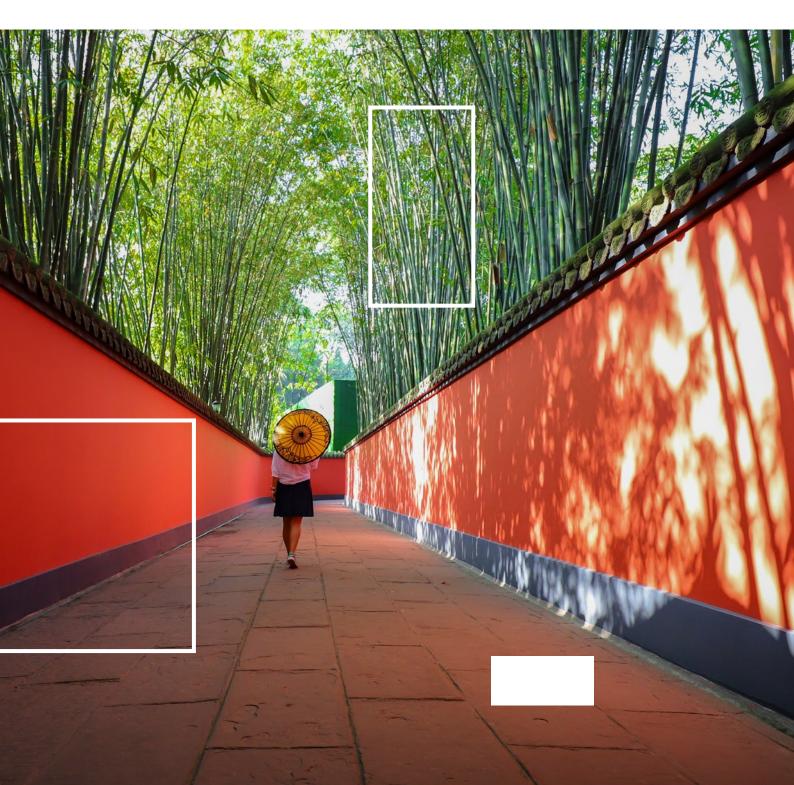
Investments

China through a sustainable investment lens

Part 1: The case for including China in a sustainability focused portfolio



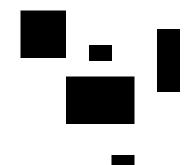
Willis Towers Watson IIIIIII

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Part 1: The case for including China in a sustainability focused portfolio

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Executive summary

Home to the world's second largest capital market, China is an increasingly attractive investment destination for global investors as the nation has gradually liberalised its capital account over the past decade. During the same period, the global investment community has undergone a sustainable investment (SI) revolution, propelling sustainability considerations to the forefront of many investment decision-making processes.

In this two-part series we offer our thoughts on the most important questions that sit in the intersection of these major trends and that are likely to shape global institutional investing for the decades to come. This first part asks the following question:

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Does the investment case still hold for allocation to China if environmental, social and governance (ESG) characteristics of its assets are properly taken into account?



We believe the answer to this question is yes.

There are three main parts of our argument:

- We recognise that there are indeed substantial challenges on the SI front in China. China's SI practice is in its early stages of development and not yet comparable with global best practice. Only a small proportion of listed companies disclose ESG-related information. Controlling shareholders, state-owned enterprises with dual mandates and the widespread presence of very large variable interest entities with structures often titled to favour the founder(s) are some key challenges for investors from a corporate governance standpoint. Investors should not underestimate the local contextual knowledge or the governance capability required to support an allocation to China with SI considerations properly incorporated.
- 2. That being said, the rate of change is also an important consideration. In the paper we will present evidence that China's SI development has gathered significant positive momentum over the last few years. We will also point to empirical studies that this positive rate of change the so-called ESG momentum can be a financially significant indicator in its own right, despite weak absolute ESG performance.
- 3. SI is not just about properly integrating ESG-related information for risk management purposes; it is also about recognising that long-term ESG-related themes (e.g. climate change) may create **return opportunities**. China has in recent years emerged as a world leader in funding and developing technologies to combat climate change and its net-zero pledge creates a new sense of urgency. We expect China to be a major source of climate change driven investment opportunities in the years to come.

In the second part of this series, we will go on to explore how investors can structure their portfolio implementation in order to manage the above ESG-related risks and capture ESG-driven opportunities in China.



As Chinese capital markets have become increasingly accessible to outside investors over the last few years, we believe that there is a strong case for global investors to add or increase exposure to Chinese assets in their portfolios, based on:

- 1. Its role as a diversifier in a global portfolio;
- Ample opportunities for active managers to add value, and;
- Improving portfolio resilience with respect to an evolving, albeit uncertain, world order.

In speaking to many institutional investors about China allocations, ESG considerations often occupy a substantial part of the discussion. It is not unusual for enthusiasm to give way to some concerns and scepticism when the discussion moves from economic/return prospects to ESG.

We are often asked this question:

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"Does it still make sense to invest in China if investors want to incorporate sustainability properly?"

The short answer is yes, and in this paper we set out three main arguments behind this view. Our aim is to address the common concerns and help institutional investors build a more informed understanding of China's SI practice and its future outlook.



Before diving into the details, we would like to address a question we are quite often asked up front – "what about human rights issues?". Globally, investors are increasingly aware of and concerned about the significant operational, financial, legal, and reputational risks both they and portfolio companies might face when human rights risks are not properly managed.

The Investor Alliance for Human Rights¹ put together a helpful toolkit that guides investors, asset owners and asset managers, to embed human rights considerations in their decision-making processes. Their paper argues that investors are now more exposed to human rights risks globally than ever, as a result of, for example, increasing globalisation of businesses.

Institutional investors have a systemic influence over financial markets and the behaviour of participants within them. This position enables them to contribute to new systems that embed respect for human rights – what every individual is entitled to in order to live a life of fundamental welfare, dignity, and equality.

As with any other ESG issue, human rights considerations should be embedded across the whole of the investment process, including investment decision-making and stewardship of assets. Investing in China should be no different. Asset owners can require from managers that assets are managed in line with the UN Guiding Principles². Human rights due diligence, engaging with portfolio companies and policymakers as well as exploiting the power of collective action are all part of the toolkit available to investors to stop, prevent, and mitigate risks associated with human rights violations.

³"Investor Toolkit on Human Rights", **The Investor Alliance for Human Rights**, 2020 ⁴"Guiding Principles on Business and Human Rights", **United Nationals**, 2011

Chapter 1

China's SI practice is not yet comparable with global best practice

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Global investors should not underestimate the challenges they face in the area of ESG when investing in China.

For example, at the end of 2020, Chinese companies had an average FTSE4Good rating of just 1.5 out of 5, compared to an emerging market average of 2.1 and a developed market equivalent of 3. That made **China the lowest ranked large market according to FTSE Russell**³.

Other ESG ratings paint a more positive picture, although the gap to global best practice is still substantial. Morningstar's Sustainability Atlas⁴ focuses on the **listed equity market** and currently ranks China in the third quintile, giving it a score of 27.82. There is a significant gap between China and the Netherlands, which tops of the list for strong ESG practice with a score of 19.07 (the lower the score, the stronger the ESG practice). To put things in context, developed economies such as Japan, Canada and New Zealand are also ranked in the third quintile.

In terms of disclosure, China's average Bloomberg **ESG disclosure score**⁵ is currently 21.7, substantially lower than that of France, which holds the top rank of 46.9 (the higher the score the stronger the ESG disclosure practice). China's ESG disclosure practice, according to Bloomberg, is similar to that of Australia (24.2) and Japan (24.1) and is, interestingly, stronger than the U.S. (18.5). One of the key challenges is that ESG data disclosed by companies is not standardised and therefore not readily comparable across markets, industries and portfolios⁶.

³"China's ESG ratings tarnish its allure for sustainable investors", **Steve Johnson**, **Financial Times**, 2020

4"Sustainability Atlas: Measuring the ESG Practices of Countries Around the World", Valerio Baselli, 2020

⁵"China Set to Lead ESG Disclosure to Lure Foreign Investments", Jacqueline Poh and Mariko Ishikawa, 2019

 $^{\rm Ge}$ ESG data in China – recommendations for primary ESG indicators", PRI, UNEP FI and SynTao Green Finance, 2019

⁷Data is sourced from https://ourworldindata.org/co²/country/china?country=-CHN ⁸"China's plan to cut coal and boost green growth", Sarah O'Meara, Nature, 2020

⁹"China expands coal plant capacity to boost post-virus economy", Thomas Hale, Financial Times, 2020

10https://info.worldbank.org/governance/wgi/

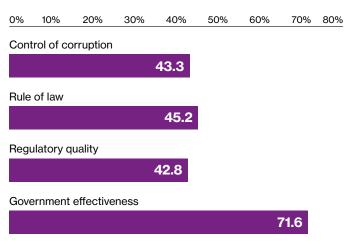
"As defined by Worldwide Governance Indicators, governance consists of the traditions and institutions by which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them. In this regard, it encapsulates aspects across both "S" and "G" in ESG. It is fair to say that China is far from a global leader in SI.

China is the world's biggest emitter⁷ of carbon dioxide (CO₂) emissions, with a global share of around 27%. China's energy supply still relies heavily on coal (58% in 2019). Since 2011, it has burnt more coal than all other countries combined⁸. Just recently it caused environmental concerns when the Financial Times⁹ reported that China is approving plans for new coal power plant capacity at the fastest rate since 2015 to boost its economy in response to the coronavirus pandemic.

The World Bank's Worldwide Governance Indictors¹⁰ are a set of widely accepted measures that assess a country's **governance credentials**¹¹.

As *Figure 1* shows, in 2019, apart from government effectiveness, all other five indicators rated China below 50% in the world.

Figure 1. **Worldwide Governance Indictors – China** (2019, percentile in the world)



Political stability and absence of violence/terrorism

38.1

Voice and accountability



There are also several notable issues in relation to corporate governance for Chinese companies:

- According to MSCI¹², the presence of a controlling shareholder continues to be the key characteristic of the MSCI China Index (79% of constituents in 2019). Many of these firms are state-owned¹³, with founder-led firms the next most sizable group. Minority shareholder influence in these situations is therefore limited¹⁴.
- State-owned enterprises (SOEs) have dual mandates to the state and shareholders (as of end 2020, SOEs accounted for 38% of the CSI 300 index¹⁵). They have explicit obligations to a wide group of stakeholders, including customers (low prices), employees (higher wages and benefits, and long-term employment security) and to what might be characterised as the "public good"¹⁶. It is worth noting that SOEs are not a unique phenomenon to China. They are prevalent in many emerging markets and also exist in developed markets, but to a lesser extent.
- There are a number of large companies employing variable interest entity (VIE) structures (16 companies with constituent weights on the MSCI China Index of 12% as of 2017¹⁷). VIE governance structures are often tilted to favour the founder(s) and minority ownership risk is increased due to legal uncertainties and a lack of direct ownership of the actual assets (see *Figure 2* for more information).
- Many companies lack an independent board majority. The presence of a controlling shareholder combined with the lack of an independent board majority can reduce the influence of minority shareholders and potentially lead to the board failing to protect the interests of minority investors.
- Most (more than 80% of MSCI China Index constituents) companies do not have CEO equity incentives, which means there is a weak alignment between executive's actions and company success.
- Events¹⁸ in the last few years such as the Luckin Coffee and TAL Education Group scandals reminded investors about the risk of accounting fraud.

¹⁶It is interesting to note that over recent years the societal zeitgeist in many western markets has shifted to be in favour of corporations moving away from only serving the interests of shareholders.

¹⁷"Corporate governance in China", MSCI, 2017

¹⁸ "China corporate governance in doubt after two accounting scandals in week", Japantimes, 2020

Current Chinese legislation prohibits foreign investors from investing directly in Chinese companies that operate in key industries such as internet and education. The VIE structure was devised to allow foreign investors access to these sectors through a listed special purpose vehicle (SPV). Tencent Holdings and Alibaba, for example, both use VIE structures. Many VIEs retain the involvement of their founders and designed the governance structures (e.g. dual share class structure; incorporation in a management-friendly jurisdiction such as Cayman Islands; monopolising the board) to preserve the founders' tight control over the company. Investors in VIEs are exposed to certain legal risks relating to the VIE structure - while Chinese authorities have not yet taken any action against companies with VIE structures, its legal validity has not been confirmed. In addition, the ownership of the operating company is often in the hands of the founders or their executive, rather than directly in the control of the holding company. Minority shareholders are therefore exposed to a risk that the operating companies are transferred beyond their reach. One of the most well-known such disputes involved Jack Ma, in 2009, transferring a majority of Alipay to a Chinese entity controlled by himself, which later became Ant Group. In 2011 Jack Ma became involved in a public dispute with Yahoo, then Alibaba's largest outside shareholder. The terms of the transfer were later negotiated with an agreement that Alibaba would receive up to \$6bn if Alipay was listed. This case study highlighted the risk of the VIE structures for minority investors.

Source: "Corporate governance in China", MSCI, 2020



¹²"China through an ESG lens", MSCI, 2019

¹³State-owned enterprises are defined by MSCI as those in which the state directly or indirectly controls at least 10% of the voting rights or has the right to appoint a majority of the directors.

¹⁴It is worth noting that the influence of concentrated founder/family ownership in itself requires a more nuanced discussion. For example, it can be a good indicator of being aligned to company outcomes, and so offers more protection to minority shareholders.
¹⁵As per China Securities Index Co. Ltd. CSI 300 Index consists of the 300 largest and most liquid A-share stocks.

Chapter 2

China's SI development has gained positive momentum over recent years

ESG momentum matters in its own right

In the following we will present a growing body of evidence that the improvement in ESG performance of Chinese companies has, in recent years, started to pick up a strong momentum, despite the fact that they still lag their global peers in terms of absolute performance. The natural question to ask is, given the weak absolute performance, does positive momentum matter or not?

This is an area that has led to an increasing number of studies because investors everywhere, not just those who want to allocate to China, are interested in the answer. While there is always debate in the academic world, literature largely supports that ESG momentum, in its own right, can be a financially significant indicator and a potential link to future returns. The rationale is that improvement in ESG characteristics is expected to lead to (and has led to, as found in empirical studies) increasing valuations over time. We list some recent studies in *Figure 3*.



Figure 3. ESG momentum does matter

Study 1

"Can ESG Add Alpha? An Analysis of ESG Tilt and Momentum Strategies" Nagy et al, The Journal of Investing, 2016

This study examined the performance of two ESG-based investment strategies. "ESG Tilt" strategy overweights stocks with higher ESG ratings while the "ESG Momentum" strategy overweights stocks that have improved their ESG rating over recent time periods. Over the eight years leading to 2015, the study found that both strategies outperformed the global benchmark. Furthermore, it showed that the "ESG Momentum" strategy outperformed the "ESG Tilt" strategy, demonstrating the importance of momentum in driving future returns.

Study 2

"Foundations of ESG Investing: How ESG Affects Equity Valuation, Risk, and Performance" Giese et al, The Journal of Portfolio Management, 2019

This paper reviewed several studies contributing to the literature assessing the transmission of a change in a company's ESG profile to a change in financial indicators such as valuation. In addition, using MSCI's ESG ratings it showed that an improvement in ESG profiles has led to increasing valuations over time. It concluded that ESG momentum can be a useful financial indicator in its own right.

Study 3

"ESG rating and momentum – Do stocks with improving ESG ratings represent potential upside for investors?" Societe Generale, 2019

This study used ratings from a different provider – Sustainalytics – and came to the same conclusion: companies that have over time improved their ESG ratings outperformed not only the index but also the portfolio that includes top ESG-rated companies.

The macro tailwinds for SI development in China

From a low starting point, China is catching up quickly with the global SI movement.

Let's start by understanding why SI development is starting to matter for China.

First, more and more end savers and asset owners ask for it. Like elsewhere in the world, compared to their parents, China's millennials are more aware of social and environmental issues and care more about the impact of their actions on society¹⁹. In the meantime, as China's capital market continues to open up to the outside world, more and more capital has entered the country²⁰ from investors with an SI mindset. For example, the inclusion of the China A-share market in the major indices has encouraged local companies to develop their collection and reporting of ESG information. Our experience suggests that some local asset managers are also starting to rise to the challenge of building out their SI capabilities to attract foreign investments.

Second, Chinese regulators are actively promoting green finance and sustainable development. The landmark policy dates back a few years, to 2016 with "Guidelines for Establishing the Green Financial System"²¹. Since then, the guidance has heralded a series of initiatives designed to assist SI developments, particularly in the area of improving the environmental information disclosure system for listed companies and bond issuers²²:

- Phase I (since 2017): mandatory disclosure of environmental information for listed companies that are included in the list of key pollutant discharging entities.
- **Phase II (since 2018):** "comply or explain" disclosure of environmental information for listed companies.
- Phase III (since 2020): mandatory disclosure of environmental information for all listed companies. This phase was delayed by the Covid-19 pandemic.

Enforcement of the environmental protection law has also become increasingly stringent. Authorities handled 186,000 environment pollution cases in 2018, up from 83,000 cases in 2014. Total fines reached 15.28 billion yuan (about 2.15 billion U.S. dollars) last year, compared with just 3.17 billion yuan in 2014²³.

Third, there is rising evidence of ESG integration being a source of investment value in China, as pointed out by Margarita Pirovska²⁴, head of Fiduciary Duty in the 21st Century, at Principles for Responsible Investment (PRI). The expectation is that companies are more incentivised to improve their ESG performance as the link between ESG performance and financial performance becomes increasingly clear. Readers can refer to Figure 4 for a selection of recent studies suggesting that incorporating ESG information in investment decisions in China makes sense from a risk-adjusted return perspective. We do acknowledge that ESG data in China is more limited in its breadth and available history compared to developed markets. However, this early evidence is consistent with global empirical evidence lending support to positive ESG integration impact on risk-adjusted returns²⁵.

 ¹⁹*China's Millennials and ESG", Frank Pan, Sustainalytics, 2019
 ²⁰*Rising foreign investment in Chinese stocks and bonds shows deepening financial integration", PIIE, 2020
 ²¹https://greenfinanceplatform.org/financial-measures-database/chinas-guidelines-establishing-green-financial-system
 ²²*China sustainable Investment Review 2019", China SIF and SynTao Green Finance, 2019
 ²³*China enhances crackdown on environmental violations: official", Xinhua, 2019
 ²⁴*ESG and alpha: ESG integration in China", Margarita Pirovska, top1000funds.com, 2020
 ²⁵*Financial performance of ESG integration in US investing", PRI, 2018; "Increasing Body of Evidence Bolsters Case for ESG Investing", Michael Katz, ai-cio.com, 2020
 ²⁶*Chinese company ESG scores inching upward: MSCI", Fund Selector Asia, 2020

Figure 4. Rising evidence of SI as a source of investment value in China

Study 1

"ESG and Alpha in China" PRI, 2020

This study, using data from MSCI ESG research for companies in the MSCI EM index and the MSCI China index (from June 2013 to June 2019), found that ESG incorporation in investment is a source of Alpha. According to the analysis, both best-in-class (ESG Leaders Index) and titling strategies (ESG Universal Index) deliver Alpha and relatively lower maximum drawdowns over their respective benchmarks. The efficacy of ESG factors in delivering stronger risk-adjusted returns is more pronounced in the MSCI China universe than in wider emerging markets.

Study 2

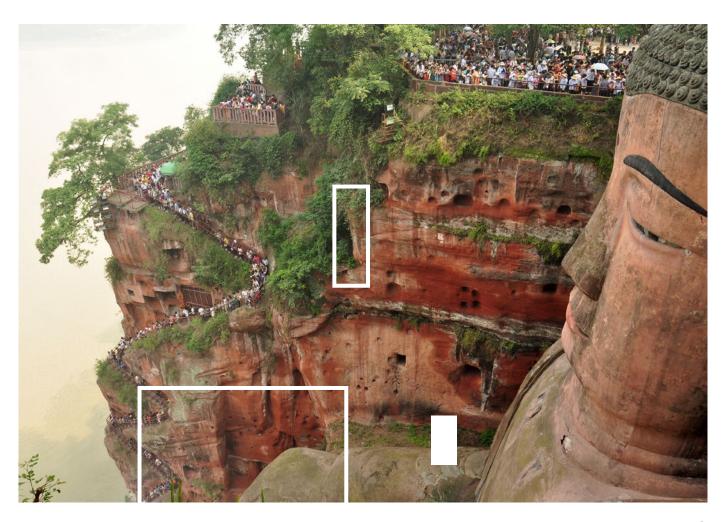
"Analysis of China A-share ESG ratings" SynTao Green Finance, 2020

This study discovered a significant correlation between ESG performance and the stock prices in A-share market. It selects from CSI 300 constituents the top 50 and bottom 50 ESG rated companies over the period of 2015 to 2019, and constructs "CSI 300 High ESG 50 Portfolio" and "CSI 300 Low ESG 50 Portfolio" using the free float capitalisation-weighted method. From January 2016 to May 2020, the "CSI 300 High ESG 50 Portfolio" outperformed the CSI 300 benchmark by 23.2%, while the "CSI 300 Low ESG 50 Portfolio" underperformed the benchmark by 2.1%.

Study 3

"China and the future of equity allocations" Zheng Wei, MSCI, 2019

The data using historical annual ESG premium based on MSCI ESG Leaders Indexes from December 2008 to April 2019 suggests integrating ESG historically enhanced return more in China (3.9% pa) than Emerging Markets (3.3% pa), World ex US (0.7% pa), Japan (0.4% pa) and US (0% pa).



Upward momentum and growing shareholder engagement

In 2020, Wang Xiaoshu, MSCI's head of ESG research for Asia-Pacific, pointed to a "strong upward momentum" with regards to Chinese companies' ESG performance²⁶. At least 50 Chinese companies, or 11%, had rating upgrades in 2019, with ESG leader companies (rated AA to AAA) growing to seven from five in the previous year. In 2019, ESG laggards (rated CCC to B) accounted for 56% of the MSCI China constituents, 3% lower than a year before.

Fidelity International's inaugural China Stewardship Report (see more in *Figure 5*), based on a study of shareholder voting patterns across nearly 7,000 shareholder meetings and 40,000 company filings at Chinese A-share firms, also shows a picture of steady progress across-the-board when it comes to investment stewardship in China.

Figure 5. Growing shareholder engagement in China

- Average controlling interest as a % of total shareholding across all A-shares has declined from over 45% in 2000 to below 35% in recent years
- Investors are voting more
 - The study noted that average turnout increased to 26.2% of non-controlling shares in 2019, up marginally from 25.5% in 2017. The change has been more pronounced at companies without a controlling shareholder, where the average voting participation rate has jumped to 36.5% from 33.1% over the same period
 - The number of resolutions that received more than 10% "against" votes increased to 385 in 2019, 20% more compared to 2017
- Engagements are on the rise. There are growing indications that asset managers are starting to engage with public companies on ESG issues. The number of Chinese signatories to UNPRI has climbed to 51 as of November 2020, from just seven in 2017
- Companies and managements are responding to rising participation among investors by making it easier to take part in voting and to initiate ESG engagement.

Source: "Fidelity International China Stewardship Report 2020", Fidelity International, 2020

SOE reform is an ongoing endeavour and positive changes are seen on a number of corporate governance fronts

In the area of corporate governance practice, MSCl²⁷ notes that, for some 20 years, China has been implementing **SOE reform**. One of the key themes of SOE reform has been to change state control **from management of company to management of capital**, pushing for sharing board control with non-state interests and giving company boards more autonomy to make decisions. The latest round of reform aimed to enhance corporate efficiency through mixed ownership and incentivised pay.

During the reform, the ownership of companies previously owned by state agencies was transferred to State-owned Assets Supervision and Administration Commission (SASAC). This move has led to improved governance practice²⁸. Performance-based contractual relations were established with CEOs and directors of all centrally-owned enterprises with more detailed dividend targets. In order to improve accountability of the management, professional independent directors have been invited to join corporate boards via partial privatisation.

Matthews Asia, in a 2019 paper²⁹, suggests that they are observing **positive change on a variety of ESG factors, especially around state ownership, shareholder friendliness, ownership and control structures, disclosure, board composition, environmental stewardship and corporate conduct**. The revised **Corporate Governance Code**³⁰ introduced by the China Securities Regulatory Commission was devised to underscore the role of minority shareholders and strengthen ESG principles.

In order to increase global investors' confidence in its capital markets, Chinese policy makers have over the last few years amended or issued several key rules and guidelines.

In some respects, A-share companies are subject to stricter regulation compared to offshore markets – for example, companies listed in the mainland Chinese stock markets are not legally permitted to issue multiple share classes with unequal voting rights, unlike in Hong Kong and the U.S.

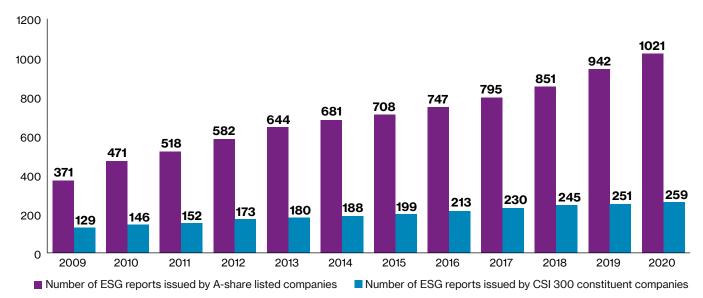
 ²⁸"How reform has made China's state-owned enterprises stronger", Amir Guluzade, 2020
 ²⁹"Corporate Governance in China: Progress and Participation in Profits", Matthews Asia, 2019

³¹"Analysis of China A-share ESG ratings", SynTao Green Finance, 2020

^{27&}quot;Corporate governance in China", MSCI, 2017

³⁰www.csrc.gov.cn/pub/csrc_en/laws/rfdm/DepartmentRules/201804/ P020180427400732459560.pdf





Improving ESG disclosure

Availability of ESG data is also improving as regulatory requirements for ESG information become increasingly stringent. In recent years, the number of A-share companies disclosing ESG information has kept rising, while still remaining at a low level (just over 25% of all A-share listed companies issued their ESG reports in 2019), as shown in *Figure* 6³¹.

At the country level, China has improved in five of the World Bank's Worldwide Governance Indicators

As shown in *Figure* 7³² – maybe a surprise to the prevailing perception – **China has improved in five categories of the World Bank's Worldwide Governance Indicators** during the period from 2012-2019³³. In particular, rule of law, political stability and government effectiveness have improved significantly.

In addition, Dymon Asia³⁴, in a 2020 research note using Verisk Maplecroft data, showed that China has advanced in several social dimensions over the past decade, for example in food security, poverty and education, forced and child labour.

³²Data is sourced from https://info.worldbank.org/governance/wgi/

³³We picked this period because it reflects the latest political leadership regime in China – President Xi Jinping became the General Secretary of the Chinese Communist Party and Chairman of the Central Military Commission in 2012. ³⁴"Responsible Investing in China's Sovereign Bond Market", Dymon Asia, 2020 ³⁶"China going carbon neutral before 2060 would lower warming projections by around 0.2 to 0.3 degrees C", Climate Action Tracker, 2020 Figure 7. **Worldwide governance Indictors – China** (percentile in the world)

0%	10%	20%	30%	40%	50%	60%	70%	80%
Cont	rol of co	orruption						
				43.3				
			4	0.3				
Rule	of law							
				45.2				
			35.7					
Regu	ulatory q	juality						
				42.8				
				44.1				
Gove	ernment	effective	ness					
							71.6	
					57.8	В		
Politi	ical stab	ility and a	absence	e of violer	nce/terro	rism		
			38	.1				
		28.0						
Voice	e and ac	countabi	lity					
6.4								



Chapter 3 China offers exciting investment opportunities in climate technology

SI is not just about properly integrating ESG risks in the investment decision-making. It is also about recognising that long-term ESG-related themes may create **attractive return opportunities**.

In recent years, China has started taking active and, in some cases, aggressive measures to combat climate change. In September 2020, President Xi Jinping made a surprise announcement at the UN General Assembly that **China will aim to achieve carbon neutrality before 2060**. This was hailed by many as a very significant event in global climate policy as China is currently the world's biggest emitter of greenhouse gases. To its credit, China has made a conscious choice to decarbonise its economy at a point when its per capita output is barely more than one third of the level of the developed world.

China's net-zero pledge has effectively doubled the share of global emissions covered by carbon-neutrality pledges, from around 25% to more than 50%. Climate Action Tracker³⁵ estimated that this pledge alone, subject to full implementation, has the potential to lower global warming by 0.2 to 0.3° C.

Even prior to the net-zero pledge, China has made meaningful progress in shifting towards a low-carbon economy, as highlighted in *Figure 8*³⁶. China is leading the world in wind and solar energy production. China accounted for more than half of the electric cars sold in 2019 but it has an even greater ambition. Beijing wants the so-called new energy cars – mainly electric vehicles – to represent 25% of all vehicle sales by 2025, up from less than 5% in 2019³⁷.



³⁸Sources include "China green bond market – 2019 research report", 2020, Climate Bonds Initiative and China Central Depository & Clearing Research Centre (CCDC Research); "World's top 10 countries in wind energy capacity", 2019 ETEnergyWorld; https://ourworldindata.org/renewable-energy; www.iea.org/reports/global-ev-outlook-2020; www.sustainable-bus.com/electric-bus/electric-bus-public-transport-main-fleets-projectsaround-world/; www.statista.com/

³⁷"Electrifying: How China Built an EV Industry in a Decade", Ilaria Mazzocco, 2020 ³⁸"The State of Climate Tech 2020", **PwC, 2020**

Figure 8. China's achievements in combatting climate change

By far **the world's largest** wind energy

producer with an installed capacity of **221 GW**, larger than the U.S., Germany, India and Spain combined (*ranked in the world from 2nd to 5th*)

In 2019, China poured US\$83 billion

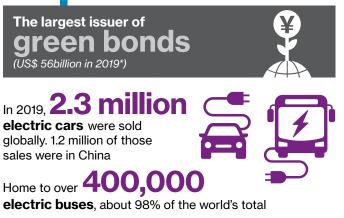
into clean energy, the most in the world, higher than the U.S. (\$56bn), Japan (\$17bn), U.K. (\$5bn) and France (\$4bn) combined





By far the world's largest **solar energy**

producer with an installed capacity of **205 GW**, larger than Europe (147 GW) and North America (70 GW)



Home to more than **35,000 kilometres** of installed **high-speed rail**,

more than the rest of the world combined. This is an energy-efficient way of conducting long-distance travel



*It is important to note that discrepancies still exist between China's local green bond guidelines and the international ones, especially when it comes to the eligibility of green projects and disclosure on the proceeds allocation. This figure is based on China's local guidelines. That being said, China was still the world's second largest green bond issuer in 2019 using international definition.

What are the areas worth watching?

In a 2020 PwC paper³⁸ **climate tech** is referred to as encompassing a broad set of sectors that address the challenge of decarbonising the global economy. This includes low-to-negative carbon approaches to cut key sectoral sources of emissions across energy, built environment, mobility, heavy industry, food and land use. It includes carbon capture and storage (CCS) as well as areas such as climate data generation. Exponential Roadmap³⁹ outlines a number of technology strategies that align with a net-zero pledge:

- Energy solar, wind, storage and smart grid
- Buildings digitalisation (drive down energy waste; increase space utilisation etc); renewable building materials or retrofitting buildings to reduce energy leakage
- Transport electric cars; service-based business models (demise of car ownership); autonomous driving; virtual meeting technology that reduces the need for business trips
- Manufacturing and materials artificial intelligence (AI) to design products for re-purpose, sharing, reuse and recycling; high-precision manufacturing through 5G and other technologies to save materials and energy usage
- Food plant-based food; Al for better prediction of supply and demand in reducing waste in the supply chain
- Cities and infrastructure AI to optimise existing physical infrastructure; increasing use of digital technology to connect
- Sustainable consumptions carbon calculators for growing population who want to keep track of their carbon footprint.

As shown in *Figure 8*, China is already leading the world in a number of these areas and the latest net-zero pledge creates a new sense of urgency. We expect that strong regulatory tailwinds will further augment the attractiveness of these investment opportunities. In October 2020, China released new guidelines on investment and financing activities⁴⁰ (including the role of foreign capital) supporting addressing climate change, another step in gearing up the financial sector to fund the net zero transition.

In addressing "the defining issue of our time", the world' biggest emitter, also the world's second largest economy, needs to play a pivotal role. The good news is that combatting climate change is already on the top of its national agenda.



³⁹The Exponential Roadmap Initiative brings together innovators, scientists, companies and NGOs, with the mission to halve emissions before 2030 through exponential climate action and solutions.

⁴⁰ "China Sketches Out Rules for Green Finance", Caixin, 2020



A peek at Part 2

In the concluding part of this two-part series we will develop our thinking further and consider how investors can structure their portfolio implementation in order to manage the above ESG-related risks and capture ESG-driven opportunities in China.

Preview of Part 2: How should investors implement their China allocation to manage ESG-related risks, as well as exploring ESG-driven opportunities?



From the standpoint of portfolio construction, ESG characteristics

need to be weighed against other elements of portfolio quality. While adding Chinese assets incurs a penalty if looked through the sustainability lens in isolation, at the aggregate level, there is a substantial positive contribution to portfolio quality, mainly driven by increased diversity and higher expected return.

Our portfolio construction approach has over the years moved away from strategic asset allocation (SAA) towards a total portfolio approach (TPA), where any investment idea is considered in terms of its impact on the overall risk and return characteristics of the aggregate portfolio. It increases the flexibility to spend the "sustainability budget" in multiple ways across asset classes. In a TPA framework, we can include Chinese assets and still maintain the same level of sustainability performance at the total portfolio level if we reduce exposure to assets that have negative sustainability characteristics elsewhere in the portfolio (e.g. high carbon intensity assets), and/or increase exposure to assets that have positive sustainability characteristics (e.g. investments in climate solutions).



We strongly believe that skilled active management should be front and centre of any institutional implementation solutions to access China. Given the current state of China's SI development, we do not recommend a blanket allocation across Chinese assets and caution investors against it. In selecting investment managers, there needs to be a strong emphasis on SI characteristics, both in terms of their ESG integration and stewardship credentials and practices.

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Skilled active management can significantly reduce risk exposures related to many poor ESG practices that are prevalent in China.

For example, to reduce the risk of accounting fraud, it is particularly important to have skilled active managers on the ground who understand the lay of the land and are able to verify and validate reported information through proprietary research and alternative sources. Innovative managers are well equipped to explore cutting edge technologies such as artificial intelligence/machine learning that can massively reduce the time required for searching, sorting, and extracting key information from vast amount of ESG-related data, and accelerate response to risk events.

From a social perspective, skilled active managers can also conduct in-depth, on-the-ground due diligence to minimise the risk associated with practices such as forced labour in investee companies and their supply chains. Exploring climate change driven investment opportunities ultimately requires an active judgement that is based on sectoral know-how and fundamental analysis, supported by a disciplined execution of investment strategy and process. That, by definition, cannot be delivered by a passive approach.

Appendix – Willis Towers Watson China research



Considering Chinese assets

In this paper we argue that Chinese assets offer compelling diversification benefits to typical investor portfolios from a strategic point of view. As a result, we believe all global investors should consider an allocation to Chinese assets as a building block within their portfolio.

Thinking Ahead Institute



The opening up of Chinese capital markets

This paper provides detailed answers to eight often asked questions about the opening-up of Chinese capital markets. What exactly does it mean? Why does China want to open up and how committed is China to this process? Why do global investors want to take advantage of the opening-up and own Chinese onshore assets? What are the risks and challenges?

Allocation to China in a new world order Rising US-China tensions and de-globalisation



Allocation to China in a new world order

In this paper we put forward an argument that, for global investors who have a long time horizon, the rising geopolitical tensions and the movement towards de-globalisation actually reinforce the need to own more Chinese assets to make their portfolios more resilient to a changing, albeit uncertain, world order. We recommend an allocation of 20% (within the growth portfolio) based on a scenario exercise, compared to average institutional allocation to China of between 4% and 5%. The merits of a standalone equity allocation to China



The merits of a standalone equity allocation to China

This paper calls for a standalone equity allocation to China. China is under-represented in most global investment portfolios. Its size and scale make it worthy of a standalone allocation, but most asset managers lack the expertise to handle this. In particular, the China A share market offers a dynamic and broad opportunity set within a ripe market environment for institutional investors to deliver alpha.

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