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Emerging markets –
home to the next great
tech revolution

A SECULAR OUTLOOK

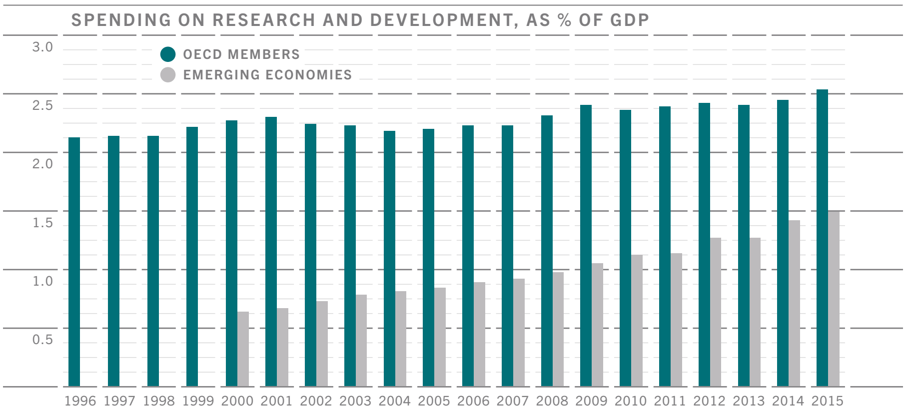
2018

Emerging markets – home to the next great tech revolution

Silicon Valley's disruptive technologies have upended industries from manufacturing to health care and retail to transport. But its status as the world's innovation hub is facing its strongest challenge yet, from countries that were dismissed until very recently as unsophisticated tech copycats – emerging markets.

Countries like China, for instance, now enjoy much greater pricing power as they produce increasingly sophisticated electronics. High-end goods now account for 87 per cent of Chinese exports, up from 63 per cent in 2001.[1] India is following suit, focusing on high-tech products to help lift manufacturing from 16 per cent of GDP to 25 per cent by 2025.[2] What is more, Korea and Taiwan have helped power the global rise in smart phone sales, with the market capitalisation of industry leaders such as Samsung increasing by more than 60 per cent in just two years. More broadly, emerging nations are becoming better innovators than their rich world counterparts. As IMF data show, the number of patent awards in developing economies, excluding China, grew at more than 7 per cent a year in the decade ending 2014. In the rich world, they grew by less than 3 per cent.

Emerging world racing to close tech gap



Source: World Bank

1 Bank of Canada, November 2017
2 Government of India, July 2016

The emerging world's embrace of technology points to a new era in its economic development. Under the traditional operating model, developing countries simply plugged themselves into global supply chains, manufacturing goods that were conceived in the West much more efficiently and cheaply than the rich world ever could. Cheap labour was part of that equation.

But tech innovation opens up an entirely new set of possibilities for emerging economies.

By moving to the frontiers of digital transformation, countries through Asia, Latin America and beyond have opened themselves to the possibility of creating home-grown, value-added products and services. They now have the capacity to loosen Silicon Valley's grip and generate revenues that no longer rely on technology transfer.

Current projections show the earnings of EM companies in the MSCI ACWI Information Technology index will grow 22 per cent over three to five years, outpacing the 16 per cent expected from their developed-market counterparts.

Developed economies are, of course, unlikely to sit back and watch. The threat could prompt tariffs and curbs in a world where trade tensions are already increasing. US President Donald Trump has already threatened to slap USD100 billion in tariffs on China – specifically targeting its "Made in China" 2025 drive – alleging intellectual property theft.

But with spending on research and development in emerging economies catching up fast with that of their developed counterparts, the innovation gap is already starting to narrow, and in key areas of the economy.

- **Artificial intelligence:** China has an ambitious government-led plan to become a global hub for AI and is already home to tech giants such as Alibaba and Baidu that can challenge American hegemony in AI software. AI could also give Taiwan and Korea's semiconductor industries a new lease of life, with the potential to generate around 25 per cent of total semiconductor demand by 2020, up from 10-15 per cent today.
- **Mobile messaging:** Emerging-market-based companies are already becoming competitive in the messaging service sector, offering a wider range of services than Silicon Valley firms, such as money transfers, job searches and prepaid electricity. Chinese service providers have a particular advantage: they can harvest big data gleaned from the country's 1.3 billion citizens.

- **Digital society:** India's radical move to transform its financial and monetary system has no comparison. The cash clampdown in November 2016 has stripped USD45 billion of cash from the economy while the number of transactions processed by the government payment system has jumped to 76 million from just 100,000 a year before. Digital identification system Aadhaar is the only non-US tech service to have broken the 1-billion-user threshold. While Aadhaar is government-owned, there's significant potential for local banks and insurers to use the platform to tap customers outside the formal financial system, thus leapfrogging the traditional branch banking set-up to adopt digital banking and payments. In Kenya, mobile money system M-PESA is expanding rapidly.
- **E-commerce:** Latin America is the fastest growing e-commerce area after Asia.[3] Home-grown online platforms are increasingly catering to a well-connected middle-class population in a region with limited infrastructure. Companies like Argentina's MercadoLibre, already Latin America's most popular e-marketplace,[4] are beginning to expand outside their home region.
- **Blockchain technology:** A number of emerging economies are embracing financial technologies, including blockchain and digital currencies, to build infrastructure and raise the level of public trust. Venezuela has already launched a virtual currency, the first to be issued by a nation.
- **Environmental technology:** China is financing a thriving environmental technology industry as Beijing directs capital towards tech-focused anti-pollution programmes, boosting the prospects of local firms that develop, for example, filters for engines and industrial applications for pollution control. China now files more environmental technology patents than Japan and Korea, Europe or North America.

As emerging markets' tilt towards technology alters their economic prospects, so too will the shift alter the behaviour of their financial markets – particularly equities.

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3 Latin America's e-commerce market is set to grow at CAGR of 19 per cent between 2017-2022. Source: WorldPay as at 20.10.2017

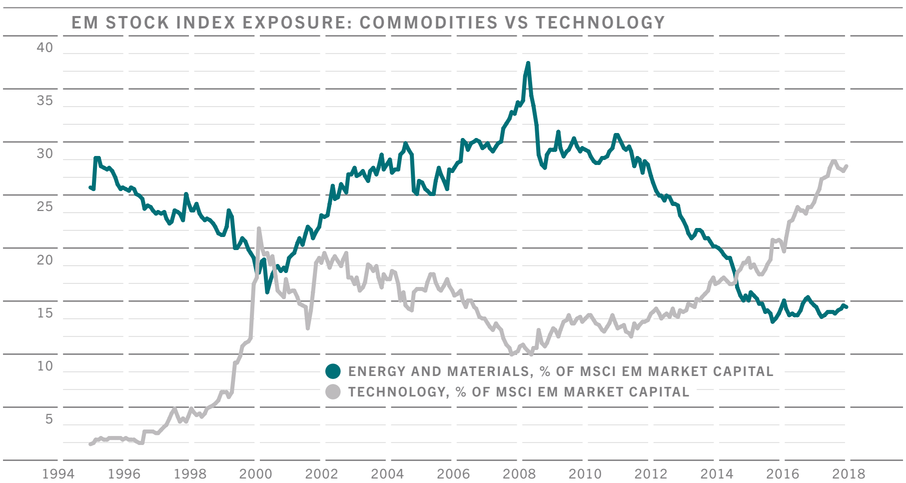
4 By number of visitors, Statista as at 31.01.2016

By focusing on technology, the emerging world's stock markets will become even less sensitive to the ups and downs in commodity prices. Technology firms are now the biggest single sector in the MSCI EM equity index, accounting for 27 per cent of the benchmark, compared with 10 per cent a decade ago.

This rise has come at the expense of commodity-related stocks, which represent just 15 per cent of the MSCI Emerging Equity index, down from 37 per cent 10 years ago. The result of this rebalancing is a sharp drop in the correlations between the returns of the MSCI EM index and commodities indices to only 0.2 from a high of 0.7 in 2010.[5]

The continued rise of EM innovators should help improve the quality and sustainability of economic growth in the developing world, lifting future investment returns from EM stocks further above those of their developed counterparts. Indeed, we expect emerging technology stocks to deliver yearly returns that are more than double those of their US counterparts over the next five years – 14.5 per cent versus 7 per cent. So, for many reasons, EM tech has much further to run.

It's all about tech in emerging markets



Source: Thomson Reuters Datastream; data covering period 31.03.1994-31.12.2017

5 One-year rolling weekly returns, MSCI EM index and CRB commodity index. Source: Thomson Reuters Datastream, data covering period 16.03.1988-16.03.2018

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