from banks. Cinda was founded in 1999 to buy troubled debt from state-owned banks on the verge of insolvency and has developed strong capabilities in managing distressed assets, its core business. The company prospered by addressing the banks' need to get non-performing loans off their balance sheets, and in 2013 it raised \$2.5 billion in an IPO.⁴³

AMCs can be created for individual industries or to handle stressed assets for an entire bank. Thailand offers an example of a bank-wide approach, with Bangkok Bank establishing the Sinnsuptawee Asset Management Company to take over its non-performing loans. In an example of an industry-specific solution, the Spanish government set up SAREB in 2012 to absorb and eventually resell soured property assets.

Longer term solutions include rethinking bank credit policies and the overall approach to lending, particularly in the corporate and SME market. The focus of these longer-term efforts is to prevent non-performing loans from accumulating on balance sheets in the first place.

For corporate loans, for example, one option is to follow an originate-to-distribute model, in which a bank provides a loan, and then sells the asset to a third party. Banks that have adopted this model have generated a 20- to 30-percent increase in new loans, a similar increase in commission fees, and a 50- to 100-basis-point improvement in return on working assets. While the originators focus on growth, the buyers of these loan assets concentrate on restructuring the portfolio for greatest value. Such approaches have come under increasing scrutiny following the 2008 economic crisis, and banks must plan them carefully to ensure they accomplish their goals without creating systemic risk.

Banks can also avoid burdening their balance sheets with non-performing loans by using transaction data more aggressively in their credit-scoring models. SME lending provides an example. Assessing risk for SMEs and assuring the lent funds are used appropriately can be challenging: data can be scarce, annual reports inaccurate, and owners may jumble together personal and corporate accounts. Using deposit transaction history and non-traditional sources of data codifying qualitative factors based on credit officers' experience can help a bank create a cash-flow perspective and truer picture of company's balance sheets and profit-and-loss position. Coupled with an assessment of the credit worthiness of company and its owners, this approach can lead to more effective underwriting processes.

A final measure would be to work with other banks on the common goal of improving risk management. While retail bureaus are common in Asia-Pacific and provide banks insight into credit underwriting, similar information transparency across banks is typically not available in wholesale banking. Complicated corporate structures—subsidiaries, special purpose vehicles, and joint ventures, for instance—make such an approach for wholesale banking difficult, of course, but a lack of shared information on debt exposure and pledged collateral among peer banks adds to the problem. To resolve the challenge, banks and regulators should consider structural initiatives to improve transparency of corporate borrower information.

As the new reality continues to take hold, banks in Asia-Pacific must seek immediate and longer-term solutions to the increase in non-performing loans, which will continue to place added stress on their balance sheets. Exploring the potential of asset management companies provides one short-term option, while looking for ways to avoid accumulating bad debt in the first place offers a longer term solution.



Enabling the organization

To thrive amid the turbulence, banks will need to fundamentally rethink their organizational models. Three aspects are particularly important—a thoughtful approach to partnerships, shifting to an agile organization and model, and rethinking talent and culture to enable the new digital organization.

Partnerships

Traditionally, because of the nature of the business and regulatory needs, banks have tended to be very independent, focusing squarely on banking products and services and associated revenue pools. The new environment—digital technologies and competitors from many corners—makes this approach obsolete. Banks will have to quickly build capabilities in finding, striking and managing relationships with a broader range of partners.

FinTech players have proven proficient at solving customer needs intelligently and quickly creating scale. Banks that can find ways to draw from this innovative spirit will capture significant benefits.

One approach is to establish accelerator or incubator programs that attract bright start-ups with the possibility of partnering with a major bank. Banks not only share in the innovations being developed, but can also propose taking equity stakes in the most promising participants. Singapore's DBS, for instance, works with Hong Kong accelerator Nest to support promising start-ups.⁴⁴ In Germany, Commerzbank has opened an incubator that provides FinTechs with access to its customer base, as well as office space, infrastructure, a network of banking experts, and the possibility of getting venture capital.⁴⁵

In another approach, some banks are putting together venture-capital funds to invest in technology companies. Australia's Westpac, for example, has established a venture-capital fund, Reinventure Group, that is investing A\$50 million in domestic technology ventures.⁴⁶ Among its investments, the Reinventure Group has acquired stakes in peer-to-peer lender SocietyOne, social media platform Nabu, data business Zetaris,

payments platform PromisePay, and bitcoin transaction exchange Coinbase.

FinTechs aren't the only attractive partners for banks; mobile operators and e-commerce platforms, among others, can also provide banks with advantages, such as immediate access to a large customer base. Banks can also pursue joint product development with these partners. For example, in India Kotak Mahindra Bank and telecommunications giant Bharti Airtel have joined to obtain a payments bank license, which is likely to create a mobile money service targeting the unbanked and underbanked.⁴⁷

E-commerce partners offer banks the opportunity to create lending services for merchants that use the platform and their customers. At the same time, SMEs using the platform get easier access to working capital because of the partnership, and their customers may be more willing to consider big-ticket items like appliances and television if financing were available.

Flexibility and agility

Traditionally, banks have released up to four new products a year, with average time to market of one to two years. They must pick up the pace to compete in the new environment. Technology companies like Google release several new products and services a week with an average time to market of 2 to 12 weeks. FinTechs and other attackers can bring financial products to market much more quickly than banks, and banks must find ways to close the gap and respond to customer needs more quickly to remain competitive.

Thriving in the new digital environment requires banks to develop more flexible organizations. For many banks in Asia-Pacific this will mean taking a cue from the Agile development approach favored by many software firms and technology firms. These companies succeed by creating dedicated teams, deploying a two-speed IT architecture, and encouraging closer collaboration between product development and IT operations.

One crucial measure is to establish cross-functional teams that have a solid understanding not just of technology, but also of the bank's strategy, design, and brand, as well as the economics of its business model. A dedicated core team should be supplemented by ad-hoc additions from critical areas, such as compliance, as needed. The core team would grow as its responsibilities expand. Portuguese digital bank Activobank, for example, started with a management team of six to eight people as it designed its digital business model, and the team expanded to more than 30 during implementation, not including frontline and operational roles.⁴⁸

Banks will also have to balance and integrate two distinct IT systems: legacy systems that focus on transactions and tend to be slower, but are more secure and stable, and a new system centered on digital technology that supports customer-focused, nimble, and flexible frontend applications. Running such a two-speed IT network is vital to a bank's ability to remain competitive in the new era.⁴⁹

The nimble frontend system should be designed by small teams—usually with fewer than 10 members—that use Agile- and Sprint-based approaches to product development. Software release cycles for customer applications and other frontline uses should be modular and designed for quick deployment, targeting a minimum viable solution that will evolve over time.

To build the frontend system quickly, banks can turn to a combination of customized and off-the-shelf functions from their vendors. One new digital bank in Asia, for example, used standard functions from its frontend provider, such as a peer-to-peer payment system, in tandem with features tailored to specific consumers, such as personal-finance modules that allow customers to track their expenses and set savings goals.

When prudent, legacy systems should be modernized to increase efficiencies. For example, if the regulatory regime and security

considerations allow, banks can explore using cloud-based systems for data storage and other applications. Several digital solution providers have expanded into emerging markets, offering competitive alternatives to traditional data centers that normally require large capital investments. Along with saving money, cloud-based solutions can offer banks greater flexibility and contribute to innovation. For example, an open application program interface can encourage outside collaboration on new banking applications.

Banks that run a two-speed IT architecture proficiently have captured significant benefits. For example, time-to-market can be cut by 40 to 60 percent, errors and defects can be cut by up to 60 percent, IT productivity can be improved by 20 to 30 percent, and employee motivation improved significantly.

Faster product releases on digital platforms require closer collaboration between product development and IT operations teams, which in technology circles is known as DevOps. Banks must gradually build a strong DevOps team that can support continual delivery for new products and services to production, where automated tools can bring them to market much more quickly than traditional manual approaches to provisioning, testing, and storage. Processes that approve applications to move from production to customer engagement should also be accelerated with increased automation. Although challenging, creating a strong DevOps team can reduce defects, increase the frequency of pilots and live releases, and significantly improve productivity.

Talent and culture

In moving into the new environment, banks should not underestimate the changes needed in corporate culture and the approach to talent. Traditionally, banks have been the embodiment of steady, rigid corporate culture, characteristics that were needed to build reputations of trust and credibility. But while these traits remain important, digital innovation relies on increased flexibility and speed and a shift in attitude that focuses on customer needs.

To keep pace with FinTechs and others trying to shoulder their way into financial products, banks must abandon traditional silos, departments, functions, and reporting lines in favor of cross-functional teams that are self-organized, non-hierarchical, and empowered to deliver end-to-end processes that meet customer needs. The most progressive companies will launch transformation programs that change the character of the entire organization, while others may opt to isolate digital efforts and culture in a separate business unit or teams within a business unit. The optimal structure depends largely on strategic goals, but whichever is chosen a new culture is needed for those responsible for digital implementation.

In a 2013 McKinsey global survey, 53 percent of the respondents said improved culture, energy, and morale were the most effective measures for energizing a digital team. Although respondents cited compensation and incentives as the next-most effective measure, clearer career paths and exciting work were close behind. The best digital teams are enthusiastic about their work with a clear focus on serving customer needs. In addition, they are collaborative, with members at all levels involved in key decisions, and they allow for experimentation and failure.

Agile management practices, which focus on rapid, iterative advances, are fundamental in driving the performance and health of a digital organization. The approach, which should be embraced beyond engineering, fosters an atmosphere of collaboration by creating fluid teams, often called tribes, that work together on very specific problems and don't hesitate to reach outside the group for additional expertise when needed. One example of how Agile techniques are employed is seen in Spotify, the digital music service that has attracted 30 million subscribers.⁵⁰ Spotify adopted an Agile approach and built cross-functional teams, known as squads, across its organization. Each squad represents a product owner, and to ensure that skills and economies of scale are not isolated within squads, chapters are formed

across squads that comprise workers with similar expertise. Finally, guilds – essentially special-interest groups – are formed that draw from the entire organization (Exhibit 21). In banking, the Dutch ING Bank has used an Agile approach since 2015 in an effort to increase efficiency and flexibility, accelerate innovation, and attract technology talent.⁵¹

Banks must also have a solid strategy for recruiting digital talent, which begins with a value proposition that doesn't rely exclusively on compensation and incentives. The best digital talent is also attracted by assurances of autonomy and purpose.

Recruitment pools should also expand to account to the wider range of skills needed in banking. For instance, banks can look outside the industry and hire leaders from technology companies or bring in needed capabilities through their acquisitions. US-based BBVA Compass, for example, acquired banking services provider Simple in 2014 for about \$117 million in part to gain skills in virtual

banking.⁵² Engineering campuses and other science schools can also provide a new source of talented recruits for banks.

Non-traditional career paths can also be crucial to bringing in top digital talent. Traditionally, career progression in the banking industry has been tightly linked to increased managerial responsibilities: a career is defined by the number of people below you. In digital technology, the litmus test for career progression changes. Instead of careers defined by increasing managerial responsibilities, they are defined by increased complexity of assigned projects. Banks will have to adopt a similar approach for their digital operations.

Outsourcing some tasks can also help banks bridge the talent gap. For greatest impact banks should expand their outsourcing models. Traditionally banks in Asia-Pacific have held one or two contracts either on a fixed-rate for specific tasks or on more flexible terms to augment staff to meet specific needs or to handle periods of higher

Exhibit 21

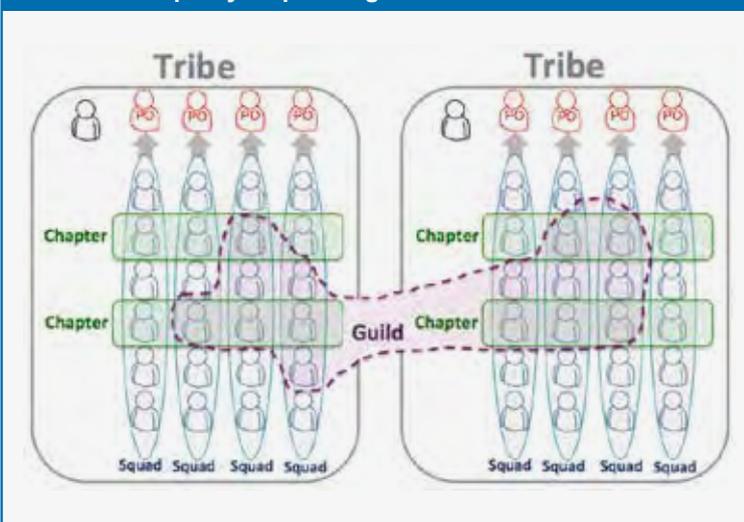
Spotify has adopted an innovative approach using agile principles



Approach

- Spotify is a digital music service providing access to millions of songs
- 1500 employees in “cross-functional, self-organizing, self-learning, co-located teams”
- Teams have E2E accountability for part of the Spotify experience (e.g., search) across devices

Overview of Spotify's operating model



SOURCE: Henrik Kniberg and Anders Ivarsson, “Scaling Agile @ Spotify”, October 2012

volume. New outsourcing models could be more effective in addressing such needs, especially as tasks required by the bank are becoming increasingly fluid and complex. For example, outcome-driven contracts would pay vendors based in quantifiable results, such as cost savings or revenue increases. The approach could lower the risk shouldered by the bank, but would likely require better in-house capabilities handling vendor relationships.

□□□

One goal of this report is to make clear to banks that, in our view, a storm is approaching. A second goal is even more important: to spur them to action. Banks risk losing market share, suffer a loss in profitability and, in extreme cases, could even be pushed aside by more nimble competitors. Concerted action can help banks thrive when others flounder.



Final thoughts

Changes are coming quickly to the banking sector in Asia-Pacific. Like a storm blowing across the region, the turmoil will leave the landscape altered. But just as the storm presents threats to banks in the region, the disruption it causes will also raise opportunities for those that can transform their businesses and adapt to the new environment. In large measure, adapting will mean embracing digital technologies and a business model that focuses on customer needs.

Building a digital organization is not a task that is completed overnight. Many steps – some small, others large – are needed to complete the journey. Among the key principles that should be understood is the need to deploy multi-disciplinary teams that imagine end-to-end processes that cater to specific customer needs. Customers take priority, in this new environment, then products, channels, and geography, in that order. Beyond this, banks should pursue growth pockets, embrace digital technologies, infuse their organization with a nimbler approach to innovation, and solve their balance sheets problems.

The transformation is complex, touching all corners of an organization, and it will not be without its tensions and frustrations. But, once completed, a bank can embrace the strong winds of the coming storm.

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