2022



E

RECEDING HORIZONS: LONG-TERM STRATEGIES AMID UNCERTAINTY



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.



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Introduction

2022 marked a year of transition and new challenges. As parts of the world began emerging from the COVID-19 pandemic, new trends appeared in the form of inflation, economic decoupling, geopolitical tension, and the possibility of a recession. These issues underscore the critical nature of FCLTGlobal's mission to focus capital on the long term to support a sustainable and prosperous economy.

With a growing membership (76 organizations as of July 2022), FCLTGlobal continues to publish practical, innovative research based on the levers of long-term value creation: governance, incentives, engagement, metrics, and policy. While the FCLTGlobal community has demonstrated the value of long-term strategy and developed tools which facilitate that approach, real lasting benefits for savers and communities will hinge upon how investors, businesses, and policymakers navigate both periods of crisis and periods of calm.

This year, we expanded *FCLTCompass* to include seven additional countries – Chile, Malaysia, Mexico, South Africa, Spain, Sweden, and United Arab Emirates – covering 6 continents and over USD \$530T in assets. This crucial research was driven by our data partners, CoreData Research and the International Forum of Sovereign Wealth Funds (IFSWF).

We also give special thanks to the team at State Street Global Markets and their Insights platform for bringing additional findings to light by sharing their extensive data and analysis of macroeconomic indicators, ranging from cross-border asset flows to inflation and recession metrics, to market valuation ratios. This data was especially helpful in understanding market sentiment for key trends likely to impact long-term investment and holding periods going forward.

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. 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 welcome your engagement as we continue to develop actionable research and tools to drive long-term value creation for savers and communities.

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Investment horizons of savers, investors, and companies are converging to the shorter term in a sign of caution

FCLTCompass is an annual benchmarking tool tracking long-term investment behavior on a global scale, and the results of our 2022 analysis suggest a theme of convergence. Investment horizons for all three segments of the investment value chain – savers, asset classes, and companies – shrank in 2021, the first year in our dataset for which this was the case.

While the overall horizon gaps decreased between the three segments last year, such a trend could be a signal of increased short-term pressures. For example, high household consumption (especially in the United States) drove saver horizons down to their lowest point in our study period. Companies, for their part, held onto more cash and retained earnings and did not allocate more to R&D and capital expenditures, instead choosing to buy back stock – shortening time horizons as a result. Asset class time horizons remained relatively stagnant in 2021, decreasing by just one month.

Investment horizons compressed in 2021 due to disruptions that were felt globally, such as inflation and COVID-19 recovery efforts. Though markets recovered from pandemic-induced lows, disruptions continued into 2022 with rising inflation contributing to market turbulence. Overall, the impact of different parts of the world reopening at various speeds – for example, tighter restrictions in the Asia-Pacific region, exacerbated the global economic decoupling already underway and was reflected in divergence across countries.

However, upon closer inspection, the gap between savers and asset classes shrank by 14% (1 year 9 months). This suggests that markets, and each group in the market, became more short-term in a trend that may indicate a growing sense of caution post-pandemic:

- The savers group shrank significantly, by 14% (1 year, 10 months), to 10 years 10 months
- Corporate time horizons also shrank significantly, by 12% (8 months) to 5 years 4 months
- Asset classes shrank slightly, by 2% (1 month), to 5 years 3 months

Investors are increasing allocations to illiquid assets to increase return, leading to comparatively longer time horizons. Due to a high correlation between traditional asset classes like equities and fixed income, institutional investors are increasingly looking to generate returns in other ways – mostly in real assets and private equity. Even in the face of increasing corporate and saver short-termism, investors recovered, lengthening their investment time horizons. In addition to buoyant equity markets and low turnover, institutional investors are increasingly allocating to real assets (e.g., private equity, venture capital, real estate, infrastructure). While the former trend looks likely to reverse given the markets in 2022, the latter is a trend that will likely persist.

Many of the meaningful shifts in allocations and investment time horizons are due to volatile market valuations, rather than a deliberate change in strategy. Unprecedented government intervention in reaction to the global economic shock of the pandemic 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.

Post-pandemic, corporates are faced with the dilemma of saving for resilience or maintaining balance sheet

efficiency. Accordingly, we saw many companies making shorter-term decisions such as holding significant cash (19% of all capital in 2021 was kept as retained earnings) and choosing to return capital via buybacks (+2% to 11%, \$1.3B overall), under-allocating to R&D (-2% overall to 8%) and CapEx (-7% overall to 22%, a historic low). How these companies are positioning themselves to mitigate long-term risks such as climate change or economic downturns is an open issue.

As we look ahead, preliminary 2022 data reflects continued geopolitical instability. It is too early to determine the impact geopolitical events could have on investment time horizons, but periods of significant stress and volatility often foreshadow cautious investment behaviors and shortening time horizons.

About FCLTCompass

FCLTCompass traces the world's largest pools of capital as they flow through capital markets from savers to their ultimate destinations. We first measure savers' capital and track how it is allocated across a wide array of available asset classes via asset manager intermediaries. We then examine corporate sources of capital and how it is deployed to support business growth. Tracking these asset flows globally provides a snapshot of how capital is allocated in a given year and how those allocations shift over time. After mapping savers' asset allocations, we determine the average time horizon of each segment of the value chain (and compare intended investment horizons to actual horizons 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 time frame is usually 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.
- 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 their own 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.

Significant evidence shows that taking a long-term approach to investment decision-making delivers superior value over time.¹ Nevertheless, managers and investors struggle to balance immediate financial pressures against long-term objectives.

FCLTCompass brings objectivity to this dilemma by examining quantitative data reported in years (investment horizons) and US dollars (wealth), framing the conversation in a more actionable light. Providing data that illustrates the gaps between intended investment horizons and how capital is actually being allocated 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.

Investment Horizons

Building on the uncertainty of 2020, in 2021 there were again significant shifts in behavior among all three segments of the investment value chain– savers, assets classes, and companies – as the world began emerging from the pandemic. For the first time, investment horizons for all three groups shrank, and the overall intention-allocation gap narrowed by 14%.

Led by households (especially in the United States), many savers who had stayed the course last year began shifting their behavior: spending instead of saving. Intended investment horizons shortened by over 14% as a result, driving saver horizons down to a historical low. Asset class investment horizons remained mostly steady, with lower turnover from a rising equities market offset by decreasing durations in fixed income instruments. Caught at a crossroads, corporates struggled to balance resilience vs. efficiency: some held onto more cash (via retained earnings) while others returned capital to shareholders via dividends and buybacks. Both decisions led to shorter investment horizons, reversing last year's corporate trend.

Overall, while the intention-allocation gap narrowed among the three segments, short-term pressures on each part of the value chain forced investment horizons down universally. Higher turnover may be a natural response to market disruption, but each segment is responding to its own form of short-term pressure as the world emerges from the pandemic and to longer-term challenges like climate change, digital transformation, and economic decoupling in the years to come.

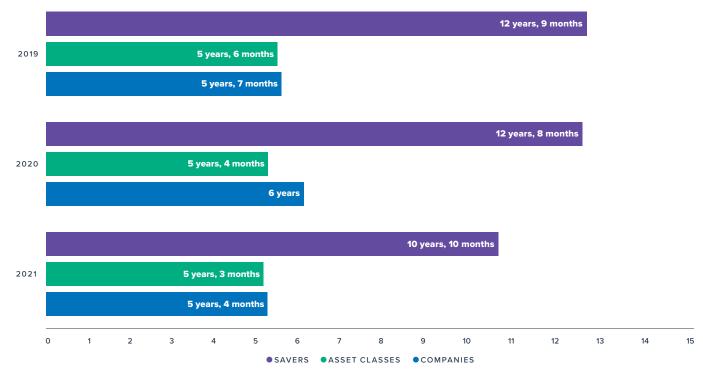


Chart 1: Investment Horizons for Savers, Asset Classes, and Companies All Declined in 2021 Investment Horizons, Savers, Asset Classes, and Companies, 2021

A Global Snapshot of Investment Horizons

While investment horizons converged between savers, asset classes, and companies globally, investment horizons on the national level are far more disparate. At the national level, countries exhibited notably different spending patterns coming out of the pandemic. Nations which had historically maintained the longest investment horizons and held large pools of capital – the United States and United Kingdom – experienced among the largest horizon contractions. This was largely due to increased consumption and allocation of assets towards stocks and real estate, and low saving. In contrast, other markets with tighter restrictions – China, Japan, and Australia, for example – curtailed short-term trading, built up pension savings, and extended horizons.

Such variations amid crises are notable, but should 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 seek to become more resilient to shocks. As governments tout stimulus and investing in infrastructure, there could come a point where thinking about long-term risks and opportunities becomes more engrained in the social conscience, especially in the face of challenges associated with climate change and continued economic recovery and stability.

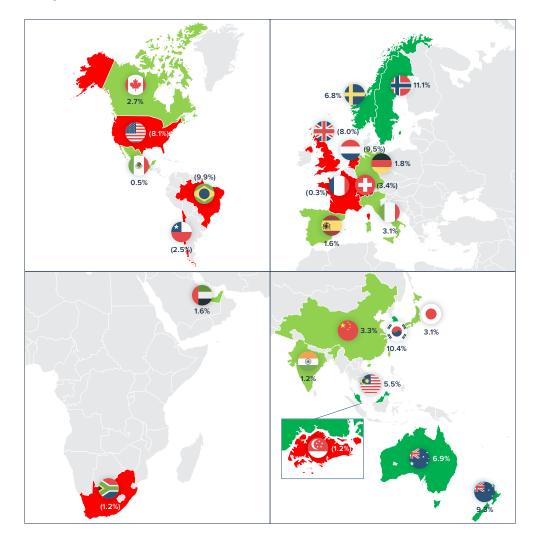


Chart 2: Global Snapshot of Investment Horizons

Global Investment Horizons Are Diverging

Percent Change in Investment Horizon, 2020-2021

	Country	Percentage Change Investment Horizon, 2020–2021
	Norway	11.1%
	South Korea	10.4%
	New Zealand	9.3%
	Australia	6.9%
	Sweden	6.8%
	Malaysia	5.5%
	China (including SARs)	3.3%
	Japan	3.1%
	Italy	3.1%
	Canada	2.7%
	Germany	1.8%
	Spain	1.6%
	United Arab Emirates	1.6%
	India	1.2%
	Mexico	0.5%
\mathbf{O}	France	(0.3%)
	Singapore	(1.2%)
\triangleright	South Africa	(1.2%)
	Chile	(2.5%)
0	Switzerland	(3.4%)
	United Kingdom	(8.0%)
	United States	(8.1%)
	Netherlands	(9.5%)
	Brazil	(9.9%)

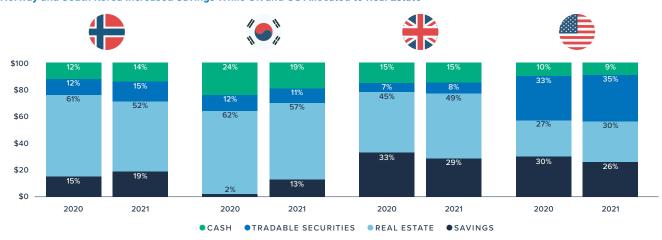
These changes in national investment horizons appear dramatic but happened during a period of market turmoil and unprecedented government economic intervention. In many cases there were shifts of months, rather than years. The long-term trend may be more telling than a snapshot of behavior during a time of distress.

Economic Decoupling or Divergence?

COVID-19 recovery, inflation, and other disruptions led to shorter-term investment horizons – impacts playing out unevenly across the world

As inflation ignites in many markets in 2022, 2021 data painted a picture of rapid recovery in markets from pandemic lows, buoyant equity markets, strong corporate earnings, and brisk consumer spending. The global pandemic affected all markets, but the method of recovery from its effects varied across the map.

We see clearly diverging household asset allocation patterns coming out of the pandemic in 2021. Large, developed markets like the United States and United Kingdom both opened up their economies earlier compared to other countries in 2021 and incentivized consumption at the household, corporate, and state levels. In these countries, households shifted a portion of their wealth into the stock market and real estate, and out of long-term savings – shortening their overall investment horizon. In contrast, households in many other countries were more conservative in 2021, holding onto higher cash balances and increased long-term savings, lengthening their investment horizons in the process, as seen with Norway and South Korea below. Differing priorities, such as zero-COVID policies in China and continued supply chain disruptions, could also have contributed to divergence in markets, and will be something to watch as companies and investors try to build resilience into their businesses and portfolios.



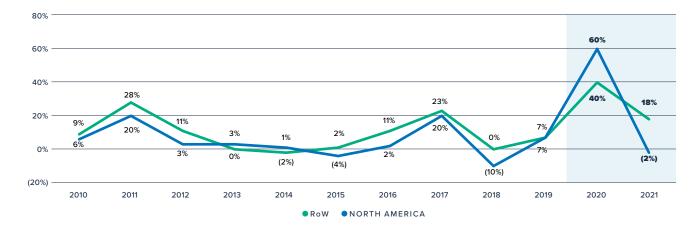


Corporate uses of capital were similarly diverse. Buybacks surged in North America to their highest levels ever recorded, close to \$1 trillion total in 2021, while companies in the rest of the world increased buybacks to a lesser extent. As a result, cash holdings at North American companies decreased (-2% overall) while those in other countries preferred holding onto a higher cash balance (+18% overall) instead of returning cash to shareholders.



Chart 4: Capital Committed to Buybacks Hit New Highs





ARE INVESTORS MORE WILLING TO PAY A PREMIUM FOR GROWTH IN THE UNITED STATES COMPARED TO OTHER CORE MARKETS?

In the post-pandemic recovery, equity markets quickly regained losses from 2020, with investors bidding up share prices in the United States to record levels in 2021. While it was a successful year for equity markets in Europe and Asia-Pacific, price-to-earnings ratios remained steady and diverged considerably from skyrocketing PE ratios in the United States.







Source: State Street Insights

Similar divergence last year could also be found among asset managers' equity funds. Continuing an upward trend since 2009, total assets managed by indexed equities in the United States crossed over the 50% mark in 2021, essentially doubling the 2009 mark. As more assets pour into indexed strategies, we may see investment horizons extend given that equity holding periods are longer for indexed strategies compared to those actively managed.

Outside the US in contrast, 2021 painted a starkly different picture for indexed investments, where an abrupt reversal in trends caused the percentage of assets managed by indexed equities to drop four percentage points to mid-2010s levels.

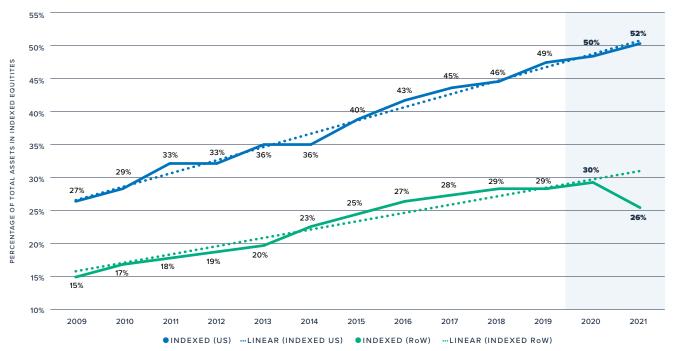


Chart 7: US Indexed Equities Continue to Grow in Contrast to Rest of World Changes in Indexed Equity, 2009-2021

Investors Emphasized Private Markets to Increase Returns, Lengthening Time Horizons

The traditional "60-40" portfolio – 60% equities and 40% fixed income – has long been under pressure as global yields have been in secular decline for years, leaving less room for fixed income to outperform during periods of equity market volatility². In reality, few institutional investment portfolios resemble such an allocation; investors have been diversifying across markets and asset classes in search of return, especially since the global financial crisis when yields in fixed income had reached new lows and opportunities in public equity markets were muted. Correlations between equities and fixed income have also increased, particularly in the first six months of 2022, when equity and bond markets both sold off. Without the diversifying effect of traditional fixed income, investment portfolios have been exposed to larger drawdowns with leading investors to seek returns elsewhere. Investments in private markets – including private equity, real estate, and infrastructure – has seen significant growth as a result.



Chart 8: Rolling Three Year Correlation, MSCI ACWI and Bloomberg Global Aggregate, Monthly Returns

Institutional investors – pension funds, insurance companies, endowments and foundations, and sovereign wealth funds – have different return and risk profiles, yet several key trends stand out in their historical asset allocation.

Pension funds can vary significantly by country and even within countries as local regulations and pension fund design, including defined benefit or defined contribution plans, can impact long-term asset allocation. As a result, trends in alternative investment allocations can vary widely as well. One market that stands out is Canada, where allocations to alternative investments have gradually increased while allocations to listed equities and fixed income have decreased. Allocations to alternatives and other increased by five percentage points over the five years ending in 2021.

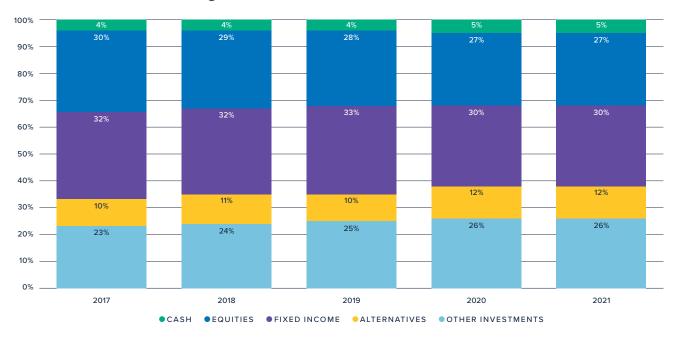


Chart 9: Canadians are Increasing Alternatives Allocations

Insurance companies – who typically invest large amounts in fixed income (asset-liability matching), faced significant headwinds navigating the low-yield environment. Allocations to other asset classes, including alternatives, increased to 14% of total assets at the end of 2021, while fixed income declined to 58%. Sovereign wealth funds saw substantial increases to other asset classes, such as private equity, real estate, and infrastructure from 23% of total assets in 2017 to 28% in 2021. The increase in other asset classes was funded through a reduction in listed equities and fixed income.



Chart 10: Insurance Allocation as Percentage of Total



Chart 11: SWF Allocation as Percentage of Total

Much of the growth observed in other asset classes is due to investment in illiquid markets like private equity, real estate, and infrastructure. For example, endowments now invest 27% of their total portfolio in private equity and venture capital, and the median sovereign wealth fund allocation to infrastructure was 7.3% in 2021³. Growth in private markets is forecasted to continue, with institutional investors remaining active in this space. Because holding periods for illiquid assets tend to be longer than public markets, the investment horizons of institutional investors increasing their allocations to private equity, real estate, and infrastructure will extend.

- Endowments invested over 50% of total assets in alternative investments, with allocations to listed equities and fixed income continuing to shrink over the past five years
- Private equity allocations have grown significantly from 16% of total assets in 2017 to 27% in 2021

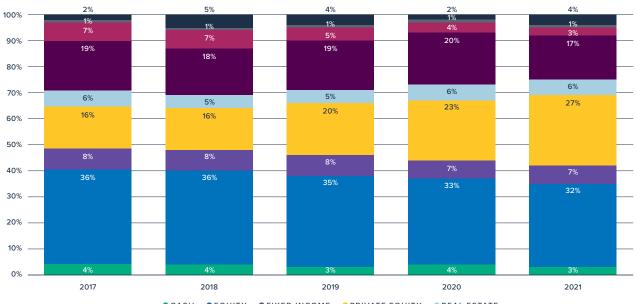


Chart 12: Endowments Continue to Grow Private Equity Allocations

Companies Chose Between Resilience or Balance Sheet Efficiency

Coming out of the pandemic, companies became shorterterm in a number of areas after initially spending capital on R&D and fixed assets.

The prior edition of *FCLTCompass* posed the question of whether effects of corporate and investor behaviors in 2020 would be temporary – namely the observed increase in corporate investment horizon and shortening equity holding periods. The new data show that the pandemic behavior was very much a "moment" instead of the beginning of a "movement."

Buoyed by lower turnover and stellar performance of the equity market in 2021, public equity holding periods increased to 3.89 years, their highest levels in our study to date. However, tensions and short-term pressures once again pushed corporate investment horizons shorter to 5.29 years on average – their lowest levels to date.

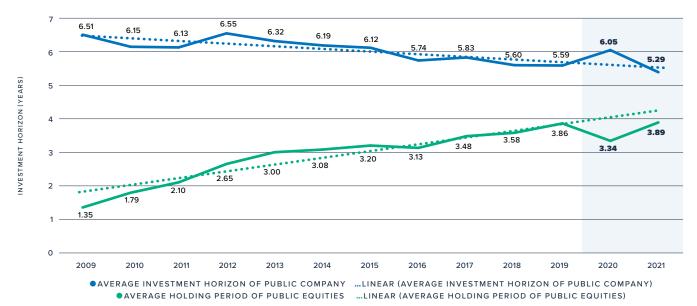
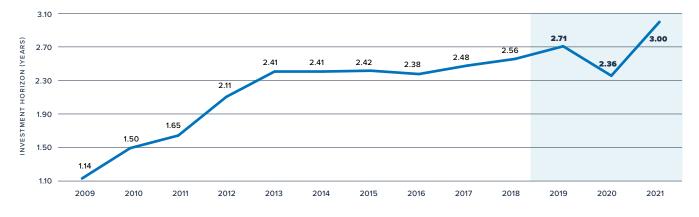
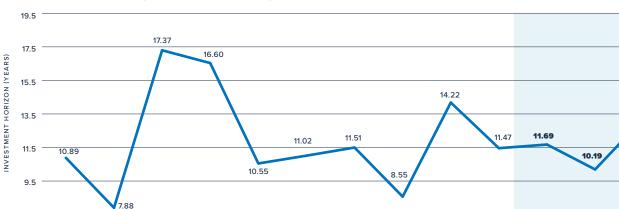


Chart 13: Corporate Investment Horizons Fall to Lowest Levels in Our Study Corporate Investment Horizon vs. Public Equity Holding Period Equities rallied in 2021, with markets peaking at the end of the year. Investors in active strategies rode this wave of strong performance, recovering from the pandemic-induced sell-off in 2020, driving active equity holding periods to their longest point in recent history. Time horizons in indexed strategies also lengthened in 2021.







2014

Chart 15: Indexed Equity Time Horizons Lengthened

7.5

2009

2010

2011

2012

2013

2021 represented a significant bounce-back year for corporates, buoyed by higher household consumption levels and the reopening of economies. Many companies as a result built resilient balance sheets with higher cash reserves, better positioning themselves to weather short-term volatility and support credit ratings in the face of shifting geopolitics, rapid technological change, and the climate transition. However, cash is a hindrance on performance and investors are diversified, lessening their concern about one particular company's resilience.

2015

2016

2017

2018

2019

2020

In aggregate, corporate use of cash became shorter-term in 2021. Faced with short-term pressures and the increased tension between resilience and efficiency, companies held onto their cash via retained earnings, and did not keep up with 2020 levels of spending in R&D and capital expenditures. Overall allocations to R&D decreased by one percent, while allocation to capital expenditures fell more than seven percent to 23% overall, a historic low.

13.25

2021

For what cash companies did spend, a significant portion went the way of buybacks – most prominently driven by companies based in the United States. Globally, buybacks have nearly surpassed dividends as the preferred method of returning cash to shareholders for companies – a shift unfathomable a decade ago, where uses of cash spent on dividends outpaced that of buybacks by a ratio of 3:1.

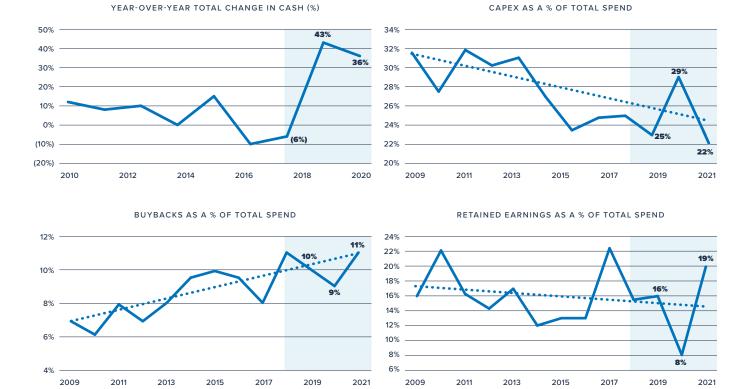


Chart 16: In 2021, Companies Were Not Positioned to Weather Long-term Challenges

Looking Ahead

Raising New Questions

As we enter a period of inflation not seen since the 1970s, along with materially higher interest rates than savers are accustomed to, where will investment flow?

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

Fixed income has not been a diversifier for equity risk in portfolios, so how will investors balance equity risk going forward? What does the portfolio of the future look like? Increased allocations to alternatives mean more illiquidity in portfolios. Are investors testing the limits of illiquidity in their portfolios, and how do they manage illiquidity during times of market stress? On the other hand, are companies who hold cash prioritizing short-term security or building long-term resilience in their businesses?

More broadly, as investment horizons and asset allocation behaviors differ across countries, and are there lessons to be learned from digging deeper into what might be contributing to those differences? Longer investor time horizons should alleviate short-term pressures on corporations, but corporate time horizons and C-suite tenure continue to decline. What is the primary source of short-term pressure on a company today? As corporate investment time horizons shorten and equity time horizons lengthen, their investment horizons could converge in the next few years. Could matched investment horizon alleviate much of the short-term pressure in the capital markets today?

2022 Trends: Inflation, Volatility, and Geopolitics

The data presented in this report on investor time horizons, corporate uses of capital, and asset allocation of institutional investors is presented through calendar year end 2021. At the start of 2022, markets rolled over and sentiments shifted rapidly, with inflation quickly igniting in global markets. Geopolitics also contributed to greater market turbulence, with higher volatility in financial markets and currencies. These trends will affect long-term investment flows in the future, particularly in terms of household wealth, asset allocation of institutional investors, corporate uses of capital, and investment time horizons.

Russia's invasion of Ukraine raised geopolitical tensions and further disrupted energy markets, food security, and global supply chains. Energy, in particular, has been acutely affected across the globe as oil and gas supplies become constrained in the widening geopolitical context. At the same time, global supply chains are undergoing a reevaluation, with reliability and resilience gaining new attention. Companies are facing difficult choices, balancing cost with reliability of inputs – this will be something to monitor in future data on corporate uses of capital

Cross border flows also became volatile with Russia's invasion of Ukraine and geopolitical tensions in Asia. In early 2022, the all-world average turbulence reached its 96th percentile, indicating it was at nearly its highest level in the past five years. Steering through this environment is proving challenging but may present opportunities for active investors. Investment strategies that worked well in recent years may cease to be effective. Though it is too early to determine the impact of these events on investment time horizons, periods of significant stress often signal changes in investment behaviors and patterns. Watching future allocations to active versus passive investments, and in private markets may indicate how investors are reacting – if at all – to the volatility.





Source: State Street Insights

MONETARY POLICY, INFLATION, AND IMPLICATIONS FOR LONG-TERM INVESTORS IN THE FACE OF VOLATILITY

With policy interest rates already at historic lows, central banks increasingly turned to unconventional monetary policies like quantitative easing and negative interest rates during the Covid-19 crisis, in order to blunt economic shocks and stave off recession. Many countries deployed aggressive fiscal stimulus as well. As markets quickly moved to recover in 2021, economies risked overheating with combined monetary and fiscal stimulus driving strong consumption and rising asset prices. Combined with the Russian invasion of Ukraine, the result has been rocketing inflation, particularly in food and energy, gripping markets with astonishing celerity. Many investors in developed markets have not experienced high inflation in decades, contributing to its surprise.

At publication, inflationary pressures still appear to be strong and more broad-based and entrenched than most expected. Central banks have been forced to reverse course from pandemic lows and raise interest rates. As a result, global markets are likely to face further volatility, resulting in slowing GDP growth and potential recession. These trends could impact household wealth significantly, especially in those regions where wealth is tied up in stock markets, or if prices decline in real estate.

Conclusion

This edition of *FCLTCompass* reports on investment behavior of market participants in the midst of rising inflation, geopolitical risk, and volatility – and the influence that behavior has on investment time horizons. Ultimately, investment horizons declined for all market segments in 2021, with household consumption rising while inflation mounted, and companies choosing to buy back stock with cash.

In the aftermath of the pandemic, disruptions continue to prompt investors and companies to exercise caution. What happens next will be pivotal for shaping the trajectory of capital markets. Will companies commit to their long-term strategies? Can investors hold steadfast on their goals for the future? And perhaps most importantly, can these goals be achieved in an equitable way, inclusive of the global population striving to build a sustainable and prosperous economy?

Our analysis suggests that the gaps, trends, and opportunities highlighted present a chance to think critically about how we can navigate our way forward and rewire capital markets for the benefit of savers and communities – the goal of FCLTGlobal.

Asset Flows

2020 Asset Flows PUBLIC COMPANY ALLOCATIONS SOURCES PUBLIC COMPANY USES OF CAPITAL SAVERS OF CAPITAL OF CAPITAL \$34,172 \$34,172 Capital \$1,937 Expenditures Cash \$419 \$35.798 \$1,138 \$23,696 \$52 \$18 \$455 R&D Households \$4,900 \$227.131 \$23,696 Active \$105,434 \$4,818 Equities \$381 Acquisitions \$30,990 \$1,948 \$443 \$58.930 \$86 \$700 Dividends \$4,900 \$419 Indexed \$4,818 Equities \$984 \$984 \$6,279 \$315 \$6,836 Sources Buybacks \$55 of Capital \$432 \$398 (gross) \$6,946 \$24 \$5,598 \$6,836 \$1,138 Fixed \$12,521 Income \$1,948 \$492 Change in \$19,891 Insurance \$28 \$315 Intangibles \$42 \$19,012 \$12,521 \$3,089 \$52 \$105,434 Interest Real \$622 Sovereign Expense \$443 Estate Wealth Funds \$105,849 \$55 \$398 \$492 \$18 \$120 Income \$856 Taxes \$18 \$58,930 \$86 Other Endowments \$24 \$5,598 Investments* Change in \$67,900 \$3,089 \$42 \$1,435 Retained Earnings \$18 \$120 \$162 \$162

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.

2021 As	set F	lows			PUBLIC COMPANY		
SAVERS			ALLOCATI OF CAPITA		SOURCES OF CAPITAL		C COMPANY DF CAPITAL
	\$71,525		\$71,525	Cash \$74,211		\$2,579	Capital Expenditures
	\$74,863		\$1,709 \$98 \$28			\$957	R&D
Households \$451,382	\$20,464		\$74,863			<i>400</i>	
	\$198,959		\$7,773 \$4,046	Active Equities \$89,454		\$954	Acquisitions
	\$85,571		\$2,572 \$199				
	\$851 \$7,773		\$20,464	Indexed		\$1,527	Dividends
Pensions \$30,829	\$4,452 \$12,438 \$1,232		\$4,452 \$883 \$379	Equities \$26,252	Sources of Capital \$11,500	\$1,246	Buybacks (gross)
	\$4,083		\$74	 			
Insurance \$29,815	\$1,709 \$4,046 \$883 \$18,144		\$12,438 \$18,144 \$1,252 \$56	Fixed Income \$31,890		\$85	Change in Intangibles
	\$5,034 \$98		\$198,959	Deel		\$755	Interest
Sovereign Wealth Funds	\$98 \$2,572 \$379		\$1,232	Real Estate \$200,226		\$700	Expense
\$6,275	\$1,252 \$1,974		\$35			\$1,197	Income Taxes
	\$28 \$199		\$85,571				
Endowments	\$74		\$1.083	Other			

2021 Asset Flows

Endowments

\$74

\$56

\$35

\$428

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=\$1,045; Investment fund shares/units, mutual funds and unit trust=\$11,314; Alternatives=\$554; Hedge Funds=\$281; Commodities=\$25; Private Debt=\$31; Securities=\$0; Other=\$83,839.

\$4,083

\$5,034

\$1,974

\$428

Investments* \$97,089

\$2,230

Change in

Retained Earnings

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, our 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: (1) individual households and (2) institutional asset owners.

Individual households:

- Household assets: We divide into cash and checking accounts, savings/401(k) accounts, equities, and owneroccupied real estate and then calculate an asset-weighted investment horizon (**10 years 10 months** in 2021).
 - 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 intention for future gain.
 - Savings/401(k) accounts: We calculate the investment horizon of these assets as the difference between the average life expectancy of a country and the average age of its working population, based on data from the Central Intelligence Agency's *World Factbook*.⁵ Exact investment horizons vary across countries,⁶ 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 investment horizons 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.⁷

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.⁸
 - Insurance companies: Insurance companies are assumed to have investment horizons of **14 years**. As it
 is difficult to separate and identify the investment horizon or average contract life of the many branches
 of insurance, we took a blended average number of 14 years from the European Central Bank.⁹ 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 investment horizons of **20 years**, based on typical language included in governance documents. A sample of annual reports from sovereign wealth funds cited investment horizons of anywhere from 10 to 75 years.
- Endowments and foundations: These assets are assumed to have investment horizons of **20 years**. While some endowments and foundations are assumed to be perpetual, we believe the investment horizon to be close to 20 years based on the typical language included in governance documents. 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 <u>research@fcltglobal.org</u>.

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 as listed above for saver groups cash is a liquid asset with very little expectation for 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 allow 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.¹⁰ 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 24 countries. Funds with these geographic regions (i.e., pan-European, Asia-Pacific) were prorated based on the size of each country's stock market. For example, in 2021 the Asia-Pacific fund's assets and investment horizons were allocated as follows: 66 percent to China, 12 percent to Japan, ten percent to South Korea, four percent to India, two percent to Australia, and less than one percent each to Malaysia, 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.¹¹ We used the same methodology
 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.¹² 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 2021 in the Asia-Pacific region, 51 percent was allocated to China, 14 percent to Japan, nine percent to India, five percent to South Korea, four percent to Australia, and one percent each to Malaysia, New Zealand, and Singapore. 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 **6.7 years**, representing a weighted average of the residential and commercial real estate markets for investors. We relied on two US sources: (1) the same seven-year number from LendingTree¹³ that was used for residential real estate and (2) six years for commercial real estate from a Real Estate Research Institute academic study.¹⁴ Finally, we applied a 2:1 residential-to-commercial weighting based on the relative market size (commercial versus residential) for investors.¹⁵
- **Private equity:** These assets are assumed to have an investment horizon of **5.3 years**, taken from a recent McKinsey study using Preqin data.¹⁶
- Hedge funds: Hedge funds are to have an investment horizon of two years, proxied based on a Statista finding that the average maximum lockup period accepted by selected hedge fund investors ranged from 20 to 33 months.¹⁷
- Commodities: Commodities are assumed to have an investment horizon of **0.5 year**,¹⁸ proxied using the average tenor from a basket of commodities on the UBS Bloomberg Constant Maturity Commodity Index.¹⁹
- Infrastructure: Infrastructure is to have an investment horizon of **7.5 years**, taken as the midpoint from BlackRock's eFront report, which states that "infrastructure funds are created for 13 to 15 years and their average holding periods are **seven to eight years**."²⁰

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 <u>research@fcltglobal.org</u>.

CORPORATE USES OF CAPITAL

Corporate uses of capital include CapEx, R&D, acquisitions, intangibles, interest expense, taxes, gross buybacks, dividends and retained earnings, many of which are found on the expenses section of a corporate balance sheet. We have taken an 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 **five years three months** in 2021.

• CapEx: The investment horizon of capex is assumed to be **between five and 15 years**, depending on industry. While depreciation schedules would have provided the best estimate, high-quality data was not available. Instead, we proxied the investment horizon by sampling corporate annual reports from different sectors and countries and estimated the sectors' allocations to common fixed assets such as land, machinery, and buildings to create a blended average asset life for each sector.²¹

- R&D: R&D is assumed to have an investment horizon of **between three and 11 years**, depending on industry. We proxied the investment horizon of R&D investment by sampling selected corporate annual reports across various industries and countries. We then looked at language describing the average life cycle of a product from concept to market (e.g., every generation of iPhone takes three years from concept to market).²²
- 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, like brands and patents, vary greatly depending on country and sector, and that reports mentioning the average life of a brand can suffer from survivorship bias (i.e., brands that become household names are few and far between, but those that do can last for more than 100 years). To account for this variation, we have proxied the average life of intangibles to equate to the average life of a public company, 18 years according to McKinsey.²³
- 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 to have an investment horizon of **4.7 years**. While retained earnings are not, strictly speaking, a "use of cash," some of our Members have likened this item to a rainy day savings fund. Consequently, we sought to answer the question of how many years of a company's bottom line it would take to accumulate its current amount of retained earnings. We proxied the answer to that question as retained earnings divided by net income, to approximate a corporate savings rate.

CORPORATE SOURCES OF CAPITAL

We proxied investment horizons for corporate sources of capital by using a ratio based on average corporate debt to equity. This approach resulted in an average investment horizon of **four years, two months** in 2021.

- **Debt issuance:** Debt issuance is assumed to have an investment horizon of **five years** in 2021. 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 \$120 million 10-year note in 2021 and a \$80 million 10-year note in 2016, then its weighted average maturity is eight years (120/200 * 10 + 80/200 * 5).
- Equity issuance: Equity issuance is assumed to have an investment horizon of three years, ten months, taken from the blended public equity number in the Asset Class Allocations section above.

In the future we seek to track and assign investment horizons to other corporate sources of capital, including (but not limited to) divestitures, revenue, and net income.

Data Collection

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

SAVERS

- Households: Data from Credit Suisse's Global Wealth Report.²⁴
- **Pensions:** Total asset and allocation data for OECD countries from OECD's Funded Pension Statistics data set.²⁵ Assets and allocation for Japanese pensions proxied using a weighted average of Government Pension Investment Fund²⁶ and Pension Fund Association²⁷ assets, taken from their respective annual reports.
- Insurance companies: Total asset and allocation data for OECD countries from OECD's Institutional Investors' Assets and Liabilities data set.²⁸ Assets and allocation for Indian insurance companies from Reserve Bank of India.²⁹ Assets for Brazilian insurance companies from IMF,³⁰ allocation from ANBIMA.³¹ Assets and allocation for China (including SARs) insurance companies from the China Banking and Insurance Regulatory Commission.³² Assets and allocation for United Kingdom insurance companies from the Association of British Insurers.³³
- Sovereign wealth funds: Data is from the IFSWF. Additional supplementary quarterly data is taken from individual SWF websites.
- Endowments: Total asset and allocation data from historical endowment study data collected by the National Association of College and University Business Officers (NACUBO).³⁴
- Foundations: Total asset and allocation data available only for 2018. Data from Harvard Kennedy School's Global Philanthropy Report.³⁵

ASSET CLASS ALLOCATIONS

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

CORPORATE (PUBLIC EQUITIES)

Data from FactSet and the MSCI All Country World Index (ACWI) constituents.³⁶

Additional Assumptions and Considerations

- Exchange rates: All exchange rates are from the Federal Reserve Economic Data (FRED) database.³⁷ 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
 - 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 2020 French pensions, an equal weighted average allocation of Germany, Italy, Netherlands, Norway, Spain, Sweden, Switzerland, and the UK (France's regional neighbors) would be used.

Note that OECD pensions data for 2021 was not available at the time this report was published, so 2020 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, blank fields for the SWF 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 lack thereof) of high-quality and complete global data sets. As a result, our data is currently not detailed enough to conduct further in-depth analysis, especially for households, which own the majority of savers' assets. As a richer universe of data or a broader array of methodologies comes to light and becomes available, it will be integrated into *FCLTCompass* as appropriate.

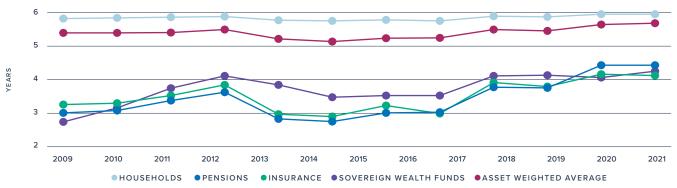
Country Analysis and Trends, 2009–2021³⁸

AUSTRALIA

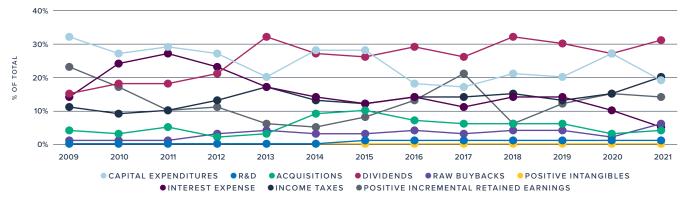
Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Households	\$6,984	\$7,579	\$8,137	\$8,924	\$8,266	\$8,219	\$7,942	\$8,578	\$9,848	\$9,410	\$9,669	\$11,231	\$11,374
Pensions	\$839	\$987	\$1,397	\$1,383	\$1,441	\$1,635	\$1,475	\$1,492	\$1,797	\$1,883	\$1,813	\$1,813	\$1,794
Insurance	\$387	\$449	\$422	\$471	\$436	\$424	\$391	\$344	\$387	\$340	\$336	\$308	\$315
Sovereign Wealth Funds	\$57	\$67	\$75	\$85	\$93	\$99	\$127	\$134	\$150	\$157	\$161	\$162	\$146
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	\$13,630

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cash	\$692	\$756	\$925	\$1,038	\$982	\$1,013	\$969	\$1,033	\$1,177	\$1,108	\$1,092	\$1,299	\$1,513
Active Equities	\$814	\$909	\$973	\$1,048	\$1,033	\$1,151	\$1,089	\$1,325	\$1,544	\$1,559	\$1,460	\$1,472	\$1,626
Indexed Equities	\$55	\$97	\$147	\$137	\$144	\$76	\$72	\$111	\$143	\$155	\$307	\$372	\$316
Fixed Income	\$151	\$171	\$193	\$216	\$183	\$191	\$178	\$321	\$370	\$382	\$391	\$390	\$377
Private Equity	\$1	\$2	\$4	\$6	\$7	\$9	\$10	\$11	\$13	\$17	\$17	\$16	\$26
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	\$6,288
Investment funds, mutual funds, etc.	\$570	\$658	\$835	\$811	\$821	\$907	\$831	\$111	\$132	\$114	\$99	\$46	\$55
Alternatives	\$6	\$10	\$15	\$14	\$14	\$14	\$11	\$14	\$16	\$16	\$16	\$17	\$21
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	\$3,406

Investment Horizon



Uses of Capital



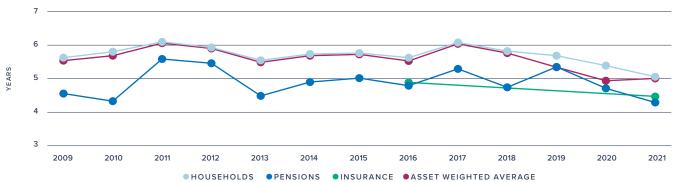


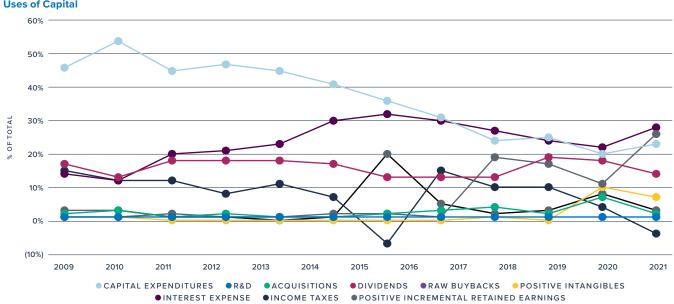
BRAZIL

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	20201
Households	\$2,868	\$3,681	\$3,946	\$4,152	\$4,328	\$4,126	\$3,329	\$3,416	\$4,459	\$3,783	\$4,117	\$3,347	\$3,560
Pensions	\$279	\$320	\$308	\$315	\$274	\$250	\$175	\$232	\$243	\$220		\$196	\$196
Insurance								\$234					\$35
Foundations										<\$1			
Total	\$3,147	\$4,001	\$4,255	\$4,467	\$4,602	\$4,376	\$3,503	\$3,882	\$4,701	\$4,004	\$4,117	\$3,543	\$3,791

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cash	\$186	\$215	\$275	\$311	\$300	\$280	\$253	\$243	\$294	\$236	\$254	\$227	\$377
Active Equities	\$403	\$455	\$476	\$573	\$613	\$573	\$456	\$458	\$600	\$454	\$593	\$448	\$657
Indexed Equities	\$28	\$45	\$63	\$75	\$109	\$124	\$107	\$118	\$172	\$144	\$135	\$208	\$104
Fixed Income	\$159	\$177	\$173	\$177	\$153	\$144	\$112	\$367	\$157	\$142	\$182	\$106	\$135
Private Equity	\$4	\$6	\$8	\$8	\$8	\$10	\$4	\$5	\$3	\$2	\$2	\$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	\$1,680	\$1,781
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	\$873	\$736

Investment Horizon





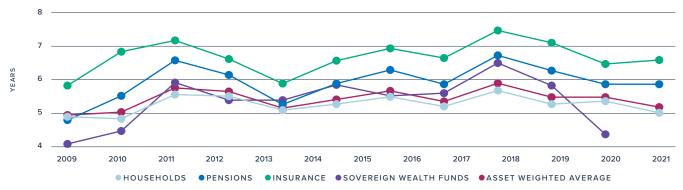


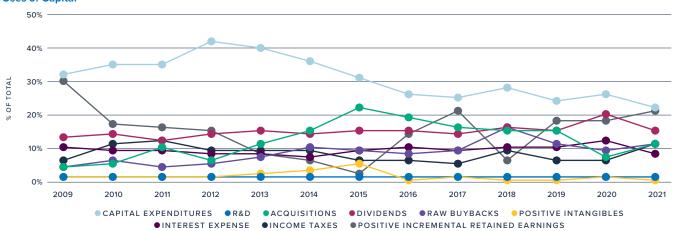
CANADA

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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	\$12,988
Pensions	\$876	\$1,054	\$1,076	\$1,200	\$1,261	\$1,298	\$1,196	\$1,289	\$1,470	\$1,373	\$1,597	\$1,597	\$1,729
Insurance	\$528	\$607	\$604	\$671	\$658	\$648	\$554	\$613	\$672	\$593	\$688	\$674	\$807
Sovereign Wealth Funds	\$13	\$15	\$16	\$16	\$17	\$16	\$14	\$14	\$13	\$14	\$14	\$13	\$14
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	\$15,538

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cash	\$905	\$1,023	\$1,083	\$1,177	\$1,144	\$1,095	\$969	\$1,079	\$1,191	\$1,145	\$1,271	\$1,236	\$2,241
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	\$3,662
Indexed Equities	\$111	\$172	\$217	\$242	\$341	\$408	\$366	\$463	\$594	\$599	\$458	\$373	\$625
Fixed Income	\$648	\$753	\$799	\$862	\$824	\$846	\$740	\$787	\$834	\$768	\$873	\$870	\$906
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	\$6,283
Investment funds, mutual funds, etc.	\$102	\$127	\$127	\$142	\$156	\$164	\$144	\$162	\$189	\$163	\$199	\$193	\$241
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	\$1,563

Investment Horizon





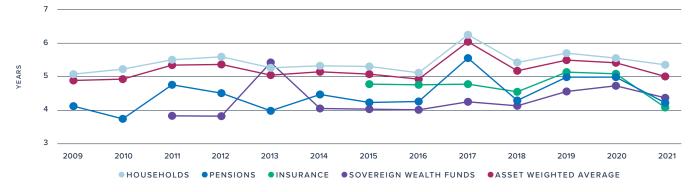
Uses of Capital

CHILE

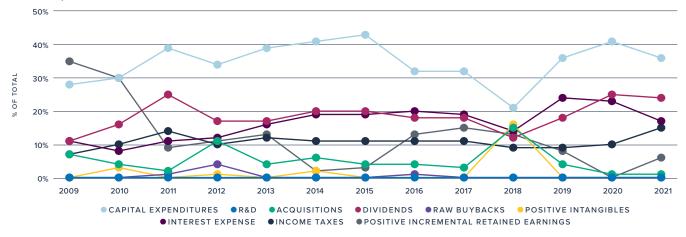
Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Households	\$501	\$596	\$612	\$729	\$746	\$701	\$701	\$759	\$910	\$894	\$898	\$888	\$942
Pensions	\$118	\$148	\$135	\$162	\$163	\$165	\$155	\$174	\$211	\$193	\$217	\$208	\$208
Insurance							\$40	\$46	\$54	\$53	\$157	\$57	\$163
Sovereign Wealth Funds			\$13	\$15	\$15	\$15	\$14	\$14	\$15	\$24	\$23	\$19	\$10
Total	\$619	\$745	\$760	\$906	\$925	\$881	\$910	\$994	\$1,190	\$1,164	\$1,294	\$1,172	\$1,322

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cash	\$31	\$33	\$46	\$57	\$55	\$53	\$54	\$61	\$71	\$69	\$69	\$91	\$90
Active Equities	\$134	\$157	\$147	\$172	\$174	\$172	\$156	\$162	\$192	\$184	\$157	\$168	\$180
Indexed Equities	\$15	\$24	\$23	\$31	\$35	\$41	\$41	\$47	\$61	\$61	\$57	\$48	\$34
Fixed Income	\$59	\$75	\$93	\$110	\$118	\$115	\$144	\$172	\$188	\$181	\$219	\$186	\$236
Real Estate	\$215	\$282	\$280	\$331	\$345	\$292	\$316	\$324	\$402	\$396	\$404	\$405	\$460
Investment funds, mutual funds, etc.							\$4	\$5	\$7	\$7	\$95	\$10	\$33
Other Investments	\$165	\$173	\$176	\$212	\$212	\$216	\$202	\$231	\$280	\$267	\$292	\$264	\$290

Investment Horizon



Uses of Capital



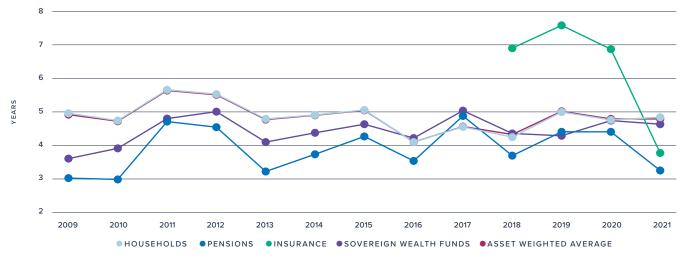


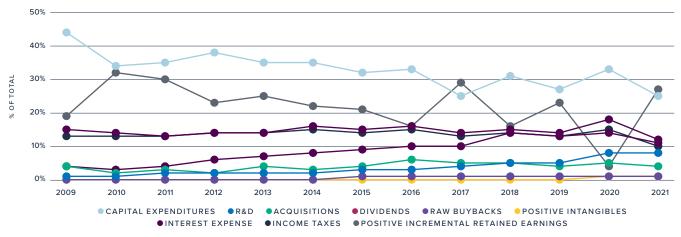
CHINA INCLUDING SARs

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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	\$89,804
Pensions	\$104	\$120	\$136	\$167	\$202	\$236	\$262	\$282	\$346	\$364	\$424	\$424	\$534
Insurance										\$2,330	\$1,153	\$1,271	\$3,377
Sovereign Wealth Funds	\$610	\$711	\$802	\$934	\$1,044	\$1,153	\$1,255	\$1,280	\$1,457	\$1,458	\$1,583	\$1,802	\$1,692
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	\$95,407

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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	\$20,025
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	\$13,663
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	\$1,976
Fixed Income	\$326	\$362	\$373	\$414	\$424	\$436	\$493	\$503	\$577	\$1,725	\$1,679	\$1,959	\$1,736
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	\$52,839
Alternatives	\$20	\$86						\$303	\$370	\$415	\$441	\$526	\$516
Hedge Funds			\$58	\$73	\$77	\$86	\$103						
Other Alternatives			\$149	\$186	\$184	\$196	\$180						\$516
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	\$4,127

Investment Horizon





FRANCE

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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	\$17,672
Pensions	\$4	\$5	\$6	\$9	\$12	\$13	\$13	\$15	\$19	\$19	\$22	\$22	\$72
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	\$3,469
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	\$21,213

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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	\$2,756
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	\$2,399
Indexed Equities	\$114	\$151	\$182	\$201	\$292	\$316	\$341	\$346	\$470	\$506	\$467	\$407	\$348
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	\$2,096
Private Equity	<\$1	<\$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	\$9,636
Investment funds, mutual funds, etc.	\$496	\$466	\$408	\$462	\$539	\$522	\$503	\$586	\$751	\$697	\$759	\$863	\$897
Hedge Funds	<\$1	<\$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	\$3,117



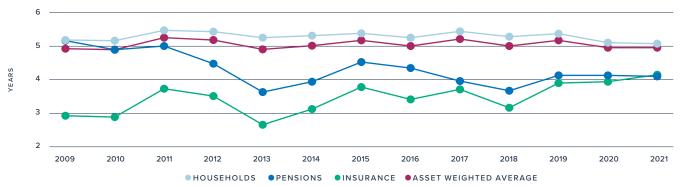
Uses of Capital 50% — 40% -30% % OF TOTAL 20% 10% 0% ____ 2009 2021 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 ● CAPITAL EXPENDITURES ● R&D ● ACQUISITIONS ● DIVIDENDS ● RAW BUYBACKS ● POSITIVE INTANGIBLES ●INTEREST EXPENSE ●INCOME TAXES ●POSITIVE INCREMENTAL RETAINED EARNINGS

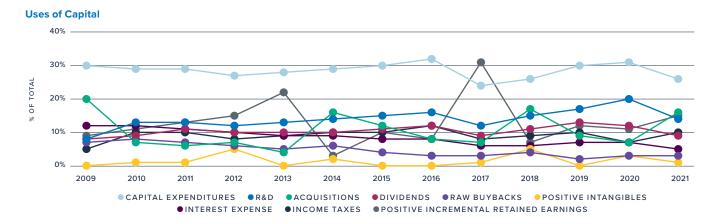


GERMANY

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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	\$21,547
Pensions	\$188	\$187	\$193	\$221	\$237	\$236	\$220	\$227	\$271	\$268	\$291	\$291	\$338
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	\$2,853
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	\$24,739

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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	\$4,289
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	\$2,072
Indexed Equities	\$92	\$121	\$144	\$155	\$224	\$247	\$258	\$289	\$389	\$407	\$436	\$382	\$305
Fixed Income	\$786	\$775	\$781	\$894	\$996	\$991	\$919	\$925	\$1,097	\$1,089	\$1,127	\$1,267	\$1,206
Private Equity	<\$1	<\$1	<\$1	<\$1	<\$1	<\$1	\$1	\$1	\$2	\$2	\$3	\$3	\$4
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	\$12,249
Investment funds, mutual funds, etc.	\$399	\$439	\$449	\$531	\$642	\$647	\$623	\$651	\$782	\$722	\$817	\$950	\$1,016
Hedge Funds	\$1	\$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	\$3,598





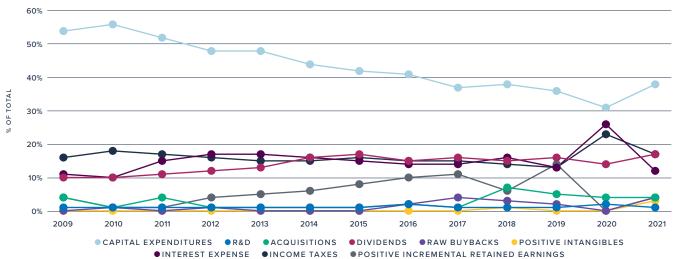


Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Households	\$5,413	\$6,371	\$6,055	\$6,897	\$7,324	\$8,128	\$9,467	\$10,450	\$13,511	\$13,034	\$13,779	\$13,969	\$10,679
Pensions		\$3	\$3	\$5	\$7	\$11	\$16	\$23				\$75	\$75
Insurance	\$158	\$201	\$230	\$226	\$231	\$248	\$267	\$287	\$336	\$357	\$378		\$443
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	\$14,045	\$11,197

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cash	\$488	\$580	\$672	\$763	\$822	\$838	\$979	\$1,177	\$1,554	\$1,442	\$1,442	\$1,344	\$1,970
Active Equities	\$174	\$222	\$242	\$298	\$388	\$429	\$514	\$652	\$888	\$810	\$693	\$689	\$840
Indexed Equities	\$12	\$16	\$17	\$21	\$27	\$30	\$36	\$46	\$62	\$57	\$126	\$82	\$124
Fixed Income	\$10	\$11	\$10	\$10	\$9	\$11	\$20	\$25	\$5	\$4	\$4		\$53
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	\$6,891
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	\$1,297

Investment Horizon



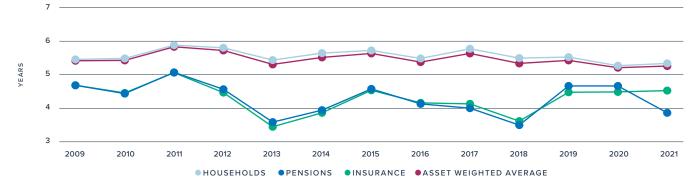


2014 2016 \$13,839 \$12,702 \$12,346 \$12,825 \$13,292 \$12,714 \$11,463 \$11,079 \$12,832 \$12,512 \$11,953 \$13,087 \$13,801 Households \$198 Pensions \$90 \$95 \$99 \$116 \$132 \$131 \$122 \$130 \$157 \$153 \$169 \$169 Insurance \$768 \$685 \$651 \$694 \$795 \$800 \$816 \$864 \$1,026 \$959 \$1,039 \$1,111 \$1,220 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 \$15,219

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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	\$2,105
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	\$896
Indexed Equities	\$106	\$129	\$149	\$166	\$275	\$305	\$319	\$335	\$460	\$462	\$447	\$440	\$140
Fixed Income	\$596	\$547	\$526	\$565	\$643	\$652	\$643	\$662	\$769	\$724	\$779	\$832	\$852
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	\$7,658
Investment funds, mutual funds, etc.	\$94	\$95	\$92	\$105	\$122	\$139	\$161	\$179	\$220	\$212	\$252	\$270	\$344
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	\$3,224

Investment Horizon

ITALY



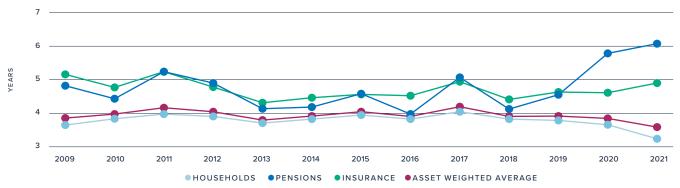


JAPAN

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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	\$31,206
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	\$1,955
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	\$4,676
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	\$37,837

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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	\$12,342
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	\$3,693
Indexed Equities	\$152	\$215	\$296	\$317	\$457	\$540	\$572	\$627	\$806	\$863	\$1,043	\$997	\$1,279
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	\$3,703
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	\$9,837
Investment funds, mutual funds, etc.	\$167	\$189	\$176	\$181	\$163	\$129	\$121	\$130	\$140	\$141	\$160	\$162	\$171
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	\$7,510

Investment Horizon



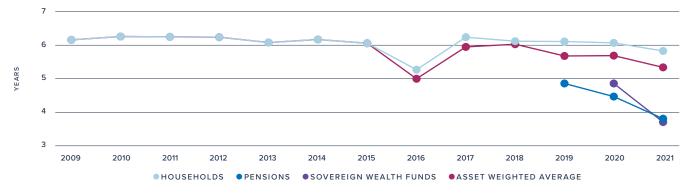


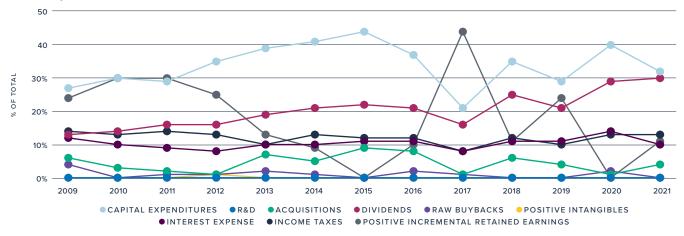


Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Households	\$375	\$479	\$493	\$587	\$628	\$634	\$610	\$632	\$741	\$763	\$658	\$816	\$849
Pensions							<\$1	<\$1	<\$1	<\$1	\$224	\$238	\$244
Sovereign Wealth Funds								\$35	\$37	\$34	\$18	\$23	\$31
Total	\$375	\$479	\$493	\$587	\$628	\$634	\$610	\$667	\$778	\$797	\$900	\$1,077	\$1,124

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cash	\$29	\$32	\$38	\$47	\$56	\$54	\$58	\$62	\$70	\$69	\$69	\$98	\$107
Active Equities	\$17	\$18	\$18	\$22	\$25	\$22	\$21	\$20	\$24	\$42	\$89	\$117	\$150
Indexed Equities	\$2	\$3	\$3	\$4	\$5	\$5	\$5	\$6	\$8	\$14	\$32	\$31	\$22
Fixed Income										\$3	\$114	\$111	\$112
Private Equity										\$7	\$4	\$5	\$7
Real Estate	\$293	\$386	\$388	\$457	\$474	\$486	\$453	\$466	\$547	\$568	\$498	\$585	\$574
Alternatives												\$13	\$15
Other Investments	\$35	\$40	\$46	\$57	\$68	\$67	\$73	\$78	\$93	\$94	\$91	\$117	\$138

Investment Horizon





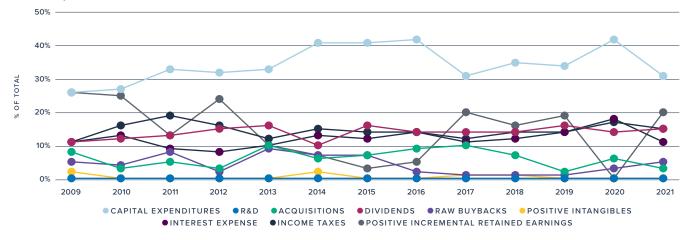
Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Households	\$2,050	\$1,795	\$1,782	\$2,119	\$2,310	\$2,306	\$2,634	\$2,612	\$2,723	\$2,806	\$3,047	\$3,727	\$4,205
Pensions	\$108	\$135	\$132	\$169	\$181	\$182	\$164	\$146	\$174	\$182	\$233	\$236	\$236
Insurance	\$34		\$42		\$55	\$54	\$52	\$32	\$36	\$39	<\$1	<\$1	
Sovereign Wealth Funds												<\$1	
Total	\$2,192	\$1,929	\$1,956	\$2,288	\$2,546	\$2,542	\$2,850	\$2,790	\$2,933	\$3,026	\$3,280	\$3,963	\$4,441

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cash	\$169	\$90	\$90	\$109	\$124	\$7	\$2	\$1	\$1	\$2	\$234	\$241	\$267
Active Equities	\$377	\$201	\$202	\$234	\$264	\$36	\$29	\$23	\$29	\$25	\$411	\$512	\$629
Indexed Equities	\$43	\$31	\$32	\$43	\$54	\$8	\$8	\$7	\$9	\$8	\$149	\$146	\$96
Fixed Income	\$121	\$147	\$145	\$176	\$184	\$186	\$178	\$144	\$167	\$181	\$181	\$184	\$184
Real Estate	\$1,146	\$1,325	\$1,309	\$1,580	\$1,697	\$1,698	\$1,582	\$1,550	\$1,518	\$1,612	\$1,832	\$2,352	\$2,679
Investment funds, mutual funds, etc.											\$32		
Other Investments	<\$1	\$1	<\$1	<\$1	<\$1	<\$1	<\$1	\$2	\$4	\$5	<\$1	\$528	\$585

Investment Horizon



Uses of Capital



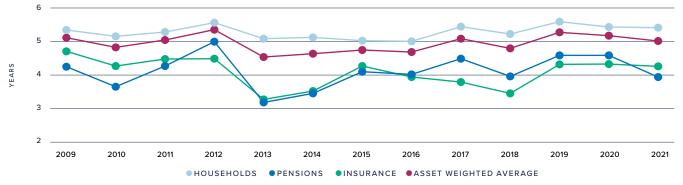
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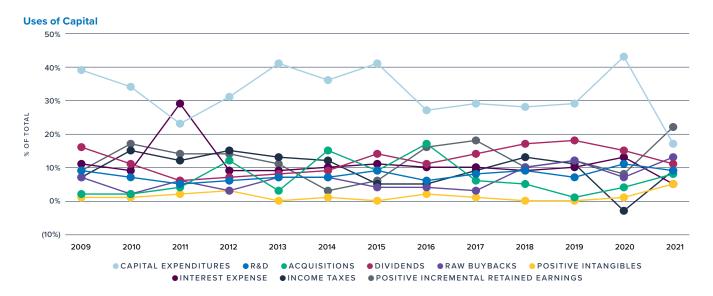


NETHERLANDS

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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	\$6,672
Pensions	\$979	\$1,016	\$1,056	\$1,229	\$1,335	\$1,282	\$1,266	\$1,361	\$1,631	\$1,536	\$1,770	\$1,770	\$2,089
Insurance	\$488	\$477	\$498	\$551	\$571	\$572	\$479	\$469	\$515	\$485	\$537	\$635	\$570
Sovereign Wealth Funds										\$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	\$9,331

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cash	\$542	\$542	\$549	\$597	\$608	\$527	\$473	\$477	\$571	\$559	\$574	\$681	\$730
Active Equities	\$689	\$714	\$717	\$742	\$835	\$771	\$728	\$674	\$788	\$702	\$795	\$861	\$1,007
Indexed Equities	\$70	\$90	\$58	\$105	\$117	\$139	\$137	\$151	\$202	\$180	\$223	\$229	\$217
Fixed Income	\$811	\$804	\$835	\$941	\$982	\$948	\$919	\$979	\$1,111	\$1,098	\$1,222	\$1,272	\$1,443
Real Estate			\$3	\$2	\$1	\$14	\$1	\$49	\$57	\$57	\$68	\$68	\$81
Investment funds, mutual funds, etc.	\$2,312	\$2,120	\$2,053	\$1,957	\$2,043	\$1,762	\$1,404	\$1,562	\$1,762	\$1,787	\$2,435	\$2,549	\$3,137
Other Investments	\$69	\$72	\$75	\$86	\$118	\$116	\$98	\$92	\$106	\$97	\$110	\$129	\$124

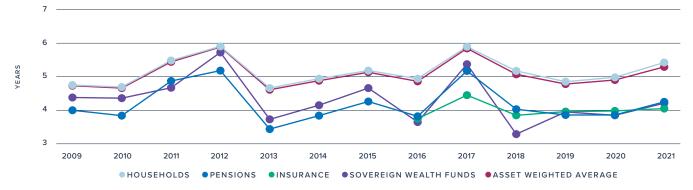






Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Households	\$746	\$766	\$832	\$934	\$1,008	\$1,025	\$996	\$1,118	\$1,184	\$1,174	\$1,342	\$1,414	\$1,432
Pensions	\$12	\$19	\$24	\$28	\$34	\$40	\$40	\$45	\$54	\$54	\$66	\$66	\$80
Insurance								\$10	\$10	\$11	\$10	\$11	\$12
Sovereign Wealth Funds	\$9	\$12	\$19	\$16	\$20	\$23	\$22	\$21	\$25	\$27	\$28	\$29	\$75
Total	\$767	\$798	\$875	\$978	\$1,062	\$1,089	\$1,058	\$1,194	\$1,273	\$1,266	\$1,447	\$1,520	\$1,599

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cash	\$71	\$75	\$86	\$98	\$107	\$110	\$107	\$118	\$128	\$125	\$150	\$153	\$98
Active Equities	\$271	\$282	\$302	\$333	\$346	\$349	\$323	\$339	\$341	\$410	\$503	\$506	\$391
Indexed Equities	\$37	\$45	\$54	\$61	\$70	\$81	\$87	\$97	\$115	\$48	\$63	\$70	\$60
Fixed Income	\$4	\$6	\$8	\$7	\$9	\$12	\$11	\$17	\$20	\$20	\$23	\$23	\$38
Private Equity			<\$1	<\$1	<\$1	<\$1	<\$1	<\$1	\$1	\$4	\$1	\$1	\$3
Real Estate	\$337	\$335	\$361	\$406	\$449	\$453	\$450	\$531	\$567	\$551	\$593	\$650	\$640
Investment funds, mutual funds, etc.	\$5	\$8	\$10	\$12	\$14	\$17	\$17	\$22	\$24	\$24	\$24	\$23	\$27
Other Alternatives	\$2	\$2	<\$1	<\$1	<\$1	<\$1	<\$1	<\$1	<\$1	\$2	\$1	\$2	\$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	\$338



Uses of Capital 60% -50% 40% % OF TOTAL 30% 20% 10% 0% -2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 CAPITAL EXPENDITURES
 • R&D
 • ACQUISITIONS
 • DIVIDENDS
 • RAW BUYBACKS
 • POSITIVE INTANGIBLES
 • INTEREST EXPENSE
 • INCOME TAXES
 • POSITIVE INCREMENTAL RETAINED EARNINGS

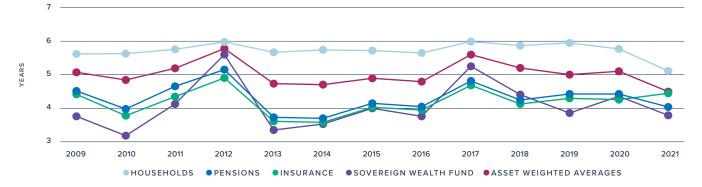


NORWAY

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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	\$1,686
Pensions	\$30	\$33	\$34	\$39	\$41	\$37	\$34	\$37	\$42	\$40	\$44	\$44	\$49
Insurance	\$155	\$166	\$173	\$203	\$204	\$184	\$165	\$180	\$204	\$196	\$215	\$232	\$247
Sovereign Wealth Funds	\$420	\$509	\$591	\$656	\$857	\$1,021	\$926	\$895	\$1,027	\$1,015	\$1,146	\$1,158	\$1,434
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	\$3,417

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cash	\$142	\$147	\$156	\$180	\$178	\$152	\$136	\$146	\$160	\$168	\$161	\$183	\$253
Active Equities	\$376	\$426	\$469	\$516	\$624	\$666	\$599	\$593	\$715	\$697	\$893	\$886	\$1,168
Indexed Equities	\$38	\$54	\$38	\$72	\$87	\$120	\$112	\$125	\$148	\$147	\$114	\$167	\$172
Fixed Income	\$269	\$304	\$358	\$385	\$456	\$485	\$431	\$415	\$437	\$431	\$425	\$412	\$496
Real Estate	\$763	\$860	\$892	\$950	\$992	\$909	\$776	\$814	\$967	\$1,020	\$1,037	\$1,022	\$917
Investment funds, mutual funds, etc.	\$20	\$27	\$33	\$41	\$45	\$55	\$50	\$56	\$67	\$64	\$75	\$85	\$96
Other Investments	\$235	\$245	\$248	\$286	\$283	\$247	\$225	\$245	\$275	\$280	\$279	\$312	\$315

Investment Horizon





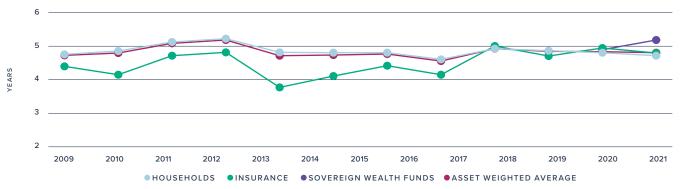


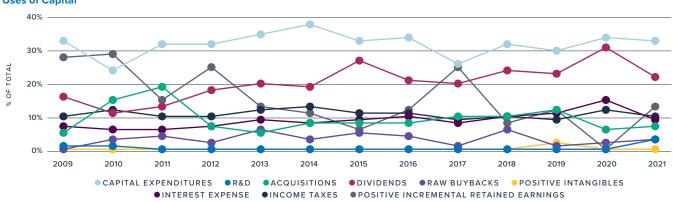
SINGAPORE

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Households	\$874	\$1,026	\$1,161	\$1,342	\$1,362	\$1,325	\$1,283	\$1,335	\$1,529	\$1,562	\$1,728	\$1,868	\$2,045
Insurance	\$88	\$102	\$118	\$129	\$132	\$145	\$142	\$153	\$174	\$190	\$217	\$249	\$268
Sovereign Wealth Funds											\$440	\$452	\$1,094
Total	\$962	\$1,127	\$1,279	\$1,471	\$1,494	\$1,470	\$1,425	\$1,488	\$1,703	\$1,752	\$2,385	\$2,569	\$3,407

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cash	\$167	\$188	\$223	\$255	\$266	\$267	\$267	\$283	\$319	\$322	\$362	\$398	\$426
Active Equities	\$116	\$131	\$124	\$148	\$151	\$147	\$128	\$130	\$155	\$156	\$313	\$292	\$658
Indexed Equities	\$16	\$19	\$20	\$24	\$26	\$28	\$28	\$29	\$45	\$47	\$72	\$73	\$96
Fixed Income	\$48	\$55	\$67	\$74	\$74	\$84	\$84	\$89	\$91	\$102	\$311	\$359	\$472
Private Equity											\$53	\$63	\$223
Real Estate	\$412	\$506	\$587	\$667	\$660	\$618	\$589	\$601	\$670	\$687	\$762	\$811	\$930
Other Investments	\$203	\$229	\$259	\$304	\$317	\$327	\$329	\$354	\$423	\$438	\$512	\$573	\$947

Investment Horizon





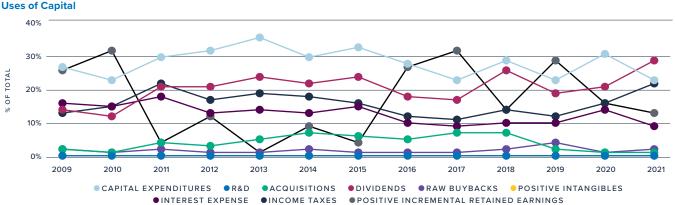


SOUTH AFRICA

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Households	\$904	\$996	\$931	\$1,010	\$930	\$921	\$720	\$854	\$1,040	\$943	\$929	\$911	\$927
Pensions	\$156	\$198	\$170	\$186	\$173	\$180	\$146	\$171	\$197	\$137	\$96	\$171	\$171
Insurance											\$128		\$229
Total	\$1,060	\$1,194	\$1,100	\$1,196	\$1,103	\$1,101	\$866	\$1,025	\$1,236	\$1,080	\$1,153	\$1,083	\$1,328

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cash	\$79	\$91	\$88	\$92	\$79	\$81	\$70	\$85	\$102	\$10	\$96	\$88	\$96
Active Equities	\$28	\$37	\$31	\$31	\$31	\$31	\$24	\$26	\$28	\$38	\$80	\$134	\$153
Indexed Equities	\$3	\$6	\$5	\$6	\$6	\$7	\$6	\$8	\$9	\$12	\$29	\$38	\$25
Fixed Income	\$85	\$104	\$97	\$108	\$101	\$104	\$83	\$98	\$115	\$60	\$44	\$208	\$127
Private Equity				<\$1	<\$1	<\$1	<\$1	\$1	\$1	\$1	\$1	\$3	\$1
Real Estate	\$352	\$370	\$340	\$352	\$315	\$312	\$249	\$296	\$347	\$331	\$331	\$324	\$355
Investment funds, mutual funds, etc.	\$16	\$22	\$22	\$25	\$25	\$28	\$19	\$27	\$32	\$4	\$32	\$58	\$155
Alternatives											\$4		
Hedge Funds				\$4	<\$1	\$2	\$1	\$1	<\$1	\$1	<\$1	\$1	<\$1
Private Debt													\$18
Other Investments	\$7	\$7	\$6	\$2	\$3	\$1	\$4	\$3	\$4	\$4	\$106	\$399	\$397





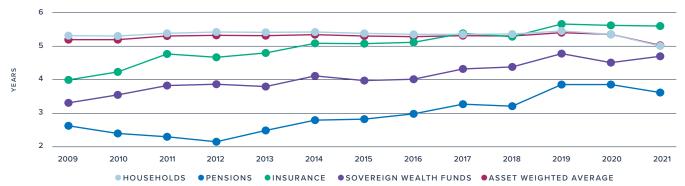


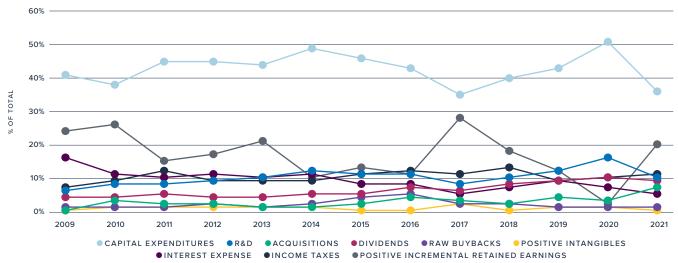
SOUTH KOREA

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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	\$11,911
Pensions	\$32	\$41	\$48	\$64	\$82	\$99	\$109	\$123	\$158	\$171	\$191	\$191	\$236
Insurance	\$395	\$471	\$520	\$657	\$732	\$790	\$806	\$859	\$1,048	\$1,048	\$1,086	\$1,219	\$1,174
Sovereign Wealth Funds	\$30	\$37	\$43	\$57	\$72	\$85	\$92	\$111	\$134	\$132	\$157	\$183	\$191
Total	\$5,509	\$6,293	\$6,558	\$7,559	\$8,030	\$8,310	\$8,345	\$8,627	\$10,448	\$10,259	\$11,093	\$12,427	\$13,511

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cash	\$812	\$956	\$998	\$1,126	\$1,198	\$1,238	\$1,255	\$1,322	\$1,590	\$1,658	\$1,658	\$1,899	\$2,345
Active Equities	\$422	\$477	\$426	\$483	\$505	\$517	\$544	\$528	\$653	\$611	\$697	\$952	\$1,306
Indexed Equities	\$51	\$77	\$74	\$91	\$101	\$102	\$103	\$125	\$205	\$193	\$219	\$215	\$190
Fixed Income	\$320	\$380	\$430	\$527	\$607	\$670	\$702	\$759	\$911	\$927	\$969	\$982	\$1,015
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	\$6,839
Investment funds, mutual funds, etc.	\$38	\$45	\$46	\$68	\$78	\$83	\$82	\$86	\$117	\$133	\$135	\$165	\$195
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	\$1,603

Investment Horizon

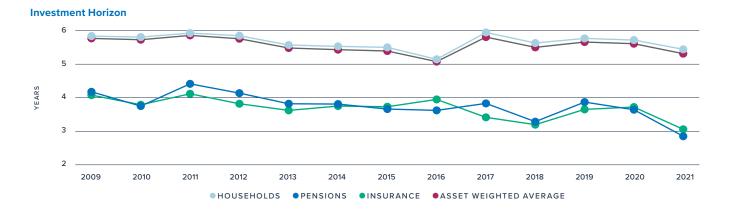






Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Households	\$10,832	\$9,933	\$9,948	\$9,233	\$9,063	\$7,490	\$7,015	\$7,032	\$8,517	\$8,509	\$8,666	\$9,514	\$9,314
Pensions	\$123	\$112	\$108	\$114	\$127	\$122	\$113	\$112	\$132	\$121	\$130	\$145	\$145
Insurance	\$333	\$306	\$308	\$323	\$341	\$341	\$324	\$312	\$359	\$347	\$357	\$392	\$360
Total	\$11,288	\$10,351	\$10,364	\$9,671	\$9,532	\$7,952	\$7,453	\$7,456	\$9,008	\$8,978	\$9,153	\$10,050	\$9,819

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cash	\$1,269	\$1,178	\$1,145	\$1,171	\$1,246	\$1,075	\$965	\$928	\$1,060	\$1,037	\$1,014	\$1,205	\$1,291
Active Equities	\$702	\$625	\$620	\$611	\$796	\$721	\$693	\$678	\$802	\$820	\$808	\$885	\$1,128
Indexed Equities	\$80	\$98	\$99	\$112	\$162	\$171	\$183	\$198	\$255	\$270	\$293	\$253	\$168
Fixed Income	\$302	\$273	\$276	\$301	\$319	\$325	\$311	\$306	\$346	\$337	\$548	\$399	\$366
Private Equity	<\$1		<\$1	<\$1	<\$1	<\$1	<\$1	<\$1	\$1	\$1	\$1	\$1	\$1
Real Estate	\$8,365	\$7,643	\$7,666	\$6,918	\$6,448	\$5,133	\$4,815	\$4,863	\$5,977	\$5,973	\$6,167	\$6,634	\$6,146
Investment funds, mutual funds, etc.	\$23	\$27	\$25	\$23	\$26	\$29	\$32	\$36	\$50	\$48	\$33	\$30	\$33
Alternatives													\$2
Hedge Funds												\$2	\$2
Commodities	\$19	\$24	\$29	\$28	\$31	\$36	\$37	\$36	\$40	\$43	\$30	\$23	\$23
Other Investments	\$546	\$506	\$532	\$534	\$537	\$497	\$453	\$446	\$517	\$491	\$509	\$641	\$683





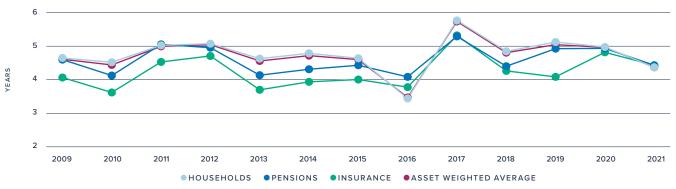


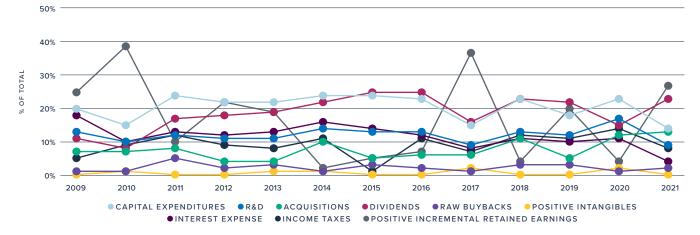
SWEDEN

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Households	\$1,775	\$1,908	\$2,002	\$2,202	\$2,385	\$2,182	\$2,216	\$2,233	\$2,648	\$2,497	\$2,530	\$3,220	\$3,556
Pensions	\$36	\$47	\$47	\$57	\$54	\$47	\$44	\$20	\$23	\$21	\$23	\$26	\$26
Insurance	\$134	\$154	\$147	\$168	\$178	\$170	\$161	\$157	\$188	\$168	\$190	\$229	\$262
Total	\$1,945	\$2,109	\$2,195	\$2,427	\$2,617	\$2,399	\$2,421	\$2,410	\$2,858	\$2,686	\$2,742	\$3,476	\$3,843

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cash	\$156	\$170	\$194	\$220	\$230	\$199	\$198	\$196	\$231	\$220	\$222	\$296	\$327
Active Equities	\$441	\$471	\$432	\$495	\$562	\$536	\$545	\$529	\$593	\$544	\$542	\$808	\$1,107
Indexed Equities	\$50	\$73	\$69	\$91	\$114	\$127	\$143	\$154	\$188	\$179	\$196	\$231	\$161
Fixed Income	\$82	\$88	\$94	\$103	\$96	\$83	\$73	\$58	\$66	\$62	\$56	\$68	\$61
Real Estate	\$745	\$779	\$835	\$890	\$926	\$800	\$825	\$845	\$1,016	\$954	\$964	\$1,072	\$981
Investment funds, mutual funds, etc.	\$45	\$60	\$52	\$69	\$80	\$77	\$78	\$70	\$90	\$80	\$101	\$119	\$141
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	\$54,095

Investment Horizon



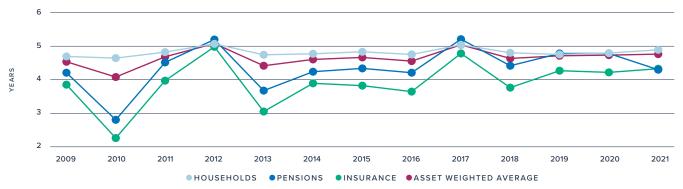


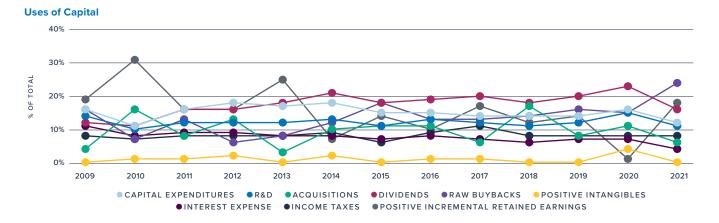


SWITZERLAND

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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	\$6,807
Pensions	\$581	\$661	\$665	\$734	\$808	\$786	\$794	\$811	\$917	\$893	\$1,037	\$1,037	\$1,208
Insurance	\$465	\$526	\$551	\$611	\$613	\$581	\$576	\$607	\$656	\$644	\$704	\$762	\$753
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	\$8,768

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cash	\$663	\$651	\$784	\$862	\$928	\$860	\$849	\$870	\$954	\$938	\$1,042	\$1,152	\$1,232
Active Equities	\$444	\$472	\$514	\$546	\$626	\$541	\$540	\$548	\$627	\$603	\$730	\$781	\$1,203
Indexed Equities	\$45	\$55	\$41	\$77	\$80	\$91	\$96	\$113	\$144	\$164	\$215	\$220	\$215
Fixed Income	\$449	\$500	\$509	\$550	\$562	\$576	\$552	\$565	\$608	\$589	\$650	\$669	\$725
Private Equity	\$5	\$6	\$7	\$8	\$10	\$10	\$11	\$12	\$15	\$16	\$18	\$18	\$24
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	\$3,427
Investment funds, mutual funds, etc.	\$82	\$98	\$103	\$113	\$124	\$135	\$144	\$150	\$162	\$159	\$188	\$205	\$194
Hedge Funds	\$16	\$17	\$17	\$17	\$18	\$17	\$18	\$18	\$21	\$17	\$17	\$17	\$19
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	\$1,730





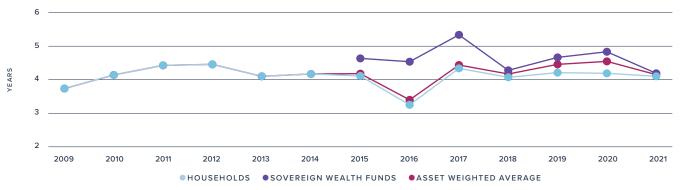


UNITED ARAB EMIRATES

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Households	\$1,047	\$1,024	\$852	\$811	\$930	\$982	\$886	\$932	\$1,057	\$1,051	\$1,070	\$1,006	\$1,006
Sovereign Wealth Funds	\$70	\$75	\$114	\$129	\$133	\$307	\$133	\$122	\$128	\$968	\$1,257	\$1,279	\$1,392
Total	\$1,118	\$1,099	\$966	\$941	\$1,062	\$1,289	\$1,018	\$1,054	\$1,185	\$2,019	\$2,327	\$2,285	\$2,398

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cash	\$329	\$288	\$227	\$217	\$269	\$283	\$257	\$285	\$319	\$341	\$348	\$294	\$294
Active Equities	\$77	\$65	\$51	\$48	\$58	\$59	\$70	\$72	\$75	\$413	\$496	\$586	\$666
Indexed Equities	\$9	\$10	\$8	\$9	\$12	\$14	\$16	\$18	\$21	\$136	\$180	\$94	\$97
Fixed Income							\$12	\$9	\$21	\$141	\$421	\$182	\$211
Private Equity							\$73	\$71	\$54	\$261	\$370	\$362	\$386
Real Estate	\$415	\$470	\$416	\$394	\$412	\$437	\$407	\$414	\$488	\$527	\$557	\$535	\$549
Other Investments	\$214	\$188	\$148	\$142	\$175	\$185	\$168	\$180	\$202	\$203	\$203	\$192	\$192

Investment Horizon







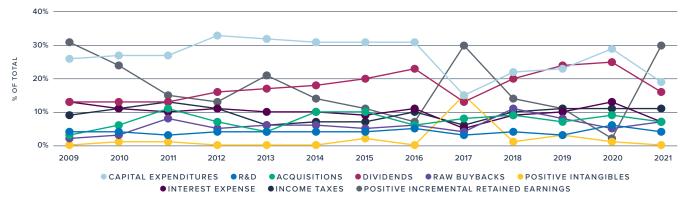
UNITED KINGDOM

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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	\$19,394
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	\$3,594
Insurance									\$2,376	\$2,325	\$2,043		\$1,443
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	\$24,430

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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	\$3,062
Active Equities	\$1,288	\$1,248	\$1,125	\$1,122	\$1,223	\$1,201	\$1,094	\$947	\$1,537	\$943	\$1,563	\$1,387	\$2,024
Indexed Equities	\$89	\$117	\$140	\$138	\$199	\$256	\$252	\$241	\$436	\$298	\$646	\$473	\$487
Fixed Income	\$536	\$558	\$660	\$742	\$828	\$885	\$903	\$889	\$1,933	\$848	\$2,203	\$1,488	\$2,527
Private Equity											\$25	\$25	\$28
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	\$9,606
Investment funds, mutual funds, etc.	\$464	\$579	\$596	\$708	\$785	\$702	\$740	\$724	\$1,399	\$749	\$531		\$298
Hedge Funds											\$50	\$50	\$82
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	\$6,209

Investment Horizon



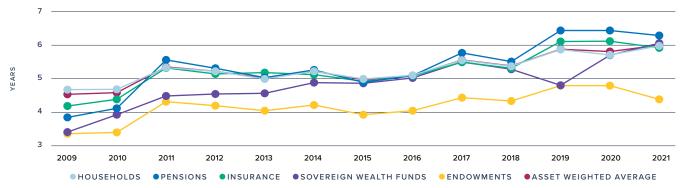




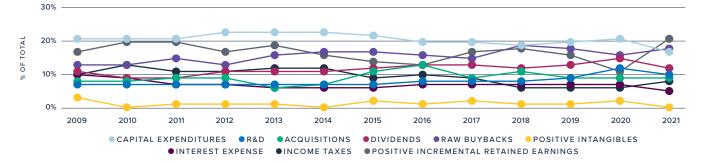
UNITED STATES

Allocators of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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	\$168,031
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	\$20,230
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	\$12,963
Sovereign Wealth Funds	\$34	\$35	\$45	\$43	\$50	\$55	\$56	\$55	\$64	\$60	\$67	\$72	\$86
Endowments	\$316	\$346	\$408	\$404	\$447	\$511	\$526	\$515	\$567	\$615	\$631	\$638	\$841
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	\$202,150

Allocations of Capital (USD Billions)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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	\$15,906
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	\$48,123
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	\$18,986
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	\$12,814
Private Equity	\$47	\$52	\$65	\$69	\$72	\$77	\$79	\$88	\$91	\$98	\$135	\$157	\$239
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	\$49,807
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	\$7,296
Hedge Funds	\$70	\$73	\$78	\$77	\$89	\$92	\$105	\$103	\$108	\$111	\$125	\$132	\$143
Other Alternatives											\$3	\$2	
Commodities	\$19	\$24	\$29	\$28	\$31	\$36	\$37	\$36	\$40	\$43	\$30	\$23	\$25
Private Debt	\$6	\$10	\$8	\$8	\$9	\$10	\$11	\$5	\$6	\$6	\$9	\$10	\$9
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	\$48,782







Acknowledgments

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

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Appendix

Country	Global	Global-Ex Japan	ACWI	ACWI-Ex US	Asia Pacific	Asia Pacific ex-Japan	BRIC	EAFE	EMEA	Emerging Asia	Europe Ex-UK	Eurozone	Latin America	North America	Pan- European	Country	Greater China	Greater China & 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	0	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	1	1	1	1	0	0	0	1	1	0	1	1	0	0	1	0	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	0	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
Chile	1	1	1	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0
Malaysia	1	1	1	1	1	1	0	0	0	1	0	0	0	0	0	1	0	1	0	1	0	1	1
Mexico	1	1	1	1	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	1	0	0	0
South Africa	1	1	1	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0
Spain	1	1	1	1	0	0	0	1	1	0	1	1	0	0	1	1	0	0	0	0	0	0	0
Sweden	1	1	1	1	0	0	0	1	1	0	1	0	0	0	1	1	0	0	0	0	1	0	0
United Arab Emirates	1	1	1	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0

Table 1: Broader Geographic Region Mapping – Equities³⁹

ACWI = All Country World Index; BRIC = Brazil, Russia, India, and China; EAFE = Europe, Australasia, and Far East; EMEA = Europe, Middle East, and Africa.

Country	Country	Global	Global Ex-Japan	ACWI	ACWI Ex-US	Global Emg Mkts	EAFE	Pan-European	Eurozone	Europe Ex-UK	North America	Asia Pacific	Asia Pacific Ex-Japan	Greater China & Pac Rim	Hong Kona	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	0	0	0	0	0	0	1	0	0	0	0	0	0
Japan	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1	0
Germany	1	1	0	1	1	0	1	0	0	0	0	1	0	1	0	0	0
India	1	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0	1
United Kingdom	1	1	1	1	1	1	0	0	0	0	0	1	1	0	0	0	0
France	1	1	1	1	1	0	1	0	0	0	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	0	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0	1
Canada	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Australia	1	1	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0
Netherlands	1	1	1	1	1	0	1	0	0	0	0	1	1	1	0	0	0
New Zealand	0	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0	1
Norway	1	1	1	1	1	0	1	0	0	0	0	1	1	1	0	0	0
Singapore	1	1	1	1	1	0	1	1	0	1	0	0	0	0	0	0	1
South Korea	1	1	1	1	1	0	1	0	0	0	0	1	1	1	0	0	0
Switzerland	1	1	1	1	1	1	1	0	0	0	0	1	1	1	0	0	0
Malaysia	1	1	1	1	1	0	1	1	0	1	0	0	0	0	0	0	1
Sweden	1	1	1	1	1	1	0	0	0	0	0	1	1	1	0	0	0
United Arab Emirates	0	1	1	1	1	0	1	1	0	1	0	0	0	0	0	0	1
Spain	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
South Africa	0	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0	1
Mexico	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1
Chile	0	1	1	1	1	1	0	0	0	0	1	0	0	0	0	0	0

Table 2: Broader Geographic Region Mapping – Fixed Income⁴⁰

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

Table 3: 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	18
Consumer Discretionary	13.6	5	18
Consumer Staples	24.7	2	18
Energy	17.5	9	18
Financials	13	NA	18
Health Care	10.6	11	18
Industrials	15.4	7	18
Information Technology	6.5	3	18
Materials	17.5	9	18
Real Estate	40	NA	18
Utilities	17.1	9	18

NA = not applicable.

Endnotes

- Measuring the Economic Impact of Short-termism. February 2017. McKinsey Global Institute; Predicting Long-term Success for Corporations and Investors Worldwide. September 2019. FCLTGlobal; and Public Markets for the Long Term. February 2019. FCLTGlobal.
- 2 See, e.g. <u>https://caia.org/portfolio-for-the-future</u>.
- 3 Source: Preqin.
- 4 Source: State Street Insights, accessed 9/30/2022.
- 5 The World Factbook, CIA, accessed October 2020.
- 6 They ranged from 33.2 years in Germany to 42.5 years in Brazil, according to *The World Factbook,* CIA, accessed October 2020.
- 7 T. Kapfidze. *Cities Where Homeowners Stay Put the Longest.* January 2019. LendingTree.
- 8 M. McCaulay. "Duration and Convexity for Pension Liabilities." September 2013. *Pension Section News*.
- 9 Insurance groups' assets and liabilities duration, European Central Bank: ESRB Risk Dashboard, accessed October 2020.
- 10 In 2018, investment horizons ranged from 2.38 years in Japan to 2.53 years in the United States. For a full list of investment horizons by country and year, please email research@fcltglobal.org.
- In 2018, investment horizons ranged from 9.55 years in China to 11.71 years in the United States. For a full list of investment horizons by country and year, please email <u>research@fcltglobal.org</u>.
- 12 In 2018, investment horizons ranged from 3.50 years in Germany, France, and Italy to 12.65 years in the United Kingdom. Note that for both equity and fixed income, many funds do not

have a country-specific fund (e.g., France fund), instead opting for a "pan-European" strategy. For this reason, numbers for countries in the same geographic region may look similar. For a full list of investment horizons by country and year, please email research@fcltglobal.org.

- 13 Kapfidze. Cities Where Homeowners Stay Put the Longest.
- 14 B. Ciochetti and J. D. Fisher. 2002. The Characteristics of Commercial Real Estate Holding Period Returns (IRRs). Real Estate Research Institute.
- 15 S. White and J. Hebron. Size of U.S. Residential Real Estate Market Is \$27 Trillion in 2019. April 2019. The Basis Point; and Estimating the Size of the Commercial Real Estate Market in the U.S. 2018. Real Estate Research Institute; Naireit research.
- 16 Private Markets Come of Age. 2019. McKinsey Global Private Market Review 2019, McKinsey & Company.
- 17 Time of Average Maximum Lock-up Period Accepted by Selected Hedge Fund Investors Worldwide in 2018. 2019. Statista.
- 18 2019 Target Weights Announced for CMCI.2019. Bloomberg.
- 19 Of note, commodities include energy (crude oil, diesel, natural gas), agriculture (soybeans, sugar, cotton, wheat), industrial metal (gold, silver, zinc, copper), and livestock (cattle, hogs).
- 20 Infrastructure Funds: The Upside of Low Downside. 2019. eFront.
- 21 Exact investment horizons vary by industry. For specific sector-by-sector details, see Table 3 in the Appendix.

- 22 Exact investment horizons vary by industry. For a full list of sector-by-sector details, see Table 3 in the Appendix.
- 23 S. Garelli. 2016. *Why You Will Probably Live Longer Than Most Big Companies*. International Institute for Management Development.
- 24 The Global Wealth Report. 2019. Credit Suisse.
- 25 *Funded Pension Statistics*. OECD.Stat, accessed October 2020.
- 26 *Past Performances.* Japan Government Pension Investment Fund, accessed October 2020.
- 27 *Investments Overview*. Japan Pension Fund Association, accessed October 2020.
- 28 Institutional Investors' Assets and Liabilities. OECD.Stat, accessed October 2020.
- 29 *Publications.* Reserve Bank of India, accessed October 2020.
- 30 Brazil: Financial Sector Assessment Program Technical Note on Insurance Sector Regulation and Supervision. November 2018. International Monetary Fund, Monetary and Capital Markets Department.
- 31 ANBIMA, Brazilian Financial and Capital Markets Association, accessed October 2020.
- 32 Insurance Sector Performance January to April 2018. 2018. China Banking and Insurance Regulatory Commission.

- 33 UK Insurance and Long-term Savings: The State of the Market 2019. 2019. Association of British Insurers.
- 34 Historic Endowment Study Data. 2020. NACUBO. NACUBO data is available only for US endowments. While other endowments exist around the world, their asset allocation data is not readily available and thus they are not captured in the report.
- P. D. Johnson. Global Philanthropy Report.
 April 2018. Harvard Kennedy School, Hauser Institute for Civil Society at the Center for Public Leadership.
- 36 For more information about the MSCI ACWI and its constituents, visit <u>https://www.msci.com/acwi</u>.
- 37 FRED Economic Data. Federal Reserve Bank of St. Louis, accessed October 2020.
- 38 China data includes special administrative regions.
- 39 eVestment categorizes "China incl. SARs" as "Greater China"
- 40 eVestment categorizes "China incl. SARs" as "Greater China"



