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The Elephants in the Room

Hidden Risk and Opportunities in India

Vol. 2

MARSH GUY CARPENTER MERCER OLIVER WYMAN

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INTRODUCTION

The articles contained in this publication have been selected for the way in which they represent key economic and social issues which organisations in India have to contend with.

India recently regained the title of being the fastest growing major economy after a period of uncertainty following major government led policy changes. There is some optimism that the reforms have laid the foundations for double digit growth in the future, but there are many challenges which need to be navigated by businesses along the way.

This compendium collates knowledge and expertise from the world's leading experts to provide practical and timely insights on the various risks and opportunities associated with India's rapid economic growth and societal development.

All articles first appeared on BRINK, the digital news service of Marsh & McLennan Companies' Global Risk Center, managed by Atlantic Media Strategies, the digital consultancy of The Atlantic. BRINK gathers timely perspectives from experts on risk and resilience around the world to inform business and policy decisions on critical challenges.

ECONOMY

THE ASIAN CENTURY COULD BELONG TO INDIA

John West
Executive Director of Asian Century Institute

India has never managed to achieve three decades of 10 percent annual economic growth rates like China has. But in all its long history, India has never had a centralized regime like China has had for over 2,000 years, which could provide strong political leadership. “No single person can change India. You speak 320 different languages,” once said Singapore’s former Prime Minister Lee Kuan Yew. This diversity makes governance in India more complex than in China. However, the Indian economy has performed very well these past 25 years, and the prospects for continued development may be very good.

India is a country with huge potential. For instance, Indians who have migrated to the U.S. and their descendants, on average, earn \$88,000 a year, compared to \$66,000 for all Asian Americans and \$50,000 for Americans overall. Indian success stories in the U.S. include the CEOs of Microsoft (Satya Nadella), Google (Sundar Pichai) and PepsiCo (Indra Nooyi). Indian companies such as Infosys, Mahindra, Mittal, Reliance, and Tata have succeeded famously in global markets. The Indian movie industry produces more films than any other country. And the Indian Premier League is the world’s most lucrative and popular cricket tournament.

THE COMPLEX INDIAN STORY

The Indian economy was, for many years, a chronic underperformer. During India's first four decades of independence, the economy chugged along at the "Hindu rate of growth" of about 3.5 percent (or 1.3 percent in per capita terms) from the 1950s to the 1980s. Despite a vibrant democracy, India's economic policies drew more inspiration from the socialism of the USSR than the capitalism of East Asia or the West.

A financial crisis in the early 1990s triggered a wave of economic liberalization and reform. During the following 25 years, the Indian economy has averaged 6.5 percent annual growth and is currently the world's fastest growing large economy with a growth of around 7.5 percent. India's GDP per capita more than tripled over this period, with the information technology sector playing a leading role.

Thanks to India's positive economic developments, the share of the population living in extreme poverty (less than $1.90 a day) has more than halved over the past decade to around 20 percent. But this amounts to some 270 million people who are still suffering in "Incredible India." And despite this impressive achievement, almost 40 percent of the Indian population is caught between $1.90 and $3.10 a day in a situation of near poverty. The Indian government desperately needs to raise more taxes to provide basic services to its citizens. In fact, the OECD reports that less than 6 percent of Indians pay personal income taxes.

India's GDP per capita remains less than half that of China and about one-tenth of America's. India's ranking as the world's third largest economy, as well as its status as an emerging power, is highly dependent on its enormous population.

India has suffered from rising inequality like most Asian countries. Economists Jean Drèze and Amartya Sen observed that India looks "more and more like islands of California in a sea of sub-Saharan Africa." And it is true that beyond the glitter of high-tech Bangalore, Bollywood and Indian cricket, India remains a rural country, with two-thirds of its population living in the countryside. However, it is also undeniable that India has made immense progress.

RECENT DEVELOPMENTS

In the 2014 national elections, the Bharatiya Janata Party—under the leadership of Prime Minister Narendra Modi—came to power. Prime Minister Modi has been leading the country for over four years. His pro-business leadership and impressive reforms to date helped India climb 29 positions to 100 out of 190 surveyed countries in the World Bank's Ease of Doing Business ranking. The OECD judges Indian policies to not be "competition friendly;" however, it does note a positive trend for barriers to entrepreneurship and trade and investment. There has been another positive trend in the World Economic Forum's Global Competitiveness Report where, after five years of decline, India has bounced back over the past two years to 39th place out of 138.

However, India's human capital development is hampered by one of the worst education systems in Asia. By some estimates, half of the Indian population is functionally illiterate. Even at the elite level, not one Indian university figures in the world's top 200. India spends next to nothing on public health. Improving human capital will be critical for taking advantage of the half a billion young Indians who will enter the labor

> There are strong reasons to be optimistic about India's future—the country could well emerge as Asia's leading power.

force over the next decade. Already more than 30 percent of Indian youths aged 15–29 are not employed, pursuing an education or in training, highlighting the immense challenges of reaping the demographic dividend of its youth bulge.

A major element that has been lacking in India as compared with East Asia has been the development of a strong manufacturing sector. India's manufacturing sector has been stuck at around 15 percent of GDP. Today, industrialization could play an important role in India's development, since it faces the challenge of creating jobs for masses of semi-skilled young people entering the labor market and transforming this demographic bulge into a dividend. The services sector, especially business process outsourcing and tourism, has been a key driver of the economy.

STEPS IN THE RIGHT DIRECTION

Fortunately, Prime Minister Modi's government is making efforts to develop its manufacturing sector. Major investments are being made in improving the country's logistics in areas such as coastal shipping, highways and railways, which would help product transportation. Inspired by the government's "Look East" policy, these efforts are being concentrated on the eastern side of the country, which is close to fast-growing Bangladesh and Southeast Asia. Special economic zones and economic corridors are also being developed.

The timing is right for India to become an industrial power, as China is now suffering from increasing wages and investors such as Japan are looking for new low-cost locations. This is where Prime Minister Modi's business-friendly policies are helpful. For example, the implementation of a national goods and services tax will help transform a fragmented India into a common market. The government has also liberalized some policies for FDI, with the result that flows of FDI reached $208.99 billion from April 2014 to the December 2017 period. Leading companies such as Foxconn, SoftBank, Microsoft and Huawei are all now investing in India. Korean companies in particular are very successful in India.

Overall, there are strong reasons to be optimistic about India's future, even though it lags behind the world's leading economies in terms of GDP per capita and economic, business and technological sophistication. As I argue in my new book, over the course of the 21st century, India could well emerge as Asia's leading power. Already, India's economy is growing faster than China's, a trend that could continue. Further, India's population will overtake China's in 2022 and could be approximately 50 percent higher by 2100—according to the UN—providing immense demographic dividends if human capital development is prioritized.

In short, India is a slow burner compared with China, but it is moving decisively ahead. The Asian Century could well belong to India.

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ECONOMY

A DECISIVE TIME FOR INDIA'S BANKING SECTOR

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The Indian banking sector appears at a precipice. One generation after the sector was liberalized, assets and deposits remain dominated by government-owned banks, which are struggling under the weight of crippling levels of nonperforming assets that have exposed deficiencies in their corporate governance and risk management capabilities.

Declared gross nonperforming assets at public-sector banks have risen to at least 6.2 trillion rupees ($95.8 billion), with an additional 1.5 trillion rupees of restructured standard assets. In total, these represent 14.6 percent of advances, three times the level for private-sector banks.

HOW BAD ARE THINGS REALLY?

In truth, we don't know how bad the situation is. Unlike in Europe, the amount of public data used to judge asset quality has been rather restricted, and the impact of asset quality could be larger than estimated so far.

No public, system-wide effort has been made to assess the adequacy of provisions against NPAs or of the sustainability of the restructured assets. Most independent observers, such as ICRA, India Ratings, Moody's, and Fitch, estimate that between 1.25 trillion and 1.35 trillion rupees of capital will be needed for the banks to meet their capital requirements for the 2019 fiscal year.

The latest Financial Stability Report suggests that under the new Indian Accounting Standards, Ind AS, provisioning requirements will be substantially higher, which suggests that banks' own estimates of the recoverability of their assets are below what is reflected in their current books.

And, at the time of writing, all public sector banks except the State Bank of India and IDBI Bank are trading at (often significantly) less than book value after experiencing aggregate losses of 400 billion rupees over the 2016 and 2017 fiscal years; only SBI has been profitable in this period.

STEPS BEING TAKEN

We read almost daily about the initiatives taken by the Reserve Bank of India, the government and the Securities and Exchange Board of India to address the problem of bad corporate loans and to improve mechanisms for more effective recovery of these debts.

More recently, we have seen the RBI asking banks to initiate forced bankruptcy proceedings against 12 large loan defaulters that account for 25 percent of the banking system's bad loans. It has also sent commercial banks the names of another 26 defaulters whose accounts it wants resolved before mid-December, or bankruptcy proceedings will be initiated against them too.

We have also seen the government commit to limited capital infusions to help shore up public-sector banks via its "Indradhanush" recapitalization program. What we have yet to see is a comprehensive vision of how the sector can return to sustainability.

HOW TO MAKE THE BANKING SECTOR SUSTAINABLE

It is our view that a comprehensive vision is critical for the sector—for the sustained economic growth it facilitates and for the population to have access to quality financial services. The questions that need to be addressed are not easy to answer and will be best approached through a healthy public dialogue. This should encompass the industry itself—via bodies such as the Indian Banks' Association as well as individual institutions—regulators, policymakers, academia, public advocacy groups and other industry experts.

The questions that this discourse should address include:

- What is the real size of the problem? Will actions aimed at corporate debt recovery and balance sheet remediation, such as limited capital infusions and regulatory relief on accounting norms, be adequate to restore the sector to a sustainable state without structural reforms?
- How could the risk and governance frameworks fail so spectacularly, and what can be done to address this going forward?
- How could the government resolve the current problems structurally?

Approaches could include:[1]

- Low-cost government recapitalization. For example, a change in the reserve requirement, introduction of an asset protection scheme, and injection of government capital in a limited manner.
- Consolidation of public-sector banks around a few state-owned national champions. Some of the smaller state banks could be merged or allowed to fail, while largely maintaining a similar structure. Such an option might boost economic growth, but there would be a high likelihood of the problem recurring. Further, this would be a moderate- to high-cost option for the Indian government, with no guarantee of the problems not recurring. There would also be the possibility of the government creating "too-big-to-fail" institutions, enhancing the distortions in the financial sector, making private sector banks compete with even larger state-owned enterprises.
- A radical restructuring of the public-sector banks. Large-scale privatization with the creation of specialized banks focusing on the under-served parts of the economy. Privatization will pay for the recapitalization, so the effective cost would be minimal for the Indian state, and competition would be encouraged, with a beneficial impact on economic growth. Strong political will would be needed for such a solution.

We have yet to see a comprehensive vision of how India's banking sector can return to sustainability.

1. According to recent earnings results, there has been an increase in nonperforming assets in India. This indicates that the problem continues to worsen beyond what our model estimated at the time the report was published, and the solutions proposed in this article may barely be sufficient.

MEDIUM-TERM VISION

Further, there should be a medium-term vision for the sector that articulates clear objectives for the government's continued role (if any) in the ownership of banks. In our view, there are three key questions:

First, does government ownership lead to systemic stability? The government-owned banks have not proven more stable, but the implicit government support they receive has prevented a crisis of confidence.

Second, does government participation in the sector promote greater innovation, especially with respect to financial deepening and inclusion? There is some evidence for this, but it is not clear that other tools for the incubation of new ideas, such as seed funds and regulatory sandboxes, could not be at least as effective.

Third, are public-sector banks better positioned to deliver credit and services in ways that serve the public interest? In recent years, it would appear that increased access to finance for micro, small and medium enterprises has come more from non-bank financial companies than public-sector banks. In terms of gathering deposits and providing banking services, new models such as business correspondents, small finance banks and fintechs appear likely to fill any void that might be left by retreating public sector banks.

WHAT ROLE FOR THE GOVERNMENT?

If the government wants minimal disruption or to maintain status quo, it will need to keep capitalizing the banking system, which is not sustainable. We therefore consider the scenario in which the government only uses taxpayer funds to the extent set out in the current budget commitments. Our analysis indicates that the immediate options—such as the sale of stakes in joint ventures, changes in the revaluation reserve discount factor, partial privatization and government guarantees—would be minimally sufficient to recapitalize the banks under base case assumptions of their capital needs. Any significant deterioration in asset quality from current levels would require new ideas for recapitalizing the banking system.

For a sustainable, long-term solution, the government and supervisory bodies need to fundamentally review the role of the government in the banking system. One outcome could be a banking structure where public-sector banks become more specialized, with a much clearer strategic focus on public goods. They could support small businesses and strategic interests such as defense and utilities, for example. The largest private-sector players would provide mainstream banking services in the corporate, small- and medium-sized enterprises and retail segments.

Such a transformation of the banking sector would be a herculean task given the sociopolitical challenges involved, and it would require strong political will and a well-planned transition, but it needs to be attempted.

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ECONOMY

IS INDIA OVERPLAYING ITS DEMOGRAPHIC DIVIDEND?

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Much is made of India's demographic dividend, but this dividend cannot be taken for granted. Given the high rates of youth unemployment, underemployment, disguised unemployment, low productivity due to skill deficits and the low-wage trap of the informal sector, there are question marks over this "dividend."

And while India does have a large and growing number of graduates, their quality, skill and employability remain a serious concern. Moreover, the high rates of unemployment or joblessness coupled with rising income inequality will eventually impose limits on consumption, which has been the top driver of economic growth in India.

REASONS FOR CONCERN

A recent study by the Centre for Monitoring Indian Economy and Bombay Stock Exchange (CMIE-BSE) estimates that India added 2 million jobs between August 2016 and August 2017, whereas it's adding 12 million people a year to its workforce. More people are being being added to India's pool of unskilled or low skilled and largely unemployable workforce because birth-rates tend to be higher among poor families. Mainly concentrated in the states of Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan and Jharkhand, these families can't afford nutritious food and quality education, or provide healthcare to their children.

Unsurprisingly, more than 90 percent of the country's workforce is unskilled or low skilled, and most are employed by the informal sector wherein productivity and wages are low. Yet, employment opportunities are primarily increasing in the informal sector, which was first jolted by demonetization and then by a poorly conceived and implemented the Goods & Services Tax. A CMIE-BSE survey estimates that demonetization could have resulted in job losses of anything between 3 to 12 million—mostly in the informal sector. The implementation of the GST and the government's sharp focus on extracting more taxes can further dent job market prospects.

Many argue that demonetization and GST are good for India's economy in terms of facilitating formalization, which is needed to boost productivity and wages. However, forced formalization without addressing the factors that lead to increased informal sector activity, such as the lack of access to cheaper institutional capital, technological know-how and marketing support along with an untamed skill deficit, may all aggravate the employment situation further.

Jobless growth is the biggest future risk to India's political and social stability, especially since financing a basic income program would be fiscally too difficult for India.

India's archaic labor laws are an issue as well, with top companies in the organized sector increasingly relying on contractual workers to get around them. Roughly half of the workers employed in the organized sector are now contractual, hence they have no job security or social benefits and often get lower wages compared to their permanent counterparts.

The workforce participation of women in the country is already one of the lowest in the world, and instead of improving, it is deteriorating further. It fell to 22.5 percent in 2016 from 37 percent in 2005. That shaves off an estimated 2.5 percent from India's GDP every year. Many of India's nonworking women, especially in the cities, are highly qualified but either never work or leave their jobs post-maternity as quality child care support is lacking even in large cities such as Mumbai or Delhi.

The low labor force participation rate of women will adversely affect key sectors such as banking, IT, medicine/nursing, hospitality and retail as these sectors usually have a high proportion of women in their workforce. From the demand side, the low participation rate of women will affect the growth potential of the cosmetics, educational and health services as well as travel and hospitality in the form of lower demand for these products and services.

FACTORS CAUSING JOBLESSNESS

The poor quality of education in both liberal arts and STEM, with no emphasis on the employability of the graduating students, is a major factor contributing to the problem of unemployment. It is also the reason even the biggest companies are facing difficulties in hiring suitably skilled employees.

Cheaper capital or low interest rates combined with India's unfriendly labor laws have induced top companies in the organized space to switch to capital-intensive or labor-saving production methods. This imposes limits on the growth of jobs in India.

Jobless growth is the biggest future risk to India's political and social stability, especially since financing a basic income program would be fiscally too difficult for India.

Many large companies, faced with intense competition both in domestic and export markets, are trying to cut corners to survive, and one of the suggested ways is to reduce the number of workers. Thus, more jobs have to come from smaller companies/SMEs, startups and first-time entrepreneurs. However, doing business for companies that can't afford having corporate affairs departments to navigate India's opaque bureaucracy and government machinery is a big challenge. It will have adverse implications for job creation. The recent investment slump is another short-term factor contributing to jobless growth.

Exogenous factors such as growing protectionism in the developed world and rapid technological changes present new threats and will make it difficult for India to benefit from its favorable demography. Disruptive technological breakthroughs such as automation and 3-D printing, although a global phenomenon, will further dilute the importance of labor cost advantage in production and will make it even more difficult for India to provide jobs for its workforce going forward.

Then there are sector-specific issues often compounded by poor domestic regulations (pharmaceuticals and textiles, for instance) and short-term focus (information technology), which have forced top firms to cut jobs. Real estate, another top job creator, is suffering from a particularly bad slowdown, and the implementation of a diluted version of New Delhi's Real Estate (Regulation and Development) Act, or RERA, by state governments is unlikely to restore home buyers' interest in the industry.

The Indian government's attempt to hike minimum wages often delinked with labor productivity is hurting the prospects of labor intensive sectors such as apparel, footwear and leather goods.

DEMOGRAPHIC DIVIDEND OR DISASTER?

In the long term, economic growth is a function of the total number of workers and their average productivity. Although the number of workers are growing, labor productivity in the country is near stagnant, as most of them are employed by the informal sector. Moreover, the number of unemployed people is increasing every day.

Jobless growth is the biggest future risk to India's political and social stability, especially since financing a basic income program,such as the one being tried in Finland, would be fiscally too difficult for India.

And going forward, the failure to address the skill deficit by providing adequate and relevant education, skills and training can greatly impact India's economic future, especially as it poses a big challenge for existing and potential investors looking to expand their presence in India.

THE WAY FORWARD

To improve the employability of graduating students, educational institutions need to coordinate with corporates in designing course curriculum. Massive Open Online Courses and other short-term online courses and certifications could be equally helpful in skill upgrade of existing and potential employees and should be promoted by the government.

As the population growth rate differs from state to state, encouragement to interstate migration—such as from poorer states to richer states—can solve the twin problem of the shortage of workers in southern parts of the country and relatively excess supply of workers in northern states such as Bihar and Uttar Pradesh.

This article first appeared on BRINK Asia on January 19, 2018.

ECONOMY

EVADING M&A RISKS IN EMERGING ASIA

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In recent years—and particularly since the global financial crisis—robust economic growth in emerging Asia has led to increased investment in the region (barring in 2016), resulting in a flurry of merger and acquisition (M&A) activity.

However, foreign investors are still faced with a considerable degree of risk, which they need to be cognizant of when investing in Asia, despite a general improvement in the regulatory and transparency landscape.

It is critical to identify the risk in an emerging market compared to a developed market. The risk-adjusted return is better in developing markets and is a critical aspect for any investor; it's vital to identify such markets. These markets show signs of rapid growth and development coupled with low per capita income. The most important challenge for a foreign investor is finding the right balance not only between risk, growth and liquidity, but also taking into consideration factors such as cultures, languages, regulatory regimes, tax jurisdictions, labor pool, skill levels, governments, political issues, accounting rules, etc. Since developed markets are generally considered safer than emerging markets, these issues define the basis of any investment in emerging markets.

A FEW CONSIDERATIONS

Markets such as Singapore, much like Western markets, are mature and the due diligence process is fairly streamlined. Most target companies know what to expect, and if the investor wishes to outsource the due diligence process, the right experts are available. Also, the accounting rules are in line with International Financial Reporting Standards (IFRS) for both public and private companies; and legal requirements are well documented and easily accessible to investors.

In emerging markets such as Malaysia and Indonesia, the due diligence process could face challenges on a few aspects. They include accounting, legal and regulatory, commercial, and language and culture, among others. Malaysian public companies follow accounting standards in line with IFRS and private companies follow standards in line with IFRS for SMEs. Similarly, Indonesian GAAP (Generally Accepted Accounting Principles) has adopted IFRS but with some time lags for updates. Indonesia as its own valuation standards and requirements. These are some things to be prepared for from an investor's perspective.

Frontier markets like Vietnam still use their legacy standards for accounting. It is also a country with one of the highest costs of debt and one of the highest country risk premiums. Sometimes, Vietnam is also plagued with labor strikes, which can cause significant disruption to business. Elsewhere, Myanmar has recently introduced an older version IFRS for public companies. However, the economy is still evolving their business processes, financial systems, accounting standards and regulatory requirements, and, these aspects are rapidly changing for the better. An investor doing due diligence will need to spend more time and effort in the process to understand these issues and the impact they will have on investment.

The lack of protection and transparency leads to corruption. The ASEAN Business Outlook Survey 2016 report on corruption in Southeast Asia shows that less than 15 percent of respondents are satisfied with the lack of corruption in eight of the 10 Southeast Asian countries. The two exceptions are Singapore, which has a very high score of satisfaction, and Brunei.

A few of the nations have set up strong anti-graft commissions, which are making good progress. However, this is undermined when we look at some high-profile scandals worth billions of dollars that have happened in the recent past. This is not just a Southeast Asian phenomenon. Most emerging and growth markets have similar issues, albeit possibly at a different scale. An investor needs to weigh the risk of such issues against the various benefits and opportunities that the deal would offer and make a balanced decision.

Some of the issues around transparency can be addressed or mitigated somewhat. This can be done through checks and controls in the purchase agreements, which can make vendors liable for any lack of disclosures at the time of doing the deal or prior to signing.

INDIA AND INDONESIA REMAIN ATTRACTIVE

There are, however, a few emerging economies that have made progress in terms of corporate governance requirements and transparency. India continues to attract international investors for reasons beyond the attractive growth rate and the affluence of the burgeoning

To attract investors, emerging Asia should focus on regulatory, transparency and infrastructure-related reforms.

middle class. The initiatives the current government has taken are bringing benefits and resulting in increasing capital inflow to the country. The fundamentals of the economy remain compelling; making room for interest rate cuts would help extend India's position as the go-to place for investing among the emerging markets in Asia.

In India most of the capital inflows over the past couple of decades have been toward services, retail and real estate. However, Indonesia appears to be emerging as an alternative to China in the manufacturing and industrial space. The slowdown of global demand and potential change in export-import philosophies of leading economies may have an impact on the Chinese economy. Indonesia, then, becomes an attractive alternate investment area given its reduced reliance on external demand.

However, these geographies still have some way to go toward increasing investor confidence in terms of corporate governance requirements, transparency and protection.

MINIMIZING RISK IN DEVELOPING ASIA

Over the years, the focus has primarily been on emerging markets for higher returns. Investors are looking for risk mitigation strategies, such as investing in developed market companies, but are also increasing their presence in emerging markets. This adds value to them as a tangible advantage because they can avoid paying a higher multiple for investing in emerging markets. Yet, they can profit from rising valuations of those multinational companies investing in such emerging markets.

Emerging markets are subject to various kinds of risk such as political risk, credit risk and market risk, among others. A company with issues related to shareholder rights, accounting principle and transparency can be volatile to fluctuations in the above parameters.

Investors need to weigh the pros and cons of an investment proposition and arrive at a balanced decision, especially where risks can be mitigated through checks and controls built into sale and purchase agreements, such as clauses that set out certain rights and indemnities that hold vendors liable for the lack of disclosures prior to signing.

Conducting due diligence in a thorough manner also helps to identify gaps and risks from both the legal and commercial fronts. This gives investors the chance to seek legal advice and take precautions that can protect them from misrepresentation or the lack of knowledge. In addition, it is important to carefully examine the corporate governance of the company.

Southeast Asia as a region is the 7th largest economy in the world, with a market potential of over $2.5 trillion and a relatively young population of over 640 million. While the market is huge, it is largely untapped, and emerging countries such as Myanmar, Indonesia and Vietnam are leading the pack in attracting investor interest.

Given that much of the fund flow would come from mature/stable economies, emerging Asia would benefit from focusing on regulatory, transparency and infrastructure-related matters, as these have traditionally been the areas that have lacked focus and kept investors away.

The views expressed in this article are the author's and not of Duff & Phelps.

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SOCIETY

ROBO ADVISERS: WHY NO MASS ADOPTION YET?

Subhajit Mandal
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long-term investment portfolios for savings and who previously didn't invest anywhere.

Proxy data points on the amounts saved in 401(k) accounts do not point toward a bright inference. In total, the three top robo advisers in U.S.—Betterment, Wealthfront and Charles Schwab—have about $35 billion in total assets under management, and their year-on-year increase is dwarfed by the year-on-year increase in the amount of 401(k) contributions. A possible inference from this data point is that robo advisers have not led to drastic behavior change and have not effectively got consumers to start saving.

There are now several robo advisers around the world and particularly in the U.S., where the trend started. Increasingly, we are seeing robo advisory firms pop up in Asia (see Exhibit 1, next page) as the region's startups and financial institutions start jumping on to the fintech bandwagon.

Many see robo advisory as an industry with the promise of bringing about a change not just in terms of how wealth is managed, but also behavioral change in terms of getting erstwhile non-investors to start investing, perceivably at the proverbial click of a button. Yet, collectively, how effective have all these robo advisers been in this regard over the past decade?

The effectiveness of robo advisers should be measured by the number of new consumers who have started

EXHIBIT 1: ROBO-ADVISORS AROUND THE WORLD (AS OF 4/17/17)
Source: CB Insights

THE RESEARCH

Why haven't robo advisers gained mass adoption? A series of 40 one-on-one interviews conducted by the author with consumers in India revealed some interesting insights.

Based on the interviews, a new framework (Exhibit 2) was developed to assess consumers. An average consumer can be placed on a scale of financial savviness vis-à-vis willingness to invest.

Those ranked low on the "financial savviness" spectrum (x-axis in Exhibit 2) have little to no idea about investment avenues such as stocks/equities and bonds, for example. Those at the middle of the band may know what equities are, but their understanding of investment avenues such as exchange-traded funds is low to nonexistent. And finally, those who rank high along this spectrum (zones 3, 6 and 9) have a thorough understanding of ETFs, fixed income and equity indices. Their understanding of personal money management—for example, how much of their savings should be held for emergencies, residential mortgages, and fixed income and equities, is high.

Similarly, those at the lower end of the "willingness to invest" spectrum (y-axis in Exhibit 2) will only put money in the bank and not into anything else. Being safe is their main mantra. Move upward along the scale, and there are consumers who are ready to allocate money to somewhat riskier assets such as real estate and gold. And finally, those who are already investing in riskier assets lie further along the spectrum (zones 7, 8 and 9).

EXHIBIT 2: CONSUMERS' WILLINGNESS TO INVEST VIS-À-VIS FINANCIAL SAVVINESS

THE FINDINGS

Consumers in zone 9 just want to maximize returns on their investments. They either manage their own finances or work with trusted financial advisers. They tend to be in the early to middle parts of their careers. If they are young (early 20s), then they come from a family whereby investing is a part of the family's history, and hence they are comfortable with investments and have been financially aware since their teenage years. There are a sufficient number of services within existing banks and brokerage companies to cater to their needs. Innovation in this zone is centered on helping these people make better investment decisions through comparison websites such as MarketWatch, crowdsourcing research such as ZeroHedge, crowdsourcing trades such as eToro, or through lower costs (ETFs).

At the other end of the spectrum, those in zone 1 are both not very financially savvy and have a low willingness to invest. The research found the reasons for this can be manifold—bad experiences with investments among family members leading to the perception that risky investments are "bad," possibly the lack of adequate disposable income, the wrong perception of high capital requirements to start investing, or the lack of a willingness to know or find out more to invest.

The inability of robo advisers to move consumers from zone 1 to zone 9 is what is resulting in the lack of mass adoption of robo advisory in Asia and around the world. One of the key factors that can lead the move of people from low financial savviness to high financial savviness is education.

That said, there are sufficient means—including friends, families, colleagues, financial advisers, the Internet—to help people increase awareness of investment options and to understand personal money management. Yet, the move toward becoming more financially savvy is slow. This could simply be a matter of intent. It must be borne in mind, however, that a move along the x-axis is also dependent on a consumer's position on the y-axis.

CHALLENGES IN MOVING UP THE 'WILLINGNESS TO INVEST' AXIS

There are a variety of reasons consumers are not willing to invest:

Category 1. They feel they don't have enough capital to start investing. Sometimes this is correct, but often this is a misplaced notion.

Category 2. Individuals have a negative emotional bias owing to the poor experiences of family and friends who may have lost significant savings in the stock market, for example.

Category 3. They feel that they are not ready yet.

Category 4. A lack of interest or desire to know more.

There are many solutions to help people in category 1. For example, among the consumers we interviewed, some thought that one needs a minimum balance of capital to begin with, but that is not true anymore.

Converting people in category 2 is difficult, given that subconscious biases can only be addressed through data. There is a possibility of change when they see friends or families getting good returns from their investments, and that can trigger a change in view.

People in category 1 and category 2 usually do not move along the axes of financial savviness because they don't feel the need to do so unless they overcome their misconceptions and/or biases.

To cater to people in category 3, there are a lot of mock trading/investing apps that can help people feel comfortable trading with mock money and live market data, with the hope of getting them to move up the axes.

THE OPPORTUNITY

In my view, the big area where innovation is lacking and where we could see a real change is in category 4.

Here, firms need to help potential customers shake off their ambivalence and get them to take the first step toward investing. Doing so can help robo advisers become more effective, where effectiveness is measured not in terms of returns or the amount of capital managed, but in terms of actually growing the universe of individuals who are investing.

The expectation that making investing possible with the proverbial "click of a button" will result in more people investing has not really come to fruition. Rather, behavioral change is required for this category of consumers, and bringing that about is challenging. But robo advisory firms need to find triggers that can get individuals to start investing. Owing to the lack of a sense of urgency and consumer bias for instant gratification, it is hard to find such triggers.

The robo adviser who finds a trigger to change behavior will unearth the holy grail of robo advisory business models.

This article first appeared on BRINK Asia on December 20, 2017.

SOCIETY

BOOMING HEALTH CARE INDUSTRY IN INDIA IS NOT ALL GOOD NEWS

Employee Health & Benefits at Marsh India

The growth of India's health care sector is being driven by a rise in both infectious and chronic diseases. Chronic diseases have overtaken infectious diseases in terms of morbidity and mortality data.

Some communicable diseases once thought to be under control, such as dengue fever, viral hepatitis, tuberculosis, chikungunya, and pneumonia, have resurfaced and developed a resistance to more potent drugs. This troubling trend can be attributed in part to substandard housing, inadequate water, inadequate and inefficient sewage and waste management systems, a crumbling public health infrastructure, increased air travel and movement of populations across borders.

THE NUMBERS

An increasing number of Indians are now adopting unhealthy lifestyle habits and consuming diets that are high in fat and sugar. The country is experiencing a rise in lifestyle-related diseases such as hypertension, cancer and diabetes. More so, due to demanding schedules, high stress levels and performance-linked perquisites in the private sector, nearly 85 percent of employees in the private sector are afflicted with lifestyle-related, chronic diseases. For example, India is the world's second-largest consumer of tobacco, resulting in high rates of cancer, including the largest numbers of oral cancer in the world.

According to a survey of 1,250 corporate employees across

150 companies, 42.5 percent of respondents suffer from depression or general anxiety. Obesity is the second hard hitting disease that was observed in 23 percent of the respondents. Obesity alone can adversely impact occupational morbidity, mortality and injury risks that can further affect workplace absence, disability, productivity and health care costs. High blood pressure and diabetes are the third- and fourth-largest prevailing diseases with shares of 10 percent and 8 percent respectively. Spondylosis, heart disease, cervical, asthma, slip disk and arthritis are other common diseases among corporate employees. Two percent of the capital spent on workforce is lost to disability, absenteeism and poorer attendance arising from chronic diseases.

HOW ARE ORGANIZATIONS RESPONDING?

Increasingly, employers are recognizing that chronic diseases are a growing threat to their employees. As a result, employers are looking at ways to reduce health care costs of employees while creating a culture of health. Chronic health problems have something in common apart from their devastating effects: Many of them are preventable.

Surveys show that human resources (HR) managers are now offering preventive health care services to employees. However, most of these are offered on an ad hoc basis—for example, gym memberships, annual health checkups, healthy eating at workplaces, weight loss programs and health talks. Such programs have little or no impact on health risk mitigation and hence do not provide corporates with a sustainable strategy toward cost containment.

HR professionals are also not making a concerted effort to collect and integrate data points from multiple sources that can help measure baselines and thereby outcomes.

A few targeted programs, such as cancer care, diabetes prevention programs and pregnancy care programs, have been successful. Concepts such as having live interactions with celebrity fitness icons/life coaches have helped to increase engagement, for instance. Certain programs, when delivered at home and when they involve spouses and partners, have shown positive outcomes.

Some of the program formats may be offered earlier, but just by enhancing the delivery model by means of a web portal or mobile app can make the engagement far deeper and, in the process, ensure a higher uptake because of the ease of use and navigation.

For example, a nutrition management program offered through a team exercise of a cooking competition, where a farmer's market is created for employees to purchase their own ingredients and score on criteria like caloric count, presentation, nutrition value and the like, can make such exercises far more enjoyable and engaging.

Another important touchpoint is the on-site clinic/medical center, usually implemented to comply with occupational health and labor regulations. Due to the focus on occupational health, on-site clinics are not connected with other health and wellness strategies offered to employees. Currently this is being underutilized, offering only primary care, and corporates are not analyzing any data that is recorded here. Clinics could become a hub of all health and wellness needs and deliver far more value to employees.

Increasingly, employers are recognizing that chronic diseases are a growing threat to their employees.

STEPS TO TAKE

Creating an impact on outcomes and risk reduction requires more behavior modification programs that can be sustained over the long term. These programs need to be visualized as an investment to cap costs and not as an increase in the health care spend for companies.

HR professionals should commit to pursuing and investigating the wealth of health and behavioral data available to help them determine whether to eliminate or refocus existing programs. They should also look beyond market studies and industry benchmarking. An effective health and wellness program must be targeted and relevant to an organization's workforce.

Health and wellness frameworks should be planned and customized in an integrated way that delivers on specific objectives. When programs are fragmented, their effectiveness diminishes or vanishes.

Additionally, leveraging data for better decision-making, maximizing spend for ongoing health care programs and creating a sustained health and wellness strategy will be the key focus for Indian companies in the years to come.

The need for employee wellness programs is further highlighted when viewed against the backdrop of the rising burden of noncommunicable diseases in India, which now account for 53 percent of total deaths.

Employee wellness programs are an economic imperative for companies and a strategic priority for India, given the heavy contributions of the private sector to the economy.

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ECONOMY

HOW CAN ASIAN PENSION SYSTEMS DEAL WITH AGING POPULATIONS?

David Knox
Senior Partner at Mercer Australia

Several Asian countries received the lowest ranking in a report on the sustainability of their pension systems.

Countries in Asia with unsustainable pension systems need to take action now to avoid having to take drastic measures in the future. This is the stark warning from the latest Melbourne Mercer Global Pension Index.

There are two major challenges that retirement income systems across the world face: increasing life expectancies and low investment returns. These pressures have alerted policymakers to the growing importance of intergenerational equity issues.

Japan, Austria, Italy and France are examples of developed countries where pension systems don't represent a sustainable model that will support current and future generations in their old age. If left unchanged, these systems could create societal pressures where pension benefits are not distributed equally between generations.

LEARNING FROM OTHER PENSION SYSTEMS

While comparing pension systems around the world isn't straightforward due to economic, social, cultural and political differences, this doesn't stop countries reviewing the best models and using some of the desirable features in reforming their own systems.

The Melbourne Mercer Global Pension Index uses three sub-indices—adequacy, sustainability and integrity—to measure each country's retirement income system against more than 40 different indicators. This study of retirement income systems in 30 countries reveals that there is great diversity between the highest ranking (Denmark at 78.9) and the lowest (Argentina at 38.8).

The index reveals that for 2017, Denmark retains its top position for the sixth year in a row, just beating the Netherlands (78.8) and Australia (77.1).

The highest rating band in the index is A, although no country achieved this status. The next ranking is B+ (a value of 75-80), which was given to Denmark, the Netherlands and Australia. The highest-ranking Asian country is Singapore, which earned a B rating with an index value of 69.4. This band covers a scheme that has a sound structure, with many good features, but has some areas for improvement, which is what differentiates it from an A-grade system, according to the index.

Malaysia has the second-highest-ranking retirement income scheme among Asian nations with a value of 57.7, falling into grade C along with France, the U.S., Italy and Brazil. However, Asian countries dominate the lowest-ranked grade D, with Indonesia (49.9), South Korea (47.1), China (46.5), India (44.9) and Japan (43.5) all included in this category, which covers a scheme that has some desirable features but also has major weaknesses and/or omissions that need to be addressed. Without these improvements, its efficacy and sustainability are in doubt. The average index value across all countries is 59.9. Only Singapore scores an above-average value among Asian countries.

NOT JUST AN ASIAN PROBLEM

Longer life expectancy and declining birth rates lead to rapidly aging populations. As a result, this trend is having a significant impact on the resources of pension schemes. Aging populations are proving to be a major challenge for most countries, with Asia among the worst regions affected.

As people live longer, the greater the financial pressure on pension schemes to provide benefits for them. To highlight these pressures, we have looked at the gap between life expectancy at birth and the state pension age. The state pension age is a useful benchmark as it guides many retirement decisions. We also look at the projected gap, fast-forwarding two decades ahead. This prediction is useful as it highlights the impact of aging populations between now and 2035 and the likely effects on funding requirements for pensions.

The current average gap ranges from 3.7 years (South Africa) and 9.9 years (India) at the lower end to 21.4 years (South Korea) and 23.5 years (Japan). Looking at future projections for 2035, the gap ranges from 7.3 years (South Africa) and 9.6 years (Indonesia) at the lowest points to 22.6 years (China) and 22.8 years (France) at the highest. Every country has a current difference between life expectancy and state pension age of less than 23 years, with one notable exception—Japan. A number of improvements have been recommended for Japan's system such as further increasing the state pension age as life expectancy continues to rise.

By looking at the old-age dependency ratio for 2035, we can see the effects of aging populations and low fertility rates on the working population in the future. The projected dependency ratios for 2035 range from 11 percent in South Africa to 57 percent in Japan, revealing a very wide divergence. Fertility rates are also important as they indicate the number of young people joining the workforce in future years. The lowest total fertility rates in the survey belong to Asian countries—South Korea and Singapore both have a rate 1.23. The highest fertility rates are Indonesia at 2.45 and South Africa at 2.55. A TFR of less than 1.5 raises serious issues for the future age structure of these countries. While immigration can be a short-term solution, it is not sustainable in the long term.

REFORMS NEEDED SOONER RATHER THAN LATER

When it comes to improving each country's retirement income systems, there are some common recommendations as many economies face similar problems in the decades ahead; namely, aging populations. There are a range of reforms that can be implemented to improve the long-term outcomes of weaker systems.

They include increasing the state pension/retirement age to reflect increasing life expectancy and promoting higher labor force participation at older ages, which will increase the savings available for retirement. Additionally, higher levels of private savings within and beyond the pension system should be encouraged. Increasing the coverage of employees/self-employed in the private pension system is an important pillar too. Finally, leakages from the retirement savings system prior to retirement also need to be reduced.

This article first appeared on BRINK Asia on December 5, 2017.

MEDICAL TOURISM IN ASIA-PACIFIC GROWING RAPIDLY

Bart Van den Mooter
Principle & Founder of TforG—an IQVIA company

Asia-Pacific is the fastest-growing region in the global medtech market. This growth is fueled by public health care reforms, but even more so by the rapidly expanding private sector and with medical tourism, a connection not often made when the booming medtech market is talked about.

In most Association of Southeast Asian Nations countries, medical tourism represents a third or more of private hospital revenues. With every country looking to extract a piece of this pie, competition between countries and hospitals is intensifying.

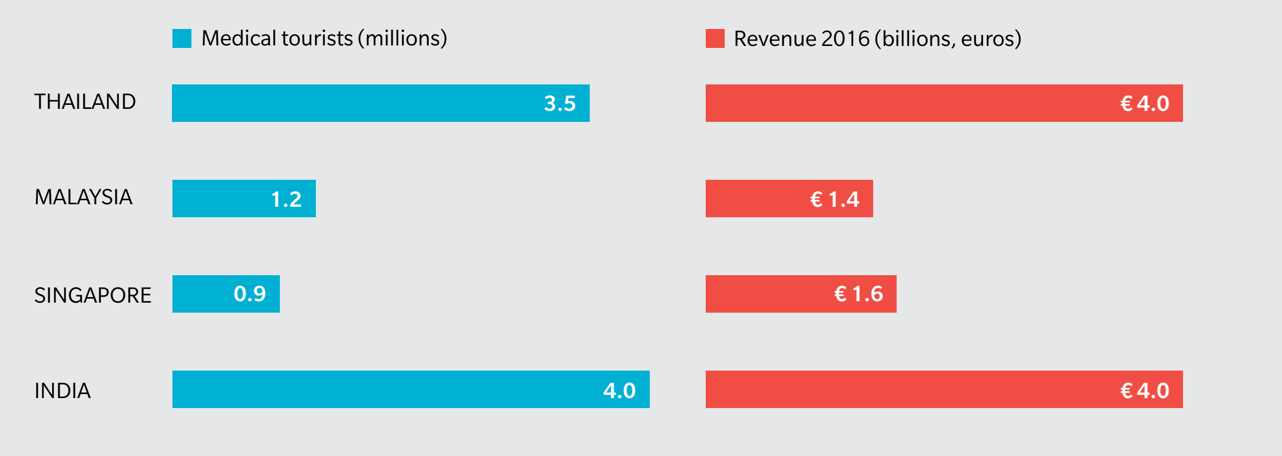
HOW BIG IS MEDICAL TOURISM?

In 2016, between 105 and 120 million medical tourists traveled abroad to seek health care services. This number is expected to grow by 10-14 percent annually in the coming three years. Worldwide medical tourism generated 150 billion euros ($177 billion) in 2016 and is expected to grow to 200 billion euros by 2020.

The Southeast Asian health care market is expanding faster than in other regions, especially driven by the private sector and, notably, medical tourism. Foreign patients are a major revenue generator for private hospitals in the region. Their share represents 40-55 percent of the private hospitals' revenue

SOUTHEAST ASIA MEDICAL TOURISM 2016

Source: TforG



in countries such as Singapore, Malaysia and especially Thailand. In India, medical tourism accounts for 25 percent of revenue, and in the Philippines, South Korea and Taiwan, it accounts for 10-15 percent of revenue.

In 2016, the medical tourism sector in Asia-Pacific accounted for 10 million patients and 15-17 billion euros in revenues. For instance, India attracted more than 4 million medical tourists in 2016, generating around 4 billion euros in health care revenues. Similarly, in Thailand, which has perhaps the most advanced medical tourism sector, 3.5 million foreign patients spent more than 4 billion euros on health care in 2016. In Singapore, medical tourism accounted for almost 1.6 billion euros with close to 900,000 patients in 2016.

The sector will continue to grow 15-17 percent annually for the coming three years.

IMPACT OF MEDICAL TOURISM ON MEDTECH

Due to fierce competition, private hospitals in the region regularly upgrade facilities and increase capacity. Recently, the sector has started attracting more international hospital groups and investors seeking to enter this lucrative market.

Countries seeking to develop medical tourism are teaming up with large multinational players (for example, Mayo Clinic with Raffles Medical Group in Singapore, Cleveland Clinic Abu Dhabi, John Hopkins Singapore and Anadolo Medical Center in Turkey). While increasing competition between the care providers is leading to differentiating investments and services, it is also leading to increased cost pressure and dilution in quality of health care.

The growth of medical tourism in Southeast Asia obviously impacts the medtech market segment. Southeast Asia and India together represent more than 50 billion euros, or more than 10 percent of the global medtech market, and are growing faster (7.5 percent) than any other region in the world.

Market dynamics in the health care tourism segment impact the providers of medical equipment and devices in terms of product offerings and customer services. It also creates new opportunities for global as well as local medtech companies. With recent trends, there has been a shift to more day-care and ambulatory procedures in order to deal with staff shortages and cost-effectiveness.

There is also an increased need for telemedicine and e-health to improve the continuum of care. In recent times, medtech companies have increased group purchasing and central warehousing and are also offering innovative IT-based and value-chain solutions to improve or defend their competitive advantage. They are also shifting from product-focused offerings to customized value-based solutions.

WHAT FUELS MEDICAL TOURISM IN SOUTHEAST ASIA?

There are a variety of reasons why the medical tourism market has taken off in the region and continues to grow.

PUSH FACTORS

Wealthy patients in emerging countries seek high-quality care in high-standard settings, which medical tourism destinations can offer. Middle-class and underinsured patients in developed countries feel disenfranchised by their national health care systems, which are often plagued by long waiting times for treatments. They shop outside the organized medical system to find services that are affordable, timely or simply available.

Healthcare insurers motivate patients to seek more cost-effective medical provisions outside their home countries, and the usually lower cost of medical treatment in medical tourism destinations is an obvious attraction.

Moreover, national health insurance in developed countries does not typically cover some types of care, such as cosmetic surgery and dental care.

PULL FACTORS

Triggered by the opportunities of medical tourism, governments actively promote their countries and hospitals for patients shopping for health care services. Health care providers deploy referral systems to attract patients, and service companies offer innovative products to guide patients in their choice of country and hospital. To meet this demand, entrepreneurs are building technologically advanced facilities using foreign and domestic capital. They are hiring physicians, technicians and nurses trained to international standards, and where qualified personnel are not available locally, they are recruiting expatriates. Additionally, new service providers in these markets are also offering state-of-the-art health care technology for patients.

The increasing affordability of international air fares for intercontinental travel has also played a role in supporting the growth of the regional medical tourism market.

Finally, many nations in the region regard medical tourism as a resource for economic development; for instance, the ministries of Tourism in Thailand, Malaysia and India have been aggressively and fiercely promoting medical tourism in their countries. In the same vein, private hospital chains and investors perceive medical tourism in Asia-Pacific as an attractive business opportunity and invest in infrastructure, equipment, staff and services.

PRIMARY CHALLENGES

The market is not without its challenges. Chief among them are:

Political stability. Political stability is a requisite to draw any international tourists, irrespective of whether they are traveling for leisure or medical treatment. For instance, political unrest in Thailand and in some Malaysian provinces had an impact, albeit temporary, on medical tourism in these countries.

Staff shortage. The volume of adequately trained clinical staff (doctors and nurses) can hardly keep up with the growing numbers of medical tourists and the level and quality of care they expect. Hospitals hire physicians abroad or collaborate with western hospitals to deal with the shortage. At the same time, they review their operational processes and invest in equipment and solutions that impact the productivity of the hospital.

Competitiveness and cost pressure. The increasing number of hospitals and investors offering global health care services creates in competition between countries, often resulting in price wars that can potentially dilute the quality of health care provided.

The medical tourism market in ASEAN is in the midst of a boom, and this is impacting the medtech market, among others. For stakeholders that can mitigate these and other operational challenges, the opportunity is abundant. Much of their success, however, will depend on how governments and the private sector can work together to create a conducive medical tourism ecosystem.

This article first appeared on BRINK Asia on November 3, 2017.

SOCIETY

NAVIGATING HR CHALLENGES IN INDIA

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India is one of the world's fastest growing major economies, recent concerns of a slowdown notwithstanding. India is also home to a young population, and it is expected that by 2020, the average age in India will be 29. Should the current rate of population growth continue, India would overtake China to become the most populous nation by 2050. The millennials and Generation X demographics dominate the Indian workforce, with 98 percent of working individuals belonging to these generation segments.

While it is popularly called out as a "demographic dividend," it also implies that economic growth and resulting job creation need to serve the needs of the millions of new graduates entering the workforce each year. The situation has been exacerbated by the rapidly evolving skills requirements that come with the advent of new technologies. Additionally, the curricula in most higher-educational institutions have not kept up with this evolution. We hope that the government will proactively take steps to address the burgeoning gap through broad-based reforms in education and focus on better partnerships between the academia and the corporate sector.

According to Mercer Talent Trends 2017, in India, jobs in the next three years will focus more on design and innovation, and as more jobs will be done virtually, salaried workforce will primarily be in management roles, with much broader spans of control. As India Inc. welcomes five generations in the workplace and embraces the shifting nature of jobs, it will be critical how HR professionals manage to attract and retain today's talent, while striking the right balance and finding a sustainable way to build capability for the future.

SHIFT IN WHAT INDIAN EMPLOYEES VALUE

Mercer Talent Trends 2016 showed that an Indian employee valued "focus on learning" as the most important aspect of the employee value proposition. However, in 2017, the focus has shifted to "pay and promotion," signaling a shift to what a younger workforce demographic typically values.

Ninety-three percent of Indian employees want to be recognized and rewarded for contributions beyond their role definitions. They also seek greater clarity on performance ratings and periodic constructive feedback.

With the wide adoption of technology, 54 percent of workers want their organizations to offer more flexible work options. Health and wellness are also accorded high priority—54 percent of employees want their employers to focus on this aspect by way of offering compelling benefits. While the baby boomers and traditionalists sought the comfort of long-term careers, the younger workforce in India would

EMPLOYEE SAY "WHAT WOULD MAKE A POSITIVE IMPACT ON YOUR WORK SITUATION?"

Source: 2017 Mercer Talent Trends – India

1. Opportunity to get promoted
2. Working with the best and brightest
3. Leaders who set clear direction
4. Compensation that is fair and market-competitive
5. Career path information
6. Access to better internal learning content
7. More feedback on performance from managers

Career growth, work environment, leadership matter!

"HOW IS HR PRIORITIZING?"

prefer to have the liberty to navigate their own careers.

Seventy percent of workers would rather work on a contractual basis, resonating with the global rise of the gig economy. Per the employees surveyed, a few key areas that would make a positive impact on their work are represented above.

EMPLOYEE FLIGHT IS A REALITY

In the two decades that followed India's economic liberalization since the early 90s, robust job expansion and greater-than-inflation wage growth has meant that the employees in general were more engaged at the workplace. However, with increasing automation and the shifting nature of jobs, there may be an increasing sense of disenchantment with the traditional full-time model.

In 2016 there was a 16.4 percent average annual attrition rate. The turnover rate is higher in roles in high demand, such as sales and data science. This can perhaps be attributed to those 20 percent of employees reporting that they do not feel empowered to create their own success at work. Furthermore, a staggering 60 percent of employees are likely to change jobs within the next 12 months.

Thirty-three percent of companies have instituted a retention bonus policy. This policy is aimed at specifically retaining special skills and retaining employees with flight risk. More can be done by companies in India with respect to creating compelling career paths for employees. For example, providing employees with a skills development and learning roadmap, which would enable them to fulfill their career aspirations.

ADDRESSING HUMAN RESOURCE CHALLENGES

Evidently, India's enormous labor force presents diverse HR challenges, and for HR teams to be future-ready, organizations must adapt to changing trends.

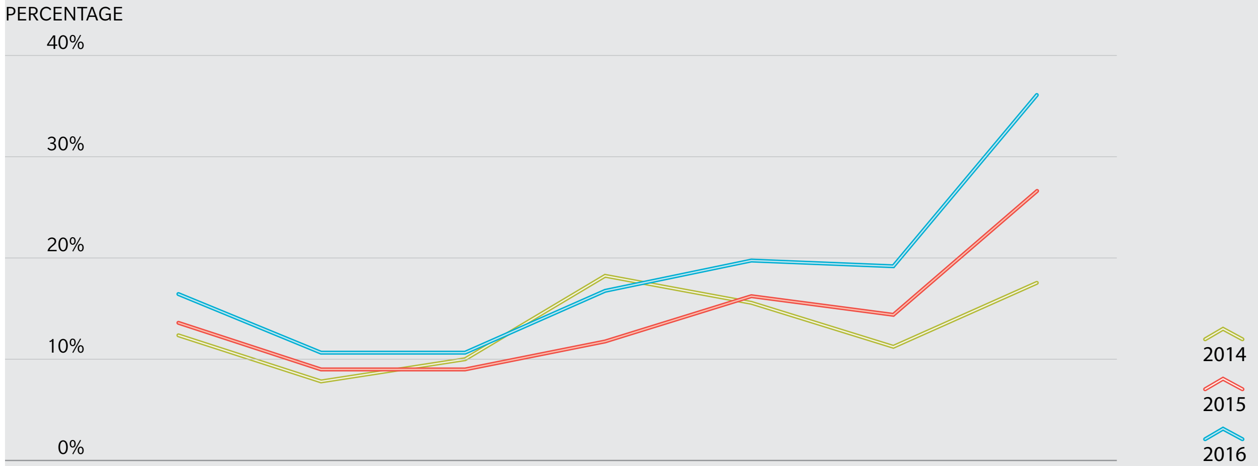
Facilitate a culture shift. Organizations must recognize the need for a fundamental cultural shift in order to prepare for digital disruption. The people strategy and talent interventions have to be evidence-based, using workforce analytics and closely linking to business outcomes. As organizations prepare to be more customer-centric and agile, HR as custodians of culture have to drive a shift in employee mindset so that employees feel more empowered and energized about their work.

Transform the organization. HR teams must partner with business strategically. In doing so, they must nurture and develop leaders for the future, grooming them into future leaders with the skills to take on ever-changing business environments. Strategies that could be implemented include: cross-functional or cross-geography experience; global exposure; customized career plans; rotational stints; mentoring and coaching; and high-impact action learning projects.

Associated costs must also be closely monitored to maintain adequate checks and to bolster growth. Buying talent by paying above the market is no longer sustainable, and therefore HR professionals have to focus on a combination of build and buy strategies to bring in the skills needed to make their organizations

AND WE ARE LOSING PEOPLE

Source: Mercer TRS 2016



	All industries	Chemical	Auto	Consumer	MLS	High Tech	SSO
2014	12.6	8.2	10.1	17.6	15.8	11.2	17.8
2015	13.3	9.2	9.3	11.9	15.9	14.4	26.2
2016[1]	16.4	10.2	11.0	16.6	20.0	19.0	35.8

1. Annualized
Based on average figures
2016 numbers are annualized

future-ready. In this regard, 54 percent of Indian CEOs are likely to transform their organizations into significantly different entities over the next three years.

Know your talent. Each generation has a different requirement, and a deeper look at generational preferences outlines varying total rewards priorities for each. Organizations must ascertain what motivates this multigenerational talent. They must also design and maintain an engaging rewards philosophy and leverage on data analytics to attract and retain talent. To this effect, 85 percent of Indian CEOs are planning large investments on data analytics tools. Companies are currently tracking a) workforce metrics such as turnover, demographics, attraction and retention; and b) organizational efficiency metrics such as financial impact and cost efficiencies.

HR may also like to start tracking employee development, manager efficiency and succession planning.

GEARING UP FOR THE FUTURE

In view of the multiple challenges, human resource departments in India face a daunting task. Navigating through these challenges requires organizations to be responsive, agile and innovative. There may be significant opportunity for the HR function to focus on its own capability development, by way of becoming more comfortable with the use of data analytics and new technologies. HR professionals will need to have a much deeper understanding of the evolving business models and implications of digital disruption on people strategy.

With profitable growth as the new "mantra," double-digit salary growth may not always be feasible. And therefore building a more compelling employee value proposition, based on the rewards philosophy and the business model will be crucial. To drive engagement and productivity among the young millennial workforce will require innovative talent practices, based on a deeper data-led understanding of what different employee populations seek and what drives them.

This article first appeared on BRINK Asia on October 19, 2017.

TECHNOLOGY

HOW THE IT SECTOR IS IMPACTING INDIA'S REAL ESTATE

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The Indian IT sector is going through a structural transformation—and the causes and impacts of this shift are multifold.

India's commercial real estate market is increasingly driven by the information technology sector, which is currently undergoing a number of major disruptions.

H-1B VISA ISSUE

Proposed U.S. legislation restricting H-1B visas is likely to impact global corporations, causing them to hire Americans over Indians in the U.S. and downsize their expansion plans in India.

For those impacted by the proposed changes, we expect a certain degree of reverse migration to India. Given their skill set, this could contribute significantly to the startup culture in India, which would boost demand for office space from this segment in the medium to long term.

ADVENT OF NEW, INNOVATIVE TECHNOLOGIES

The onset of the Fourth Industrial Revolution is becoming apparent in India, thanks to the strength of the IT industry. With innovative technologies such as artificial intelligence, big data, cybersecurity and cloud computing being adopted by corporations, back-end and regular business processes are becoming increasingly automated.

The rate of growth in IT is increasingly dependent on the adoption of new technologies, as well as finding the right talent to operate such technologies. Data analytics is also emerging as a key factor in determining how technology can be leveraged to improve business operations.

Employee displacement caused in the short term could be covered by the creation of new jobs due to the adoption of innovative technologies. This is likely to boost office space leasing in the medium to long term, particularly from the knowledge-based, software and research and development segments.

GROWTH SLOWDOWN IN TRADITIONAL IT SECTOR

India's traditional IT sector is going through a phase of evolution, with corporates becoming cautious about future expansion. The slowdown in this sector is temporary, but it is likely to result in select corporates deferring their real estate decisions. Stringent evaluation processes have also resulted in a marginal contraction of their future hiring needs.

Most IT companies hire on a "bench-strength" basis, with potential employees only coming on board as required by projects. Therefore, we expect them to be innovative about their office space requirements, with rising demand for shared/flexible office spaces expected going forward.

NEW SECTORS, NEW OPPORTUNITIES FOR INDIA

Given the scaling up of talent, India is moving toward a cost advantage not only in back-end processes but also in high-end processes that require a certain degree of talent. Consequently, various corporates in sectors such as manufacturing, engineering, financial services, investment banking and consulting are looking at ramping up their India operations.

CBRE expects that demand from corporates in these sectors will continue to rise in the medium to long term, especially for those based out of Europe, the Middle East and Africa and the Asia-Pacific region, as they continue to favor India as an outsourcing destination.

IMPLICATIONS FOR OFFICE SPACE DEMAND IN INDIA

While it is certain that the Indian IT sector is going through a structural transformation, the aligned causes and impacts are multifold. Potential impacts on the office real estate market in India include the following situations:

- Leasing activity from select corporates in the IT sector is anticipated to be marginally lower going forward. However, it is expected to be compensated by augmented demand from corporates of other industry segments such as banking, financial services, engineering and manufacturing, and consulting and research.
- As occupiers strive to achieve cost and space efficiencies, more consolidation-led deals are expected. As corporates consolidate, the release of secondary space in quality, investment-grade developments in core locations is likely to result in increased space options for occupiers. There could also be a rising inclination from select IT corporates to pre-commit space in order to save costs and address the short-term issue of limited availability of ready-to-move-in options.
- Given the impact of technology on all sectors, occupiers will continue to future-proof their portfolios. They are also likely to have a growing preference for flexible space solutions and lease terms, opting for shared office options such as co-working spaces.

This article first appeared on BRINK Asia on March 7, 2018.

ECONOMY

SOUTH AND SOUTHEAST ASIA'S INFRASTRUCTURE STEPS UP

Abhishek Dangra
Director in S&P Global Ratings' Asia Pacific Corporate Ratings

The South and Southeast Asia region (SSEA) is embarking on many of the world's most intensive infrastructure projects. To address power deficits and improve electrification, utilities are scaling up—with developing countries in the region expanding their airports, ports and highway networks.

The Asian Development Bank estimates that the South and Southeast Asia region will spend a total of $9.5 trillion on infrastructure between 2016 and 2030.

BIG AMBITION

So, as the region enters a critical period in its infrastructure development, what is the credit outlook for SSEA's infrastructure players? While the regulatory landscape differs between jurisdictions and sectors, the region's regulatory stability provides a stable outlook for most of the 24 S&P-rated infrastructure companies in the region. And, in this respect, we believe infrastructure companies based in Singapore, Malaysia, Thailand and the Philippines could feature among the most robust market participants.

The Asian infrastructure market remains characterized by elevated spending and ambitious plans. In this respect, India and Indonesia are leading the field. India's capital expenditure (capex) remains high as the country addresses its across-the-board infrastructure deficits, while Indonesia's infrastructure spending is expected to increase by 47 percent for our rated companies between 2018 and 2020, against the previous three-year period.

INDIA AND INDONESIA

Driving capital investment in Indonesia are state-owned enterprises (SOEs), particularly for electricity, toll roads and ports. The likes of electricity generator PT Perusahaan Listrik Negara and toll road operator PT Jasa Marga are scaling up operations to meet the government's development and gross domestic product growth targets. Yet, given that these are highly ambitious targets, our ratings already factor in the potential execution—namely delayed cash flows, higher capex or negative regulatory interventions—and financing challenges that projects may encounter.

Similarly, SOEs are the main players overseeing India's infrastructure upgrades. In particular, there is strong demand in transportation infrastructure. Disputes and payment delays in recent years have dissuaded the private sector from projects such as toll road construction. So, to compensate for muted private sector participation, the Indian government has significantly scaled up its roads and railway expenditure. Elsewhere, high investment in renewable generation also continues—helping the sector to become poised for strong growth, albeit from a low base.

SINGAPORE

Enjoying a proven and, in some respects, unique regulatory framework that allows returns on projects still under construction, Singapore's power spending will upgrade existing infrastructure while also addressing the grid's future requirements.

Singapore's government is expected to increase spending to upgrade the country's transportation infrastructure, too. Expenditure will be focused on modernizing ageing facilities, including the metro rail, and expanding the island state's airport and ports, thereby easing domestic and global trade. Among the marquee projects is the inter-country, high-speed rail network connecting Singapore and Malaysia, which remains in a planning phase. Meanwhile, we see moderate increases in capital spending, notably in the power sector. However, that may be where the similarities end: Both have divergent regulatory and competitive trends.

MALAYSIA AND THE PHILIPPINES

Malaysia recently retained its tariff schedule for utilities, which provides visibility over cash flows for the next two years.

By contrast, regulatory uncertainty continues in the Philippines—with tariff review delays lasting nearly three years. In turn, public-private partnerships, which were previously encouraged, have fallen by the wayside and have since been replaced by government-led infrastructure spending. The country thereby remains the region's wild card: Capex could increase drastically should the government succeed in implementing its $180 billion "Build, Build, Build" agenda, a spending plan equivalent to 7 percent of national GDP.

WIDENING CREDIT PROFILES?

Comprising highly ambitious and capital-intensive projects, SSEA's infrastructure pipeline is brimming. We expect average revenue growth for rated SSEA infrastructure and utilities to sit between 4 and 6 percent between 2018 and 2020.

Of course, with ambition comes some risk: For the region's biggest

There are unprecedented incentives for South and Southeast Asian governments to significantly support the burgeoning infrastructure sector.

spenders, India and Indonesia, cumulative capex for rated companies will exceed $25 billion by the end of 2020. Capex, therefore, is among the key determinants for credit ratings of the region's infrastructure companies.

As such, those companies boasting balance sheets able to withstand higher spending—or those operating in sectors with stronger regulatory controls—should see their credit profiles fare better. We would therefore expect companies in Singapore, Malaysia, Thailand and the Philippines to maintain stronger credit profiles and lower leverage than their Indonesian and Indian peers. Nevertheless, we expect Indian majors to deleverage due to rising cash flows; while sharp increases in capex could weigh on the balance sheets of Indonesian players.

As infrastructure gaps narrow, there is also a risk that credit profiles could widen. Divergent regulations by jurisdiction and by sector may leave highly leveraged companies vulnerable to regulatory surprises—not to mention other stresses, such as rising interest rates and lower-than-expected revenues.

Across the region, we believe infrastructure majors with ratios of debt to EBITDA (earnings before interest, tax, depreciation and amortization) in excess of 5.5 times could face financial pressure. This could place some of Indonesia's infrastructure majors in troubling waters: The average ratio of debt to EBITDA could rise above 6.0 times by the end of 2020. And, during the medium to long term, majors could also see risks from industry disruption and technological advancements, although these could result in opportunities too.

VERDICT

That said, the region's substantial infrastructure investments should support the SSEA region's growth and development. The emergence of a more supportive and consistent regulatory environment in the future can result in stronger infrastructure majors.

Given the increasing involvement of SOEs in developing infrastructure in these economies, there is an unprecedented incentive for governments to ensure the strength of both the infrastructure sector's supporting regulatory frameworks and the financial health of market participants. It follows, then, that strong regional infrastructure majors could emerge in the future.

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ENVIRONMENT

CAN INDIA BECOME THE NEXT RENEWABLES POWERHOUSE?

Ron Somers
Founder and CEO of India First Group

The bottom line is that India needs to scale-up energy production urgently if it is to meet its energy demands.

I am a bit old-fashioned in my belief that you cannot power a great economy on renewable energy alone. That said, developing energy from every conceivable source is an absolute imperative.

India's efforts to shape its wind power policy such that India now ranks fourth globally in wind power installation is nothing short of commendable.

Likewise, India's ambition under the previous administration and carried forward by Prime Minister Narendra Modi's government to make India a global player in solar energy is paying terrific dividends. India has quadrupled its solar-generation capacity from 2,650 MW in 2014 to 13,000 MW today.

All sources of non-carbon-emitting energy, including civil nuclear power, must be pursued on a war-footing basis. Global climate change and India's own future depend on this.

ENERGY CONSUMPTION

It is important to emphasize a sense of urgency—India's energy consumption habits are not shrinking. Just the opposite. India's appetite for energy is exponentially growing.

A country registering 10 million cell phones every month must also provide reliable sources of power to recharge those cell phone batteries.

But here's a troubling fact: India's per capita consumption of electricity still hovers at a dismal 1,100 kWh of energy per person per year—the lowest of all the BRIC nations. In the U.S., most homes consume this amount of energy nearly every month.

If those at the bottom of the pyramid in India are ever to be given real opportunity and a chance to achieve prosperity, then India must strive to double its energy generation and deliver per capita levels of reliable power at least equivalent to what's available in China—at more than 3,927 kWh per person per year.

The bottom line is that India needs to scale-up energy production urgently if it is to meet its energy demands, and if its healthy economic growth is to be sustained.

RENEWABLES

Renewable energy is not a panacea, but it can augment India's installed capacity. And the good news is that if the central and state governments tweak their policies correctly to make the investment environment more conducive, then much of this renewable energy can be added at little capital cost to the government. This is because private investors—both foreign and domestic—have, for a long time, expressed a desire to invest in the sector.

Large-scale wind farms and solar farms are being installed around the country without financing from the government. Unleashing the entrepreneurial private sector will potentially result in a wave of new financing for renewable projects. Once again, to do this, India will need a few initiatives to address concerns investors have about investing in the country's infrastructure sector.

But here's the hitch. Renewable energy only works when water is falling or wind is blowing or the sun is shining. Storing energy is crucial.

So far, China is far ahead of most countries in developing effective energy storage. India needs to take the strategic lead on this front as well. India can only become the next renewables powerhouse if it becomes a leader in energy storage. This is not easy, but it is achievable. Here's how.

India is already one of the largest producers of batteries in the world. Every Indian home has a bank of inverters and batteries attached for backup power.

India could go that extra mile in research and double down on innovation in lithium technologies and other highly efficient and proven energy storage technologies. Dominance in the field of energy storage will set India apart, placing it at the top of the value chain for advancing renewable energy technology.

This endeavor to become the global leader in energy storage will require massive capital investment in both soft infrastructure (research universities) as well as intense research and development (R&D). The total costs involved will be high. But India could have the kind of money required.

DEFENSE OFFSETS A SOLUTION?

The magnitude of investment required is already available to India in the form of "defense offsets" under the Ministry of Defense's Defense Procurement Procedure (DPP).

The Indian government's policy states that if an international vendor sells India defense or homeland security equipment, at least 30 percent valuation of that sale is obligated to be discharged via the "Make in India" effort by the vendor/seller. This is part of India's effort to bolster indigenous capability to make strategic equipment domestically—for use in India and for export and sale overseas. This is an initiative to bolster self-reliance in manufacturing and to upgrade technology domestically, creating an ecosystem of domestic suppliers in the defense sector.

There is no reason why helping India become the dominant global innovator in the strategic/technological field of energy/battery storage could not make for a good defense offset. This could truly be a "win-win" for both sides. The defense contractor/vendor will discharge their offset, satisfying their obligation, while transferring to India best-in-class technologies in the field of energy/battery storage.

If the Ministry of Defence could be convinced to approve such a concept as an acceptable defense offset, then India would not only have international defense contractors lining up to set up R&D centers and high-end manufacturing facilities to advance this technology, but India could soon become a dominant global player in battery/energy storage, too.

This potentiality is no fantasy. Such a capability in battery/energy storage, funded by India's own defense offset program and courtesy of international defense contractors that are cash- and technology-rich, could propel India to become the next renewables powerhouse.

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ENVIRONMENT

GLARING INSURANCE GAPS IN ASIA-PACIFIC

Michael Owen
Head of GC Analytics—Asia-Pacific at Guy Carpenter

Just 10 percent of the economic loss from last year's major typhoons in China is likely to be recovered from the insurance market.

Many countries in Asia-Pacific have a significant insurance gap. This is particularly the case with developing countries in the region, such as India, Indonesia, the Philippines and Vietnam, where the average amount of nonlife insurance can be as little as $15 per person.

This stands in sharp contrast to developed Asian economies such as Japan, South Korea and Australia, which have similar insurance penetration to Europe and North America in terms of the average amount of nonlife insurance being purchased (in the range of $1,000 to $4,000)—(exhibit 1, page 36).

Unsurprisingly, the portion of losses uninsured in the Asia-Pacific region remains high. For example, an examination of last year's major typhoons in China shows a wide discrepancy between economic and insured losses (exhibit 2, page 37).

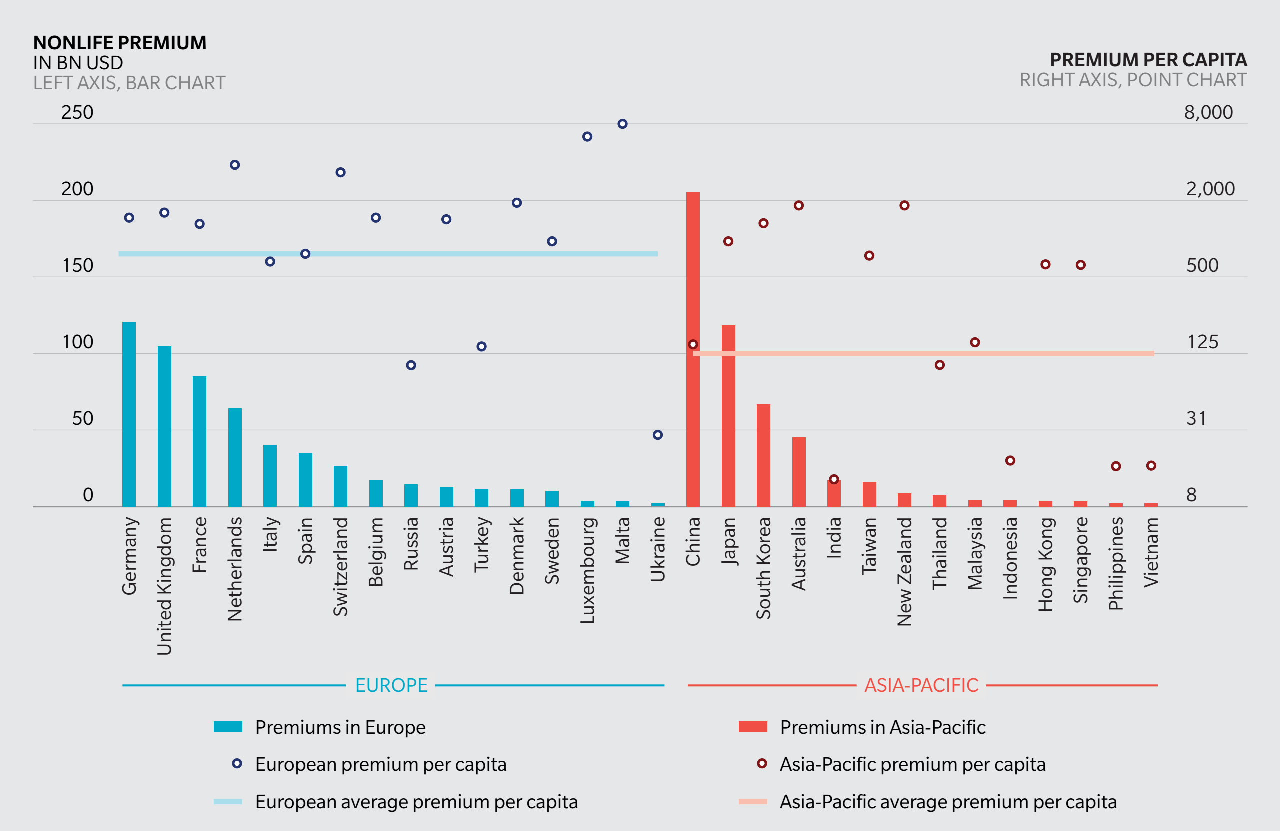
On average, just 10 percent of the total economic loss is likely to be recovered from the insurance market. Contrast that with insurance market penetration in three of last year's headline grabbing storms in the U.S. (exhibit 3, page 37).

The table shows that insurance penetration in the U.S. is much higher—close to 40 percent. This clearly indicates room for growth in the Asia-Pacific insurance markets and, more importantly, the need for greater insurance penetration.

Both the supply and demand for insurance that covers natural perils are impacted by large events. This is the first of a two-part series that

EXHIBIT 1: 2016 NONLIFE INSURANCE PREMIUM AND PREMIUM PER CAPITA IN EUROPE AND ASIA-PACIFIC

Source: Guy Carpenter



reviews recent catastrophe losses in Asia-Pacific and the impact these events have had on the insurance and reinsurance market.

ECONOMIC VS. INSURED CATASTROPHE LOSSES IN ASIA-PACIFIC, 2016 AND 2017

The largest losses in the Asia-Pacific in 2016 were caused by the Kumamoto earthquake in Kyushu Japan, floods in China, the Kaikoura earthquake southeast of Wellington, New Zealand, and droughts in inner Mongolia. In 2017, cyclone Debbie, which hit Australia and New Zealand, resulted in the largest loss for the region.

Kumamoto earthquake. The Kumamoto earthquake was a series of earthquakes in April 2016 near Kumamoto city on the island of Kyushu in Japan. A total of 137 people died and close to 2,000 were injured. More than 8,500 homes were destroyed, and the economic loss is estimated to be between $25 billion and $30 billion. The insured loss is estimated to be $4.9 billion or roughly 20 percent of the economic losses.

China floods. In June 2016, there was heavy rainfall in the south and southwest of China, with many provinces receiving between 350 mm and 500 mm of rain. The main damage was caused by flooding and landslides. The economic losses from the floods in southern China were estimated to be $22 billion, of which the insured loss was only $0.4 billion, or roughly 2 percent of the economic losses.

Kaikoura earthquake. A magnitude 7.8 earthquake struck Kaikoura on the east coast of the South Island of New Zealand in November, 2016. The damage from this event is estimated to be $3.9 billion, with the insured loss at around $1.7 billion to $2.4 billion. One reason for the relatively large insurance loss for this event is because in New Zealand it is mandatory to include earthquake coverage on every residential fire policy.

Inner Mongolia drought. The drought in inner Mongolia began in June 2016 and was well established by August, when the government issued a level four emergency

EXHIBIT 2: 2017 TYPHOON LOSSES IN CHINA

Source: China national commission for disaster reduction and China Insurance Regulatory Commission (CIRC)

NAME	LANDING LOCATION	ECONOMIC LOSS (MM $US)	INSURED LOSS (MM $US)	PERCENT INSURED
Merbok	Guangdong	260	8	3%
Nesat	Fujian	760	84	11%
Haitang	Fujian			11%
Hato	Guandong	12,180	1,210	10%
Pakhar	Guandong	310	17	5%

EXHIBIT 3: 2017 TYPHOON LOSSES IN THE U.S.

Source: FEMA, RMS, CoreLogic, AIR, PCS, Moody's Analytics and Karen Clark and Company

NAME	LANDING LOCATION	ECONOMIC LOSS (BN $US)	INSURED LOSS (BN $US)	PERCENT INSURED
Harvey	Texas	97	34	35%
Irma	Florida	71	31	44%
Maria	Puerto Rico	95	30	32%

response. There were shortages of drinking water in some areas, as well as inadequate water for livestock. Temperatures reached as high as 44 degrees Celsius. The loss estimates for this event was $3 billion economic loss, of which the insured loss was $1.1 billion.

Cyclone Debbie. The largest catastrophe event to affect Australia in the past 12 months was the Category 4 severe tropical cyclone Debbie, which made landfall in March 2017 in northern Queensland. The storm tracked through Australia and passed into New Zealand. The market loss in Australia from Debbie was estimated at AU$1.5 billion ($1.2 billion). Insured loss in New Zealand was estimated at NZ$66.4 million ($48.89 million).

These events had limited impact on the supply and demand of insurance in Asia-Pacific as the losses were relatively small. The Kumamoto earthquake was the largest insurance loss in Asia-Pacific during 2016 and 2017, but even that was relatively small compared to the $100 billion of insured losses in North America from hurricanes Harvey, Irma and Maria. That said, if the scale of losses increases it could start having a bearing on the insurance and reinsurance markets in Asia. It is something for Asian governments and businesses to be mindful of.

This article first appeared on BRINK Asia on January 30, 2018.

INFRASTRUCTURE ACTIVITY IN INDIA: SHIFTING TIDES

Patrick Adefuye
Head of Real Assets Products at Preqin

India's infrastructure need is massive. As one of the world's most populous and rapidly growing large economies, the Indian government has recognized that boosting the country's public infrastructure is key to maintaining the momentum its economy has achieved in recent years. A failure to invest significantly in improving its existing infrastructure and building new infrastructure can scupper the country's economic prospects.

FUNDRAISING TRENDS

Currently, there is not a great deal of private capital being raised for infrastructure in India. The assets held by India-based unlisted infrastructure funds totaled just $2.8 billion as of end-September 2017, including less than $1 billion of capital available for investment in upcoming projects. That's a very small sum for a country of India's size. By contrast, the equivalent figure for China-based infrastructure is $22 billion, while for the United States, it is $158 billion.

This small scale is perhaps a reflection of the rapid speed of development so far. Infrastructure funds operate on long-term horizons of 10 years or more, meaning that many India-based infrastructure funds will have been incepted in recent years in order to take advantage of burgeoning opportunities.

This is reflected in fundraising trends for unlisted infrastructure funds with a mandate for India. One fund closed in 2000 that included India in its scope, and then no funds were raised with any exposure to the country until 2005. However, there was a rapid boom from that point, with fundraising activity peaking in 2009 as nine funds secured $2.5 billion from investors. After declining again in the wake of the Global Financial Crisis, fundraising accelerated between 2013 and 2015, and in 2014, four funds that include India in their scope secured a record $3.2 billion. In a sign of gathering pace, though, this record has already been broken in 2018 year-to-date (YTD), as the Macquarie Asia Infrastructure Fund 2 closed on $3.3 billion, part of which is likely to be invested in projects in India.

What is more promising is that the amount of capital available for investment in India is likely to accelerate further in the coming months. There are currently 11 unlisted infrastructure funds in market (still raising capital) that include India as part of their geographic focus, and collectively, these vehicles are targeting $15 billion in investor commitments.

If these funds manage to achieve their fundraising targets, they will surpass the total number of funds closed in the decade 2008-2017, as well as exceed their capital totals. It reflects the new attention being paid to Indian infrastructure in the wake of renewed government focus on the sector.

DEAL MAKING TRENDS

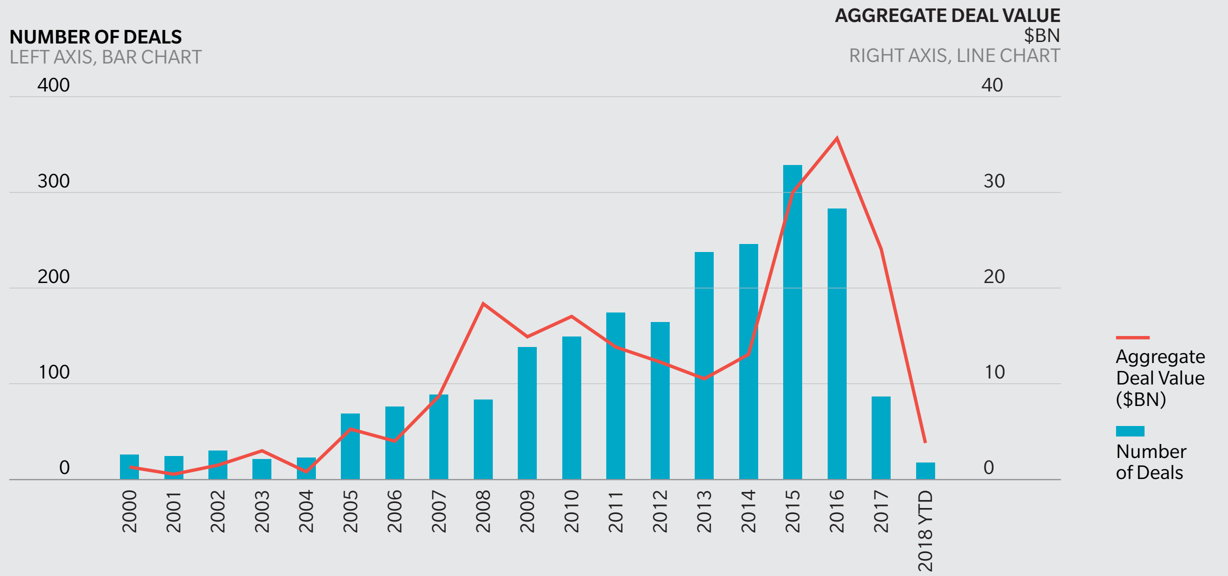
Although fundraising levels over the past decade have not always been strong, there has been significant acquisition activity for infrastructure assets in India. While there were just 26 deals worth a total of $1.5 billion in 2000, this surged to 138 deals worth $15 billion in 2009 and reached a record high of $35 billion for 281 deals in 2016. This is extremely encouraging and illustrates that investors are finding abundant attractive investment opportunities in India.

It also indicates that private capital in this case represents a small proportion of capital sources: Corporate and sovereign investors, as well as listed funds, have all deployed capital toward acquiring projects in the country.

However, this rate has slowed rapidly since the start of 2017, with that year recording just 86 deals announced for a total of $24 billion. This has slowed further in the first four months of 2018, which have seen 18 deals announced for a combined $4.1 billion, just 6 percent of the number of deals recorded in 2016. This will be of some concern to the sector and may be due in part to the introduction of the Insolvency and Bankruptcy Code regulation, which may have impacted the way in which many acquisitions were financed. However, with a robust pipeline of new funds looking to raise capital for the country, as well as increased incentives from the government, the prospect is good for deal activity to rebound in the coming months.

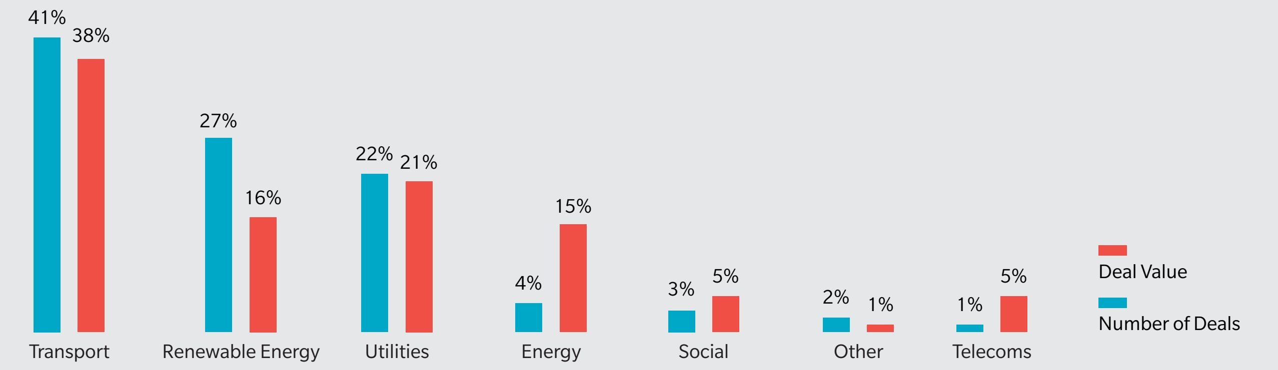
ANNUAL INFRASTRUCTURE DEALS ANNOUNCED IN INDIA, 2000–2018 YTD

Source: Preqin



INFRASTRUCTURE DEALS COMPLETED BY INDUSTRY, 2008–2017

Source: Preqin



When looking at the deals that have been announced over the past decade, it is transportation that has accounted for the largest proportion of investment activity in India, representing 41 percent of the number of deals and 38 percent of deal value since 2008. Within transportation, the largest proportion of investments in India primarily targeted roads, which make up 31 percent of the number of deals and 27 percent of deal value. By comparison, on a global scale, transportation projects have accounted for just 14 percent of the number of deals announced in the same period.

The focus on roads is unsurprising when looking at the infrastructure needs of India. The government announced in October 2017 that in the next five years, it would build more than 83,000 kilometers of highways and spend about $106 billion doing so, an indicator of the need for more road infrastructure in the region. In the past decade or so, the largest 20 deals looking to invest in roads in India were all made before 2016. Due to a difficult business environment, one concern is further slowdown in private investments in roads. However, with investors and fund managers worldwide worried about competition in more established markets as well as rising asset valuations, investors could very well choose to weather the difficult business environment in India to push their capital into the region.

It is also encouraging that a significant proportion of deal activity since 2008 has been for new-build greenfield projects. These have accounted for close to half (49 percent) of the number of deals announced and 45 percent of total deal value recorded in the period. This reflects that infrastructure needs in the country revolve around developing new assets rather than refurbishing or expanding preexisting ones. However, in 2017 and 2018, year-to-date investors have overwhelmingly put their capital into assets in the secondary stage, which accounted for the majority of deal announcements in both years. This switch towards preexisting assets may also be an offshoot of the Insolvency and Bankruptcy Code, as firms look to lower-risk and income-generating assets over new builds due to financing concerns. In fact, the largest Indian infrastructure deal ever announced was the 2017 acquisition of Essar Oil in a financing worth $12.9 billion, a transaction involving a secondary stage asset.

PUBLIC OVERSIGHT

This shift points to the key contention between India's infrastructure needs and its sources of private capital. The huge governmental drive to develop new infrastructure assets in roads, railways, utilities and public buildings will surely provide significant opportunities for infrastructure investment, and private infrastructure funds are among those lining up to take advantage of these opportunities.

However, the regulatory and financing framework is currently challenging. Tightening rules on bank solvency and lending are making finding sources of leverage more difficult, while abrupt shifts in monetary policy may lead investors to question the long-term viability of their investments. If these challenges can be eased in conjunction with the government, there is every indication that infrastructure investment in India could surge in the coming years.

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NOTES

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