



THEMATIC INSIGHTS

Managing the human capital transition



Sally Springer
Senior Thematic
Research Analyst

At a glance

- > There has been a shift in the way firms create value, as human capital and intellectual property occupy a significant piece of a firm's market capitalisation.
- > Columbia Threadneedle Investments will use the five 'S' framework to identify and evaluate the firms proactively managing human capital.
- > Human capital, although often overlooked by investors, is a significant component of the forces driving performance. Businesses investing in human capital are likely to derive a competitive advantage.



Definitions of human capital

“The knowledge, skills, competencies and other attributes embodied in individuals or groups of individuals acquired during their life and used to produce goods, services or ideas in market circumstance”.

Source: OECD

There has been a fundamental shift in the way firms create value. Intangibles such as human capital and intellectual property now make up a significant proportion of a firm’s market capitalisation. In 1985, 32% of the S&P 500 market value was accounted for by intangibles; that value is now more than 90%.¹ Many sectors including biotech, software, communications and healthcare demonstrate that global economies are increasingly based on knowledge intensity.

However, due to accounting policies created when workers were viewed as a low skilled factor of production to support physical assets, labour is viewed as an expense on a profit and loss (P&L) statement rather than an asset on a balance sheet. That expense is often the most significant operating cost within the P&L, accounting on average for 20%-35% of revenue.²

This means investors are unable to fully assess how well companies are managing their “greatest asset”, as former Xerox

CEO Anne Mulcahy referred to employees in 2003.³ At Columbia Threadneedle Investments we believe businesses that treat human capital as an asset, and align strategic investments in managing human capital with their business strategy, will achieve a competitive advantage.

We believe businesses that treat human capital as an asset, and align strategic investments in managing human capital with their business strategy, will achieve a competitive advantage

¹ Ocean Tomo, Intangible Asset Market Value Study, 2021.

² Chron - How to Calculate the Employee Labor Percentage, January 31, 2019.

³ Forbes - Growing Your Business: Tips For Finding Top Employees, May 27, 2014.



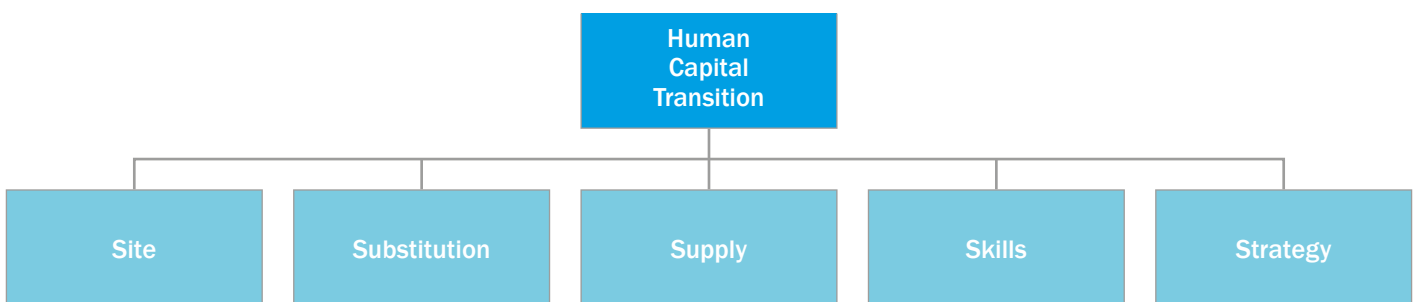
Introducing the ‘five esses of human capital management’

To help assess how well an investee firm is managing its human capital, we have created the “Five ‘S’ framework of human capital management”.

This sets out five factors a firm should consider when managing human capital (Figure 1), and allows Columbia Threadneedle research analysts to identify what “good” looks like. This “good” firm acts as an industry benchmark and allows us to engage with management teams on their human capital management.

In the longer term, the framework will allow us to identify and place a value on those firms which are proactively and effectively managing the risks and opportunities associated with managing human capital, which should help drive performance.

Figure 1: the Five ‘S’ framework of human capital



Source: Columbia Threadneedle Investments, 2023.



Breaking down the framework

Site

For centuries firms have been offshoring production to arbitrage high-cost labour markets for low-cost ones. But now there are incentives for firms to “re-site” human capital, including gaining access to larger pools of labour, greater access to talent and improving supply-chain resilience.

Site is about assessing how well a firm uses potential opportunities in relation to where it locates human capital and mitigates potential risks.

There are four opportunities for firms to consider “site” in relation to their human capital:

1. While the rate of growth of trade in goods is slowing, globalisation is not dead. Opportunities remain to re-site employees from higher cost areas to lower cost ones – although the rise of the middle class in developing economies is a potentially limiting factor.
2. Future opportunities for globalisation are in services. While trade in goods dwarfs that of services, services are growing 60% faster than goods.⁴ Remote working throughout the coronavirus pandemic, alongside technological advancements, enabled firms to look at re-siting their human capital within the service sector.
3. Supply-chain management is increasingly focused on resilience, partly driven by the disruptive influence of Covid-19 which exposed weaknesses in existing supply chains. Firms are looking to increase visibility, efficiency and resilience through physical changes in their supply-chain footprints.
4. Governments want to secure the production of critical industries in their countries, and are offering incentives to encourage firms to onshore production. There are numerous examples of firms amending their capital investment strategies due to the stimulus of the US Inflation Reduction Act and the EU Green Deal Industrial Plan.

Site case study – Publicis

Publicis, a French advertising company, is an excellent example of a company effectively managing its human capital in relation to “site”.

In 2020 it appointed a CFO, Michel-Alain Proch, who had a background in technology, who implemented a re-siting of human capital. This strategy was undoubtedly accelerated by the impact of Covid-19, with CEO, Arthur Sadoun, crediting the pandemic with showing them the potential and benefits of a globally distributed workforce.

Publicis acknowledges that having a globally diversified workforce is a competitive advantage and one of the main reasons for its industry-leading margins. These results were achieved against a backdrop of significant labour inflation while maintaining record bonus payments for employees.

The company’s approach to human capital management provides a clear benchmark for Columbia Threadneedle equity research analysts to engage not only with Publicis but also with its peer group. The Five S framework means we can assess the potential opportunity for Publicis’s peers, such as WPP or Omnicom, to raise margins by outsourcing to lower labour cost jurisdictions, broadening talent pools and mitigating some of the risks to their corporate strategy of high-cost scarce labour.⁵

There are incentives for firms to “re-site” human capital, including gaining access to larger pools of labour, greater access to talent and improving supply-chain resilience

⁴ McKinsey Global Institute – Globalization in transition: The future of trade and value chains, January 2019.

⁵ Note: the mention of any specific shares or bonds should not be taken as a recommendation to deal.



Substitution

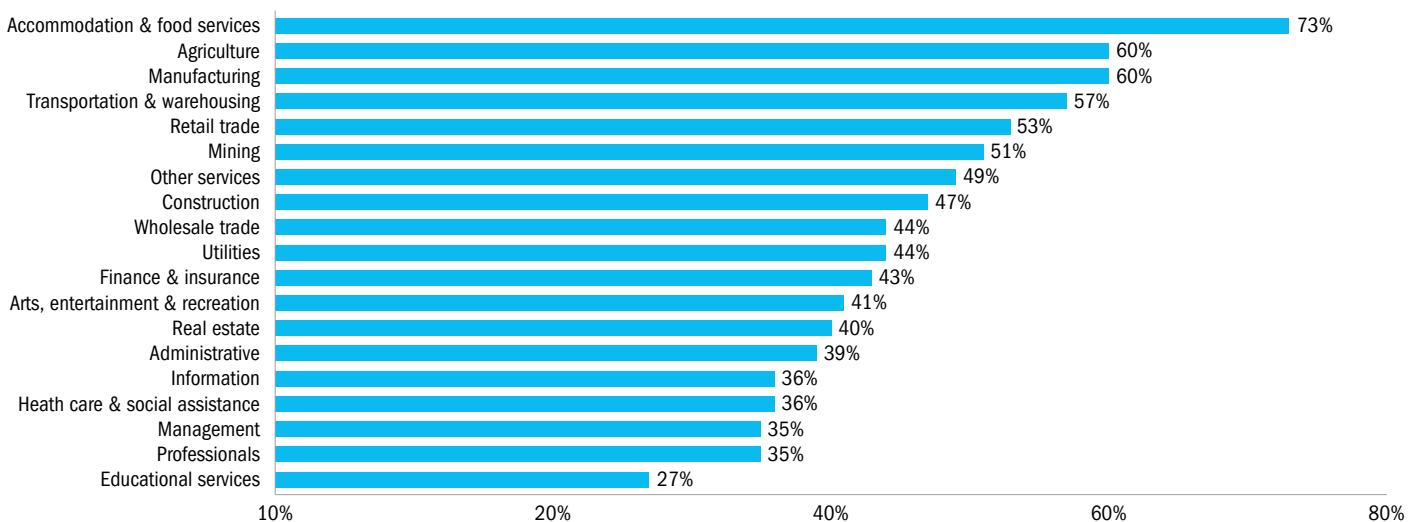
Firms have used machinery to substitute human labour since the industrial revolution. However, there are now multiple factors driving them to focus on this theme. Rising energy costs and wage inflation have been joined by extraordinary progress in technological advancement, enabling more processes to be replicated by robots and digital processes. In addition, a severe talent shortage limiting the availability of human capital and the need for supply-chain resilience and operational efficiency are further pushing firms to assess how they manage human capital and potentially substituting it for alternative methods.

While much of the recent focus is on the progress of generative artificial intelligence (AI), the process of digitalisation has allowed for quicker decision making and higher productivity across

various industries. Automation, as it has for centuries, remains the principal way firms continue to substitute human capital. For example, Tesla recently told investors it had reduced labour participation by 95% in the assembly of its onboard computer, which has more than 7,000 components.⁶

The substitution of human capital presents potentially significant opportunities for companies in which we invest to fundamentally change their cost basis and productivity. According to McKinsey, 50% of current work activities are technically automatable and six out of 10 occupations could have around 30% of the job automated.⁷ Technological advancements mean the impact is likely to be felt across a spectrum of existing roles and a broader range of sectors (Figures 2 and 3).

Figure 2: share of time spent in tasks that could be automated



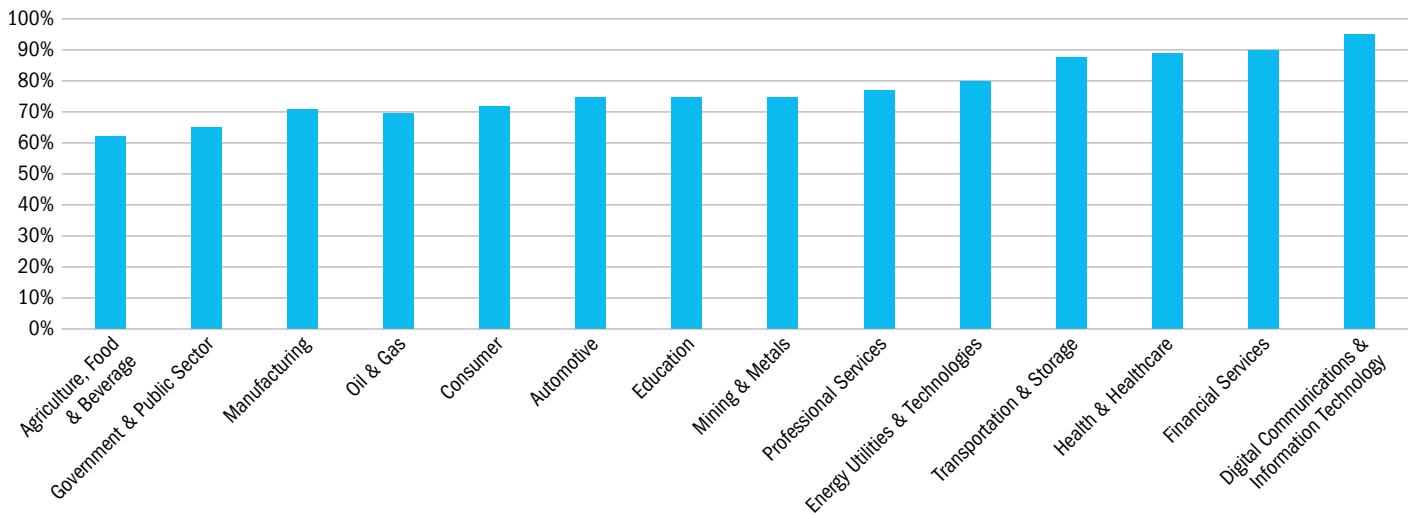
Source: McKinsey & Company, 2017.

⁶ Tesla Investor Day Presentation, 1 March 2023.

⁷ McKinsey & Company report – jobs lost, jobs gained: workforce transitions in a time of automation, December 2017.



Figure 3: proposed sector adoption of AI by 2025



Source: World Economic Forum 2020 Survey.

The long-term impact on jobs of recent technological progress such as AI is unclear. Goldman Sachs suggests generative AI could expose 300 million full-time jobs to automation.⁸ History tells us, however, that worker displacement from automation has been offset by the creation of new jobs which complement the new technology, or the emergence of new occupations following such technological innovation.

Investors will continue to assess the associated risks of substitution on corporate strategies and economies. Firms may initially experience an increase in industrial action as workers react to their roles being replaced, which will have implications for sales and earnings forecasts. They may also need to invest in their remaining workforces to ensure they have the necessary skills and training to work alongside the newer technologies. Ultimately, if AI is as disruptive as some people predict, the buying power of individuals no longer in work could be severely impacted, which will have long-term implications for company and economic growth targets.

What is the human capital transition? – a question posed to generative AI chat bots.
Time taken to respond: <90 seconds.

“The human capital transition is the process by which societies shift from an economy based on traditional forms of labor to one based on knowledge and skills. This transition has been underway for centuries, but it has accelerated in recent decades due to technological change and globalization.” **BARD**

“The human capital transition refers to the process through which economies evolve from being primarily based on physical capital (such as machines, buildings, and infrastructure) to being primarily based on human capital (such as knowledge, skills, and abilities). This transition is driven by several factors, including technological advancements, changes in economic structures, and shifts in social and cultural values.” **CHAT GPT**

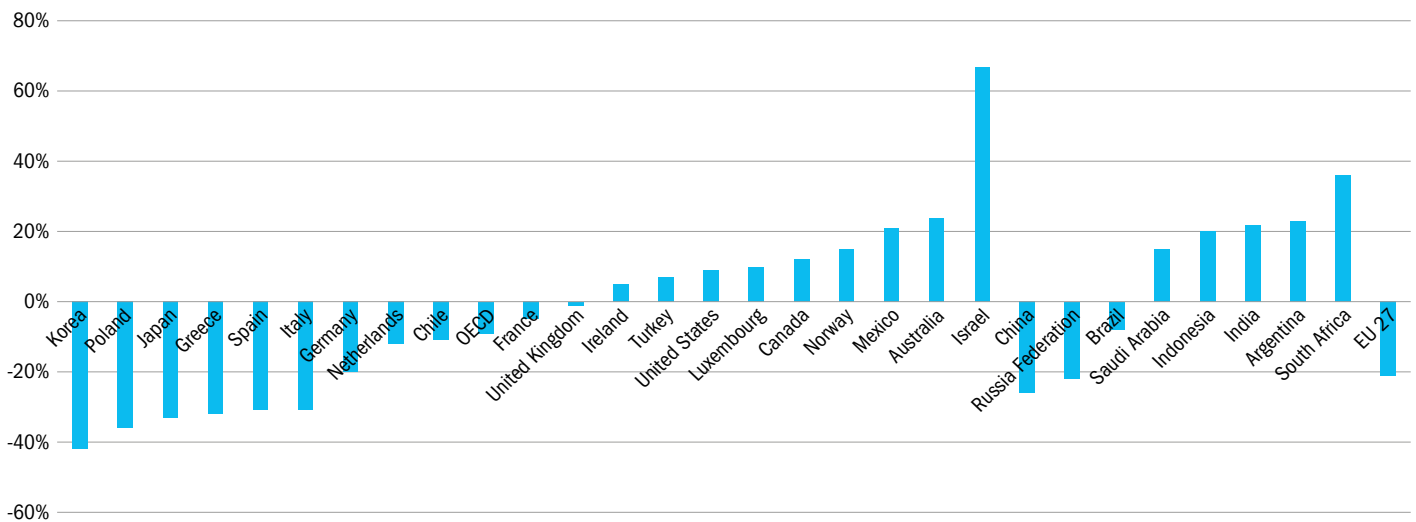
⁸ Goldman Sachs: The potentially Large Effects of Artificial Intelligence on Economic Growth (Briggs/Kodnani), March 26, 2023.



Supply

Demographic changes have seen the working-age population decline in many OECD countries, significantly impacting labour supply (Figure 4).

Figure 4: the working-age population will decline in a large number of OECD countries



Source: United Nations World Population Prospects – 2019 Revision.

This is not just a developed market issue: emerging markets such as China and Brazil have also seen significant reductions in the working-age population, which will affect not only the countries themselves but also the global economy.

The fall in the supply of labour is not only due to retiring baby boomers going unreplaced; there has been a seismic change in the attitude of new workers who expect a better work/life balance than their parents, more opportunities and perks from employers, and who will reject certain industries if they do not fit with their ethics.⁹ There is also a secular trend in the number of hours employees are working; in Europe between 1995 and 2019 yearly average hours fell 6.8%.¹⁰

Another phenomenon affecting the supply of workers is the decrease in workforce participation. Following the pandemic we had the great resignation, whereby workers decided their newly

discovered work-life balance was more important to them than returning to work as before. In the US around two million fewer workers returned to the labour force. This contributed to the US Bureau of Labor Statistics reporting that there are only 0.6 unemployed persons per job opening.¹¹ In the UK, 300,000-500,000 fewer workers returned to the jobs market.¹²

Companies especially exposed to this factor are those with high labour intensity or low-skilled employees, where we have seen significant turnover of staff. Exploring how management teams will address this while meeting growth and earnings targets will give us insight into how well they are handling human capital over the longer term.

⁹ BBC, Gen Z: The workers who want it all, 14 June 2022.

¹⁰ Our World in Data, Working Hours, December 2020.

¹¹ US Bureau of Labor Statistics, Number of unemployed persons per job opening, May 2023.

¹² Reuters, Half a million UK workers drop out of workforce, citing long-term illness, 10 November 2022.



Skills

Robust labour markets, low unemployment rates and an ageing population are contributing to a global skills shortage. This phenomenon affects a wide range of sectors with ManpowerGroup¹³ reporting that 77% of employers are struggling to find the talent they need. Over the past year, several firms across sectors such as healthcare¹⁴ and defence¹⁵ have said talent scarcity is having an operational impact on earnings calls.

One of the largest areas of skills demand is firms transitioning to more sustainable business models in a lower carbon world. To do this they need to either reskill their existing workforce or recruit. At Columbia Threadneedle Investments' recent energy transition conference one of the key pinch points identified through engagements with senior management teams was labour availability.

Worldwide government incentives to increase domestic renewable energy production and reduce carbon emissions are likely to exacerbate the talent shortage. The US Inflation Reduction Act is forecast to generate 537,000 jobs per annum for the next decade.¹⁶ Meanwhile, the EU Green Industrial Plan estimates that around 800,000 workers will need to be retrained or upskilled by 2025 if Europe is to become a major player in sustainable battery technology.¹⁷ Policy is being adapted globally to encourage workers possessing the requisite skills for a sustainable economy to enter the workforce.

For renewable energy firms to construct wind turbines, or for auto manufacturers to adapt their fleets to electric vehicles, new skills are required. Some firms such as Bosch¹⁸ and Shell¹⁹ are responding to the skills shortage by investing significant amounts on reskilling their workforce, enabling them to benefit from policy tailwinds and mitigating risks to corporate growth targets.

As investors this is a key part of our company engagement. We will talk with firms about how they are managing this sub-factor and the risks a skills shortage can bring in terms of meeting corporate strategies and earnings objectives, and ultimately its impact on overall performance.

Strategy

The final S is strategy. This covers the different components of a firm's internal human capital strategy, such as workforce planning – for example, temporary versus permanent workers – or whether a firm offers its employees flexibility around working arrangements. Other considerations include training budgets for existing employees and the breadth of the Diversity, Equity and Inclusion strategy.

One of the most fundamental elements of a firm's internal strategy is the culture, vision and values management promote. There are numerous studies linking culture to better corporate performance. Alex Edmans et al found that employee satisfaction is positively correlated with shareholder returns,²⁰ and employee satisfaction is linked to higher employee retention and greater productivity, which boost future profitability. Regression analysis also found that firms with a strong culture particularly outperformed in crisis years, such as following the global financial crisis and the pandemic.

Culture is clearly helpful to assess how well a company will perform, but assessing a company's culture from desk analysis alone can be challenging. Columbia Threadneedle has started developing a check list based largely on quantitative metrics to make an initial evaluation of this factor. Metrics include staff voluntary turnover levels, training investment and the depth of seniority benefitting from a long-term incentive plan.

Regression analysis also found that firms with a strong culture particularly outperformed in crisis years, such as following the global financial crisis and the pandemic

¹³ ManpowerGroup Employment Outlook Survey, Q2 2023.

¹⁴ IQVIA, Q4 report 2022.

¹⁵ BAE Systems, H2 report, 2022.

¹⁶ Reuters, Insight: Biden's climate agenda has a problem: Not enough workers, 12 January 2023.

¹⁷ Industry Europe, New European Battery Academy to upskill 800,000 workers, 25 February 2022.

¹⁸ Unleash – Bosch to spend €2bn on reskilling. Note: The mention of any specific shares or bonds should not be taken as a recommendation to deal.

¹⁹ Energy Voice – Shell boss touts £100m UK jobs investment as part of 2030 growth plans. Note: The mention of any specific shares or bonds should not be taken as a recommendation to deal.

²⁰ SSRN: Employee Satisfaction, Labor Market Flexibility and Stock Returns Around the World.



Conclusion

Human capital is often overlooked by investors. Increasingly, however, the drivers of performance and valuation are intangible asset growth – with human capital a significant component. Therefore, firms managing human capital effectively are likely to achieve a competitive advantage.

Columbia Threadneedle will use the building blocks of the “Five ‘S’ framework of human capital management” to assess how well firms are managing their “most important asset”. The objective is to identify and place a value on those companies proactively and effectively handling the risks and opportunities associated with managing human capital. This should drive performance not only for the firms but also for Columbia Threadneedle Investments as fundamental and active investors.

After all, as an internal memo at Columbia Threadneedle recently put it, “Everything ultimately comes back to people in the end – demand, supply, production, service, culture, all these define how

successful and competitive a company is and therefore should be important to us as investors/important to the market when assessing a company’s value”.

Everything ultimately comes back to people in the end


Get to know the author



Sally Springer, Senior Thematic Research Analyst

Sally joined Columbia Threadneedle Investments in 2023. As part of the global research team she undertakes thematic research, engages with companies, and collaborates with investment teams on the risks and opportunities arising from the transition in human capital. She previously worked as an equity research analyst and an industry policy lead for responsible investment regulation and legislation. Sally studied at the University of Warwick (BSc Economics) and gained the CFA charter in 2003.

Contact us

 columbiathreadneedle.com

 Follow us on LinkedIn

To find out more visit columbiathreadneedle.com



Important Information:

For use by professional clients and/or equivalent investor types in your jurisdiction (not to be used with or passed on to retail clients)

This document is intended for informational purposes only and should not be considered representative of any particular investment. This should not be considered an offer or solicitation to buy or sell any securities or other financial instruments, or to provide investment advice or services. Investing involves risk including the risk of loss of principal. Your capital is at risk. Market risk may affect a single issuer, sector of the economy, industry or the market as a whole. The value of investments is not guaranteed, and therefore an investor may not get back the amount invested. International investing involves certain risks and volatility due to potential political, economic or currency fluctuations and different financial and accounting standards. The securities included herein are for illustrative purposes only, subject to change and should not be construed as a recommendation to buy or sell. Securities discussed may or may not prove profitable. The views expressed are as of the date given, may change as market or other conditions change and may differ from views expressed by other Columbia Threadneedle Investments (Columbia Threadneedle) associates or affiliates. Actual investments or investment decisions made by Columbia Threadneedle and its affiliates, whether for its own account or on behalf of clients, may not necessarily reflect the views expressed. This information is not intended to provide investment advice and does not take into consideration individual investor circumstances. Investment decisions should always be made based on an investor's specific financial needs, objectives, goals, time horizon and risk tolerance. Asset classes described may not be suitable for all investors. Past performance does not guarantee future results, and no forecast should be considered a guarantee either. Information and opinions provided by third parties have been obtained from sources believed to be reliable, but accuracy and completeness cannot be guaranteed. This document and its contents have not been reviewed by any regulatory authority.

In Australia: Issued by Threadneedle Investments Singapore (Pte.) Limited ["TIS"], ARBN 600 027 414. TIS is exempt from the requirement to hold an Australian financial services licence under the Corporations Act and relies on Class Order 03/1102 in marketing and providing financial services to Australian wholesale clients as defined in Section 761G of the Corporations Act 2001. TIS is regulated in Singapore (Registration number: 201101559W) by the Monetary Authority of Singapore under the Securities and Futures Act (Chapter 289), which differ from Australian laws.

In Singapore: Issued by Threadneedle Investments Singapore (Pte.) Limited, 3 Killiney Road, #07-07, Winsland House 1, Singapore 239519, which is regulated in Singapore by the Monetary Authority of Singapore under the Securities and Futures Act (Chapter 289). Registration number: 201101559W. This advertisement has not been reviewed by the Monetary Authority of Singapore.

In Hong Kong: Issued by Threadneedle Portfolio Services Hong Kong Limited 天利投資管理香港有限公司. Unit 3004, Two Exchange Square, 8 Connaught Place, Hong Kong, which is licensed by the Securities and Futures Commission ("SFC") to conduct Type 1 regulated activities (CE:AQA779). Registered in Hong Kong under the Companies Ordinance (Chapter 622), No. 1173058.

In Japan: Issued by Columbia Threadneedle Investments Japan Co., Ltd. Financial Instruments Business Operator, The Director-General of Kanto Local Finance Bureau (FIBO) No.3281, and a member of Japan Investment Advisers Association and Type II Financial Instruments Firms Association.

In UK: Issued by Threadneedle Asset Management Limited. Registered in England and Wales, Registered No. 573204, Cannon Place, 78 Cannon Street, London EC4N 6AG, United Kingdom. Authorised and regulated in the UK by the Financial Conduct Authority.

In the EEA: Issued by Threadneedle Management Luxembourg S.A. Registered with the Registre de Commerce et des Societes (Luxembourg), Registered No. B 110242, 44, rue de la Vallée, L-2661 Luxembourg, Grand Duchy of Luxembourg.

In Switzerland: Issued by Threadneedle Portfolio Services AG, Registered address: Claridenstrasse 41, 8002 Zurich, Switzerland

This document is distributed by Columbia Threadneedle Investments (ME) Limited, which is regulated by the Dubai Financial Services Authority (DFSA). For Distributors: This document is intended to provide distributors' with information about Group products and services and is not for further distribution. For Institutional Clients: The information in this document is not intended as financial advice and is only intended for persons with appropriate investment knowledge and who meet the regulatory criteria to be classified as a Professional Client or Market Counterparties and no other Person should act upon it.

Columbia Threadneedle Investments is the global brand name of the Columbia and Threadneedle group of companies.

columbiathreadneedle.com

5830168 | 449200 (08/23)