



Your success. Our priority.

# Threadneedle (Lux) Global Technology

For professional investor use only

Q1 2021



# Table of contents

## **Section 1**

Columbia Threadneedle Investments overview

## **Section 2**

Threadneedle (Lux) Global Technology fund overview

## **Section 3**

Team, investment process and philosophy

## **Section 4**

Performance and portfolio characteristics

## **Appendix**



Your success. Our priority.

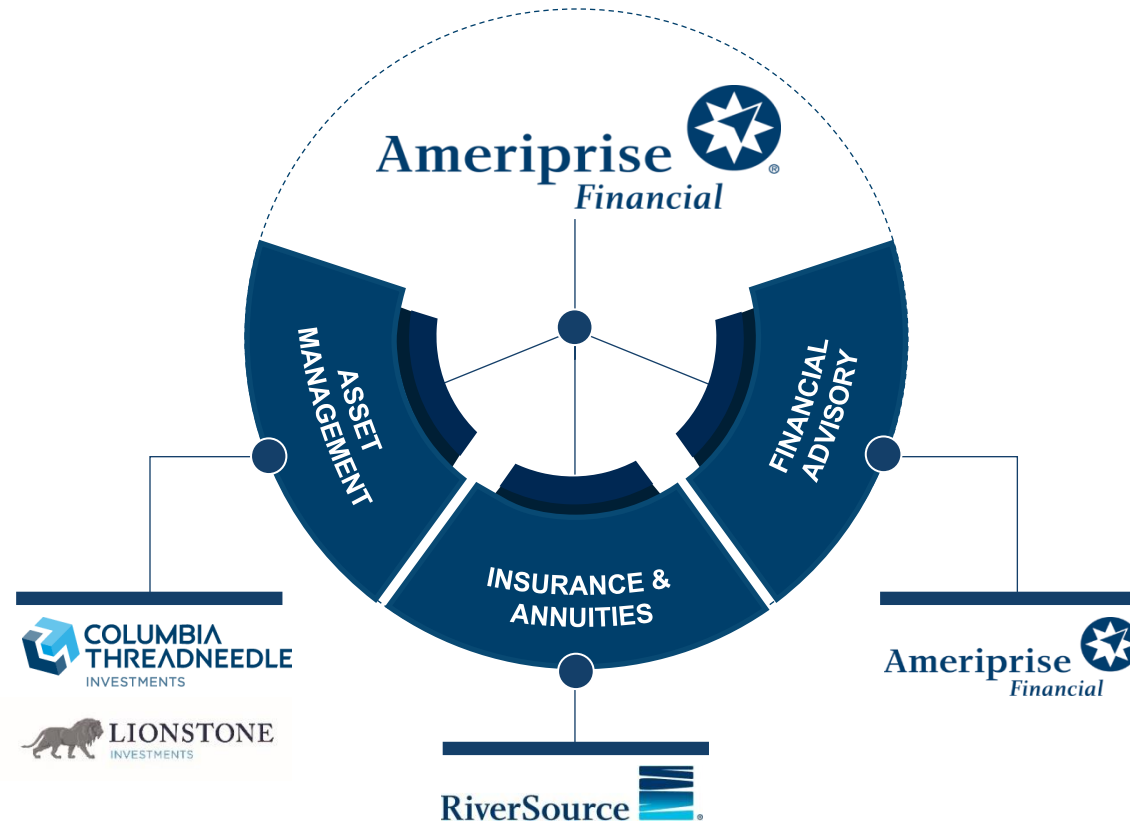
## Section 1

# Columbia Threadneedle Investments overview



# Ameriprise Financial Inc.

## Overview of business lines



### Key facts

- Group AUM of US\$1.1 trillion<sup>1</sup>
- A Fortune 500 company
- S&P rating of A; Moody's A3
- Top 50 largest global asset managers<sup>2</sup>
- Top 15 largest managers of long-term US mutual funds<sup>3</sup>
- No.6 largest retail manager in the UK<sup>4</sup>

Source: Ameriprise Financial Inc. as at 31 March 2021, unless otherwise stated.

1 Group AUM represents total assets under management and administration for all Ameriprise companies combined.

2 Source: IPE 'The Top 400 Asset Managers' 2019 listing, based on Columbia and Threadneedle assets as at 31 December 2019.

3 Source: Investment Company Institute (ICI). Based on Columbia Funds assets excluding money market funds as at 31 December 2020.

4 Source: UK Investment Association Ranking. Based on Threadneedle Funds assets as at 30 November 2020.

# Columbia Threadneedle Investments

## Global Reach

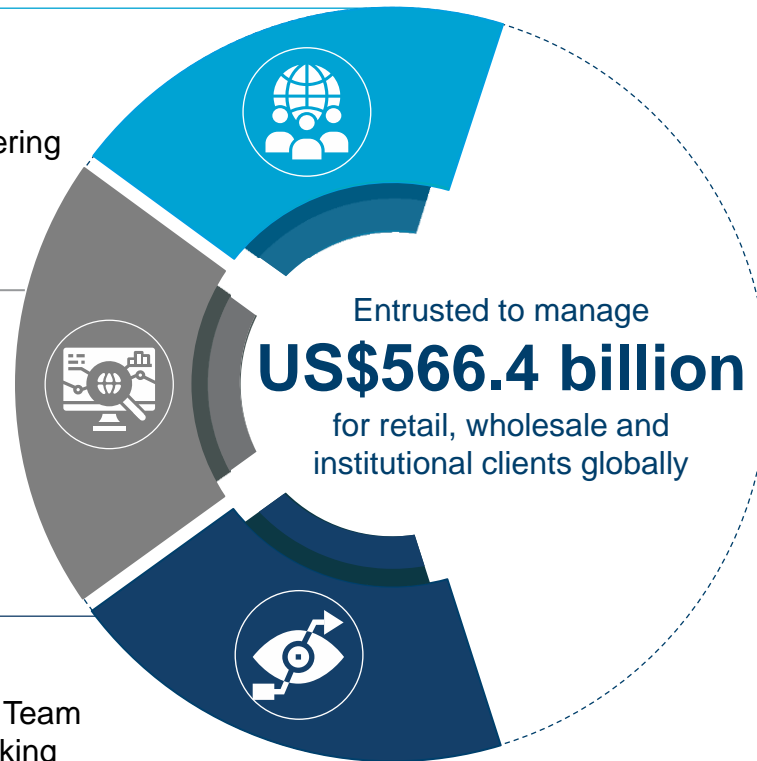
We have built a global team of 2,000 people working together, including 450+ investment professionals covering all major asset classes and markets

## Research Intensity

Behind every investment, you'll find original, independent analysis powered by our research experts. Responsible Investment (RI) principles are key and, with our proprietary RI tools, add real value to investment decisions

## Forward-looking

Our independent Investment Consultancy & Oversight Team ensures the integrity of each strategy we manage, working with our portfolio managers to foster continuous improvement



Source: Columbia Threadneedle Investments, as at 31 March 2021.

All data is for the Columbia and Threadneedle group of companies. AUM includes externally managed funds under administration as well as all assets managed on a discretionary or non-discretionary basis by the entities in the Columbia and Threadneedle group of companies.

# Investment approach

Our commitment to **client success** is underpinned by our distinctly different **investment approach** based on four pillars:



## GLOBAL PERSPECTIVES

### Macro view

Extensive reach enables understanding of economic, social and political trends

### Micro view

Deep presence in local markets and strong relationships with companies

### Continuous collaboration

Exchange of insights and ideas from analysts and portfolio managers across asset classes and sectors



## RESEARCH INTENSITY

### Independent research

Around 160 analysts and research analysts driving independent research\*

### Data and technology

Big data, analytics and augmented intelligence turning information into forward-looking insights



## RESPONSIBLE INVESTMENT

### Focused research

Seeks to identify well-managed companies that look to the future and are better positioned to navigate risks and challenges and achieve sustainable performance and long-term value creation



## CONTINUOUS IMPROVEMENT

### Autonomy

Investment teams cultivate and apply the best ideas

### Analysis

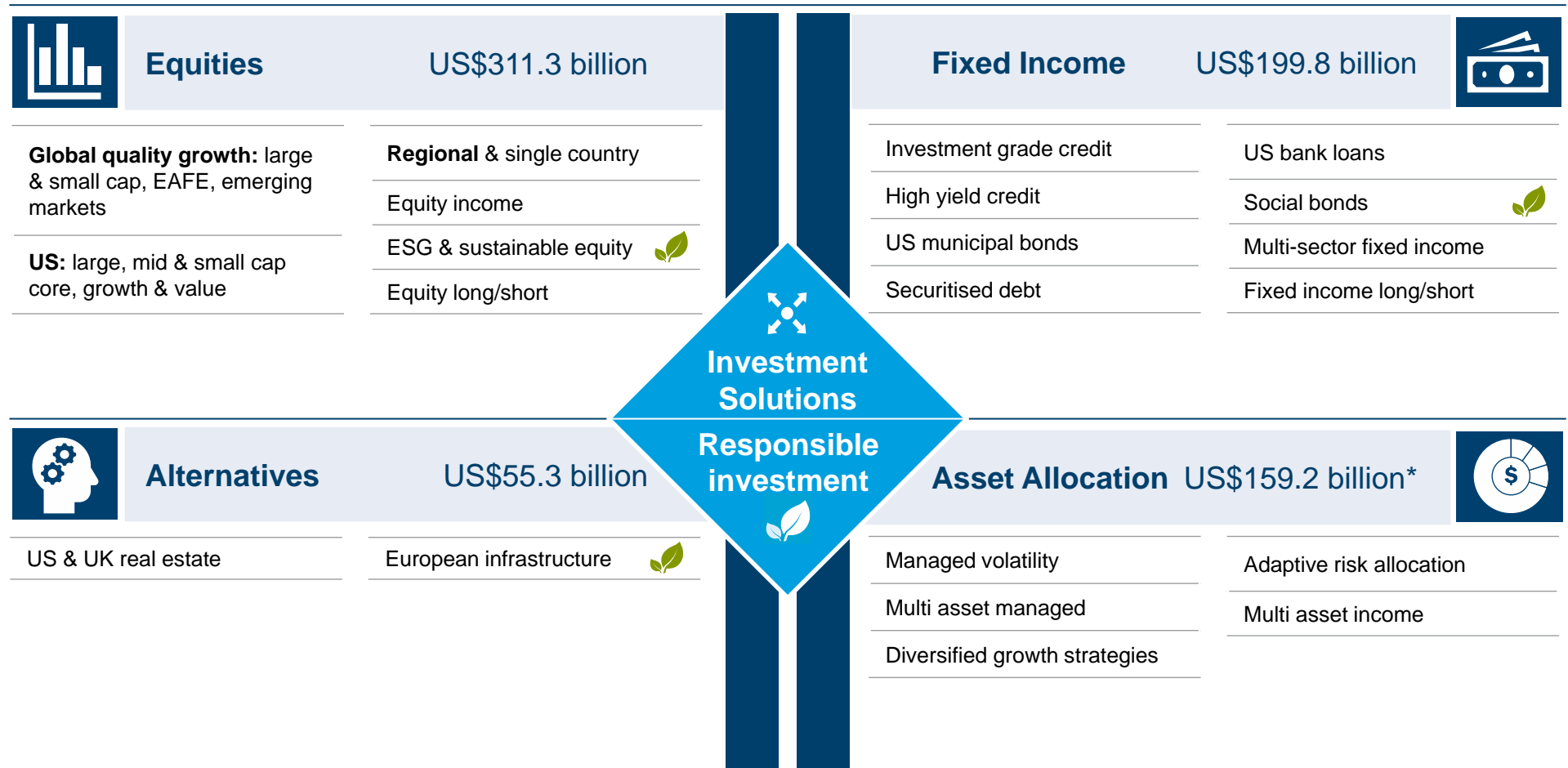
Investment oversight helps ensure investment teams adhere to a consistent approach and avoid unintended risks

### Accountability

Independent monitoring evaluates strengths, weaknesses and opportunities

(\*) Information as at 31 March 2021.

# Core investment capabilities



Source: Columbia Threadneedle Investments, as at 31 March 2021.

(\*) The asset allocation category refers to accounts that invest across multiple asset classes, such as equities, fixed income and alternatives. This includes fund of fund strategies and accounts that directly invest in those broad asset classes, such as multi asset strategies.



Your success. Our priority.

## Section 2

# Threadneedle (Lux) Global Technology fund overview





## Highly experienced and well resourced

- Sub-advised by Columbia Management Investment Advisers, LLC – a US based asset manager which is part of the Ameriprise Financial group alongside Threadneedle Asset Management Limited
- Extensive experience and good track record in managing technology funds
- Detailed coverage of information technology, media, telecommunications, medical technology and other technology-related sectors
- High level access to the innovators and decision makers through long-standing industry contacts
- The experience and insight to help identify opportunities in a wide range of technology-related industries that other managers may overlook

# Threadneedle (Lux) Global Technology

## Fund overview

<b>Fund Manager</b>	Paul Wick
<b>Sub-adviser</b>	Columbia Management Investment Advisers, LLC
<b>Fund size</b>	US\$539 million
<b>Benchmark</b>	MSCI World Information Technology Index
<b>Investment focus</b>	Technology companies with robust growth prospects and / or high profit margins trading at reasonable valuations
<b>Style</b>	GARP
<b>Market capital bias</b>	Can invest across the market cap spectrum; currently a mid-cap bias but stock selection is driven by fundamentals
<b>Targeted number of positions</b>	50–75
<b>Geographical focus</b>	The fund can invest globally across various market capitalizations
<b>Estimated annual portfolio turnover</b>	75% - 100%. Team is constantly looking for new ideas and sources of alpha

Source: Columbia Threadneedle Investments, as at 31 March 2021.

The fund characteristics described above are internal guidelines (rather than limits and controls). They do not form part of the fund's objective and policy and are subject to change without notice in the future.



Your success. Our priority.

## Section 3

# Team, investment philosophy and process



# Investment resources

## Internal and external investment resources and support



- Investment professionals across Columbia Threadneedle Investments available to assist the team
- Dedicated trading team
- Internal trading, risk measurement, performance measurement, and legal/compliance/reporting groups can provide immediate information to the Seligman Technology Group

# Seligman Global Technology Strategy

## Lead management

### Paul Wick

- Head of Seligman Technology Group
- Lead portfolio manager of Columbia Seligman Technology Growth Strategy and Columbia Seligman Global Technology Strategy
- Joined Seligman Technology Group: 1990
- Joined industry: 1987
- Prior experience:
  - Managed Seligman Frontier Strategy
  - Since 1990, portfolio manager of Columbia Seligman Communications and Information Strategy
- Education:
  - BA (Economics) – Duke University
  - MBA (Finance) – Duke University Fuqua School of Business
- Principal coverage area:
  - Capital equipment

# Seligman Global Technology investment resources

- Experienced, comprehensive research coverage
- Seligman technology group located in California and New York

Professional	Location	Year joined industry	Year joined technology group
Paul Wick	Head of Seligman Technology Group Portfolio Manager Menlo Park, CA	1987	1987
Sanjay Devgan	Menlo Park, CA	1995	2012
Israel Hernandez	Menlo Park, CA	1996	2014
John Noell, CFA	Menlo Park, CA	1998	2018
Jeetil Patel	Menlo Park, CA	1995	2012
Vimal Patel	Menlo Park, CA	1996	2014
Shekhar Pramanick	Menlo Park, CA	1993	2012
Nitin Saigal, CFA	Menlo Park, CA	2008	2015
Sanjiv Wadhvani	Menlo Park, CA	1998	2016
Chris Boova	New York, NY	1995	2000
Jonathan Wang, CFA	New York, NY	2005	2015

Source: Columbia Management Investment Advisers, LLC, as at 31 March 2021.

# The Seligman Technology Group distinct edge: Experienced, comprehensive research coverage

Sector	Subsector	Technology sector coverage
<b>Communications</b>	Networking Telecom equipment Telecom services Cable & satellite TV Cable Equipment Wireless phones Optical components	Wadhvani Wadhvani Wadhvani Wadhvani Wadhvani V. Patel V. Patel
<b>Software</b>	Application software/security/database Electronic design Entertainment Financial/education/billing services/ Mechanical design Enterprise software/SaaS/data warehousing/ mainframe/infrastructure	Hernandez Wick J. Patel Boova  Hernandez
<b>Semiconductors</b>	Digital and analog ICs Passive components/distributors IC foundry/assembly/test services Semiconductor and display capital equipment	Devgan/Pramanick Pramanick Pramanick Pramanick/Wick
<b>Technology services</b>	Telematics International IT services Defense IT/U.S. IT services/payment processing Print technology	V. Patel Wang Boova V. Patel
<b>Computer &amp; peripherals</b>	Hardware Data storage systems Disk drives IT Resellers and distributors	V. Patel V. Patel Pramanick Hernandez/Wadhvani
<b>Consumer electronics</b>		V. Patel/J. Noell
<b>Industrial technologies</b>		V. Patel
<b>Internet</b>		J. Patel/Saigal
<b>Asian &amp; Japanese electronics</b>		Pramanick
<b>Media</b>		J. Patel/Saigal
<b>Alternative energy technology</b>		Pramanick
<b>Medical technology</b>		Wick

Coverage as of 31 March 2021.

# Investment process

- **Our positions are heavily skewed to technology**, reflecting our analysts' significant domain expertise in sub-sectors like semiconductors, computing, data storage, networking, software and internet. Media, telecom, and medical stocks play a minor role in our portfolios.
- **We usually invest in 50-75 positions**, which provides a degree of diversification and seeks to reduce portfolio risk. Holding 50-75 names means we can invest part of the Fund in smaller companies without liquidity issues. The top 10 holdings typically comprise 40-50% of capital.
- **We invest in all capitalization ranges**, from small companies with market values under \$1 billion to mega cap stocks approaching \$1 trillion in value. A significant portion of the Fund is invested in companies with market values between \$2 billion and \$30 billion. Companies in this size range tend to be less risky than small caps, but are usually faster growing than mega cap companies. They are also more likely to be acquired, and they are often less efficiently valued and understood by market participants.
- **Our overriding goal is to identify undervalued companies in the technology industry.** The team's analysts have spent decades following their sectors, and utilize their industry knowledge to judge which we believe companies have the most enduring IP, the best management teams, and the longest runway of high-profit revenue growth.
- **Our investment horizon depends on the unique circumstances** surrounding every idea. We don't hesitate to flip IPOs, and we often enter into merger arbitrage trades when market participants are too concerned about regulatory uncertainty. On the other hand, we have positions in the Fund that have been held since 1993.
- **Most of our investments are in US companies.** We believe many of the best technology companies in the world happen to be American, and it's easy to diligence companies headquartered within 50 miles of our offices. We are also of the view that U.S. corporate governance is often superior to other countries, and US managements tend to be shareholder friendly. Not surprisingly, there are more takeovers of American public companies than Japanese ones. Lastly, the logistical issues of time zones and corporate access translate into greater ease of investing in the U.S.



# Investment process

## Attributes of companies in which we invest

- Fundamentally attractive business – large market opportunity, high margin potential, sticky products, recurring revenues, potential for IP dominance
- Capable management team with solid execution track record
- Strong current or near-term profit margins and cash flow
- Company is a logical takeover target and management is incented to sell
- Management team focused on building shareholder value via organic growth, smart M&A, and /or share repurchases
- Reasonable valuation relative to expected cash flow or intrinsic value to an acquirer
- Significant, differentiated intellectual property; high competitive barriers
- Large backlog or high degree of recurring revenues
- Company is a beneficiary of likely technological trends
- Rising profit margins, accelerating organic revenue growth, or favorable new product cycle
- Recent acquisition(s) materially enhance company value
- Positive CEO or board changes
- Belief of upside to consensus estimate – revenues, earnings, cash flow, users, etc.
- Market leaders, share gainers, technology innovators
- Beneficiaries of changing industry structure (e.g. consolidation)
- Cold IPO in company with strong IP and management, but unfashionable business

# Investment process

## Depth and breadth of research

- Our team of analysts meet with hundreds of company managements at investment conferences, analyst days, user group meetings, and at their office or ours in Silicon Valley. The analyst team also travels abroad to visit non-US companies that are competitors, customers, or suppliers to US companies. In the past year, our analysts have traveled to Israel, Taiwan, South Korea, China, Japan, and Spain on research trips.
- Industry events: our team attends dozens of conferences and trade shows to “kick the tires” on developments in technology. Below is a partial listing of events we attended in 2016-2019.

Artificial Intelligence Symposium  
 Andreessen Horowitz Summit  
 Autodesk University  
 Autonomous Driving Symposium  
 Barclays Semiconductor and Technology Board Summit  
 Charter Research RF Semiconductor Seminar  
 Consumer Electronics Show  
 Dell EMC World  
 Design Automation Conference (DAC)  
 Electronic Entertainment Expo (E3)  
 EFI Connect  
 Facebook F8  
 Farnborough Air Show  
 Flash Memory Summit  
 Fortinet Accelerate User Conference  
 Fraud in a Bull Market  
 Game Developer Conference (GDC)  
 Gartner Datacenter Conference (slightly different than IT Expo)  
 Gartner IT Expo  
 Hot Chips  
 HPE Discover  
 IEDM Semiconductor Device Conference  
 ISCC Semiconductor Circuits  
 Jefferies Israel Tech Trek

JP Morgan Evolution Conference  
 Mobile World Congress  
 Money 20/20 Europe  
 Money 20/20 USA  
 NetApp Insight  
 Norwest Venture Investor Summit  
 Nvidia GTC  
 Open Compute Project (OCP)  
 Optical Fiber Conference (OFC)  
 Optical Society Executive Forum  
 Oracle Modern Business Experience  
 Oracle OpenWorld  
 Pure Accelerate  
 RSA Security Conference  
 Salesforce Dreamforce  
 Semicon Japan  
 Semicon West  
 SOI Silicon Valley Symposium (Silicon On Insulator)  
 Space Symposium  
 SPIE International Society for Photonics and Optics  
 Supercompute Conference  
 Synopsys Users Group (SNUG)

# Investment process

## Depth and breadth of research

- Technology blogs and news sites: yes, we really do make the effort to read publications like Microprocessor Report, EE Times, VentureBeat, Above Avalon, Tech Crunch, Computer Reseller News, PC Magazine, The Information, GamesBeat, and many others.
- We avail ourselves of numerous news services available online. Examples include: Taiwan monthly import figures by vendor of semiconductor capital equipment, South Korea's monthly semiconductor exports, US Semiconductor Industry Association (SIA) bookings of front and back end equipment as well as semiconductor device shipments, website and app traffic downloads and visits (Comscore, App Annie, SimilarWeb), and domain name registrations (Verisign), among others.
- We meet with private companies and venture capitalists to better understand the competitive landscape facing public companies. We also speak frequently to our network of current and former tech executives, engineers, sales people, board members, and attorneys with relevant domain knowledge.
- Our analysts conduct proprietary channel checks with Value Added Resellers (VARs) to gain a better sense of how portfolio companies' quarterly results are tracking. We supplement our sources with reliable 3rd party survey sources such as M-Science, 7 Park, yipit Data, Marker Groove, and OTR Global.
- If we need to increase our knowledge of a technology or a given vendor's products or services, we don't hesitate to use expert networks to speak with end users. We also meet frequently with IT purchasers to better understand the vendor landscape and identify technology trends at a nascent stage.
- We build proprietary, bottom-up, product-line driven P+L models of the companies we become long term investors in.

# Investment process

## Attributes of companies seek we avoid

- Fundamentally flawed business – questionable market opportunity, low profit margins, declining total addressable market, fierce competition, weak IP.
- Declining market share, escalating competitive environment, or accelerating risk of obsolescence.
- Questionable business model with persistent losses and cash burn; unclear if company can ever attain profitability.
- Weak or untrustworthy management team; company run for benefit of management or employees, not public shareholders.
- Promotional management team; “press release factory” with “slideware”; company avoids conference calls with investors and tries to evade investor scrutiny.
- Extreme valuation relative to traditional metrics like cash flow, profits, and revenues.
- Weak balance sheet with refinancing and/or bankruptcy risk; elevated receivables or inventory.
- Deteriorating business fundamentals, including price pressure, margin compression, faltering sales, and weakening new product cadence.
- Minimal IP moat; trivial R+D spend leaves company vulnerable to competitors.
- Inferior products, low customer satisfaction, high risk of churn.
- Back-end loaded quarterly results; low revenue visibility; low backlog; minimal recurring revenues.
- Elevated or unusually risky customer concentration.
- One product company.
- Faddish, hit driven business with uncertain staying power or ability to scale beyond early adopters; “one and done” businesses.
- High management or salesforce turnover; “pressure-cooker” mentality with managing sales force.
- Consensus revenue or earnings estimates or other metrics (users) appear to be too high.
- Serial acquirer / reckless “roll-up” strategy.
- Company facing VC or private equity lock-up expiration, especially after significant stock outperformance.
- Weak shareholder base with superficial knowledge of or commitment to the company; company has shareholders who repeatedly are burned by flawed stocks.
- Dwindling institutional sponsorship – diminishing research coverage by brokerage firms and fewer long-only institutional investors. As stock prices fall below \$10 and market values fall below \$500 million, a “virtuous negative circle” often ensues. As stock prices decline, employees often quit, further pressuring fundamentals.
- Significant insider selling by management or board members, especially if those insiders were prescient sellers in the past.
- High short interest. Empirically, highly shorted companies tend to underperform market indices.
- Company targeted by reputable “activist” short sellers.

# Corporate governance considerations

**The Fund seeks to avoid holding positions in companies with certain attributes that may negatively impact future share prices. In particular we are sensitive to:**

- Executives with a history of unethical conduct
- Companies that exhibit a cavalier attitude towards their customers, suppliers, employees, and investors
- Aggressive accounting, insider dealing, and behavior that raises the possibility of fraud
- Products or practices that are harmful to society or the environment
- Companies that engage in “pay to play”
- Unreasonable price increases that harm taxpayers or vulnerable end users

# Exit discipline

## Fundamental weakness

- Lack of upside to estimates or potential earnings disappointment
- Deterioration of company/segment/industry/customer base
- Decelerating revenue or earnings growth
- New products or technologies from competitors threaten business franchise or intellectual property advantage
- Failure to retain key employees (especially salespeople)
- Product obsolescence or market saturation

## Financial problems

- Declining return on capital
- Negative cash flow or other balance sheet deterioration

## Valuation

- Stock becomes fully valued; reaches set price target
- Insider selling

## M&A activity

- Problematic acquisition
- Reckless acquisition spree



Your success. Our priority.

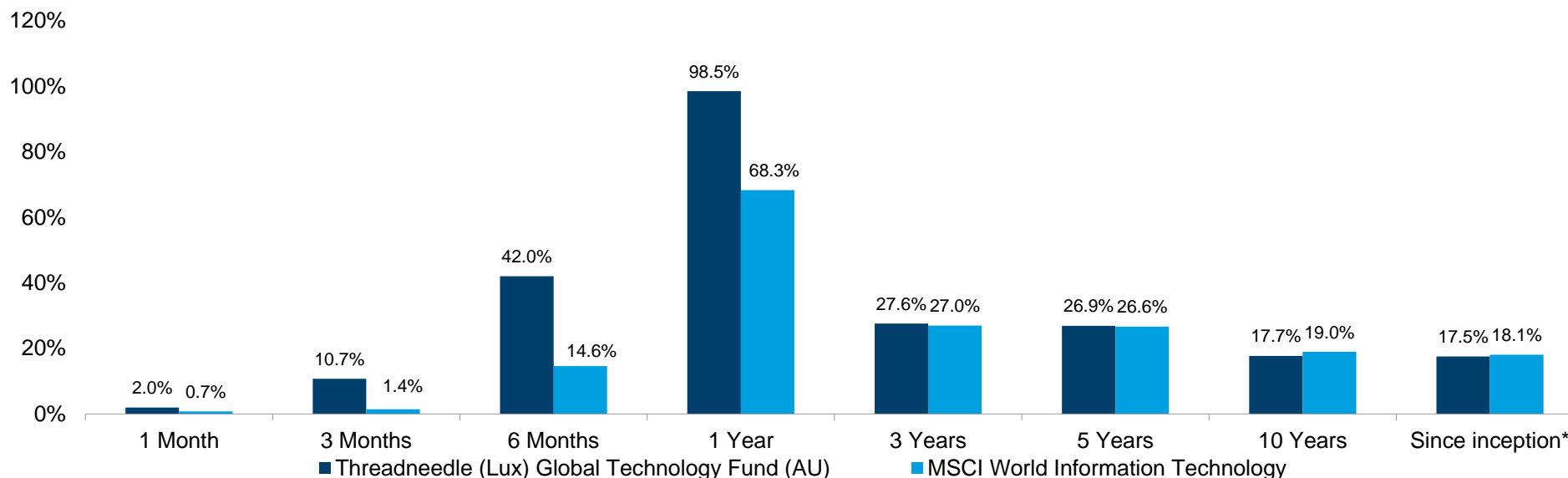
## Section 4

# Performance and portfolio characteristics



# Threadneedle (Lux) Global Technology Portfolio performance

## Annualised net performance (USD)



## Calendar year gross performance (%)

As at 31 December	2020	2019	2018	2017	2016
<b>Fund</b>	43.0	53.1	-9.7	33.8	14.6
<b>Index</b>	44.3	48.2	-2.3	38.7	12.0

Source: FactSet and Columbia Threadneedle Investments, as at 31 March 2021. Performance is shown in USD net of fees and expenses but gross of tax. Fund data is quoted on a bid to bid basis with income re-invested at bid. Index data provided by Thomson Financial Datastream. Performance for periods greater than 1 year is annualised.

Past performance does not guarantee future results.

\* Since Inception was since fund (SICAV) launch on 12 March 2010.



# Threadneedle (Lux) Global Technology

## Industry breakdown

	Fund (%)	Index (%) <sup>1</sup>	Relative (%)
<b>Semiconductors &amp; Semiconductor Equipment</b>	38.1	18.1	20.0
<b>Software</b>	20.6	30.4	-9.8
<b>Technology Hardware Storage &amp; Peripherals</b>	12.6	20.0	-7.4
<b>IT Services</b>	7.5	20.8	-13.3
<b>Interactive Media &amp; Services</b>	6.1	--	6.1
<b>Communications Equipment</b>	5.7	3.0	2.7
<b>Internet &amp; Direct Marketing Retail</b>	2.3	--	2.3
<b>Electrical Equipment</b>	2.2	--	2.2
<b>Entertainment</b>	1.4	--	1.4
<b>Wireless Telecommunication Services</b>	0.6	--	0.6
<b>Media</b>	0.5	--	0.5
<b>Other</b>	1.1	7.6	-6.5
<b>Cash</b>	1.3	--	1.3

Source: Columbia Threadneedle Investments, as at 31 March 2021.  
<sup>1</sup>Index shown is the MSCI World Information Technology Sector Index.

# Threadneedle (Lux) Global Technology

## Top 10 holdings

	Fund (%)	Index (%) <sup>1</sup>	Relative (%)
<b>Lam Research</b>	7.6	0.7	6.9
<b>Alphabet</b>	5.9	--	5.9
<b>Apple</b>	4.7	18.1	-13.4
<b>Teradyne</b>	4.4	0.2	4.2
<b>Applied Materials</b>	4.2	1.1	3.1
<b>Broadcom</b>	3.9	1.6	2.3
<b>Synaptics</b>	3.6	--	3.6
<b>Microsoft</b>	3.2	14.7	-11.5
<b>Synopsys</b>	3.1	0.3	2.8
<b>NetApp</b>	2.7	0.1	2.6

Source: Columbia Threadneedle Investments, as at 31 March 2021. Top holdings exclude short-term holdings and cash, if applicable. Fund holdings are as of the date given, are subject to change at any time, and are not recommendations to buy or sell any security.

<sup>1</sup> Index shown is the MSCI World Information Technology Sector Index, ex-Cash.

# Threadneedle (Lux) Global Technology

## Market capitalisation focus

	Fund (%)	Index (%) <sup>1</sup>	Relative (%)
<b>&gt;\$100 billion</b>	29.2	66.7	<b>-37.5</b>
<b>\$50 billion–\$100 billion</b>	16.8	11.3	<b>5.5</b>
<b>\$25 billion–\$50 billion</b>	14.2	9.8	<b>4.4</b>
<b>\$10 billion–\$25 billion</b>	19.6	10.6	<b>9.0</b>
<b>\$3 billion–\$10 billion</b>	14.4	1.5	<b>12.9</b>
<b>\$0 billion–\$3 billion</b>	5.7	0.0	<b>5.7</b>

Source: Columbia Threadneedle Investments, as at 31 March 2021.

<sup>1</sup> Index shown is the MSCI World Information Technology Sector Index.

# Threadneedle (Lux) Global Technology

## Geographical positioning

### Geographic breakdown

	Fund (%)	Index (%) <sup>1</sup>	Relative (%)
<b>United States</b>	93.3	85.2	8.1
<b>Netherlands</b>	1.5	3.2	-1.7
<b>Japan</b>	0.9	4.8	-3.9
<b>Brazil</b>	0.8	--	0.8
<b>Canada</b>	0.5	1.6	-1.1
<b>United Kingdom</b>	0.5	0.2	0.2
<b>Sweden</b>	0.5	0.6	-0.1
<b>Israel</b>	0.4	0.4	--
<b>Germany</b>	0.2	1.7	-1.5
<b>Australia</b>	--	0.3	-0.3
<b>Finland</b>	--	0.2	-0.2
<b>Other</b>	--	1.7	-1.7
<b>Cash</b>	1.3	--	1.3

- Under normal circumstances, the Fund generally invests at least 40% of its net assets in companies that maintain their principal place of business or conduct their principal business activities outside the U.S., have their securities traded on non-U.S. exchanges or have been formed under the laws of non-U.S. countries. The Fund considers a company to conduct its principal business activities outside the U.S. if it derives at least 50% of its revenue from business outside the U.S. or had at least 50% of its assets outside the U.S.

Source: Columbia Threadneedle Investments, as at 31 March 2021.

<sup>1</sup>Index shown is the MSCI World Information Technology Sector Index.

The fund characteristics described above are internal guidelines (rather than limits and controls). They do not form part of the fund's objective and policy and are subject to change without notice in the future.



Your success. Our priority.

# Appendix



# Threadneedle (Lux) Global Technology

## Fund details

---

Retail class ISIN	AU class:	LU0444971666
Retail hedged class ISIN	AEH class:	LU0444972557
Institutional class ISIN	IU class:	LU0444972805

---

Retail class fee	AU class:	1.95% (OCF)*
Retail hedged class fee	AEH class:	1.95% (OCF)*
Institutional class fee	IU class:	1.05% (OCF)*

---

Settlement	T+3
------------	-----

---

Liquidity	Daily
-----------	-------

---

Dealing cut off	3pm Luxembourg
-----------------	----------------

---

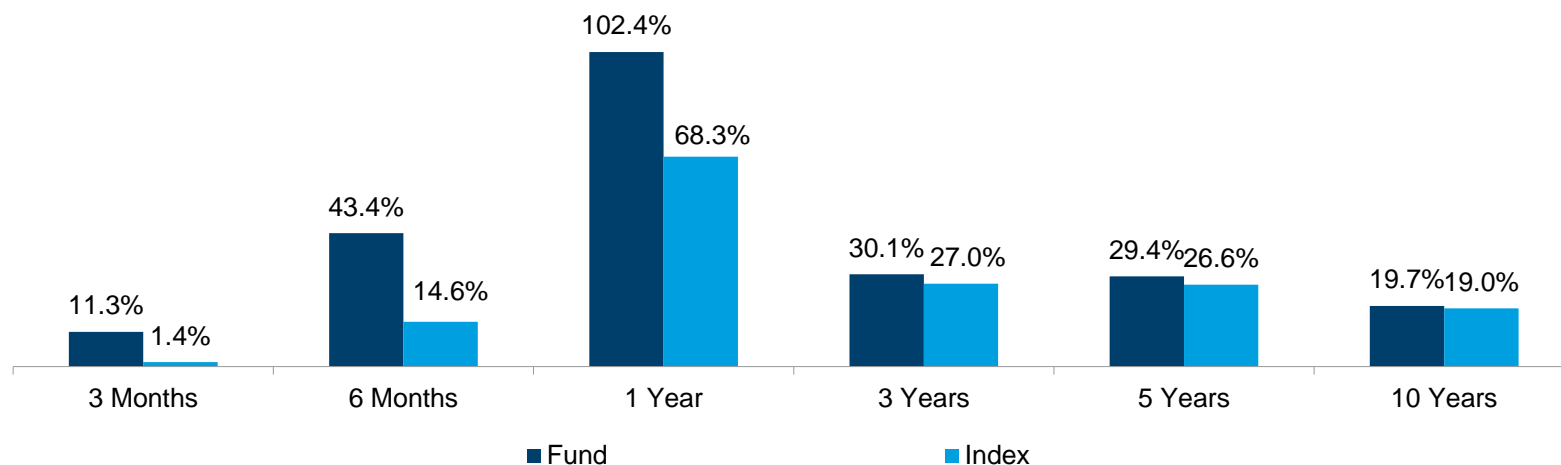
Source: Columbia Threadneedle Investments, as at 31 March 2021.

\* The ongoing charges figure is based on expenses for the year ending 2 October 2020. This figure may vary from year to year. It excludes the costs of buying or selling assets for the Fund (unless these assets are shares of another fund).

# Threadneedle (Lux) Global Technology

## Performance analysis

### Annualised gross performance



<b>Outperformance<sup>1</sup></b>	+9.7%	+25.2%	+20.2%	+2.4%	+2.2%	+0.6%
-----------------------------------	-------	--------	--------	-------	-------	-------

### Calendar year gross performance (%)

As at 31 December	2020	2019	2018	2017	2016
<b>Fund</b>	45.8	56.1	-7.9	36.5	16.9
<b>Index</b>	44.3	48.2	-2.3	38.7	12.0
<b>Outperformance<sup>1</sup></b>	<b>+1.0</b>	<b>+5.3</b>	<b>-5.8</b>	<b>-1.6</b>	<b>+4.4</b>

Source: Columbia Threadneedle Investments and FactSet, all data as at 31 March 2021 and in USD. Past performance is not a guide to future returns.

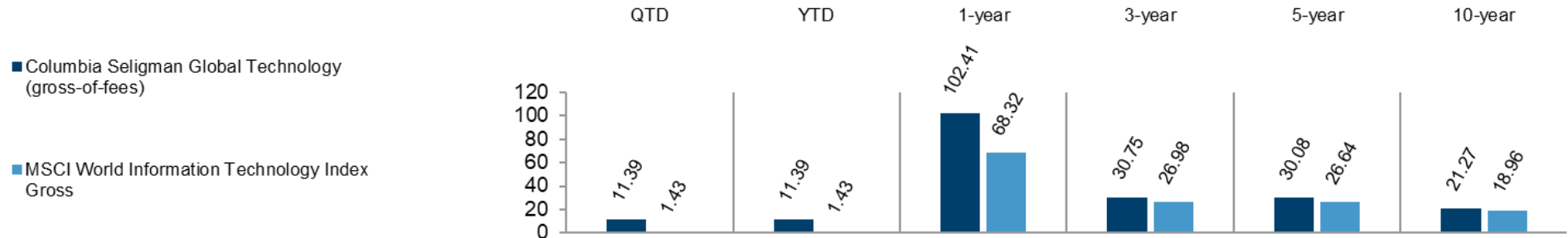
<sup>1</sup> Fund returns gross of fees and management expenses for comparison with MSCI AC World Index. Gross performance is calculated at total fund level, using daily global close valuations. Relative return is shown on a geometric basis. Relative return is shown on a geometric basis.

# Columbia Seligman Global Technology

## Composite performance

### Gross average annual total return (%) as of March 31, 2021 (USD)

Inception Date: June 30, 1994



eVestment eA Global All Cap Growth Equity percentile rank*	1-year	3-year	5-year	10-year
Columbia Seligman Global Technology Composite	7	11	39	27
MSCI World Information Technology Index Gross	97	63	81	66
No. observations in eVestment eA Technology Equity peer group	32	30	27	24

Gross calendar year returns (%)	2020	2019	2018	2017	2016
Columbia Seligman Global Technology (gross-of-fees)	47.29	56.55	-7.78	36.37	18.41
MSCI World Information Technology Index Gross	44.26	48.15	-2.25	38.74	11.98
eVestment eA Global All Cap Growth Equity percentile rank*					
Columbia Seligman Global Technology Composite	71	1	83	79	5
MSCI World Information Technology Index Gross	87	19	57	62	40
No. observations in eVestment eA Technology Equity peer group	39	45	45	44	44

\* The above table shows where the benchmark would fall if it were ranked within the peer group

Source: Columbia Threadneedle Investments North America, eVestment.

**Past performance is not a guarantee of future results.**

Returns over one year are annualized. Gross returns do not include the impact of management fees and other expenses that will reduce individual returns on a compound basis.

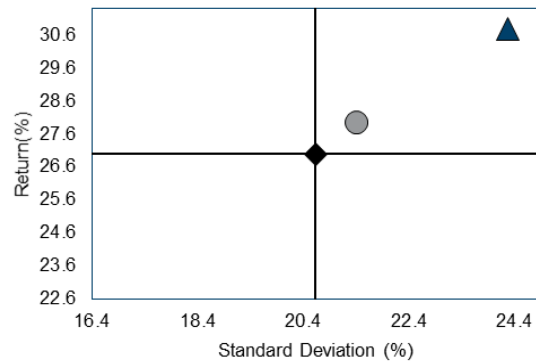
**Please see the GIPS Report provided for additional performance information, including the impact of fees.**



# Columbia Seligman Global Technology Composite

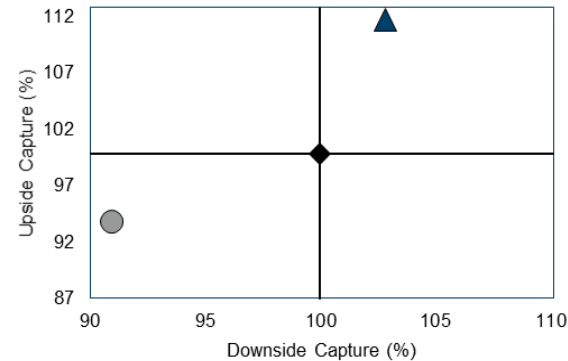
## Three-year period ending 31 March 2021

### Risk/Return



- ▲ Columbia Seligman Global Technology Composite
- eA Technology Equity
- ◆ Seligman Global Technology Custom Index

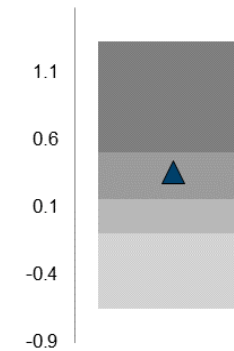
### Up/Down Market Capture



- ▲ Columbia Seligman Global Technology Composite
- eA Technology Equity
- ◆ Seligman Global Technology Custom Index

### Information Ratio

eA Technology Equity



▲ Columbia Seligman Global Technology Composite

5th Percentile	1.35
25th Percentile	0.52
50th Percentile	0.18
75th Percentile	-0.07
95th Percentile	-0.63
Observations	30

	Annualized Return (%)	Std Dev (%)	Tracking Error (%)	Information Ratio	Alpha	Beta	R <sup>2</sup>	Sharpe Ratio
Columbia Seligman Global Technology Composite	30.75	24.31	9.90	0.38	1.87	1.08	0.84	1.20
eA Technology Equity	27.92	21.43	7.50	0.18	0.11	0.98	0.88	1.23
Seligman Global Technology Custom Index	26.98	20.66	-	-	-	-	-	1.23

Source: Columbia Threadneedle Investments North America, eVestment.

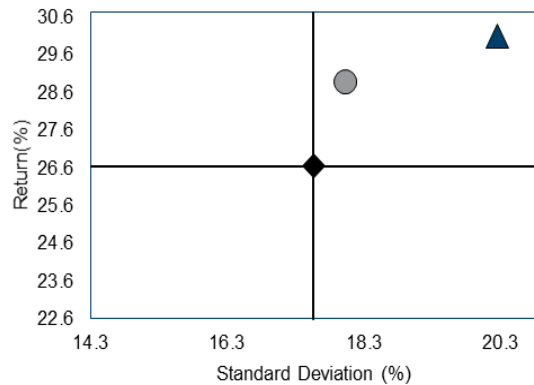
#### Past performance is not a guarantee of future results.

Returns over one year are annualized. Gross returns do not include the impact of management fees and other expenses that will reduce individual returns on a compound basis. **Please see the GIPS Report provided for additional performance information, including the impact of fees.**

# Columbia Seligman Global Technology Composite

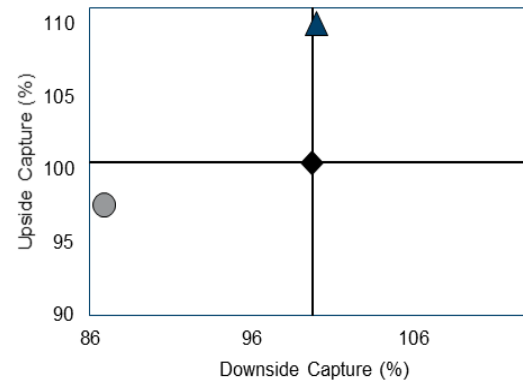
## Five-year period ending 31 March 2021

### Risk/Return



- ▲ Columbia Seligman Global Technology Composite
- eA Technology Equity
- ◆ MSCI World Information Technology Index Gross

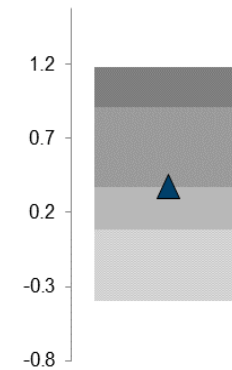
### Up/Down Market Capture



- ▲ Columbia Seligman Global Technology Composite
- eA Technology Equity
- ◆ MSCI World Information Technology Index Gross

### Information Ratio

eA Technology Equity



- ▲ Columbia Seligman Global Technology Composite

5th Percentile	1.22
25th Percentile	0.95
50th Percentile	0.41
75th Percentile	0.12
95th Percentile	-0.36

Observations 27

	Annualized Return (%)	Std Dev (%)	Tracking Error (%)	Information Ratio	Alpha	Beta	R <sup>2</sup>	Sharpe Ratio
Columbia Seligman Global Technology Composite	30.08	20.28	8.37	0.41	1.99	1.05	0.83	1.42
eA Technology Equity	28.86	18.07	6.62	0.41	0.21	0.96	0.87	1.50
MSCI World Information Technology Index Gross	26.64	17.59	-	-	-	-	-	1.45

Source: Columbia Threadneedle Investments North America, eVestment.

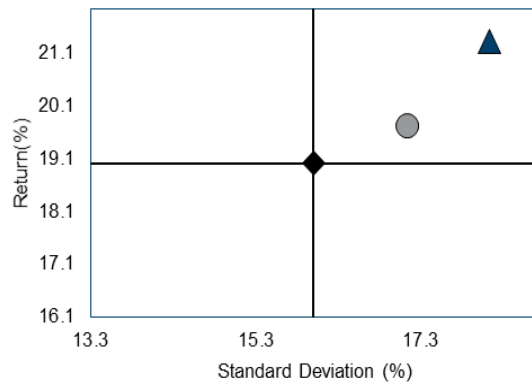
### Past performance is not a guarantee of future results.

Returns over one year are annualized. Gross returns do not include the impact of management fees and other expenses that will reduce individual returns on a compound basis. **Please see the GIPS Report provided for additional performance information, including the impact of fees.**

# Columbia Seligman Global Technology Composite

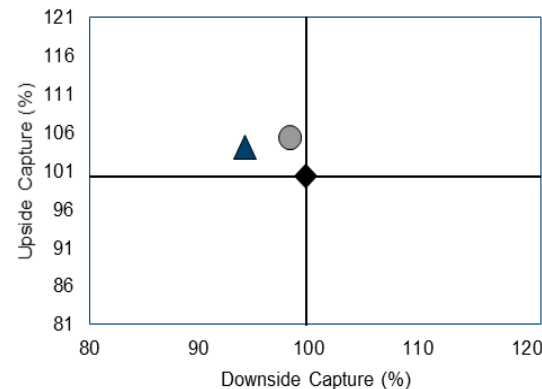
## Ten-year period ending 31 March 2021

### Risk/Return



- ▲ Columbia Seligman Global Technology Composite
- eA Technology Equity
- ◆ MSCI World Information Technology Index Gross

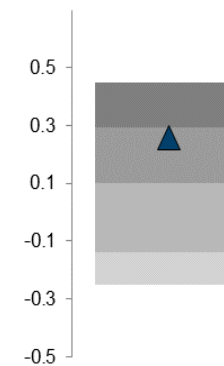
### Up/Down Market Capture



- ▲ Columbia Seligman Global Technology Composite
- eA Technology Equity
- ◆ MSCI World Information Technology Index Gross

### Information Ratio

eA Technology Equity



▲ Columbia Seligman Global Technology Composite

5th Percentile	0.49
25th Percentile	0.34
50th Percentile	0.14
75th Percentile	-0.10
95th Percentile	-0.21

Observations 24

	Annualized Return (%)	Std Dev (%)	Tracking Error (%)	Information Ratio	Alpha	Beta	R <sup>2</sup>	Sharpe Ratio
Columbia Seligman Global Technology Composite	21.27	18.17	7.74	0.30	1.86	1.03	0.82	1.14
eA Technology Equity	19.67	17.18	6.62	0.14	0.07	1.00	0.85	1.08
MSCI World Information Technology Index Gross	18.96	16.04	-	-	-	-	-	1.14

Source: Columbia Threadneedle Investments North America, eVestment.

#### Past performance is not a guarantee of future results.

Returns over one year are annualized. Gross returns do not include the impact of management fees and other expenses that will reduce individual returns on a compound basis. **Please see the GIPS Report provided for additional performance information, including the impact of fees.**

# Columbia Seligman Global Technology Composite GIPS Report

## Columbia Threadneedle Investments North America

Reporting Currency: USD

### Statement of Performance Results

Calendar Year	Gross-of-fees Return (%)	Net-of-fees Return (%)	Primary Index Return (%)	Secondary Index Return (%)	Composite 3-Yr St Dev (%)	Primary Index 3-Yr St Dev (%)	Secondary Index 3-Yr St Dev (%)	Internal Dispersion (%)	Number of Portfolios	Total Composite Assets (\$ mil.)	Total Firm Assets (\$ bil.)
2020	47.29	45.86	44.26	45.15	24.37	21.11	21.61	N.A.	≤ 5	2,788	396
2019	56.55	55.05	48.15	42.68	18.32	15.26	15.86	N.A.	≤ 5	2,087	353
2018	-7.78	-8.71	-2.25	2.88	15.79	14.71	15.21	0.96	6	1,583	320
2017	36.37	35.05	38.74	37.78	14.93	13.97	14.04	N.A.	6	1,592	364
2016	18.41	17.25	11.98	13.56	14.45	13.60	13.81	N.A.	≤ 5	913	333
2015	11.42	10.32	5.21	9.91	12.16	11.57	12.16	N.A.	≤ 5	782	328
2014	26.58	25.35	16.61	15.28	13.13	11.38	11.63	N.A.	≤ 5	706	333
2013	27.93	26.69	29.30	34.57	15.31	13.81	14.18	N.A.	≤ 5	603	321
2012	9.17	8.09	13.77	15.23	18.18	18.38	18.84	N.A.	≤ 5	542	304
2011	-5.60	-6.55	-2.17	-0.88	18.26	19.83	20.31	N.A.	≤ 5	565	298

Inception Date June 30, 1994

1. Columbia Threadneedle Investments North America claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Columbia Threadneedle Investments North America has been independently verified for the periods of January 1, 1993 to December 31, 2019. The verification report is available upon request. A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. Verification does not provide assurance on the accuracy of any specific performance report. GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein.

2. Columbia Management Investment Advisers, LLC, is an SEC-registered investment adviser (formerly known as RiverSource Investments, LLC prior to May 1, 2010). For purposes of compliance with the GIPS standards, Columbia Management Investment Advisers, LLC has defined the Firm as Columbia Threadneedle Investments North America (prior to January 1, 2021, the Firm was known as Columbia Management Investments), an operating division of Columbia Management Investment Advisers, LLC that offers investment management and related services to institutional clients. As of May 1, 2010, certain long-term assets of Columbia Management Advisors, LLC ("CMA") were merged into Columbia Threadneedle Investments North America and included in firm assets as of that date. The Firm was redefined in January 2011 to include stable value assets that were previously excluded from the firm. Beginning March 30, 2015, the Columbia and Threadneedle group of companies, which includes multiple separate and distinct GIPS-compliant firms, began using the global offering brand Columbia Threadneedle Investments. As of January 1, 2017, the Firm was redefined to include Columbia Wanger Asset Management, LLC, a wholly-owned subsidiary of Columbia Management Investment Advisers, LLC. As of November 1, 2020, the Firm was redefined to include Columbia Cent CLO Advisers, LLC.

# Columbia Seligman Global Technology Composite GIPS Report

## Columbia Threadneedle Investments North America

### Reporting Currency: USD

3. The strategy invests primarily in equity securities of US and non-US companies with business operations in technology and technology-related industries. Under normal market conditions, 40% of the net assets of a portfolio will be invested in companies that maintain their principal place of business outside the US, have their securities traded on a non-US exchange or have been formed under the laws of non-US countries. The composite includes all portfolios managed according to its investment strategy on a discretionary basis with a minimum account value of \$5 million. The benchmarks are the Seligman Global Technology Custom Index which is made up of the S&P North American Technology Sector Total Return Index prior to 1/1/1999 and the MSCI World Index Information Technology Gross Index after 1/1/1999, and the Standard & Poor's North American Technology Sector Index. The composite was created March 1, 2009.
  4. The gross-of-fees returns are time-weighted rates of return net of commissions and other transaction costs. Net-of-fees returns are calculated by deducting from the monthly gross-of-fees composite return one-twelfth of the highest client fee (model fee) in effect for the respective period. Composite returns reflect the reinvestment of dividends and other earnings.
  5. Internal dispersion is calculated using the equal-weighted standard deviation of the annual gross returns of those portfolios that were included in the Composite for the entire year. If the composite contains five or fewer accounts for the full year, a measure of dispersion is not statistically representative and is therefore not shown.
  6. The three-year annualized standard deviation measures the variability of the gross-of-fees composite and benchmark returns over the preceding 36-month period. It is not required to be presented when a full three years of performance is not yet available.
  7. Portfolios are valued and composite returns are calculated and stated in U.S. dollars. Returns are calculated net of non-reclaimable withholding taxes on dividends, interest, and capital gains. Policies for valuing investments, calculating performance, and preparing GIPS Reports, as well as the list of composite descriptions, list of pooled fund descriptions for limited distribution pooled funds, and the list of broad distribution pooled funds are available upon request.
  8. The following fee schedule represents the current representative fee schedule used as the starting point for fee negotiations for institutional clients seeking investment management services in the designated strategy: 0.90% on the first \$25 million; 0.70% on the next \$50 million; 0.60% on the next \$75 million; Negotiable over \$150 million. Gross of fee performance information does not reflect the deduction of management fees. The following statement demonstrates, with a hypothetical example, the compound effect fees have on investment return: If a portfolio's annual rate of return is 10% for 5 years and the annual management fee is 90 basis points, the gross total 5-year return would be 61.1% and the 5-year return net of fees would be 54.0%.
  9. The primary benchmark is the Seligman Global Technology Custom Index, which prior to 1/1/1999 was made up of the S&P North American Technology Sector Total Return Index, which is a modified capitalization weighted equity index designed as a benchmark for U.S. traded stocks in the technology sector, and after 1/1/1999 is made up of the MSCI World Index Information Technology Gross Index, which is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance in the information technology sector. The secondary benchmark is the Standard & Poor's North American Technology Sector Index that is a modified capitalization weighted equity index designed as a benchmark for U.S. traded stocks in the technology sector. Index returns reflect the reinvestment of dividends and other earnings and are not covered by the report of the independent verifiers.
  10. Past performance is no guarantee of future results and there is the possibility of loss of value. There can be no assurance that an investment objective will be met or that return expectations will be achieved. Care should be used when comparing these results to those published by other investment advisers, other investment vehicles and unmanaged indices due to possible differences in calculation methods. Registration with the SEC as an investment advisor does not imply a certain level of skill or training.
-

# Seligman Technology Group

## **Paul H. Wick**

### *Lead Portfolio Manager*

Paul Wick is the lead portfolio manager for the Seligman Technology Group at Columbia Threadneedle Investments. Mr. Wick leads a team of investment professionals located in New York and California who, together, manage public and private technology assets. He joined one of the Columbia Threadneedle Investments legacy firms in 1987 and for almost two decades has been the portfolio manager of the Seligman Communications and Information Strategy. In 2001, he began managing a long-short investment vehicle focused on opportunities in the technology sector. Mr. Wick is recognized as a leading technology investor. He specializes in the semiconductor and electronic capital equipment industries as well as in the software and computer hardware industries, both domestically and abroad. Mr. Wick's insight and outlook on the technology industry are frequently featured in the financial media. Mr. Wick received a B.A. in economics from Duke University and an MBA in finance from Duke University Fuqua School of Business.

## **Christopher (Chris) Boova**

### *Portfolio Analyst*

Chris Boova is a portfolio analyst for the Seligman Technology Group at Columbia Threadneedle Investments. Mr. Boova currently follows financial technology, IT services, software and defense. Prior to joining the Seligman Technology Group, he followed the technology sector for the growth and core teams for 8 years. He joined one of the Columbia Threadneedle Investments legacy firms in 2000 and has been a member of the investment community since 1995. Previously, he was a vice president in the investment banking department at Morgan Stanley from 1995 to 2000, where he provided corporate finance and merger and acquisition advice to public and private technology clients. Mr. Boova received a B.S. in chemical engineering and a B.S. in economics, both with Highest Distinction, from Worcester Polytechnic Institute and an M.A. in national security affairs from Georgetown University. He also received an MBA in finance and strategic management from The Wharton School at the University of Pennsylvania.

## **Sanjay Devgan**

### *Portfolio Analyst*

Sanjay Devgan is a portfolio analyst for the Seligman Technology Group at Columbia Threadneedle Investments. Mr. Devgan joined one of the Columbia Threadneedle Investments firms in 2012. He is responsible for a broad array of semiconductor companies including communication ICs, analog ICs, CPUs and PLDs. Previously, Mr. Devgan was a vice president at Morgan Stanley providing equity research on the semiconductor industry. Prior to that, Mr. Devgan was a senior financial business analyst at Cisco Systems covering operations finance, and worldwide sales finance. He has been a member of the investment community since 1995. Mr. Devgan received a B.S. in psychology from University of California, Los Angeles and an MBA in finance and information systems from Santa Clara University.

## **Israel Hernandez**

### *Portfolio Analyst*

Israel Hernandez is a portfolio analyst for the Seligman Technology Group at Columbia Threadneedle Investments. Mr. Hernandez focuses on enterprise and application software. Previously, in 2014, Mr. Hernandez was senior equity research analyst, managing director, at MKM Partners covering enterprise software. Prior to that, he was senior equity research analyst, director, and head of U.S. software research at Barclays Capital. Mr. Hernandez received his B.S. in labor & industrial relations from Cornell University, and his MBA from the University of North Carolina.



# Seligman Technology Group

## **John Noell, CFA**

### *Portfolio Analyst*

John Noell is a portfolio analyst for the Seligman Technology Group at Columbia Threadneedle Investments. Mr. Noell focuses on short positions across industries. Prior to joining the Seligman Technology Group in 2018, he was Senior Investment Risk Analyst at Franklin Templeton responsible for risk management coverage for \$60 billion in equity strategies. Before that he was a Founder and Managing Partner at Kensington Growth Partners, a long/short San Francisco-based hedge fund, and a Partner and Portfolio Manager at Barrington Partners, where he was responsible for the U.S. short portfolio. He has been a member of the investment community since 1999. Mr. Noell received a B.S. in Business administration from Washington University in St. Louis and an MBA from the Marshall School at the University of Southern California. In addition, he also holds the Chartered Financial Analyst® designation

## **Jeetil Patel**

### *Portfolio Analyst*

Jeetil Patel is a portfolio analyst for the Seligman Technology Group at Columbia Threadneedle Investments. Mr. Patel has 18 years of investment industry experience focused on the internet and media industries. Mr. Patel joined one of the Columbia Threadneedle Investments firms in 2012. Previously, he was a managing director and senior internet analyst for Deutsche Bank Securities, and during his tenure there he was included in Institutional Investor's All-American Research Team four times. Prior to that, Mr. Patel was a research associate with Hambrecht & Quist. Mr. Patel received a B.A. in international economics from the University of California, Los Angeles.

## **Vimal Patel**

### *Portfolio Analyst*

Vimal Patel is a portfolio analyst for the Seligman Technology Group at Columbia Threadneedle Investments. Mr. Patel focuses on consumer electronics, telematics, and computers & peripherals companies. Prior to joining one of the Columbia Threadneedle Investments firms in 2014, he was a vice president covering technology and business services for Bertram Capital. Before that, Mr. Patel was a principal at Sierra Ventures, a technology venture capital firm, where he covered consumer technologies, mobile, hardware, advanced materials and cleantech. Mr. Patel received a B.A. in electrical engineering from North Carolina State University, an M.S. in electrical engineering from the University of Colorado, Boulder, and an MBA from the Anderson School of Management at the University of California, Los Angeles.

## **Shekhar Pramanick, Ph.D.**

### *Portfolio Analyst*

Shekhar Pramanick is a portfolio analyst for the Seligman Technology Group at Columbia Threadneedle Investments. Dr. Pramanick joined one of the Columbia Threadneedle Investments firms in 2012. Previously, he was a principal at Elemental Capital Partners, focusing on global semiconductor devices, memory, capital equipment and disk drives. Prior to that, Dr. Pramanick was a semiconductor analyst at Seasons Capital Management. Dr. Pramanick received a B.S. in electrical engineering from the National Institute of Technology, an M.S. in physics from the University of Oregon and a Ph.D. in materials science and engineering from North Carolina State University.

# Seligman Technology Group

## **Nitin Saigal, CFA**

### *Portfolio Analyst*

Nitin Saigal is a portfolio analyst for the Seligman Technology Group at Columbia Threadneedle Investments. In this role Mr. Saigal covers the internet and media industries. Prior to joining the group in 2015, he was an associate in the technology investment banking group at Bank of America Merrill Lynch where he worked on transactions for firms including Twitter, Yahoo! and Facebook. Before that, he worked in the technology equity research team at Evalueserve covering internet and interactive entertainment stocks. Mr. Saigal holds a bachelor of engineering degree from the Delhi College of Engineering and received his MBA from Northwestern University's Kellogg School of Management. In addition, he holds the Chartered Financial Analyst® designation.

## **Sanjiv Wadhvani**

### *Portfolio Analyst*

Sanjiv Wadhvani is a portfolio analyst for the Seligman Technology Group at Columbia Threadneedle Investments. Mr. Wadhvani has 19 years of investment management experience. He joined the Seligman Technology Group in 2016. He covers a broad array of communications equipment companies. Prior to joining Columbia Threadneedle, he was a Senior Research Analyst, Managing Director at Steifel Nicolaus and its predecessor, Miller Johnson Steichen Kinnard, providing equity research on the communications equipment industry. Before that, he was a Research Analyst, Principal at Piper Jaffray covering communications equipment. In 2007, he was ranked # 1 Telecom Equipment Analyst in the Wall Street Journal's Best on the Street survey. Mr. Wadhvani received a BS in Electronics Engineering from University of Bombay and his MBA from the University of Iowa.

## **Jonathan Wang, CFA**

### *Portfolio Analyst*

Jonathan Wang is a portfolio analyst for the Seligman Technology Group at Columbia Threadneedle Investments. In this role, Mr. Wang focuses on the international IT services industry. He joined the Seligman Technology Group in 2015 as a research analyst. Previously, he was part of the asset management group at Oppenheimer & Co. and most recently worked on our trading desk supporting the Seligman Technology Team. He has been a member of the investment community since 2005. Mr. Wang received his B.A. in economics from the State University of New York at Stonybrook. In addition, he holds the Chartered Financial Analyst® designation.



# Threadneedle (Lux) Global Technology

## Objectives and Key Risks

**Objective** – The aim of the Fund is to grow the amount you invested. The Fund invests at least two-thirds of its assets in shares of companies with operations in technology and technology-related industries worldwide. Technology-related companies are companies that use technology extensively to improve their business processes and applications. The Fund may invest in shares of companies of any size and in any country.

**Investment Risk** – The value of investments can fall as well as rise and investors might not get back the sum originally invested.

**Currency Risk** – Where investments are in assets that are denominated in multiple currencies, or currencies other than your own, changes in exchange rates may affect the value of the investments.

**Derivatives for EPM / Hedging** – The investment policy of the fund allows it to invest in derivatives for the purposes of reducing risk or minimising the cost of transactions.

**High Volatility Risk** – The fund typically carries a risk of high volatility due to its portfolio composition or the portfolio management techniques used. This means that the fund's value is likely to fall and rise more frequently and this could be more pronounced than with other funds.

**Effect of Portfolio Concentration** – The Fund has a concentrated portfolio (holds a limited number of investments and/or has a restricted investment universe) and if one or more of these investments declines or is otherwise affected, it may have a pronounced effect on the fund's value.

# 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 is an advertising document.**

Past performance is not a guide to future performance. The value of investments and any income is not guaranteed and can go down as well as up and may be affected by exchange rate fluctuations. This means that an investor may not get back the amount invested. Your capital is at risk. This material is for information only and does not constitute an offer or solicitation of an order to buy or sell any securities or other financial instruments, or to provide investment advice or services. The mention of any specific shares or bonds should not be taken as a recommendation to deal.

The analysis included in this document has been produced by Columbia Threadneedle Investments for its own investment management activities, may have been acted upon prior to publication and is made available here incidentally. Any opinions expressed are made as at the date of publication but are subject to change without notice and should not be seen as investment advice. Information obtained from external sources is believed to be reliable, but its accuracy or completeness cannot be guaranteed.

This presentation and its contents are confidential and proprietary. The information provided in this presentation is for the sole use of those attending the presentation. It may not be reproduced in any form or passed on to any third party without the express written permission of Columbia Threadneedle Investments. This presentation is the property of Columbia Threadneedle Investments and must be returned upon request.

Threadneedle (Lux) is an investment company with variable capital (Société d'investissement à capital variable, or "SICAV") formed under the laws of the Grand Duchy of Luxembourg. The SICAV issues, redeems and exchanges shares of different classes. The management company of the SICAV is Threadneedle Management Luxembourg S.A, who is advised by Threadneedle Asset Management Ltd. and/or selected sub-advisors.

Certain sub-funds of the SICAV are registered in Austria, Belgium, Denmark, France, Finland, Germany, Hong Kong, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, Macau, the Netherlands, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the UAE and the UK; however, this is subject to applicable jurisdictions and some sub-funds and/or share classes may not be available in all jurisdictions. Shares in the Funds may not be offered to the public in any other country and this document must not be issued, circulated or distributed other than in circumstances which do not constitute an offer to the public and are in accordance with applicable local legislation.

Threadneedle (Lux) is authorised in Spain by the Comisión Nacional del Mercado de Valores (CNMV) and registered with the relevant CNMV's Registered with number 177.

Het compartiment is op grond van artikel 1:107 van de Wet op het financieel toezicht opgenomen in het register dat wordt gehouden door de Autoriteit Financiële Markten. / Pursuant to article 1:107 of the Act of Financial Supervision, the sub-fund is included in the register that is kept by the AFM.

Please read the Prospectus before investing.

Shares in the Funds may not be offered, sold or delivered directly or indirectly in the United States or to or for the account or benefit of any "U.S. Person", as defined in Regulation S under the 1933 Act.

## Important information (cont.)

This document contains strategies managed by Columbia Management Investment Advisers, LLC (CMIA). CMIA is an affiliate of:

- Threadneedle Asset Management Limited (TAML),
- Threadneedle Management Luxembourg S.A. (TMLSA) and
- Columbia Threadneedle Investments (ME) Limited, (CTIME).
- CMIA and TAML provide sub-advisory services to TMSLA for discretionary managed accounts.
- CMIA is registered as an investment adviser with the U.S. Securities and Exchange Commission. This document-is being made available to you by:
- TAML – authorised and regulated in the UK by the Financial Conduct Authority or
- TMLSA – authorised and regulated in Luxembourg by the Commission de Surveillance du Secteur Financier or
- CTIME – authorised and regulated by the Dubai Financial Services Authority.

The materials relating to the CMIA strategies included in this document have been approved and provided to TAML, TMLSA and/or CTIME by CMIA.

The document and its contents and any other information or opinions subsequently supplied or given to you are strictly confidential and for -the sole use of those attending the presentation. It may not be reproduced in any form or passed on to any third party without the express written permission of TAML, TMLSA or CTIME. By accepting delivery of this document, you agree that it is not to be copied or reproduced in whole or in part and that you will not disclose its contents to any other person.

Notice to Investors in Austria, Belgium, Demark, Finland, France, Germany, Iceland, Italy, Liechtenstein, Luxembourg, the Netherlands, Norway, Portugal, Spain and Sweden. TMSLA is Registered with the Registre de Commerce et des Societes (Luxembourg)

*Notice to Investors in the UK:* TAML is authorised and regulated in the UK by the Financial Conduct Authority.

*Notice to Investors in the Middle East:* CTIME is authorised and regulated in the DIFC by the Dubai Financial Services Authority.

CMIA is registered as an investment adviser with the U.S. Securities and Exchange Commission. This document-is being made available to you by TAML, which is authorised and regulated in the UK by the Financial Conduct Authority and/or Threadneedle Portfolio Services AG (TPS AG) in Switzerland.

The materials relating to the CMIA strategies included in this document have been approved and provided to TAML and TPS AG by CMIA.

The document and its contents and any other information or opinions subsequently supplied or given to you are strictly confidential and for -the sole use of those attending the presentation. It may not be reproduced in any form or passed on to any third party without the express written permission of TAML and/or TPS AG. By accepting delivery of this document, you agree that it is not to be copied or reproduced in whole or in part and that you will not disclose its contents to any other person.

*Notice to Investors in Switzerland:* TAML and CMIA are not licensed in Switzerland and may only provide investment management services on a cross-border basis.

## Important information (cont.)

Subscriptions to a Fund may only be made on the basis of the current Prospectus and the Key Investor Information Document, as well as the latest annual or interim reports and the applicable terms & conditions. Please refer to the 'Risk Factors' section of the Prospectus for all risks applicable to investing in any fund and specifically this Fund. Documents other than KIIDs are available in English, French, German, Portuguese, Italian, Spanish and Dutch (no Dutch Prospectus). KIIDs are available in local languages. Documents can be obtained free of charge on request by writing to the management company at 44, rue de la Vallée, L-2661 Luxembourg, Grand Duchy of Luxembourg, from International Financial Data Services (Luxembourg) S.A. at 47, avenue John F. Kennedy, L-1855 Luxembourg, Grand Duchy of Luxembourg, from [www.columbiathreadneedle.com](http://www.columbiathreadneedle.com) and/or from: in Austria from Erste Bank, Graben 21 A-1010 Vienna; in Belgium: CACEIS Belgium S.A., avenue du Port 86 C b 320, 1000 Brussels; in France from CACEIS Bank, 1/3 Place Valhubert, 75013 Paris; in Germany from JP Morgan AG, Junghofstr. 14, 60311 Frankfurt; in Sweden from Skandinaviska Enskilda Banken AB (publ), Kungsträdgårdsgatan, SE-10640 Stockholm, Sweden; in the UK from JPMorgan Worldwide Securities Services, 60 Victoria Embankment, London EC4Y 0JP.

*For Swiss investors:* Subscriptions to a Fund may only be made on the basis of the current Prospectus and the Key Investor Information Document, as well as the latest annual or interim reports, which can be obtained free of charge on request, and the applicable Terms & Conditions. Please refer to the 'Risk Factors' section of the Prospectus for all risks applicable to investing in any fund and specifically this Fund. The above documents and the instrument of incorporation can be obtained from our representative and Paying Agent in Switzerland, RBC Investor Services Bank S.A., Esch-sur-Alzette, succursale de Zurich, Badenerstrasse 567, Case Postale 101, CH-8066 Zurich.

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

*In the UK:* Threadneedle Management Luxembourg S.A. Registered with the Registre de Commerce et des Sociétés (Luxembourg), Registered No. B 110242, 44, rue de la Vallée, L-2661 Luxembourg, Grand Duchy of Luxembourg. Issued by Threadneedle Asset Management Limited, registered in England and Wales, No. 573204. Registered Office: Cannon Place, 78 Cannon Street, London EC4N 6AG. Authorised and regulated in the UK by the Financial Conduct Authority.

*In the Middle East:* 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 Counterparty and no other Person should act upon it.

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