

McKinsey Corporate Banking

# Price to Win

## Create value through smarter pricing in a competitive interest rate environment



7

Strategic Imperative of Pricing



13

Mckinsey Pricing Framework



35

Excellence in Transformation

McKinsey Greater China FIG Practice June, 2016





June, 2016

McKinsey Greater China FIG Practice

# Price to Win

Create value through smarter pricing in a competitive interest rate environment

Joseph Luc Ngai | Hong Kong

John Qu | Hong Kong

Winston Yung | Hong Kong

Charles Tan | Taipei

Hongming Chen | Hong Kong

Mario Aquino | Singapore

Gianluigi Salatiello | Milan



---

## Acknowledgements

This report was developed based on years of experience supporting the banking industry, both globally and in China. In helping to bring this wide expanse of knowledge together, the authors would like to thank our McKinsey team, Steve Chou, Nicole Zhou, Clear Wu, Rio Xu, and Bin Zhou. The team at Periscope Solutions was also very helpful in helping to prepare this report and included Ben Sun, Viktor Csala, and Serge Louvet. In addition, we would like to acknowledge the contributions of Yihong Wu, Xiao Liu and Eugenia Chen in project coordination, and the editorial team, Roger Malone and Fanny Chan.

# CONTENTS

Executive Summary	1
Strategic Imperative for Sophisticated Pricing	3
Revenue boost	3
Improved corporate relationships	4
Better middle- and back-office performance	5
New Reality of Bank Pricing	7
Aligning pricing strategy with business strategy	7
Governing the pricing function	9
Applying pricing models, methods, and tools	9
Tracking performance	10
Deploying IT and data management	10
McKinsey Pricing Methodology	13
I. Price leakages	13
II. Deposit list prices	16
III. Risk-adjusted pricing for lending	18
IV. Fee optimization	21
V. Relationship-based pricing	23
VI. Pricing governance	27
VII. Systems and data	29
Excursion: Periscope – a pricing solution	32
Implementation Plan	35
Pricing transformation	35
Challenges and lessons of transformation	38
Final Thoughts	43



# Executive Summary

In 2015, the ground shifted irrevocably for China's banking industry. By eliminating the ceiling on deposit interest rates, the People's Bank of China took the final step – and, in its own words, the “riskiest” step – in interest rate reform and set the country's banking industry on a new, more competitive course.

In this new environment, pricing will become a decisive factor in banking profitability. Banks will need to move quickly to shed a blasé attitude toward pricing built during a heavily regulated regime if they hope to capture the opportunities presented by the new setting. Successful banks will adopt a sophisticated pricing strategy that can add 6 to 15 percent to the bank's revenue, deepen relationships with valuable corporate clients, and encourage performance improvements throughout the organization.

While regulatory changes in China create an underlying urgency for banks there to adapt to the new environment, measures needed in China are broadly applicable throughout Asia. Banking markets throughout the region will have to address similar factors that are squeezing profitability, especially slower economic growth and troubled loans. Competition centered on interest rates will become more intense as banks throughout Asia seek ways to regain their momentum.

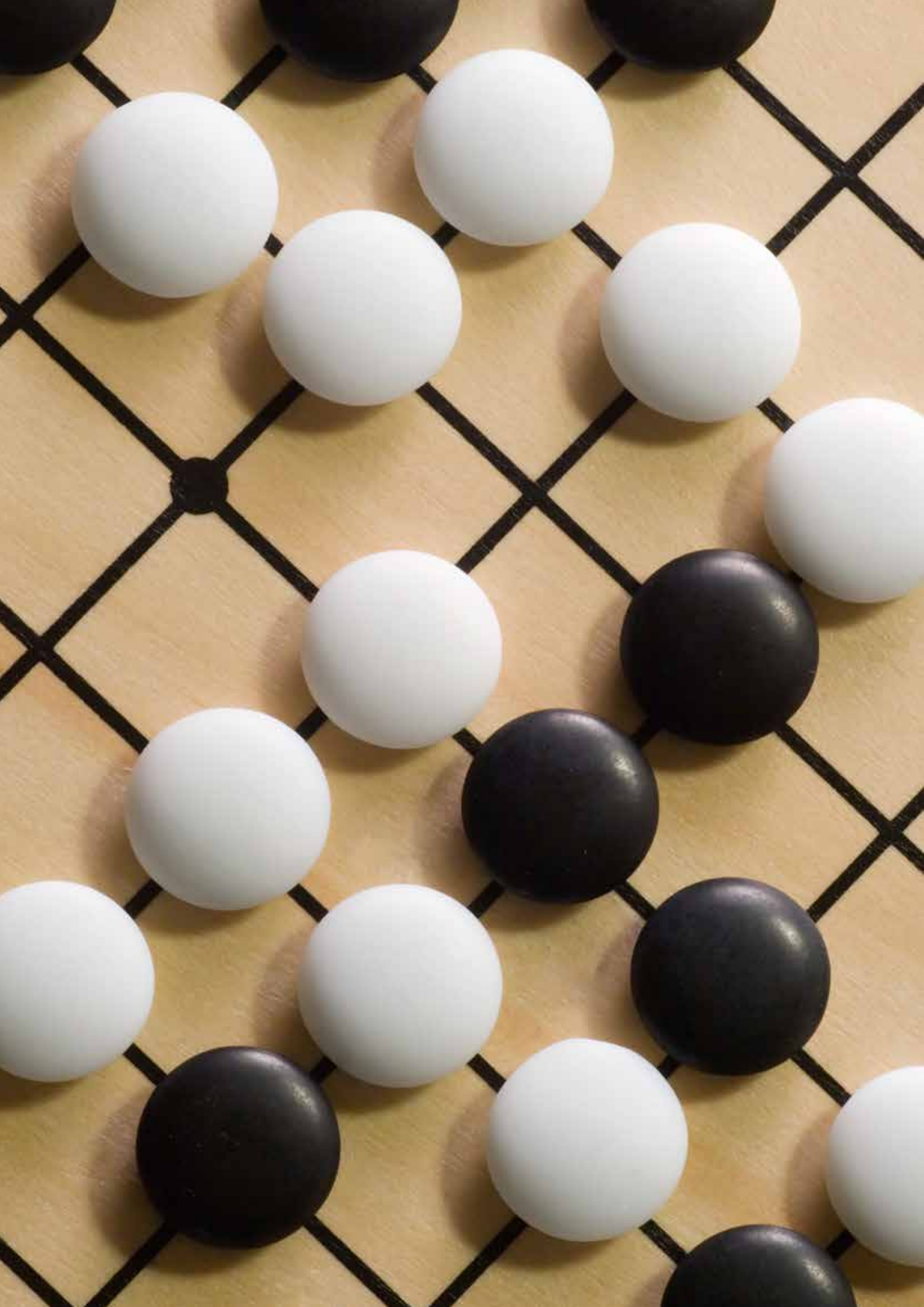
Adapted to more intense competition around interest rates will not be easy. In China, coming from a regulated regime, banks have generally neglected pricing as a strategic tool and must make up for lost time. Adding to the urgency, the recent economic slowdown in China is putting increased stress on the financial industry.

Banks have considerable ground to cover if they hope to create sophisticated pricing systems. Most banks in China do not have a comprehensive pricing strategy that aligns with the organization's overall business strategy. They will also have to strengthen governance systems, rein in relationship managers who have traditionally worked more from intuition than knowledge, and install tracking systems to monitor performance at all levels. In addition, they will have to adopt new pricing models and tools and invest in IT systems that are integrated seamlessly with other bank systems and provide real-time support for the new pricing strategy.

Years of experience helping global banks in similar situations and studying best practice have resulted in an effective approach in pushing through a pricing transformation. The comprehensive framework is built around seven crucial themes: (1) Price leakages and quick wins, (2) Deposit list prices, (3) Risk-based loan pricing, (4) Fee-business pricing, (5) Relationship-based pricing, (6) Pricing governance, (7) Systems and data.

Pricing transformation affects every corner of a banking organization, from asset and liability management to customer relationship management to IT. A transformation program must be carefully planned and can take 18 to 24 months to be fully implemented. Working with banks globally has identified common challenges faced during a transformation, as well as measures that are critical for success: creating a strong, dedicated pricing team, viewing IT needs as strategic investment, and crafting a persuasive program to change frontline behavior.

By moving pricing strategy from a mechanical reaction to arbitrary market benchmarks to a strategic instrument, banks in China and elsewhere in Asia can create the opportunity to capture greater value in a changing market. Liberalization and macroeconomic changes will force all banks to change their pricing systems, whether actively or passively, and those that use the opportunity to create a strategic advantage will reap significant rewards.





# Strategic Imperative for Sophisticated Pricing

In autumn 2015, the banking industry in China changed radically. Following years of reform, the People's Bank of China took a major step by eliminating the ceiling on interest rates on deposits. The move, coming about two years after the central bank abandoned the floor for interest rates on loans, represented the final step in liberalizing interest rates in the country.

Banks operating in China must now adjust to a much more competitive environment. The liberalization will pose significant challenges for banks accustomed to a highly regulated market. But it also presents valuable opportunities, especially for small and mid-sized banks that can use their newly-found flexibility to implement smarter business strategies that could propel them to the head of the industry. Such strategies could increase margins while drawing lending and deposit clients from their bigger rivals.

But adding to the challenge, the liberalization comes just as China's banking sector confronts a variety of other tribulations. China has entered a period of slower economic growth. Among other effects of the slowdown, the value of non-performing loans held by the country's banks nearly doubled in two years, rising from 1 percent of total loans at the end of 2013 to 1.7 percent at the end of 2015, hurting profitability and core capital. Smaller interest margins, which began narrowing at the onset of reforms, and increased competition from innovative financial service providers have also put pressure on traditional banking businesses. As recently as 2013, average revenues at the country's five largest banks were growing at 12 percent annually, but by 2015 this dropped to 5.6 percent.

For banks wishing to succeed in the transition, a crucial component of their transformation programs must be a sophisticated pricing system. Adopting modern pricing processes can deliver a significant boost in revenues, provide improved services for the dominant corporate banking segment, and support management performance improvements in the mid- and back offices.

## Revenue boost

Based on experience in other markets, a sophisticated pricing system can boost banking revenues by 6 to 15 percent (Exhibit 1). The impact would be similar to that of expanding into a new municipal market. The immediate improvement would provide a financial buffer as a bank completes its transformation into the new regulatory regime, which should also include restructuring sales coverage strategy, strengthening sales management, and cost cuts, among other measures.

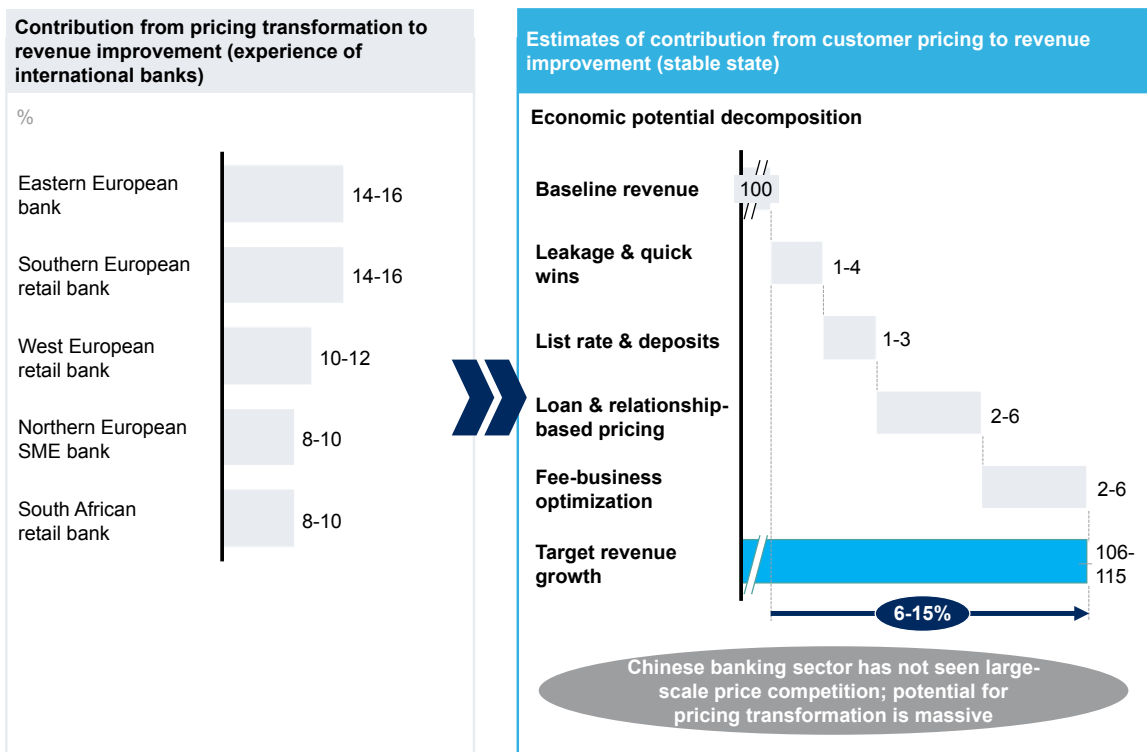
The bulk of these potential revenue improvements comes from two sources, each offering a 2- to 6-percent boost: lending practices and fee optimization. Better pricing for loans suggests a shift from single-product pricing to pricing based on total customer relationships, allowing for improved cross selling, increased product penetration, and better overall client economic value added (EVA). Fee optimization comprises improved discount management and a portfolio pricing strategy designed to elicit more business from individual clients.

A sophisticated pricing system can boost banking revenues by

**6 to 15**  
percent

Figure 1

## Pricing transformation can generate 6-15% in additional revenues



The remaining opportunities are linked to reducing price leakages and fine-tuning deposit list prices. Leakages are often a result of overly generous discounts offered by relationship managers that fail to generate additional business. Often these can be plugged quickly to generate quick wins. Deposit list prices can be lowered, and a portion of the savings used to offer premium rates to strategic clients, such as cash-rich companies, that are identified through systematic targeting efforts.

### Improved corporate relationships

The corporate banking sector accounts for more than 60 percent of total banking revenues in China. However, while bank management capabilities improved greatly in retail banking, they languished in corporate banking. In corporate banking, client management was often left to ad hoc decisions by relationship managers under the assumption that frontline staff had a better understanding of what the market could bear.

Sophisticated pricing can help banks build better relationships with corporate clients. These modern pricing systems focus on client needs, rather than an overarching performance metric. Planning a strategy around each major corporate account requires collaboration among relationship managers, team leaders, product managers, and risk managers, among others. The result is a product package designed for individual corporate needs, a level of attention that can create closer relationships.

In addition, sophisticated pricing systems not only suggest optimal prices, but also identify potential cross-selling opportunities.

## Better middle- and back-office performance

A sophisticated pricing system will also have ripple effects on a bank's middle- and back-office management performance. Coming from a highly regulated regime, banks in China generally lack capabilities for determining exact baseline costs for individual products, and as a result have trouble establishing crucial metrics such as funds transfer pricing, risk, economic capital, and cost allocation. The rigors of sophisticated pricing systems would force banks to correct these deficits, enhancing the professionalism of their middle- and back-offices.

Improved performance in the middle- and back-offices can translate directly into competitive advantages. For example, above-average efficiency for a given product would allow the bank to offer more attractive prices or capture higher margins, either of which improves its market position. Clear metrics also provide other benefits. For instance, products determined to have excessively high input-output ratios, can be corrected with price adjustments and such data can support decisions on whether to invest further in a product, outsource all or part of operation, try to create economies of scale through M&A, or even drop the product altogether.



# New Reality of Bank Pricing

Interest rate liberalization in China is presenting banks with enormous challenges that must be overcome for them to capture the opportunities being opened. The regulatory change will force banks to address weaknesses in their price management systems that were safely ignored before the reforms. To gain the greatest benefit from the regulatory reforms, banks should move quickly to address these shortcomings.

Detailed studies of the country's banking sector have identified five specific areas that must be tackled to fully capture the opportunities presented by the new interest rate regime: pricing strategy, governance, mechanics, performance, and support.

## **Aligning pricing strategy with business strategy**

Most Chinese banks do not have pricing strategies that are aligned with their clients, product, regional, or even overall business strategies. Too often, price setting is isolated from these other corporate priorities, and, indeed, some banks simply follow market prices mechanically.

Interest rates on deposits offer a clear example (Exhibit 2). Often, small- and mid-sized banks set their rates at either the upper bounds of a benchmark floating band published by the People's Bank or a few basis points above the list rates of the five large state-owned banks. This rough-and-ready approach does not make specific the objectives to be achieved by offering rates higher than PBOC benchmarks (e.g., customer acquisition, lowering of funding costs, or attraction of high quality funds). Achievement of these objectives is also not regularly monitored.



















In contrast, banks in other markets that have gone through interest rate liberalization have adopted an active strategy on rates offered for deposits. Some smaller players have raised their interest rates drastically to gain market shares, while leading banks differentiate list prices by geography and client segment. In addition, some banks target new funds with attractive rates propagated by special marketing campaigns. As a result, a vast variety of deposit rates are available in these markets.

Banks in China also generally lack a clear program for offering discounts for banking services. In contrast, leading banks in other markets use discounts to gain strategic clients and deepen client relationships. Such discounts are a clear signal of the value these banks place on selected clients. Discount management usually includes discount budgeting, discount measurement, discount authority delegation, discount execution and tracking, and economics evaluation.

Figure 2

## Deposit list rates of mainstream banks in China<sup>1</sup>

 Higher than peer average

RMB deposit rate	Current deposit	Time deposits (lump sum)					
		3m	Half-year	1y	2y	3y	5y
<b>Base rate of central bank</b>	0.35	1.35	1.55	1.75	2.34	3.00	N.A.
 Industrial and Commercial Bank of China	0.30	1.35	1.55	1.75	2.25	2.75	2.75
 China Construction Bank	0.30	1.35	1.55	1.75	2.25	2.75	2.75
 Agriculture Bank of China	0.30	1.35	1.55	1.75	2.25	2.75	2.75
 Bank of China	0.30	1.35	1.55	1.75	2.25	2.75	2.75
 Bank of Communications	0.30	1.35	1.55	1.75	2.25	2.75	2.75
 China Merchants Bank	0.30	1.35	1.55	1.75	2.25	2.75	2.75
<b>Big 5+CMB</b>	0.30	1.35	1.55	1.75	2.25	2.75	2.75
 Industrial Bank Co., Ltd.	0.30	1.40	1.65	1.95	2.70	3.20	3.20
 SPD Bank	0.30	1.40	1.65	1.95	2.40	2.80	2.80
 China Citic Bank	0.30	1.40	1.65	1.95	2.40	3.00	3.00
 China Minsheng Banking Corp., Ltd	0.30	1.50	1.75	2.00	2.45	3.00	3.00
 Huaxia Bank	0.30	1.40	1.65	1.95	2.40	3.10	3.20
 China Everbright Bank	0.30	1.40	1.65	1.95	2.41	2.75	3.00
 Ping An Bank	0.30	1.40	1.65	1.95	2.50	2.80	2.80
 CGB	0.30	1.40	1.65	1.95	2.40	3.10	3.20
 Evergrowing Bank	0.35	1.43	1.69	1.95	2.50	3.10	3.10
 China Zheshang Bank	0.35	1.43	1.69	1.95	2.50	3.00	3.25
 China Bohai Bank	0.35	1.43	1.69	1.95	2.65	3.25	3.00
<b>Joint-stock banks</b>	0.31	1.42	1.67	1.95	2.48	3.01	3.05
 Bank of Beijing	0.30	1.40	1.65	1.95	2.50	3.15	3.15
 Bank of Nanjing	0.35	1.40	1.65	1.90	2.52	3.15	3.30
 Bank of Ningbo	0.30	1.50	1.75	2.03	2.60	3.10	3.30
 Huishang Bank	0.30	1.40	1.65	1.95	2.50	3.25	3.25
<b>Listed urban commercial banks</b>	0.31	1.43	1.68	1.96	2.53	3.16	3.25

<sup>1</sup> As of Mar 1, 2016, retail deposits

Unfortunately, many Chinese banks are new to discount management and have much to learn. Few have overall guidelines or quantified targets, and execution at the branch level is often haphazard. In addition, legacy IT systems aren't generally able to track the discounts offered, allowing overly generous deals and even abuse.

## **Governing the pricing function**

In most Chinese banks, the pricing function is fragmented and there are no meaningful guidelines disseminated from headquarters. Often, there is no systematic approach to pricing that is used throughout the organization. Asset and liability management departments, which are generally in charge of price management, often use antiquated approaches linked to funds transfer pricing to manage internal pricing levels. These departments also lack the expertise or the means to determine prices offered to clients.

Without a systematic approach or clear guidance, each regional branch is left to fend for itself as it manages day-to-day client pricing. Of course, most branches also lack sufficient expertise in pricing strategy and don't have the full range of metrics needed to make informed decisions. This has resulted in significant price variations across branches, and some branches omit price management altogether in favor of managing overall profitability of the branches.

Although many corporate departments take into account some aspects of pricing – for example, risk management and finance – few banks in China have the capacity or structure to integrate this knowledge into a complete pricing strategy. And since no one is responsible for integrating this fragmented information into an umbrella pricing strategy, decisions are left at the discretion of relationship managers, each following an individual approach.

## **Applying pricing models, methods, and tools**

Banks that use quantified pricing models are better than those that don't at responding to changes in the market and attracting high-value clients. One McKinsey study found, for example, that one bank's standard lending procedures failed to differentiate adequately between high- and low-risk borrowers and even a simple risk-based loan pricing model produced better results. In China, only a few banks have used quantified models to guide frontline pricing, and most adopt a rough-and-ready approach centered around PBOC pricing guidance.

Part of the problem is that Chinese banks face several challenges in building scientific pricing models. First, these models require a wide range of data. For example, setting a cost baseline for an asset product requires information from many sources, including funds transfer pricing, capital costs, risk costs, operational costs, taxes, and surcharges. Many banks in China don't collect these data or haven't integrated them into a common database.

Next, pricing models require detailed client segmentation, but most banks maintain only minimal information, such as a corporate client's overall size, especially if it is a deposit-only customer. Know-your-customer rules are still in their infancy in China.

Other important aspects of a client's profile – industry, risk factors, and even location, for example – are either not recorded or ignored.

And finally, most banks still price one product at a time. Instead, pricing models should reflect the value of a long-term client relationship and the overall contribution a client can deliver through cross selling and other practices.

## Tracking performance

Banks in China do not have a history of tracking pricing performance, which has resulted in a tremendous loss of value. For example, while 20 percent of corporate accounts generate about 90 percent of EVA, the bottom 5 to 10 percent destroy value. Too often, clients with low credit ratings are given the same, or better, terms as those with higher ratings. Discounts on loan pricing have also often failed to bring in deposits or fee-based business that are relied upon for EVA enhancement.

Unsophisticated price management systems are responsible for much of these leakages, particularly the absence of processes that monitor pricing execution. Without a standard procedure to track the effectiveness of pricing decisions, managers cannot judge whether the decisions are appropriate or whether changes are needed. In essence, bad deals are left undiscovered.

Four factors hamper effective monitoring at most banks in China:

- No one is responsible for monitoring the results of pricing decisions or identifying leakages, and organizational structures do not support such oversight.
- Account planning, which projects a client's potential in the near future is either not conducted or followed-up.
- Legacy IT systems are not capable of monitoring pricing execution or alerting management of leakages, and multiple systems have not been integrated sufficiently.
- Performance reviews and key performance indicators do not encourage professional pricing practices. For example, discounts offered to secure future business are not reviewed for effectiveness.

## Deploying IT and data management

Few Chinese banks have dedicated pricing IT systems, and those that do tend to focus on pricing individual loans rather than supporting a more sophisticated pricing strategy. In an internal survey at one bank in China, relationship managers complained that they didn't have access to pricing systems that provided relationship-based pricing recommendations, pricing simulations, track records of individual deals, integrated information about clients, or mobile access. They also said the systems that were available were too complicated and difficult to use.

Integrated and comprehensive data is crucial in creating effective systems. At many banks, for instance, customer relationship management and management information systems are not in sync and can produce conflicting results on fundamental topics, such



as a client's EVA. In addition, client information held by banks is often haphazard and not detailed enough. Banks have much more information, for example, on clients that have gone through a formal credit assessment than those that use the bank just for deposits or payments. Such discrepancies make segmentation difficult.

Banks must also write clear rules on collecting, processing, and using data. Very often, for instance, relationship managers omit too many data fields when signing on new clients and updates to client information are random rather than systematic. Without quality data from the outset, sophisticated pricing strategies will never reach their potential.



Government

US\$ m

2,500

2,000

1,500

1,000

500

0

FY94

FY95

FY96

FY97

FY98

FY99

FY00

FY01

FY02

FY03

FY04

FY05

FY06

FY07

FY08

FY09

FY10

FY11

FY12

FY13

FY14

FY15

FY16

FY17

FY18

FY19

FY20

FY21

Budget

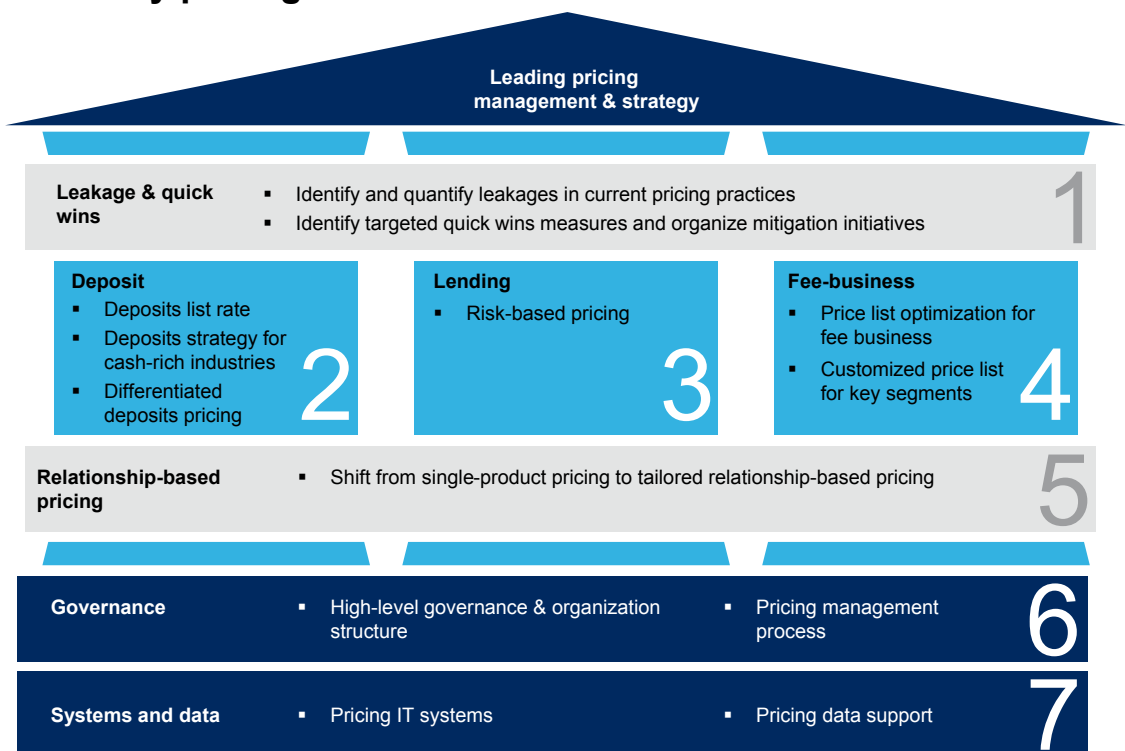
# McKinsey Pricing Methodology

Decades of working with banks and other financial institutions around the world on their pricing strategies have led to a framework that addresses all aspects of the function (Exhibit 3). By managing prices using this framework, some banks have increased their average EVA by more than 20 percent through improved performance, better client targeting, more efficient use of discounts, and other measures. The approach rests on seven specific pillars: price leakages, deposit pricing, loan pricing, fee optimization, relationship-based pricing, pricing governance, and IT systems and data.

This framework can be valuable to banks in China as they navigate the liberalized regulatory regime. Since many are starting at an elementary level, initial improvements could be significant and help raise enthusiasm for a full program.

Figure 3

## McKinsey pricing transformation framework



### I. Price leakages

Price leakages lead to substantial losses at commercial banks. Experience suggests that banks globally lose on average 2 to 4 percent of potential corporate revenues each year as a result of price leakages, and banks in China, because of the industry's early development phase, are likely to be losing more. Leakages take many forms, with the most common being inaccurately assessing the risk level of individual loans, giving unnecessary discounts

to clients with no strategic value, and failed attempts to use discounts on ongoing business to encourage cross selling.

In many cases, stopping leakages can be straightforward and the quick wins it generates can provide needed momentum for broader pricing reforms. In addition, the analysis that accompanies efforts to plug leakages can provide crucial information on a bank's overall pricing health. A program to stop leakages comprises three components: diagnosis, quick win initiatives, and long-term solutions.

## Diagnosis

Leakage diagnosis is typically based on internal pricing data of past

**12-18**  
months

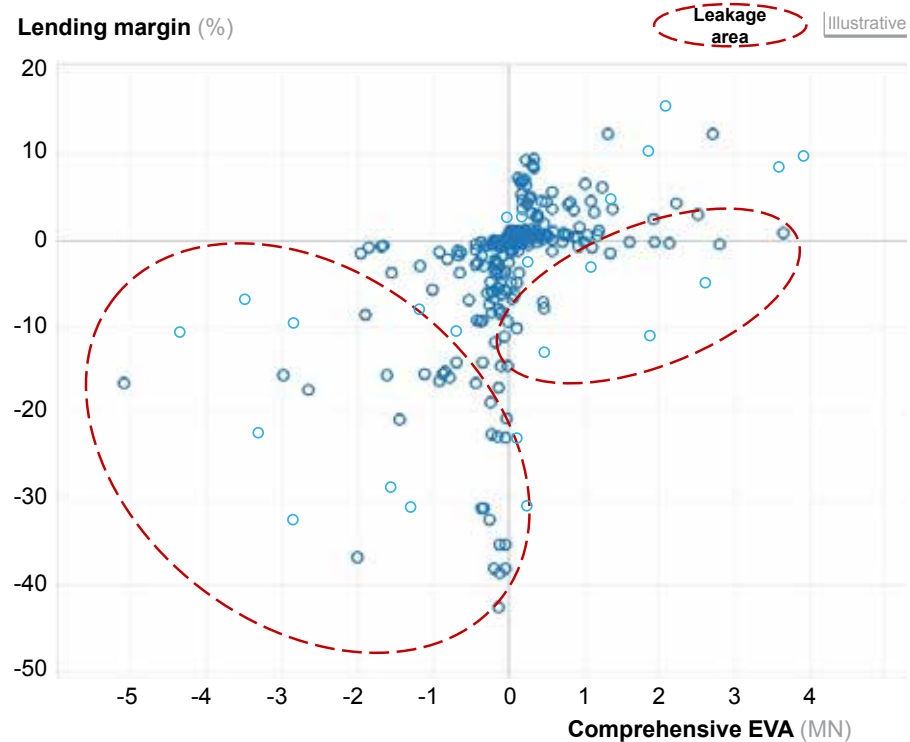
Diagnosing the extent and nature of price leakages is the natural first step to plugging them. The diagnosis begins by gathering data on bank clients, including their transaction history with the bank over the previous 12 to 18 months. The data should include basic information, such as industry and annual turnover for corporate clients, as well as proprietary data, such as their product and pricing history, risk assessments, and value to the bank using metrics like EVA, which is in essence a client's profit contribution above total baseline costs for its products.

Clients should also be clustered into groups based on industry, size, risk level, location, and other relevant factors. For clusters that are too small to generate credible diagnoses, rules should be established to regroup them into larger clusters while assuring that comparisons remain relevant.

Leakages are identified by comparing pricing history and EVA of clients within each cluster. EVA is a crucial metric, particularly when placed alongside pricing patterns (Exhibit 4). Leakages in general are shown when clients with negative or very low EVA are charged

Figure 4

### Correlation between lending margins<sup>1</sup> and EVA



<sup>1</sup> Definition of lending margin is NIM minus cost of capital and risk cost

lower prices than their peers for similar products.

## Quick win initiatives

Once leakages are identified, banks should implement immediate initiatives to plug them, generating quick wins for pricing transformation. Banks must use data to understand how the leakages are occurring and estimate the potential improvement in EVA if the leakage were plugged. Initiatives that could lead to quick wins include repricing, improving cross-selling efforts, or strategic exit from a client relationship if other solutions seem unworkable.

To ensure that these initiatives are delivering the expected results, execution and progress of individual efforts should be monitored and the entire program reviewed regularly.

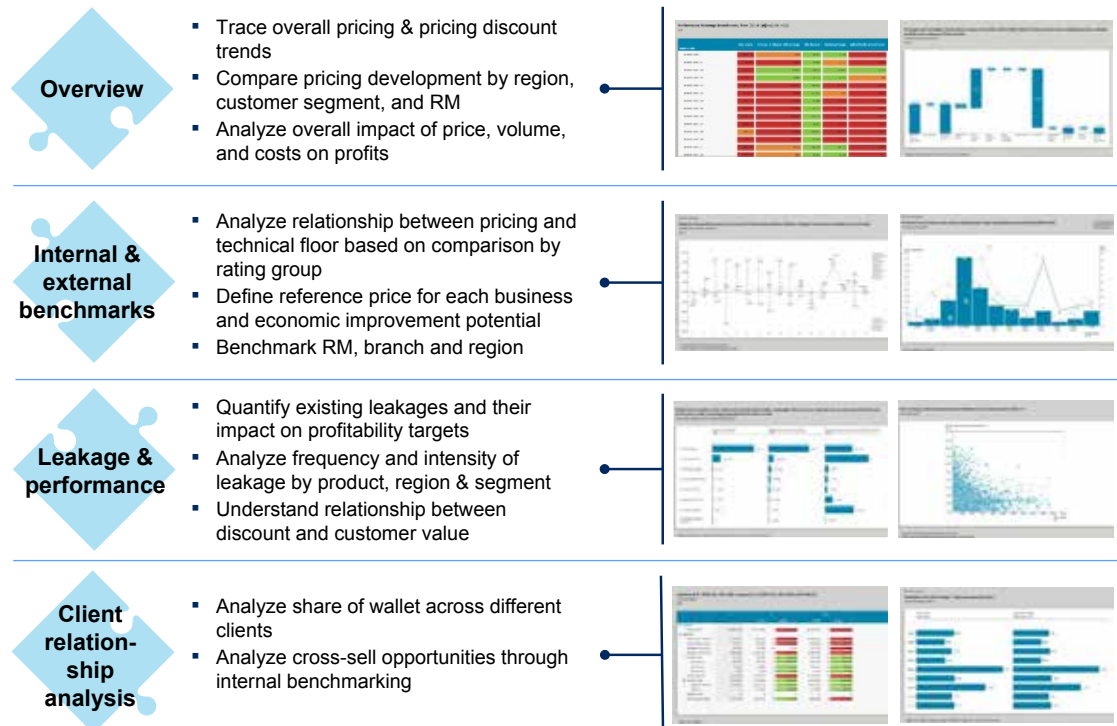
## Long-term solutions

Banks with the greatest success at plugging price leakages also implement long-term measures to ensure that value-destroying habits don't resurface. Two components are central to this effort. The first is to create a pricing center with clearly defined roles and a mandate to continuously search for new leakages, monitor progress in stopping leakages, implement any necessary solutions, and issue regular reports to senior management.

The pricing center should be supported by systematic price monitoring system (Exhibit 5). Such a system is crucial in ongoing efforts to identify and plug leakages and track performance. Among other measures, the system should provide easy access to information on overall pricing trends broken down by product, geography, and client

Figure 5

### Build systematic price monitoring system



segment; internal benchmarking comparing branches and individual relationship managers; external pricing trends; analysis of leakages and efforts to plug them; and an overview of client relationships.

## II. Deposit list prices

Deposit strategy in China is generally rudimentary and fails to capture maximum value from this side of the business. Usually, small- and mid-sized banks price deposits by simply adding a few basis points to the list price published by the five big state-owned banks or staying in the upper range of the People's Bank benchmark band (while the big banks stay in the lower range). Deposit prices are rarely seen as an instrument of overall strategy, for instance by adjusting the rates to attract clients from cash-rich industries or other strategic clients.

To improve their deposit pricing activities, banks in China should build a strategy around three central themes: selecting an optimal strategy, targeted client acquisition, and differentiated pricing.





### Optimal strategy

Setting the list price for deposits is more than just a regulatory requirement. It is the foundation for all other aspects of pricing strategy, and optimizing deposit prices should be looked at as a strategic tool to manage deposit pricing at scale. In general, the global banking industry has settled on three models for optimizing deposit pricing: passive followers, aggressive pricing, and pyramid pricing (Exhibit 6). Each carries its own advantages and disadvantages.

Most banks in China follow a passive follower approach to deposit pricing. The strategy is a

Figure 6

### International leading banks use different list rate strategies

	Description	Pros	Cons	Example
1	<b>Passive follower</b> Adopt margin-plus approach against key competitors	<ul style="list-style-type: none"> <li>+ Simple and rapid execution, convenient, easy to use</li> <li>+ Strategy aligned with industry position</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of client segment selection; lack of understanding of client behavior over the long run</li> <li>- Passive strategy influenced by competitor strategy</li> </ul>	<b>Many Chinese commercial banks</b>
2	<b>Aggressive list rate</b> Acquire new customers/funds using higher interest rates	<ul style="list-style-type: none"> <li>+ Rapid client acquisition and industry ranking improvement</li> </ul>	<ul style="list-style-type: none"> <li>- Only applicable under particular conditions</li> <li>- Long-term use will attract too many interest rate-sensitive customers and increase cost of capital</li> </ul>	  (Particular period of time)
3	<b>Pyramid pricing</b> Reduce list rate and use the saved interest expense to acquire and maintain key accounts	<ul style="list-style-type: none"> <li>+ Reduces average interest expenses for deposits</li> <li>+ More precise input to acquire clients funds</li> </ul>	<ul style="list-style-type: none"> <li>- Need continued and targeted campaign to retain and acquire price sensitive customers</li> <li>- Need strong customer sensitivity analysis capability</li> </ul>	 

legacy of a highly regulated market. While it's an easy strategy to implement, it is inherently passive in nature, inhibiting client segmentation, and making them vulnerable to more nimble and innovative peers.

Aggressive pricing is a bold, but risky model. When implemented well, it can deliver significant rewards, but it is best used during times of radical change in a market, such as a period of substantial deregulation. In the 1980s, as Spain was liberalizing interest rates much as China is today, Santander Bank took the opportunity to launch its "Super Account", which offered deposit interest rates twice those of its competitors. The gambit worked, and Santander doubled its market share in just two years.

Because aggressive pricing is effective only during periods of great change, the strategy has a relatively small window for success and greatly favors first movers. In addition, it is more difficult for large banks to implement an aggressive pricing strategy under any circumstance without igniting a price war that can destroy value throughout the industry.

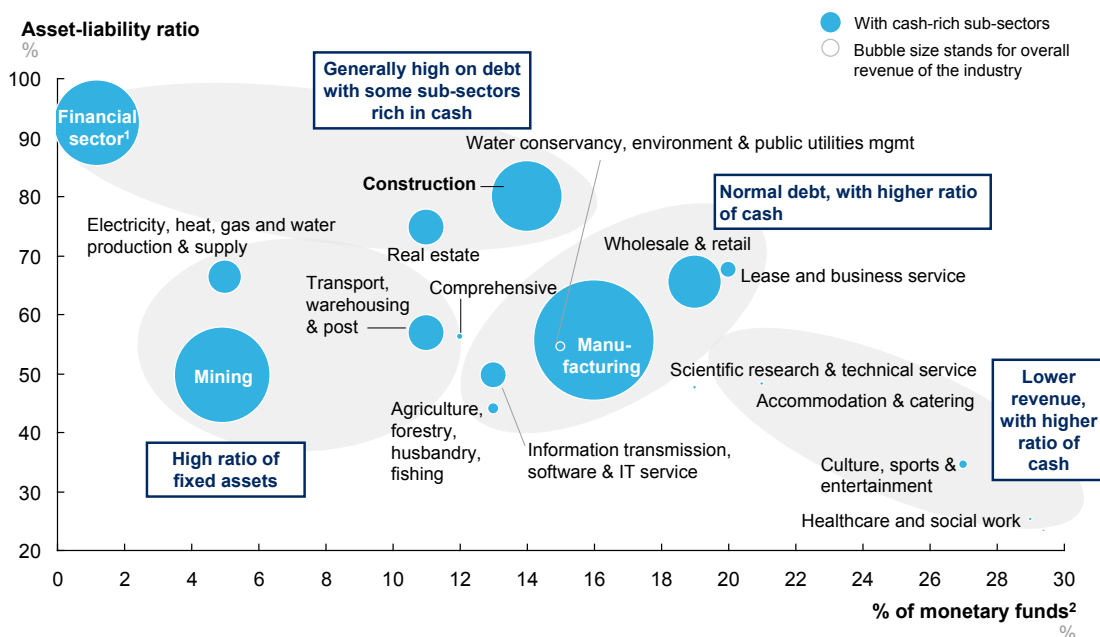
The pyramid strategy is followed by many leading global institutions. In this model, banks lower their deposit list price, and use the savings to acquire and maintain the most valuable accounts. While the approach is more sustainable than aggressive pricing and reduces the risk of a price war, it also requires strong capabilities in client segmentation and marketing.

## Targeted client acquisition

A successful deposit pricing strategy recognizes that not all clients deliver equal value and targets for acquisition those with the greatest potential, particularly those in cash-rich industries (Exhibit 7). For example, the education, technology, entertainment, and sports industries usually attract steady cash flows and have greater demand for deposit products

Figure 7

### Identifying cash-rich industries



1 Though the financial sector is generally high on debt, there are still cash-rich companies in certain sub-sectors

2 Percent of monetary funds=monetary funds/total assets, referring to the assets held in form of money during production and operation processes, generally including cash in hand, deposits in banks account etc.

than industries that are generally starved for cash, such as real estate development and transportation.

In addition, by their nature different industries have different deposit needs. For example, catering and commercial services require money for cash settlements so they want settlement-based deposit products from their banks. In contrast, manufacturers tend to be more interested in credit products, using deposits primarily as guarantees for loans.

Altogether, these industry differences mean that some companies – those with cash surpluses – are more attractive clients for deposit products. Business development programs should focus on these key industries and accounts, backed by an optimized deposit pricing strategy. Against this backdrop, banks can analyze individual client needs and implement targeted marketing campaigns based on tailored pricing to attract or retain selected customers.

## Differentiated pricing

Ultimately, differentiated pricing is the key to creating an effective deposit pricing strategy. By matching optimal rates to specific clients, banks can capture value by offering higher rates only to clients that offer potential advantages, such as large cash holdings or a good prospects for cross selling. Generally, banks follow one of three approaches to offer differentiated prices to their customers.

The first is rule-based pricing. In this model, banks offer specific deposit prices based on clear criteria, usually ticket size, but also region, industry, channel, or some other standards. A common practice is to develop one or more volume pricing curves and automatically offer large depositors more favorable prices along those curves.

Another approach focuses on targeted pricing campaigns. For example, HSBC recently launched a campaign with special rates for renminbi time deposits in Guangzhou and Shenzhen to attract cash held offshore by wealthy depositors from Hong Kong back to China. Successful campaigns require clear segmentation and positioning, a detailed plan, and first-rate execution, especially at the branch level. Targeted deposit campaigns are already becoming more common in China, and banks that are quick to develop capabilities in analyzing customer needs, implementation, and monitoring will retain clear advantages.

The most nuanced approach – and therefore the one that tends to extract the greatest value – is to tailor pricing for individual customers. Sometimes called a “one-to-one pricing”, this model offers a specific price plan to a client based on the long-term value of its relationship and price sensitivity. This approach requires a rich set of data at the customer level and a good understanding of their price sensitivities, often using quantitative analysis and other measures to generate useful insights.

## III. Risk-adjusted pricing for lending

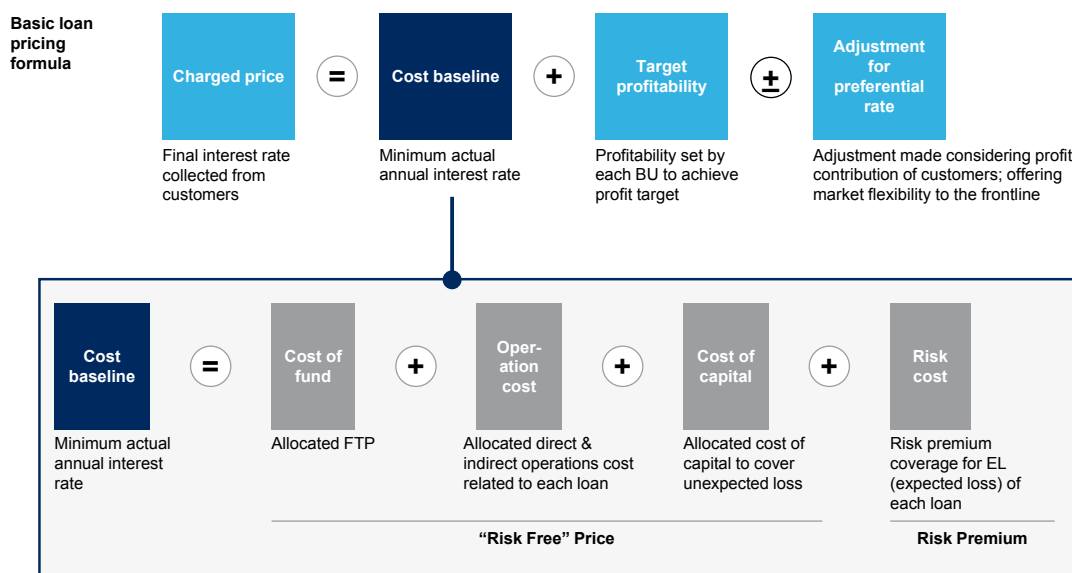
In a rapidly growing Chinese economy, corporate lending could easily be seen as being very low risk, and banks in general were unconcerned about credit quality. In recent years, as China’s economic growth slowed, this idyllic construct has shattered. Non-performing loans have become more prevalent, rising to 1.7 percent in 2015 after hovering near 1 percent from 2010 to 2013, and credit quality has become a major concern for the country’s banks.



To adjust to the new environment, many banks will have to implement a form of cost-plus pricing, which takes into account the total costs to the banks, including risk costs, and adds to this an appropriate profit margin (Exhibit 8). This type of risk-adjusted pricing requires a clear accounting of all cost components, a capability most banks in China still need to develop.

Figure 8

## Loan model includes break-even price, profit target, and adjustment for preferential rates



- 1 Excluding cost of equity
- 2 Including cost of equity

### Cost of funds (FTP)

The cost of funds – also known as funds transfer pricing or internal pricing – is the starting point for most cost-plus lending models. Most banks have at least a rudimentary concept of the cost of funds, and the metric plays a significant role in guiding the behavior of relationship managers and the direction of business development. In essence, the cost of funds should reflect as closely as possible the bank's actual cost in obtaining funds on the market.

The cost of funds for some products, such as traditional loans, can closely track external fund pricing, while for other products, such as credit cards, an internal model to calculate funds transfer pricing would likely be necessary. In the wake of the 2008 global financial crisis, a new dimension of the costs of funds, liquidity costs, has come under the limelight. Potential opportunity costs from holding highly liquid and qualifying assets under new liquidity regulations must also be considered as part of the cost of funds.

### Operating costs

Some portion of operating costs must also be considered to generate a complete picture of the cost of lending. For large banks with more sophisticated cost allocation processes,

a portion of operating costs can be allocated to each deal for each product. To ease implementation, each business unit must be aligned on how operating costs are to be allocated across the various products. Generating alignment around operating cost allocation is also a useful tool for gaining acceptance for new pricing models.

Smaller banks will likely have to adopt a less specific approach to match cost accounting systems that are less advanced. One relatively straightforward method would be to allocate a predetermined share of operating costs across product categories, rather than to individual deals. Before implementation, senior management would have to agree on how to proportion the banks operating cost fairly.

When allocating operating costs, banks would be wise to consider direct costs, but not indirect costs, like headquarters salaries. Indirect costs are sunk costs and paid whether a deal is struck or not. Including these in price calculations can create a dangerous spiral: prices are less competitive, leading to fewer loans, leading to unchanging indirect costs allocated across fewer loans, leading to less competitive prices. Indirect costs must be covered, of course, but they should come out of the profit margin added onto the baseline cost calculation.

## Cost of capital

Cost of capital is usually determined by a bank's internal capital model, and the methodology used depends greatly on the bank's capabilities. Leading banks will employ an approach that considers economic capital. In essence, this model predicts the cost of capital needed to support particular risk levels and can differentiate among various product categories. While the model can allocate cost of capital minutely, its complexity makes it more difficult for frontline staff to use.

A more straightforward model relies on determining regulatory capital and assigns a risk coefficient across product categories. The relationship between volume and capital costs is linear in this model, making it easier for frontline staff to use it to guide lending decisions.

Before moving to the more sophisticated economic capital model, banks should ensure that all business units have agreed to the change. Pricing optimization should not be the first application of a controversial model. Piloting the new model in management information, for example, would present lower risk. Only when the model is refined and understood clearly, could it be eventually moved to pricing, where relationship managers must be prepared to explain the logic to clients whose rates have changed. Relevant staff in the front office and throughout the organization should all understand the concepts and workings behind the new model.

Finally, key performance indicators and incentive programs must be properly aligned to ensure the model is used correctly.

## Cost of Risk

Cost of risk is the factor most frequently neglected in cost analysis, but is one of the most critical in determining a program's success or failure. Risk cost is often the key differentiating factor among clients. Offering credit is fundamentally about assessing risk and pricing products appropriately, and a nuanced approach can quickly become a competitive

advantage. For example, a bank with excellent risk analysis can target loan clients with low risk, leaving companies with greater inherent danger of default to its competitors.

Risk assessments can be complicated. In essence, the bank is attempting to predict how much it is likely to lose, on average, under a particular set of circumstances. The approach of each bank will vary in the details, but in general risk assessment looks at the overall credit worthiness of a borrower and assigns a probability of default for a particular product and deal structure, as well as the expected loss if there were a default. From these inputs, the bank can gauge the cost of risk in a particular deal using proprietary algorithms.

## IV. Fee optimization

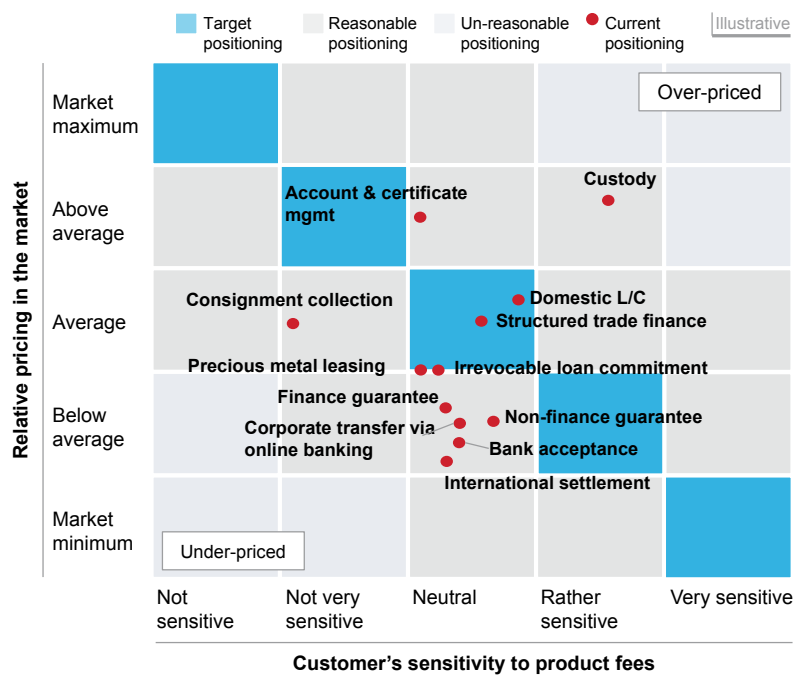
As interest margins have narrowed, banks in China have begun paying more attention to fee-based businesses. Over the past decade, fee businesses have grown rapidly in China, in some cases increasing almost fourfold in terms of share of revenue between 2007 and 2015. Despite the surge, however, fee revenues account for less than a quarter of total revenues at China's banks compared to a third to a half at banks in more developed markets. The gap creates a significant opportunity to improve revenues from fees. Three aspects in particular can help build a strong fee business: price list optimization, tailored prices for key accounts, and improved discount management.

### Price list optimization

Price list optimization rests largely on benchmarking against peers in the market and understanding client price sensitivity (Exhibit 9). In a nutshell, prices offered to clients with high sensitivity should be below market trend, while those with low sensitivity may tolerate prices above market trend. The standard fee business price list should reflect these market insights.

Figure 9

### Fee-business pricing and sensitivity scoring



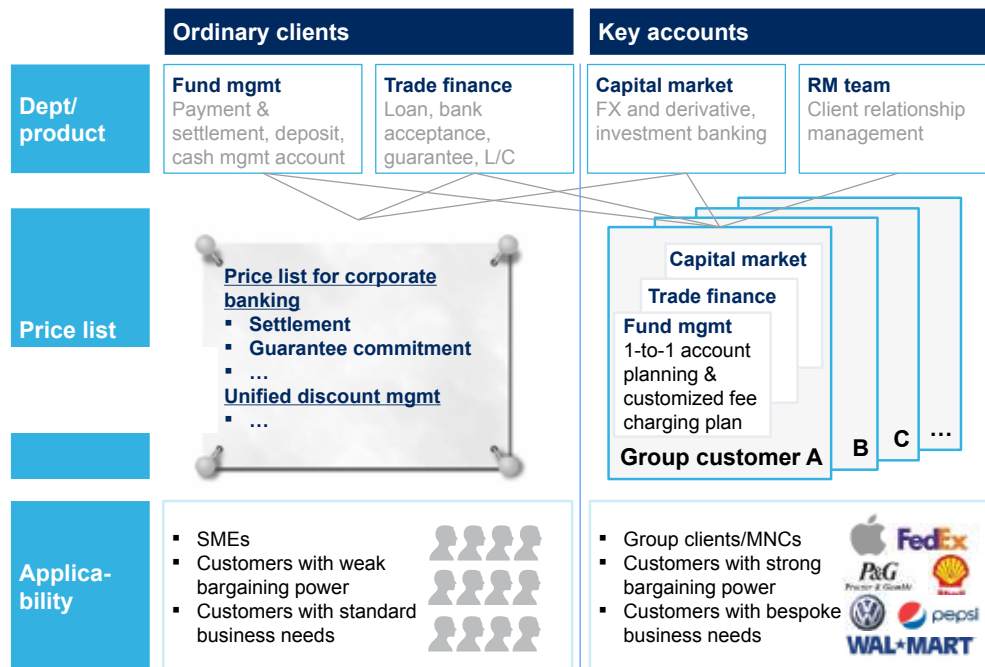
## Tailored prices for key accounts

Especially for important accounts, fee business should be seen as a component of the overall portfolio of products and services offered by the bank. Fee business generally results in frequent interactions with these clients, providing a clear opportunity to strengthen and expand the relationships. For example, clients that use a particular bank to provide letters of credit, foreign exchange, and trade settlement could gravitate toward this bank as their primary financial partner, i.e., main bank.

Often, leading banks tailor their price list for fee-based services to accommodate the needs of key accounts (Exhibit 10). The customized price list would encompass the primary demands of a customer and the prices reached through negotiation. This creates a list tailored to the needs of a specific key account, emphasizing its value to the bank. The closer relationship also provides openings for discussions about products beyond those already sold.

Figure 10

### Fee-business pricing example



1 With separate price list in each country

## Fee discount management

As tailored price lists are created, banks must be careful to manage discounts systematically, rather than haphazardly. Often, quick wins can be captured simply by discontinuing or revising discounts that serve little purpose.

Discounts should reflect the EVA of individual clients. Discounts offered to any client found to have a low or negative EVA should be reviewed to ensure they serve a strategic purpose. Some banks even impose a rule against providing discounts to any client with negative EVA.

In addition to EVA, discount calculation should consider whether a successful sale would likely bring in additional business, such as deposits or loans. If completing a deal has a good chance of generating additional business, greater discounts could be considered. This can be achieved through analyzing the historic correlation between the sales of product pairs that are likely to be purchased in tandem.

## V. Relationship-based pricing

Studies have shown that about 5 percent of strategic clients account for half of a bank's revenues and almost two-thirds of its economic profit. Relationship-based pricing seeks to extract the greatest value from these strategic clients by making pricing decisions based on the overall value of a long-term relationship. In addition, it uses prices as a strategic tool to attract similar high-value clients to the bank. Unlike tailored product pricing, relationship-based pricing considers the full portfolio of products that would appeal to an individual client and sets prices to deepen the relationship and open the door for further purchases.

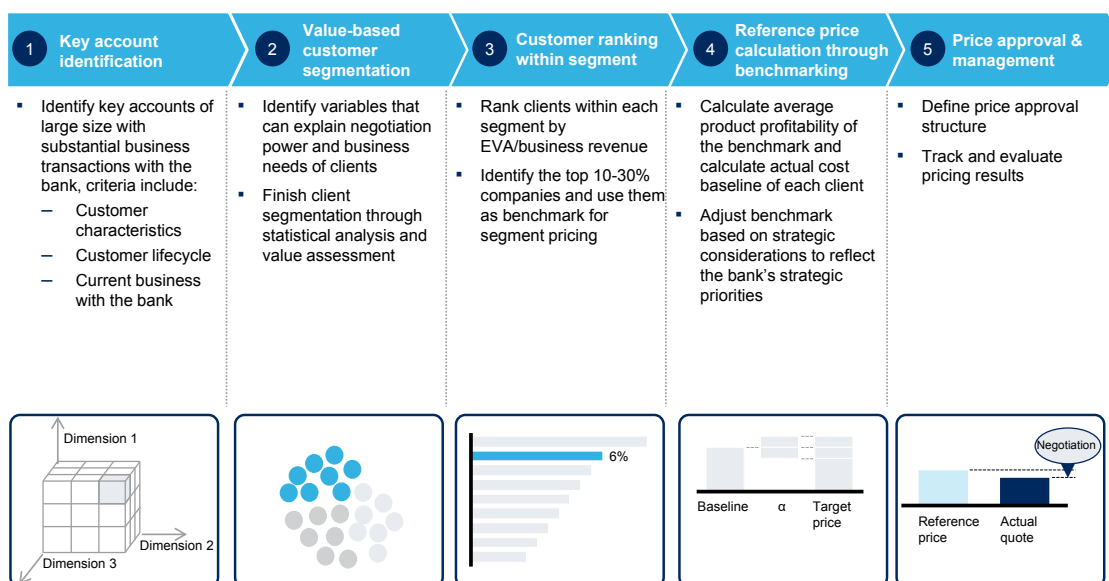
Experience has shown that successful relationship-based pricing relies on five components: identifying strategic clients, segmenting based on value, ranking clients based on EVA, calculating benchmark reference prices, and creating integrated pricing approval and management processes (Exhibit 11).

**5%**  
of strategic clients  
account for

**60%**  
of its economic  
profit

Figure 11

### Relationship-based pricing linked to customer value



### Identifying strategic clients

Relationship-based pricing should be reserved for strategic clients and those with significant potential. Deploying the practice broadly across a bank's client base would waste resources and dilute returns. Strategic clients are those that meet specific criteria, such as loan and deposit volume, number of products held, individual EVA, and the intrinsic importance of relationship. Clients with potential high value – for instance, large companies that could be

tempted to switch banks or are expected to have significant banking needs in the near future – should also be considered for relationship-based pricing.

Of course, criteria for identifying strategic and high-potential clients will vary for each bank and will be defined largely by a bank's overall business strategy. Some banks, for example, might focus on specific industries, large state-owned enterprises, or specific services like supply chain financing, depending on internal expertise and experience. Importantly, whatever the criteria, it should be transparent and well-understood throughout the organization.

In addition, business units and branch managers should have the authority to designate clients as key accounts or drop them from the list based on their understanding and judgment. At least once a year, banks should review clients identified as strategic or high-potential and make any adjustment necessary to ensure the list is aligned with overall strategy. In general, strategic and high-potential accounts should comprise no more than about 5 percent of the total corporate business pool.

## Segmenting customers based on value

Customer segmentation based on value is a time-consuming, but essential component of relationship-based pricing. Proper segmentation relies on a combination of analytical techniques and sound business judgment. One powerful method is to consider customers across two dimensions: needs and bargaining power. Needs, of course, will determine the type and volume of products desired, while bargaining power reflects a company's ability to influence pricing across banks. The combination brings into play a client's intrinsic value, as well as its options in a competitive market.

Initial segmentation efforts must be tested before being fully deployed. For example, to be relevant, each segment should include at least 30 clients. Smaller segments should be combined with others based on clear rules to create segments of appropriate size. Statistical testing of the segments is also needed to ensure that each is properly differentiated from the others. In other words, members of a segment should have similar reactions to various pricing options, and these should be noticeably different from the reactions of other segments.

The final criterion is business judgment. Samples from client lists should be selected and segmentation results carefully reviewed and assessed. Internal experts check the clusters based on their business experience, and flag any anomalies that warrant further review, such as a sole retailer in a segment full of high-tech companies.

## Ranking based on EVA

Once clients are segmented, the clusters should be ranked based on an indicator of weighted EVA. A ranking based solely on EVA would be too biased toward companies with larger turnover, so taking a ratio of EVA to turnover is usually more relevant and allows banks to accommodate the value inherent in some smaller companies. The ranking helps produce

Top **10-30%** of the customers in terms of relative EVA are selected as target population for internal benchmarking

internal benchmarks that are useful in deciding which segments to target with relationship-based pricing.

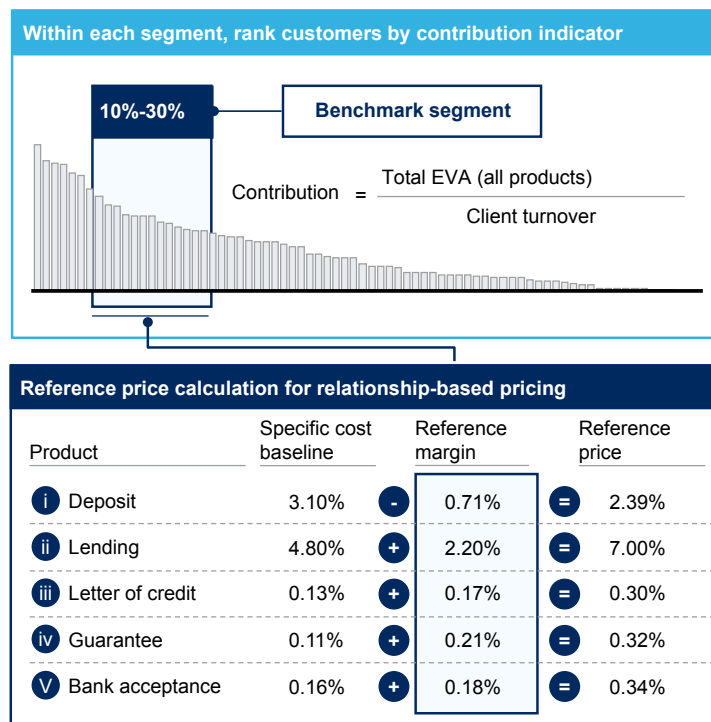
Ignoring outliers at either end of the spectrum, the top 10 to 30 percent from these rankings can create a benchmark broad enough to be representative of the best of a bank’s customer pool. This benchmark can then serve as an improvement goal for all clients targeted with relationship-based pricing.

### Calculating reference prices

For targeted clients outside the benchmark segments (e.g., new customers), banks must calculate a reference price, which has two components (Exhibit 12). The first is the bank’s cost for the product, taking into consideration the various components of baseline cost. The next is a benchmark margin, which is in essence the expected profit based on the experience of the benchmark segment. Reference prices are often the starting point for internal decisions on relationship-based pricing, and are less relevant for segments within the benchmark group since they are already contributing appropriate value.

Figure 12

### Internal customer price benchmarking, reference price calculation



Reference prices could also be less relevant for atypical segments that are desired, but posting economic losses. The negative EVA could be linked to external anomalies, such as price competition, or internal challenges, such as bringing costs for a specific product down to a level appropriate for market conditions. Whatever the cause, the situation could

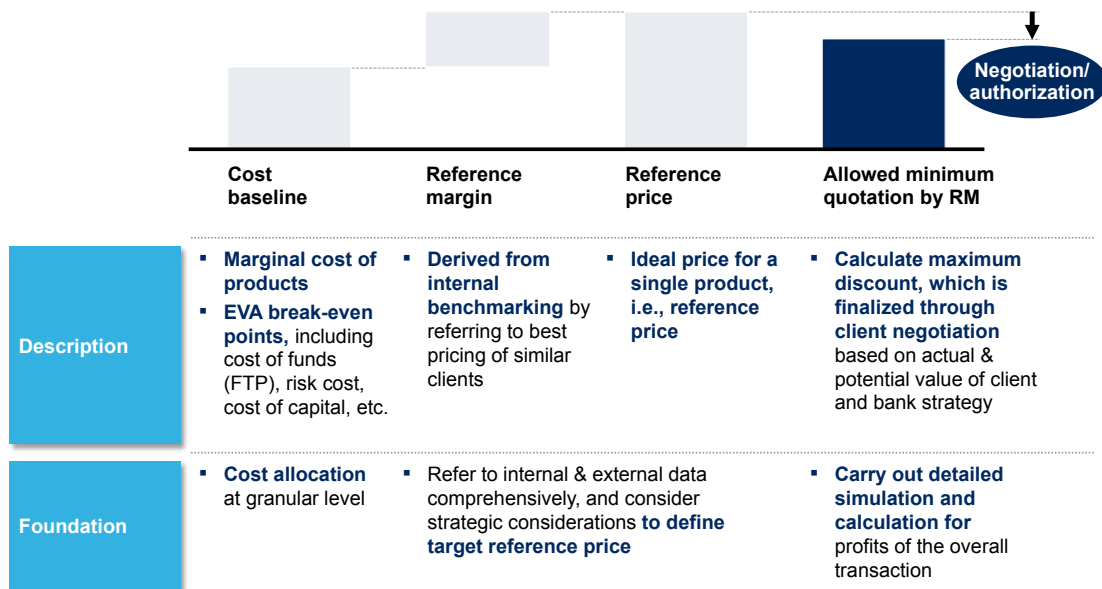
be tolerated over the short run, allowing negative reference margins, but immediate action should be taken to correct the anomaly.

## Improving management processes

Often banks misunderstand the reference price as a rigid target imposed on relationship managers. It is not. The reference price is a starting point from which relationship managers can add appropriate discounts or, much more rarely, premiums within limits to extract the maximum long-term value from a client (Exhibit 13). A bank's pricing approval and management processes carry the responsibility of ensuring that negotiated discounts serve the intended purpose.

Figure 13

### Application of relationship-based pricing



Many factors can influence whether a negotiated deal is approved, and its economic value is among the most important. But this does not mean that economic profit has the final word. Deals with low or even negative margins can be approved if there is a convincing argument that they will lead to compensating future value. Such decisions are generally left to senior relationship managers, branch managers, or even managers in the corporate and investment banking division. Generally speaking, relationship managers with a solid history of extracting value should be given greater leeway.

Another vital component of effective pricing management is a mechanism that tracks and monitors the success of negotiated deals and relationship-based pricing generally. Modern pricing systems often come with features that automatically track the price of



deals and regularly review the value these deals capture. Systematic processes within banks can serve the same purpose. Such mechanisms help ensure that overall discounts are not excessive and are effective in bringing in additional business from targeted clients as designed. In addition, they are warning systems that could limit the discretion given to relationship managers who are too generous in offering discounts.

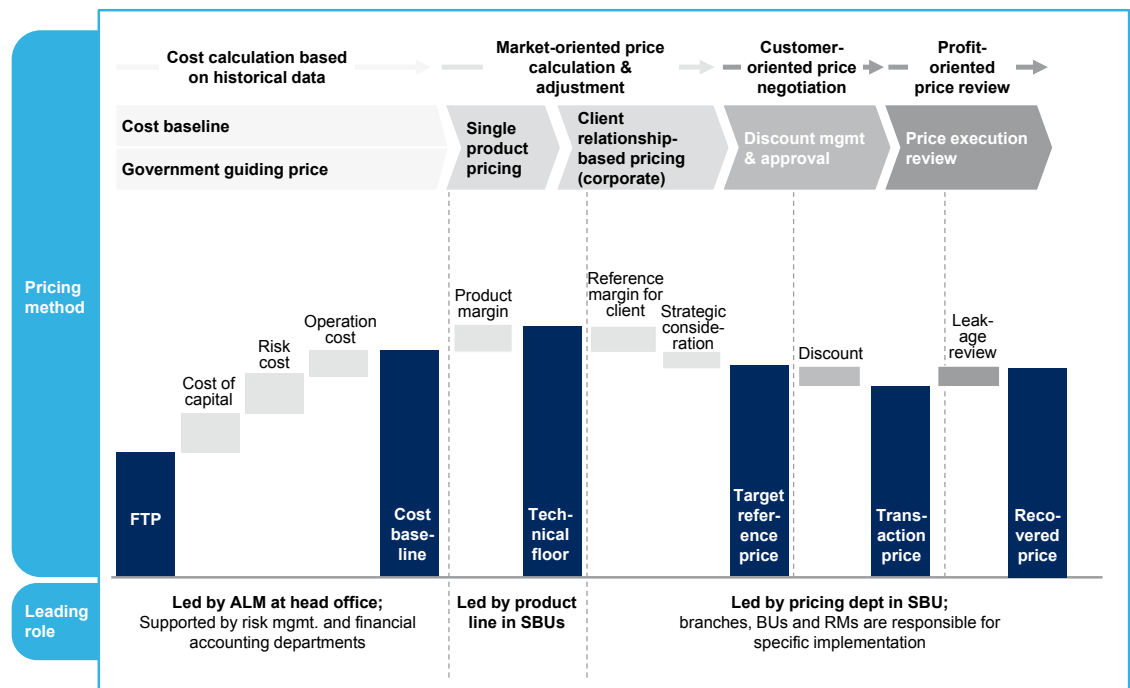
Optimized pricing creates value, but is not an end in itself. When coupled with sophisticated account planning, relationship-based pricing can deepen a bank's relationship with strategic clients and deliver long-term value. The goal is not to charge the highest price tolerable, but to establish relationships that encourage cross- and up-selling as a means of generating value. Account planning complements relationship-based pricing by projecting future value from individual clients, establishing goals, and crafting concrete measures to achieve these targets.

## VI. Pricing governance

Any change in pricing strategy requires a parallel shift in governance and management processes. As banks adopt relationship-based pricing, roles within the organization must also evolve to ensure that proper oversight is provided from establishing costs to reviewing execution and impact (Exhibit 14). Asset and liability management, product managers, and business units and branch leaders all have roles to play directing the new strategy.

Figure 14

### Pricing governance requires clearly defined roles across the organization



## Asset and liability management

Traditionally, asset and liability management units have had wide-ranging responsibilities for managing interest rates and setting prices. While under relationship-based pricing the unit will continue to have an influential role, its mandate will focus more sharply on funds transfer pricing and establishing internal costs for the bank, from the cost of capital to the cost of risk.

During the transformation to relationship-based pricing, the asset and liability management should gradually transfer its market-facing pricing responsibilities to frontline business units. In the process, the asset and liability management unit should work closely with the bank's Asset-Liability Committee to develop proper guidelines around the new strategy. The pace of the transfer of authority rests largely on capability development within individual business units. Managers at the asset and liability management unit should monitor the development of specific capabilities and transfer pricing authority appropriately, likely beginning with some minor aspects of pricing before turning over full responsibility for large, aggressively negotiated deals.

## Product managers

In the new system, product managers carry the important responsibility for determining and implementing two key components of price: minimum product profitability and targeted profitability. Internal risk-return objectives and strategic options are defined in a bank's three-year business plans and further refined in annual budgets. These overarching objectives are then extrapolated into minimum and targeted profitability levels for the bank's portfolio of products and overseen by leaders of individual product categories.

In moving away from a heavily regulated regime, banks in China will have to improve their capabilities in financial product development and product pricing management. Unfortunately, talent in this area is scarce and banks will have to work vigorously to build internal skills and bring in external expertise. Then, clear career tracks and other incentives will be needed to retain experienced product managers.

## Business units and branches

Once the transformation is complete, final discounting decisions are left to business unit and branch leaders, who have the clearest sense of client needs and price sensitivities. Their close contact with clients provides the insights needed to negotiate final prices that can extract long-term value.

Frontline leaders will need to improve their pricing skills, and for most banks the transition will not be immediate. As a prerequisite, banks will have to create an overall pricing methodology and relevant pricing models that address the needs of business unit and branch managers. As standards and management processes for pricing approvals are implemented, more and more authority can be transferred to the frontline. Bank managers will also need to regularly review pricing levels across all businesses to identify any continuing leakages and track performance.

To make up for lost time, banks in China must set up a core pricing team under the corporate banking department to develop and disseminate skills quickly. The team would

act as champions of the new pricing strategy, promoting the transformation throughout the organization. In addition, it should assume direct management of the pricing process to ensure that frontline staff adhere to the new standards and do not revert to old habits.

In adopting relationship-based pricing, banks will have to scuttle many of their old management tools, such as discount authorization rules that apply across product lines or incentives that focus on volume rather than value of incoming business. The changes ripple throughout the entire organization, from back-office price management to frontline product negotiations.

The old ways are replaced by a more sophisticated pricing system. This new system relies on formal and transparent criteria for setting prices that cover myriad aspects of lending, including actual product costs, client relationships, and expected profits. It also features clear rules for negotiations – such as allowing a discount of, say, 50 basis points below the reference price – that are tailored for each product and could even vary based on a relationship manager’s capabilities and track record. To ensure the new pricing system is being followed and benefits are accruing, transactions are reviewed regularly and any necessary adjustments, such as repricing, cross selling, or dropping clients entirely, are made.

## VII. Systems and data

Sophisticated pricing systems are complicated and must be supported by IT systems that are up to the task. Alone, relationship managers could take up to two days to perform pricing calculations that could be completed in just 20 minutes with technological support. Effective pricing IT systems must possess excellent pricing functionalities, support end-to-end pricing processes and provide full data integration.

### Core pricing functionalities

Four core functionalities of a pricing system are fundamental in drawing the greatest value from relationship-based pricing:

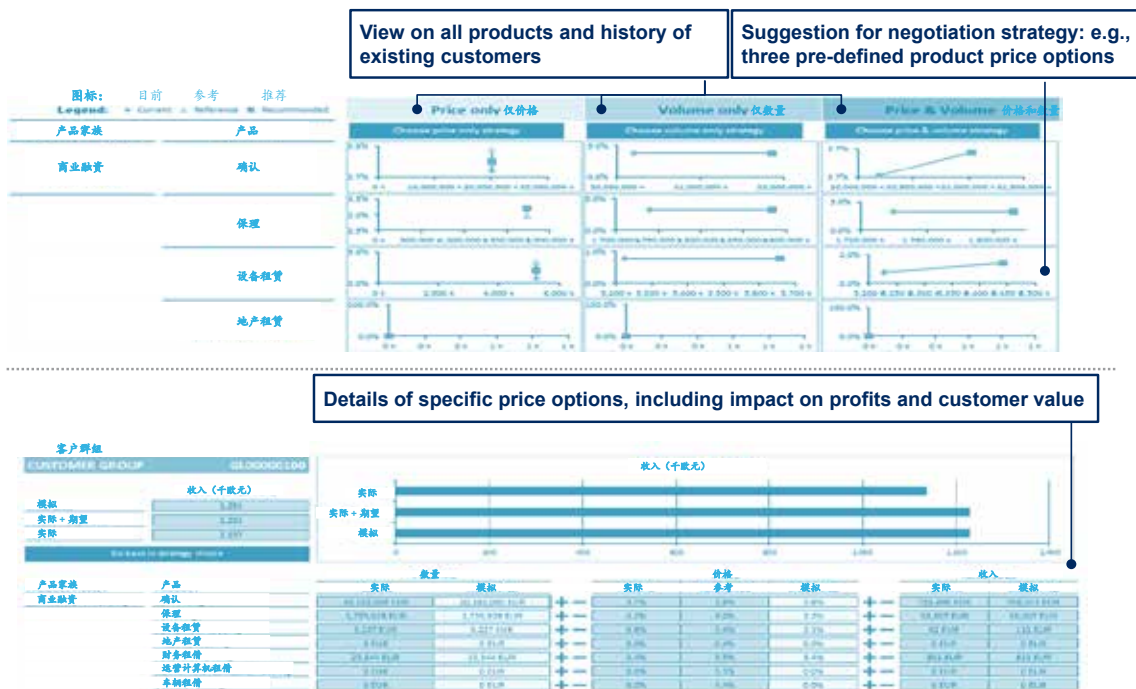
- **360 degree customer view:** Client knowledge is the foundation of relationship-based pricing; data stored in the IT system must present a complete, accurate, and up-to-date view of each client and include factors such as basic attributes, risk profiles, transaction records, and profitability analyses; where necessary, external data sources should be integrated .
- **Automated process management:** The IT system should not only calculate reference prices for each transaction, but also be able to automate and standardize processes throughout the system, including pricing authorization and approval.
- **Flexibility:** While standardized operations are the norm, the system should be flexible enough to allow for quick responses to new situations and support rapid product development and testing.
- **Analytics:** The IT system should entail built-in advanced analytics capacities required for pricing such as clustering, benchmarking, and elasticity calculation.
- **Consistent information:** Pricing information will be accessed across a variety of

Relationship managers could take up to two days to perform pricing calculations that could be completed in just

**20** minutes with technological support.

Figure 15

## Price simulator provides real-time negotiation support for RMs



channels, including desktop computers, tablets, smartphones, ATMs, and call centers. The IT system must ensure that the information provided is consistent across them all.

## End-to-end process support

Beyond these core functionalities, IT systems must also be on hand at any time to support relationship managers during their day-to-day work, for example by offering immediate price calculations and simulations and streamlining pricing approvals. Such features should be conveniently available for quick access by relationship managers, whether at the bank branch or the client's office (Exhibit 15).

Key process support functionalities include (1) Reference price provision, (2) pricing simulation, (3) pricing approval workflow, (4) customer behavior tracking, (5) Leakage analyses, (6) repricing and quick win initiatives, and (7) monitoring and verification of account planning.

## Integration

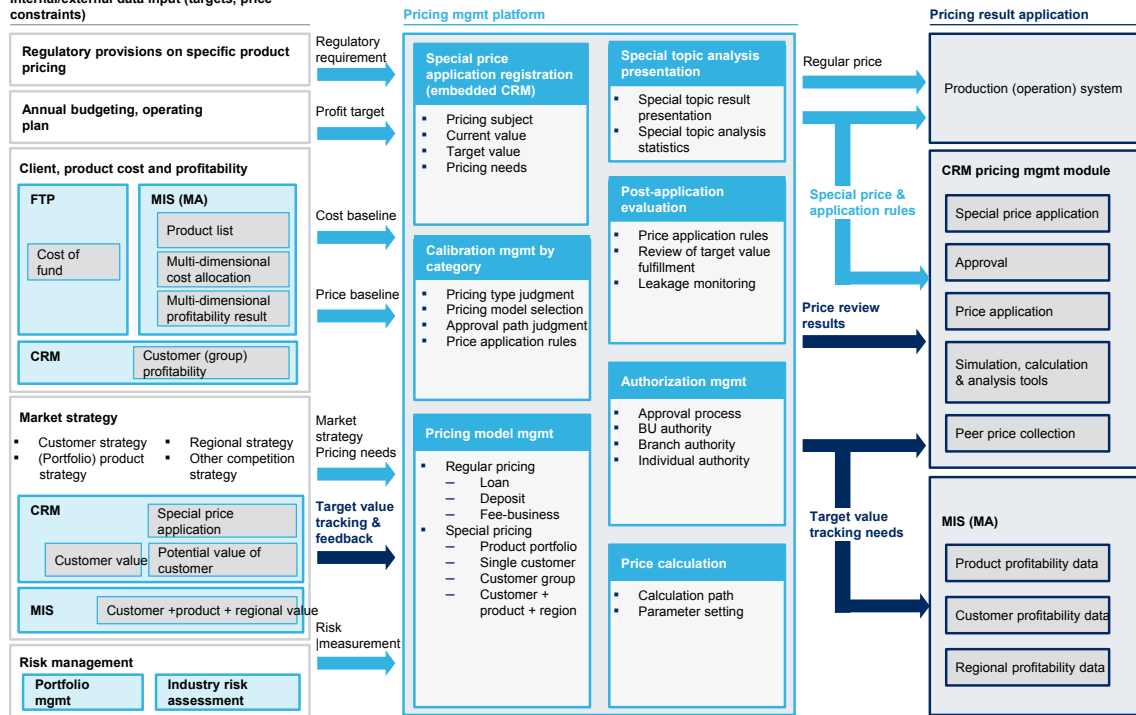
A pricing IT system cannot function effectively unless it is integrated with the bank's overall IT architecture (Exhibit 16). Pricing software will need seamless access to a range of data held in various systems, such as funding costs from the ALM system, client histories and product information from the CRM system, risk information from the risk management system, and capital costs from the capital management system.

In addition to accessing data from throughout a bank's overall IT systems, a fully integrated pricing IT system must also be able to output data to these systems as needed.

Figure 16

# System and data integration for pricing platform

Internal/external data input (targets, price constraints)

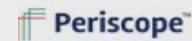


# Excursion: Periscope – a pricing solution

Periscope Solutions is a comprehensive system that fully integrates McKinsey’s banking pricing methodologies (Exhibit 17). Periscope’s functions cover modules such as account planning and sales strategy recommendations, in addition to comprehensive pricing functionalities, and can fully support all key aspects of corporate banking transformation. In addition, Periscope also has strong data management capabilities. Periscope analysts can summarize and clean existing bank data, streamline pricing databases required by the pricing system, and use best-practice approaches to manage third-party data sources.

Figure 17

## Functional structure of Periscope system



		Periscope™			
		Data	Analytics	Tools	Experts
Pricing planning	Account planning based on client potential value	<ul style="list-style-type: none"> <li>Data cleaning and consolidation</li> <li>Proprietary benchmarks from comparable peers (limited to certain markets)</li> <li>3<sup>rd</sup> party data provision and integration</li> </ul>	Bottom-up wallet sizing	Sales Advisor Portfolio and opportunity analyzer, account planner	<ul style="list-style-type: none"> <li>Training programs for overall capability improvement</li> <li>Pricing and IT experts on demand</li> </ul>
	Business opportunity identification		Next product to buy/lead engine		
Pricing execution	Reference pricing calculation at product level		Risk-adjusted & reference pricing	Deal Advisor Pricing simulator and approval workflow	
	Value simulations at client level		Forward looking client profitability situation		
Pricing mgmt	Granular portfolio planning		Portfolio profitability simulator	Price Advisor Budget and pricing policies setting tool	
	Enhanced pricing governance		Discount ROI forecasting		
	Comprehensive perf. management		Booked/realized sales matching	Performance Vision Business performance management	
	Continuous leakage reduction		Pattern recognition		

Periscope provides a new option for bank pricing transformation. For example, more and more banks have started to review their pricing strategy from the perspective of client relations and have abandoned product-centered thinking. With Periscope assisting with the pricing transformation, banks could gain several advantages:

- Accelerated implementation:** Periscope is a set of proven solutions that can go live very quickly, after rapid configuration to reflect a bank’s requirements . It generally takes six to nine months from model design to pilot and implementation, much less than the time normally needed for bank IT system development.

- **Modularized system:** Periscope platform inherits the concept of modularized design, and its main function modules include: Deal Advisor, a comprehensive pricing tool for the frontline; Sales Advisor, an account planning and cross-selling tool; Price Advisor, a module for price list and massive reprice management; and Performance Vision, a performance management tool. These are all independent modules and allow banks to make choices based on their own needs. Meanwhile, the system also supports the industry's universal interface and data standards, so it can link with existing bank IT systems when the right interface is developed.
- **Embedded management processes:** Along with a pricing model, Periscope has a large number of embedded pricing management processes, including account planning, integrated approval, pricing authority management, tracking of customer commitments, and ante-post review. These processes not only save the bank time and effort in streamlining and restructuring management processes, but also provide best practice guidance. Banks need only carry out a quick review of existing user access authority and customize based on the Periscope standard process.
- **Continued system updates:** Periscope has a dedicated system solution R&D team responsible for continuous system revision and improvement. For example, the current research priority of Periscope is machine learning. Machine learning primarily targets the weaknesses statistical models have in processing massive and unstructured data to further improve customer insights and predictive power. It uses external unstructured data to improve the accuracy in predicting overall customer potential.

Periscope has had many successes with banking clients across Europe and America, with the experience at UniCredit as an example. A leading European bank, UniCredit operated in 17 countries with 8,500 business offices and nearly 150,000 employees. The pricing transformation of UniCredit started with its corporate and transaction banking function and was deployed in several countries. Through a pilot and rollout in five countries over a year, significant performance improvements were captured. Senior executives of Unicredit said they were very satisfied with these achievements and recognized Periscope has enabled them with advanced pricing capabilities “one of the most successful projects in recent years.”





# Implementation Plan

For most banks in China, building sophisticated pricing capabilities requires a systematic transformation that touches all corners of the organization. It will not happen overnight. Banks wanting to improve their pricing capabilities and capture increasing value in the liberalized market must craft an implementation plan that details the measures needed at each stage of the transformation.

## Pricing transformation

Years of experience helping banks in China suggests that for most institutions a complete pricing transformation will require 18 to 24 months and pass through three distinct stages: design, pilot, and full-scale implementation (Exhibit 18). Each stage demands unique capabilities and brings the bank closer to a modern, more valuable pricing regime.

Pricing transformation typically takes **18-24** months

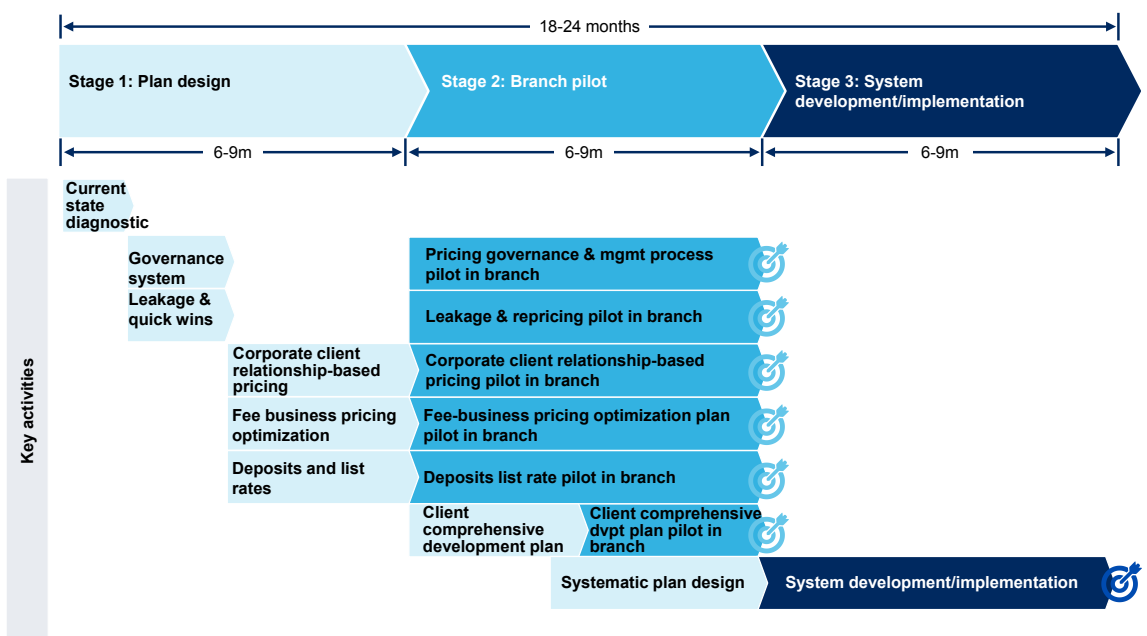
## Design

The design stage, which generally lasts six to nine months, results in a blueprint for the new pricing system, including key features like pricing model tools, supporting governance structure, and management processes.

Work in this stage begins with a complete diagnosis of the current state of a bank's pricing processes. Using internal data from the previous 18 to 24 months, the diagnosis would include identifying crucial shortcomings in the existing system and leakages. As part of the diagnosis, immediate measures to plug price leakages could be identified, giving the transformation quick wins that could help build momentum.

Figure 18

### Pricing transformation stages over 18-24 months



Also during the design stage, the bank must create a pricing governance structure that would support the transformation and help sustain improvements under the new strategy. The governance structure should allocate roles and responsibilities clearly among the managers in various parts of the organization down to relationship managers.

The bulk of the work in the design stage is to develop a comprehensive set of models and methodologies that will form the core of the new pricing regime. These include developing a relationship-based pricing model that defines segmentation, benchmarking and cross-selling. Models for deposits should cover list rates, differentiated pricing strategies, and approaches to identifying and targeting cash rich companies. For fee-based businesses, the models should include standardized management processes over product lifecycles and portfolio pricing strategies.

Staff at the asset and liability management and corporate banking departments will carry most of the load during the design stage, although experts in management accounting, customer relationship management, risk management, and other areas would also be called in as needed.

## Pilot

The pilot stage tests the strength of the new pricing design and demonstrates its benefits. During this stage, which can last six to nine months, one or two branches are selected to put the pricing design into practice. At this point, the design should be at least 80 percent complete, and lessons learned during the pilots will fill any remaining gaps and trigger any changes in the plan that might be needed.

Overall, the pilot program should produce replicable processes that can be deployed throughout the organization quickly and effectively, as well as a demonstration of the system's value (Exhibit 19).

The pilot stage should aim to achieve five major goals:

- **Involve frontline:** Frontline staff, particularly relationship managers, should understand the program. Through clear communications efforts and workshops, they should also be invited to help fine-tune the design and implementation plan.
- **Capture quick wins:** Quick wins, such as plugging price leakages, should be identified and captured immediately to demonstrate the value of the new design.
- **Streamline processes:** Ways to streamline interactions among business units, branches, and the head office should be identified. Standard operating procedures and working templates should also be developed.
- **Improve model performance:** All models and methodologies should be strenuously tested and revised as needed. Crucial points include the model's ability to guide pricing practices, ways to optimize results, and strength of the underlying data and algorithms.
- **Support full-scale implementation:** At the end of the pilot stage, the pricing team should have an end-to-end plan for full-scale implementation, including data requirements and any change needed for the IT system.

The pilot stage is critical for testing assumptions and methods included in the design of the new pricing strategy. In general, 1 pricing team mentor should be assigned to coach

Figure 19

## Five major strategic goals for pricing pilot



1	<b>Enhance involvement of the frontline:</b> Help the frontline understand the plan and deeply involve them in plan refinement through communication and training workshops
2	<b>Achieve stage-based quick wins:</b> Quickly implement quick-win initiatives through pilot, which will be further rolled out bank-wide after reaching expected results
3	<b>Streamline cross-BU and inter-dept management processes:</b> Streamline linkages across different sections of the process; develop SOP and working templates
4	<b>Improve model performance:</b> Test applicability and guiding power of pricing models; optimize application results and revise requirements for data and processing logic
5	<b>Support systematic plan implementation:</b> Form end-to-end electronic workflow and refine requirements for underlying data collection and relevant system changes

8 to 10 relationship managers at the pilot branch, giving him ample opportunity to explain the principles behind the new system, field questions, and resolve any practical issues encountered during implementation.

Ideally, the pilot program should cover all pricing methods and management processes included in the plan. Such practical experience is particularly important for processes that identify leakages and generate quick wins, implement risk-based and relationship-based pricing practices, optimize fee-based services, and enhance governance. In addition, experience from the pilot will help the bank select branches to test region-based price differentiation policies.

Technical systems must also be stress-tested during the pilot stage. Even if the full IT pricing system is not yet online, any new functions should be tried in the field as they become available. By the end of pilot stage, full IT support should be ready. During the pilot, banks can use simple and flexible tools, such as Excel-based pricing templates, to formulate systematic and detailed logic designs, including data input and output relations, logic processing, and user interface design that will help guide development of the full system.

Along with the pricing team and frontline staff, experts from the planning, finance and IT departments will be closely involved during this stage.

### Full-scale implementation

With lessons drawn from the pilot program, the final stage of the transformation is full-scale implementation of the new pricing system. Full deployment should take six to nine months and should strive to improve corporate banking revenues by 6 to 15 percent. Implementation will assume different characteristics depending whether a third-party IT system is used or the bank is developing its own system.

With a third-party system, like McKinsey's Periscope Solution, new processes and models can be online early in the implementation stage. Once user interfaces are in place, staff will need to be trained in waves as the system is rolled out throughout the organization. Full implementation could be completed in six months.

Building a system internally requires basic data preparation, system development, and testing based on a detailed logic design plan refined during the pilot stage. Deployment speed rests largely on the capabilities of the internal IT team, but systems can commonly go online within six to nine months. To accelerate deployment, the system could be rolled out across the organization in waves.

All departments connected to pricing and IT would be brought in for the final roll out.

## Challenges and lessons of transformation

Out of necessity, most banks are forced to rethink their pricing strategies during times of market liberalization, with some succeeding in the transformation while others fail. Banks in China will be no different. The transformation touches a bank's entire organization – the front, middle, and back offices – and challenges it at every turn.

But by understanding the challenges, banks are better prepared to face them and find solutions. Three recurring challenges are:

- **Management capabilities:** Relationship-based pricing requires strong management support at every level; capabilities throughout the bank must be improved to meet expectations. For example, funds transfer pricing and risk metrics are fundamental to a sophisticated pricing system and require high-level support from IT development, operations, and maintenance to be captured accurately.
- **Frontline resistance:** Change does not come easily, and many relationship managers will resist modifying their behavior from practices that have served them well, personally. Random and non-standard practices will have to be eliminated, and banks will have to adjust communications, training, and incentives to ensure that frontline staff understand the need for change and are encouraged to adopt the new system professionally.
- **Fatigue:** Pricing transformation will deliver full benefits when implemented throughout an organization, but too often fatigue sets in during the final stage and an organization loses its momentum. Senior managers must be committed and ready to promote the transformation until it is complete, and the pricing team must be prepared for a final push, raising enthusiasm even as energy for change begins to ebb.

Amid all the frameworks and details necessary for implementing a successful pricing transformation, three crucial lessons relevant to banks in China stand out from experience in other markets: the value of a dedicated and well-organized pricing team, of suitable investment in IT, and of managing frontline behavior.

## The pricing team

China's commercial banks must create a professional and capable pricing team to drive reform forward. As newcomers to sophisticated pricing strategy, most banks in China are

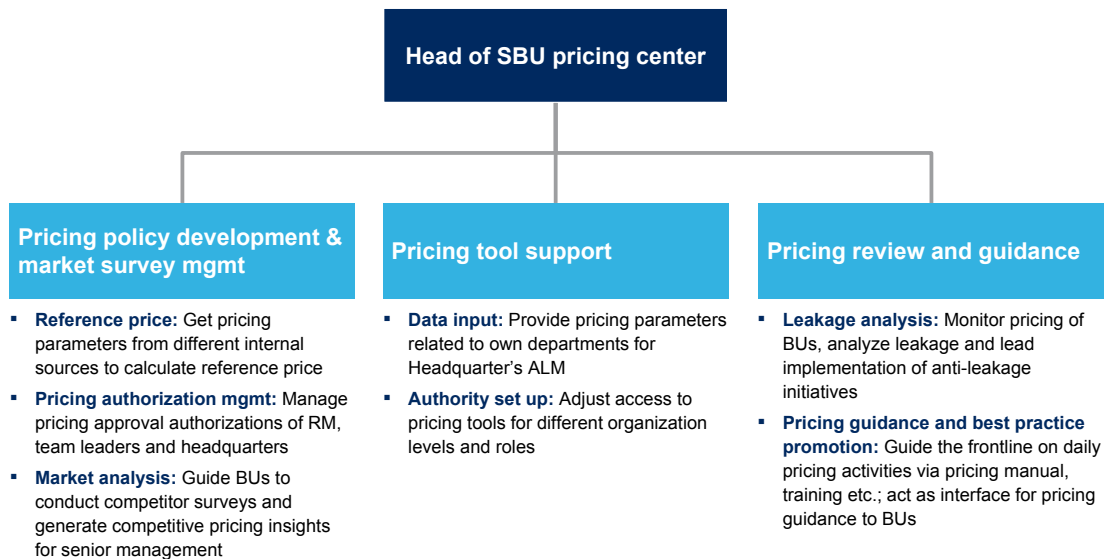
starting virtually with a clean slate. Strategies, models, systems and processes linked to the pricing system need to be scrupulously reviewed and streamlined, and indeed most will need to be re-developed, essentially rebuilt from the ground up. The effort demands support for a dedicated, powerful team of pricing champions who would lead development and promote changes throughout the organization.

At first, the pricing team will act as a project team, designing and implementing the transformation, and then it will gradually evolve into a formally staffed pricing center that forms the nexus of the new strategy. Internal staff on the pricing team will develop capabilities suitable for the pricing center, but some expertise will likely need to be recruited externally.

In ongoing efforts to optimize pricing practices, the pricing center will serve as the core support unit (Exhibit 20). Key functions of the pricing center include policy development and management, pricing tool support, and pricing review and guidance.

Figure 20

## Pricing center acts as the backbone for all pricing activities



## Strategic investment in IT

Investment in Pricing IT systems could yield

**15-to  
30-fold**  
return if successful

IT expenditures must be seen as strategic investments rather than overhead costs. And the required investment will be significant. Not only is a pricing IT system complicated in itself, but it also must be integrated seamlessly with other systems within the bank: customer relationship management, management information, capital management, risk and credit rating, funds transfer pricing, and most importantly, the core banking system. In addition to the hardware and software, banks will need to train, recruit, and retain competent talent to run the system, and appropriate candidates are scarce in China. Experience has shown that banks get a 15- to 30-fold return from their IT investment in pricing systems, while efficiency and management of operational risk are improved.

In investing in technology, banks generally must decide whether to buy vendor systems or build internally. Vendor systems generally allow the bank to implement the new pricing design more quickly, but systems that are internally developed can provide increased flexibility, more autonomy, and better integration with legacy systems. Banks should consider both options and decide which is the better fit for them.

## Frontline behavior

Transformation to a sophisticated pricing regime can be a significant shock to frontline staff, especially relationship managers. Under most traditional systems, relationship managers had a large degree of autonomy. Many decisions rested on their experience and intuition because relationship managers were the ones with first-hand knowledge of client needs and sensitivities and the competitive environment.

Much of this changes with a modern pricing strategy, and the risks of relying on an individual's intuition become increasingly apparent (Exhibit 21). With a broader perspective, it becomes obvious that relationship managers are often unaware of a product's baseline cost or a client's EVA. The performance of relationship managers also varies widely, with the bottom 5 percent often destroying value for the bank. Also, relationship managers have proven to be adept at optimizing their own performance metrics, even at the expense of overall bank performance.

Largely because attitudes and behaviors of relationship managers and other frontline staff must shift noticeably, a pricing program is intractably linked to change management; it is a transformation in its own right (Exhibit 22).

Successful change management generally relies on four crucial components:

- **Leadership role model:** Senior managers from the Chairman and CEO downward must be aligned on the need for a new pricing approach and visibly demonstrate their support for it. Leaders should clearly communicate the need for reform throughout the organization and be closely involved in key decisions, mobilization, and promotion.
- **Credible change story:** The pricing team must present a compelling change story that serves as a call to arms for the transformation. The narrative should be refined with the aid of communications specialists at management workshops and presented consistently to staff throughout the organization over all available channels to create strong understanding of the need for change and excitement over its potential.
- **Pilots and training:** The pilot stage of implementation is also an ideal time to develop new skills and attitudes that support the transformation. Pricing experts are developed among frontline staff during these pilots, and they become champions for the effort among their peers.
- **Measurements and incentives:** Metrics and incentives must also be redesigned to track and reward desired behaviors.



Continuous refinement of the Pricing solution during pilot, which typically resolves

**80%** of the implementation-related issues

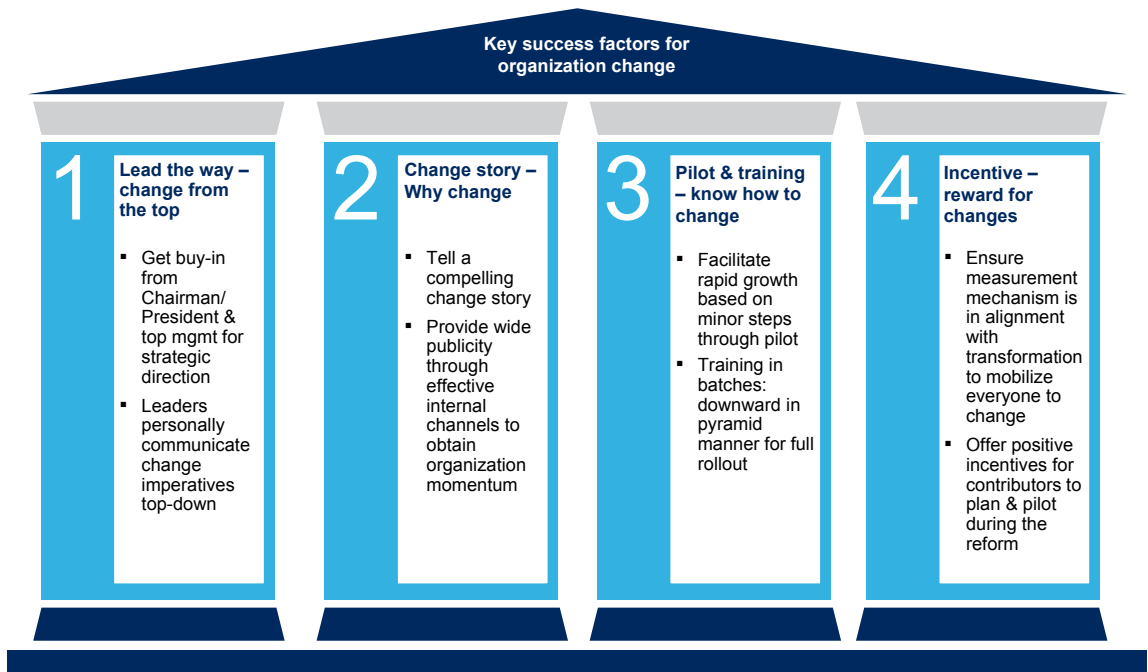
Figure 21

## Changing the pricing behavior of RMs



Figure 22

## Key elements of change management





	PAR	PREV	OPEN	HIGH	LOW	CLOSE
1	3.36	3.38	3.4	3.38	3.30	3.30
10	36.75	36.5	38.5	20.8	36.75	36.75
5	20.9	20.9	21	20.8	20.8	20.8
1	35.5	37	37.75	36.75	1	1
0.5	1	1.02	1.03	0.86	0.86	0.86
1	0.87	0.86	0.88	4.4	4.4	4.4
1	4.42	4.42	4.42	4.16	4.16	4.16
1	4.18	4.18	4.2	9.6	9.6	9.6
1	9.65	9.65	9.75	6.85	6.85	6.85
1	6.85	6.65	6.85	6.65	6.65	6.65
5	3.72	3.76	3.76	3.72	3.72	3.72
1	1.48	1.38	1.39	1.36	1.36	1.36
0.5						
1	29.75	30	29	28.75	29	29
10	347	349	347	347	347	347
1	65.25	65.75	66	65.25	65.25	65.25
10	16	16.1	16.1	16.1	16.1	16.1
10	45.75	46	46	46	46	46
10	44					
10	99.75	99.25	10	99.75	99.75	99.75
10	61.5	61.5	61.5	61.5	61.5	61.5
10	78	78	78	78	78	78
10	1084	1082	1086	1086	1086	1086
10	27.25	27	27	27	27	27
5	468	466	468	468	468	468
10	3.14	3.16	3.2	3.2	3.2	3.2
1	13.7	13.7	13.7	13.4	13.4	13.4
1	25.25	25.25	25.5	25.25	25.25	25.25
10	35.5	35.75	35.75	35.25	35.25	35.25
1	6.1					
10	9	9	9.05	8.85	8.85	8.85
1						



# Final Thoughts

The financial landscape in China has changed as though an earthquake had rumbled through it. In completing interest rate liberalization by eliminating the interest rate ceiling on deposits, the People's Bank of China opened the market to greater competition. The next decade will prove to be a period of great, positive change for the banking industry in China, and an important aspect will be the introduction of modern pricing systems.

Bank pricing will change, either actively – seeking to capture opportunities quickly – or passively – reacting to weak profits and market losses. Whether leading the effort or being dragged behind, all banks in China will have to transform their pricing systems to adapt to the deregulated regime.

Banks that understand the enormity of the coming change can act quickly to take advantage of its opportunities. A successful pricing transformation can not only secure rapid and sustainable revenue improvements, but also support overall performance improvements of frontline staff, as well as middle and back offices. Banks that are leading the market today can use pricing transformation to safeguard their market position, while up-and-coming banks can leverage the effort to try to leapfrog competitors.

To capture the value, however, banks must act quickly.



## About GC FIG Practice of McKinsey

McKinsey is a global management consulting firm, providing consulting and other services related to strategy, organization, operation, technology, and other critical areas for companies and public institutions. We have more than 8,000 consultants based in more than 100 offices in 60 countries. The Greater China Office comprises Beijing, Hong Kong, Shanghai, Shenzhen and Taipei.

McKinsey's Greater China Financial Institutions Practice ("GC FIG Practice") serves leading banks, securities & trust companies, wealth & asset management companies, insurance and other financial institutions throughout the Greater China. The Practice assists clients on a broad range of topics including transformation and innovation, internet finance, globalization, strategy, corporate finance, sales and marketing, operations, digital and technology, risk and capital, organization, leadership development and culture transformation. We have more than 100 dedicated consultants across the region, who have deep experience in financial institutions topics. We draw on McKinsey's extended network of global financial institutions consultants and research analysts to deliver service to clients.

Periscope is McKinsey's solution for pricing. Periscope Solution is built on McKinsey's long experience in pricing methodology and practices, covering functions such as leakage analysis, comprehensive pricing, account planning, pricing approval, and management reporting, and providing a series customer services that includes data management, model development, and management process restructuring.

---

## About Author



### Joseph Luc Ngai

Senior Partner  
Hong Kong office  
Joseph\_Luc\_Ngai@mckinsey.com



### John Qu

Senior Partner  
Hong Kong office  
John\_Qu@mckinsey.com



### Winston Yung

Partner  
Hong Kong office  
Winston\_Yung@mckinsey.com



### Charles Tan

Associate Partner  
Taipei office  
Charles\_Tan@mckinsey.com



### Hongming Chen

Engagement Manager  
Hong Kong office  
Hongming\_Chen@mckinsey.com



### Mario Aquino

Venture Partner  
Singapore office  
Mario\_Aquino@mckinsey.com



### Gianluigi Salatiello

Periscope Head of FIG  
Milan office  
Gianluigi\_Salatiello@mckinsey.com

