

OUT OF THE SHADOWS

The rise of emerging Asia

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- II China: the globe's new financial powerhouse?
- III Emerging Asia's investment hotspots
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Overview

Emerging Asia's stocks and bonds have experienced a lost decade. In the past 10 years, their returns, in US dollar terms, have lagged those of global indices by a considerable margin. And that is despite the fact that these economies accounted for about 70 per cent of world GDP growth over that period. The next five years will see an altogether different outcome. Returns will be commensurate with the region's dynamism. Which means Asian assets are currently under-represented in global portfolios.

That is the conclusion to draw from our analysis of the nations that make up emerging Asia¹, a region characterised by improving growth prospects, low inflation, a credible commitment to reform and an increasingly diversified economy.

Investors can ill afford to ignore this part of the world. If the aim is to match the real returns a traditional balanced portfolio has delivered in recent years, then more of that capital will have to flow to the emerging Asia region.

Based on our calculations, US dollar-based investors would need to roughly treble their exposure to Asian assets to around 25 per cent of their total investments to achieve an annualised real return of 3.5 per cent over the next five years. A study using a Markovitz portfolio optimisation methodology suggests an even higher allocation, of some 30 per cent, which is close to the region's share of global GDP.

We expect emerging Asian equities to be the best-performing asset class over the next five years, with returns averaging around 11 per cent per annum in US dollar terms. Vietnam and India should do particularly well.

Within fixed income, meanwhile, China's government bonds offer the best return/risk profile while investment grade corporate bonds also look attractive.

To make the most of the opportunities the region offers, allocations will need to be both direct and active, however.

Pictet Asset Management includes the following economies in the Emerging Asia region: China, India. Korea, Taiwan, Indonesia, Malaysia, Philippines, Pakistan, Vietnam, Bangladesh and Sri Lanka. Historic returns of these markets' stocks and bonds respectively lagged the MSCI World by 5.3 per cent per year and the Bloomberg Barclays Global Bond Index by 3 per cent by year in US dollar terms; data covering the 10-year period ending 31.12.2020.

That is partly because its individual asset markets tend to move independently of one another, which increases the scope for excess returns.

Currencies offer an additional source of return. Our models show the region's currencies are among the most undervalued versus the US dollar, and we see good reason for that to change. The region runs a current account surplus, its monetary policy is far less expansionary and, in the renminbi, it has a currency that will soon begin to challenge the greenback's dominance of the financial landscape.

Of course, there are risks. Asia's developing economies face significant challenges ranging from China's debt pile to those that won't be resolved for decades, not least deteriorating demographics, climate change and weak governance. But many of these challenges can be overcome with a combination of technological development, innovation and political and social reforms.

> LUCA PAOLINI, CHIEF STRATEGIST

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FIG.1

Asian stars

CHINA EQUITIES							12.
EMERGING ASIA EQUITIES				_			10.
LATAM EQUITIES	1	_					10.
EMERGING EQUITIES	-						10.
FRONTIER MARKET EQUITIE	S						10.
JAPANESE EQUITIES							9.
EMEA EQUITIES							9.
UK EQUITIES			0				6.
EMERGING MARKET DEBT (LOCAL)	0					6.
SWISS EQUITIES					-		6.
EURO ZONE EQUITIES							6.
10Y CHINA GOVT BONDS							6.
GLOBAL EQUITIES							5.
DEVELOPED MARKET EQUIT	IES						5.
US EQUITIES							4.
10Y JAPAN GOVT BONDS							3.
EMERGING MARKET CORPO	RATE DEBT						3.
EMERGING MARKET DEBT (US DOLLAR)						3.
US TIPS							2.
SWISS GOVT BONDS					• 5Y TOTAL RETURN IN LOCAL CURRENCY, P.A.		
GLOBAL GOVT BONDS					CURRENCY IMPACT		2.
EURO ZONE HIGH-YIELD BO	NDS				LAST 10Y AV	RN P.A. (USD)	2.
10Y US TREASURIES							1.
US HIGH-YIELD BONDS							1.
10Y UK GOVT BONDS			<u> </u>				1.
EURO ZONE GOVT BONDS							1.
US INVESTMENT GRADE BO	NDS						0.
EURO ZONE INVESTMENT G	RADE BONDS						0.
10Y GERMAN BUNDS							0.
US REAL ESTATE							9.
PRIVATE EQUITY							8.
GOLD							7.
EURO ZONE REAL ESTATE							7.
SWI REAL ESTATE							5.
UK REAL ESTATE							
HEDGE FUNDS							3.

Source: Pictet Asset Management; historic return, data covering period 31.05.2011-31.05.2021; forecast period 31.05.2021-31.05.2026

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The stars align in the East

The stars align in the East

By deepening their commercial ties and investing more in technology and education, Asia's emerging nations are carving out a leading role on the global stage and tilting the world's centre of economic gravity decisively Eastward.

Asia's economic might

For every crisis, an opportunity.

The 1997 currency crash, which spread from Thailand to its neighbours, was a watershed for Asia's emerging nations.²

It proved to be a catalyst for numerous ground-breaking structural reforms, each designed to reduce the region's vulnerabilities and improve its economic resilience.

Two decades on, developing Asia finds itself at another turning point. Formerly the epicentre of the virus outbreak, it has emerged from the Covid crisis as the engine of the global economic recovery.

Thanks to its relatively effective handling of the pandemic and prudent fiscal and monetary policies, Asia will be the world's fastest-expanding region this year with GDP growth of more than 9 per cent.

Its regeneration won't end there. Applying lessons from the 1997 playbook, Asian governments are using the crisis as an opportunity to extend reforms, boosting the international competitiveness of their economies.

There's a crucial difference, however, between what is happening now and what unfolded then. Export-led growth used to be the priority. The region's current and future success, by contrast, rests on the diversity of its constituent parts. Some economies privilege domestic demand while others are pursuing global leadership in some of the world's most dynamic industries. Korea and Taiwan, for example, are technologically advanced, open economies that are deeply embedded in global supply chains. Other Asian economies, meanwhile, benefit from a deepening pool of wealthy consumers and a growing service economy. India, with its burgeoning middle class, falls into this category. The region also supports emerging manufacturing



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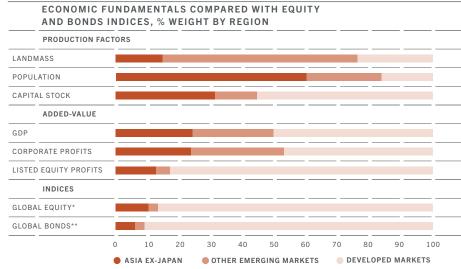
² Pictet Asset Management includes the following economies in the Emerging Asia region: China, India. Korea, Taiwan, Indonesia, Malaysia, Philippines, Pakistan, Vietnam, Bangladesh and Sri Lanka

hubs such as Vietnam and countries with a tilt towards commodities such as Indonesia and Malaysia. Then there's China. The region's dominant force is building on its traditional strengths in manufacturing while also gaining a foothold in areas where it has hitherto lacked influence. It has displaced the US as Europe's biggest trading partner and is pressing ahead with reforms that could help it become a financial and technological powerhouse in as little as a decade.

Yet if diversity is part of Asia's investment appeal, so too is the region's drive to boost productivity. This, its leaders increasingly recognise, will require deeper economic integration, more investment in technology and better welfare and educational provision. We expect the next five years to deliver rapid progress on all three fronts, tilting the world's centre of economic gravity decisively Eastward.



Under-represented



*MSCI AWCI **JPMorgan GBI Broad Source: Pictet Asset Management, CEIC, World Bank, data as of 31.01.2021; listed equity profits refers to profits from listed companies while

corporate profits are earnings data taken from aggregated national accounts

Emerging Asia: standing apart from the rest of the developing world

A problem common to almost every emerging nation is the risk of falling into the middle-income trap.

Yet in confronting this challenge Asian nations have several factors in their favour.

To begin with, they are no longer just low-cost manufacturers of commoditised goods; they have steadily become more diversified, less volatile economies. Our industry concentration index, which measures how dispersed a country's sources of growth are, shows emerging Asian economies are better balanced than those of other emerging nations in Latin America or Central and Eastern Europe. Significantly, the Asian powerhouses China and India are among the economies with the lowest concentration scores. As a result, the volatility of Asia's GDP growth rates is lower than other emerging regions, a key indicator of the region's increasing resilience.

Emerging Asia's public debt dynamics also set it apart. The region has largely avoided piling on government borrowing to contain the effects of the pandemic – in contrast to advanced economies. China, for example, had made progress in deleveraging its economy, bringing its credit-to-GDP gap – a measure of how far credit is growing above its natural long-term rate – to zero just before Covid struck from a 2016 peak of 27 per cent.³ Moreover, the country entered the crisis with public debt running at about 70 per cent of GDP; we expect it to rise to just 75 per cent by 2022 compared to an average of 150 per cent for G-5 economies.

The debt picture is as benign in the rest of emerging Asia; our forecasts point to a debt-to-GDP ratio across the region of sub 70 per cent. The region's debt sustainability is also enhanced by a sharp rise in its foreign exchange reserves. Asia's emerging economies have accumulated their highest level of foreign exchange reserves since 2014 – USD5.82 trillion as of May 2021. Even stripping out China, reserves stood at an all-time high of USD 2.6 trillion.

Lower debt levels have significant economic implications. Research shows high debt can crimp an economy's long-term potential, particularly once debt-to-GDP ratios breach 100 per cent. All of which means that, unencumbered by high debt-servicing costs, Asian economies should continue to outgrow their peers over the rest of the decade.

By our calculations, the region's GDP will expand by an average of 5.1 per cent per year for the next half decade, accounting for some 54 per cent of global economic growth. That compares to 2.4 per cent for Latin America, 4.4 per cent for emerging markets and 1.9 per cent for developed economies.

³ Source: Bank for International Settlements

Just as significantly, this growth will be achieved with low inflation. Emerging Asia's inflation rate over the next five years will average at just 2.2 per cent a year, according to our calculations, well below the world average. We expect the trend inflation rate in China to be just 1.5 per cent over our forecast period. This is due to three factors. First, China's economic policies have not been overly stimulative; authorities will prioritise financial stability. Second, the country's excess savings should help contain price pressures. In other words it will continue to produce more than it can absorb domestically. Third, a strong renminbi should prevent imported inflation. No other region has a better growth/inflation mix, which bodes well for its stock and bond markets.

Asia also has scale in its favour. Together, countries within the emerging Asia bloc can be expected to make up more than half of global GDP by 2045. The region can also draw on a growing – and increasingly affluent – population: in less than 10 years' time, it will account for two-thirds of the planet's middle class.⁴

Integration and tech leadership

There are reasons to believe Asia's influence on the world stage could be greater still.

Not least because its priorities – much like Europe's in the 1970s – include deeper regional integration and greater self-sufficiency.

Bearing witness to that ambition is a new trading pact – the Regional Comprehensive Economic Partnership (RCEP) – a deal that covers trade in goods, services and investment across 15 countries that together account for 30 per cent of world population.

Expected to add as much as USD500 billion to world trade by 2030, the RCEP will have deeply synergistic effects, enabling its members to combine their strengths in technology, manufacturing, agriculture and natural resources.⁵

Asia is also seeking greater technological independence from the West.

Numerous products that were once imported or depended on technology transfer from countries such as the US will in all likelihood be manufactured domestically by the end of the decade.

Households spending USD11-110 per day per person in 2011 adjusted for purchasing power parity. Source: Brookings Institute

⁵ Source: Brookings, RCEP: A new trade agreement that will shape global economics and politics, November 2020

China, for example, has unveiled a new strategic blueprint ('dual circulation'), aiming for a balance between what it calls 'internal circulation' – the building of homegrown supply chains to boost domestic industry – and 'external circulation', or remaining open for business to the rest of the world.

Among the tech industries in which China is hoping to achieve critical mass domestically is artificial intelligence.

Beijing is already home to well over a thousand homegrown companies specialising in A1.

The regional Beijing government, meanwhile, plans to invest USD2.1bn to build an AI development centre in Zhongguancun, part of the central government's aim to catapult China to the position of the world's preeminent AI power in the next decade.

Once built, the centre is expected to house up to 400 AI start-ups.

Beijing also boasts 91 universities overall. Among them are Tsinghua University, which recently established a research institute for AI as well as a research scholarship programme in blockchain.

——— Expected to add as much as USD500 billion to world trade by 2030, the RCEP will have deeply synergistic effects, enabling its members to combine their strengths in technology, manufacturing, agriculture and natural resources.⁴

> India, meanwhile, is starting to build viable alternative and domestic supply chains in automotive components, telecom equipment, chemicals and pharmaceuticals.

> The aim of such efforts is to repeat – and build on – the success North Asia has enjoyed in semiconductors, in which the region is already a global force. China, Taiwan and Korea together command a market share of 32 per cent in the world semiconductor market. That is up from 20 per cent a decade ago, threatening the supremacy of the US, whose share has slipped to 47 per cent.⁶

Asia's influence is even greater in smartphone chips, where it is the undisputed market leader.

⁶ SIA handbook 2021. The overall share of Asia including Japan stands at 42 per cent.



Only two years ago, US chip designer Qualcomm had the leading market share in smartphone System on a Chip (SoC) shipments in China at just under 38 per cent. Now, its share is barely over a quarter, with the US firm having first been overtaken by Huawei's HiSilicon and then most recently by Taiwan's MediaTek.⁷

More R&D investment in semiconductors can be expected right across the region.

In China, semiconductors are part of President Xi Jinping's USD1.4 trillion of planned investment to develop national tech champions. In Taiwan, meanwhile, Taiwan Semiconductor Manufacturing Co (TSMC) is committed to spending USD100 billion over the next three years to expand its chip fabrication capacity and R&D.

Other Southeast Asian countries' tech capabilities should also receive a boost from the bloc's deepening economic integration.

Take Vietnam. It is among the largest recipients of Taiwanese investment. The funds are part of the island's "New Southbound Policy" – through which the nation aims to establish stronger relations with South and Southeast Asia. Taiwan's outward investment towards NSP countries – including Vietnam – rose 16 per cent to USD2.8 billion in 2019 from a year earlier.⁸

Out of poverty, into prosperity

Asia's ambitions do not end with trading pacts and technological leadership. Its governments understand that future economic prosperity also requires re-imagining the welfare state.

Asian nations have in recent years become more attuned to problems associated with growing inequality. Their traditionally threadbare social provisions – which for years were deliberately left untouched as a means to incentivise work – are now viewed as a hindrance to future development.

The immediate priority is to transform a large shadow economy – in which commercial activities are untaxed and unregulated and workers unregistered and unprotected – into a formal one.

Formalisation of the labour force would bring considerable benefits. It would improve economic productivity as better working conditions enable employees to secure regular sources of income and gain access to formal channels of credit. This, in turn, boosts national tax revenue, money that can then be invested in both infrastructure and human capital, further reducing social inequality.

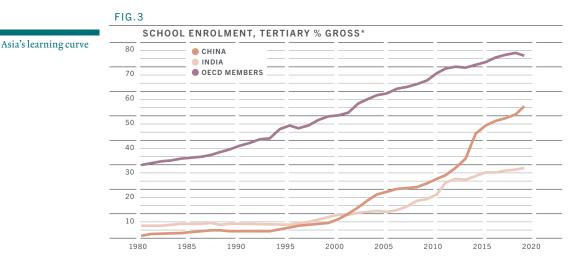
Source: Fierce Wireless, Qualcomm's smartphone chip share in China plummets while MediaTek rises, January 2021
 Source, Fource Toines, 2010 FDL down from 2010, but still

⁸ Source: Focus Taiwan, 2019 FDI down from 2018, but still strong, January 2020

Asia's governments are beginning to introduce measures to improve social security and legal protection for informal workers, which account for nearly 60 percent of nonfarm employment, higher than in Latin America and Eastern Europe. Such policies include expanding social assistance programmes (Vietnam, Bangladesh, Nepal, India and Indonesia), introducing new cash transfers (Thailand and Vietnam), establishing public works programmes (Philippines) and expanding employment retention schemes (Malaysia).⁹

Authorities also recognise that the eradication of the shadow economy alone is insufficient. It must be accompanied by increased investment in education.¹⁰

Education levels and the size of shadow economies are after all intrinsically linked. Research shows people who have completed secondary and tertiary education are less likely to



*Gross enrolment ratio for tertiary school is calculated by dividing the number of students enrolled in tertiary education regardless of age by the population of the age group which officially corresponds to tertiary education Source: UNESCO, Pictet Asset Management, data covering period 31.12.1979-19.03.2021

be in informal employment compared with workers who have either no education or completed primary education.

Asia, and in particular China, is making progress on this front. The tertiary ratio, or the ratio of total enrolment to the population that corresponds to the level of tertiary education, has grown to 54 per cent from only 8 per cent since the start of the century. (see FIG. 3)

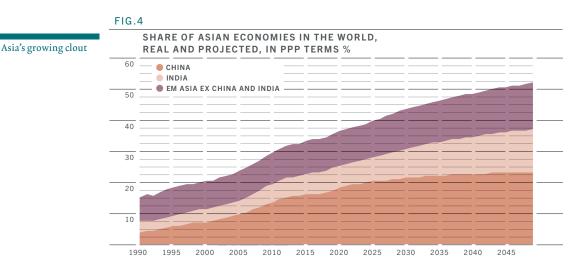
Source: IMF Blog, A "New Deal" for Informal Workers in Asia, April 2020

¹⁰ Source: International Labour Organisation, More than 60 per cent of the world's employed population are in the informal economy, April 2018

Post-pandemic powerhouse

Asia's resilience in the face of the Covid crisis presents the region with a once-in-a-generation opportunity to become a more influential player on the world stage. By deepening commercial ties with one another, and by channelling investment to strategic industries and the welfare state, Asian economies look set to further distinguish themselves from other emerging nations and close the gap on their developed counterparts.

That could have a transformative effect on global financial markets and investors' portfolios. Currently emerging Asia represents just 10 per cent and 3 per cent, respectively, of global equity and bond markets even though the region generates a quarter of the world's GDP. Asia's reform efforts could be what is needed to consign that anomaly to history.



Source: Oxford Economics' forecasts, Refinitiv, Pictet Asset Management, data covering period 30.06.1990-30.06.2049 (forecast)

China: the globe's new financial powerhouse?

China: the globe's new financial powerhouse?

China is already a global economic powerhouse. But it is also about to challenge the US's dominant role in the financial system

Since it joined the World Trade Organization in 2001, China has made a habit of disrupting the established order. It took the country less than 15 years to dethrone the US as the world's largest economy on a purchasing power parity basis. Its research expenditure, meanwhile, has more than tripled in the last two decades, with the Chinese now spending almost as much on R&D as the Americans. Asia's powerhouse has also quickly established itself as the global leader in artificial intelligence (AI). Last year, it accounted for a staggering 473 of the 607 AI patents filed with the World Intellectual Property Organisation.

Yet within this impressively rapid metamorphosis sits an anomaly. For all its economic and technological heft, China's currency, and by extension its stocks and bonds, remain minor players on the world stage. By one yardstick,

——— The US retrenchment from globalisation undermines the dollar. But just as significantly, it also presents China with a unique opportunity.

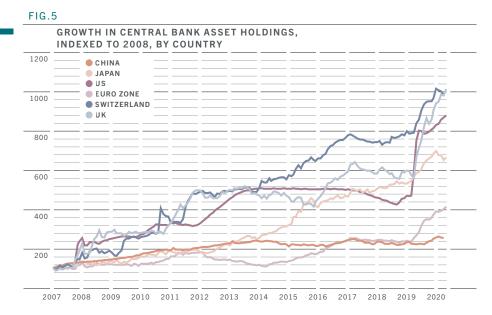
the renminbi is a minnow by international standards, barely registering on the balance sheets of the world's central banks.

Nevertheless, it would be wrong to dismiss the threat China presents to the US dollar's hegemony and America's dominant role in the financial system. The conditions under which its currency, bonds and stocks can evolve into genuine international investments are rapidly falling into place.

In any case, experience tells us that the Chinese paradox isn't unusual. A nation can dominate the economic landscape for quite some time before its currency and financial assets reach the same heights. When the gold standard was suspended during the First World War, for example, it took decades before the dollar vaulted the pound sterling to become the globe's pre-eminent currency. It was not until after the Second World War that the greenback consolidated its position and only then after having existed side by side as a reserve currency along with its British rival. Other factors besides historical precedent are in China's favour. For one thing, there is the US's steady disengagement from international affairs. In recent years, the world's hegemon has grown weary of the burdens that come with global leadership. Having lost manufacturing jobs to Asia and other low-cost producers, and increasingly wary of China's technological and military ascendancy, the US has turned its attention to re-shoring supply chains and other protectionist measures. Contrary to what many believe, such policies will outlive the presidency of Donald Trump.

Checking China's dominance of trade and technology is one of the few issues on which Democrats agree with Republicans. The US retrenchment from globalisation undermines the dollar. But just as significantly, it also presents China with a unique opportunity.

Authorities in Beijing now have every incentive to embrace the reforms that can help the country carve out a



Source: Pictet Asset Management, data covering period 31.12.2007-30.04.2021

central role in the world's financial system. This would be in keeping with President Xi Jinping's policy of 'open domestic and international dual circulation' under which China will continue to seek foreign investment while also making it easier for non-Chinese firms to enter its domestic markets. If this results in the removal of capital controls and other restrictions on investment flows, it could lay the foundations for a powerful economic 'Sinosphere'.

It also helps that China's central bank – the People's Bank of China – has strengthened its reputation among international investors. That is in part because, in contrast with its peers in the developed world, it has largely refrained from quantitative easing. As FIG. 5 shows, its bal-

China's modest

balance sheet

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ance sheet has grown at a much slower pace than that of either the US Federal Reserve or the European Central Bank.

By controlling the supply of money in this way, the PBOC appears to have created a more stable economic climate in which both growth and inflation have been less volatile.

The internationalisation of the renminbi

Offering clues to China's future role in the financial system is the renminbi's growing global influence.

For a currency to be considered an international unit, the academic literature specifies three broad criteria. It should be used widely for invoicing imports or exports, serve as the denominating currency for a large stock of globally tradable investment securities, and feature prominently in the currency reserves of central banks.

By several of these measures, the renminbi is evolving at a brisk pace. As a unit of exchange, it is already making strides. Convertible for transactions in goods and services since 1996, the renminbi made up only 2.2 per cent of Chinese export settlements as recently as five years ago. Yet by the end of 2020, it accounted for about 20 per cent of all such transactions. Transactions settled in the renminbi have in fact been growing at an annual rate of about 40 per cent since January 2012. It is also now the fifth most used currency in international payments.

Its progress as a unit of account and store of value appears to have been more sedate at first glance. Currently only 2.1 per cent of world central bank foreign exchange reserves are held in renminbi. That compares with 60 per cent in dollars and 20 per cent in euros.

But this masks some significant developments.

First, there is its rapid transformation into a global investment currency. Here the catalysts have been capital market expansion and financial reform. China has in recent years extended the yield curve for government bonds, which means such securities can now serve the needs of a broader range of borrowers and investors, domestic and foreign. Moreover, while the world's second largest bond market has traditionally been off limits to international investors, that is no longer the case.

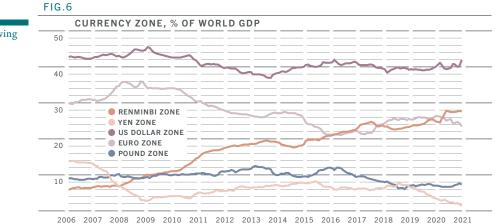
China has delivered a series of reforms to make it easier for foreigners to access its bonds.

Among the most important is the "Bond Connect" programme, which was launched in 2017 and allows non-Chinese investors to trade in Hong Kong without an onshore account. Already, 75 out of the world's top 100 asset managers have joined the programme while trading volume doubled last year to RMB4.8 trillion. This, and the inclusion of Chinese bonds in all major international fixed income benchmarks, should result in a multi-trillion-dollar reallocation into the renminbi among international investors.

According to the International Monetary Fund, index inclusion alone could shift as much as RMB7.4 trillion of foreign capital into China's bond markets in the next few years.

A second development boosting the renminbi's international credentials is the steady but unmistakeable reorientation towards the unit as a reference currency peg, particularly in Asia.

Flows of international trade and finance typically cause currencies to cluster into zones anchored by a dominant currency. Our research shows the renminbi has already established its own zone, accounting for nearly a quarter of world GDP. (see FIG. 6)



Source: Pictet Asset Management, data covering period 31.12.2005-31.12.2020. Monetary zone is estimated as the elasticity-weighted share of 48 economies' GDP where the elasticity is the reserve currency weight in a given currency using a 2-step Frankel-Wei rolling regression

The analysis draws on a framework developed by the Bank for International Settlements (BIS).¹¹ It shows that before China abandoned its heavily managed exchange rate regime in 2015, the dollar was the only reference point for much of developing Asia. For every 1 per cent fall or rise in the dollar against any numeraire currency, emerging currencies would see a corresponding move of about 0.8 per cent, reflecting policymakers' desire to contain potentially damaging currency volatility. But the dollar's pull on emerging market currencies has since waned.

> 11 McCauley, R and Chan, T, Currency movements drive reserve composition, Bank for International Settlements Quarterly Review, December 2014

Renminbi's growing footprint

Today, the co-movement is closer to 0.5 per cent. Crucially, the dollar's loss has been the renminbi's gain. Where it once had no influence at all, the renminbi now causes a 0.25 per cent shift in other emerging currencies for every 1 per cent fall or gain. This suggests a growing number of central banks already implicitly include the renminbi in their currency baskets. That's a critical development. According to the BIS, any currency that displays this behaviour tends to see a meaningful and permanent increase in its share of foreign exchange reserves in subsequent years.

An additional statistical analysis offers an indication of how quickly the renminbi could establish itself as a reserve currency. Our study compares the renminbi's standing in the financial system to other fundamental indicators of China's economic and financial development – its share of world trade and GDP, the market capitalisation of its bond and stock markets, long-term inflation trends and currency volatility – shows the unit is under-represented in official reserves. The implied weighting is 14 per cent, more than seven times the current figure.¹²

Adding to the renminbi's international clout are China's ambitions in the digital realm. The PBOC is some distance ahead of its US, Japanese and European peers in the development of a digital currency. It has already trialled a digital renminbi across six major Chinese cities and there is growing appetite among policymakers to extend its use to international transactions. The central bank has prioritised facilitating the use of the digital renminbi in the Swift global payments network, having recently established a joint venture with the Society for Worldwide Interbank Financial Telecommunication, which carries most transactions on that system. It is also exploring other cross-border payment options that would allow real-time foreign exchange transactions. Should the renminbi take the digital lead here, it can only boost its international use.

Reform remains an obstacle. When it comes to the opening up of its capital account, China is dragging its feet. Its caution isn't entirely unwarranted. A first snag is capital flight. Many believe China's huge pool of savings is keen to find a home outside its borders. Making it easier for domestic savers to invest abroad could lead to unwanted volatility in exchange rates. Inflows could be a problem too. Should demand for renminbi assets cause a sharp rise in the currency, China's international competitiveness would surely suffer, weighing on exports. What is more, an open

¹² For methodology see Appendix



economy would involve lifting restrictions on foreign ownership of real estate and other assets; the resulting surge in demand could fuel inflation and lead to the formation of bubbles. This would cause a headache for authorities as it would amount to a potential drop in real income for the local population.

But the benefits of an international currency – low borrowing costs and reduced exchange rate volatility – should eventually prove too alluring. Over the past year, Beijing has been quietly easing restrictions on cross-border lending and saving. Such measures, the most recent a scheme allowing up to USD23 billion of investment to flow between the mainland and Hong Kong, are designed to counter the currency-boosting effects of surging foreign investment.

There are in fact parallels to draw between what is occurring now in Asia with what unfolded in Europe in the lead up to – and the years following – the collapse of fixed exchange rate regimes in the 1970s. Just like European nations then, Asian economies face a choice between boosting regional commercial trade ties or focusing more on maintaining existing relationships with the US. Europe

> decided to embark on a decoupling from the US, a journey that led to the establishment of the euro. There is every reason to believe Asia will follow the same playbook.

> The correlation among currencies in the region is rising in line with the flow of trade. Even inflation rates among emerging Asian economies are converging, similar to what was seen within Europe after the creation of the single currency. In other words, the expansion of a renminbi block is a set to continue, becoming a crucial element in the currency's progress towards reserve status in our view.

Emerging Asia's investment hotspots

Emerging Asia's investment hotspots

Emerging Asia is the world's fastest-growing region and home to some of the world's most dynamic economies. Investment opportunities abound in e-commerce and finance as well as in China's maturing bond market.

Asia is not only the world's fastest-growing continental economy: it is also, arguably its most dynamic. Its metamorphosis encompasses changes in its demographic make-up, economic models, consumption patterns and corporate structures. For investors, that gives rise to both opportunities and risks.

The region is fast becoming more digital, more urban, more innovative, and more focused on sustainability – structural shifts which investors can best harness through a thematic lens. We see particularly strong potential in five areas: e-commerce, financial products and services, the green transition, semiconductors and Chinese renminbi bonds.

——— The region is fast becoming more digital, more urban, more innovative, and more focused on sustainability – structural shifts which investors can best harness through a thematic lens.

> One of the region's distinguishing features – and part of its investment appeal – is the natural diversification it offers across economic and market cycles. Global investors, we believe, would benefit from the distinct, and in some cases complementary, strengths of the four main sub-regions:

> — China: catching up with the US, benefits from a large and growing sphere of influence and an economy increasingly focused on innovation and R&D. Despite its size, China still offers potential for strong economic growth, leadership in sectors such as e-commerce, a currency that is both attractively valued and stable and a defensive asset class in bonds.



- Korea/Taiwan: world leaders in technology hardware and semiconductors, areas with formidable barriers to entry. Equities from these economies offer a cyclical boost to portfolios and an attractive play on the global tech cycle, but also protection in periods of sustained US dollar strength – typically when traditional emerging markets suffer.
- ASEAN: in itself quite a heterogeneous set of countries with exposure to commodities, tourism and emerging manufacturing hubs; as investments, this group offers



defensive investments during periods when global economic conditions are unfavourable. Within ASEAN, we see particularly interesting opportunities in Vietnam (see box overleaf).

World benchmark as of 31.05.2021

¹³ More flexible and simplified labour laws (29 central labour laws merged into four labour codes), incentives for foreign companies to boost domestic manufacturing across 10 "sunrise" sectors, steep cuts to corporate taxation in 2019 (India's tax rate for new manufacturing companies is now the lowest among peers) and the most pro-growth policy shift in decades in the FY2022 budget. The latter addresses a fundamental roadblock to growth: a clear focus on infrastructure capex (roads and rail capex, urban infra, water, local state infra schemes, etc.) funded by a newly created development finance institution.

Vietnam

Vietnam may be a little off the beaten track for many investors, but it has the potential to become a stellar success story.

Home to 95 million people, it is a highly open economy with trade worth over 200 per cent of GDP (with around a quarter of exports going to China). Its external balances are positive, with consistent trade surpluses since 2011. Annual foreign direct investment (FDI) has doubled over the last five years. The economy is diversified, with approximately 40 per cent of GDP coming from industry, 45 per cent from services and the rest from agriculture.

Vietnam has already attracted numerous foreign businesses and has the characteristics to become one of the world's prime manufacturing hubs:

- Labour force is young (average age 31) and affordable with average wages at around one third of China's;¹⁴
- Good connectivity to current supply chain/logistic hubs (Guangdong, Singapore);
- Membership of multiple free trade agreements (FTAs), including with South Korea and the European Union;
- Very competitive tax regime with incentives and tax holidays to encourage new investment.

Vietnam has already made one of the swiftest progressions up the export value chain. High-value-added manufacturing now accounts for a third of its exports, up from less than 5 per cent a decade ago, with a corresponding fall in the share of agricultural and raw material (commodity) exports. Along with India, Vietnam is also one of the leaders in the adoption of digital technologies, surpassed only by China.

Vietnam has been one of the biggest beneficiaries of US-China trade tensions as well. A survey of North Asian CFOs found that 84 per cent are planning to move production out of China, with Vietnam highlighted among the popular destinations.¹⁵

> ¹⁴ HBR/ Digital Intelligence's 'Digital Evolution Scorecard'. Measured by the growth rate of the digitalisation score over 12 years, 2008-2019, December, 2020
> ¹⁵ UBS, January 2021

Domestic demand, meanwhile, should be supported by a growing and thriving middle-income cohort. Vietnam ranks among the least troubled globally on the "misery index" – inflation is low, as is unemployment.

Politically stable, Vietnam looks set for continuity in areas such as legal reform, infrastructure investment, and digital transformation, as well as the privatisation of stateowned enterprises and development of the private sector.

However, the benefits of a young labour force need to be harnessed quickly – the population is ageing faster than in any of its regional peers. Limited fiscal policy headroom is another concern. Vietnam has been running a sizeable budget deficit (4.5-6.5 per cent of GDP) over the last decade.

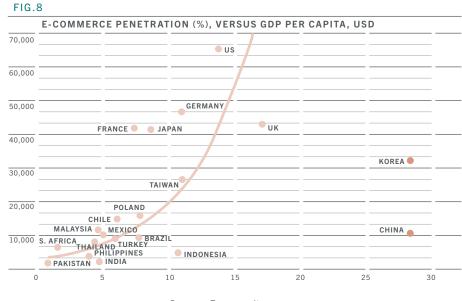
From an investment viewpoint, strong growth in corporate earnings should continue to drive further outperformance of Vietnamese stocks. Their valuations are in line with their long-term average and attractive compared with their peers in the region, while local bond yields hover around 2 per cent. Banks stand out as both very profitable and attractively valued. Consumer sectors and real estate are supported by population growth, rapid urbanisation and the increasing affluence of the middle-income group.

Its stock market looks set to deepen and become more diversified, with new initial public offerings and the privatisation of major state-owned enterprises (such as Agribank, VNPT, Mobifone, ACV and Viettel) to come. Vietnam's inclusion in international stock indices is another tailwind, with officials targeting a reclassification from frontier markets to emerging markets by 2023. The revamp of the securities law, meanwhile, is expected to improve market transparency and support more sustainable development. Recent MSCI reclassification of Kuwait to emerging markets has doubled the weightings of Vietnam within MSCI Frontier markets (to 32 per cent) – this should support passive inflows to Vietnam equity.

1. E-commerce

North Asia is a global leader in e-commerce. China already has the highest e-commerce penetration in the world, with the highest absolute revenue generated (three times that of the US) and, for now, the fastest growth rate despite its already high base.¹⁶ Even though the rate of penetration outside of tier-3 Chinese cities will probably be slower, growth can be maintained through increased revenues per user (ARPU) and continued innovation.

Livestreaming e-commerce – in which retailers use influencers or celebrities to sell products and services online through video streaming in real time – could be a key source of growth. Last year about 40 per cent of China's online shoppers made livestream purchases and its share of total retail e-commerce is forecast to almost double to 22 per cent of the total in the next two years.¹⁷ China's success has caught the attention of the developed world, with



Source: Euromonitor, UBS, Pictet Asset Management, 2019

US retailers Amazon and Walmart are among those starting to experiment with the format – a classic case of Asian leadership in product/business-model innovation.

However, regulation is a risk in China, with the tightening of rules for 'new-economy' sectors across e-commerce, fin-tech and edu-tech. Testifying to the threat was a USD2.8 billion fine against e-commerce giant Alibaba in April 2021 for what authorities alleged were monopolistic activities. Still, with the penalty representing just 4 per cent of the company's 2019 sales, it would seem that Chinese authorities are keen to strike a balance between preventing what they describe as "disorderly capital expansion" and promoting innovation.

China and Korea lead e-commerce adoption

¹⁶ Forbes, Live Streaming E-Commerce Is The Rage In China. Is The U.S. Next?, December 2020

¹⁷ Source: iResearch

Elsewhere in emerging Asia, the pandemic has spurred e-commerce adoption, particularly in historically hard to penetrate categories such as groceries, and among less tech-savvy segments of society, such as seniors. Surveys suggest that a large proportion of consumers who shifted to e-commerce for the first time in 2020 expect to continue shopping online.

As late-starters in Internet adoption, South and South-East Asian markets are rapidly catching up with other parts of the world. For instance, Indonesia took just three years to increase e-commerce penetration to 11 per cent from 2 per cent – it took China around five years to achieve such progress and the US over a decade. In India, meanwhile, e-commerce penetration is forecast to double to 16 per cent by 2025.¹⁸

Across emerging Asia Internet and e-commerce stocks trade on a premium to the broader market or even to the tech sector but, adjusted for growth, valuations appear attractive. Adjusted for 2021-23 consensus earnings, the Chinese Internet retail sector trades at a 50 per cent discount to global equities, a 20 per cent discount to emerging Asia equities and a 40 per cent discount to developed market e-retailers.

2. Financial services and products

Asia's financial services market is expanding rapidly. An ageing population (particularly in China, where the number of citizens aged 65 and over has jumped by 60 per cent in the past decade) with a huge pool of savings and changing societal norms are boosting demand for financial planning. China's personal pension segment – including endowment insurance – is still small, providing insufficient support for the elderly. Which means it could see strong growth over the medium term.¹⁹

At the same time, wealth across the region is growing, not least among the growing middle-income cohort, benefiting industries such as high-touch banking and wealth management. China's asset management industry is expected to triple in the decade to 2028.²⁰

Technology, meanwhile, is aiding financial inclusion in South Asia. As with e-commerce, the digitisation of financial services has been further boosted by the pandemic, with Asian consumers embracing digital identity verification, AI-infused chat bots and more.²¹

¹⁸ Source: World Bank, population ages 65 and above, total -China, 1960-2019

¹⁹ Source: Deloitte, 2021 China Outlook, January 2021

²⁰ Roland Berger, on mutual fund assets under management basis

²¹ Source: EY, How 2021 will reshape Southeast Asia's financial services ecosystem, February 2021

India has already made great strides in financial inclusion, albeit from a low base. This is thanks to improved teledensity, smartphone penetration and some of the most affordable data globally, but also to "India Stack" – an open architecture digital ecosystem built on the foundation of India's biometric identification system, Aadhaar. The tech framework has paved the way for applications such as the Unified Payments Interface (UPI), which allows peer-to-peer and merchant payments and reduces the need for credit cards or cash. The share of digital transactions has increased to 30 per cent from 5 per cent in just five years. The stage now appears set for innovative and scalable solutions such as digital consumer finance to customers who were hitherto outside of the formal credit extension system.

3. The green transition

China has emerged as an unlikely champion of the green transition. It is now the world's largest investor in renewables and the biggest producer of both solar and wind energy. And while it also has the world's largest carbon footprint, pollution levels peaked in 2014 and are now edg-

——— China has emerged as an unlikely champion of the green transition. It is now the world's largest investor in renewables and the biggest producer of both solar and wind energy.

> ing lower. Crucially, overall energy consumption is currently growing at a slower pace than the economy.

> Beijing's commitment to achieve net zero by 2060 would require significant further investment in renewable energy infrastructure and technological improvements – which in turn could create attractive investment opportunities for the private sector. On renewable energy, the official target is to reach at least 40 per cent of total energy consumption by 2040 from 28 per cent in 2020.²²

> Carbon pricing is likely to play a major role. China has launched a number of pilot schemes introducing carbon taxes for the power sector this year, that will gradually be extended to other sectors. But technology could prove to be the key pillar of the transition. China has already carved out a leading position in the "green tech" value chain, be-

²² Source: Reuters, China plans to raise minimum renewable power purchase to 40% by 2030, February 2021



coming the undisputed solar champion globally. According to Bloomberg, China now produces more than 80 per cent of the polysilicon and roughly 98 per cent of two other key components – wafers and ingots – that are used in solar panels worldwide, even those manufactured and assembled in other countries. Eight of the world's top ten solar companies are based in China.²³

The growth in electric vehicles is another string to China's bow. Despite China accounting for half the world's electric car sales in 2019, penetration of EV remains low at 5 per cent. But this is expected to reach 35 per cent, among the highest worldwide, by 2030.²⁴ Chinese EV manufacturers already have a much higher global share of that sector than for traditional internal combustion engine autos – 35 per cent versus 10 per cent. Its EV industry has achieved significant technological prowess, enjoys a cost advantage and improving brand perception compared to its peers – factors that could see it evolve into significant disruptive force in the global auto industry.

China is also a leader in the development of "sponge cities", which provide a radical template in water resource management for the rest of the world. The project – which covers new and existing cities – features artificial and scenic wetlands for rainwater storage, rooftop gardens on buildings and permeable pavements that can effectively percolate and store rainwater. The ultimate goal is to ensure 80 per cent of China's urban areas will absorb and reuse at least 70 per cent of rainwater.

Other Asian nations are embracing sustainability. South Korea has emerged as a leader in manufacturing batteries for electric vehicles, with three of its companies covering nearly a third of the total global market.²⁵ That the Biden administration was considering setting aside an international trade commission ruling to accommodate two leading Korean battery makers setting up production facilities in the US is testimony to their strategic importance.

4. Semiconductors

Semiconductors are the foundation of modern technology – they are vital to machine learning, big data, the Cloud, networking, high-performance computing and gaming. As chips become ever more powerful and affordable, great progress is possible. A smartphone today has more computing power than the NASA moon landing mainframe,

²³ Source: Forbes, How China's Solar Industry Is Set Up To Be The New Green OPEC, March 2021

²⁴ Source: International Energy Agency, Global EV Outlook 2020, June 2020

²⁵ Source: Business Standard, Three South Korean companies capture 31% of global EV battery market in Q1, May 2021

while a leading-edge semiconductor circuit is the size of a single strand of DNA, or 1/40,000th of a human hair.

Semiconductor production is a highly specialised process. Pricing power and barriers to entry are high and require specialised processes and equipment, as well as access to rare materials and chemicals. That makes it an attractive industry for investors – and one where Asia is well positioned.

Taiwan and Korea lead in chip manufacture, particularly when it comes to the most advanced semiconductors. Korea's Samsung Electronics and Taiwan Semiconductor Manufacturing Co (TSMC) together are forecast to be responsible for 43 per cent of the global semiconductor industry's capex for this year.²⁶

China, as a leading assembler of consumer electronics, is the world's largest buyer of semiconductors, spending some USD137 billion in 2020.²⁷ It is actively working to increase domestic chip production.

We see semiconductors as a key industry: it should feature prominently in Asia-centric investment portfolios.

5. Chinese renminbi bonds

These bonds have emerged as a new defensive asset in global portfolios, as evidenced by their outperformance and low volatility during periods of market turbulence (including the global financial crisis and the initial stages of the pandemic). They offer attractive yields (at 3.1 per cent compared with US Treasuries at 1.5 per cent) while their returns do not strongly correlate with those of other major asset classes, including core developed market bonds.

²⁶ Source: IC Insight, March 2021

²⁷ Source: Reuters, World going through unprecedented chip shortage, China trade body says, March 2021

Also underpinning the asset class is China's management of its economy and financial system. China's economic policies have not been over-stimulative while financial stability has remained Beijing's top priority.

Inflation should not be troublesome, either. With China continuing to produce more than it can absorb domestically, we calculate that its inflation rate will remain approximately 1 percentage point lower than the US's in the coming five to ten years, benefiting renminbi bonds.

The market is also maturing, with growth in the asset management industry helping to diversify the fixed income investor base beyond commercial banks. There is also huge potential for growth in foreign investment, which stands at just 3 per cent. Index inclusion will play a key part here.

Reforms are helping to further open up the market, particularly for foreigners. Among the most important, the "Bond Connect" programme, launched in 2017, allows non-Chinese investors to trade in Hong Kong without an onshore settlement agent. Further reforms are needed for foreign access to onshore futures and repo markets. In corporate bond markets, greater foreign participation would require more transparent credit ratings and clearer default resolution procedures.

An appreciation of the renminbi would further enhance the appeal of Chinese bonds. And here too, the prospects are promising. The currency is already gaining influence outside its borders and remains cheap relative to its fundamentals to the order of some 20 per cent according to our models.

Obstacles to success

Obstacles to success

For emerging Asia to thrive, it will need to resolve some formidable political, environmental and social problems.

South and East Asia's breakneck development over the past few decades has been a blessing for the billions who call it home. It has also brought with it challenges that governments have to tackle head on if this trend of superior growth is to be sustainable. The birth rate in the region is falling and its population ageing fast. Then there's debt. A considerable amount of China's growth has been driven by borrowing, most recently among households. Longer term, meanwhile, countries across the region need to improve governance standards to make the leap to fully developed economies. Along the way, they'll also have to tackle climate change. And that's all set against increasingly fraught geopolitical tensions, particularly between Beijing and Washington, as China uses its prosperity to flex its muscles internationally.

The dragon uncoils

It's no surprise China should be seeking to project its power globally, commensurate with its growing wealth. Equally unsurprising is that this should make its neighbours and their allies uneasy – not least the US. That China's domestic politics also have international dimensions merely complicates matters.

There are a growing number of internal disputes over which the international community is taking an increasing interest. Additionally, recent events in Hong Kong as well as rising tensions concerning the future of Taiwan have the potential to escalate into a geopolitical confrontation with unpredictable effects on the economy and markets.

Elsewhere, China and its neighbours take differing views over territorial matters, some of which, like the Spratly Islands in the South China Sea and border disputes with India, threaten to turn hot.²⁸

Further afield, China's effort to reinforce its global economic reach with its Belt and Road programme has been met with both praise and suspicion. For example, in March 2019, Italy became the first G7 country to formally join the BRI – a decision that infuriated the EU and its allies.²⁹

The close relationship between the Chinese government and its technology companies has been another global flashpoint. Huawei, a leader in 5G technology, has been shut out of leading western markets for fear Chinese

²⁸ Source: India Today, Global conflict triangle? US think-tank flags possibility of India-Pakistan, India-China war, April 2021

²⁹ Source: Post Magazine, Relations between China and Myanmar have long been fraught, resulting in imperial invasions and wars, April 2021

agencies would have illicit access to vital communications infrastructure in other countries. But Huawei is merely a particularly high-profile symptom of a wider issue, which is China's technological ascendancy. China has been making significant strides in artificial intelligence, in which it is a global leader. Its technological prowess brings huge possibilities for the Chinese economy but could also unsettle rivals into retaliation.

The US has responded to these geopolitical threats with measures ranging from sanctions to tariffs and seeking extra-territorial legal moves against Chinese executives on grounds of fraud, money laundering or involving US state secrets. In early June, President Biden signed an executive order banning Americans from investing in 59 Chinese companies, including Huawei and SMIC.³⁰ This, though, isn't a one-way street. When Australia called for an international investigation into the origins of the Covid pandemic, China responded by imposing tariffs on a number of Australian goods, causing exports to China of a number of major Australian commodities to slump as much as 80 per cent.

In some ways, China's complex relationship with the rest of the world is a potential boon for its neighbours. Sanctions on China have already given a boost to Vietnamese exporters. India, meanwhile, could increasingly benefit as an alternative source of relatively inexpensive welltrained labour, particularly in technology.

Some sanctions against China have backfired. China's size means it can resist pressures that would cause the likes of Russia and Iran to buckle. The blacklisting of some Chinese companies by the US caught headlines and caused short-term pain, but in the long run it amounts to a transfer of wealth from US to Chinese investors as American investors are deprived of the superior returns associated with fast-growing markets.

A debt dilemma

After decades of relentless economic growth, increasingly fuelled by borrowing, one of the biggest worries investors have about China is its debt burden.

Chinese public and private debt is 276 per cent of GDP, having risen by 100 percentage points since the global financial crisis of 2007-08. Most of that borrowing has occurred in the private sector. Over the past five years alone, Chinese household debt has risen 21 percentage points to above 60 per cent of GDP.³¹

³⁰ Source: Financial Times, Washington to bar US investors from 59 Chinese companies, June 2021

³¹ Pictet Asset Management estimates from 14.04.2021

Not only is the volume of debt large, but it is also very concentrated in some specific sectors – such as the 20 per cent that has gone to finance the real estate sector.

But these risks are mitigated by a number of factors. Two-thirds of Chinese corporate debt is owed by state operated enterprises, which means there is no impediment to the government stepping in to support these firms. And given that public debt stands at a relatively modest 70 per cent of GDP, Beijing has significant capacity to take on this debt burden, even though the government has shown it will not bail every company out for fear of moral hazard and the consequent risk of inflating asset bubbles.

At the same time, nearly all of that debt is held domestically – externally held debt is worth only some 16 per cent of GDP – which makes it highly unlikely that a crisis of confidence would be triggered by foreign investors, as happened elsewhere in the region during the 1997 Asian financial crisis. And China's high rate of economic growth and current account surplus makes interest payments affordable over the longer run.

Whether the accumulation of debt continues to drive China's development is another matter. The Chinese government is implementing policies to restrain debt. Each

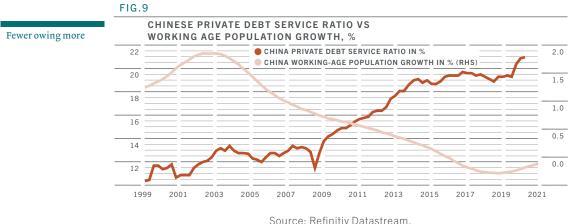
additional unit of debt has been generating incrementally less growth over recent years, raising concerns that China could be stuck in a middle income trap – never quite achieving the status of the world's most developed economies.

A demographic crisis?

Changing demographics are among the biggest challenges facing Asian economies. As in many other parts of the world, people are having fewer children and they're living longer. These two facts mean that an ever larger economic burden will fall on the shoulders of working age people.

In China the working age population is already shrinking (see FIG. 9) and the dependency ratio is seen rising from 42 to 67 per cent over the next three decades, which would mean that for every 10 working people, there would be almost seven who are either children or above retirement age. China's fertility rate is already among the lowest globally, and the latest 10-year census data reveals the severity of the challenge facing the country. Last year births fell to 12 million, the lowest since the famine years in the early 1960s. China's government has further relaxed its birthcontrol regulations to a three-child policy (a "one-child policy" introduced in 1980 to address rapidly expanding population was eased in 2016 to allow two children per household). Such measures are, however, unlikely to move the needle in the face of structural factors impeding fertility growth such as rising female participation in the labour force and prohibitively expensive housing and education in tier 1 and 2 cities.

Elsewhere in the region, the situation is less dire. For South-East Asia, the dependency ratio is on course to rise to 55 per cent from 48 per cent; and in India to remain



BIS, Oxford Economics, Pictet Asset Management. Data from 15.05.1999 to 15.05.2021

largely flat at around 49 per cent. In the past the dependency ratio was also high, but that's because the number of children was high. Now the dependents are increasingly old people.

Automation can do only so much to plug this gap. For all the promise of robotics and machine learning, it's unlikely that care of the infirm and elderly will be handled in any substantial way by anything other than people for decades.

These demographic problems will in part be mitigated by rising education and increasing productivity in other parts of the economy. Everywhere in the world, people are having fewer children than they did in the past. But more resources are being poured into educating them. In 1970, some 56 per cent of the world population was literate; by 2010 that proportion had grown to 83 per cent.³² Then, less than half of children aged 15 years or younger were in school. Now that proportion is 82 per cent. Some of the biggest strides have been made in Asia. In 1980 less than 5 per cent of South Asians had access to tertiary education. By 2014 that proportion had grown four-fold.

Demographics may be a hazard. But trends in education offer considerable hope. We may not be able to anticipate the rate of technological change and innovation, but we know they're pushed forward by additions to human capital. So in 80 years' time a 100 per cent dependence ratio could well be more manageable than 70 per cent now.

An uphill battle to contain environmental and social risks

Asia's environmental and social problems also loom large. The pandemic brought into sharp relief many of the failings of the world economic and financial system. It uncovered deep-rooted problems such as social inequality, dilapidated public health care systems and an inability to address environmental damage.

Asia's emerging economies confront many of these challenges from a position of relative weakness. Climate change is particularly worrying. A recent Oxford University study³³ argued that economies like India's will suffer a net loss of two thirds GDP per capita by the end of the century without mitigating action.

A snag is that for both China and India, the path to economic development has been hugely energy intensive. Indeed, China's and India's emissions targets for 2030 have been set only in reference to energy intensity, or per unit of GDP. That means their emissions can still increase substantially in absolute terms – by more than 150 per cent in both cases.³⁴ Furthermore, these economies will find it hard to wean themselves off coal. For instance, 60 per cent of China's energy consumption is coal generated even though Beijing has committed to capping China's coal consumption by 2026. With investors increasingly taking climate change into account when making investment decisions and developed markets' governments considering carbon border taxes, Asia's investment appeal could be materially dented if it lags on emission targets.

Social inequality is no easier to solve.

Compounding the difficulties is the highly unequal distribution of income across Asia. For instance, since 1980, the share of income flowing to the top 10 per cent of Chinese earners has risen to 41 per cent from 27 per cent. This divergence is even greater in India.

³² Demographic and education data from Our World in Data

³³ Source: Pictet Asset Management, December 2020

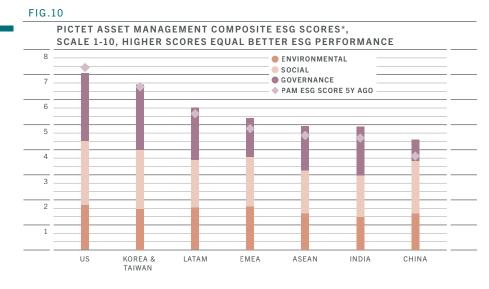
³⁴ Bloomberg New Energy Finance, How COP26 Climate Pledges Compare Post Earth Day: Update April 2021



Weak governance

It is not a surprise that Asia, along with the majority of emerging countries, scores poorly on ESG metrics. Countries at an earlier stage of development typically put economic development at the top of their priorities and in doing so can easily overlook the impact of growth on the environment and social wellbeing. Their political and market institutions do not always ensure good governance – of which transparency is a key factor. We strongly believe that superior ESG scores will ultimately lead to superior performance and appeal to a new class of investors for which ESG is a pre-requisite for any investment decision.

Asia's difficulties on the ESG front are clear and significant. But what really matters in our view, like most things in the world of investing, is the direction of travel. And on



*PAM ESG score is based on a set of Environmental (7 including Air Quality, Climate Change, Water Quality and others), Social (7 including Education, Healthcare, Gender Equality and others) and Governance (9 including Civil Unrest, Corruption, Judicial system, Government Stability and others) indicators. ASEAN includes Indonesia, Malaysia, Thailand, Philippines and Vietnam. Regional score aggregated by GDP in PPP terms. Source: Pictet Asset Management. Data as of Q2 2021

this, long-term investors might take some solace from the fact that although Asia lags on ESG scores, it is also improving the fastest among regions.³⁵

Asia's ESG gap

01

³⁵ Based on Verisk Maplecroft ESG scores. Scores are an average of 23 environmental, social and governance indicators. Environmental indicators are: air quality; carbon policy, climate change exposure; CO₂ emissions per GDP; deforestation; water quality; and water stress. Social indicators are: capacity to innovate; education; gender equality; healthcare capacity; life expectancy; quality of scientific research institutions; and working-age population trends. Governance components are: capacity for renewal; civil unrest; corruption; efficacy of the regulatory system; electoral process; government stability index; judicial effectiveness index; judicial independence index; right to privacy.

Asia's developing economies, then, face significant challenges ranging from China's near-term debt issues to those that won't be resolved for decades, not least demographics and climate change. But many of these challenges can be met with technological development, innovation and political reform. Emerging Asia in global portfolios

Emerging Asia in global portfolios

Superior growth, low inflation and cheap currencies. These are some of the defining characteristics of emerging Asian economies. They are also the reasons why investors should consider increasing their exposure to the region. Others include a reform agenda that is more ambitious than any in the world and a commitment to invest heavily in R&D.

We expect emerging Asian equities to deliver among the best returns in global stock markets over the next half decade, especially in dollar terms (10.8 per cent per year on average, or double the global market). We calculate that their outperformance – which stems mainly from superior earnings growth and currency appreciation – could amount to 35 per cent on a cumulative basis over the US in that timeframe.

Our analysis shows dollar-based investors are underexposed to the region and should consider almost trebling the weight of Asian equities and bonds in their portfolios.

——Our analysis shows dollar-based investors are under-exposed to the region and should consider almost trebling the weight of Asian equities and bonds in their portfolios.

Only by doing this can they hope to secure a real return approaching 4 per cent per year over the next five years.

Defining EM Asia

In our framework emerging Asia today can be split into four distinct groups: the two powerhouses China and India, the technologically advanced open economies of Taiwan and Korea, the nations of the ASEAN. In addition to this, smaller frontier markets such as Bangladesh and Sri Lanka might also present attractive opportunities in the future.

It is a dynamic region which, according to our forecasts, will see economic growth of 5 per cent per annum on average over the next five years – double the rate of expansion of the US but with inflation averaging at a lower 2.2 per cent. Asia's "growth tilt" is also reflected in the composition of its equity market. It has a higher proportion of stocks in high-growth sectors than other emerging markets. Tech-related companies, for example, account for some 47 per cent of emerging Asian equities – higher even than the US at 38 per cent. (see FIG. 11)

Unusually, this growth premium does not come at the expense of diversification. Asian equities' beta to global markets – a measure of their sensitivity to moves in international stock markets – has fallen below 1, a level last seen in the late 1990s, when the region had only just begun to open up to foreign capital.³⁶ This means investors can access high-growth sectors without unduly increasing the risk in their portfolios.



Source: Refinitiv, Pictet Asset Management, data as of 02.06.2021

Asia: the new haven?

Emerging Asia offers a distinctive combination of an economic growth profile typical of emerging economies and the resilience associated with more advanced nations.

We arrive at that conclusion by analysing a number of macroeconomic variables that serve as good indicators of risk or vulnerability, including a country's leverage, foreign currency reserves and fiscal and external balances.

Under this framework, Taiwan, Korea, Thailand and China stand out as the least exposed to global economic shocks (see Appendix for details on the methodology).

FIG.11

More growth,

more tech

³⁶ Beta in USD vs MSCI ACWI based on weekly observations over the past five years. (See more in Appendix) Source: Refinitiv, Pictet Asset Management, data as of 07.06.2021

In a complementary study, we also analyse the cross-correlation among the bonds, equities and currencies of emerging Asian economies to quantify the multi-asset diversification potential for investors.

In this analysis, a positive correlation of 1 would indicate that as a country's equity markets rise or fall, bonds and currencies move in lockstep and in the same direction. A correlation of zero, by contrast, shows no relationship at all, while -1 is indicative of a perfectly inverse one.

Our calculations show the weighted average of cross-correlation of domestic asset classes in emerging Asia is close to zero (-0.1), compared with the US (-0.3) and the rest of emerging markets (+0.5).

At the same time, our study illustrates that emerging Asia offers a rich variety of domestic assets whose performance is not dependent on the perception of country risk – in contrast with many other emerging nations and, indeed, the countries in the euro zone periphery. Instead, the returns generated by its stocks and bonds are more heavily influenced by domestic macroeconomic factors. This, in turn, improves the diversification quality of the region.

Asian assets also provide more sustainable sources of return. This can be seen through a breakdown of the components of equity returns, which shows gains are largely generated by growth in corporate revenue, dividends and pre-tax profit margins.

It is a picture that compares favourably with developed markets – particularly in the US – whose stock returns have been boosted by factors such as buybacks, tax cuts and falling interest costs, which are very unlikely to continue in a post-pandemic world. The Fortune Global 500, an annual ranking of the top 500 corporations worldwide as measured by revenue, shows how far Asian companies have progressed. As of August last year, 40 per cent of firms in the list were located in East Asia. European and US companies, by comparison, each accounted for 28 per cent. For the first time ever, there were more Chinese companies in the index than US ones.

Asia, therefore, represents a promising source of investment returns. At first glance, our expectations for a 35 per cent outperformance of emerging Asian stocks over the US in the next half decade may seem impressive. Yet this will only take the relative performance of the region to the US back to the level of early 2018 and broadly in line with its 20-year average.

Be active and local in Asia

For skilled investors, returns could be higher than our forecast. That's because Asian equity markets possess characteristics that suggest active management could deliver handsome rewards. To begin with, the average correlation between MSCI EM Asia constituents' returns is just 0.42, lower than the global average of 0.6. This means there is more scope for investors to generate alpha through stock selection.

Add to that the fact that Asian economies are characterised by heavy investment in R&D, rapid innovation and an evolving regulatory framework, and the case for adopting an active investment approach based on bottom-up analysis becomes stronger still.

What's more, we think Asia's growth potential should be best realised by investing directly in the region rather than via a broader mandate.

Some investors have preferred to take an indirect route – by adding exposure to developed market companies that derive a considerable proportion of their revenue from Asia. The idea here is that investors can have a similar exposure to local demand without being exposed to the risk of weaker governance. This has been a popular strategy for some time in sectors such as luxury goods and beverages, where stocks with high exposure to Asia trade at a significant premium to their peers.

However, we believe indirect exposure has some clear disadvantages over direct investing for the following reasons:

- Prominent developed market companies with emerging market exposure can be vulnerable to sudden changes in regulations and/or protectionist policies that give preferential treatment to domestic companies
- Foreign companies can become targets of consumer boycotts when political tensions flare up, as recently experienced by global fashion retailers based in China
- Developed market companies have a chequered track record when it comes to their expansion in Asia. The world's largest retailer Walmart, for instance, has come up against several obstacles in India, including running foul of foreign investment regulations in 2019; Google's search engine, meanwhile, is still blocked in China
- The indirect exposure in the most exposed sectors represents only a fraction of the direct exposure enjoyed by local companies. The average exposure of developed market stocks to emerging Asia stands at 11 per cent, with the highest exposure in technology at 22 per cent. This pales in comparison to emerging Asian companies, whose proportion of revenue within the region is above 70 per cent and as much as 90 per cent of domestic sales in China.

All of which suggests domestic companies are better placed to navigate the intricacies of the evolving political, regulatory and market framework and benefit from any growth opportunities that arise.

The bond opportunity

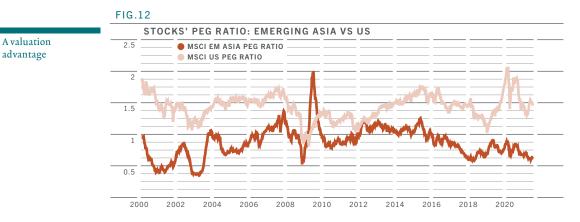
When it comes to fixed income, most Asian government bonds – with the notable exception of China – are unlikely to offer returns that are considerably more attractive than those in other emerging markets.

However, US dollar-denominated credit in emerging Asia is a promising asset class for investors looking for income and keen to avoid currency risks.

Asian corporate bonds have strong fundamentals relative to emerging and developed market peers. For example, the region's dollar-denominated investment grade corporate bonds offer a 90 basis point yield pick-up compared with their US peers. Such bonds are also of lower duration, less volatile and more liquid than their counterparts in other emerging markets. Asian corporate bond issuers are also less leveraged than their developed market peers.

Multi-asset portfolios

For investors looking to build a multi-asset portfolio, it is important to understand that valuations favour equities



* Price to trend earnings ratio divided by consensus long-term EPS growth estimate Source: Refinitiv, Pictet Asset Management, data covering period 31.12.1999 - 25.06.2021

over bonds in Asia. Notably, the gap between stocks' 12-month earnings yield and 10-year government bond yields is higher in North Asia than in the US or Latin America. In other words, investors are more than sufficiently compensated by investing in riskier stock markets instead of bonds.

Emerging Asia's equity discount to the rest of the world, as measured by forward price/earnings ratios, is not far away from its long-term average of 10-15 per cent. That said, the region's stocks looks cheap when valuation is adjusted for the expected superior earnings growth – with the gap between Asia's and US PEG ratio (price to trend earnings divided by long-term EPS growth) now being the widest in 20 years. (see FIG. 12) According to our currency model, which takes into account differences in countries' inflation rates, productivity and net foreign assets position, emerging Asian currencies are 16 per cent undervalued against the dollar; we think this gap will begin to close in the coming years as we expect them to appreciate by around 3 per cent per annum in the next half a decade. The Indian rupee is the most undervalued emerging market currency on our models.

Measuring the optimal weight of Asia in a global portfolio

Our analysis suggests investors with a long-term horizon should increase their holdings of assets in emerging Asia by a considerable margin. The alternative – persevering with a traditional balanced portfolio – is difficult to justify.

The current yield of a global portfolio whose assets are split equally between equities and bonds is below expected inflation for the first time in 30 years. This suggests that the return of this 50/50 portfolio – which tends to be twice the average yield – will fall well short of the long-term average return of a balanced passive portfolio.

For dollar-based investors, the long-term average return of a 50/50 portfolio has been around 5 per cent in real terms. Given that most developed market assets are already expensive on several measures, we think that a 4 per cent real return in the coming years is a more realistic target. In FIG. 13 we show a realistic path for investors to achieve that, based on our expected five-year total return forecasts.³⁷

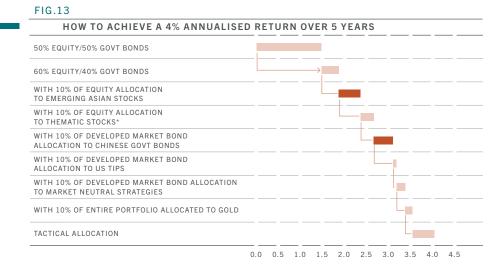
As our calculations show, investors' expected total return will improve as they increase allocations to emerging Asian equities and Chinese government bonds. The expected return of a portfolio with 15 per cent of its assets invested in emerging Asia equities and 10 per cent in Chinese government bonds is around three times higher than what our forecasts suggest a purely passive global balanced portfolio would generate. Chinese government bonds offer the best risk/return trade-off of all the asset classes.

³⁷ Our five-year total return forecasts are based on initial valuation, the expected path of key macroeconomic variables (including GDP, inflation and interest rates) and the expected appreciation of the domestic currency. For equities, adjustments are made for sector breakdowns, geographical sales exposure and change in taxation. Detailed forecasts are featured in our Secular Outlook publications.

The expected return of this portfolio – in which thematic stocks, US inflation-linked bonds, an allocation to market-neutral strategies and gold also feature – is more than double what a traditional 50/50 portfolio would deliver and with only a 20 per cent increase in risk (volatility).

Moreover, according to calculations based on the Markovitz approach that incorporates both our five-year asset class return forecasts and historical covariances as inputs, an "optimal" portfolio targeting 50/50 global equity/bonds' volatility of 8 per cent annualised would have 32 per cent of its assets invested in emerging Asia. This is roughly in line with the region's share of global GDP.

Within this, emerging Asian equities account for 17 per cent (the majority, or 15 per cent, in Chinese stocks) and Chinese bonds 15 per cent.



Source: Pictet Asset Management; forecast period 31.05.2021-31.05.2026; Indices used in calculations: MSCI equity indices, JPMorgan government and emerging-market bond indices; *Thematic stocks are companies within our thematic universe that we believe offer a potential excess return of 3% per year over the MSCI World A/C Index. These companies operate in industries we expect to expand at a faster rate than the world economy (such as clean energy, robotics and digital technology) See Appendix for methodology.

As Asia emerges as a financial powerhouse in the coming years, it's a matter of time before the region develops into a strategic asset class for international investors. The make-up of global portfolios will have to change to reflect the region's growing heft.

Why investors can ill afford to ignore emerging Asia — We believe...

The most effective investment committees prefer debate to consensus, dissent to harmony, and humility to complacency.



Investment decisions should take account of the time lag between financial-market cycles and economic

cycles: market prices anticipate the future development of the real economy; they do not follow it. A classic mistake is to equate economic growth with a bull market.

> We take account of capital allocation growth of any asset, style and geography as a contrarian indicator,

> > a sign that an established trend might soon go into reverse.

Asset allocation is the most important source of excess return over the long run.

Strategic asset allocation has a bigger impact on long-term returns than tactical asset allocation.

It must endure periods of greed and fear, where the temptation to change it to reflect the latest market movements generally ends up destroying value.

All quotes refer to Pictet Group's Multi-Asset Investment Beliefs. For more information, please contact your Pictet Asset Management relationship manager.

Pictet Asset Management's Strategy Unit (PSU)

The PSU is composed of Pictet Asset Management's most experienced multi asset and fixed income portfolio managers, economists, strategists and research analysts located in various offices. This investment group is responsible for providing asset allocation guidance over the short-term and long-term horizons across stocks, bonds, commodities and alternatives.

Every year, the PSU produces the Secular Outlook: a publication providing asset class return forecasts for the next five years. The research embeds, and is a reflection of the PSU's investment philosophy.





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Appendix

Asset class return forecasts

Our Secular Return forecasts (5-year) are based on models combining our expected evolution of key macroeconomic variables (growth, inflation), our assumptions on interest rates and our assessment of initial valuation, adjusted for factors related to fiscal policy, trend factors and index composition.

Our forecast of DM government bond returns is derived from our forecast of the annual roll yield and the terminal bond yield in every major market, which is in turn determined by our estimated trend growth of nominal GDP, to which we apply a discount dependent on the stance of monetary policy (0.4X for the US and UK, 0.3X in the Euroarea). For EM and corporate bonds, the return forecasts are based on fair value models of the corresponding spreads and expected recovery rates in the 40/50% range depending on the index.

FX forecasts assume that currencies will revert to their fair value over the next 10 years, where the fair value is an estimate by our Economics team based on relative productivity, inflation and the evolution of current account balances.

The following benchmarks are used: JP Morgan indices for developed/emerging government bonds and emerging corporate bonds; SBI Index for Swiss bonds; BofA indices for Euro zone/US corporate and high yield bonds, US 10year TIPS.

Equity returns are calculated by adding the average dividend yield, expected sales growth (derived from nominal GDP) and margin change (adjusted for changes in taxation), a dilution effect and the expected change in P/E multiples. We use MSCI indices for all markets and IBES consensus on 12m forward earnings for P/E. We first estimate the 12m PE of the US market in 5 years' time with a model based on trend growth, inflation and bond yields. Then we forecast the P/E for the remaining markets assuming that regional PEs revert to their long-term median discount to US (in sector-adjusted terms for DM). For EM Asia, we assume a P/E discount to US equal to its trend value of 20%. Within EM regions we assume Latam and emerging EMEA will trade at a 30% and 35% discount to EM Asia, respectively. We also assume that frontier markets will trade at a 20% discount to EM.

For alternatives, the forecasts are based on models using the expected returns from traditional asset classes, initial relative valuation and some specific factors as inputs.

Economic and currency forecasts

Our GDP forecasts are based on estimating countries' current potential growth, and adjusting that by current production factors — which determine how effectively economic inputs are being translated into outputs.

Potential output is defined as the highest real GDP level that can be sustained over the long run. First, we decompose raw GDP data into cyclical and trend components. Then we apply the Phillips curve approach to determine the natural level of output, which is consistent with stable inflation (NAILO) and/or with a stable unemployment rate (NAIRU).

Production factors such as the state of the labour market, the availability of private capital and the degree of technological advancement are then applied to the potential output figure to determine the pace of potential — or trend economic growth in five years' time. We then use linear interpolation to determine growth estimates for the preceding four years. To forecast inflation, we combine three approaches. The first is based on the current inflation trends, using the Hodrick-Prescott filtering method. The second calculates optimal inflation based on the assumption that neutrality of money prevails over the long run. The third considers the variations in the transmission dynamics between money supply and inflation depending on the state of the economy (expansion, financial crisis). Our final inflation forecast is an average of the three calculations.

Currency weighting calculation methodology (chapter 2)

1. Logistic transformations of the dependent variables

The applied logistic transformation, or logit, of variable x is $ln(\frac{1}{1-x})$ where x is the reserve currency share.

2. Cross-sectional analysis

The implied reserve currency share for each currency is based on the estimated coefficients of the following cross-sectional regression:

 $y_{t} = \alpha + \beta x_{t} + \varepsilon_{t}$ ⁽²⁾

where yt the logit of the average reserve currency share (in % total reserves) over the period from 1999 Q1 to 2014 Q4 and xt is the average world GDP share, world trade share, stock market capitalisation share, foreign exchange market turnover (% daily turnover), total debt securities share, international debt securities share, FX volatility, inflation gap and inflation volatility of the US, Euro area, Japan, UK and Switzerland, Canada and Australia respectively. α and β are the regression coefficients and ε_t is a stochastic error term.

The dependent variable (the average reserve currency share) is regressed on each of the explanatory variables, one variable at a time.

	WTH, INFLATION FORE					T	T	
		LONG-TERM GROWTH**		LONG-TERM INFLATION ***	RISK****			
	GDP PER CAPITA*	GDP	EPS		BETA	DOMESTIC ASSET CROSS- CORRELATION	EM VULNERABILITY	
CHINA	10,484	4.6	13.2	1.4	0.85	-0.10	2.0	
INDIA	1,965	7.0	18.7	4.9	0.96	0.04	2.3	
KOREA	31,497	3.4	26.8	1.6	1.22	-0.09	1.9	
TAIWAN	28,306	3.4	18.6	1.4	0.92	-0.02	1.5	
INDONESIA	3,922	4.9	7.4	4.2	1.15	0.30	2.4	
MALAYSIA	10,270	4.3	6.2	2.0	0.68	0.20	2.4	
PHILIPPINES	3,330	5.3	3.7	3.0	0.90	0.16	2.4	
PAKISTAN	1,260	3.5	8.6	6.5	1.01	0.03	2.6	
THAILAND	7,190	3.1	3.3	1.9	1.04	0.11	1.9	
VIETNAM	3,499	5.9		4.0	0.72			
BANGLADESH	1,998	7.2		5.5	0.41			
SRI LANKA	3,679	4.2		5.0	0.58			
EM ASIA	6,563	4.3	16.1	2.0	0.93	-0.05	2.2	
EM	5,172	4.2	14.5	2.6	1.00	0.01	2.5	
DM	46,350	1.6	9.4	1.9	1.00	0.09		
					-			

VALUATION*****

EQUITY INDEX WEIGHTS

12M FWD PE	10Y BOND YIELD	FX	% OF MSCI EM ASIA	% OF FRONTIER MARKETS	% OF MSCI ACWI	COMMODITIES	CYCLICALS (EX-FINANCIALS)	DEFENSIVES	FINANCIALS
15.2	3.1	-1.7	47%			4%	65%	14%	18%
21.7	6.0	-3.5	13%			23%	30%	21%	26%
11.5	2.1	-1.2	17%			10%	71%	11%	7%
15.9	0.4	-1.4	18%			6%	78%	4%	12%
14.5	6.4	0.3	1%			14%	8%	28%	50%
14.0	3.2	-2.0	2%			11%	12%	45%	32%
15.7	4.1	-2.2	1%			0%	37%	17%	46%
5.1	9.7	-3.0	0%			30%	0%	0%	70%
17.3	1.7	-0.7	2%			28%	19%	36%	18%
20.9	2.3	-0.9		32%	•	6%	17%	22%	54%
12.6	5.8			2%					-
16.2	8.6			1%		3%	25%	42%	30%
15.1	4.4	-1.5			10%	8%	60%	14%	17%
13.8	5.0	-1.5			13%	13%	51%	15%	21%
19.3	0.5				87%	8%	51%	25%	17%

* GDP per capita (current prices USD) as at 31.12.2020. EM Asia = Emerging and developing Asia

- ** Real GDP Growth (%) : PAM Economics Team trend annual growth forecast for 2026. For Bangladesh and Sri Lanka it is the equivalent IMF forecast
- *** PAM Economics Team trend annual inflation rate forecast for 2026. For Taiwan, Philippines, Pakistan it is the equivalent IMF forecast
- **** Beta in US dollars vs MSCI ACWI based on weekly observations over the past 5 years; cross-correlations based on weekly observations over the past 5 years weighted average of 60% equities/bonds, 20% equities/currencies, 20% bonds/currencies. EM Vulnerability scores (1= best; 10 = worst) are computed using the below variables: current account balance, net foreign assets, external debt, fiscal balance, excess private debt, excess bank loans, Gvt. & NFC debt in hard currency, FX reserves and real interest rate differential vs US

***** Valuation: 12m fwd PE based on IBES forecasts; Trailing PE for Frontier Markets. 10Y government bond yield or benchmark. FX: Standard deviations from fair value (calculated using net foreign assets, productivity and inflation). EM and EM Asia are the median of the respective countries



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