





Rewiring Capital Markets to Support Sustainable Growth

Business leaders have long struggled to weigh immediate financial needs against objectives many years into the future in order to succeed over the long term.

In the wake of the global financial crisis, something had to change in order to safeguard the future needs of individual savers and their communities. To call for action to reform the system, Focusing Capital on the Long Term (FCLT) was founded in 2013 as a joint initiative of CPP Investments and McKinsey & Company.

The initiative's message made it clear that those who participate in the capital markets could work to improve them. In July 2016, CPP Investments and

McKinsey teamed with BlackRock, Dow, and Tata Sons to found FCLTGlobal as an independent non-profit.

FCLTGlobal is a non-profit organization that develops research and tools that encourage long-term investing. At the heart of our work are our Members—leading global asset owners, asset managers, and companies that demonstrate a clear priority on long-term investment strategies in their own work. We conduct research through a collaborative process that brings together the entire global investment value chain, emphasizing the initiatives that market participants can take to make a sustainable financial future a reality for all.

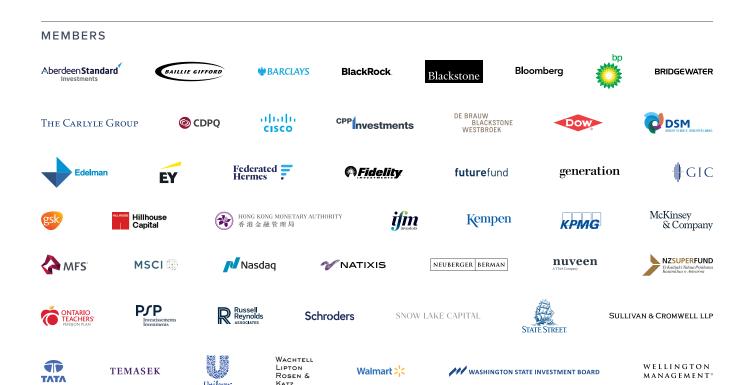


Table of Contents

4	Foreword
5	Executive Summary
7	Making the Case for Long-term Investment
7	Who We Are
7	Why "Long-term" Matters
10	Introducing FCLTCompass
11	FCLTCompass Architecture
12	FCLTCompass
12	2009 Asset Flows
13	2018 Asset Flows
18	A Global Snapshot
18	Asset Allocation of Savers by Country, 2018
19	Savers' Investment Time Horizons by Country, 2018
20	Country Analysis and Trends, 2009–2018
30	Key Findings
30	Mind the Gap
31	– Savers
31	- Companies
32	– Finding the Disconnect
35	Rethinking Investment Risk Profiles
35	Shift to Indexed Equity
36	Risky Business
37	The Rise of China
40	Raising New Questions
42	Conclusion
43	Methodology & Assumptions
49	Acknowledgments
50	Appendix
51	Endnotes

Foreword

Evidence from extensive research confirms that long-term oriented companies and investors outperform their peers. More importantly, the benefits these organizations pass on to their stakeholders sustain them for years into the future.

In that spirit, FCLTGlobal serves a dual purpose—to make the case for long-term business decision-making and to uncover practical ways to make those decisions. Both are aimed at reversing the course of the global business community after decades of short-termism. Since the inception of our organization, our research has been driven by a search for the best ways to manage capital for the long term, whether by companies, asset managers or asset owners.

So, how much capital is indeed being focused on the long term? For the past several years, we have worked to put structure around this question. Finally, we have an answer.

FCLTCompass is an annual reporting of money as it flows through the global investment value chain. Taking 10+ years of financial data, it traces investors' savings through various asset vehicles, finally arriving at the companies that deploy it in support of economic growth.

The project is named Compass because it is meant to give us a clear understanding of where our economies, and businesses, are heading. As we plan for the future, we must know which way the current is taking us. The FCLTCompass will not only measure how much capital is being invested in specific ways, but how long those investments take to reach fruition for savers, for investors, and for companies.

While FCLTGlobal has made tremendous advances through research and advocacy to encourage the adoption of a long-term focus, change requires the efforts of all actors in the investment value chain. The data in this report makes an even more compelling case for the adoption of long-termism as the norm. We encourage businesses, investors, and savers around the world to make use of this new information to improve their own practices and make a more sustainable financial future a reality for all.

As we publish the inaugural report of this flagship project, we thank our Members—leading global asset owners, asset managers, and companies across a range of industries and geographies—for their own work and for their collaboration with FCLTGlobal. Likewise, our sincere thanks goes to all of the partners, contributors, and staff who worked to make this initiative possible.

Mark Machin

President & CEO, CPP Investments
Chair, FCLTGlobal

Executive Summary

Capital markets have many functions in today's financial system. They promote the vitality of global and regional economies, and they provide new businesses a pathway to success through access to capital. The core purpose of capital markets is to facilitate transactions—to transform the money from savers into uses that support societal and economic growth, and that, in turn, earn a fair return for the savers themselves.

But the way that capital flows from savers, through various investment vehicles, to the companies that use it can be an opaque process. The structure of this process and the extent to which capital is focused on long-term goals shifts constantly as funds pass from one entity to the next across the investment value chain.

FCLTCompass is our way to spotlight this function. Through this new initiative, we have mapped capital flows in the largest countries by gross domestic product over the past decade—and have arrived at a critical conclusion.

The data shows us, unsurprisingly, that there is a significant intention-allocation gap of upward of eight years between the expected investment horizon of the saver and the actual time frame that capital remains committed to a particular investment opportunity. On the other end of the capital markets, the companies that savers' funds are invested in have the inverse problem: companies have short-term funding sources that are misaligned with the companies' own longerterm investment horizons. These long-term aspirations, therefore, are lost in translation due to a barbell effect whereby the goals of both savers and companies are weighed down by the path capital takes between them.

These discrepancies in time horizons highlight key issues for companies as they position themselves to be competitive and prosperous for all of their stakeholders. The adoption of business models with fewer fixed assets (so-called fixed asset-light models) has contributed to a 14 percent decline in corporate investment time horizons by driving a shift in the concentration and average useful life of assets in a company's portfolio. Debt outstanding has increased as a proportion of corporate financing in a period of extremely low interest rates—alongside the rise in return of capital to shareholders, excess leverage can pose risks to corporate resilience. And the decline in corporate investment time horizons parallels a decline in CEO tenures, which could be either a symptom or a cause of the broader decline in corporate investment time horizons.

Likewise, our findings show significant emerging trends in the global investment community. A widespread shift to indexed equity is contributing to an overall increase in average equity holding periods while time frames for fixed income have shortened and the low rate environment has inspired yield-chasing behavior. Most notably, the accumulation of wealth in China is beginning to show increasing influence on global household investment horizons.

Finally, one piece of the capital allocation puzzle is missing from our mapping of uses of cash. Capital invested in employees—in the form of wages, health and wellness, retirement contributions, and further training—is not easily discerned from typical financial disclosures. In the midst of a global pandemic, at a time when economic inequality and employee well-being are front and center, this absence is palpable.

These findings present further questions that challenge the nature and function of today's capital markets: How can savers mitigate their own short-term tendencies and incentivize behavior on the part of the asset management community that is aligned with their own long-term interests? And how can the asset management industry serve clients better by aligning the products they provide with savers' intended time horizons?

We hope this first annual edition of FCLTCompass offers an opportunity to think critically about these questions and the future of our global markets. By relying on data reported prior to the COVID-19 crisis, this evaluation serves as a stable baseline. As the years go by, we will see the impacts of the pandemic and other dislocations on global asset flows and investment horizons.

Over time, FCLTCompass will evolve and expand by widening its global scope, digging deeper into emerging trends, and benefiting from feedback from the global business and investment community, especially as new data comes to light in the years ahead. It is our goal for this project to contribute to our ongoing practical research to help companies, investors, and savers alike practice long-term decision-making as the norm, not the exception.

We welcome your comments and suggestions as we continue our work to rewire capital markets to support a long-term and sustainable global economy.

Sarah K. Williamson

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CEO, FCLTGlobal

Making the Case for Long-term Investment

Who We Are

Business leaders have long struggled to weigh immediate financial needs against future objectives.

In the wake of the 2008–2009 global financial crisis, business leaders knew something had to change in order to safeguard the interests of individual savers and their communities. In 2011, Dominic Barton, then global managing partner of McKinsey & Company, wrote *Capitalism for the Long Term*, a call to action for business leaders to reform the system. This piece was met with agreement from many other observers, and as a result, Focusing Capital on the Long Term (FCLT) was founded in 2013 as a joint initiative of CPP Investments and McKinsey & Company.

FCLT produced a number of seminal reports in the ensuing years. The initiative's message made it clear that those who participate in the capital markets could improve the system. In July 2016, CPP Investments and McKinsey teamed with BlackRock, Dow, and Tata Sons to found FCLTGlobal.

FCLTGlobal is a not-for-profit organization that develops research and tools to encourage long-term business and investing. Our Membership is comprised of global asset owners, asset managers, and companies that play a leading role in rebalancing capital markets for sustainable growth. We conduct research through a collaborative process that brings together the entire global investment value chain, emphasizing the initiatives that market participants can take to make a sustainable financial future a reality for all.

Why "Long-term" Matters

People around the world are saving money to meet personal goals, such as paying for an education, funding a comfortable retirement, or buying a home. Effective capital markets allocate these long-term savings to fuel innovation and fund business growth, which, in turn, results in savings growth.



Despite the widespread and proven benefits of long-term oriented capital markets, pervasive short-term behavior has taken hold. Results from a 2016 *McKinsey Quarterly* survey of a panel of more than 1,000 C-level executives and board directors showed that a majority of respondents perceived short-term pressure to be growing.²

Other evidence corroborates that perspective:

99%

of reported earnings for S&P 500 companies was spent on dividends and buybacks in 2019.³

87%

of executives and directors feel the most performance pressure within the first two years of assuming the role.⁴ **55%**

of CFOs would delay projects with a positive net present value to hit quarterly earnings targets.⁵

This pressure has made it difficult for executives to codify their long-term plans and articulate critical elements of their long-term strategy.⁶ Yet 86 percent of executives agree that longer time horizons for business decisions would improve performance,⁷ and for good reason.

Companies that make long-term decisions outperform their peers. From 2001 to 2014, the revenue of long-term firms cumulatively grew, on average, 47 percent more than the revenue of other firms, and with less volatility.⁸

Companies that make long-term decisions benefit the global economy. Although long-term firms took bigger hits to their market capitalization than other firms during the 2008–2009 global financial crisis, their share prices recovered more quickly after the crisis. Furthermore, long-term firms added nearly 12,000 more jobs on average than other firms from 2001 to 2015. 10

The benefits of looking toward the long term also extend to the world of investment. Just like companies that make long-term decisions, **investors** who do the same can better capture systemic

mispricing relative to their peers. Investors can earn a net long-term premium relative to a market cap—weighted index of up to 1.5 percent annually, depending on size and governance arrangements.¹¹ The illiquidity risk premium available to long-term investors is worth 0.5 percent to 2.0 percent annually. Finally, long-horizon investors can capture significant savings in transaction costs by avoiding unnecessary turnover.

Long-term investors engage on long-term issues,

a practice that benefits all stakeholders, including the investors themselves. In the year following engagement with investee companies, long-term investors can average an excess return of 2.3 percent—in some cases as high as 7.1 percent.¹² Those returns can be persistent. Over the five years following an engagement, targeted companies produced cumulative average excess returns of 12.3 percent above the benchmark.¹³

The numbers show that long term-oriented investors deliver superior performance, and long term-oriented companies outperform others in terms of revenue, earnings, and job creation. But despite overwhelming evidence of the superiority of long-term investments,

the short-term pressures—of the market, of peers, of boards—are hard to avoid.

FCLTGlobal's work is focused on identifying key levers that can elevate long-term performance, as well as encouraging market participants themselves to measure progress in these areas. Strong governance, incentive alignment, robust engagement, sustainable

business and investment strategies, and thoughtful public policy all contribute to laying the foundation for long-term value creation. Our mission is to encourage a long-term focus in global investing by developing practical methods to address these foundational elements, thereby enabling companies and investors to take the long view, to the ultimate benefit of savers and of society as a whole.

Introducing FCLTCompass

Significant evidence shows that taking a long-term approach to investment decision-making delivers superior value over time. ¹⁴ Nevertheless, managers, economists, and investors struggle to balance immediate financial pressures against long-term objectives many years into the future. In part, this struggle is because "long-term" is more of a future-oriented state of mind than an actual time horizon.

That lack of clarity makes it difficult to determine how exactly to take action or change behavior in pursuit of long-term goals. It also makes it easier for companies or investors to defer or delay decisions that would favor the long term, opting instead to prioritize more immediately tangible results.

We are often asked questions like the following:

How long is the average investment time horizon?

How have those investment horizons shifted over time, and where are they heading?

How much money is focused on the long term?

FCLTCompass attempts to provide answers to these questions by anchoring the abstract concept of long-term investing to quantitative data reported in years and US dollars, framing the conversation in a more actionable light. Savers can take action to change the prevailing short-term paradigm we see in the capital markets today. Providing the data needed to illustrate the gaps is the first step toward catalyzing broader adoption of longer-term investment perspectives.

DEFINING "SAVERS"

A saver can be one individual or several (in the case of households), or it can be an institution (e.g. a pension fund, insurer, sovereign wealth fund, endowment, or foundation). Savers have long-term goals—such as saving for retirement, providing for the next generation, or financing a particular purpose or mission—and allocate their capital in pursuit of those goals. Savers are the ultimate investment decision makers, either selecting asset allocations and individual investments themselves, or deciding to entrust their capital to managers who make investments on their behalf.

FCLTCompass Architecture

FCLTCompass traces funds as they flow through capital markets from savers to their ultimate destination, beginning with the time period of 2009 – 2018. First we measure savers' capital and track how it is allocated across a wide array of available asset classes:

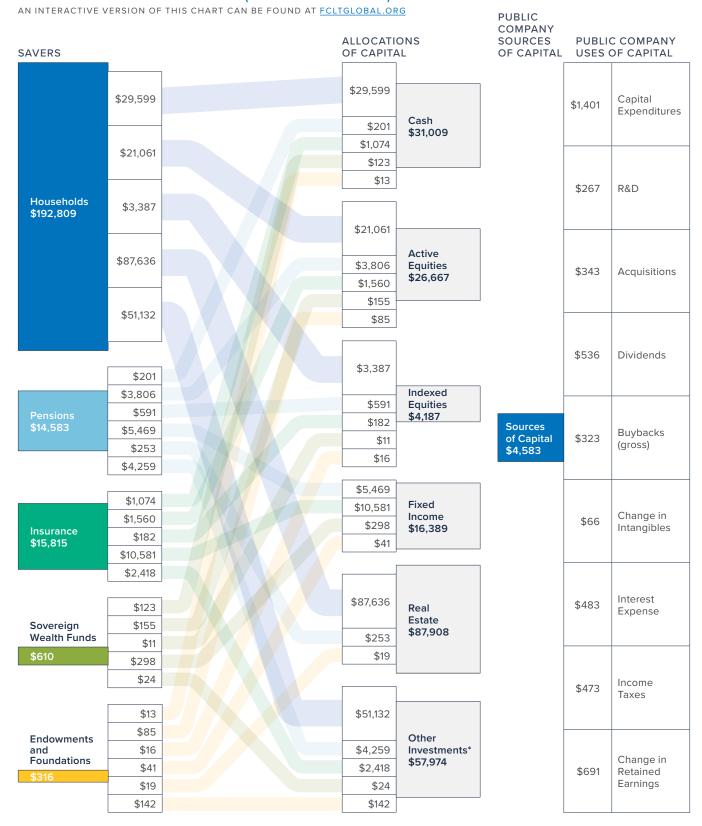
Savers	\longrightarrow	Allocation of Capital	
HOUSEHOLDS (NET WORTH)		CASH	PRIVATE EQUITY
PENSIONS		INDEXED EQUITY	HEDGE FUNDS
INSURANCE		ACTIVE EQUITY	COMMODITIES
SOVEREIGN WEALTH FUNDS		REAL ESTATE	PRIVATE DEBT
ENDOWMENTS AND FOUNDATIONS		FIXED INCOME	

Then we look into corporate sources of capital and how capital is deployed to support business growth:

Corporate Sources of Capital	Corporate Uses of Capita	al
NET INCOME	CAPITAL EXPENDITURES	TAXES
NET DEBT	RESEARCH & DEVELOPMENT	BUYBACKS (GROSS)
EQUITY ISSUANCE	ACQUISITIONS	DIVIDENDS
DIVESTITURES	INTANGIBLES	CHANGE IN RETAINED EARNINGS
	INTEREST	

Tracking these asset flows, taken as a whole, around the world provides a snapshot of how capital is allocated in a given year and how those allocations have shifted over time.

2009 Asset Flows¹⁵ (USD Billions)



Note: the majority of the funding in the sources of capital come from equity and debt issuance, but may also include other smaller or irregular sources like divestitures, prior-year earnings, and tax breaks. Savers and allocations of capital calculated as of 12/31/2009. Public company sources of capital and uses of capital calculated on an annual basis for 2009.

^{*}Other Investments includes the following assets: Private Equity=\$52; Investment fund shares/units, mutual funds and unit trust=\$5,268; Alternatives=\$20; Hedge Funds=\$71; Commodities=\$19; Private Debt=\$6; Securities=\$148; Other=\$52,390.

2018 Asset Flows¹⁵ (USD Billions)

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PUBLIC COMPANY **ALLOCATIONS** SOURCES **PUBLIC COMPANY** USES OF CAPITAL SAVERS OF CAPITAL OF CAPITAL \$51,122 \$51,122 Capital \$2,136 Expenditures Cash \$393 \$52,497 \$893 \$37,929 \$64 \$25 \$625 R&D Households \$15,499 \$302,175 \$37,929 Active \$123.618 **Equities** \$4,686 \$805 Acquisitions \$44,772 \$1,677 \$335 \$74,007 \$145 Dividends \$1,147 \$15,499 \$393 Indexed \$4,686 \$2,215 **Equities** \$2,215 \$18,585 \$689 \$7,770 Sources \$105 Buybacks of Capital \$1,021 \$284 (gross) \$8.771 \$77 \$7,622 \$7,770 \$893 \$14,039 Fixed Income \$1,677 \$503 Change in \$22,362 \$94 Insurance Intangibles \$689 \$21,309 \$49 \$14,039 \$4,010 \$123,618 \$64 Interest Real \$723 \$335 Expense **Estate** Sovereign \$284 \$123,945 Wealth Funds \$105 \$12 \$503 \$1,459 \$31 \$12 Income \$439 \$786 Taxes \$25 \$74,007 \$145 **Endowments** Other and \$77 \$7,622 Investments* **Foundations** Change in \$86,368 \$49 \$4,010 \$1,435 Retained Earnings \$439 \$31 \$289 \$289

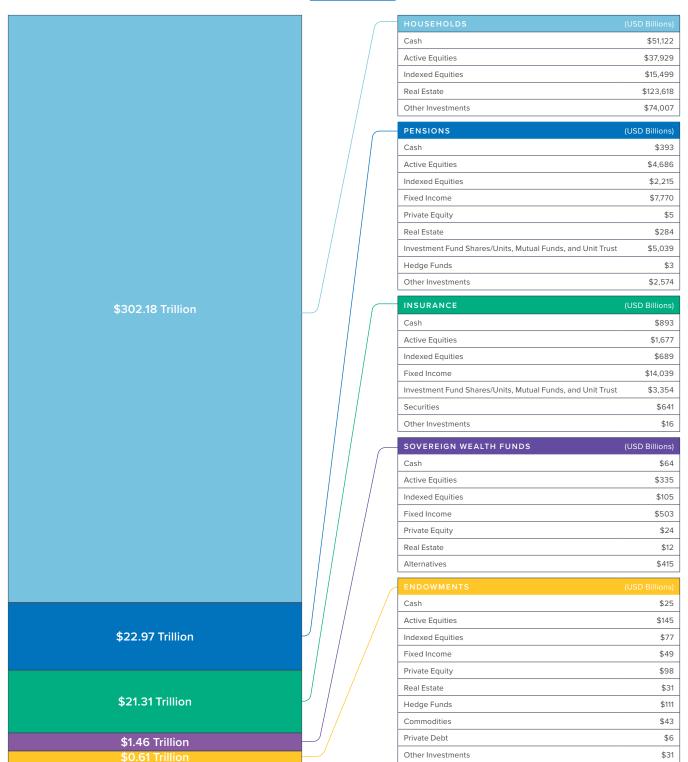
Note: the majority of the funding in the sources of capital come from equity and debt issuance, but may also include other smaller or irregular sources like divestitures, prior-year earnings, and tax breaks. Savers and allocations of capital calculated as of 12/31/2018. Public company sources of capital and uses of capital calculated on an annual basis for 2018.

^{*}Other Investments includes the following assets: Private Equity=\$127; Investment fund shares/units, mutual funds and unit trust=\$8,393; Alternatives=\$415; Hedge Funds=\$114; Commodities=\$43; Private Debt=\$6; Securities=\$641; Other=\$76,628.

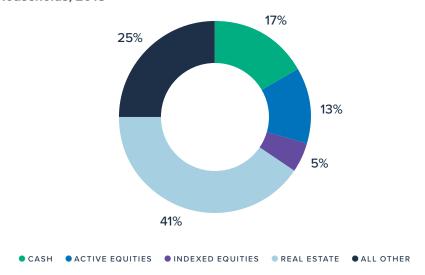
It is clear from these snapshots that household savings are the primary source of wealth, providing the raw fuel to finance capital investments and economic growth worldwide. Although households control most of the wealth, distributed decision-making authority dilutes their influence on capital markets. This diluted influence not only is due to their widely dispersed number, but also reflects, in part, their asset allocation choices. By favoring cash and real estate, household savings have a blunted influence on major equity and fixed-income markets.

Asset Allocation of Savers (In USD Billions), 2018¹⁶

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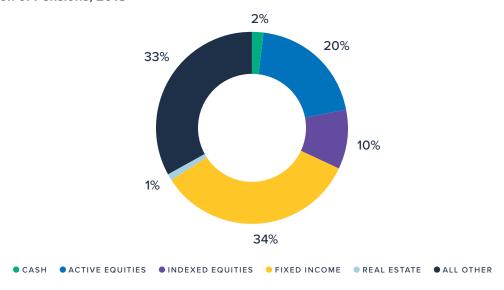


Asset Allocation of Households, 2018¹⁷



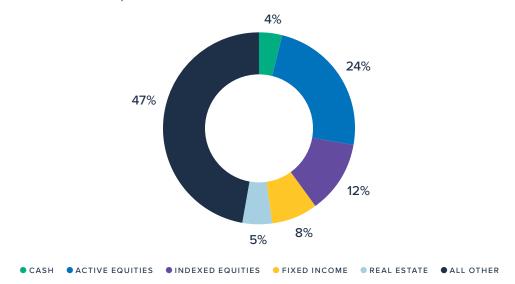
Nonetheless, households are the "swing voters": small shifts in the asset allocation of households in a particular country carry significant ramifications for investment horizons, asset class valuations, and even market volatility at times.

Asset Allocation of Pensions, 2018¹⁸



While households, often considered less sophisticated retail investors, prefer cash and real estate in their investment allocations, pensions have a much lower allocation to these two asset classes and a much greater emphasis on fixed income. Those fixed income—heavy allocations, common in pension portfolios, stand in stark contrast to the average endowment allocation. With the ability to take on riskier assets due to the less regulated nature of their structure, endowments often have allocations that skew heavily into alternative and emerging asset classes, in pursuit of higher returns.

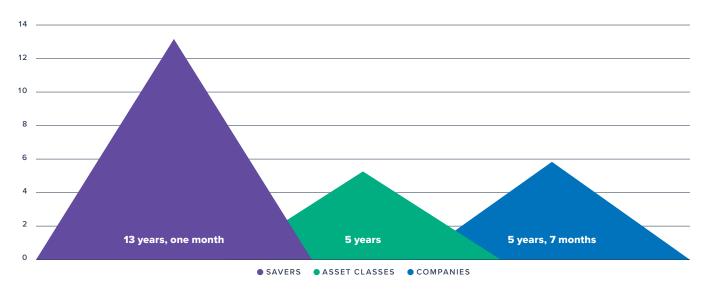
Asset Allocation of Endowments, 2018¹⁹



After mapping savers' asset allocations, we can then determine the average time horizon of each segment of the value chain to measure the state of long-term behavior in the capital markets. In 2018, savers, on average, had investment horizons of upward of 13 years—which, in many cases, extends beyond a full business cycle. But the capital markets as currently structured are not meeting these long-term intentions. Taken as a whole, the dollar-weighted average investment horizon of asset classes is just five years, while the average investment horizon of a public company in our sample is just shy of six years (five years, seven months):

Investment Horizons, Savers Versus Public Companies (In Years), 2018

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The term *investment horizon* describes the total length of time an investor expects to hold a security, portfolio, or other asset. In the case of a saver's intended investment horizon, this usually is the time frame aligned with the goals attached to the capital. For example, a household saving for retirement in 25 years would have an intended investment horizon aligned with this 25-year goal. In the case of asset classes, the investment horizon is the average holding period of a security or investment instrument.

Similarly, companies' investment horizons often match the average life of the assets in which they

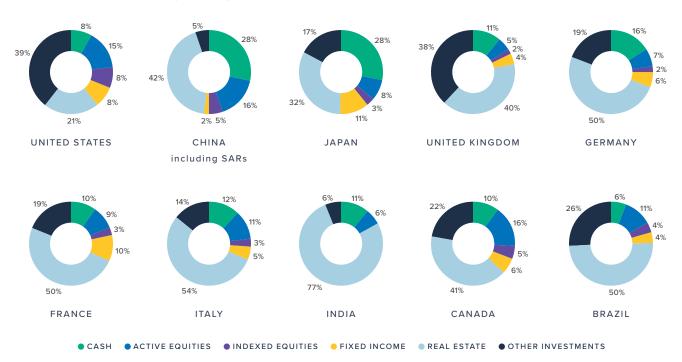
invest. Items that make up a corporate investment portfolio, such as patents, machinery, and software, all have average useful lives. By attaching an investment horizon to these various pieces of the investment value chain, we can compare the intended investment time horizons of the assets that comprise a company's sources of capital with the actual time horizons of companies' investment allocations. For a full description of the definitions used to specify investment horizons for various savers, asset classes, and uses of capital, please see the Methodology and Assumptions section.

A Global Snapshot

Economies in every region experience cycles and volatility, and the financial futures of savers all over the world are tied to these shifts. Companies and investors, regardless of their location, are susceptible to the temptation of short-term gains over long-term goals. The benefits of long-term financial decisions, and the harm or missed opportunity of short-term ones, are not unique to any one country.

With these realities in mind, a primary goal of FCLTCompass is to develop a data set that measures regional asset flows and investment horizons on an annual basis, in the same way it measures the movement of capital on a global level. As a proof of concept, we selected 2018 (a relatively calm year in the capital markets) as the inaugural base year and began with the top 10 national economies as determined by gross domestic product (GDP).

Asset Allocation of Savers by Country, 2018²⁰



Even with the top 10 largest countries in the world by GDP, gaps in data exist. Some gaps in the tables and figures that follow are due to a lack of disclosure, while others are due to the lack of a particular type of saver in a particular country. For example, the lack of endowment numbers in France is not due to a lack of data but rather because the endowment legal

structure is not common in that country. Similarly, while sovereign wealth fund data is sometimes difficult to uncover, in this case, the many blank fields for this saver category result from the fact that, of our 10 countries, only one, China (including special administrative regions, or SARs), has sovereign wealth funds. We also acknowledge that there

are significant differences in the characteristics of government-issued versus corporate-issued debt, and as more detailed data becomes available, separating fixed-income assets by issuer type

would lend helpful perspective. Please see the Methodology and Assumptions section for a full discussion of the data used and the limitations presented by that data.

Savers' Investment Time Horizons by Country (In Years), 2018

	Households	Pensions	Insurance	Sovereign Wealth Funds	Endowments	Average
United Kingdom	5.39	9.12				5.92
India	5.92		4.41			5.82
Brazil	5.83	4.73				5.77
Canada	5.28	6.29	7.13			5.49
United States	5.37	5.51	5.31		4.33	5.38
France	5.66	3.61	3.48			5.30
Italy	5.49	3.47	3.59			5.16
Germany	5.29	3.67	3.16			5.01
China (including SARs)	4.22	3.66		4.33		4.22
Japan	3.82	4.12	4.41			3.89

Country Analysis and Trends, 2009–2018²¹

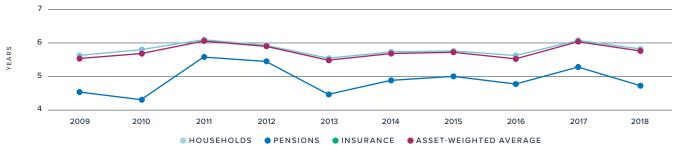


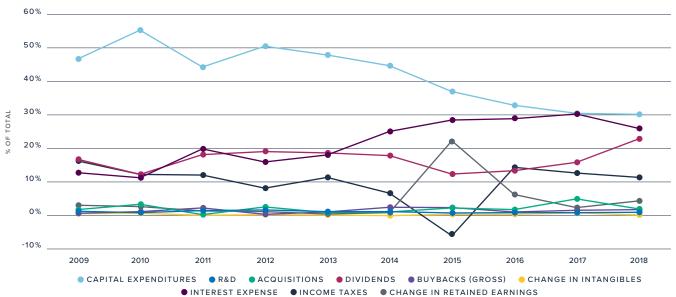
BRAZIL

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Households	\$2,868	\$3,681	\$3,946	\$4,152	\$4,328	\$4,126	\$3,329	\$3,416	\$4,459	\$3,783
Pensions	\$279	\$320	\$308	\$315	\$274	\$250	\$175	\$232	\$243	\$220
Insurance								\$234		
Foundations										<\$1
Total	\$3,147	\$4,001	\$4,255	\$4,467	\$4,602	\$4,376	\$3,503	\$3,882	\$4,701	\$4,004

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cash	\$186	\$215	\$275	\$311	\$300	\$280	\$253	\$243	\$294	\$236
Active Equities	\$403	\$455	\$476	\$573	\$613	\$573	\$456	\$458	\$600	\$454
Indexed Equities	\$28	\$45	\$63	\$75	\$109	\$124	\$107	\$118	\$172	\$144
Fixed Income	\$159	\$177	\$173	\$177	\$153	\$144	\$112	\$367	\$157	\$142
Private Equity	\$4	\$6	\$8	\$8	\$8	\$10	\$4	\$5	\$3	\$2
Real Estate	\$1,548	\$2,158	\$2,131	\$2,065	\$2,159	\$2,100	\$1,538	\$1,714	\$2,273	\$2,001
Investment funds, mutual funds, etc.								\$5		
Hedge Funds							\$2	\$3	\$2	\$3
Other Investments	\$818	\$944	\$1,129	\$1,259	\$1,260	\$1,146	\$1,032	\$969	\$1,200	\$1,023

Investment Horizon



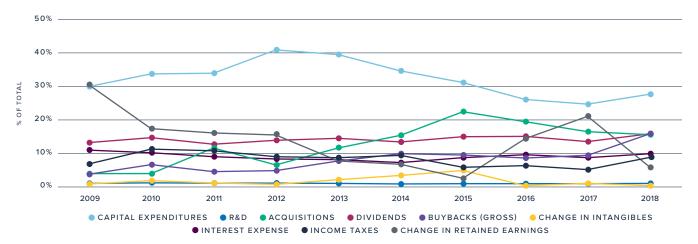




Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Households	\$7,379	\$8,245	\$8,606	\$9,503	\$9,583	\$9,442	\$8,305	\$9,272	\$10,453	\$10,026
Pensions	\$876	\$1,054	\$1,076	\$1,200	\$1,261	\$1,298	\$1,196	\$1,289	\$1,470	\$1,373
Insurance	\$528	\$607	\$604	\$671	\$658	\$648	\$554	\$613	\$672	\$593
Foundations										\$4
Total	\$3,147	\$4,001	\$4,255	\$4,467	\$4,602	\$4,376	\$3,503	\$3,882	\$4,701	\$4,004

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cash	\$905	\$1,023	\$1,083	\$1,177	\$1,144	\$1,095	\$969	\$1,079	\$1,191	\$1,145
Active Equities	\$1,621	\$1,817	\$1,696	\$1,932	\$1,979	\$1,946	\$1,609	\$1,847	\$2,129	\$1,936
Indexed Equities	\$111	\$172	\$217	\$242	\$341	\$408	\$366	\$463	\$594	\$599
Fixed Income	\$648	\$753	\$799	\$862	\$824	\$846	\$740	\$787	\$834	\$768
Real Estate	\$3,640	\$4,003	\$4,283	\$4,706	\$4,725	\$4,567	\$4,088	\$4,555	\$5,081	\$4,892
Investment funds, mutual funds, etc.	\$102	\$127	\$127	\$142	\$156	\$164	\$144	\$162	\$189	\$163
Other Investments	\$1,755	\$2,011	\$2,081	\$2,308	\$2,337	\$2,363	\$2,139	\$2,282	\$2,578	\$2,489



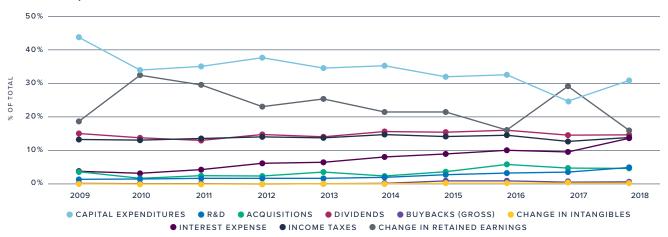




Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Households	\$22,694	\$27,928	\$34,739	\$39,145	\$46,576	\$50,140	\$53,164	\$61,008	\$71,581	\$69,990
Pensions	\$104	\$120	\$136	\$167	\$202	\$236	\$262	\$282	\$346	\$364
Insurance										\$2,330
Sovereign Wealth Funds	\$610	\$711	\$802	\$934	\$1,044	\$1,153	\$1,255	\$1,280	\$1,457	\$1,458
Foundations										\$25
Total	\$23,408	\$28,760	\$35,677	\$40,245	\$47,822	\$51,529	\$54,681	\$62,570	\$73,383	\$74,167

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cash	\$5,368	\$6,527	\$8,185	\$9,183	\$10,937	\$11,785	\$12,592	\$18,654	\$21,879	\$20,519
Active Equities	\$2,977	\$3,717	\$4,357	\$4,918	\$6,163	\$6,921	\$7,510	\$10,902	\$12,785	\$12,129
Indexed Equities	\$887	\$1,107	\$1,332	\$1,492	\$1,886	\$2,132	\$2,321	\$3,400	\$4,005	\$3,815
Fixed Income	\$326	\$362	\$373	\$414	\$424	\$436	\$493	\$503	\$577	\$1,725
Private Equity						\$10	\$12	\$15	\$20	\$24
Real Estate	\$13,149	\$16,118	\$20,171	\$22,721	\$26,583	\$28,218	\$29,594	\$26,009	\$30,489	\$31,501
Alternatives	\$20	\$86						\$303	\$370	\$415
Hedge Funds			\$58	\$73	\$77	\$86	\$103			
Other Alternatives			\$149	\$186	\$184	\$196	\$180			
Securities										\$287
Other Investments	\$680	\$841	\$1,050	\$1,254	\$1,565	\$1,742	\$1,874	\$2,780	\$3,261	\$3,058

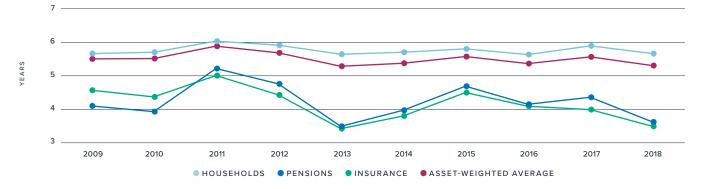


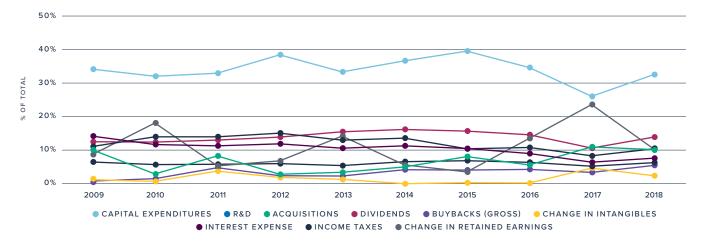




Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Households	\$15,183	\$15,250	\$15,173	\$15,109	\$15,815	\$14,007	\$13,113	\$13,236	\$15,739	\$15,607
Pensions	\$4	\$5	\$6	\$9	\$12	\$13	\$13	\$15	\$19	\$19
Insurance	\$2,536	\$2,533	\$2,426	\$2,739	\$3,010	\$2,912	\$2,689	\$2,747	\$3,235	\$3,067
Foundations										\$30
Total	\$17,724	\$17,788	\$17,605	\$17,857	\$18,837	\$16,932	\$15,815	\$15,998	\$18,993	\$18,723

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cash	\$1,614	\$1,572	\$1,625	\$1,751	\$1,838	\$1,653	\$1,538	\$1,559	\$1,876	\$1,844
Active Equities	\$1,621	\$1,538	\$1,380	\$1,548	\$1,636	\$1,458	\$1,456	\$1,344	\$1,635	\$1,597
Indexed Equities	\$114	\$151	\$182	\$201	\$292	\$316	\$341	\$346	\$470	\$506
Fixed Income	\$1,627	\$1,689	\$1,637	\$1,855	\$2,027	\$1,964	\$1,772	\$1,819	\$2,059	\$1,958
Private Equity	<\$1	<\$1	<\$1	<\$1	<\$1	<\$1	<\$1	<\$1	<\$1	<\$1
Real Estate	\$9,700	\$9,866	\$9,908	\$9,533	\$9,827	\$8,540	\$7,909	\$7,903	\$9,349	\$9,287
Investment funds, mutual funds, etc.	\$496	\$466	\$408	\$462	\$539	\$522	\$503	\$586	\$751	\$697
Hedge Funds	<\$1	<\$1	<\$1	<\$1	<\$1	<\$1	<\$1			
Other Investments	\$2,557	\$2,510	\$2,465	\$2,501	\$2,678	\$2,474	\$2,291	\$2,440	\$2,853	\$2,799

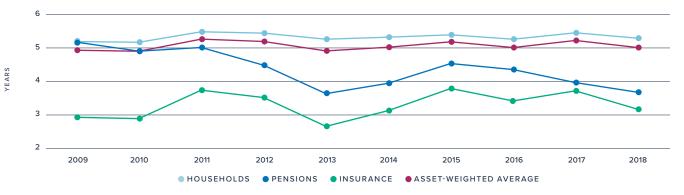


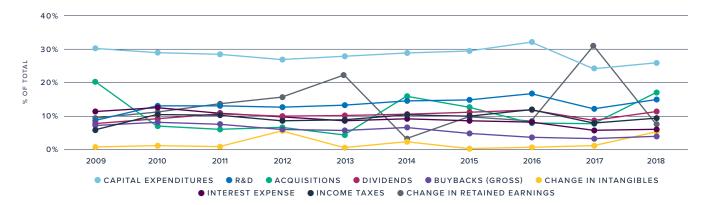




Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Households	\$14,607	\$13,916	\$13,889	\$14,716	\$15,897	\$14,613	\$13,753	\$13,901	\$16,593	\$16,445
Pensions	\$188	\$187	\$193	\$221	\$237	\$236	\$220	\$227	\$271	\$268
Insurance	\$1,964	\$1,922	\$1,909	\$2,094	\$2,306	\$2,189	\$2,024	\$2,036	\$2,372	\$2,271
Foundations										\$93
Total	\$16,759	\$16,025	\$15,991	\$17,031	\$18,441	\$17,039	\$15,997	\$16,164	\$19,236	\$19,076

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cash	\$3,022	\$2,860	\$2,866	\$3,007	\$3,188	\$2,886	\$2,691	\$2,704	\$3,186	\$3,114
Active Equities	\$1,312	\$1,229	\$1,087	\$1,189	\$1,255	\$1,142	\$1,102	\$1,124	\$1,358	\$1,287
Indexed Equities	\$92	\$121	\$144	\$155	\$224	\$247	\$258	\$289	\$389	\$407
Fixed Income	\$786	\$775	\$781	\$894	\$996	\$991	\$919	\$925	\$1,097	\$1,089
Private Equity	<\$1	<\$1	<\$1	<\$1	<\$1	<\$1	\$1	\$1	\$2	\$2
Real Estate	\$8,506	\$8,052	\$8,137	\$8,571	\$9,252	\$8,490	\$7,957	\$8,039	\$9,549	\$9,500
Investment funds, mutual funds, etc.	\$399	\$439	\$449	\$531	\$642	\$647	\$623	\$651	\$782	\$722
Hedge Funds	\$1	\$1	\$1	\$1	\$1	<\$1	<\$1	<\$1	<\$1	<\$1
Other Investments	\$2,634	\$2,542	\$2,531	\$2,681	\$2,875	\$2,635	\$2,446	\$2,436	\$2,872	\$2,853

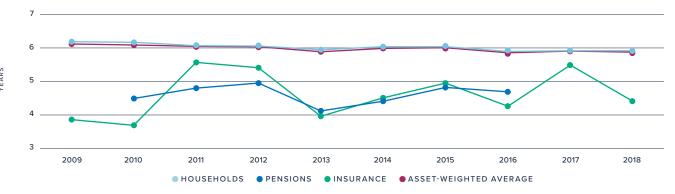


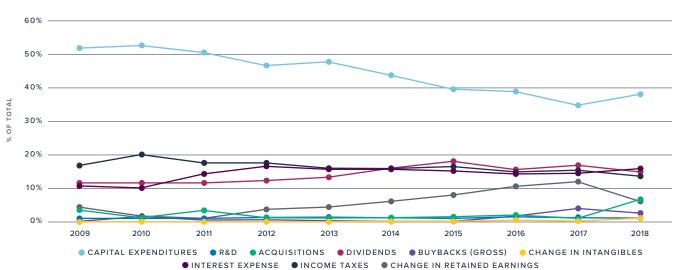




Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Households	\$5,413	\$6,371	\$6,055	\$6,897	\$7,324	\$8,128	\$9,467	\$10,450	\$13,511	\$13,034
Pensions		\$3	\$3	\$5	\$7	\$11	\$16	\$23		
Insurance	\$158	\$201	\$230	\$226	\$231	\$248	\$267	\$287	\$336	\$357
Foundations										\$1
Total	\$5,571	\$6,575	\$6,287	\$7,128	\$7,561	\$8,387	\$9,749	\$10,760	\$13,846	\$13,392

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cash	\$488	\$580	\$672	\$763	\$822	\$838	\$979	\$1,177	\$1,554	\$1,442
Active Equities	\$174	\$222	\$242	\$298	\$388	\$429	\$514	\$652	\$888	\$810
Indexed Equities	\$12	\$16	\$17	\$21	\$27	\$30	\$36	\$46	\$62	\$57
Fixed Income	\$10	\$11	\$10	\$10	\$9	\$11	\$20	\$25	\$5	\$4
Real Estate	\$4,517	\$5,309	\$4,845	\$5,518	\$5,804	\$6,554	\$7,624	\$8,238	\$10,581	\$10,320
Investment funds, mutual funds, etc.		<\$1	<\$1							
Securities	\$148	\$191	\$220	\$218	\$223	\$241	\$260	\$282	\$331	\$353
Other Investments	\$227	\$255	\$288	\$312	\$302	\$297	\$331	\$349	\$440	\$419



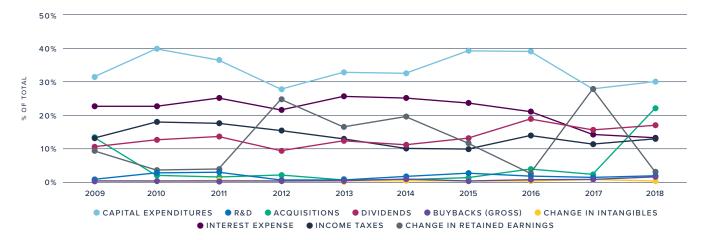




Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Households	\$13,839	\$12,702	\$12,346	\$12,825	\$13,292	\$12,714	\$11,463	\$11,079	\$12,832	\$12,512
Pensions	\$90	\$95	\$99	\$116	\$132	\$131	\$122	\$130	\$157	\$153
Insurance	\$768	\$685	\$651	\$694	\$795	\$800	\$816	\$864	\$1,026	\$959
Foundations										\$87
Total	\$14,697	\$13,481	\$13,097	\$13,635	\$14,219	\$13,644	\$12,401	\$12,073	\$14,015	\$13,712

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cash	\$1,642	\$1,482	\$1,453	\$1,568	\$1,664	\$1,493	\$1,384	\$1,399	\$1,634	\$1,627
Active Equities	\$1,503	\$1,312	\$1,124	\$1,275	\$1,539	\$1,408	\$1,362	\$1,300	\$1,598	\$1,456
Indexed Equities	\$106	\$129	\$149	\$166	\$275	\$305	\$319	\$335	\$460	\$462
Fixed Income	\$596	\$547	\$526	\$565	\$643	\$652	\$643	\$662	\$769	\$724
Real Estate	\$8,479	\$7,858	\$7,739	\$7,892	\$7,904	\$7,865	\$6,974	\$6,677	\$7,588	\$7,436
Investment funds, mutual funds, etc.	\$94	\$95	\$92	\$105	\$122	\$139	\$161	\$179	\$220	\$212
Other Investments	\$2,276	\$2,057	\$2,019	\$2,065	\$2,066	\$1,782	\$1,557	\$1,522	\$1,747	\$1,708



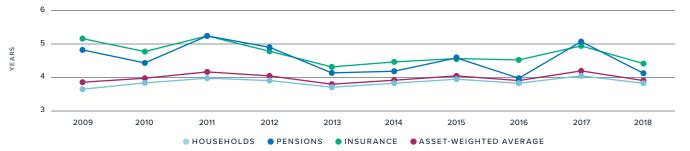


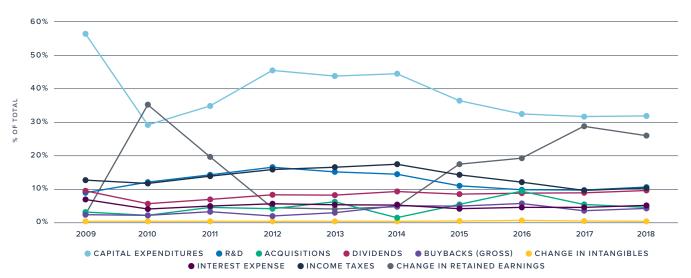
JAPAN

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Households	\$27,079	\$28,048	\$33,484	\$30,506	\$25,959	\$23,617	\$24,072	\$25,031	\$26,689	\$26,934
Pensions	\$1,190	\$1,440	\$1,548	\$1,644	\$1,417	\$1,482	\$1,259	\$1,498	\$1,550	\$1,591
Insurance	\$3,455	\$4,027	\$4,275	\$3,986	\$3,442	\$3,106	\$3,125	\$3,297	\$3,387	\$3,412
Total	\$31,724	\$33,515	\$39,307	\$36,135	\$30,819	\$28,205	\$28,456	\$29,827	\$31,626	\$31,937

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cash	\$9,116	\$9,050	\$11,212	\$10,227	\$8,654	\$7,786	\$7,883	\$8,382	\$8,891	\$9,068
Active Equities	\$2,194	\$2,188	\$2,258	\$2,320	\$2,440	\$2,380	\$2,330	\$2,396	\$2,743	\$2,652
Indexed Equities	\$152	\$215	\$296	\$317	\$457	\$540	\$572	\$627	\$806	\$863
Fixed Income	\$3,797	\$4,475	\$4,797	\$4,598	\$3,826	\$3,385	\$3,262	\$3,417	\$3,447	\$3,531
Real Estate	\$10,321	\$11,492	\$13,435	\$11,911	\$9,794	\$9,017	\$9,301	\$9,723	\$10,225	\$10,256
Investment funds, mutual funds, etc.	\$167	\$189	\$176	\$181	\$163	\$129	\$121	\$130	\$140	\$141
Other Investments	\$5,977	\$5,906	\$7,134	\$6,562	\$5,485	\$4,969	\$4,972	\$5,166	\$5,357	\$5,442

Investment Horizon

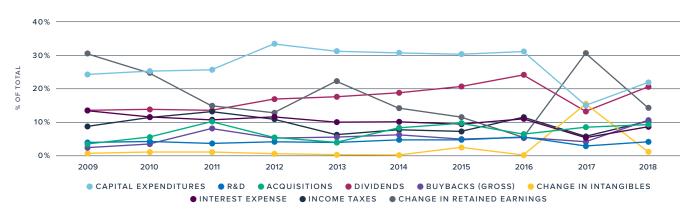




Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Households	\$13,791	\$13,422	\$14,128	\$14,766	\$16,168	\$16,689	\$16,459	\$14,911	\$17,086	\$16,968
Pensions	\$1,821	\$2,018	\$2,233	\$2,530	\$2,811	\$2,785	\$2,742	\$2,608	\$2,998	\$2,809
Insurance									\$2,376	
Foundations										\$84
Total	\$15,612	\$15,440	\$16,361	\$17,296	\$18,978	\$19,474	\$19,201	\$17,519	\$22,460	\$19,861

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cash	\$1,932	\$1,900	\$1,981	\$2,116	\$2,326	\$2,263	\$2,202	\$1,971	\$2,450	\$2,226
Active Equities	\$1,288	\$1,248	\$1,125	\$1,122	\$1,223	\$1,201	\$1,094	\$947	\$1,537	\$943
Indexed Equities	\$89	\$117	\$140	\$138	\$199	\$256	\$252	\$241	\$436	\$298
Fixed Income	\$536	\$558	\$660	\$742	\$828	\$885	\$903	\$889	\$1,933	\$848
Real Estate	\$6,539	\$6,280	\$6,318	\$6,593	\$7,416	\$7,549	\$7,710	\$6,876	\$8,167	\$7,990
Investment funds, mutual funds, etc.	\$464	\$579	\$596	\$708	\$785	\$702	\$740	\$724	\$1,399	\$749
Other Investments	\$4,764	\$4,759	\$5,540	\$5,877	\$6,201	\$6,618	\$6,301	\$5,872	\$6,535	\$6,733

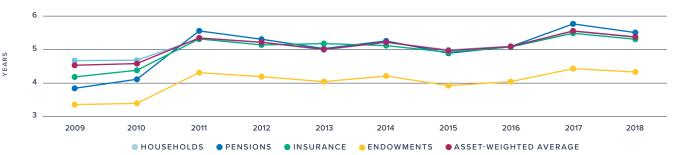


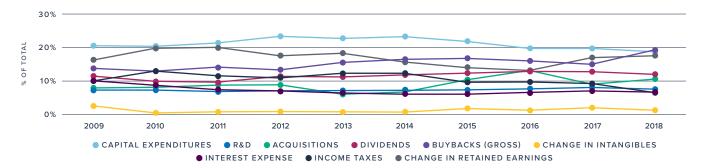




Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Households	\$69,956	\$73,516	\$74,298	\$79,870	\$89,417	\$94,395	\$97,323	\$102,965	\$111,071	\$116,936
Pensions	\$10,031	\$11,064	\$11,072	\$12,129	\$13,667	\$14,303	\$14,126	\$14,829	\$16,663	\$16,178
Insurance	\$6,406	\$6,846	\$7,124	\$7,543	\$7,866	\$8,235	\$8,178	\$8,539	\$9,213	\$8,985
Endowments	\$316	\$346	\$408	\$404	\$447	\$511	\$526	\$515	\$567	\$615
Foundations										\$890
Total	\$86,709	\$91,772	\$92,902	\$99,946	\$111,397	\$117,444	\$120,153	\$126,848	\$137,514	\$143,604

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cash	\$6,736	\$7,272	\$7,918	\$8,407	\$8,803	\$9,397	\$9,886	\$10,491	\$10,740	\$11,276
Active Equities	\$13,574	\$14,460	\$13,350	\$16,058	\$19,043	\$20,031	\$20,609	\$19,786	\$22,763	\$21,508
Indexed Equities	\$2,596	\$3,272	\$3,799	\$3,780	\$5,866	\$7,185	\$5,935	\$8,855	\$11,068	\$11,434
Fixed Income	\$7,904	\$8,389	\$8,841	\$9,315	\$9,439	\$10,001	\$10,034	\$10,535	\$11,192	\$11,573
Private Equity	\$47	\$52	\$65	\$69	\$72	\$77	\$79	\$88	\$91	\$98
Real Estate	\$21,508	\$20,940	\$20,984	\$22,432	\$24,408	\$25,603	\$27,053	\$28,569	\$30,324	\$30,764
Investment funds, mutual funds, etc.	\$3,546	\$3,982	\$3,838	\$4,232	\$5,062	\$5,309	\$5,178	\$5,455	\$6,174	\$5,711
Hedge Funds	\$70	\$73	\$78	\$77	\$89	\$92	\$105	\$103	\$108	\$111
Commodities	\$19	\$24	\$29	\$28	\$31	\$36	\$37	\$36	\$40	\$43
Private Debt	\$6	\$10	\$8	\$8	\$9	\$10	\$11	\$5	\$6	\$6
Other Investments	\$30,703	\$33,294	\$33,935	\$35,538	\$38,575	\$39,704	\$41,227	\$42,924	\$45,003	\$50,104





Key Findings

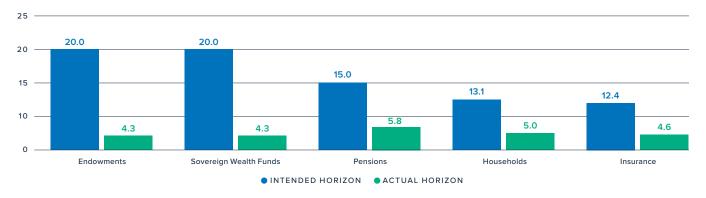
Important trends have emerged from our global data set, consistent with what we know about the evolution of capital markets since the global financial crisis. The analysis highlights a subtle shifting of global investment time frames and levels of capital, and patterns have come to light that may impact companies' prospects for success, investors' likelihood of strong returns, and the financial futures of millions of savers worldwide.

Mind the Gap

A significant intention-allocation gap exists between the intended investment horizons of savers and the actual time frames of their investments (as calculated by the asset-weighted average holding period of their asset allocations). Similarly, companies have long-term intentions for their investments, made in support of their strategic plans, but there is a gap between the investment horizon of these intentions and the companies' sources of capital, which carry much shorter-term investment horizons. These intention-allocation gaps are endemic throughout the investment value chain and around the world. Uncovering the reasons for these gaps, and evaluating how they change over time, could provide some of the data required to start to change investment behaviors, redirecting capital toward the long term.

Investment Horizon Gaps (In Years), 2018

AN INTERACTIVE VERSION OF THIS CHART CAN BE FOUND AT FCLTGLOBAL.ORG

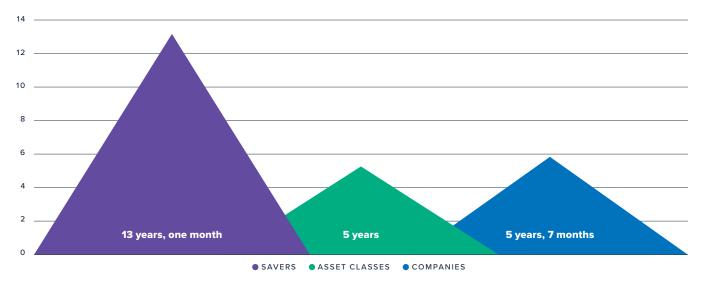


SAVERS

Gaps exist throughout the saver community in all the countries included in our study. On balance, savers have intended investment horizons in excess of a decade (13-plus years), but the manner in which their money is invested disrupts this intention.

Investment Horizons, Savers Versus Public Companies (In Years), 2018

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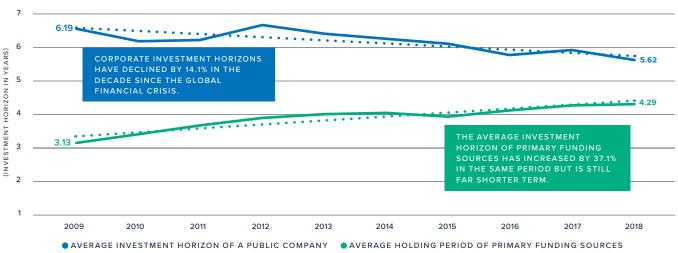
For a decade, the gap between savers' intended and actual investment horizon has been stubbornly hovering between eight and nine years. In 2018, the average gap stood at eight years, one month—a near one-year improvement from 2009's average gap of nine years, zero months. While moving toward convergence, albeit slowly, this significant gap could compromise the ability of savers to achieve their long-term savings goals.

COMPANIES

Like savers, companies also generally have long-term investment intentions, allocating capital in support of their strategic growth initiatives. But there is an intention-allocation gap here too, although it has been closing, with a disconnect between the relatively longer-term investment horizon of a company's asset allocation versus its much shorter-horizon sources of funding.

Corporate Investment Horizon Versus Average Investment Horizon of Primary Funding Sources

AN INTERACTIVE VERSION OF THIS CHART CAN BE FOUND AT FCLTGLOBAL.ORG



Public companies allocated capital on a blended average basis of five years, seven months in 2018—down from six years, six months in 2009, a 14.1 percent decline in the last decade. And while corporate sources of capital lengthened their horizons by almost 40 percent over the same period (calculated by asset weighting corporate debt maturities and equity holding periods with the debt-to-equity ratio), there is still a significant gap between the investment horizon of the capital allocation decisions made by corporate leadership and corporate sources of financing—a gap that may be putting undue pressure on companies to shorten their own investment horizons, prioritizing near-term results.

FINDING THE DISCONNECT

Three themes within this data directly contribute to the investment intention-allocation gaps at public companies: (1) the shift to fixed asset-light business models, (2) the popularity of debt as a source of financing, and (3) a persistent decline in CEO tenure. These themes could be a response to the global financial crisis or the result of much longer-term trends, but the combination has resulted in a compression of corporate investment time horizons.

The Shift to Asset-light Business Models

First, the evolution of companies toward fixed asset-light business models naturally contributes to declining investment time horizons by changing the composition and average useful life of assets in a company's portfolio. As companies have shifted spending from fixed investments (capital expenditures, or CapEx) toward acquisitions, research and development (R&D), dividends, and buybacks, the profile of the average company's investment portfolio has evolved. Similarly, the increasing importance of technology and intangible assets may accelerate this evolution in the business model. Over the 10-year period of 2009–2018, as a percentage of total public company spending, CapEx declined by 6.2 percent, acquisitions increased by 1.7 percent, dividends increased by 1.4 percent, and buybacks increased by 4.6 percent.

2009

2010

2011

2012

2013

2014

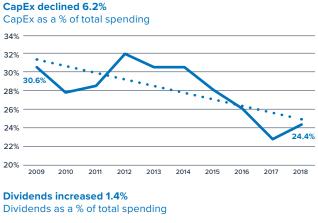
2015

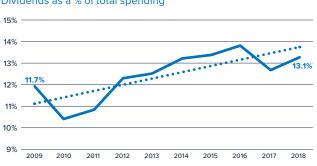
2016

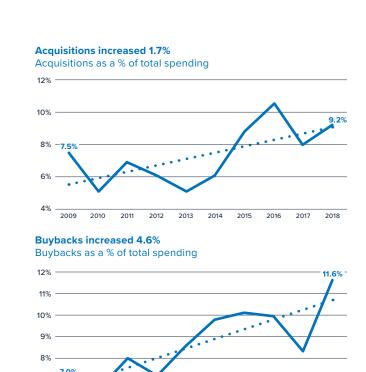
2017

2018

Business Model Shift, 2009-2018²²



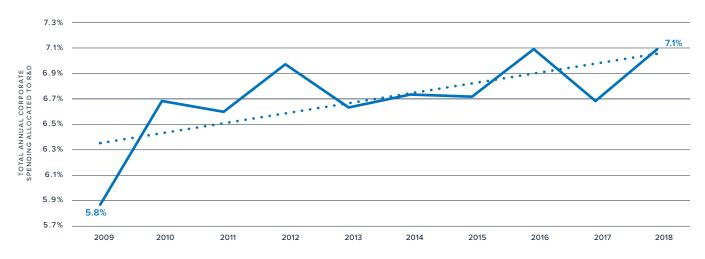




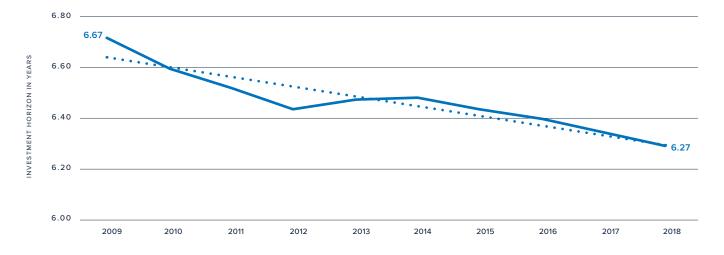
Alongside the shift to a fixed asset-light business model, R&D spending has seen meaningful change in the past decade. From 2009 to 2018, R&D as a percentage of total spending increased by 1.3 percent, but the investment horizon of R&D spending declined slightly (shorter by five months). This pattern suggests that on balance, new investment in R&D is flowing toward shorter-term projects, contributing to the broader decline in corporate investment horizons.

FCLTGlobal previously investigated the impacts and implications of the increasing propensity to return capital to shareholders via buybacks. For more on the subject, see *The Dangers of Buybacks: Mitigating Common Pitfalls.* Please contact research@fcltglobal.org if you'd like to share your perspective on the topic.

R&D as a Percentage of Total Corporate Spending



Investment Horizon: Global Corporate R&D Spending

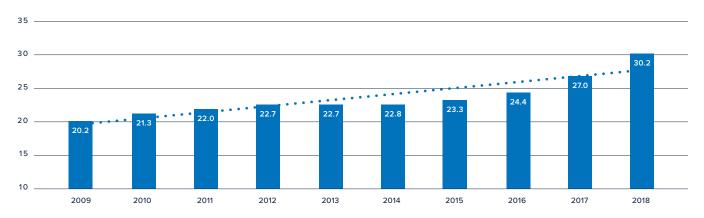


For more on the causes of, consequences of, and potential solutions to combat declining R&D investment horizons, see our report *Funding the Future: Investing in Long-horizon Innovation*.

The Increasing Popularity of Debt Financing

Despite the shift to a fixed asset-light business model, companies have more debt outstanding than ever before—with issuance from the constituents of the MSCI All Country World Index (ACWI) increasing by 50 percent over the study period.²³

MSCI ACWI Debt Outstanding (USD Trillions)



The fact that debt outstanding has increased in a period of extremely low interest rates is not particularly surprising. But alongside a preference for returning capital to shareholders, excess leverage may pose risks to corporate resilience.²⁴

MSCI ACWI Cash, Debt Outstanding and Buybacks Trends, 2009–2018



Declining C-suite Tenure

The decline in corporate investment horizons is aligned with the decline in global CEO and CFO tenures. Median CFO tenure fell from five years in 2009 to four years in 2018. CEO tenure also declined—although the average masks the trend somewhat—falling from six years, five months in 2009 to just six years, two months in 2017 (the most recent year for which data is available). Whether this decline in management tenure is a symptom or a cause of the broader decline in corporate investment time horizons remains an open question. In either case, expecting CEOs to take a longer view when they won't necessarily be around to reap the rewards of that strategy requires careful board oversight (see our paper *The Long-term Habits of a Highly Effective Corporate Board*).

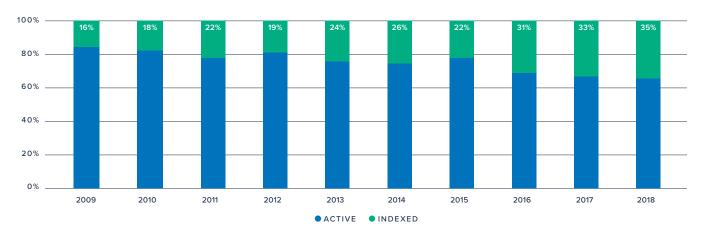
Rethinking Investment Risk Profiles

Investors have experienced their own evolution in the past 13 years, with investor time horizons increasingly shaped by the shift to indexed equity, the rotation toward riskier asset classes in a hunt for meaningful investment yield, and the growth of wealth in China (including SARs).

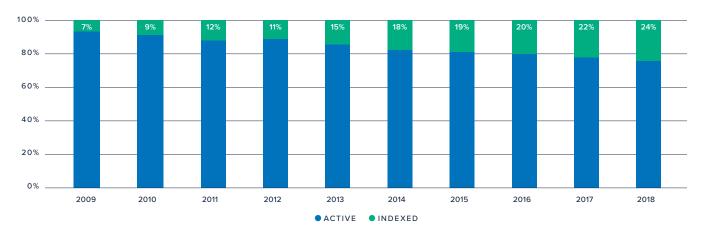
THE SHIFT TO INDEXED EQUITY

The shift to indexed equity has reshaped global investment horizons by contributing to an overall increase in average equity holding periods. Asset gathering by indexed products, both mutual funds and exchange-traded funds, started in the United States, but it is now a global phenomenon, contributing to the rise in equity investment horizons since the global financial crisis.

US Public Equities: Active Versus Indexed Funds (As Percentage of AUM)

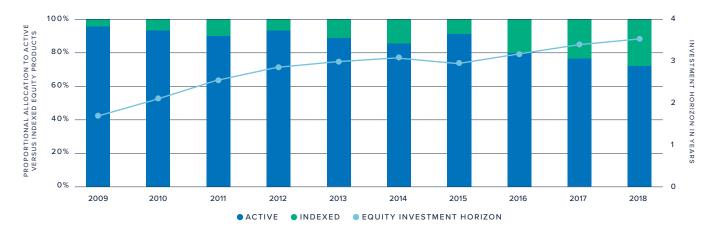


Global (excluding US) Public Equities: Active Versus Indexed Funds (As Percentage of AUM)



Taken together, in 2018, investment horizons for indexed equity products were 11 years, 5 months, compared with 2 years, 6 months for active products, accounting for a lengthening in the average equity investment horizon as indexed products gathered assets.

Overall Equity Allocations and Investment Horizons



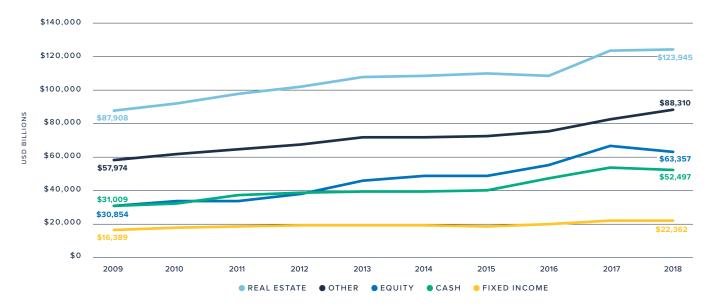
While the shift to indexed equity strategies has driven the bulk of the overall increase in investment horizon in public equities, active equity investment horizons have also lengthened—by 77 percent (from one year, five months in 2009 to two years, six months in 2018), an encouraging trend that may be linked to the rise in sustainability-minded investment.

According to the Global Sustainable Investment Alliance,²⁵ the proportion of assets managed with a sustainability lens has increased by 34 percent, from \$22.8 trillion in 2016 to \$30.7 trillion in 2018. Similarly, the proportion of savers like pensions and sovereign wealth funds that consider material sustainability factors in allocating assets has also increased, by approximately 10 percent.²⁶ As sustainable investing becomes a mainstream part of active equity management, it is likely to contribute to a continued rise in average investment horizon (because sustainable funds tend to have lower portfolio turnover and longer average holding periods²⁷).

RISKY BUSINESS

While equity investment horizons have extended on one side of the portfolio, the decade-plus-long low interest rate environment has inspired different behavior. Investment horizons for fixed income shortened and the low rate environment inspired yield chasing, with riskier asset classes seeing accelerated asset gathering (while fixed-income allocations slowed). Natixis's Global Retirement Index summed it up succinctly: "Low rates present a significant hurdle for those saving for retirement." 28

Saver Allocation by Asset Class: Top 10 Countries



In response to the low rate environment, a marked change in the allocations of savers' portfolios, especially pension portfolios, was seen from 2009 to 2018. During that period (and in the years since), interest rates remained stubbornly low worldwide, and the growth in fixed-income assets slowed in favor of asset gathering by riskier asset classes like public equities, real estate, and other emerging asset classes (private equity, hedge funds, commodities, etc.).

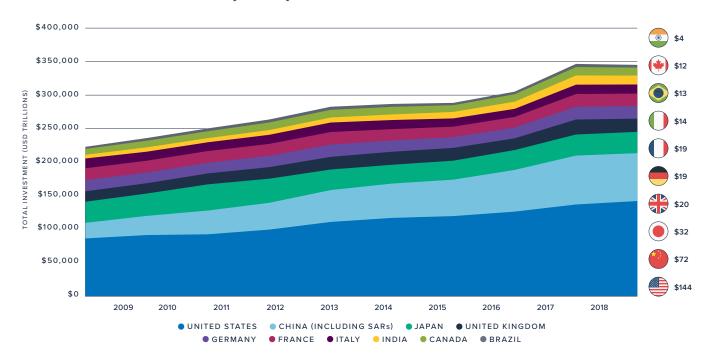
Pensions, in particular, rotated away from fixed income and toward emerging asset classes. This change added diversification but with a different risk-reward profile (i.e., a wider range of potential outcomes), and contributed to a decline in average pension investment horizons over the period.

THE RISE OF CHINA

The speed and scale of China's economic and geopolitical growth in the late 20th century solidified it as a new global power. In the 21st century, this rapid growth has transformed the country into an economic juggernaut. Within the past decade alone, asset growth has accelerated considerably in China (including SARs).

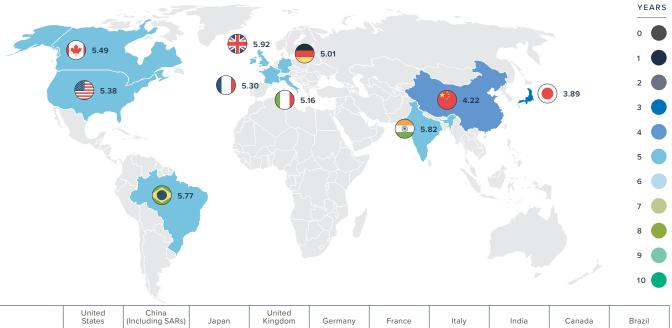
This growth has been largely driven by the ascendance of the middle class—Chinese savers' wealth more than tripled from 2009 to 2018. But savers in China (including SARs) have among the shortest-term allocations in the world, pushing the global average saver investment horizon lower.

Total Investable Assets of Savers by Country



2018 Average Investment Horizons of Savers by Country

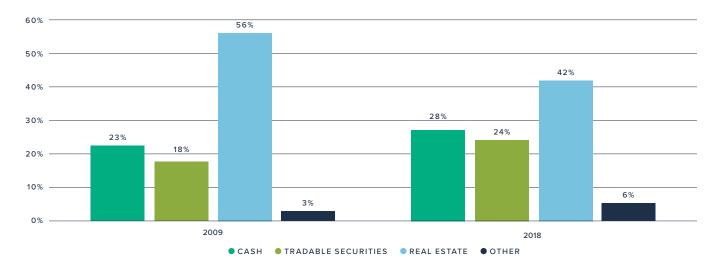
AN INTERACTIVE VERSION OF THIS CHART CAN BE FOUND AT FCLTGLOBAL.ORG



	United States	China (Including SARs)	Japan	United Kingdom	Germany	France	Italy	India	Canada	Brazil
Households	5.37	4.22	3.82	5.39	5.29	5.66	5.49	5.92	5.28	5.83
Pensions	5.51	3.66	4.12	9.12	3.67	3.61	3.47		6.29	4.73
Insurance	5.31		4.41		3.16	3.48	3.59	4.41	7.13	
Sovereign Wealth Funds		4.33								
Endowments	4.33									
Overall Investment Horizon	5.38	4.22	3.89	5.92	5.01	5.30	5.16	5.82	5.49	5.77

The shortening of savers' time horizons in China (including SARs) is driven by higher portfolio allocations to cash and real estate versus other asset classes, a preference that has dominated that market since at least 2009.

Savers by Allocation Class: China (including SARs)



Savers by Allocation Class: Rest of Top 10 Countries



Several structural reasons most likely factor into the preference for cash and real estate in the country, including (but not necessarily limited to):

- · More volatile and less mature equity markets, making the risk-reward profile less attractive for conservative savers
- · Less liquid fixed-income markets with a riskier credit profile
- · Alternative and emerging asset classes that are still in early phases of maturity
- · Lack of access to investment products (lack of rural availability as well as restrictions on the flow of investments)

For good reason, all of these factors contribute to the propensity of Chinese savers to favor the relatively more stable investment profile of cash and real estate in their portfolios. As this propensity shifts over time, the allocation behavior of Chinese savers will carry significant implications for investment horizons worldwide, given the sheer scale of their collective capital. Eventually, some asset class rotation will be necessary to ensure that households can achieve their long-term savings goals. Predicting the timing of this rotation is beyond the scope of this project.

Raising New Questions

Closing the investment intention-allocation gap could contribute to improved alignment among the members of the investment value chain, bringing their desired long-term goals within reach. How best to achieve that goal raises a number of important questions.

First, the investment intention-allocation gap of savers presents a perennial chicken-and-egg problem. Which came first? Are the ultimate owners of wealth in the world—the households, pensions, and other funds entrusted with investing in support of long-term goals—really not that long-term after all? Or have they struggled to take the long view because they are inherently selecting from an array of investment opportunities that do not meet their needs?

Fixing this problem will require a willingness to confront hard questions about the nature and structure of savers' relationships with the asset management industry today. But there is reason to be optimistic on this front. For example, we know from prior research that savers with a higher proportion of their allocation in equities outperform others over the long term.²⁹ And we can see that the average public equity investment horizon (or average equity holding period) has been steadily lengthening as indexed strategies and sustainabilityminded investing—both of which arose in response to demand from the saver community—gather increasing proportions of equity assets. Asset managers' willingness to offer longer-term products, and the accompanying time horizon increases generated as those products gather assets, are encouraging trends.

As in the saver community, the corporate intentionallocation gap highlights several questions as well. Is the glass half full or half empty? The narrowing gap between corporate investment horizons and their listed funding sources (debt and equity) could be cause for celebration as equity investor time horizons lengthen, or cause for alarm as corporate investment horizons shrink. Are companies indeed bowing to the pressures and time horizons of the investment community? It seems natural to expect companies to be responsive to the investment time horizons of their funders. Alternatively, with equity investment horizons lengthening, potentially alleviating some short-term pressure that public companies face today, are there other sources of short-term pressure on companies? How can we identify and counteract non-investor sources of short-term pressure?

In an era of meaningful market growth and ultra-low interest rates, companies have taken advantage of cheap financing to increase their debt issuance. But this rebalancing of funding sources has come alongside the adoption of fixed asset-light business models, an unusual combination in light of the fact that such debt has historically been used to finance significant CapEx or mergers and acquisitions (M&A). What is all of the additional debt for? If rising corporate cash balances are any indication, this remains an unanswered question.

MSCI ACWI Total Cash and Debt Outstanding Versus Buybacks



In the absence of significant investment, that additional debt brings risk onto a corporate balance sheet without expectation of commensurate reward (in the form of returns generated by deploying that capital in pursuit of growth opportunities), compromising corporate resilience. If fixed asset—light business models are here to stay, how can companies build resilience with current debt levels?

Finally, a piece of the capital allocation puzzle is missing from our mapping of corporate uses of cash. Capital invested in employees—in the form of wages, health and wellness, retirement contributions, and further training—is not easily discerned from typical financial disclosures. But in an asset-light world, people are often the most strategically important assets. How can companies better measure their increasingly important human capital investment? And how can those investments be elevated for apples-to-apples consideration alongside the more traditional pieces of the corporate investment portfolio (CapEx, M&A, R&D, return of capital to shareholders)? Some of the metrics needed to track this human capital investment are beginning to be disclosed by companies, which is increasingly demanded by investors. As these disclosures evolve, this gap in the analysis may well be resolved.

FCLTGlobal recognizes the need to improve disclosures pertaining to factors not typically reflected in corporate financial statements that can nevertheless create or diminish value. In September of 2020, the **US Securities and Exchange Commission** (SEC) issued amendments to Regulation S-K. The final rule requires, among other things, "a description of the registrant's human capital resources, including the number of persons employed by the registrant, and any human capital measures or objectives that the registrant focuses on in managing the business (such as, depending on the nature of the registrant's business and workforce, measures or objectives that address the development, attraction and retention of personnel)." During the comment period, FCLTGlobal suggested a short list of key metrics to measure human capital: personnel turnover, leadership diversity, gender pay gap, employee health and safety, employee training, and monetary losses from legal proceedings involving personnel.

Conclusion

FCLTCompass' asset flow and investment horizon data pull together information not previously aggregated, allowing for a clearer view of what is happening inside the depths of capital markets and within capital flows to discern trends in investment horizons and objectives. Due to data limitations and various necessary assumptions, that vision is slightly blurred. Despite the mist, however, we see a prominent intention-allocation gap that persists across the investment value chain. In other words, our concrete data suggests the status quo is failing

savers while also squandering the raw fuel that could power global economic growth. We hope this first annual edition of FCLTCompass offers an opportunity to think critically about the structure of capital markets today. We offer this tool to highlight gaps and opportunities in the current path, in the hope that we can navigate our way toward a rewiring of capital markets for the benefit of savers and in support of economic growth the goals of FCLTGlobal.

Methodology and Assumptions

Investment Horizons

Starting with the concept of bond duration, we sought to measure the amount of time it took for an investment to be recouped or come to fruition. The investment horizon represents the intended time horizon of a saver group (including households, pension funds, insurers, sovereign wealth funds, endowments, or foundations), asset class, or corporate expense. Our overall thinking on the various investment horizons of saver groups, asset classes, and corporate items comes from a variety of sources, such as investment governance documents, average useful lives of assets, benchmark time horizons, and corporate disclosure documents.

SAVER GROUPS AND ASSETS

We split savers into two groups: (1) individual households and (2) institutional asset owners.

Individual households:

- · Household assets: Divided into cash and checking, savings/401(k), equities, and owner-occupied real estate. An asset-weighted investment horizon was then calculated (13.1 years in 2018).
 - Cash and checking accounts: Assumed to have an investment horizon of zero years. These assets are assumed to be liquid and held with little interest and little intention for future gain.
 - Savings/401(k) accounts: We calculate the investment horizon of these assets as the difference between the average life expectancy of a country and the average age of its working population, based on data from the CIA World Factbook.30 Thus, exact investment horizons vary across countries,31 but we assume a horizon of 30-plus years.

- Equity assets: Exact investment horizon varies by country and year. See the active equity and indexed equity descriptions in the Asset Class Allocations section, below, for detailed methodology.
- Real estate assets: Assumed to have investment horizons of seven years. Absent a reliable global source, we have proxied data from a LendingTree study which found that US homeowners move once every seven years on average.32

Institutional asset owners:

- Institutional assets: Divided into four subgroups, based on the specific assets owned and managed. Each group has its own investment horizon methodology and assumption:
 - Pensions: Assumed to have investment horizons of 15 years. Due to the complexities and limitations of defined-contribution plan data, our primary source is Society of Actuaries estimates of defined-benefit plans, which have a duration of about 15 years.33
 - Insurance companies: Assumed to have investment horizons of 12.4 years. As it is difficult to separate and identify the investment horizon or average contract life of the many branches of insurance, we took a blended average number of 12.4 years from the European Central Bank.34 This number represents a mix of property and casualty (P&C) insurance and life insurance contracts. While P&C companies tend to have a much shorter investment horizon and life insurance companies tend to have a longer investment horizon, in many countries we could not separate the two groups. We acknowledge

that this limitation may result in a blended number that is too long for P&C and too short for life insurance, especially since the industry is heavily regulated and often uses asset-liability duration matching.

- Sovereign wealth funds: Assumed to have investment horizons of 20 years, based on typical language included in governance documents. A sample of annual reports from sovereign wealth funds cited investment horizons of anywhere from 10 to 75 years.
- Endowments and foundations: Assumed to have investment horizons of 20 years.
 While some endowments and foundations are assumed to be perpetual, we believe the investment horizon to be close to 20 years based on the typical language included in governance documents.

Certain saver groups in our sources were either too broad to be categorized under a single group or did not fit the categories above. These were either reclassified based on similarity to an existing group or left in "other." A full list of saver group mappings is available upon request to research@fcltglobal.org.

ASSET CLASS ALLOCATIONS

We defined asset class investment horizons for cash, public equity (including active and indexed equity), fixed income, real estate, private equity, hedge funds, commodities, and infrastructure.

- Cash: Assumed to have an investment horizon of zero years, for the same reasons as listed above for saver groups—cash is a liquid asset with very little expectation for future returns.
- Public equity: Split into two types, active and indexed, due to their different natures and the different intentions with which they are invested in. Active funds often have higher turnover (and therefore shorter holding periods and investment horizons) compared with indexed funds, and our

data allow us to estimate the average investment horizon of active and passive funds separately using a proxy.

- Active equity: Exact investment horizon varies by country and year.35 We computed a worldwide average by first filtering any eVestment funds categorized as active, then using annual portfolio turnover as a proxy, and finally asset weighting funds by their assets under management as of the end of the calendar year. Of note, several funds had assets applicable to a broader region than our 10 countries. Funds with these geographic regions (i.e., pan-European, Asia-Pacific) were prorated based on the size of each country's stock market. For example, the Asia-Pacific fund's assets and investment horizons were allocated 48 percent to China and 23 percent to Japan in 2018. For a full list of the exact broader region mapping, see Table 1 in the Appendix.
- Indexed equity: Exact investment horizon varies by country and year.³⁶ We used the same methodology as active equity in calculating the worldwide and country averages, with the only difference being that the first eVestment filter is for passive funds. This passive funds filter includes both indexed mutual funds and exchange-traded funds. All other methodology (calculations and geographic allocations) is identical to that of active equity.
- Fixed income: Exact investment horizon varies by country and year.³⁷ We computed an investment horizon by asset weighting the end-of-calendar-year assets under management for all fixed-income funds on eVestment. Due to data availability, average investment horizon calculations use modified duration for the United Kingdom and effective duration for all other countries. Similar to public equities, several fixed-income funds had assets applicable to a broader geographic region. Allocation and investment horizon calculations for these funds were prorated

based on the size of each country's GDP. For example, in the Asia-Pacific region, 52 percent was allocated to China and 19 percent to Japan in 2018. For a full list of the exact geographic region mapping, see Table 2 in the Appendix.

- Real estate: Assumed to have an investment horizon of **6.7 years**, representing a weighted average of the residential and commercial real estate markets for investors. We relied on two US sources: (1) the same seven-year number from LendingTree³⁸ that was used for residential real estate and (2) six years for commercial real estate from a Real Estate Research Institute academic study.³⁹ Finally, we applied a 2:1 residential-tocommercial weighting based on the relative market size (commercial versus residential) for investors.⁴⁰
- Private equity: Assumed to have an investment horizon of **5.3 years**, taken from a recent McKinsey study using Preqin data.41
- Hedge funds: Assumed to have an investment horizon of two years, proxied based on a Statista finding that the average maximum lockup period accepted by selected hedge fund investors ranged from 20 to 33 months.42
- Commodities: Assumed to have an investment horizon of **0.5 year**,⁴³ proxied using the average tenor from a basket of commodities on the UBS Bloomberg Constant Maturity Commodity Index.44
- Infrastructure: Assumed to have an investment horizon of **7.5 years**, taken as the midpoint from BlackRock's eFront report, which states that "infrastructure funds are created for 13 to 15 years and their average holding periods are seven to eight years."45

Certain data sources had asset classes that did not fit the categories above. These were subsequently reclassified based on similarity to another asset class or left in "other." A full list of asset class mappings is available upon request to research@fcltglobal.org.

CORPORATE USES OF CAPITAL

Corporate uses of capital include CapEx, R&D, acquisitions, intangibles, interest expense, taxes, gross buybacks, dividends and retained earnings, many of which are found on the expenses section of a corporate balance sheet. We have taken an assetweighted average of the following items to create blended investment horizons for corporate uses of capital. This procedure resulted in an average global corporate investment horizon of 5.6 years in 2018.

- CapEx: Assumed to have an investment horizon of between five and 15 years, depending on industry. While depreciation schedules would have provided the best estimate, high-quality data was not available. Instead, we proxied the investment horizon by sampling corporate annual reports from different sectors and countries, and estimated the sectors' allocations to common fixed assets such as land, machinery, and buildings to create a blended average asset life for each sector.46
- R&D: Assumed to have an investment horizon of between three and 11 years, depending on industry. We proxied the investment horizon of R&D investment by sampling selected corporate annual reports across various industries and countries. We then looked at language describing the average life cycle of a product from concept to market (e.g., every generation of iPhone takes three years from concept to market).47
- Acquisitions: Assumed to have an investment horizon of five years, based on investment banking valuation assumptions related to integration time frames and assumed deal synergies. Most valuation models forecast synergies for up to five years, at which point the acquired firm is considered fully integrated into the acquiring company (and its influence no longer easily discerned).
- Intangibles: Assumed to have an investment horizon of 18 years. We know that intangibles, like brands and patents, vary greatly depending on country and sector, and that reports mentioning the

average life of a brand can suffer from survivorship bias (i.e., brands that become household names are few and far between, but those that do can last for more than 100 years). To account for this variation, we have proxied the average life of intangibles to equate to the average life of a public company, 18 years according to McKinsey.48

- · Interest expense, taxes, gross buybacks, and dividends: All assumed to have an investment horizon of **zero years**. They are assumed to carry little value for future investment in the company, and dividends and buybacks, in particular, return cash to shareholders rather than supporting a company's strategic growth initiatives.
- Retained earnings: Assumed to have an investment horizon of 4.7 years. While retained earnings are not, strictly speaking, a "use of cash," some of our Members have likened this item to a rainy day savings fund. Consequently, we sought to answer the question of how many years of a company's bottom line it would take to accumulate its current amount of retained earnings. We proxied the answer to that question as retained earnings divided by net income, to approximate a corporate savings rate.

CORPORATE SOURCES OF CAPITAL

We proxied investment horizons for corporate sources of capital by using a ratio based on average corporate debt to equity. This approach resulted in an average investment horizon of 4.29 years in 2018.

- **Debt issuance:** Assumed to have an investment horizon of **7.14 years** in 2018. We proxied this by calculating the weighted average years of a company's debt outstanding based on companies' debt maturity schedules. For example, if a company issued a \$100 million 10-year note in 2018 and a \$50 million 5-year note in 2017, then its weighted average maturity is eight years (100/150 * 10 + 50/150 * 5).
- Equity issuance: Assumed to have an investment horizon of 3.52 years, taken from the blended

public equity number in the Asset Class Allocations section above.

We would eventually like to track and assign investment horizons to other corporate sources of capital, including (but not limited to) divestitures, revenue, and net income.

Data Collection

We collected data from several sources, namely global time-series data sets from reputable sources such as the Organisation for Economic Co-operation and Development (OECD), World Bank, and International Monetary Fund (IMF). Where data was spotty for some countries and years, we supplemented with reputable sources from the respective authorities of those countries.

SAVERS

- Households: Data from Credit Suisse's Global Wealth Report.49
- Pensions: Total asset and allocation data for OECD countries from OECD's Funded Pension Statistics data set. 50 Assets and allocation for Japanese pensions proxied using a weighted average of Government Pension Investment Fund⁵¹ and Pension Fund Association⁵² assets, taken from their respective annual reports.
- Insurance companies: Total asset and allocation data for OECD countries from OECD's Institutional Investors' Assets and Liabilities data set. 53 Assets and allocation for Indian insurance companies from Reserve Bank of India.⁵⁴ Assets for Brazilian insurance companies from IMF,55 allocation from ANBIMA.56 Assets and allocation for China (including SARs) insurance companies from the China Banking and Insurance Regulatory Commission.⁵⁷ Assets and allocation for United Kingdom insurance companies from the Association of British Insurers.58

- · Sovereign wealth funds: Data from China Investment Corporation⁵⁹ and Hong Kong Monetary Authority⁶⁰ annual reports.⁶¹
- Endowments: Total asset and allocation data from historical endowment study data collected by the National Association of College and University Business Officers (NACUBO).62
- Foundations: Total asset and allocation data available only for 2018. Data from Harvard Kennedy School's Global Philanthropy Report. 63

ASSET CLASS ALLOCATIONS

Fund level data for equity and fixed-income products from eVestment.

CORPORATE (PUBLIC EQUITIES)

Data from FactSet and the MSCI ACWI constituents.64

Additional Assumptions and Considerations

• Exchange rates: All exchange rates are from the Federal Reserve Economic Data (FRED) database.65 An average of the calendar year's rates was taken in each annual calculation.

- Geographic regions: "China, including SARs" includes the People's Republic of China and the SARs of Hong Kong and Macau, wherever present in the data.
- Dollar amounts: All assets and dollar amounts are nominal.

For saver group data points where we could not find an asset allocation breakdown, we used regional proxies to estimate the allocation. For example, if allocation data was not available for 2018 French pensions, an equal weighted average allocation of Germany, Italy, and the United Kingdom (its regional neighbors) would be used.

More Data Means Richer Knowledge

While our methodology and assumptions reflect our current thinking, it is important to note that we are limited by the availability (or lack thereof) of highquality and complete global data sets. As a result, our data is currently not detailed enough to conduct further in-depth analysis, especially for households, which own the majority of savers' assets. As a richer universe of data or a broader array of methodologies comes to light and becomes available, it will be integrated into FCLTCompass as appropriate.

Areas for Further Research

Longitudinal data collected over time will show us the effect of major dislocations like the global financial crisis and the COVID-19 pandemic. As data becomes available, by country, by saver category, or with greater detail and granularity, additional areas for study will open up. Future studies could explore the following questions:

- What influence, if any, have investment horizons had on income inequality?
- How do investment horizons and asset allocation behaviors differ across countries, and are there lessons to be learned from digging deeper into what might be contributing to those differences?
- We know savers with a higher allocation to equities perform better over the long term, but equities are among the shortest-term of asset classes. What accounts for this divergence?

- Index investing has been gaining popularity alongside the rise of sustainability-minded investing. How do these two trends shape the future of investor-corporate dialogue and engagement?
- What would it take to drive longer-term behavior and investment horizons across the asset management industry?
- Longer investor time horizons should be alleviating short-term pressures on corporations, but corporate time horizons and C-suite tenure continue to decline. What is the primary source of short-term pressure on a company today?
- As corporate investment time horizons shorten and equity time horizons lengthen, we could get to a place of investment horizon convergence in the next few years. Could this state of matched investment horizon nirvana alleviate much of the short-term pressure in the capital markets today?

Acknowledgments

FCLTGlobal was created to encourage a longer-term focus in business and investment decision-making. Our work is grounded in a focus on the financial needs and ambitions of everyday savers, whose own long-term goals too often are lost in the intricacy of the financial markets. By working across the investment value chain, we aim to make long-term practices the norm, not the exception.

FCLTCompass is the culmination of many years of work on the part of many people across many organizations. Alongside the tireless efforts of our staff and partners, reliable data is the other key component of FCLTCompass. Without sound numbers to form a foundation, we would not have been able to build this project into what it is today. Our sincere thanks go to the team at CoreData Research Services Inc. for making these findings possible with their data, methodology, and analysis.

As always, our Members were integral participants in our research process. In recognition of that fact, we thank all of the contributors from our Member organizations, with special recognition to six organizations that dedicated time and advice that far surpassed the norm: CPP Investments, EY, GIC Private Limited, Kempen Capital Management, MSCI Inc., and Nasdaq.

FCLTGlobal extends its gratitude and appreciation to its staff, Members, and partners, past and present, who have spent long nights and longer days to see this project to completion, and will no doubt steward this work to be an impactful source of information in the years ahead:

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ALLEN HE

EVAN HOROWITZ

KELLIE HUENNEKENS

RICHARD KLIJNSTRA

IVO KUIPER

BEN LAMBERT

KERSTEN LANES

MATTHEW LEATHERMAN

WEYLIN LIEW

ALISON LOAT

NURIA MARTINEZ

BHAKTI MIRCHANDANI

LISA OLSEN

ROSS PARKER

BRETT PERRYMAN

ANNA MARIA RECUPERO

THONG CHIE SHANG

BRUCE SHAW

SARA SIMONDS

SAM STERLING

CRAIG STEVENSON

VICTORIA TELLEZ

DEVIN WEISS

SARAH KEOHANE WILLIAMSON

Appendix

Table 1: Broader Geographic Region Mapping—Equities⁶⁶

Country	Global	Global-ex Japan	ACWI	ACWI-ex US	Asia Pacific	Asia Pacific ex-Japan	BRIC	EAFE	EMEA	Emerging Asia	Europe ex-UK	Eurozone	Latin America	North America	Pan- European	Country	China (including SARs)	China (including SARs) & Pac Rim	Hong Kong
United States	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
China	1	1	1	1	1	1	1	0	0	1	0	0	0	0	0	1	1	1	1
Japan	1	0	1	1	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0
Germany	1	1	1	1	0	0	0	1	1	0	1	1	0	0	1	1	0	0	0
India	1	1	1	1	1	1	1	0	0	1	0	0	0	0	0	1	0	0	0
United Kingdom	1	1	1	1	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0
France	1	1	1	1	0	0	0	1	1	0	1	1	0	0	1	1	0	0	0
Italy	1	1	1	1	0	0	0	1	1	0	1	1	0	0	1	1	0	0	0
Brazil	1	1	1	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0
Canada	1	1	1	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0

ACWI = All Country World Index | BRIC = Brazil, Russia, India, and China

EAFE = Europe, Australasia, and Far East | EMEA = Europe, Middle East, and Africa.

Table 2: Broader Geographic Region Mapping—Fixed Income⁶⁷

Country	Country	Global	Global-ex Japan	ACWI	ACWI-ex US	Global Emg Mkts	EAFE	Pan- European	Eurozone	Europe ex-UK	North America	Asia Pacific	Asia Pacific ex-Japan	China (including SARs) & Pac Rim	Hong Kong	China (including SARs)
United States	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0
China	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1
Japan	1	1	0	1	1	0	1	0	0	0	0	1	0	1	0	0
Germany	1	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0
India	1	1	1	1	1	1	0	0	0	0	0	1	1	0	0	0
United Kingdom	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0
France	0	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0
Italy	0	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0
Brazil	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
Canada	1	1	1	1	1	0	0	0	0	0	1	0	0	0	0	0

ACWI = All Country World Index | EAFE = Europe, Australasia, and Far East.

Table 3: Capital Expenditure, Research and Development, and Intangibles Investment Horizon (Years) by **Global Industry Classification Standard Sector**

Sector	Capital Expenditure	Research and Development	Intangibles		
Communication Services	11.2	7.0	18.0		
Consumer Discretionary	13.6	5.0	18.0		
Consumer Staples	24.7	2.0	18.0		
Energy	17.5	9.0	18.0		
Financials	13.0	NA	18.0		
Healthcare	10.6	11.0	18.0		
Industrials	15.4	7.0	18.0		
Information Technology	6.5	3.0	18.0		
Materials	17.5	9.0	18.0		
Real Estate	40.0	NA	18.0		
Utilities	17.1	9.0	18.0		

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- 18 Amounts may not sum to 100 percent due to rounding.
- 19 Amounts may not sum to 100 percent due to rounding.
- 20 Amounts may not sum to 100 percent due to rounding.
- 21 China data includes special administrative regions.
- 22 Total uses of capital include capital expenditures, research and development expense, acquisitions, dividends, gross buybacks, interest expense, income taxes, positive intangibles, and positive incremental retained earnings.
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- 37 In 2018, investment horizons ranged from 3.50 years in Germany, France, and Italy to 12.65 years in the United Kingdom. Note that for both equity and fixed income, many funds do not have a country-specific fund (e.g., France fund), instead opting for a "pan-European" strategy. For this reason, numbers for countries in the same geographic region may look similar. For a full list of investment horizons by country and year, please email research@fcltglobal.org.
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