



The Asian Century: What's next?

The Asian Century appears to be upon us, but only if the region can sustain its growth momentum, embrace digital transformation and capitalise on the rise of millennials. However, the path will not be smooth sailing. In face of various challenges, Asia should leverage its intraregional advantages for stronger connectivity, and most importantly, expand its global influence.

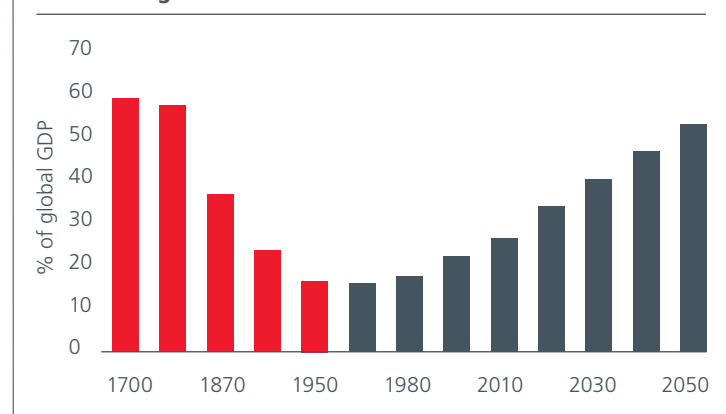
Asia is expected to be a driver of global growth in the coming decades with the region taking its place alongside America and Europe as the world's third major power centre. In 1950, having missed the industrial revolution, Asia's share of global GDP was at a low of 19%, according to research conducted by Angus Maddison (See Fig. 1). Since then, however, there has been a remarkable rise in its contribution to the global economy, and the same research predicts that Asia's share of global GDP will reach 52% by 2050¹.

What lies behind this mega trend? The emerging middle class is one fundamental driver. By 2020, Asia will become home to half of the world's middle-class population, according to OECD

projections (see Fig. 2). By 2030, Asia will further represent 66% of the 4.88 billion global middle-class population, whilst that in Europe and North America will shrink to just 21% (see Fig. 2).

Besides growing in proportion, the consumption power of Asia's middle-class population will be a force to reckon with. The aforementioned research predicts that Asia will account for over 80% of the global growth in middle-class spending in the coming 10 years. If it occurs, Asia will be the largest

Fig. 1: Asia's share of global gross domestic product (GDP) is increasing²



and wealthiest region in the world by 2030⁴.

That said, the path to the Asian Century is not preordained, and the rise of the middle class itself is not enough to sustain the ongoing transformation.

EMBRACING DIGITAL EVOLUTION

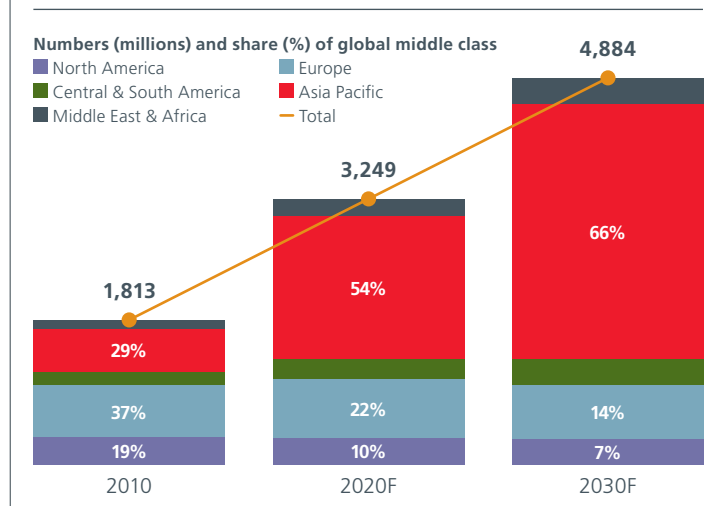
The sustainability of Asian growth will rely heavily on digital transformation in which millennials are the protagonists. About 61% of global millennials live in Asia, including a staggering 455 million and 413 million in India and China, respectively, according to United Nations estimates⁵. In addition, by 2021, about 60% of Asia Pacific's GDP will be derived from digital products or services, according to research conducted by IDC (International Data Corporation). Such a digital transformation will add around USD1.16 trillion annually, or 0.8% incremental growth to Asia Pacific's GDP by 2021⁶.

With fewer legacy infrastructure and business processes tethered to old practices, Asian countries have found it much easier to embrace digital transformation compared to other parts of the world. Cross-national academic research, for example, suggests that the speed of adopting innovation in Japan, South Korea and Taiwan has been significantly faster than in the US⁷.

At the forefront of Asian digital transformation is the evolution of AI technologies. Previously, computers could only execute rigidly defined tasks for which they were programmed. Now heading into Industry 4.0, computers can flexibly adapt new data to carry out tasks that typically require human intelligence without requiring specific rules. These include identifying handwriting, and even understanding idiosyncratic phrasing.

If harnessed in the correct way, AI technologies can dramatically boost productivity by freeing people from menial work, allowing them to focus on higher value-added tasks. With this in mind, Asian countries are putting more efforts into AI development. Spending on AI systems in Asia, according to IDC, will increase to USD15.06 billion in 2022, with a compound annual growth rate (CAGR) of 50% over the 2018-2022 period – outpacing the global CAGR of 38% to USD79.2 billion⁸.

Fig. 2: Rapid growth of Asian middle-class population³



EDUCATION: FROM DIGITAL TO AI

Knowledge is the most important resource when it comes to technological evolution. Educational technology, therefore, provides a fertile ground for AI technologies to develop. Whilst other countries have puzzled over best practices, certain Asian countries have not waited around to initiate AI-powered intelligent teaching solutions.

With AI algorithms, a teacher can easily, on a large scale, track hundreds of students' individual performances, detect which concepts each of them finds difficult, and tailor-make personalised materials and curriculums to make learning more time-efficient. With these mundane tasks undertaken by algorithms, teachers can have more time than ever to focus on the creative aspects of their work.

Whilst the US market has a strong research base in AI technologies, China has strong support from the government and its population who aspire for knowledge.

In the last few years, China's investment in AI-enabled teaching has exploded, with tens of thousands of students using some form of AI to learn. This has been through extracurricular tutoring programmes such as Squirrel's, through digital learning platforms such as 17ZuoYe (Sunny Education), or even in their main classrooms,

thereby bridging the divide between urban and remote areas. 17ZuoYe, for example, connects 51.7 million students and 2.5 million teachers, and covers 140,000 schools across 363 cities in China⁹.

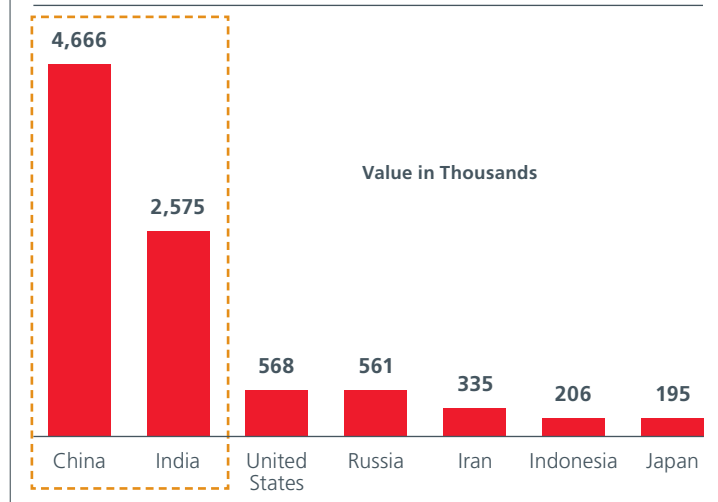
Across the rest of Asia, universities in Singapore and Malaysia have begun experimenting with predictive algorithms to prevent dropouts¹⁰. Asia, however, has a long way to go before AI-powered teaching will have a major impact, as many countries remain hesitant to allow the collection of such comprehensive data from which AI algorithms can track student performance.

CHALLENGES REMAIN

As technological development continues to thrive, there are, however, other challenges which need to be addressed. Notably, the continued trade tensions between China and the US, as well as climate change. On the bright side, these issues could act as a catalyst for new opportunities to help re-shape the future role of Asia. For example:

► **Climate change mitigation.** Asia's large population, frequency of natural disasters, and occasionally challenging urbanisation processes are making the region vulnerable to the risk of climate change. If Asia is going to meet all its Sustainable Development Goals (SDGs) under the Paris Agreement by 2030, and fight climate change,

Fig. 3: Recent graduates of STEM subjects¹¹



it needs more innovation and collaboration to enhance its sustainability potential.

► **Preparing talent for the future.** In this regard, Asia is making good progress. In 2016, China and India had 4.7 million and 2.6 million recent graduates in science, technology, engineering and mathematics (STEM) programmes, respectively, whereas the US only had 568,000 (See Fig. 3). Considering this, we remain sanguine about Asia tackling climate change with technology and moving towards zero-emissions – especially through supportive public policies. Putting matters into

Fig. 4: Total client assets across Asia Pacific (USD trillion)¹²

Clients	2007	2012	2014	2015	2016	2017	2020e	2025e
Pension funds	2.1	3.2	3.8	3.9	4.0	4.6	5.8	6.8
Insurance companies	4.8	6.7	7.5	7.7	9.1	10.5	11.7	13.7
Sovereign Wealth Funds	1.5	2.1	2.6	2.7	2.8	3.1	4.0	5.7
HNWI	9.9	14.3	15.1	15.5	16.9	17.0	19.9	28.9
Mass affluent	14.2	19.6	19.8	20.4	22.1	22.3	25.9	36.6
Total Client Assets	32.5	45.9	48.8	50.3	54.9	57.5	67.3	91.7
AWM industry AUM	6.4	7.7	8.8	11.0	21.1	15.1	16.9	29.6
Penetration rates	19.8%	16.8%	18.1%	21.9%	22.0%	26.3%	25.1%	32.3%

Note: AWM refers to assets and wealth management, AUM refers to assets under management, HNWI refers to high net worth individual



perspective, China, Japan and Korea are rigorously pursuing hydrogen-powered vehicles, which only discharge water. We believe that all of this will in turn create a string of sustainable investing opportunities.

SEEKING CONNECTIVITY FOR GLOBAL INFLUENCE

In making the region more immune to external challenges and further enhance self-sufficiency, Asia should step up its intraregional connectivity. China, for example, could seek an alliance with other Asian countries to develop a stronger technology ecosystem, while at the same time, search for stronger connectivity in the following areas:

- **Finance** Room for more
- **Infrastructure** Building for prosperity
- **Labour** Mobility boosts productivity
- **Trade** Strength in diversity

If Asia can navigate through all these short-term challenges and achieve stronger connectivity, it would not be surprising if the region takes centre stage sooner than expected.

In the meantime, we will continue to see assets shift to Asia. According to research conducted by PwC, assets under management (AUM) of the Asia Pacific asset and wealth management (AWM) industry, will reach USD16.9 trillion in 2020, and further grow to USD29.6 trillion by 2025 (See Fig. 4).

With capital increasingly allocated to Asia, stronger connectivity and technological advancements will not only reshape the economic structure, but also create new opportunities in high-value industries, such as those in financial services, infrastructure, and other industries that can embrace technological evolution. Experience and expertise will be required to navigate the changing landscape and identify these opportunities.

Sources: ¹Asia 2050: Realising the Asian Century, citing Maddison (1700-1950) (2007); Centennial Group International estimates (1951-2050) (2011). Data for 1750-1790 are PPP and data for 1991-2050 are in market prices. ²Asia 2050: Realising the Asian Century, Ibid. ³OECD Development Centre: The Emerging Middle Class in Developing Countries by Homi Kharas, January 2010. Working Paper No. 285. ⁴Forbes, The Largest And Wealthiest Population Segment In The World Is Not In The United States By 2030. Where Is It? 17 July 2019. ⁵United Nations World Population Prospects 2019: Population by Age Groups – Both Sexes (2020). ⁶International Data Corporation (IDC): Unlocking the Economic Impact of Digital Transformation in Asia Pacific (sponsored by Microsoft) November 2018, IDC #AP40434316. ⁷Takada, Hirokazu, and Dipak Jain. "Cross-National Analysis of Diffusion of Consumer Durable Goods in Pacific Rim Countries." Journal of Marketing, vol. 55, no. 2, 1991, pp. 48–54. JSOR, www.jstor.org/stable/1252237. ⁸IDC Asia Pacific excluding Japan, 21 May 2019. IDC Worldwide Semi-annual Artificial Intelligence Systems Spending Guide, March 2019. ⁹Company website uzenr.17zuoye.com, data as at 6 September 2019. ¹⁰McKinsey Global Institute. Artificial Intelligence and Southeast Asia's Future. Discussion Paper, September 2017. ¹¹World Economic Forum. The Human Capital Report 2016. Page 21. Citing data from Human Capital Index 2016 and UNESCO. ¹²Asset & Wealth Management 2025, January 2019, citing PwC analysis, and past data based on OECD, World Bank, FSB, Credit Suisse, SWF Institute.

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