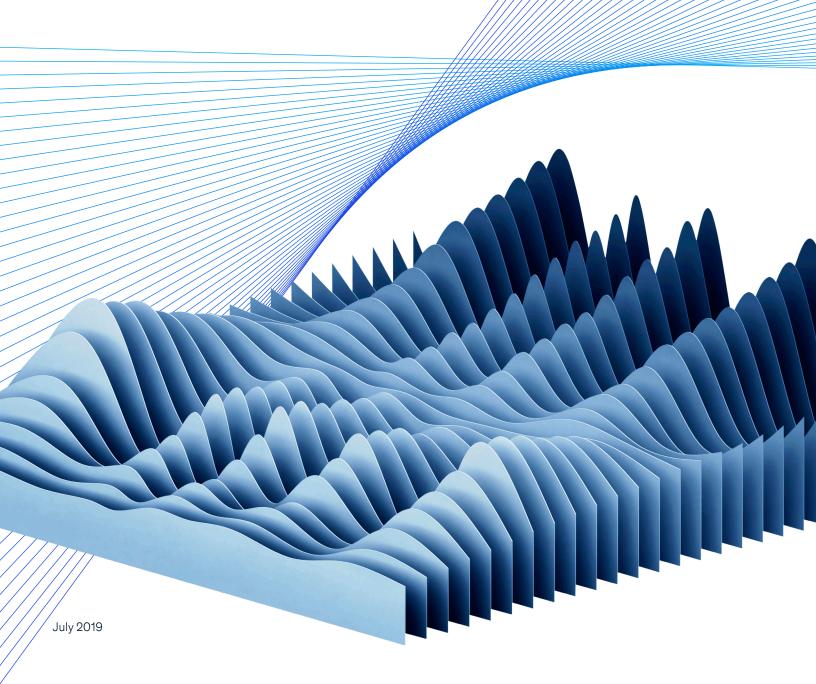
McKinsey & Company

Global Banking Practice

Signs of stress in the Asian financial system



The Asian debt crisis of 1997 devastated the region for many years, especially Southeast Asia, and was felt in markets throughout the world. The last tremors of the 2008 global financial crisis are still resonating. And now, financial media and other observers question whether rising debt levels in Asia can trigger a new crisis. Unfortunately, the signs are ominous, and the health of the real and financial sector is deteriorating.

Three fundamental conditions of stress¹ seem to be building throughout Asia:

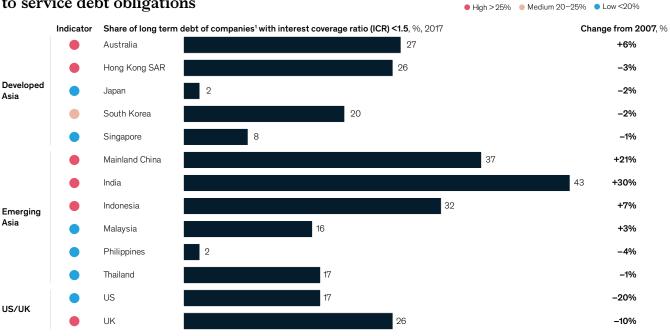
- In the real sector, corporations across the region are under significant stress to fulfill their debtservice obligations. Households in Australia and South Korea have accumulated unsustainably high levels of debt.
- The Asian financial system shows vulnerability with lower margins; higher risk costs, especially in emerging markets; continued dependence on banks and shadow-banking institutions

- for lending; and a capital buffer that could be challenged materially.
- Global cross-border capital inflows are down overall from their 2007 peak. However, inflows into Asia have surpassed pre-crisis levels, resulting in a dramatically larger share of foreign inflows into the region.

Whether cumulatively these conditions are enough to trigger a new crisis remains to be seen, of course. Since 1997, financial regulators have become wary and safeguards have been put in place, such as a shift from the fixed exchange rate to a managed-float-exchange-rate regime in Thailand. Yet, governments and businesses need to monitor potential triggers carefully, like defaults in repayment of debt, liquidity mismatches, impact of higher interest rates, or large fluctuations in exchange rates, and take adequate preventive action.

Exhibit 1

Corporates across most of Asia are under significant stress to service debt obligations



1.All listed/unlisted companies in Capital IQ database with earnings before interest and tax (EBIT)>0; ICR computed as EBIT/Interest expense 2 Companies with EBIT>0 that have some long-term debt and interest expense Source: Capital IQ, McKinsey analysis

¹ See Dominic Barton, Roberto Newell, and Gregory Wilson, Dangerous Markets: Managing in Financial Crises, New York: Wiley, 2002

Signs of stress in the real sector

In recent years, households, corporations, and governments in Asia have taken advantage of low interest rates. For example, total household, nonfinancial corporate and government debt as a share of GDP has increased since 2010 by 79 points in Mainland China, 64 points in Singapore, and 63 points in Hong Kong SAR, resulting in total debt as a share of GDP of 257 percent, 286 percent, and 338 percent respectively in each market.

We assessed stress levels on corporate balance sheets by analyzing 2007 and 2017 financial data from more than 23,000 companies across 11 markets in the Asia—Pacific region and more than 13,000 companies in the United Kingdom and the United States. The analysis looked at the share of long-term debt (senior bonds, notes, and term loans, for instance) held by corporations with an interest coverage ratio—earnings before interest and taxes over interest expense—of less than 1.5. At these levels, corporations are using a predominant share of their earnings to repay their debt.

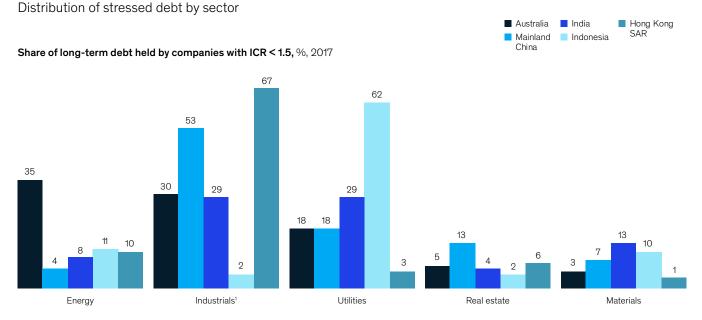
The results were sobering. In 2017, Australia, Mainland China, Hong Kong SAR, India, and Indonesia had more than 25 percent of long-term debt held by companies with an interest coverage ratio of less than 1.5, and the share has increased materially since 2007 (Exhibit 1). In Malaysia, Singapore, South Korea, and Thailand, at least 40 percent of long-term debt was held by companies with interest coverage ratios of less than 3, a level where corporations are likely to struggle to repay their debt.

The situation in Asia is in stark contrast to that in the United Kingdom and the United States where, as a 2019 McKinsey study notes, the share of corporations struggling to repay debt has fallen sharply since 2007.

A closer examination shows that energy, industrial, and utility companies accounted for a significant share of stressed corporations in Australia, Mainland China, Hong Kong SAR, and India (Exhibit 2)². It's worth noting that the large share of stressed utilities in India and Indonesia is particularly troublesome because their ability to turn

Exhibit 2

Significant share of stressed debt are held by energy, industrials, and utility companies



1 Includes capital goods, commercial and professional services (including building care services, warehousing and storage, etc), and transportation (air, marine, road, and rail) Source: Capital IQ, McKinsey analysis

² The industrial sector, which accounts for the largest share in most markets, is primarily capital-goods manufacturers, warehousing and storage service providers, and transportation companies that service exporters and importers and are a significant component of the global trade value chain

around performance and repay the debt requires working across multiple stakeholders—regulators, consumers, local and national governments, and the companies themselves—making recovery much more complicated for this sector.

The Institute of International Finance, a global association of financial institutions, estimated that in the third quarter of 2018 household debt in Australia reached 123 percent of GDP and in South Korea reached 97 percent of GDP, compared with 55 percent in Japan and 58 percent in Singapore.

In addition, in 2019 the International Monetary Fund issued a warning that the situation in Australia required close monitoring. Similarly, in Seoul the Bank of Korea in 2018 warned that large mortgages and high rents had driven up indebtedness in the economy and that household debt there had grown much higher than the Organisation for Economic Co-operation and Development average.

In Mainland China, while household debt amounted to 51 percent of GDP in the third quarter of 2018, which seems a relatively sustainable level, it had grown by about 20 percent a year since 2010. The ability of Mainland Chinese households to repay this debt needs to be monitored closely.

Financial system shows vulnerability

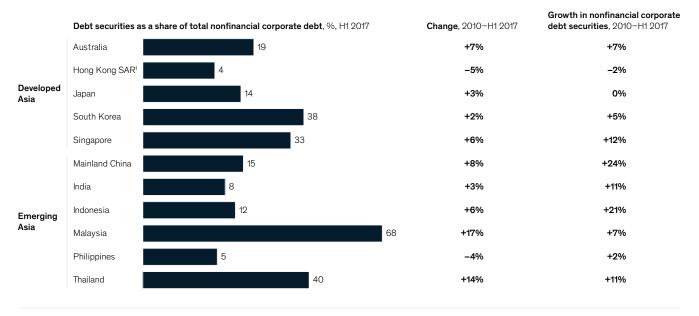
Cracks are appearing again in the Asian financial system—lower margins, higher risk costs, increasing lending by nonbank financial intermediaries, a capital buffer that could be tested materially, and reliance on foreign currency denominated debt in some markets.

Margins at banks are shrinking and return on average equity of Asian banks has fallen from 12.4 percent in 2010 to 10.0 percent in 2018. As returns have declined consistently, they are converging with the 2017 global average of 9 percent.

In addition, capital markets in parts of the region remain underdeveloped, and borrowers rely heavily on banks and nonbank intermediaries for financing. Large bond markets with significant reach have formed in only a few markets in Asia (Exhibit 3).

Adding to the worrying signs, the impact of high leverage among corporations and households is already apparent across emerging Asia, with risk costs in Mainland China, India, Indonesia, and Thailand especially burdensome (Exhibit 4).

Exhibit 3
Corporate bond markets are large and have deepened materially only in select markets

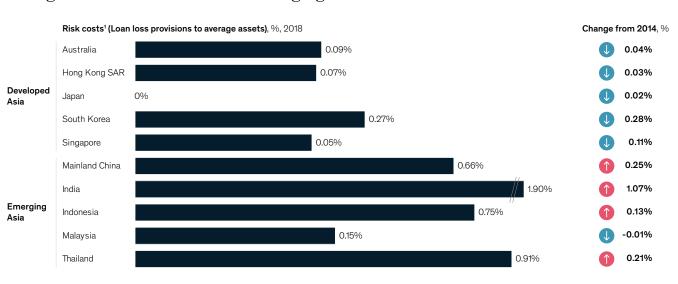


¹ Estimates for 2016

Source: Institute of International Finance; McKinsey Global Institute analysis; McKinsey analysis

Exhibit 4

Rising risk costs are seen across Emerging Asia



1 Based on a sample of 700+ banks and non-bank intermediates in Asia Source: SNL: Panorama by McKinsey

The growth in lending by nonbank intermediaries, especially in Mainland China and India, also generates greater risks. In 1997, the Asian financial crisis was partly triggered when merchant banks in South Korea were caught in a severe credit squeeze. The country's 30 merchant banks were heavily exposed to troubled companies, undercapitalized, and holding significant foreign-currency liabilities. When some of their clients went bankrupt, a vicious cycle was unleashed: foreign and domestic banks refused to lend to the merchant banks, and the merchant banks were forced to call in loans, triggering further defaults.

Analysts have estimated that lending by China's shadow-banking sector reached as high as 55 percent of GDP in 2017. However, a large share of the lending in Mainland China continues to be denominated in local currency. Even with this cushion, though, the default risk remains high, especially from corporate clients in poor financial health.

In India, while banks reduced lending as defaults showed signs of growing around 2014, nonbank financial intermediaries continued to lend. The Reserve Bank of India, India's central bank, estimates that 99.7 percent of nonbank finance companies (NBFCs) and housing companies make

long-term loans against short-term funding. As they are dependent largely on wholesale funding, any failure to make payments as debt instruments come up for redemption can trigger a crisis. This is already evident; for example, the shadow lender Infrastructure Leasing & Finance Services (IL&FS) has defaulted on interest payments to bond holders. The ripple effects of this are becoming evident—for instance, rating agencies have downgraded debt issued by multiple NBFCs and many pension funds have announced they have exposure to debt issued by them.

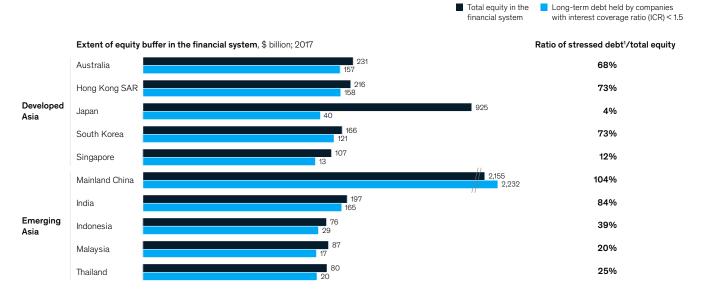
Reduction in provisions

1 Increase in provisions

The capital buffer in the financial system across Asia could be challenged materially. The Tier 1 capital ratio across Asia is about 13 percent, but a significant proportion of the equity in the system could be at risk given the large amount of long-term debt raised by stressed corporations. In many markets—developed and emerging—long-term debt raised by companies with an interest coverage ratio of less than 1.5 comprised more than 60 percent of the equity in the system in 2017, often much more than 60 percent (Exhibit 5). Even though bad loans are likely to be provided for over multiple financial years, a series of large-scale defaults in these vulnerable markets could create a damaging credit or liquidity squeeze.

Exhibit 5

Equity buffer in the system is not substantial in the event of large scale corporate defaults



1 Extent of long term debt held by companies with ICR < 1.5 Source: SNL; Panorama by McKinsey

Finally, the share of nonfinancial corporate debt denominated in foreign currencies was around 25 percent or less across emerging Asia, except for Indonesia. Indeed, in Indonesia, about half the nonfinancial corporate debt was denominated in foreign currencies, exposing the country to risks linked to rapid fluctuations in foreign exchange rates.

Surging capital inflows into Asia enhances vulnerability

Global cross-border capital inflows—foreign direct investment, loans, portfolio equity, and debt—have shrunk by about two-thirds from a peak just before the 2008 global financial crisis. The McKinsey Global Institute (MGI), McKinsey's business and economic research arm, has argued that the change means overall the global financial system is less interconnected and less vulnerable to contagion than it once was.

However, the situation is starkly different in Asia. Gross cross-border capital inflows into 20 Asian markets have fluctuated significantly since the 2008 crisis. In 2017, they topped pre-crisis levels for the fifth time in ten years and rose further to \$1.6 trillion in 2018 (Exhibit 6).

The quality of equity inflows into Asia has improved with the share of foreign direct investment in inflows increasing from 27 percent in 2007 to 38 percent in 2018. While the new composition of inflows shows less reliance on short-term portfolio investment, more than 40 percent of inflows continue to be foreign loans that are highly volatile. A few markets, including Indonesia, feature half or more of corporate debt denominated in foreign currencies, and stress from these markets could produce a broader credit squeeze in the region with ripple effects across the world.

The share into Asia of global financial inflows surged from about 12 percent in 2007 to about 36 percent in 2018. This surge in inflows and continued interconnectedness with the global financial systems present two clear risks. First, Asian markets are again potentially vulnerable to any external shocks, such as weakened global economic growth, and, second, any crisis originating in Asia could send ripple effects across the globe.

What could trigger a crisis?

There are a few triggers that could precipitate the risks Asia faces. Stakeholders should closely monitor, for example, interest-rate trends and overall global economic developments, such as slower growth and ongoing trade tensions.

A 2018 MGI report modeled the impact of a 200 basis-point increase³ in interest rates on corporate bonds at risk of default. The results for India and Mainland China were alarming. In India, the share of bonds outstanding of nonfinancial corporates with an interest coverage ratio of less than 1.5 would increase from 18 percent to 27 percent and in Mainland China from 24 percent to 43 percent. The value of debt in Mainland China issued by corporations with an interest coverage ratio of less than 1.5 would increase from \$475 billion to \$850 billion, a jump of almost 80 percent. In India, the increase would be from \$18 billion to \$27 billion.

In addition, the MGI simulation showed that certain sectors—for example, industrials and real estate—would be hurt more by an increase in interest rates with higher proportion of debt likely to be at risk of default. Industrials comprise more than half the stressed debt in Mainland China and Hong Kong SAR and nearly a third in Australia and India.

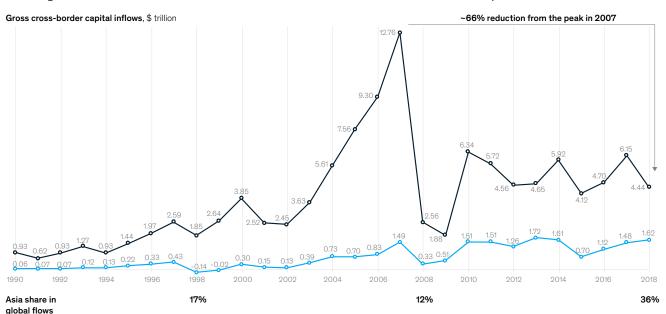
A global economic slowdown, ongoing trade tensions between the United States and China, and geopolitical tensions could also harm corporate and household earnings across Asia, increasing the region's vulnerability. For example, analysts at Bank of America Merrill Lynch, Bloomberg, and UBS among others have estimated that an aggressive trade war between the United States and China could cut GDP by 1.7 to 2.5 percent in both markets. Along with weakening corporate and individual income in Mainland China, this could send ripple effects across Asia, especially in the real sector.

While our analysis suggested no evidence of immediate risk⁴, global asset-price bubbles are another potential stress factor. Recent years have seen explosive growth in global private markets, with assets under management totaling about \$5.8 trillion in 2018 and global private-equity deal multiples near all-time highs at 11.1. A scenario in which stress originates in the private markets and

Exhibit 6

Global cross-border capital flows have declined 66 percent since the 2007 peak; however, Asia share of flows has increased dramatically

- O Global cross-border capital inflows¹
- Asia cross-border capital inflows²



¹ Gross capital inflows; including foreign direct investment (FDI), debt securities, equity, lending, and other investmen

Source: IMF balance of payments; McKinsey Global Institute analysis

² Includes flows from 20 markets in Asia (Australia, Bangladesh, Bhutan, Cambodia, Mainland China, Hong Kong SAR, India, Indonesia, Japan, South Korea, Malaysia, Maldives, Myanmar, Nepal, New Zealand, Philippines, Singapore, Sri Lanka, Thailand. and Vietnam

³ Analysis completed in H12018 when interest rates were lower; since then interest rates in the United States have increased by approximately100 basis points

⁴ Our analysis looked at signs of developing bubbles, particularly annual asset value growth of 20 percent or more for two years in a row or more. Corrections in select markets could not be ruled out

spreads to other parts of the economy remains plausible, especially if a large share of private-market funds in emerging Asia are invested in less regulated shadow banks, like fintechs that undertake lending or similar institutions.

Preparing for a slowdown or potential crisis

Financial crises can be anticipated, and corporations, banks, and policy makers can prepare better than they have in the past. Less obviously, financial crises can also be a moment of strategic opportunity. Time and again, companies that are quick to pivot wisely in response to a crisis by, for instance, setting a new strategic direction and taking advantage of new opportunities in the changed landscape have emerged from the crisis stronger and even dominant.

A 2019 McKinsey study on "resilient" companies that delivered top quintile returns post the global financial crisis highlights that corporations must create financial and operational flexibility. Divesting underperforming businesses early allows companies to enter the crisis with more financial

flexibility and the ability to acquire assets that peers are dumping. Corporations that launch or accelerate their digital-transformation programs with a focus on consistently increasing earnings through the cycle and driving revenue growth during the recovery are likely to emerge winners.

Banks and nonbank intermediaries should reevaluate credit risk in their portfolio and conduct detailed stress testing, including assessing risks by sector and the quality of borrowers and geographies. They must strengthen their capital position and manage for any liquidity mismatches proactively. Continuing to drive productivity improvements in the franchise can also help them protect and strengthen their relative position.

And finally, regulators must evaluate options to strengthen supervision, including moving from activity based to entity-based monitoring for nonbank financial intermediaries and nonfinancial players providing financial services, such as fintechs, especially when they cross certain size thresholds.

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