

MANAGEMENT



Focusing capital on the long term to support a sustainable and prosperous economy.

Millions of people around the world are saving money to meet personal goals - funding a comfortable retirement, saving for someone's education, or buying a home, to name a few.

The funds to support these goals are safeguarded by institutional investors – pension funds, sovereign wealth funds, insurers, and asset managers - who invest in companies for the prospect of growth and security. These savers, their communities, and the institutions that support them make up the global investment value chain, and each benefit from long-term decisions in different ways.

Data shows that long-term-oriented investors deliver superior performance, and long-term-oriented companies outperform in terms of revenue, earnings, and job creation. But despite overwhelming evidence

of the superiority of long-term investments, short-term pressures are hard to avoid. A majority of corporate executives agree that longer time horizons for business decisions would improve performance, and yet half say they would delay value-creating projects if it would mean missing quarterly earnings targets.

Today, the balance remains skewed toward shortterm financial targets at the expense of long-term value creation.

FCLTGlobal's mission is to focus capital on the long term to support a sustainable and prosperous economy. We are a non-profit organization whose members are leading companies and investors worldwide that develops actionable research and tools to drive longterm value creation for savers and communities.

MEMBERS AIMCo 🐝 apg BAILLIE GIFFORD BainCapital **BARCLAYS** BlackRock Blackstone Bloomberg BRIDGEWATER **Brookfield** BŪ̇́NGE THE CARLYLE GROUP **©** CDPQ DE BRAUW BLACKSTONE WESTBROEK adrada **CPP** nvestments **DSM** EQT Edelman CISCO Goldman Sachs Federated Hermes Fidelity generation GIC **future**fund EY Evercore 金素 HONG KONG MONETARY AUTHORITY KERING ifm Kempen KPMG 香港金融管理局 INCLUSIVE CAPITAL McKinsey **ℳ** Nasdaq MSCI 🌐 NEUBERGER BERMAN **MATIXIS** & Company NZSUPERFUND nuveen Russell Reynolds NORGES BANK 1 TPG **Schroders** SNOW LAKE CAPITAL SULLIVAN & CROMWELL LLP TEMASEK STATE STREET WELLINGTON LIPTON ROSEN & VOTORANTIM Walmart : **WASHINGTON STATE INVESTMENT BOARD**

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A Note from FCLTGlobal

FCLTGlobal celebrated its five-year anniversary in 2021 during a pivotal moment in our global history. The twin crises of the COVID-19 pandemic and climate change have only underscored the critical nature of our mission to focus capital on the long term to support a sustainable and prosperous economy.

As we've grown, our membership has expanded from 20 organizations to 70, and we've published research based on the levers of long-term value creation: governance, incentives, engagement, metrics, and policy. While FCLTGlobal and our Members have made significant progress toward demonstrating the value of focusing capital on the long term and developing tools that enable that long-term approach, real lasting change will hinge on how savers, investors, businesses, and entire communities navigate both periods of crisis and periods of calm.

This year, we have expanded the FCLTCompass universe to include seven additional countries – Australia, the Netherlands, New Zealand, Norway, Singapore, South Korea, and Switzerland – representing an additional \$49 trillion in tracked wealth. Without the continued support of our data partner, CoreData Research, this crucial research would not have been possible.

We also give special thanks to the International Forum of Sovereign Wealth Funds (IFSWF) and, in particular, Enrico Soddu and Victoria Barbary, for bringing these essential findings to light by sharing their extensive data and analysis of sovereign wealth funds dating back to 2015. FCLTGlobal consulted closely with the IFSWF on methodology and accuracy, benefiting from their unique expertise.

We look forward to working with both CoreData and the IFSWF in the future to further advance a long-term focus in capital markets. Indeed, we see capital and investment horizons shifting more rapidly, and those shifts will undoubtedly shape capital markets in the years to come, making FCLTCompass more essential than ever.

We thank our collaborators and each of our members for their support of this project and the broader mission to focus capital on the long term.

Sarah K. Williamson CEO, FCLTGlobal

Swah K. Williamson

Head of Research, FCLTGlobal

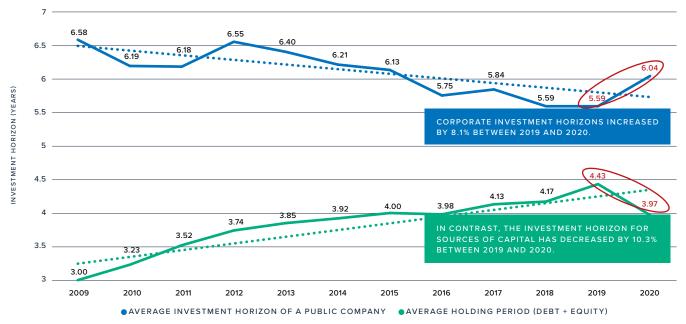
Executive Summary

FCLTCompass is an annual benchmarking tool tracking long-term investments on a global scale. The theme of FCLTCompass 2021 is divergence – there was not one unified approach to withstanding the effects of COVID-19, and strategies and capital allocation decisions varied among companies and investors and between national economies. In the face of volatility, companies are committing to the long term, while investors appear headed in the opposite direction. But investors – or savers more broadly – are anything but homogeneous.

- Corporate time horizons lengthened by 8.1 percent globally, driven by curtailed distribution of capital to shareholders and increased investment in the business via research and development (R&D) and growth of fixed asset investment.
- Corporate funding-investment gaps widened by 11 months as the time horizons of corporate sources of funding fell by 10.4 percent (six months).
- The time horizons of investor allocations shortened by 2.3 percent on average, driving investors' intentionallocation gap up by two months (to seven years, four months).
- Household wealth grew by 8.4 percent from 2019 to 2020, but the growth in savings was not evenly distributed but skewed toward wealthier households.
- Wealth inequality grew even more than savings, with the Gini score (a measure of the degree of inequality in the distribution of income and wealth) jumping to its highest level since 2014, erasing years of improvement in global wealth inequality.

When faced with the startlingly sudden COVID-19 shutdown of the global economy in just a few short weeks, many companies opted to focus on the long term. And they did that in the face of debt and public equity holding periods that fell by over 10 percent in the same period, contributing to a widening of the gap – by more than two years – between the time horizons of corporate sources of capital and corporate uses of capital.

Chart 1: Corporate Investment Horizons vs. Blended Sources of Capital



In a survey of FCLTGlobal Member organizations that collected responses during April 2020, we found that 73 percent were using planning horizons of three or more years and 50 percent cited "commitment to long-term strategy" as most important to successfully steering their organizations through the COVID-19 pandemic. This commitment was borne out in the data: corporate investment horizons lengthened by more than 10 percent from 2019 to 2020.

The longer investment time horizons at companies came despite a buildup of cash on the balance sheet – a trend that usually shortens corporate average horizons, as cash is considered to have a time horizon of zero. That cash buildup came in part from a decline in return of capital to shareholders (via buybacks and dividends), which was voluntary in some cases and mandated by regulators in others. In either case, the effect provided the raw capital to fuel growth investments.

So, what did companies spend their capital on? Investment in R&D jumped to levels not seen in the past two decades – 10.9 percent of total spending. And that spending was broad based across industries, not just driven by the healthcare and pharmaceutical industries racing to treat patients and develop COVID-19 vaccines.

Similarly, investment in fixed assets (capital expenditures) climbed to 29 percent of total spending as companies brought their supply chains in-house and enhanced mission-critical infrastructure. This fixed investment too was widespread and not concentrated in any one particular industry or geography. In a world that had been moving toward multinational globalization, the pandemic response appears to have led many companies to reconsider their supply chains and reinvest in domestic production. If it persists, this shift could reverse the trend toward fixed-asset-light business models we saw in the prior decade – a trend that previously contributed to shrinking corporate balance sheets and investment time horizons.

Investors' response to economic and market uncertainty was quite different. At a global scale, investors' time horizons shortened. For investors, the shortening horizons in fixed income and public equities obscure the quite different reactions of savers around the world over the past year. Some favored cash and equities, while others pulled money from the markets and prioritized more tangible real estate investments as a safe haven. On balance, these responses resulted in a decline of 2.3 percent in the average investment time horizons of savers, a trend that should reverse as global markets stabilize and the impact of the pandemic wanes.

Many of the meaningful shifts we see in allocations and investment time horizons are likely due to market volatility as a result of the pandemic, and the associated changes in market valuations, rather than a true change in strategy. Unprecedented government intervention in reaction to the global economic shock was a key factor in this year's data. How that intervention plays out over time will have important long-term implications for the investment horizons of capital market participants.

Our goal for this project is to further 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 focus capital on the long term to support a sustainable and prosperous economy.

Making the Case for Long-term Investment

People around the world are saving money to achieve 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.

Figure 1: The Investment Value Chain



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.¹

Other evidence corroborates that perspective:

117%

of reported earnings by S&P 500 companies were spent on dividends and buybacks in 2020.²

87%

of executives and directors feel the most performance pressure within the first two years of assuming their role.³ **55%**

of chief financial officers would delay projects with a positive net present value to hit quarterly earnings targets.⁴

This pressure has made it difficult for executives to codify their long-term plans and articulate critical elements of their long-term strategy.⁵ Yet 86 percent of executives agree that longer time horizons for business decisions would improve performance,⁶ and for good reason.

Why FCLTCompass?

At its core, the purpose of capital markets is to facilitate prosperity – to transform savers' money into uses that support societal and economic growth and earn a fair return for the savers themselves.

Significant evidence shows that taking a long-term approach to investment decision-making delivers superior value over time. Nevertheless, managers, economists, and investors struggle to balance immediate financial pressures against long-term objectives that must be pursued 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 and 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.

FCLTCompass brings clarity to this conversation by anchoring the abstract concept of long-term investing to quantitative data reported in years (investment horizons) and US dollars (wealth), framing the conversation in a more actionable light. Providing the data needed to illustrate the gaps between intended investment horizons and actual allocation 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 Construction

FCLTCompass traces the world's largest pools of capital as they flow through capital markets from savers to their ultimate destination, beginning with data from 2009. First, we measure savers' capital and track how it is allocated across a wide array of available asset classes via asset manager intermediaries. Then we look into corporate sources of capital and how capital is deployed to support business growth. 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. After mapping savers' asset allocations, we can determine the average time horizon of each segment of the value chain (and compare intended investment horizons to actual horizons as revealed by asset allocation decisions) to measure the state of long-term behavior in the capital markets.

WHAT IS AN INVESTMENT HORIZON

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.

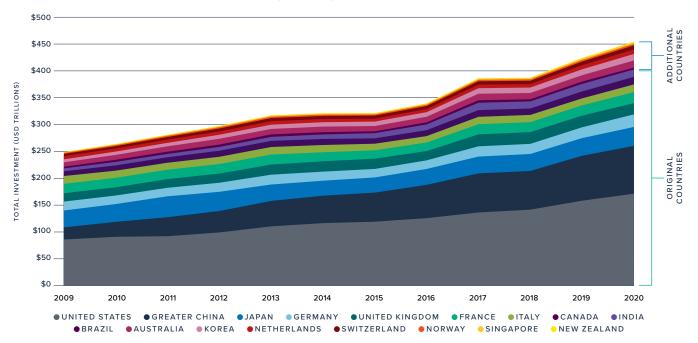
What's New?

FCLTCompass 2021 builds on our initial report published in 2020 covering the 10 largest economies in the world with data from 2009 to 2018. This year we include the following:

- The latest 2019 and 2020 investment horizon and asset allocation data for companies, asset managers, and most saver groups (Note: 2020 data is not yet available for pensions and select insurance firms and sovereign wealth funds [SWFs])
- Seven additional countries representing an additional \$49 trillion in tracked assets under management (AUM), selected to capture some of the world's largest pools of investment capital: Australia, the Netherlands, New Zealand, Norway, Singapore, South Korea, and Switzerland
- Additional coverage of 10-plus SWFs representing \$3.7 trillion in AUM made possible by a new collaboration with the International Forum of Sovereign Wealth Funds (IFSWF)

Our initial report focused on the post-global financial crisis era (beginning in 2009) and the 10 largest countries in the world as measured by gross domestic product (GDP): Brazil, Canada, China (including special administrative regions [SARs]), France, Germany, India, Italy, Japan, the United Kingdom (UK), and the United States. This year, we build on that initial dataset by "catching up" with the 2019 and 2020 data that had experienced pandemic reporting delays. We have also expanded the country coverage to add seven additional countries, as highlighted above, which add \$49 trillion, an 11 percent increase in AUM now tracked by FCLTCompass.⁸

Chart 2: Total Investment Assets of Savers by Country



We are also able to include a more detailed view of the often opaque world of SWFs thanks to a new data-sharing partnership with the IFSWF that adds \$3.7 trillion in SWF AUM to our dataset. With the IFSWF data, we have also adjusted our definitions of what qualifies as an SWF to match the definitions used by this standard-setting, knowledge-sharing, and advocacy organization.⁹

Asset Flows

FCLTCompass brings an expanded view of the asset flows and investment time horizons that comprise capital markets. In 2021, that view shows the irregular investment behaviors brought on by pandemic-fueled market instability. Households continue to be the primary source of funds, controlling 86 percent of the investment capital in the world today. But the distributed nature of households (what we typically think of as "retail" investors) blunts their influence in markets. Nonetheless, small changes in asset allocation decisions carry meaningful ramifications for capital markets.

As we can see from the flows data, allocations of capital did shift in the period from 2019 to 2020, but teasing apart the shifts related to asset class appreciation (or depreciation) versus the shifts arising from true changes in portfolio construction is more difficult over shorter time horizons. It may be that some of the flows are not true "flows" at all, but rather just changes in the relative value of particular asset classes over short time frames during a period of remarkable market volatility. Overall, household wealth grew by 8.4 percent over the last year, while allocations shifted slightly, toward tradable securities and away from other asset classes.

Chart 3: Global Households' Assets and Allocations (USD Trillions)

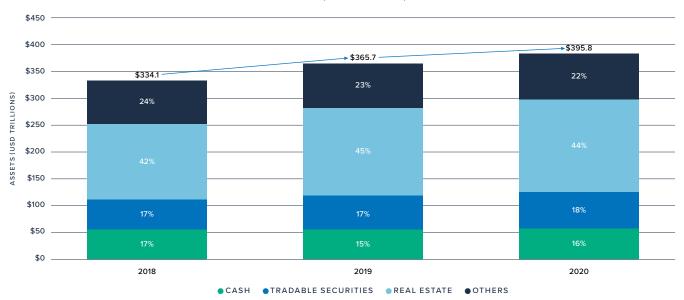
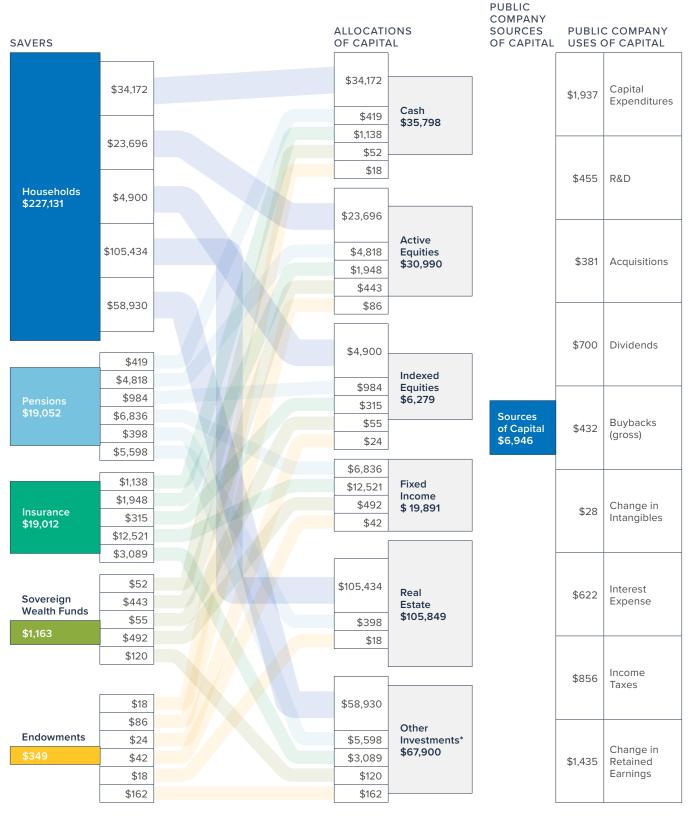


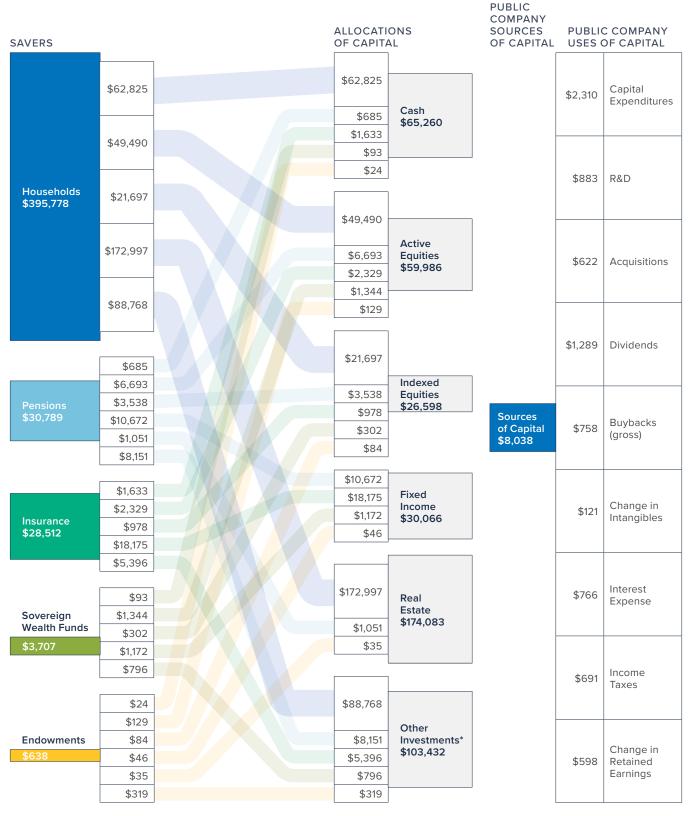
Figure 2: 2010 Asset Flows¹¹



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. Figures may not equal total due to rounding.

^{*}Other Investments includes the following assets: Private Equity=\$70; Investment fund shares/units, mutual funds and unit trust=\$6,785; Alternatives=\$96; Hedge Funds=\$94; Commodities=\$25; Private Debt=\$11; Securities=\$191; Other=\$60,615.

Figure 3: 2020 Asset Flows

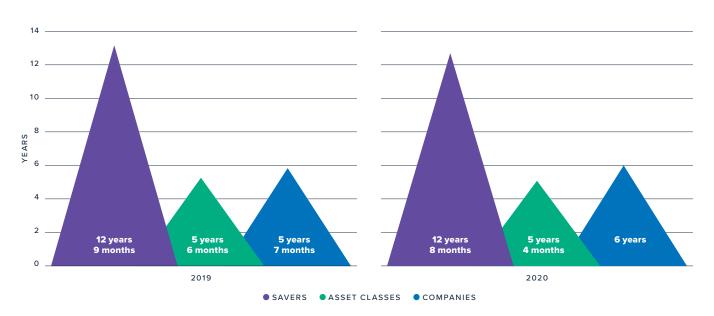


Note: the majority of the funding in the sources of capital come from equity and debt issuance, but may also include other smaller or irregular sources like divestitures, prior-year earnings, and tax breaks. Figures may not equal total due to rounding.

^{*}Other Investments includes the following assets: Private Equity=\$390; Investment fund shares/units, mutual funds and unit trust=\$9,628; Alternatives=\$542; Hedge Funds=\$232; Commodities=\$24; Private Debt=\$13; Securities=\$464; Other=\$92,042.

In a year when savers were confronted with significant uncertainty, many stayed the course, with the average intended investment horizon of the saver community hovering near 13 years. However, more savers than ever are falling short of that intention with their actual investment allocations. This widening of the intention-allocation gap gives us a picture of saver behavior in the face of pandemic-fueled uncertainty and market dislocation. The volatile market environment likely contributed to the widening intention-allocation gap as asset-class time horizons compressed, driven by higher turnover (portfolio churn). Higher turnover is a natural response to market disruption; the key over time will be to ask whether that high turnover was driven by longer-term investors taking advantage of opportunities to add attractive assets to their portfolios at discounted prices, or whether it was turnover fueled by short-term panic trading or risk aversion. No matter the cause, the fact remains that the investment time horizons of capital market intermediaries shortened in the pandemic years, driving a widening of the intention-allocation gap of savers as well as a widening of the gap between the investment time horizons of companies as compared to the horizons of their funding sources – providing a potential source of shorter-term pressure in the capital markets in the years to come.

Chart 4: Investment Horizons of Savers and Companies, 2019 vs. 2020



A Global Snapshot

FCLTCompass 2021 brings a meaningful expansion in coverage. By adding seven additional countries (Australia, the Netherlands, New Zealand, Norway, Singapore, South Korea, and Switzerland) to our original ten (the largest economies in the world: Brazil, Canada, China including SARs, France, Germany, India, Italy, Japan, the UK, and the United States), alongside new data from the IFSWF, we capture a better picture of how the largest pools of wealth are behaving and what that might mean for capital markets as we look ahead.

At the national level, investment horizons have diverged – with countries exhibiting notably different responses to recent volatility fueled by the global pandemic. Nations that had historically been among those with the longest investment time horizons, such as the UK and Canada, experienced some of the largest contractions in their horizons, while the flight to quality assets in other markets, such as New Zealand, lengthened investment horizons.

These variations in behavior are interesting but must be taken in context. The ramifications of the pandemic are likely to influence investment horizons for years to come as the effects of government intervention and stimulus wane and economies recover.

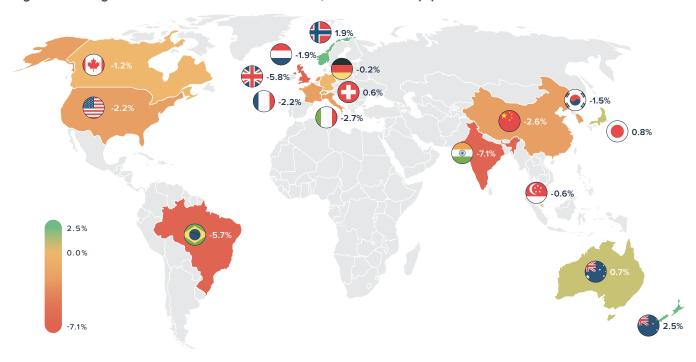


Figure 4: Changes in National Investment Horizons, 2020 vs. 2019 (%)

These changes in country investment time horizons appear dramatic but took place during a period of market turmoil and unprecedented governmental economic intervention. In many cases, we are talking about a shift of months – one way or the other – driving the investment horizon changes depicted in Table 1. The long-term trend may be more telling than a snapshot of behavior during a time of distress.

Table 1: Changes in Investment Horizons: 1-, 5- and 10-year Periods

Country	10-Year Trend (Annual CAGR)	5-Year Trend (Annual CAGR)	1-Year Trend
United States	2.0%	1.6%	-2.2%
Switzerland	1.6%	0.3%	0.6%
United Kingdom	1.3%	0.3%	-5.8%
Canada	1.2%	0.2%	-1.2%
Netherlands	0.7%	1.8%	-1.9%
China (including SARs)	0.6%	0.1%	-2.6%
Australia	0.5%	1.7%	0.7%
Norway	0.5%	0.9%	1.9%
Germany	0.5%	0.6%	-0.2%
New Zealand	0.5%	-0.9%	2.5%
South Korea	0.3%	0.2%	-1.5%
Singapore	0.0%	3.0%	-0.6%
Brazil	-0.2%	0.8%	-5.7%
Italy	-0.3%	-0.6%	-2.7%
Japan	-0.3%	-0.5%	0.8%
France	-0.3%	-0.2%	-2.2%
India	-0.4%	-0.6%	-7.1%

On a 10-year basis, we see a clearer picture of the momentum of investment horizons in various countries. Some – such as the United Kingdom, the Netherlands, and the United States – have seen their investment time horizons extend, and the pandemic appears to have accelerated that trend. In contrast, investment horizons in countries such as France, India, and Japan have been compressing in the 1-, 5- and 10-year periods.

We expect investment horizon trends to be slow moving over time; shifting the investment behavior of entire nations is no easy feat. But there have been faster-moving changes in some places. Given the unsettled operating environment of the past year, we would urge caution in interpreting recent trends. How investment horizons evolve in places such as China (including SARs), the United States, and the United Kingdom will have a meaningful influence on global average time horizons – but whether the recent shifts in these countries are indicative of a new trend remains to be seen.

Corporate Investment Horizons: Moment or Movement?

When faced with the startlingly sudden shutdown of the global economy in the span of just a few short weeks, which clouded the near-term picture, many companies opted to focus on the long term. Our conversations with companies during the early days of the pandemic confirmed this perspective. Many told us that their confidence in their long-term strategy remained; it was the short-term strategy that was being disrupted. In an April 2020 survey of FCLTGlobal Member organizations, we found that 73 percent of respondents were using planning horizons of three or more years and 50 percent cited "commitment to long-term strategy" as most important to successfully steering their organizations through the COVID-19 pandemic.

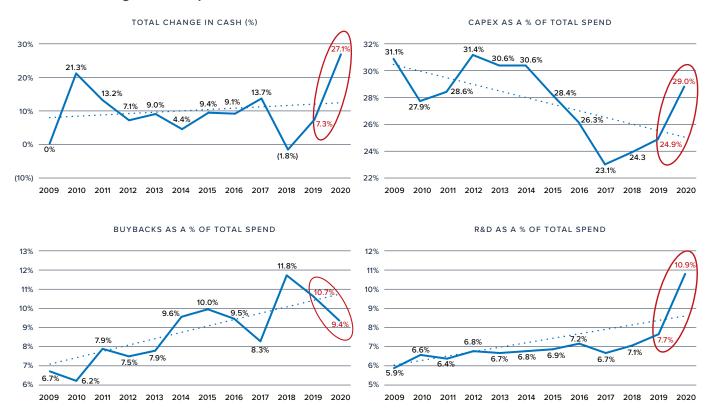
What did companies do in the face of a volatile and uncertain short-term operating environment? In many ways, the data from FCLTCompass 2021 bears out the corporate perspective reflected in our survey. Companies invested in the long term.

Corporate investment horizons lengthened by more than 10 percent from 2019 to 2020. The lengthened time horizons came despite a buildup of cash on the balance sheet – a trend that shortens corporate average horizons, as cash is considered to have a time horizon of zero. That cash buildup came in part from a decline in return of capital to shareholders (share buybacks and dividends). The decline was voluntary in some cases and mandated by regulators in others, but the effect contributed to the buildup of cash on balance sheets and provided the raw capital to fuel growth investments.

So, what did companies spend their capital on? Investment in R&D jumped to levels not seen in the past two decades - 10.9 percent of total spending. And that spending was broad based across industries, not just driven by the healthcare and pharmaceutical industries racing to treat patients and develop COVID-19 vaccines.

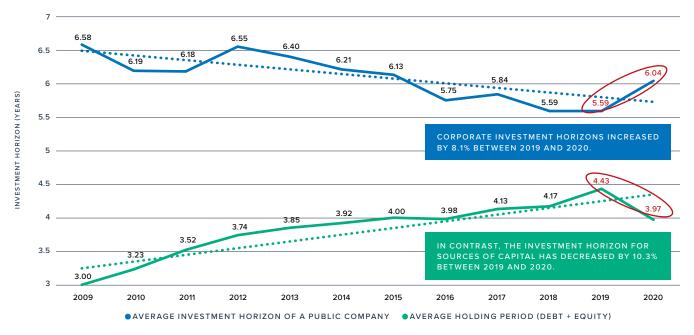
Similarly, investment in fixed assets (capital expenditures, or CapEx) climbed to 29 percent of total spending as companies brought their supply chains in-house and enhanced mission-critical infrastructure. This fixed investment too was widespread and not concentrated in any one particular industry or geography. In a world that had been moving toward multinational globalization, the pandemic response appears to have led many companies to reconsider their supply chains and reinvest in domestic production. If it persists, this shift could be the beginning of the end of the fixed-asset-light business models we saw shrinking corporate balance sheets and investment time horizons in prior years.

Chart 5: Percentage of Total Spend



The lengthening of corporate investment time horizons was meaningful, and perhaps even more so because they lengthened despite a contraction in the time horizons of corporate sources of capital. Debt and public equity holding periods fell by over 10 percent in the same period, contributing to a widening of the gap – by more than two years – between the time horizons of corporate sources of capital and corporate uses of capital.

Chart 6: Corporate Investment Horizons vs. Blended Sources of Capital



Looking only at public equity holding periods as compared to corporate investment time horizons, the picture is even starker, with an average gap of almost three years. For years we heard that shareholders were among the biggest sources of short-term pressure on companies, preventing them from taking the long view. This data disputes that perspective – companies behaved in longer-term ways in the midst of a crisis, and they did that despite their shareholders becoming shorter term.

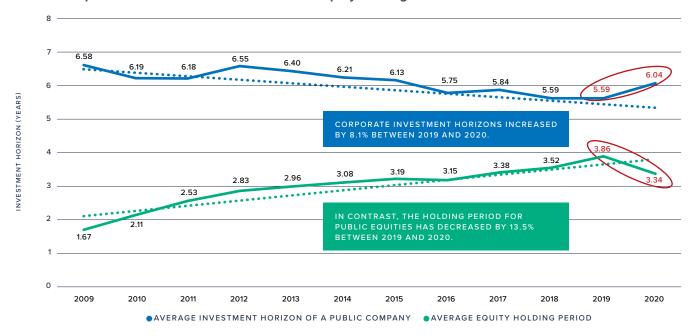


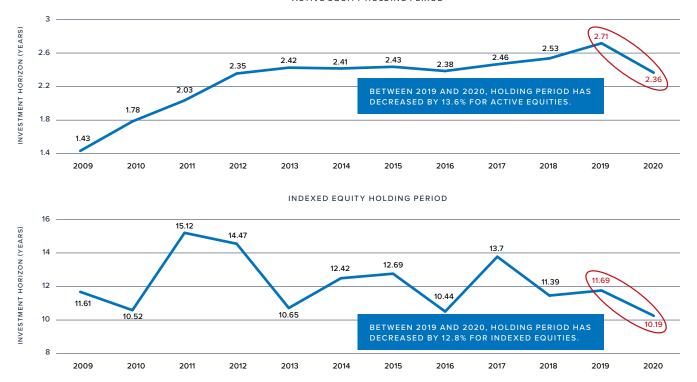
Chart 7: Corporate Investment Horizons vs. Public Equity Holding Periods

What was driving the contraction in equity investment time horizons? As seen in Chart 8, holding periods of active equity strategies declined by 13.6 percent in the past year. And it wasn't just active equities that contributed to the overall decline in public equity time horizons – indexed equity holding periods fell by 12.8 percent too.

In our conversations with active managers, we heard many mention the market volatility offering both risks and opportunities for their equities portfolios. Taking advantage of those mis-pricings and adjusting portfolios to account for new risk scenarios naturally drives portfolio turnover – but this response drove a remarkable increase in portfolio turnover. The subsequent decline in average holding periods for actively managed public equities erased eight years of improvement, returning investment time horizons to levels not seen since 2012.

Chart 8: Equity Holding Periods





The decline in indexed equity holding periods was likely driven – at least in part – by index reconstitution. But we also often see indexed equities serving as "placeholder" allocations, handy places to park cash while savers determine what the right long-term home for that investment capital might be. The pandemic-related market volatility may well have meant that more savers than usual used indexed products as that parking lot or as a risk management tool, contributing to the higher turnover.

THE EFFECT OF CLIMATE GOALS ON INVESTMENT HORIZONS

Pandemic-related market turmoil and investors' short-term reaction to that volatility is one explanation for the decline in equity holding periods. Another may be the increasing shift in portfolio allocations toward environmental, social, and governance (ESG) investing, driving near-term turnover as assets are reallocated to sustainable strategies. A subset of that push toward more sustainably minded investing is the emergence of net-zero emissions portfolio commitments. As increasing numbers of asset managers take on net-zero goals, as evidenced by the \$70 trillion in assets committed by over 160 financial firms to Mark Carney's recently launched Glasgow Financial Alliance for Net Zero, there is likely to be a period of adjustment as portfolios are reshaped to accommodate this new responsibility.¹³ Those commitments can be implemented in short-term ways, using principles-based tools such as divestment or exclusion that would meaningfully contribute to portfolio turnover in the near term. Or net-zero goals can be implemented in longer-term ways, with deployment of catalyst or value-based approaches that employ a combination of strategies, including investment in innovation, scaling solutions, engagement, and portfolio reweighting that brings carbon into the equation. With commitments spanning the next three decades, as these climate goals take shape over time, there could be a period of what looks like short-term behavior now – driven by portfolio reconstruction – that is actually a heightened incorporation of true long-term perspectives.

Wealth Inequality vs. "Quality" Around the World

At its core, the COVID-19 pandemic is about people. The impact of a global pandemic on human health and employee well-being is paramount. And wealth – or the lack thereof – often determined (and continues to determine) the resilience of households and individuals.¹⁴

Overall household wealth, which includes cash, savings and retirement accounts, investment accounts, and real estate¹⁵, grew by 8.4 percent from 2019 to 2020, while allocations across asset classes were predominantly unchanged. Much of this growth was likely fueled by increases in asset class valuations during the period, while a smaller portion may be linked to direct government stimulus payments.

That growth in household wealth seems like a rosy view given what we know about the experience of many households that were meaningfully impacted by economic shutdowns, layoffs, and workforce furloughs around the world. Digging deeper into that overall increase in household wealth, we see that the growth was not evenly distributed. The Gini score (which calculates the degree of inequality in the distribution of income and wealth) shows us that the pandemic erased years of improvement from 2015 to 2019, reaching its highest level since 2014. Mapping that increase in inequality alongside the proportion of wealth controlled by the top 1 percent of households paints a stark picture of the uneven distribution of household wealth, with that small proportion of households controlling nearly 45 percent of the household wealth in the world.



Chart 9: Global Wealth Inequality Trends (2009–2020)

Households also responded to the pandemic in different ways around the world – where a flight to quality varies by home country.

In the United States, households held onto cash and increased their exposure to tradable securities (primarily equities). That increase in cash could have been driven by government stimulus payments or could represent a flight to quality as households increased their savings in emergency funds or rainy-day accounts to buffer income-related uncertainty. Meanwhile, savers in China (including SARs) favored real estate as their safe haven of choice, prioritizing tangible fixed assets with more predictable values over tradable securities with more volatile market values.

AN IN-DEPTH LOOK AT CHINESE SAVERS AND REAL ESTATE

In 2020, we spotlighted the preferences of Chinese savers for cash and real estate and noted that as markets in that country continued to mature, a rotation into tradable securities could have a meaningful influence on global investment horizons. The pandemic appears to have set back the clock on the asset rotation of Chinese household savers and in the meantime also exposed some of the pitfalls of this preference for real estate. The struggles of debt-ridden property giant Evergrande Group have put as many as 1.6 million homebuyers waiting for unfinished apartments and hundreds of small businesses at risk of losing their money. The spotlight on Evergrande's struggles is one example of a renewed focus by Chinese officials on curtailing property speculation to curb price inflation. With such vast pools of capital (\$86.4 trillion, or 21.8 percent of total global household wealth) controlled by Chinese households that prize real estate assets, this remains a group worth keeping a close eye on.

Chart 10: Household Asset Allocation



China Including SARs





United States



Sovereign Wealth Funds Are Inimitable – They Are All Original

At the opposite end of the spectrum from households, in terms of both sophistication of investment strategy and sheer size of the pools of capital controlled, SWFs offer a very different investment picture. This year, new data from our collaboration with the IFSWF allows us to dig deeper into the behaviors of SWFs – and reveals startling findings.

While SWFs are the savers with the longest intended investment horizons, they also have the largest intentionallocation gap of any saver group, at more than 15 years.

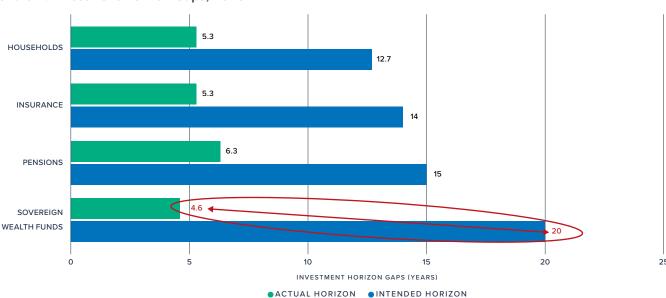


Chart 11: Investment Horizon Gaps, 2020

WHAT IS A SOVEREIGN WEALTH FUND?

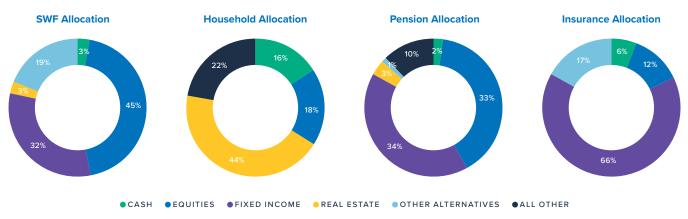
In 2008 the Santiago Principles defined sovereign wealth funds as having three key characteristics.¹⁷ Broadly speaking, a sovereign wealth fund

- 1. is owned by the general government,
- 2. includes investments in foreign financial assets, and
- 3. invests for financial objectives (although it may have nonfinancial objectives as well).

SWFs tend to fall into two primary categories, savings funds or stabilization funds. Savings funds – such as China Investment Corporation or the New Zealand Superannuation Fund – often have decades-long investment horizons and are set up to save a portion of their wealth for the future or are designed to finance future liabilities. Stabilization funds – for example, the Hong Kong Monetary Authority – are pools of capital used to help stabilize the value of a country's currency or to smooth the government's budget.

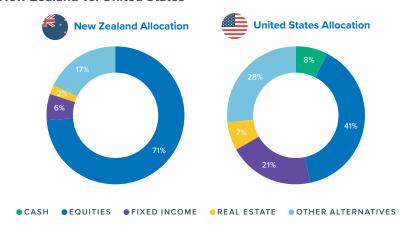
Making broad generalizations about this saver community is a risky business, however. SWFs are unique – they invest differently than households, pensions, and insurance firms, with allocations heavily favoring equities and alternatives.

Chart 12: Asset Allocations (2020)



SWFs look different not only from other savers but also from each other – with each fund's allocations as unique as the purpose of the fund. The chart below compares the New Zealand Super Fund to select sovereign wealth funds in the US, as defined by the IFSWF (Alabama Trust Fund, Alaska Permanent Fund, New Mexico State Investment Council, North Dakota Legacy Fund, and Permanent Wyoming Mineral Trust Fund).

Chart 13: Allocations: New Zealand vs. United States¹⁷



Research from State Street and the IFSWF has found that many sovereign wealth funds (as well as other institutional investors) accumulated cash during the early phases of the pandemic – with cash levels at the start of 2020 at their highest since the 2008–2009 financial crisis.¹⁸ This cash accumulation mirrors behaviors we saw from household savers around the world.

But SWFs have begun to redeploy that capital, in particular by increasing allocations to equities. While better than cash, with its investment time horizon of zero, this increased allocation to public equities – the asset class with the next shortest time horizon after cash – served overall to lower actual investment time horizons for SWFs, increasing that intention-allocation gap even further. Some SWFs invested globally, while others opted to buy local, especially in Asia, where IFSWF data suggests an increase in investments in the region "to support local companies and local economies."¹⁹

Raising New Questions

In a period of unprecedented – and globally coordinated – government economic intervention, the biggest question on our minds is: What happens to investment time horizons as monetary and government stimulus wanes?

After a decade-plus of post-financial-crisis low interest rates and tepid inflation, the pandemic years brought waves of central bank buying of corporate debt. With governments now among the largest corporate creditors in the world, how will that reality influence the time horizons of corporate sources of funding? And what will the follow-on implications be for how companies invest going forward?

For savers who have grown accustomed to low interest rates, will borrowing at rock bottom become a thing of the past? A rising interest rate environment has all sorts of implications for portfolio construction. If rates rise and yield-chasing becomes yesterday's adventure, will we see a shift back toward favoring fixed income and the longer investment time horizons that accompany that asset class?

Finally, we noted the influence that the rise of sustainability-minded investing was having on investment time horizons last year.²⁰ This is a trend that has only accelerated. A recent report identified more than one-third, or \$35.3 trillion, of all assets in five of the world's biggest markets as being managed with a sustainability lens.²¹ While emerging evidence suggests that sustainably managed assets tend to have longer average investment time horizons, this shift in asset management style may also be driving short-term contractions in holding periods as portfolios are remade with responsible investment goals in mind. If this portfolio adjustment is truly contributing to the shortening of time horizons we see, especially in public equities, a longer-term shift may in fact be on the horizon for these assets. How that shift drives volatility in investment time horizons in the interim period remains to be seen.

Conclusion

FCLTCompass 2021 illustrates the behavior of market participants, and the influence that behavior has on investment time horizons, in the midst of a crisis. Above all, what we found was surprisingly encouraging. Actual investment time horizons, especially for the most liquid asset classes, did indeed contract during this period of turmoil, but not overmuch – proving that savers are resilient, and so are companies.

What happens next will be pivotal for shaping capital markets in the future. Can companies stick with their longer-term investments and truly build back better? Can investors refocus on their ultimate goals and ignore the noise, or take advantage of it to add to their longer-term opportunities? And most importantly, can we move forward in an equitable way so that the benefits of taking the long view accrue to more of the global population?

We hope this second 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 sustainable and prosperous economic growth – the goal of FCLTGlobal.

Country Analysis and Trends, 2009–2020²²

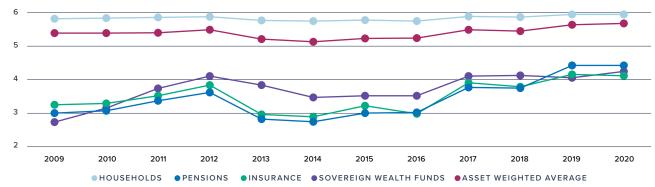


AUSTRALIA

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Households	\$6,984	\$7,579	\$8,137	\$8,924	\$8,266	\$8,219	\$7,942	\$8,578	\$9,848	\$9,410	\$9,669	\$11,231
Pensions	\$839	\$987	\$1,397	\$1,383	\$1,441	\$1,635	\$1,475	\$1,492	\$1,797	\$1,883	\$1,813	\$1,813
Insurance	\$387	\$449	\$422	\$471	\$436	\$424	\$391	\$344	\$387	\$340	\$336	\$308
Sovereign Wealth Funds	\$57	\$67	\$75	\$85	\$93	\$99	\$127	\$134	\$150	\$157	\$161	\$162
Foundations										\$9		
Total	\$8,267	\$9,083	\$10,032	\$10,864	\$10,236	\$10,377	\$9,935	\$10,549	\$12,182	\$11,798	\$11,980	\$13,514

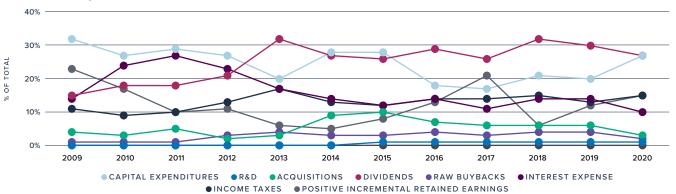
Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cash	\$692	\$756	\$925	\$1,038	\$982	\$1,013	\$969	\$1,033	\$1,177	\$1,108	\$1,092	\$1,299
Active Equities	\$814	\$909	\$973	\$1,048	\$1,033	\$1,151	\$1,089	\$1,325	\$1,544	\$1,559	\$1,460	\$1,472
Indexed Equities	\$55	\$97	\$147	\$137	\$144	\$76	\$72	\$111	\$143	\$155	\$307	\$372
Fixed Income	\$151	\$171	\$193	\$216	\$183	\$191	\$178	\$321	\$370	\$382	\$391	\$390
Private Equity	\$1	\$2	\$4	\$6	\$7	\$9	\$10	\$11	\$13	\$17	\$17	\$16
Real Estate	\$4,430	\$4,807	\$5,118	\$5,402	\$5,013	\$4,989	\$4,857	\$5,346	\$6,148	\$5,844	\$5,831	\$6,765
Investment funds, mutual funds, etc.	\$570	\$658	\$835	\$811	\$821	\$907	\$831	\$111	\$132	\$114	\$99	\$46
Alternatives	\$6	\$10	\$15	\$14	\$14	\$14	\$11	\$14	\$16	\$16	\$16	\$17
Other Alternatives	\$1	\$3	\$4	\$5	\$8	\$7	\$12	\$15	\$15	\$17	\$17	\$12
Hedge Funds												\$3
Private Debt												\$3
Other Investments	\$1,538	\$1,667	\$1,817	\$2,186	\$2,031	\$2,019	\$1,904	\$2,265	\$2,624	\$2,580	\$2,753	\$3,091

Investment Horizon

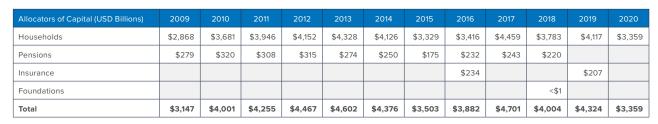


Uses of Capital

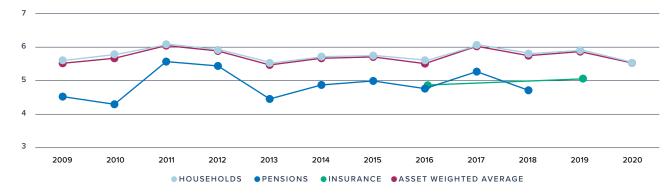
YEARS

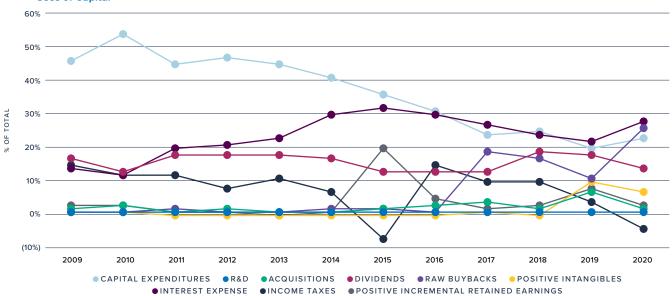






Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cash	\$186	\$215	\$275	\$311	\$300	\$280	\$253	\$243	\$294	\$236	\$254	\$223
Active Equities	\$403	\$455	\$476	\$573	\$613	\$573	\$456	\$458	\$600	\$454	\$593	\$526
Indexed Equities	\$28	\$45	\$63	\$75	\$109	\$124	\$107	\$118	\$172	\$144	\$135	\$86
Fixed Income	\$159	\$177	\$173	\$177	\$153	\$144	\$112	\$367	\$157	\$142	\$182	
Private Equity	\$4	\$6	\$8	\$8	\$8	\$10	\$4	\$5	\$3	\$2	\$2	
Real Estate	\$1,548	\$2,158	\$2,131	\$2,065	\$2,159	\$2,100	\$1,538	\$1,714	\$2,273	\$2,001	\$2,186	\$1,674
Investment funds, mutual funds, etc.								\$5			\$4	
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	\$1,051	\$824



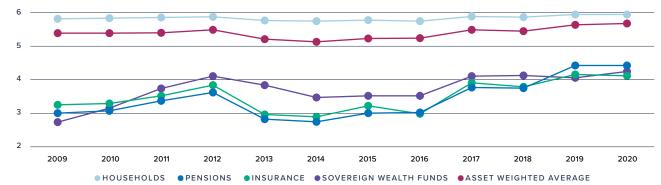


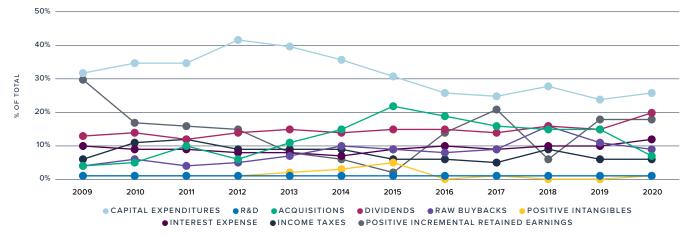




Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Households	\$7,379	\$8,245	\$8,606	\$9,503	\$9,583	\$9,442	\$8,305	\$9,272	\$10,453	\$10,026	\$10,780	\$11,879
Pensions	\$876	\$1,054	\$1,076	\$1,200	\$1,261	\$1,298	\$1,196	\$1,289	\$1,470	\$1,373	\$1,597	\$1,597
Insurance	\$528	\$607	\$604	\$671	\$658	\$648	\$554	\$613	\$672	\$593	\$688	\$674
Sovereign Wealth Funds	\$13	\$15	\$16	\$16	\$17	\$16	\$14	\$14	\$13	\$14	\$14	\$13
Foundations										\$4		
Total	\$8,795	\$9,920	\$10,302	\$11,390	\$11,519	\$11,403	\$10,069	\$11,189	\$12,608	\$12,009	\$13,079	\$14,163

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cash	\$905	\$1,023	\$1,083	\$1,177	\$1,144	\$1,095	\$969	\$1,079	\$1,191	\$1,145	\$1,271	\$1,236
Active Equities	\$1,621	\$1,817	\$1,696	\$1,932	\$1,979	\$1,946	\$1,609	\$1,847	\$2,129	\$1,936	\$2,377	\$2,245
Indexed Equities	\$111	\$172	\$217	\$242	\$341	\$408	\$366	\$463	\$594	\$599	\$458	\$373
Fixed Income	\$648	\$753	\$799	\$862	\$824	\$846	\$740	\$787	\$834	\$768	\$873	\$870
Real Estate	\$3,640	\$4,003	\$4,283	\$4,706	\$4,725	\$4,567	\$4,088	\$4,555	\$5,081	\$4,892	\$5,188	\$5,790
Investment funds, mutual funds, etc.	\$102	\$127	\$127	\$142	\$156	\$164	\$144	\$162	\$189	\$163	\$199	\$193
Other Investments	\$1,755	\$2,011	\$2,081	\$2,308	\$2,337	\$2,363	\$2,139	\$2,282	\$2,578	\$2,489	\$2,639	\$2,454

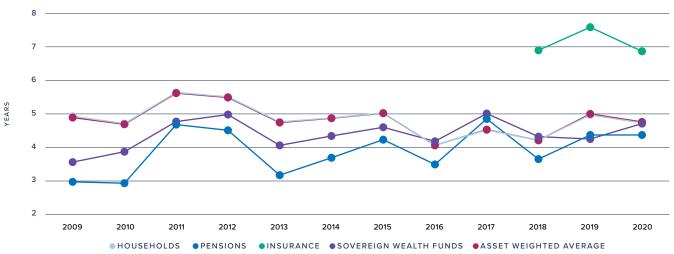


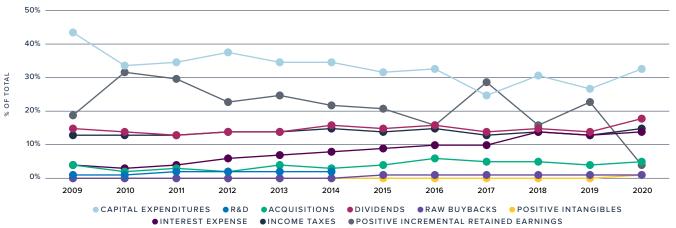




Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Households	\$22,694	\$27,928	\$34,739	\$39,145	\$46,576	\$50,140	\$53,164	\$61,008	\$71,581	\$69,990	\$81,239	\$86,375
Pensions	\$104	\$120	\$136	\$167	\$202	\$236	\$262	\$282	\$346	\$364	\$424	\$424
Insurance										\$2,330	\$1,153	\$1,271
Sovereign Wealth Funds	\$610	\$711	\$802	\$934	\$1,044	\$1,153	\$1,255	\$1,280	\$1,457	\$1,458	\$1,583	\$1,802
Foundations										\$25		
Total	\$23,408	\$28,760	\$35,677	\$40,245	\$47,822	\$51,529	\$54,681	\$62,570	\$73,383	\$74,167	\$84,398	\$89,872

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cash	\$5,368	\$6,527	\$8,185	\$9,183	\$10,937	\$11,785	\$12,592	\$18,654	\$21,879	\$20,519	\$19,370	\$18,875
Active Equities	\$2,977	\$3,717	\$4,357	\$4,918	\$6,163	\$6,921	\$7,510	\$10,902	\$12,785	\$12,129	\$11,337	\$11,390
Indexed Equities	\$887	\$1,107	\$1,332	\$1,492	\$1,886	\$2,132	\$2,321	\$3,400	\$4,005	\$3,815	\$3,616	\$2,966
Fixed Income	\$326	\$362	\$373	\$414	\$424	\$436	\$493	\$503	\$577	\$1,725	\$1,679	\$1,959
Private Equity						\$10	\$12	\$15	\$20	\$24	\$30	\$39
Real Estate	\$13,149	\$16,118	\$20,171	\$22,721	\$26,583	\$28,218	\$29,594	\$26,009	\$30,489	\$31,501	\$45,681	\$47,513
Alternatives	\$20	\$86						\$303	\$370	\$415	\$441	\$526
Hedge Funds			\$58	\$73	\$77	\$86	\$103					
Other Alternatives			\$149	\$186	\$184	\$196	\$180					
Securities										\$287	\$392	\$464
Other Investments	\$680	\$841	\$1,050	\$1,254	\$1,565	\$1,742	\$1,874	\$2,780	\$3,261	\$3,058	\$2,822	\$2,748

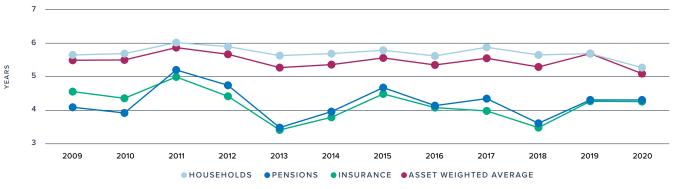


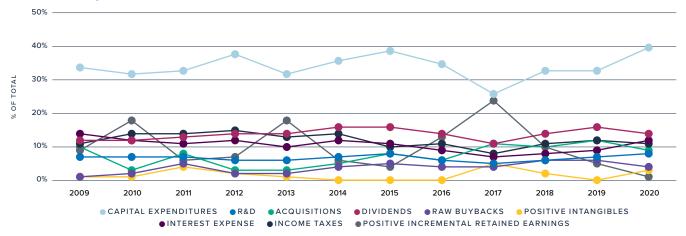




Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Households	\$15,183	\$15,250	\$15,173	\$15,109	\$15,815	\$14,007	\$13,113	\$13,236	\$15,739	\$15,607	\$16,027	\$17,195
Pensions	\$4	\$5	\$6	\$9	\$12	\$13	\$13	\$15	\$19	\$19	\$22	\$22
Insurance	\$2,536	\$2,533	\$2,426	\$2,739	\$3,010	\$2,912	\$2,689	\$2,747	\$3,235	\$3,067	\$3,249	\$3,609
Foundations										\$30		
Total	\$17,724	\$17,788	\$17,605	\$17,857	\$18,837	\$16,932	\$15,815	\$15,998	\$18,993	\$18,723	\$19,298	\$20,826

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cash	\$1,614	\$1,572	\$1,625	\$1,751	\$1,838	\$1,653	\$1,538	\$1,559	\$1,876	\$1,844	\$1,986	\$1,851
Active Equities	\$1,621	\$1,538	\$1,380	\$1,548	\$1,636	\$1,458	\$1,456	\$1,344	\$1,635	\$1,597	\$1,705	\$1,631
Indexed Equities	\$114	\$151	\$182	\$201	\$292	\$316	\$341	\$346	\$470	\$506	\$467	\$407
Fixed Income	\$1,627	\$1,689	\$1,637	\$1,855	\$2,027	\$1,964	\$1,772	\$1,819	\$2,059	\$1,958	\$2,043	\$2,258
Private Equity	<\$1	<\$1	<\$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	\$9,494	\$9,715
Investment funds, mutual funds, etc.	\$496	\$466	\$408	\$462	\$539	\$522	\$503	\$586	\$751	\$697	\$759	\$863
Hedge Funds	<\$1	<\$1	<\$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	\$2,843	\$2,609

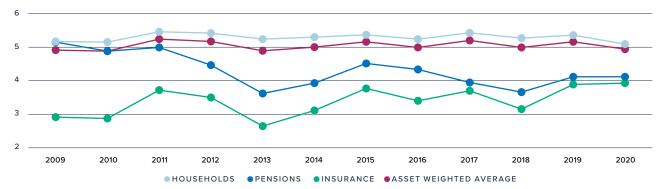


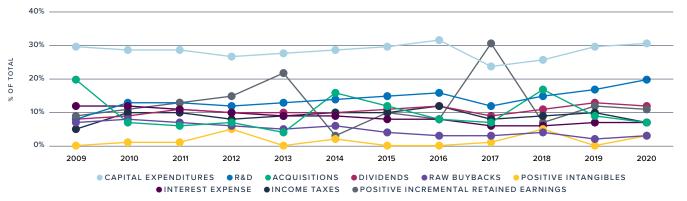




Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Households	\$14,607	\$13,916	\$13,889	\$14,716	\$15,897	\$14,613	\$13,753	\$13,901	\$16,593	\$16,445	\$17,605	\$20,679
Pensions	\$188	\$187	\$193	\$221	\$237	\$236	\$220	\$227	\$271	\$268	\$291	\$291
Insurance	\$1,964	\$1,922	\$1,909	\$2,094	\$2,306	\$2,189	\$2,024	\$2,036	\$2,372	\$2,271	\$2,403	\$2,732
Foundations										\$93		
Total	\$16,759	\$16,025	\$15,991	\$17,031	\$18,441	\$17,039	\$15,997	\$16,164	\$19,236	\$19,076	\$20,299	\$23,702

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cash	\$3,022	\$2,860	\$2,866	\$3,007	\$3,188	\$2,886	\$2,691	\$2,704	\$3,186	\$3,114	\$3,225	\$2,973
Active Equities	\$1,312	\$1,229	\$1,087	\$1,189	\$1,255	\$1,142	\$1,102	\$1,124	\$1,358	\$1,287	\$1,666	\$1,621
Indexed Equities	\$92	\$121	\$144	\$155	\$224	\$247	\$258	\$289	\$389	\$407	\$436	\$382
Fixed Income	\$786	\$775	\$781	\$894	\$996	\$991	\$919	\$925	\$1,097	\$1,089	\$1,127	\$1,267
Private Equity	<\$1	<\$1	<\$1	<\$1	<\$1	<\$1	\$1	\$1	\$2	\$2	\$3	\$3
Real Estate	\$8,506	\$8,052	\$8,137	\$8,571	\$9,252	\$8,490	\$7,957	\$8,039	\$9,549	\$9,500	\$10,359	\$12,160
Investment funds, mutual funds, etc.	\$399	\$439	\$449	\$531	\$642	\$647	\$623	\$651	\$782	\$722	\$817	\$950
Hedge Funds	\$1	\$1	\$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	\$2,679	\$2,464

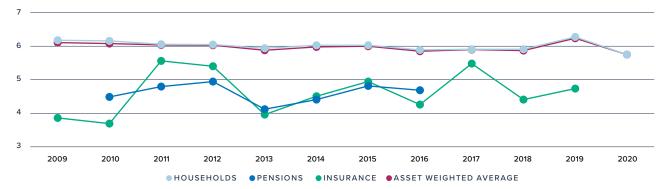






Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Households	\$5,413	\$6,371	\$6,055	\$6,897	\$7,324	\$8,128	\$9,467	\$10,450	\$13,511	\$13,034	\$13,779	\$13,969
Pensions		\$3	\$3	\$5	\$7	\$11	\$16	\$23				
Insurance	\$158	\$201	\$230	\$226	\$231	\$248	\$267	\$287	\$336	\$357	\$378	
Foundations										\$1		
Total	\$5,571	\$6,575	\$6,287	\$7,128	\$7,561	\$8,387	\$9,749	\$10,760	\$13,846	\$13,392	\$14,157	\$13,969

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cash	\$488	\$580	\$672	\$763	\$822	\$838	\$979	\$1,177	\$1,554	\$1,442	\$1,442	\$1,344
Active Equities	\$174	\$222	\$242	\$298	\$388	\$429	\$514	\$652	\$888	\$810	\$693	\$689
Indexed Equities	\$12	\$16	\$17	\$21	\$27	\$30	\$36	\$46	\$62	\$57	\$126	\$82
Fixed Income	\$10	\$11	\$10	\$10	\$9	\$11	\$20	\$25	\$5	\$4	\$4	
Real Estate	\$4,517	\$5,309	\$4,845	\$5,518	\$5,804	\$6,554	\$7,624	\$8,238	\$10,581	\$10,320	\$11,502	\$10,719
Investment funds, mutual funds, etc.		<\$1	<\$1									
Securities	\$148	\$191	\$220	\$218	\$223	\$241	\$260	\$282	\$331	\$353	\$375	
Other Investments	\$227	\$255	\$288	\$312	\$302	\$297	\$331	\$349	\$440	\$419	\$418	\$383

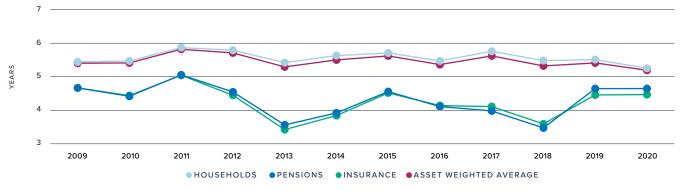






Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Households	\$13,839	\$12,702	\$12,346	\$12,825	\$13,292	\$12,714	\$11,463	\$11,079	\$12,832	\$12,512	\$11,953	\$13,087
Pensions	\$90	\$95	\$99	\$116	\$132	\$131	\$122	\$130	\$157	\$153	\$169	\$169
Insurance	\$768	\$685	\$651	\$694	\$795	\$800	\$816	\$864	\$1,026	\$959	\$1,039	\$1,111
Foundations										\$87		
Total	\$14,697	\$13,481	\$13,097	\$13,635	\$14,219	\$13,644	\$12,401	\$12,073	\$14,015	\$13,712	\$13,162	\$14,367

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cash	\$1,642	\$1,482	\$1,453	\$1,568	\$1,664	\$1,493	\$1,384	\$1,399	\$1,634	\$1,627	\$1,653	\$1,807
Active Equities	\$1,503	\$1,312	\$1,124	\$1,275	\$1,539	\$1,408	\$1,362	\$1,300	\$1,598	\$1,456	\$1,597	\$1,781
Indexed Equities	\$106	\$129	\$149	\$166	\$275	\$305	\$319	\$335	\$460	\$462	\$447	\$440
Fixed Income	\$596	\$547	\$526	\$565	\$643	\$652	\$643	\$662	\$769	\$724	\$779	\$832
Real Estate	\$8,479	\$7,858	\$7,739	\$7,892	\$7,904	\$7,865	\$6,974	\$6,677	\$7,588	\$7,436	\$7,023	\$7,318
Investment funds, mutual funds, etc.	\$94	\$95	\$92	\$105	\$122	\$139	\$161	\$179	\$220	\$212	\$252	\$270
Other Investments	\$2,276	\$2,057	\$2,019	\$2,065	\$2,066	\$1,782	\$1,557	\$1,522	\$1,747	\$1,708	\$1,425	\$1,554



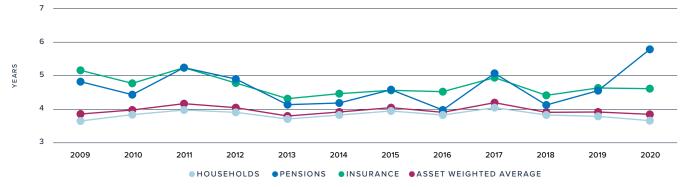


JAPAN

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Households	\$27,079	\$28,048	\$33,484	\$30,506	\$25,959	\$23,617	\$24,072	\$25,031	\$26,689	\$26,934	\$28,174	\$30,318
Pensions	\$1,190	\$1,440	\$1,548	\$1,644	\$1,417	\$1,482	\$1,259	\$1,498	\$1,550	\$1,591	\$1,524	\$1,574
Insurance	\$3,455	\$4,027	\$4,275	\$3,986	\$3,442	\$3,106	\$3,125	\$3,297	\$3,387	\$3,412	\$3,555	\$3,647
Total	\$31,724	\$33,515	\$39,307	\$36,135	\$30,819	\$28,205	\$28,456	\$29,827	\$31,626	\$31,937	\$33,254	\$35,539

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cash	\$9,116	\$9,050	\$11,212	\$10,227	\$8,654	\$7,786	\$7,883	\$8,382	\$8,891	\$9,068	\$9,949	\$9,204
Active Equities	\$2,194	\$2,188	\$2,258	\$2,320	\$2,440	\$2,380	\$2,330	\$2,396	\$2,743	\$2,652	\$2,238	\$2,360
Indexed Equities	\$152	\$215	\$296	\$317	\$457	\$540	\$572	\$627	\$806	\$863	\$1,043	\$997
Fixed Income	\$3,797	\$4,475	\$4,797	\$4,598	\$3,826	\$3,385	\$3,262	\$3,417	\$3,447	\$3,531	\$3,643	\$3,945
Real Estate	\$10,321	\$11,492	\$13,435	\$11,911	\$9,794	\$9,017	\$9,301	\$9,723	\$10,225	\$10,256	\$10,732	\$11,523
Investment funds, mutual funds, etc.	\$167	\$189	\$176	\$181	\$163	\$129	\$121	\$130	\$140	\$141	\$160	\$162
Other Investments	\$5,977	\$5,906	\$7,134	\$6,562	\$5,485	\$4,969	\$4,972	\$5,166	\$5,357	\$5,442	\$5,474	\$5,076

Investment Horizon





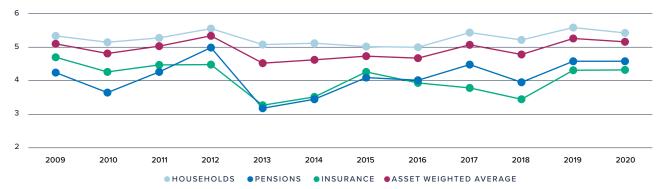
NETHERLANDS

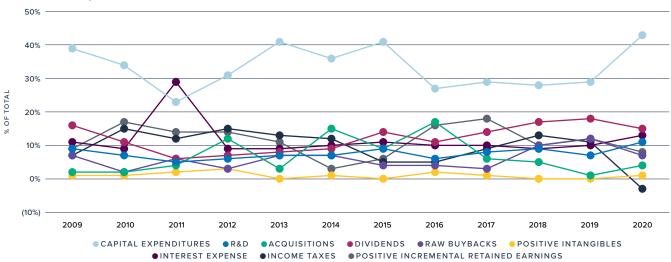


Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Households	\$4,614	\$4,415	\$4,432	\$4,528	\$4,685	\$4,365	\$3,872	\$4,027	\$4,576	\$4,547	\$5,389	\$6,156
Pensions	\$979	\$1,016	\$1,056	\$1,229	\$1,335	\$1,282	\$1,266	\$1,361	\$1,631	\$1,536	\$1,770	\$1,770
Insurance	\$488	\$477	\$498	\$551	\$571	\$572	\$479	\$469	\$515	\$485	\$537	\$635
Foundations										\$108		
Total	\$6,082	\$5,907	\$5,986	\$6,308	\$6,591	\$6,220	\$5,617	\$5,857	\$6,722	\$6,676	\$7,695	\$8,561

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cash	\$542	\$542	\$549	\$597	\$608	\$527	\$473	\$477	\$571	\$559	\$574	\$681
Active Equities	\$689	\$714	\$717	\$742	\$835	\$771	\$728	\$674	\$788	\$702	\$795	\$861
Indexed Equities	\$70	\$90	\$58	\$105	\$117	\$139	\$137	\$151	\$202	\$180	\$223	\$229
Fixed Income	\$811	\$804	\$835	\$941	\$982	\$948	\$919	\$979	\$1,111	\$1,098	\$1,222	\$1,272
Private Equity			\$3	\$2	\$1	\$14	\$1	\$49	\$57	\$57	\$68	\$68
Real Estate	\$2,312	\$2,120	\$2,053	\$1,957	\$2,043	\$1,762	\$1,404	\$1,562	\$1,762	\$1,787	\$2,435	\$2,549
Investment funds, mutual funds, etc.	\$69	\$72	\$75	\$86	\$118	\$116	\$98	\$92	\$106	\$97	\$110	\$129
Hedge Funds								\$27	\$28	\$29	\$30	\$30
Other Investments	\$1,584	\$1,560	\$1,696	\$1,876	\$1,887	\$1,942	\$1,857	\$1,849	\$2,096	\$2,055	\$2,239	\$2,744

Investment Horizon

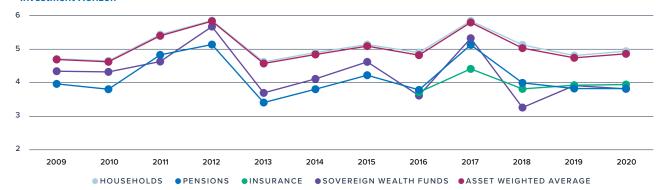






Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Households	\$746	\$766	\$832	\$934	\$1,008	\$1,025	\$996	\$1,118	\$1,184	\$1,174	\$1,342	\$1,414
Pensions	\$12	\$19	\$24	\$28	\$34	\$40	\$40	\$45	\$54	\$54	\$66	\$66
Insurance								\$10	\$10	\$11	\$10	\$11
Sovereign Wealth Funds	\$9	\$12	\$19	\$16	\$20	\$23	\$22	\$21	\$25	\$27	\$28	\$29
Total	\$767	\$798	\$875	\$978	\$1,062	\$1,089	\$1,058	\$1,194	\$1,273	\$1,266	\$1,447	\$1,520

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cash	\$71	\$75	\$86	\$98	\$107	\$110	\$107	\$118	\$128	\$125	\$150	\$153
Active Equities	\$271	\$282	\$302	\$333	\$346	\$349	\$323	\$339	\$341	\$410	\$503	\$506
Indexed Equities	\$37	\$45	\$54	\$61	\$70	\$81	\$87	\$97	\$115	\$48	\$63	\$70
Fixed Income	\$4	\$6	\$8	\$7	\$9	\$12	\$11	\$17	\$20	\$20	\$23	\$23
Private Equity			<\$1	<\$1	<\$1	<\$1	<\$1	<\$1	\$1	\$4	\$1	\$1
Real Estate	\$337	\$335	\$361	\$406	\$449	\$453	\$450	\$531	\$567	\$551	\$593	\$650
Investment funds, mutual funds, etc.	\$5	\$8	\$10	\$12	\$14	\$17	\$17	\$22	\$24	\$24	\$24	\$23
Other Alternatives	\$2	\$2	<\$1	<\$1	<\$1	<\$1	<\$1	<\$1	<\$1	\$2	\$1	\$2
Commodities		<\$1	<\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$9	\$1	\$1
Other Investments	\$40	\$43	\$51	\$59	\$63	\$64	\$61	\$66	\$74	\$71	\$86	\$88

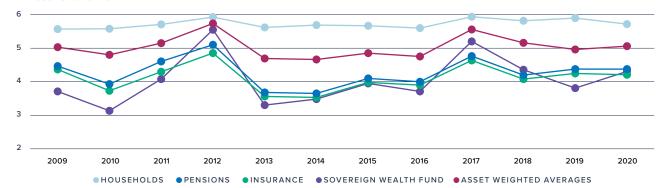






Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Households	\$1,239	\$1,354	\$1,397	\$1,532	\$1,562	\$1,392	\$1,204	\$1,283	\$1,496	\$1,556	\$1,579	\$1,635
Pensions	\$30	\$33	\$34	\$39	\$41	\$37	\$34	\$37	\$42	\$40	\$44	\$44
Insurance	\$155	\$166	\$173	\$203	\$204	\$184	\$165	\$180	\$204	\$196	\$215	\$232
Sovereign Wealth Funds	\$420	\$509	\$591	\$656	\$857	\$1,021	\$926	\$895	\$1,027	\$1,015	\$1,146	\$1,158
Total	\$1,843	\$2,062	\$2,194	\$2,431	\$2,664	\$2,634	\$2,330	\$2,395	\$2,769	\$2,807	\$2,985	\$3,068

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cash	\$142	\$147	\$156	\$180	\$178	\$152	\$136	\$146	\$160	\$168	\$161	\$183
Active Equities	\$376	\$426	\$469	\$516	\$624	\$666	\$599	\$593	\$715	\$697	\$893	\$886
Indexed Equities	\$38	\$54	\$38	\$72	\$87	\$120	\$112	\$125	\$148	\$147	\$114	\$167
Fixed Income	\$269	\$304	\$358	\$385	\$456	\$485	\$431	\$415	\$437	\$431	\$425	\$412
Real Estate	\$763	\$860	\$892	\$950	\$992	\$909	\$776	\$814	\$967	\$1,020	\$1,037	\$1,022
Investment funds, mutual funds, etc.	\$20	\$27	\$33	\$41	\$45	\$55	\$50	\$56	\$67	\$64	\$75	\$85
Other Investments	\$235	\$245	\$248	\$286	\$283	\$247	\$225	\$245	\$275	\$280	\$279	\$312

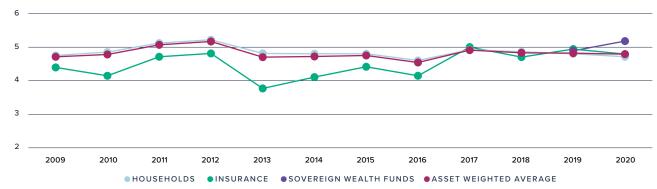


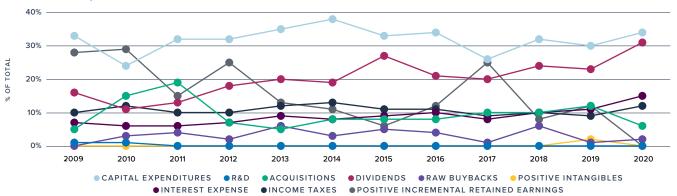




Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Households	\$874	\$1,026	\$1,161	\$1,342	\$1,362	\$1,325	\$1,283	\$1,335	\$1,529	\$1,562	\$1,728	\$1,868
Insurance	\$88	\$102	\$118	\$129	\$132	\$145	\$142	\$153	\$174	\$190	\$217	\$249
Sovereign Wealth Funds											\$440	\$452
Total	\$962	\$1,127	\$1,279	\$1,471	\$1,494	\$1,470	\$1,425	\$1,488	\$1,703	\$1,752	\$2,385	\$2,569

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cash	\$167	\$188	\$223	\$255	\$266	\$267	\$267	\$283	\$319	\$322	\$362	\$398
Active Equities	\$116	\$131	\$124	\$148	\$151	\$147	\$128	\$130	\$155	\$156	\$313	\$292
Indexed Equities	\$16	\$19	\$20	\$24	\$26	\$28	\$28	\$29	\$45	\$47	\$72	\$73
Fixed Income	\$48	\$55	\$67	\$74	\$74	\$84	\$84	\$89	\$91	\$102	\$311	\$359
Private Equity											\$53	\$63
Real Estate	\$412	\$506	\$587	\$667	\$660	\$618	\$589	\$601	\$670	\$687	\$762	\$811
Other Investments	\$203	\$229	\$259	\$304	\$317	\$327	\$329	\$354	\$423	\$438	\$512	\$573

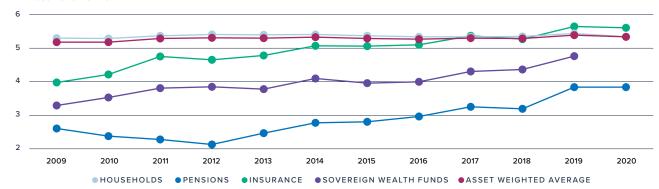






Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Households	\$5,052	\$5,745	\$5,947	\$6,782	\$7,144	\$7,337	\$7,339	\$7,534	\$9,108	\$8,909	\$9,659	\$10,834
Pensions	\$32	\$41	\$48	\$64	\$82	\$99	\$109	\$123	\$158	\$171	\$191	\$191
Insurance	\$395	\$471	\$520	\$657	\$732	\$790	\$806	\$859	\$1,048	\$1,048	\$1,086	\$1,219
Sovereign Wealth Funds	\$30	\$37	\$43	\$57	\$72	\$85	\$92	\$111	\$134	\$132	\$157	
Total	\$5,509	\$6,293	\$6,558	\$7,559	\$8,030	\$8,310	\$8,345	\$8,627	\$10,448	\$10,259	\$11,093	\$12,244

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cash	\$812	\$956	\$998	\$1,126	\$1,198	\$1,238	\$1,255	\$1,322	\$1,590	\$1,658	\$1,658	\$1,899
Active Equities	\$422	\$477	\$426	\$483	\$505	\$517	\$544	\$528	\$653	\$611	\$697	\$952
Indexed Equities	\$51	\$77	\$74	\$91	\$101	\$102	\$103	\$125	\$205	\$193	\$219	\$215
Fixed Income	\$320	\$380	\$430	\$527	\$607	\$670	\$702	\$759	\$911	\$927	\$969	\$982
Real Estate	\$3,355	\$3,760	\$3,922	\$4,434	\$4,606	\$4,697	\$4,625	\$4,727	\$5,682	\$5,574	\$6,223	\$6,732
Investment funds, mutual funds, etc.	\$38	\$45	\$46	\$68	\$78	\$83	\$82	\$86	\$117	\$133	\$135	\$165
Other Alternatives	\$1	\$2	\$3	\$4	\$6	\$7	\$11	\$15	\$19	\$22	\$25	
Other Investments	\$509	\$595	\$656	\$820	\$919	\$988	\$1,010	\$1,050	\$1,257	\$1,216	\$1,154	\$1,299





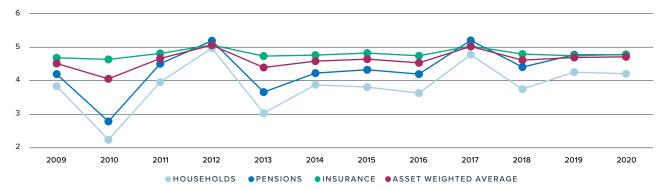
SWITZERLAND



Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Households	\$3,213	\$3,161	\$3,802	\$4,125	\$4,461	\$4,185	\$4,218	\$4,259	\$4,726	\$4,627	\$5,102	\$5,750
Pensions	\$581	\$661	\$665	\$734	\$808	\$786	\$794	\$811	\$917	\$893	\$1,037	\$1,037
Insurance	\$465	\$526	\$551	\$611	\$613	\$581	\$576	\$607	\$656	\$644	\$704	\$762
Foundations										\$88		
Total	\$4,259	\$4,348	\$5,018	\$5,469	\$5,883	\$5,552	\$5,588	\$5,677	\$6,299	\$6,251	\$6,843	\$7,548

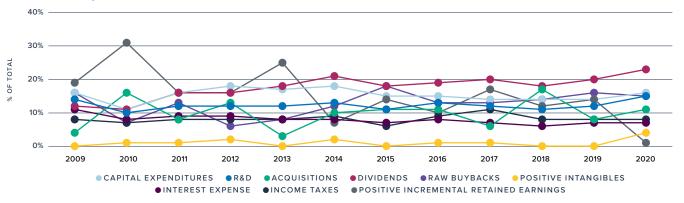
Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cash	\$663	\$651	\$784	\$862	\$928	\$860	\$849	\$870	\$954	\$938	\$1,042	\$1,152
Active Equities	\$444	\$472	\$514	\$546	\$626	\$541	\$540	\$548	\$627	\$603	\$730	\$781
Indexed Equities	\$45	\$55	\$41	\$77	\$80	\$91	\$96	\$113	\$144	\$164	\$215	\$220
Fixed Income	\$449	\$500	\$509	\$550	\$562	\$576	\$552	\$565	\$608	\$589	\$650	\$669
Private Equity	\$5	\$6	\$7	\$8	\$10	\$10	\$11	\$12	\$15	\$16	\$18	\$18
Real Estate	\$1,392	\$1,393	\$1,782	\$1,953	\$2,104	\$1,979	\$2,009	\$2,015	\$2,258	\$2,248	\$2,397	\$2,721
Investment funds, mutual funds, etc.	\$82	\$98	\$103	\$113	\$124	\$135	\$144	\$150	\$162	\$159	\$188	\$205
Hedge Funds	\$16	\$17	\$17	\$17	\$18	\$17	\$18	\$18	\$21	\$17	\$17	\$17
Other Investments	\$1,164	\$1,156	\$1,260	\$1,345	\$1,431	\$1,342	\$1,368	\$1,386	\$1,511	\$1,472	\$1,587	\$1,765

Investment Horizon



Uses of Capital

YEARS

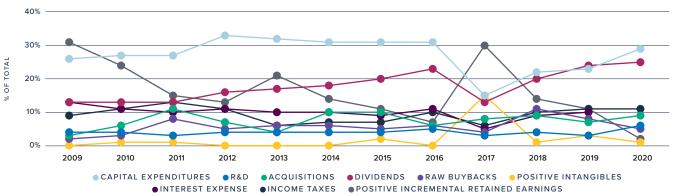




Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Households	\$13,791	\$13,422	\$14,128	\$14,766	\$16,168	\$16,689	\$16,459	\$14,911	\$17,086	\$16,968	\$16,652	\$17,923
Pensions	\$1,821	\$2,018	\$2,233	\$2,530	\$2,811	\$2,785	\$2,742	\$2,608	\$2,998	\$2,809	\$3,161	\$3,161
Insurance									\$2,376	\$2,325	\$2,043	
Foundations										\$84		
Total	\$15,612	\$15,440	\$16,361	\$17,296	\$18,978	\$19,474	\$19,201	\$17,519	\$22,460	\$22,186	\$21,856	\$21,083

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cash	\$1,932	\$1,900	\$1,981	\$2,116	\$2,326	\$2,263	\$2,202	\$1,971	\$2,450	\$2,226	\$2,639	\$2,611
Active Equities	\$1,288	\$1,248	\$1,125	\$1,122	\$1,223	\$1,201	\$1,094	\$947	\$1,537	\$943	\$1,563	\$1,387
Indexed Equities	\$89	\$117	\$140	\$138	\$199	\$256	\$252	\$241	\$436	\$298	\$646	\$473
Fixed Income	\$536	\$558	\$660	\$742	\$828	\$885	\$903	\$889	\$1,933	\$848	\$2,203	\$1,488
Private Equity											\$25	\$25
Real Estate	\$6,539	\$6,280	\$6,318	\$6,593	\$7,416	\$7,549	\$7,710	\$6,876	\$8,167	\$7,990	\$7,743	\$8,043
Investment funds, mutual funds, etc.	\$464	\$579	\$596	\$708	\$785	\$702	\$740	\$724	\$1,399	\$749	\$531	
Hedge Funds											\$50	\$50
Other Investments	\$4,764	\$4,759	\$5,540	\$5,877	\$6,201	\$6,618	\$6,301	\$5,872	\$6,535	\$6,733	\$6,370	\$6,921

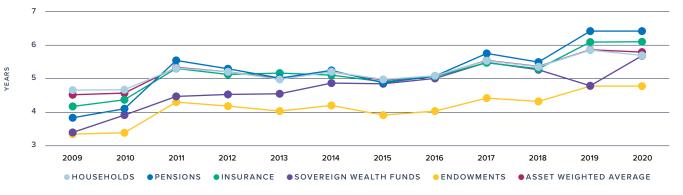


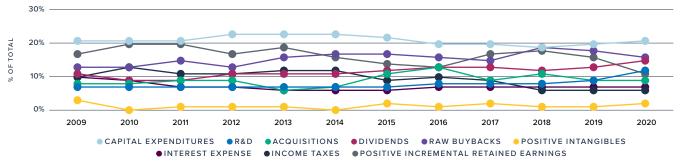




Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Households	\$69,956	\$73,516	\$74,298	\$79,870	\$89,417	\$94,395	\$97,323	\$102,965	\$111,071	\$116,936	\$130,449	\$142,531
Pensions	\$10,031	\$11,064	\$11,072	\$12,129	\$13,667	\$14,303	\$14,126	\$14,829	\$16,663	\$16,178	\$18,385	\$18,385
Insurance	\$6,406	\$6,846	\$7,124	\$7,543	\$7,866	\$8,235	\$8,178	\$8,539	\$9,213	\$8,985	\$10,161	\$11,186
Sovereign Wealth Funds	\$34	\$35	\$45	\$43	\$50	\$55	\$56	\$55	\$64	\$60	\$67	\$72
Endowments	\$316	\$346	\$408	\$404	\$447	\$511	\$526	\$515	\$567	\$615	\$631	\$638
Foundations										\$890		
Total	\$86,743	\$91,807	\$92,948	\$99,989	\$111,447	\$117,498	\$120,209	\$126,903	\$137,578	\$143,664	\$159,693	\$172,812

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Cash	\$6,736	\$7,272	\$7,918	\$8,407	\$8,803	\$9,397	\$9,886	\$10,491	\$10,740	\$11,276	\$11,791	\$13,979
Active Equities	\$13,574	\$14,460	\$13,350	\$16,058	\$19,043	\$20,031	\$20,609	\$19,786	\$22,763	\$21,508	\$23,763	\$27,798
Indexed Equities	\$2,596	\$3,272	\$3,799	\$3,780	\$5,866	\$7,185	\$5,935	\$8,855	\$11,068	\$11,434	\$17,007	\$18,338
Fixed Income	\$7,904	\$8,389	\$8,841	\$9,315	\$9,439	\$10,001	\$10,034	\$10,535	\$11,192	\$11,573	\$12,622	\$13,340
Private Equity	\$47	\$52	\$65	\$69	\$72	\$77	\$79	\$88	\$91	\$98	\$135	\$157
Real Estate	\$21,508	\$20,940	\$20,984	\$22,432	\$24,408	\$25,603	\$27,053	\$28,569	\$30,324	\$30,764	\$35,932	\$38,474
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	\$6,423	\$6,537
Hedge Funds	\$70	\$73	\$78	\$77	\$89	\$92	\$105	\$103	\$108	\$111	\$125	\$132
Other Alternatives											\$3	\$2
Commodities	\$19	\$24	\$29	\$28	\$31	\$36	\$37	\$36	\$40	\$43	\$30	\$23
Private Debt	\$6	\$10	\$8	\$8	\$9	\$10	\$11	\$5	\$6	\$6	\$9	\$10
Other Investments	\$30,703	\$33,294	\$33,935	\$35,538	\$38,575	\$39,704	\$41,227	\$42,924	\$45,003	\$50,104	\$51,899	\$54,095





Methodology and Assumptions

Investment Horizons

Taking the concept of bond duration as our starting point, we sought to measure the amount of time required for an investment to be recouped or come to fruition. The investment horizon represents the intended time horizon of a saver group (such as 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 uses of capital 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: (one) individual households and (two) institutional asset owners.

Individual households:

- Household assets: We divide household assets into cash and checking accounts, savings/401(k) accounts, equities, and owner-occupied real estate and then calculate an asset-weighted investment horizon (12 years, eight months in 2020).
 - Cash and checking accounts: These assets are assumed to have an investment horizon of zero years.
 They are assumed to be liquid and held with little interest and little expectation of future gain.
 - Savings/401(k) accounts: We calculate the investment horizon of these assets as the difference between the average life expectancy in a country and the average age of its working population, based on data from the Central Intelligence Agency's World Factbook.²³ Thus, exact investment horizons vary across countries,²⁴ but we assume a horizon of 30-plus years.
 - Equity assets: The 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: These assets are assumed to have an investment horizon of seven years. Absent a
 reliable global source, we have proxied data from a LendingTree study that found that US homeowners
 move once every seven years on average.²⁵

Institutional asset owners:

- Institutional assets: We divide institutional assets into four subgroups, based on the specific assets owned and managed. Each group has its own investment horizon methodology and assumptions.
 - Pension funds: Pension funds are assumed to have an investment horizon 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.²⁶
 - Insurance companies: Insurance companies are assumed to have an investment horizon of 14 years. As it
 is difficult to separate and identify the investment horizons or average contract life of the many branches
 of insurance, we took a blended average number of 14 years from the European Central Bank.²⁷ 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: SWFs are assumed to have an investment horizon of 20 years, based on typical language included in governance documents. A sample of annual reports from SWFs cited investment horizons of anywhere from 10 to 75 years.
- Endowments and foundations: These assets are assumed to have an investment horizon of 20 years. While some endowments and foundations are assumed to be perpetual, we believe the average investment horizon to be close to 20 years based on the typical language included in governance documents. Additionally, the typical annual spending rate for endowments and foundations in the United States is five percent, and conservatively, assuming that there are no further revenues or fund inflows, this spending ratio confirms a 20-year horizon (1/0.05 = 20 years).

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: Cash is assumed to have an investment horizon of zero years, for the same reasons listed above for saver groups – cash is a liquid asset with very little expectation of future returns.
- Public equity: These assets are divided 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 allows us to estimate the average investment horizon of active and passive funds separately using a proxy.
 - Active equity: The exact investment horizon varies by country and year.²⁸ 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 17 countries. Funds with these geographic regions (e.g., pan-European, Asia-Pacific) were prorated based on the size of each country's stock market. For example, in 2020 the Asia-Pacific fund's assets and investment horizons were allocated as follows: 66 percent to China, 16 percent to Japan, six percent to South Korea, four percent to India, three percent to Australia, and less than one percent each to New Zealand and Singapore. For a full list of the exact broader region mapping, see Table A1 in the Appendix.
 - Indexed equity: The exact investment horizon varies by country and year.²⁹ We used the same methodology as for 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. Otherwise, the methodology (calculations and geographic allocations) is identical to that used with active equity.

- Fixed income: The exact investment horizon varies by country and year. 30 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. As with 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 2020 in the Asia-Pacific region, 47 percent was allocated to China, 17 percent to Japan, nine percent to India, five percent to Australia, five percent to South Korea, one percent to Singapore, and one percent to New Zealand. For a full list of the exact geographic region mapping, see Table A2 in the Appendix.
- Real estate: Real estate is assumed to have an investment horizon of six years, eight months representing a weighted average of the residential and commercial real estate markets for investors. We relied on two US sources: (one) the same seven-year number from LendingTree³¹ that was used for residential real estate and (two) six years for commercial real estate, a figure derived from a Real Estate Research Institute academic study.³² Finally, we applied a two-to-one residential-to-commercial weighting based on the relative market sizes (commercial versus residential) for investors.33
- Private equity: These assets are assumed to have an investment horizon of two years, four months a figure taken from a recent McKinsey study using Preqin data.34
- Hedge funds: Hedge funds are assumed to have an investment horizon of two years, proxied based on a Statista finding that the average maximum lock-up period accepted by selected hedge fund investors ranged from 20 to 33 months.35
- Commodities: Commodities are assumed to have an investment horizon of six months, 36 proxied using the average tenor from a basket of commodities on the UBS Bloomberg Constant Maturity Commodity Index.37
- · Infrastructure: Infrastructure is assumed to have an investment horizon of seven years, six months 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."38

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 in the expenses section of a corporate balance sheet. We have taken an asset-weighted 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 six years in 2020.

• CapEx: The investment horizon of capex is assumed to be between five and 15 years, depending on the 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.³⁹

- R&D: R&D is assumed to have an investment horizon of between three and 11 years, depending on the industry. We proxied the investment horizon 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 approximately three years from concept to market).⁴⁰
- · Acquisitions: Acquisitions are 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: Intangibles are assumed to have an investment horizon of 18 years. We know that intangibles, such as brands and patents, vary greatly depending on the 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, which is 18 years according to McKinsey.⁴¹
- · Interest expense, taxes, gross buybacks, and dividends: All are 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: Retained earnings are assumed to have an investment horizon of four years, eight months. 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 determine how many years of a company's bottom line it would take to accumulate its current amount of retained earnings. We proxied the answer 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 using a ratio based on average corporate debt to equity. This approach resulted in an average investment horizon of four years in 2020.

- Debt issuance: Debt issuance is assumed to have an investment horizon of six years, four months. 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 2020 and a \$50 million five-year note in 2019, then its weighted average maturity is eight years (100/150 * 10 + 50/150 * 4).
- Equity issuance: Equity issuance is assumed to have an investment horizon of three years, four months, a figure 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 datasets from reputable sources such as the Organisation for Economic Co-operation and Development (OECD), World Bank, and International Monetary Fund (IMF). Where data was sparse for some countries and years, we supplemented with data from reputable sources from the respective authorities of those countries.

SAVERS

- Households: Data is from Credit Suisse's Global Wealth Report. 42
- Pensions: Total asset and allocation data for OECD countries comes from the OECD's Funded Pension Statistics
 dataset.⁴³ Assets and allocations for Japanese pensions are proxied using a weighted average of Government
 Pension Investment Fund⁴⁴ and Pension Fund Association⁴⁵ assets, taken from their respective annual reports.
- Insurance companies: Total asset and allocation data for OECD countries is from the OECD's Institutional Investors' Assets and Liabilities dataset. Assets and allocations for Indian insurance companies are from the Reserve Bank of India. Assets for Brazilian insurance companies come from the IMF and allocations from ANBIMA, the Brazilian financial and capital markets association. Assets and allocations for insurance companies in China (including SARs) come from the China Banking and Insurance Regulatory Commission. Assets and allocations for UK insurance companies are from the Association of British Insurers.
- Sovereign wealth funds: Data is from the IFSWF. Additional supplementary quarterly data is taken from individual SWF websites. See, for example, China Investment Corporation⁵² and Hong Kong Monetary Authority.⁵³
- Endowments: Total asset and allocation data is from historical endowment study data collected by the National Association of College and University Business Officers.⁵⁴
- Foundations: Total asset and allocation data is available only for 2018. Data is from Harvard Kennedy School's Global Philanthropy Report. 55

ASSET CLASS ALLOCATIONS

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

CORPORATE (PUBLIC EQUITIES)

Data is from FactSet and the MSCI All Country World Index (ACWI) constituents.⁵⁶

Additional Assumptions and Considerations

- Exchange rates: All exchange rates are from the Federal Reserve Economic Data (FRED) database. ⁵⁷ 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.
- Sovereign Wealth funds: SWFs are defined as having three key characteristics:58
 - 1. A SWF is owned by the general government, which includes both central government and sub-national governments.
 - 2. A SWF includes investments in foreign financial assets.
 - 3. A SWF invests for financial objectives.

- Note that these key elements exclude public pension funds (which are ultimately owned by the underlying policy holders) and central bank reserve assets (which are not invested for financial objectives, but for safety and liquidity).

When we could not find an asset allocation breakdown for a given saver group data point, we used regional proxies to estimate the allocation. For example, if allocation data was not available for 2019 French pensions, an equal weighted average allocation of Germany, Italy, Netherlands, Norway, Switzerland, and the UK (France's regional neighbors) would be used.

Note that OECD pensions data for 2020 was not available at the time this report was published, so 2019 numbers were used to calculate investment horizons and asset allocations instead. In addition, asset allocation numbers were unavailable for Singapore pensions – only the total amount was used.

Even when working with the wealthiest countries in the world, we encountered gaps in data. Some gaps in the tables and figures in this report 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 SWF data is sometimes difficult to uncover, in this case, blank fields for this saver category result from the fact that not all of the countries under analysis have SWFs. 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. For a full discussion of the data used and the limitations presented by that data, please contact research@fcltglobal.org.

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 unavailability) of high-quality and complete global datasets. 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 becomes available, it will be integrated into FCLTCompass as appropriate.

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 intricacies of the financial markets. By working across the investment value chain, we aim to make long-term practices the norm, not the exception.

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 the International Forum of Sovereign Wealth Funds for contributing their unique data to this project and to CoreData Research Services Inc. for making these findings possible with their data collection, methodology, and analysis.

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FCLTGLOBAL TEAM

ARIEL FROMER BABCOCK, CFA ALLEN HE, CFA, LEAD AUTHOR **ALEXIS ROBERTS** NUR ROBLEH

Appendix

Table A1: Broader Geographic Region Mapping - Equities

Country	Global	Global-ex Japan	ACWI	ACWI-ex US	Asia Pacific	Asia Pacific ex-Japan	BRIC	EAFE	EME <i>A</i>	Emerging Asia	Europe ex-UK	Eurozone	Latin America	North America	Pan- European	Country	China (including SARs)	China (including SARs) & Pac Rim	Hong Kong	Global Emg Mkts	Nordic	Pac- Basin ex- Japan	Southeast Asia
United States	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
China	1	1	1	1	1	1	1	0	0	1	0	0	0	0	0	1	1	1	1	1	0	1	0
Japan	1	0	1	1	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
Germany	1	1	1	1	0	0	0	1	1	0	1	1	0	0	1	1	0	0	0	0	0	0	0
India	1	1	1	1	1	1	1	0	0	1	0	0	0	0	0	1	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	0	0	0	0
France	1	1	1	1	0	0	0	1	1	0	1	1	0	0	1	1	0	0	0	0	0	0	0
Italy	1	1	1	1	0	0	0	1	1	0	1	1	0	0	1	1	0	0	0	0	0	0	0
Brazil	1	1	1	1	0	0	1	0	0	1	0	0	1	0	0	1	0	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	0	0	0	0
Australia	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0
Netherlands	0	1	1	1	0	0	0	1	1	0	1	1	0	0	1	1	0	0	0	0	0	0	0
New Zealand	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0
Norway	1	1	1	1	0	0	0	1	1	0	1	0	0	0	1	1	0	0	0	0	1	0	0
Singapore	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	1	1
South Korea	1	1	1	1	1	1	0	1	0	1	0	0	0	0	0	1	0	1	0	1	0	1	0
Switzerland	1	1	1	1	0	0	0	1	1	0	1	0	0	0	1	1	0	0	0	0	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 | eVestment categorizes "China incl. SARs" as "Greater China"

Table A2: Broader Geographic Region Mapping – Fixed Income

Country	Country	Global	Global Ex-Japan	ACWI	ACWI ExUS	Global Emg Mkts	EAFE	Pan-European	Eurozone	Europe Ex-UK	North America	Asia Pacific	Asia Pacific ex-Japan	Greater China & Pac Rim	Hong Kong	Greater China	EMEA
United States	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0
China	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1	0
Japan	1	1	0	1	1	0	1	0	0	0	0	1	0	1	0	0	0
Germany	1	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0	1
India	1	1	1	1	1	1	0	0	0	0	0	1	1	0	0	0	0
United Kingdom	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	1
France	0	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0	1
Italy	0	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0	1
Brazil	1	1	1	1	1	1	0	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	0
Australia	0	1	1	1	1	0	1	0	0	0	0	1	1	1	0	0	0
Netherlands	1	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0	1
New Zealand	1	1	1	1	1	0	1	0	0	0	0	1	1	1	0	0	0
Norway	1	1	1	1	1	0	1	1	0	1	0	0	0	0	0	0	1
Singapore	1	1	1	1	1	0	1	0	0	0	0	1	1	1	0	0	0
South Korea	1	1	1	1	1	1	1	0	0	0	0	1	1	1	0	0	0
Switzerland	1	1	1	1	1	0	1	1	0	1	0	0	0	0	0	0	1

ACWI = All Country World Index | EAFE = Europe, Australasia, and Far East | EMEA = Europe, Middle East, and Africa | eVestment categorizes "China incl. SARs" as "Greater China"

Table A3: Capital Expenditure, Research and Development, and Intangibles Investment Horizons (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

NA = not applicable

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- 8 A note on country selection: The original 10 countries were selected objectively, based on the size of their economies according to national rankings. The additional seven countries we include this year are added more selectively, to capture some of the world's largest pools of capital. This selection bias toward countries with meaningful wealth, but also enough disclosure that we have the necessary information to perform our analysis, could introduce bias into our calculation of global average investment time horizons.
- Please see our updated Methodology and Definitions sections for the updated definitions. For more information about the IFSWF, please visit https://www.ifswf.org/about-us.

- 10 Assumes that missing 2020 values for asset classes (e.g., selected countries' pensions, insurance, and SWF numbers) are carried over from their 2019 asset values.
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