# Money for Generations: How Churches, Sovereign Wealth Funds and University Endowments Invest — and What Private Investors Can Learn from Them

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September 2026

**Abstract**

This paper examines the most patient large investors in the world: churches and dioceses, sovereign wealth funds, and the endowments of great universities. Together they manage wealth running into the tens of trillions — sovereign wealth funds alone held around USD 15.2 trillion at the end of 2025, the endowments of US higher education around USD 944 billion — and they do so under an instruction that private investors are rarely given so plainly: the money is not meant for today, but for the next generation and the one after that. For each of the three groups, the paper describes who owns the wealth, what it consists of, how it is invested, and how the large management mandates are awarded.

The results in brief: the Norwegian sovereign wealth fund holds almost one and a half per cent of all listed shares in the world across some 7,200 companies, costs four basis points a year, and has returned 6.6 per cent per annum since 1998 — under a withdrawal rule of around three per cent that preserves the capital for future generations. The large US university endowments earned 7.7 per cent per annum over ten years, the leading group around Yale and Stanford above nine per cent — at the price of high allocations to hard-to-sell assets whose limits have been showing since 2025. Europe's churches are above all property investors and, increasingly, securities investors with ethical exclusion criteria; the balance sheet of the Archdiocese of Cologne alone exceeds four billion euros, more than three quarters of it in securities.

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*Statement on the use of AI tools*: This paper was produced with the selective use of the AI tool Claude (Anthropic). The core elements of the content – including the research question, the objective, the methodology, the data analysis, all calculations, as well as the specialist knowledge and the layout – were produced entirely independently by the author. Under the author's guidance, Claude served as an assistant tool to support research, shorten text, verify derivations and cross-check sources. Some AI-generated text passages were thoroughly reviewed by the author and only incorporated once the content objectives had been met. Finally, the system was used for proofreading (spelling and academic style). The author takes full responsibility for the content of the paper.

From the comparison, ten transferable lessons for private investors are derived — from the written investment policy through extremely broad diversification, cost discipline, and a fixed withdrawal rule to the insight that the long investment horizon is the greatest single advantage that institutional and private investors can share. At the same time, the paper warns against imitating the Yale model without Yale's access to the best managers: those who lack the selection advantages of the great institutions demonstrably fare better with the Norwegian answer — broad, listed, rule-bound, low-cost.

***Keywords***: Institutional investors · Sovereign wealth funds · Church wealth · University endowments · Investment horizon · Diversification · Manager selection.

***JEL codes***: G11, G23, L31, Z12.

**Non-Technical Summary**

Who manages money across generations — and how? This paper considers three groups of investors whose investment horizon is measured not in years but in decades and centuries: the churches with their dioceses, religious orders, and pension institutions; the sovereign wealth funds from Norway to Singapore; and the endowments of great universities such as Yale, Harvard, and Oxford. All three invest money that is never to be paid out to any single person, but is to finance a task permanently — worship, a country's prosperity after the oil, teaching and research. That is precisely what makes them the most instructive object lesson for anyone investing privately for the long term.[2]

The paper first shows what the three groups own: the churches, property accumulated over centuries and, increasingly, securities wealth — from the Archdiocese of Cologne with more than three billion euros in securities, through the Church Commissioners in England with GBP 11.6 billion, to the investment arm of the Latter-day Saints with over USD 60 billion in US equities alone. The sovereign funds manage oil and trade surpluses; the Norwegian fund, worth more than the equivalent of EUR 1.8 trillion, is the largest single shareholder in the world. The US university endowments stand for the Yale model: few bonds, much private equity, hedge funds, and real assets — with high returns for the leading group, but also with limits that have come clearly into view since 2025.

A chapter of its own is devoted to how institutional money is awarded: through tenders, selection procedures with questionnaires, on-site examinations, and a final round known in the industry as the beauty contest. The research on this is sobering: managers are chosen above all for past performance, which on average does not repeat after the appointment. Precisely for that reason, the best houses have shifted their selection from the past to the process — a practice from which private investors, too, can learn when choosing funds, advisers, and asset managers.[3]

From the comparison of the three groups, the paper derives ten lessons for private investors. The most important: the long horizon is the only advantage of the great institutions that anyone can adopt without being rich. Extremely broad diversification and low costs explain the success of the Norwegian model better than any single decision. A fixed withdrawal rule — three to five per cent — preserves wealth across generations. And hard-to-sell assets belong only in portfolios that will never depend on selling them: even Yale had to dispose of holdings at a discount in 2025, and Harvard sold in the financial crisis of 2008/09 at prices below half of book value.

[2] Orders of magnitude: sovereign wealth funds worldwide around USD 15.2 trillion at the end of 2025 (Global SWF, 2026); endowment assets of the 657 US institutions surveyed, USD 944.3 billion (NACUBO and Commonfund, 2026).

[3] Fundamental here Goyal and Wahal (2008) on some 3,400 mandate decisions of American plan sponsors, and Jenkinson, Jones and Martinez (2016) on the recommendations of investment consultants.

# Contents

# 1 Introduction

The largest fortunes in the world belong to no one who will ever spend them. The Norwegian sovereign wealth fund belongs to the Norwegian people including all future cohorts; the endowment of Harvard to the university as an institution of indefinite duration; the wealth of the Archdiocese of Cologne to the church as a corporate body — not to the bishop, not to today's faithful. This ownership design has an immediate investment consequence: where no owner grows old, there is no natural point at which the wealth would have to move into short-dated assets for safety's sake. The investment horizon is in principle unlimited, and it is on precisely this that the investment strategies of these houses have been founded — James Tobin described the task of the stewards of such wealth in a famous sentence: they are the guardians of the future against the claims of the present.[4]

The orders of magnitude are considerable. Sovereign wealth funds managed around USD 15.2 trillion worldwide at the end of 2025; together with public pension funds and central bank holdings, state-managed capital passed USD 60 trillion for the first time. The endowments of US higher education stood at USD 944.3 billion. For the churches there is no global statistic, but the individual figures speak for themselves: GBP 11.6 billion at the Church Commissioners of the Church of England; more than USD 60 billion in listed US equities alone at the investment arm of the Church of Jesus Christ of Latter-day Saints; a balance sheet of a good four billion euros in the Archdiocese of Cologne alone — plus a stock of property that has grown over centuries.[5]

This paper pursues three aims. First, it describes what the three investor groups own and how they invest — with verified figures from annual reports, supervisory documents, and the academic literature, in each case as of August 2026. Secondly, it explains how institutional money finds its way to its managers: through tendered mandates, ordered selection procedures, and those final rounds the industry calls beauty contests. Thirdly, it translates the observations into lessons for private investors. The guiding question is not whether a private portfolio can replicate a sovereign wealth fund — it cannot and need not — but which principles can be carried over without possessing the size, the access, and the staff of the great houses.[6]

The course of the study: Chapter 2 orders the three groups and what they share. Chapter 3 deals with the churches — from the Vatican through the German and Austrian

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[4] Tobin (1974), p. 427: “The trustees of an endowed institution are the guardians of the future against the claims of the present.” The essay established the rule, still standard today, of withdrawing only the permanently sustainable real return.

[5] Global SWF (2026): USD 15.2 trillion in sovereign wealth funds, USD 60 trillion including public pension funds and currency reserves, counted across some 800 state-owned investors; NACUBO and Commonfund (2026); Church Commissioners (2026); on the Latter-day Saints portfolio, Section 3.4.

[6] The paper continues earlier work by the author: on liquidity as a condition of survival, Rupprechter (2026a); on the impact question of green investing, Rupprechter (2026b).

dioceses to the Church Commissioners, the investment arm of the Latter-day Saints, and the church pension institutions — including the ethical investment guidelines. Chapter 4 covers the sovereign wealth funds with Norway as the detailed case; Chapter 5 the university endowments and the Yale model together with its limits. Chapter 6 describes the awarding of large mandates; Chapter 7 the common core of extremely broad diversification and an extremely long horizon. Chapter 8 formulates ten lessons for private investors; Chapter 9 concludes.

# 2 Three Groups of Investors, One Principle

At first sight, more separates the three groups than unites them: the church manages wealth from endowments, donations, and taxes for a religious mission; the sovereign wealth fund converts resource or trade surpluses into financial wealth for the time after the oil; the university endowment pools gifts from alumni into a capital stock whose returns carry professorships, scholarships, and research. Yet the investment task is the same: a fortune is to finance a task permanently — that is, to be preserved at least in real terms, after inflation, while delivering a plannable annual payout. Table 1 places the three groups side by side.[7]

**Table 1:** Three groups of investors at a glance (as of August 2026)

| Feature | Churches and dioceses | Sovereign wealth funds | University endowments |
|---|---|---|---|
| Source of money | Endowments, donations, church tax/contribution | Oil, gas, and trade surpluses | Gifts and bequests |
| Purpose | Ministry, staff, buildings, social work | Prosperity of future generations, budget support | Teaching, research, scholarships |
| Horizon | Centuries | Generations | Unlimited |
| Typical assets | Property; securities via dedicated funds | Broad equity and bond portfolios, holdings | Private equity, hedge funds, equities, real assets |
| Order of magnitude | no global statistic; single cases above USD 60bn | USD 15.2tn (end-2025) | USD 944bn in the United States alone (FY 2025) |
| Withdrawal rule | budget-driven | e.g. Norway: around 3% (the real return) | mostly 4 to 5.25%, smoothed |

*Source*: Global SWF (2026); NACUBO and Commonfund (2026); annual reports of the institutions named; own compilation.
*Notes*: FY = fiscal year (for US universities usually ending 30 June). The withdrawal rules are compared in Section 7.2.

[7] On the economic logic of endowed wealth, fundamentally Hansmann (1990): endowment capital serves as a buffer and secures the institution's independence across generations.

Three common traits shape the investment behaviour of all three groups. First, the horizon: because the wealth is never paid out as a whole, fluctuations can be endured that would overwhelm a private saver with a near-term purpose; no serious sovereign fund and no great endowment sells into a bear market out of fear. Secondly, the rule-binding: withdrawals follow a fixed formula — Norway takes the estimated real return of around three per cent, Yale 5.25 per cent smoothed, Oxford 4.25 per cent of a rolling average — so that good years do not inflate the budget and bad ones do not cut it abruptly. Thirdly, the separation of ownership and management: investment decisions are taken by expert bodies under written guidelines, not by the beneficiaries; this disciplines — and it creates that market for tendered mandates which Chapter 6 describes.[8]

At the same time, the differences are instructive, for they show that there is no single institutional way of investing. Norway stands for the listed, index-near, low-cost model; Yale for the opposite — concentrated on hard-to-sell holdings with a heavy selection effort; the churches for the primacy of property and the ethical restriction of the investment universe. Chambers, Dimson and Ilmanen (2012) contrasted the first two paths as the Norway model and the Yale model; this paper adds the third, older path of the churches and asks, at the end, which of them suits private investors.[9]

# 3 Churches and Dioceses as Investors

## 3.1 The Oldest Large Investor in the World

No other investor looks back on a longer unbroken history of wealth than the church. Monasteries and abbeys have farmed their estates since the High Middle Ages — Klosterneuburg Abbey near Vienna, founded in 1114, still runs Austria's oldest winery and manages a substantial property portfolio besides; English colleges have lived off endowed land since the thirteenth century; New York's Trinity Church became a landowner in 1705 through a grant from Queen Anne — 215 acres of Manhattan — whose successor wealth today amounts to around USD 6 billion. Managing wealth across centuries is thus not theory for churches but daily practice; their classic asset was and is property, complemented by forest, agriculture and — a historical latecomer — the security.[10]

The move from property to securities has a prominent author: John Maynard Keynes, who managed the endowment of King's College, Cambridge, from 1921 until his death in 1946, sold parts of the landed estate early and, as one of the first institutional managers

[8] Withdrawal rules: Norwegian Ministry of Finance (the fiscal rule, three per cent since 2017); Yale University (2025); University of Oxford (2026). On the smoothing of payouts, also Brown, Dimmock, Kang and Weisbenner (2014).
[9] Chambers, Dimson and Ilmanen (2012); for the Yale model in the original, Swensen (2009).
[10] Klosterneuburg Abbey: founded in 1114 by Margrave Leopold III; Trinity Church Wall Street (2025): land grant of 1705, wealth today around USD 6 billion, more than USD 500 million in grants since 2019.

anywhere, invested deliberately in equities — with an outperformance of an estimated five to six percentage points a year against the British market. What passes for common sense today was a rupture then: for the first time, a fortune meant to outlast centuries was ordered mainly by expected return rather than by the land register. The churches and colleges were thus — long before the sovereign funds — the laboratory of long-term capital investment.[11]

## 3.2 The Vatican: APSA and the IOR

Since the reform under Pope Francis, the asset management of the Holy See has essentially rested with APSA, the administration of its patrimony, which has published annual accounts since 2021. Its core is a property portfolio of 4,234 managed units in Italy — 2,866 of them owned outright — together with foreign properties held through companies in England, France, and Switzerland; added to this is a securities portfolio that returned 8.5 per cent in 2024. The profit of EUR 62.2 million in 2024 — of which EUR 46.1 million went to cover the deficit of the Holy See — shows both things at once: measured against sovereign funds the Vatican is a small investor, but one whose returns directly carry the running budget.[12]

The second institution, the Istituto per le Opere di Religione (IOR, often called the "Vatican bank"), manages the money of religious orders, dioceses, and Vatican bodies: EUR 5.9 billion of client assets, an annual profit of EUR 51 million (2025), and a Tier 1 capital ratio of 71.9 per cent — the figures of a small, overcapitalised bank with a single shareholder, the Pope, to whom a dividend of EUR 24.3 million flowed in 2025. That investment discipline had to be learned here too is shown by the case of the London property at 60 Sloane Avenue: bought dearly with funds of the Secretariat of State, sold in 2022 at a loss running into the hundreds of millions of euros, and the occasion of the largest financial trial in Vatican history. The response was to centralise the investments and, in 2022, to publish with "Mensuram Bonam" the first Vatican guidelines for faith-consistent investing.[13]

[11] Chambers and Dimson (2013): Keynes as Bursar of King's College 1921-1946; the equity share reached about one third of the college's wealth by 1946.

[12] APSA (2025), annual report for 2024: profit EUR 62.2 million; property income EUR 35.1 million; securities return 8.51 per cent.

[13] IOR (2026), Annual Report 2025; on the London proceedings: sale to a financial investor in July 2022 for GBP 186 million (around EUR 216 million); measured against acquisition and financing costs of around EUR 350 million this implies a loss of some EUR 130 million, though no official figure has been published. First-instance judgment of the Vatican tribunal of December 2023, appeal proceedings under way since September 2025; Pontifical Academy of Social Sciences (2022).

## 3.3 Germany and Austria: Dioceses with Balance Sheets

How wealthy the church in Germany is has been public knowledge for only a decade or so. The impulse was involuntary: the cost of the Limburg bishop's residence, which had risen to around EUR 31 million, led in 2013 to a crisis of confidence, in whose wake all twenty-seven German dioceses began publishing annual accounts, most of them under commercial law. Since then it has been there to read that diocesan wealth consists less of church buildings than of securities: the Archdiocese of Cologne most recently reported a balance sheet of EUR 4.4 billion, of which EUR 3.4 billion in financial assets — mainly two dedicated investment funds of equities and bonds set up for the archdiocese — while land and buildings stand in the accounts at cautious book values of only EUR 0.6 billion. Table 2 compares three large dioceses.[14]

**Table 2:** Three German archdioceses in figures (latest published accounts)

| | Cologne | Paderborn | Munich and Freising |
|---|---|---|---|
| Reporting year | 2024 | 2024 | 2025 |
| Balance sheet total | EUR 4.40bn | EUR 4.99bn | c. EUR 4.1bn |
| of which financial assets | EUR 3.42bn | — | c. EUR 1.5bn |
| Property (book values) | EUR 0.64bn | — | c. EUR 1.4bn |
| Church tax income | EUR 666.1m | EUR 420.5m | EUR 630m |
| Annual result | EUR 13.2m | EUR 82.8m | c. EUR 74m |

*Source*: Archdiocese of Cologne (2025); Archdiocese of Paderborn (2025); Archdiocese of Munich and Freising (2026); own compilation.
*Notes*: Book values under commercial law; property is valued cautiously and market values lie well above them; for Cologne the item shown is land and buildings. The Cologne accounts cover the archdiocese and its archiepiscopal see together, while in Paderborn and Munich the sees account separately — the Paderborn see is regarded as the wealthiest in the country. Not included are the legally separate parishes and foundations.

Current financing in Germany rests on the church tax: in 2025 the Catholic Church took in EUR 6.75 billion and the Protestant Church EUR 6.09 billion — together a nominal record, in real terms slightly declining because of inflation, and set to fall as members leave. Precisely therein lies the dioceses' investment brief: the securities portfolios are largely earmarked — they cover pension promises to clergy and staff as well as maintenance burdens — and they are to deliver returns that partly replace vanishing tax revenue. Investment is carried out through dedicated funds with external managers, selected in procedures of the kind Chapter 6 describes and bound to the ethical criteria of Section 3.5.[15]

[14] Diocese of Limburg: cost of the diocesan centre around EUR 31 million (audit report 2014: EUR 31.5 million); Archdiocese of Cologne (2025), financial report for 2024. The Cologne accounts cover the archdiocese and the archiepiscopal see together; one exception to commercial-law accounting is Münster, which follows the municipal standard.
[15] Church tax 2025: releases of the German Bishops' Conference and the EKD (2026); slightly declining in real terms with inflation at 2.2 per cent.

Austria has no church tax but the private church contribution: Catholics paid EUR 539.4 million in 2024, or 70.6 per cent of diocesan income of EUR 763.8 million; added to this are EUR 65.7 million in state compensation payments and EUR 159 million from asset management, rents, and services. The wealth of the Austrian dioceses is smaller and less uniformly published than that of the German ones; conspicuous instead is the economic weight of the abbeys and orders — from Klosterneuburg to Admont — which have run forest, wine, property, and holdings on their own account for centuries. In Vienna, the banking house Schelhammer & Schattera, founded in 1832 (today Schelhammer Capital), has made its name as a specialist in church-related and ethical investment.[16]

## 3.4 Three Models Abroad: London, Salt Lake City, Chicago

**Table 3:** Large church investors compared

| **Institution** | **Wealth** | **Character** |
|---|---:|---|
| Church Commissioners (Anglican) | GBP 11.6bn (2025) | Endowment fund since 1704/1948; target inflation + 4% |
| Ensign Peak Advisors (Latter-day Saints) | USD 60.8bn US equities (mid-2026) | Reserve fund; index-near; long undisclosed |
| Wespath (Methodist) | c. USD 28bn (end-2025) | Pension institution since 1908 with ethical criteria |
| IOR ("Vatican bank") | EUR 5.9bn client assets (2025) | Bank of the orders and dioceses |
| APSA (Holy See) | 4,234 properties in Italy | Patrimony administration; returns cover the deficit |
| Trinity Church Wall Street | c. USD 6bn | Land grant of 1705; today property and securities |

*Source*: Church Commissioners (2026); SEC 13F filing as at 30 June 2026; Wespath (2026); IOR (2026); APSA (2025); Trinity Church Wall Street (2025); own compilation.
*Notes*: Figures as most recently published; the total wealth of Ensign Peak including bonds and other assets was put at around USD 100bn in 2019.

How differently churches can invest is shown by three institutions. The Church Commissioners for England manage the historic endowment of the Anglican Church — descended from Queen Anne's Bounty of 1704 — as a diversified fund of GBP 11.6 billion (end-2025) holding equities, private equity, timberland, and property. The return target is the classic one for generational wealth: inflation plus four percentage points. In 2025 the fund returned 8 per cent, its seventeenth positive year in a row; distributions of GBP 282.4 million covered around one fifth of the running costs of the Church of England — the rest comes from the parishes. Notable is the distribution planning in three-year periods: for 2023 to 2025, GBP 1.2 billion was pledged, an increase of 30 per cent.[17]

[16] Catholic Church of Austria (2025), budget figures for 2024; 4.56 million Catholics.
[17] Church Commissioners (2026), Annual Report 2025; on the investment practice of the English churches, also Kreander, McPhail and Molyneaux (2004).

The opposite model in scale is Ensign Peak Advisors, the investment arm of the Church of Jesus Christ of Latter-day Saints in Salt Lake City. Its disclosed US equity portfolio comprised USD 60.8 billion across 1,724 holdings in mid-2026 — the largest positions: Nvidia, Apple, Microsoft, Alphabet — while the total wealth including bonds and other assets was put at around USD 100 billion by a whistleblower in 2019. The fund became known, however, in a way no church would wish: in 2023 the church and the fund paid USD 5 million to the US Securities and Exchange Commission because the holdings had been reported from 1997 to 2019 through thirteen shell companies and thus hidden from the public. The case shows the reverse side of church wealth: where transparency is lacking, mistrust grows faster than the capital.[18]

Between the two stands Wespath Benefits and Investments near Chicago, since 1908 the benefits institution of the United Methodist Church: around USD 28 billion for more than 100,000 beneficiaries and over 170 institutional clients — in substance a church pension fund that invests like a secular retirement institution, but under church exclusion criteria. Taken together, London, Salt Lake City, and Chicago show the span of church capital investment: the transparent endowment model with an inflation target, the reticent reserve fund close to the index, and the rule-bound pension institution.[19]

## 3.5 Ethics as an Investment Guideline

Common to all church investors is the ethical restriction of the investment universe — historically the oldest form of sustainable investing. The Church Commissioners have excluded armaments, tobacco, and gambling since their founding and take advice from their own ethics body; the German Bishops' Conference, together with the Central Committee of German Catholics, has issued guidance for church finance officers that combines exclusions, positive selection, and engagement; the Vatican followed in 2022 with “Mensuram Bonam”. The effect on returns is small according to the research: for the Norwegian and Swedish state funds — whose exclusion practice resembles the church rules — Hoepner and Schopohl (2018) found no measurable return penalty from ethically motivated exclusions.[20]

For private investors, the church chapter holds three observations. First: property ownership looks solid but is sluggish — measured against the capital employed, the dioceses and the Vatican usually earn more on their securities than on their buildings, and the security can be sold besides. Secondly: earmarking disciplines; those who, like the dioceses, know that their capital must cover pensions, diversify broadly and save in good years

[18] SEC (2023), press release 2023-35 of 21 February 2023: USD 4 million penalty for Ensign Peak, USD 1 million for the church; 13F filing as at 30 June 2026: USD 60.8 billion.

[19] Wespath (2026): around USD 28 billion under management as at 31 December 2025.

[20] German Bishops' Conference and ZdK (2021), “Ethisch-nachhaltig investieren”, second updated edition; Pontifical Academy of Social Sciences (2022); Hoepner and Schopohl (2018); on the impact question of green investing in detail, Rupprechter (2026b).

instead of spending. Thirdly: ethical exclusions are a legitimate personal decision which, on the available research, costs little return as long as diversification is preserved — the churches have practised this for decades.

# 4 Sovereign Wealth Funds: Saving for the Time after the Oil

## 4.1 From Kuwait 1953 to the Trillion Class

The first sovereign wealth fund in the world arose not in Norway but in the Gulf: in 1953 — before the country's independence — Kuwait set up the Kuwait Investment Board to invest oil revenues outside the country; traditionally, one tenth of Kuwait's state revenues flows into the Future Generations Fund that grew out of it, a name that anticipated the programme of the entire class. Today the industry counts around USD 15.2 trillion in sovereign wealth funds — more than fifteen times all US university endowments — and in 2025, with the Norwegian fund, a single fund passed the two-trillion-dollar mark for the first time. The usual classification is by purpose: savings funds invest resource proceeds for future generations, stabilisation funds smooth the state budget across the oil price cycle, and development funds such as the Saudi PIF are meant to broaden the home economy at the same time.[21]

**Table 4:** The ten largest sovereign wealth funds in the world

| Fund | Country | Founded | Assets, USD bn |
|---|---|---|---|
| Norges Bank Investment Management | Norway | 1996* | 2,056 |
| SAFE Investment Company | China | 1997 | 1,988 |
| China Investment Corporation | China | 2007 | 1,567 |
| Abu Dhabi Investment Authority | UAE (Abu Dhabi) | 1976 | 1,187 |
| Public Investment Fund | Saudi Arabia | 1971 | 1,151 |
| Kuwait Investment Authority | Kuwait | 1953 | 1,002 |
| GIC | Singapore | 1981 | 936 |
| Qatar Investment Authority | Qatar | 2005 | 580 |
| Investment Corporation of Dubai | UAE (Dubai) | 2006 | 429 |
| Mubadala Investment Company | UAE (Abu Dhabi) | 2002 | 385 |

*Source*: Global SWF (2026), data as of May 2026; founding years as stated by the funds.
*Notes*: * Act on the Norwegian Petroleum Fund 1990, first transfer 1996. Temasek (Singapore, 1974) follows in twelfth place with USD 324bn; by its own account the portfolio value as at 31 March 2026 was already SGD 518bn.

Because sovereign funds invest a state's wealth abroad, they raise a trust question of their own: recipient countries fear politically steered holdings, home countries misappropriation. In answer, the large funds agreed in October 2008 on the Santiago Principles — twenty-four precepts on transparency, independence of the investment decision, and

[21] Global SWF (2026); Kuwait Investment Authority: descended from the Kuwait Investment Board of 1953, the oldest sovereign wealth fund in the world. For a survey of the research, Megginson and Fotak (2015).

accountability, watched over by the International Forum of Sovereign Wealth Funds that grew out of them. The range of actual openness remains wide: Norway publishes every single holding, while Abu Dhabi and Singapore do not even state the size of their assets — GIC, as a matter of policy, quotes only its rolling twenty-year return. For investors who want to learn from the great funds, Norway is therefore the most rewarding case.[22]

## 4.2 Norway: the Benchmark

The Government Pension Fund Global is the product of a simple idea held to consistently: Norway's oil revenues are not spent but placed in full into a globally diversified securities portfolio outside Norway; the state withdraws each year only the expected real return — the fiscal rule, around three per cent since 2017. The act dates from 1990, the first money flowed in 1996, and since 1998 the central bank subsidiary Norges Bank Investment Management has managed the fund. At the end of 2025 the fund stood at NOK 21,268 billion — equivalent to a good EUR 1.8 trillion, or around EUR 330,000 per inhabitant — and by mid-2026 already at NOK 22,683 billion. Figure 1 shows the road there: from the first transfer in May 1996 to the first trillion kroner took eight and a half years; the most recent trillion has lately been added in months — compound interest in its purest form.[23]

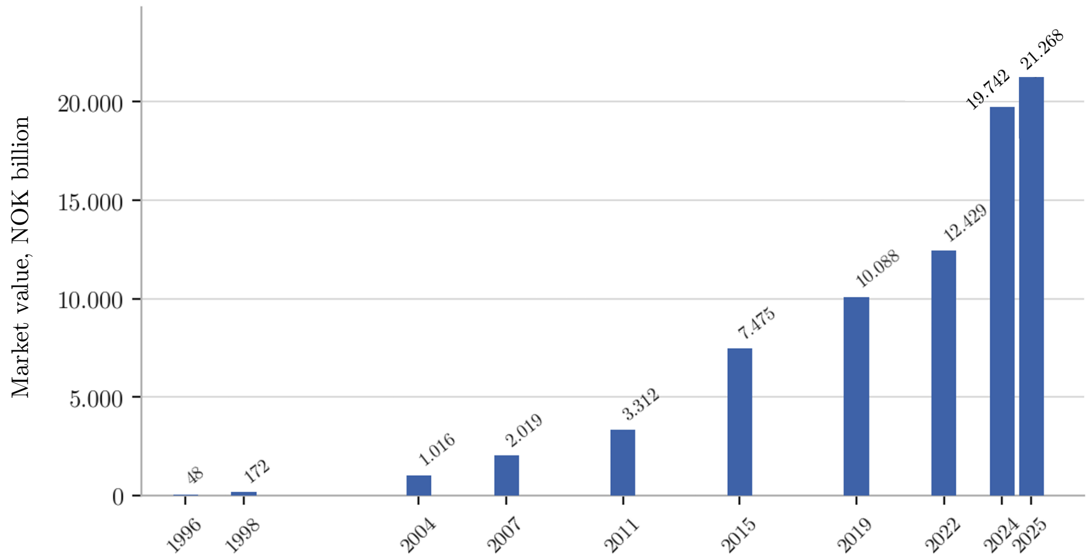


**Figure 1**: Market value of the Norwegian sovereign wealth fund at the end of selected years, NOK billion. Source: NBIM (2026a, 2026c); own presentation.

[22] IWG-SWF (2008), Santiago Principles; IFSWF since April 2009. GIC (2025): nominal twenty-year return 5.7 per cent per annum in US dollars, 3.8 per cent in real terms (as at 31 March 2025).

[23] NBIM (2026a), Annual Report 2025; conversion at around NOK 11.6 per euro and around 5.6 million inhabitants, own calculation. The NOK 1,000 billion mark was passed on 5 December 2004; the year-end figures in Figure 1 are taken from the annual reports of the respective years (NBIM, 2026c).

The investment strategy is deliberately unspectacular: at the end of 2025, 71.3 per cent was in listed equities, 26.5 per cent in bonds, 1.7 per cent in unlisted real estate, and 0.4 per cent in renewable energy infrastructure. The fund holds almost one and a half per cent of all listed shares in the world, spread across some 7,200 companies in around 70 countries — making it the largest single shareholder in the world and at the same time one of the most broadly diversified. Management hews closely to a benchmark index set by the Ministry of Finance; deviations are small, and a portion is awarded to external specialists (Section 6.2). The equity share was raised in three politically decided steps — 40 per cent from 1998, 60 per cent from 2007, 70 per cent since 2017 — and because the 2007 step fell into the middle of the financial crisis, the fund went through the 2008/09 bear market as a large buyer: rule-binding replaces market opinion.[24]

The results: in 2025 the fund returned 15.1 per cent — equities 19.3, bonds 5.4, real estate 4.4, renewable infrastructure 18.1 per cent — and since 1998 an average of 6.64 per cent per annum, with a cumulative investment return of NOK 13,457 billion: more than half of today's fund value is return, not oil money paid in. More remarkable than the return are the costs: four basis points — 0.04 per cent — of assets under management a year, achieved with 678 staff at five locations. A typical actively managed retail fund costs thirty to fifty times as much. Against its benchmark the fund lagged by 0.28 percentage points in 2025 and has led by 0.24 percentage points a year since 1998 — the value comes from market breadth, cost discipline, and staying the course, not from forecasts.[25]

**Table 5:** The Norwegian sovereign wealth fund in figures (as at end-2025)

| Indicator | Value |
|---|---:|
| Market value | NOK 21,268bn (around EUR 1.8tn) |
| Return 2025 / since 1998 | 15.1% / 6.64% p.a. |
| Cumulative return since 1998 | NOK 13,457bn |
| Equities / bonds / real estate / infrastructure | 71.3 / 26.5 / 1.7 / 0.4% |
| Share of the world equity market | almost 1.5% across some 7,200 companies |
| Management costs | 0.04% p.a. |
| State withdrawal rule | around 3% (expected real return) |
| Staff | 678 at five locations |

*Source*: NBIM (2026a), Annual Report 2025; own compilation. Euro conversion: own calculation.

Finally, the Norwegian model includes ethical rule-binding. Ethical guidelines have applied since 2004: excluded are producers of certain weapons, of tobacco and cannabis, and companies with a high coal share; added to these are conduct-based exclusions for severe environmental damage, human rights violations, or corruption, prepared by an independent Council on Ethics. In 2025 alone, ten companies were excluded and 58 smaller positions

[24] NBIM (2026a); increase of the strategic equity share from 62.5 to 70 per cent: decision of government and Storting, 2017.

[25] NBIM (2026a). The study by Ang, Goetzmann and Schaefer (2009) for the Ministry of Finance had already shown that the active contribution is small and the results are explained overwhelmingly by systematic market factors.

divested on sustainability grounds; votes were cast at 10,873 general meetings. That the fund excluded several Israeli companies in August 2025 after an urgent review, and provisionally reordered its ethics responsibilities in November 2025, shows at the same time the limit of the model: a fund of this size remains a political creature — this, too, distinguishes state wealth from private wealth.[26]

## 4.3 The Other Giants: the Gulf, Singapore, Beijing

Behind Norway follows a group that shows less and, in part, wants other things. The Abu Dhabi Investment Authority, founded in 1976, is the classic quiet savings fund: globally diversified, a high share of index-near investments, and disclosing only rolling long-term returns — 6.3 per cent per annum over twenty years, 7.1 per cent over thirty (to end-2024, in US dollars). Singapore runs on two tracks: GIC, founded in 1981, manages the state reserves with the declared aim of preserving their international purchasing power — over twenty years it earned 3.8 per cent per annum in real terms — while the older Temasek (founded 1974), as a state holding company, invests in a more concentrated, entrepreneurial way: a portfolio value of SGD 518 billion as at March 2026, 43 per cent of it in Singapore holdings such as Singapore Airlines or DBS.[27]

Different again are the development funds: the Saudi Public Investment Fund — founded in 1971, reoriented in 2015/16 — is meant, with by now around USD 1.15 trillion, to broaden the country's economy beyond oil, financing large domestic ventures as well as holdings abroad — investment success here is only one aim among several, which distinguishes it from a pure savings fund. China, finally, holds around USD 3.6 trillion through two vehicles — the China Investment Corporation and the older SAFE Investment Company, the investment arm of its currency administration — largely out of current account surpluses. For private observers the distinction matters: not every sovereign fund is a model for saving; instructive above all are those whose sole brief is the long-term real preservation of wealth.[28]

## 4.4 And the German-Speaking World? The KENFO

Since 2017 Germany has possessed a fund that comes closer to a sovereign wealth fund than its unwieldy name suggests: the KENFO — the fund for financing nuclear waste disposal — received EUR 24.1 billion from the energy utilities and must pay from it for the interim and final storage of nuclear waste until the end of the century. At the end of 2025 it managed EUR 25.6 billion — 41.0 per cent equities, 39.4 per cent bonds, 14.3 per

[26] NBIM (2026b), Responsible Investment 2025; ethical guidelines since 2004; on the return effects of the exclusions, Hoepner and Schopohl (2018): no measurable penalty.
[27] ADIA (2025), 2024 Review; GIC (2025); Temasek (2026), Temasek Review 2026: total shareholder return over twenty years 6.8 per cent per annum in Singapore dollars.
[28] Asset values: Global SWF (2026), data as of May 2026.

cent illiquid assets, 5.3 per cent cash — and despite cumulative payouts of EUR 5.3 billion had turned the initial capital into a total of EUR 30.9 billion including payouts within eight years. It awards its mandates as Chapter 6 describes: through public tenders to external managers.[29]

Austria has no comparable fund — the state holdings of ÖBAG form a holding company, not savings wealth — and in Germany the idea of a broad state generational fund for retirement provision failed: the generational capital of the second pension package did not pass the Bundestag in 2024, and the coalition in office since 2025 is pursuing individually held accounts instead of a collective state fund. All the more remarkable is what the KENFO demonstrates in miniature: a young fund without a resource windfall can, with global diversification, professional awarding of mandates, and rule-binding, show a record of returns within a few years for which no oil price is needed — only time, breadth, and discipline.[30]

# 5 University Endowments and the Endowment Model

## 5.1 From John Harvard to David Swensen

The American university endowment begins with a bequest: in 1638 the young clergyman John Harvard left the new college near Boston half his estate and his library — out of which grew the richest university in the world. The principle is the same to this day: alumni and benefactors endow capital, mostly earmarked — Harvard's endowment consists of some 14,800 individual funds for professorships, scholarships, or institutes —, the university invests it pooled and withdraws around five per cent a year for operations. The orders of magnitude are American: USD 56.9 billion at Harvard, whose distribution of USD 2.5 billion carries around 37 per cent of the university budget; at Princeton, as much as around two thirds of net revenues come from the endowment.[31]

The class became an investing legend through one man: David Swensen, chief investment officer of Yale from 1985 until his death in 2021. He turned the then-usual portfolio of US equities and bonds towards hard-to-sell but more productive assets: private equity, venture capital, absolute return strategies, real estate, and timber. Out of USD 1.3 billion grew more than USD 31 billion; the 13.1 per cent per annum over 35 years — 4.3 percentage points a year more than a classic 60/40 portfolio — is perhaps the best documented long-term record in institutional investment. Just as formative was his school:

[29] KENFO (2026), figures as at 31 December 2025; payout in 2025: EUR 823 million to the Federal Environment Ministry.
[30] Second pension package: adopted by cabinet in May 2024, lapsed with the end of the parliamentary term; the successor scheme was introduced as a government bill on 12 August 2026 and had not entered into force at the time of writing.
[31] Harvard University (2025), Financial Report FY 2025; Princeton University (2025). On the economic logic of endowments, Hansmann (1990) and Tobin (1974).

some fifteen of his staff went on to lead the endowments of Princeton, MIT, Stanford, Penn, and others.[32]

## 5.2 The Figures: the Leaders and the Average

Fiscal year 2025 — ending 30 June for most US universities — was a good one: the 657 endowments covered by the NACUBO-Commonfund study returned an average of 10.9 per cent net of costs and together managed USD 944.3 billion; over ten years the average stands at 7.7 per cent per annum. Distributions came to USD 33.4 billion — on average 4.9 per cent of endowment value — of which almost half went to scholarships and student aid; the endowments thereby fund a good 15 per cent of their institutions' operating budgets. Table 6 shows the leading group. Striking is the concentration at the top: the seven endowments listed there alone unite around USD 280 billion — close to thirty per cent of the wealth of all 657 institutions.[33]

**Table 6:** The largest US university endowments in fiscal year 2025

| University | Assets, USD bn | Return FY 2025 | Return 10 years p.a. |
|---|---|---|---|
| Harvard | 56.9 | 11.9% | — |
| University of Texas System (UTIMCO) | 49.4 | — | — |
| Yale | 44.1 | 11.1% | 9.4% |
| Stanford | 40.8 | 14.3%* | 9.4%* |
| Princeton | 36.4 | 11.0% | 9.0% |
| MIT | 27.4 | 14.8%* | — |
| Pennsylvania | 24.8 | 12.2% | — |
| Average of all 657 endowments | 1.4** | 10.9% | 7.7% |

*Source*: University announcements (October/November 2025); NACUBO and Commonfund (2026); own compilation.

*Notes*: * Return of the respective investment pool (Stanford Merged Pool, MIT Pool A). ** Arithmetic mean (USD 944.3bn / 657); the median is only USD 253.6m. Texas: including Texas A&M; behind it, in the Permanent University Fund (USD 40.3bn), stand proceeds from state oil and grazing land.

## 5.3 How the Yale Model Works

The endowment model rests on three considerations. First: whoever never has to sell can harvest the premium of hard-to-sell assets — private equity, venture capital, real estate, and timber yield more precisely because others shun their unsaleability. Secondly: in inefficient markets, selection pays; worlds lie between the best and the worst venture fund, so the effort goes into access to the best managers. Thirdly: classic bonds are dispensable

[32] Yale University (2021), In Memoriam of May 2021: endowment USD 1.3 billion in 1985, over USD 31 billion in 2021; 13.1 per cent per annum to 30 June 2020; the foundational text is Swensen (2009).

[33] NACUBO and Commonfund (2026), study for fiscal year 2025; concentration: own calculation from the individual figures in Table 6 (USD 279.8bn of USD 944.3bn).

for a perpetual horizon. Yale's most recent target weights: 23.5 per cent absolute return, 23.5 per cent venture capital, 17.5 per cent leveraged buyouts, 14 per cent listed equities, 14 per cent real estate and natural resources, only 7.5 per cent bonds and cash — Harvard, with 41 per cent private equity and 31 per cent hedge funds in fiscal 2025, was positioned similarly (Figure 2 in Chapter 7).[34]

Does it work? For the leading group, clearly: Yale earned 9.4 per cent per annum over the past ten years — 1.4 percentage points more than the median university and 2.2 percentage points more than a 70/30 portfolio; over the Swensen era the margins were larger still. The research, however, tempers the generalisation: Lerner, Schoar and Wongsunwai (2007) showed that it was precisely the elite universities' endowments that caught the best private equity funds — their access is part of the return and cannot be copied. Barber and Wang (2013) trace the alpha of the leading group almost entirely to that same overweighting; the average endowment did not beat a simple equity-bond mix. And Dahiya and Yermack (2021) find, for the breadth of American non-profit endowments, clear shortfalls against simple mixed portfolios.[35]

Fiscal 2025 supplied the fitting punchline: on average, the small endowments with their simple, equity-heavy portfolios beat the large ones with their alternatives — the MSCI ACWI world index rose 16.2 per cent in the period, and whoever was simply invested in listed markets took most of it. Over long periods the leading group stays ahead; but the gap between Yale and a disciplined index portfolio is smaller than the legend suggests — and it presupposes access that private investors do not have. Swensen himself drew the conclusion and, in his second book, expressly recommended to private investors not his professional model but broadly diversified, low-cost index funds with regular rebalancing.[36]

## 5.4 The Limits: Liquidity and Tax

The limits of the model show when money is needed. In the financial crisis, Harvard's endowment lost 27.3 per cent in fiscal 2009 — from USD 36.9 billion to USD 26.0 billion — and because capital calls from private equity funds fell due at the same time, the richest university in the world had to issue USD 2.5 billion of bonds in December 2008 and sell private equity stakes at around 45 per cent of book value. The lesson — hard-to-sell assets need a liquidity buffer — has been standard since, but was tested anew in 2025: Yale sold private equity stakes of USD 2.5 billion at a discount of just under ten per cent to book value — one of the largest secondary sales ever by a university; Harvard, too, parted with holdings worth billions. Yale itself gave ongoing portfolio management as the reason; it

[34] Yale University (2020), target allocation for fiscal year 2021 (the most recent published); Harvard University (2025); Swensen (2009).
[35] Yale University (2025); Lerner, Schoar and Wongsunwai (2007); Barber and Wang (2013); Dahiya and Yermack (2021).
[36] NACUBO and Commonfund (2026); Swensen (2005).

was the financial press that drew the connection to reduced federal funding and the new endowment tax.[37]

The second limit is political. Since 2018 the richest private universities have paid 1.4 per cent tax on their investment income; the legislative package of July 2025 turned this into a tiered tax: 1.4 per cent from USD 500,000 of endowment per student, 4 per cent from USD 750,000, and 8 per cent from USD 2 million — effective for tax years after 2025. Harvard, Yale, Stanford, Princeton, and MIT fall into the top tier; Harvard reckons with a burden in the order of USD 300 million a year. For investment policy this means more running liquidity, more tax-aware realisation of gains — and a distribution model that must for the first time reckon with the state sharing the table. Endowments are legal creatures too: their largest single risk in 2025 was not the market but the legislator.[38]

## 5.5 Europe: Oxford, Cambridge and the Rest

Europe's universities are financed mainly by the state; endowments worth the name in the American sense are found above all at the old English universities. Oxford manages GBP 4.2 billion at university level through its subsidiary Oxford University Endowment Management; added to this are GBP 5.06 billion in the legally independent colleges — together a good nine billion pounds. The distribution rule is a model lesson in smoothing: 4.25 per cent of the average fund value of the past twenty quarters is withdrawn, and the target is real growth of five per cent a year. Cambridge repeats the pattern, including the peculiarity that individual colleges — Trinity College above all — are richer than many a university. In the German-speaking world, by contrast, university endowments remain small; investing across generations has here, as Chapter 3 showed, traditionally been the business of church and monastery — and, most recently, of the KENFO.[39]

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[37] Harvard: fiscal 2009 and the December 2008 bonds according to university statements; sales in early 2009 with a realised loss of USD 439 million. Yale secondary sale 2025: around USD 2.5 billion, discount below ten per cent; on the liquidity question, cf. Rupprechter (2026a).

[38] One Big Beautiful Bill Act, Public Law 119-21 of 4 July 2025, amending Section 4968 of the Internal Revenue Code: tiers of 1.4 / 4 / 8 per cent by endowment per student, applying to institutions with at least 3,000 tuition-paying students; Harvard University (2025).

[39] University of Oxford (2026); colleges: GBP 5.06 billion according to the university. Keynes's King's College was the early Cambridge example (Section 3.1).

# 6 Mandates and Beauty Contests: How Institutional Money Is Awarded

## 6.1 The Path of a Mandate

Churches, sovereign funds, and endowments rarely manage everything themselves. The usual path: the investment committee lays down in a written investment policy which asset class is to be awarded externally and with what brief — say, “European small capitalisation shares, active, against the benchmark, observing our exclusion list” — and puts the mandate out to tender. The tender is followed by the funnel: from databases and market knowledge comes a long list of eligible managers, which is boiled down to a short list by way of standardised questionnaires on process, team, risk control, and costs; on-site examinations follow. At the end stands the final round before the investment committee, in which the last two to four houses present in person — the beauty contest, as the industry calls it. Public institutions such as the KENFO are bound by procurement law; private ones such as foundations and dioceses follow the same course voluntarily, often accompanied by specialist consultants.[40]

For the orders of magnitude, a glance at Oslo and Berlin suffices: Norway's fund held 111 external mandates with 103 managers at the end of 2025, together worth NOK 1,062 billion — five per cent of the fund; in 2025 alone, fourteen mandates were newly awarded and seventeen terminated. The KENFO awards practically its entire management through public tenders to external houses. The dioceses, too, invest their securities wealth, as Section 3.3 showed, through dedicated funds with appointed managers. Whoever wins such a mandate earns fees on billions for years — the competition is correspondingly hard, and the selecting side has to be correspondingly professional.[41]

## 6.2 What the Research Knows about Selection

The uncomfortable truth of mandate awarding was documented by Goyal and Wahal (2008): over a decade, American pension plans and endowments appointed above all managers who could show double-digit cumulative excess returns over the three years before the appointment — around twelve per cent for US equity mandates. After the appointment the excess return was no longer statistically distinguishable from zero, and the managers dismissed beforehand subsequently did no worse than their successors. Nor do the recommendations of the large investment consultants who accompany such selections predict future results, though they steer substantial flows (Jenkinson, Jones and

[40] The term has a double bottom in economics: Keynes (1936, Chapter 12) already compared the stock exchange to a newspaper beauty contest in which the winner is not the prettiest face but the one most entrants believe the others will find prettiest.

[41] NBIM (2026a); KENFO (2026).

Martinez, 2016). Past performance is precisely that: past. Whoever selects by it systematically buys after the best stretch and sells after the worst.[42]

The best houses have drawn their conclusions. Norway's manager states expressly that it awards external mandates not primarily on track records but on the examination of actual portfolios and decision processes — including multi-day visits on site — and confines awards to fields where specialist knowledge demonstrably adds value: local managers in emerging markets and specialists in smaller companies. The result bears looking at: since 1998 the external mandates have beaten their markets in 25 of 28 years after costs, by an average of 1.7 percentage points a year. The lesson is not that active selection is impossible — but that it must take place where markets are narrow, and with a procedure that examines the process rather than the past.[43]

### 6.3 What Private Investors Take from This

Private investors award no mandates — but they take the same decision whenever they choose a fund, an asset manager, or an adviser. Institutional practice translates into four rules. First: select by procedure, not by gut feeling — whoever writes down what the manager must be able to do and what he may cost compares better than with league tables. Secondly: process beats track record; three good years are not skill, a comprehensible, repeatable investment process rather more so. Thirdly: costs are negotiable and comparable — institutions squeeze every basis point, while private investors accept entry charges that would exist nowhere institutionally. Fourthly: take switching costs seriously; the constant firing and re-appointing by performance is, on all available data, a losing trade — in the private portfolio too.

## 7 The Common Core: Extremely Broad, Extremely Long

### 7.1 Diversification as the Starting Point

Laid side by side, the portfolios of the three groups at first appear thoroughly different — Norway almost entirely listed, Yale and Harvard mostly in private holdings and hedge funds, the churches on a property base. Figure 2 shows the allocations in comparison. The second look finds the common ground: none of the giants bets on a few stocks, sectors, or countries. Norway holds 7,200 companies, Harvard spreads across seven asset classes, the KENFO across equities, bonds, and illiquid assets worldwide; even the most concentrated house in this paper — Temasek — distributes its wealth across dozens of holdings on three

[42] Goyal and Wahal (2008): some 3,400 mandate decisions 1994-2003; cumulative three-year excess return before the appointment of 12.0 per cent for US equity mandates and 15.5 per cent for international mandates; Jenkinson, Jones and Martinez (2016).
[43] NBIM (2026d), External Mandates: NOK 1,062 billion with 103 managers at end-2025; cumulative added value NOK 93 billion.

continents. Markowitz's old insight that diversification is the only free benefit in investing is practised here with billions: single risks are held, but never bunched.[44]

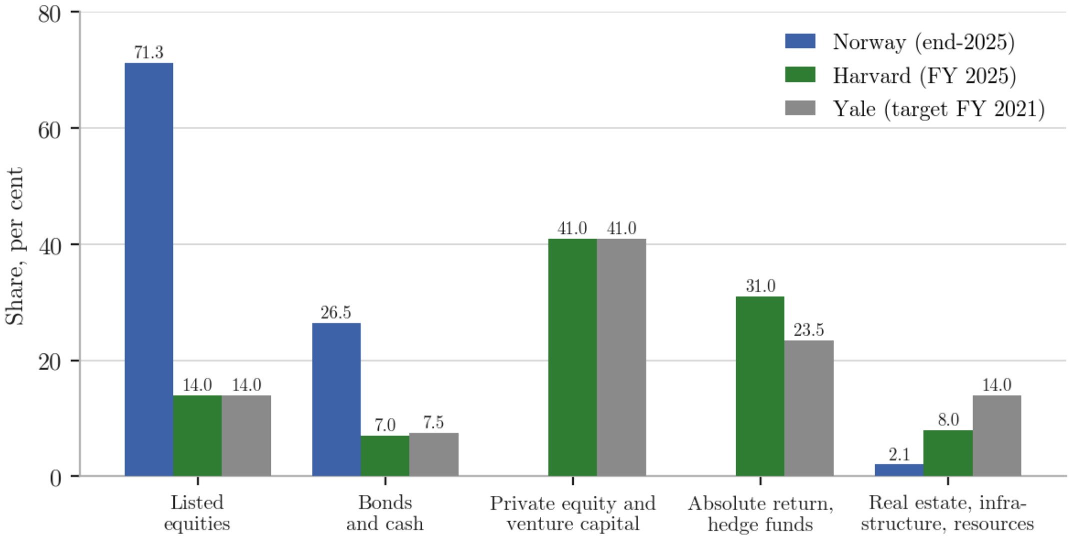


**Figure 2**: Asset allocation of three large investors compared, per cent of portfolio. Source: NBIM (2026a) as at end-2025; Harvard University (2025) as at 30 June 2025; Yale University (2020), target weights; own presentation. The Harvard figures sum to 101 per cent owing to rounding.

Behind the breadth stands not bravado but humility: the largest investors in the world do not claim to know which country, sector, or share will win — they buy them all and let the weights do the work. Norway's fund institutionalised this humility after the study by Ang, Goetzmann and Schaefer (2009) had shown that the active contribution to returns was vanishingly small; Sharpe (1991) had written down the reason even earlier: before costs, the average of all active investors is the market — after costs, it lies below it. The consequence holds for every fortune of every size: whoever diversifies needs to know less, and whoever needs to know less makes fewer expensive mistakes.[45]

## 7.2 Horizon and Withdrawal Rule

The second common trait is the pairing of a long horizon with a fixed withdrawal rule. The horizon permits high equity and private holdings: Norway held its 70 per cent of equities through the loss year 2022, and the endowments hold 86 per cent in equities and equity-like assets — for these investors, fluctuation is not the risk but the price of return; the true risk would be no longer being able to finance the task in real terms. The withdrawal rule, in turn, makes the horizon credible: whoever binds himself to withdraw only three to five per cent a year — smoothed over several years — cannot be forced to sell at the bottom. Table 7 places the rules side by side; their range is narrow, their principle identical: what

[44] Markowitz (1952); allocations: NBIM (2026a), Harvard University (2025), Yale University (2020), KENFO (2026).
[45] Ang, Goetzmann and Schaefer (2009); Sharpe (1991).

is withdrawn is what the wealth permanently yields, not what the budget happens to need.[46]

**Table 7:** Withdrawal and distribution rules compared

| Investor | Rule | Purpose |
|---|---|---|
| Norway (state) | withdrawal of around 3% — the expected real return (fiscal rule) | Budget without capital erosion |
| Yale | 5.25% target rate, smoothed: 80% prior-year amount + 20% target rate | Plannable payout |
| Oxford (OUem) | 4.25% of the average value of the past 20 quarters | Smoothing across the cycle |
| US endowments overall | effectively 4.9% in fiscal 2025 (average policy rate 4.6%) | Operations and scholarships |
| Church Commissioners | distribution pledges per three-year period; target inflation + 4% | Reliability for the Church |

*Source*: Norwegian Ministry of Finance; Yale University (2025); University of Oxford (2026); NACUBO and Commonfund (2026); Church Commissioners (2026); own compilation.
*Notes*: All rules refer to the value of the wealth, not to current income; capital gains are expressly part of the withdrawable return.

How powerfully horizon and rule work together is shown by the simplest of all sums: a fortune earning five per cent in real terms from which three per cent is withdrawn keeps growing in real terms — it finances its task for ever and becomes larger doing so. The same sum explains why Norway's fund could grow beyond NOK 21,000 billion despite funding the state budget every year, and why Yale's endowment could distribute USD 15.3 billion in a decade — 60 per cent of its opening value — and still grow. Private wealth differs from this only in scale: a retirement portfolio, too, is a small endowment with a task, a horizon, and a withdrawal rule — it is merely seldom thought of that way.[47]

# 8 Ten Lessons for Private Investors

What can be carried over? Not the size, not the access to the best private equity funds, not the purchase price of four basis points. But the principles can — they cost nothing and are, as the preceding chapters show, the real core of institutional success. Table 8 summarises them; the paragraphs that follow set them out.

[46] NACUBO and Commonfund (2026): 86 per cent "equity and equity-like" including hedge funds; Brown, Dimmock, Kang and Weisbenner (2014) show, however, that universities often cut harder after crashes than their rules require — fidelity to rules is no matter of course even for institutions.
[47] Yale University (2025): USD 15.3 billion of distributions in the decade to 2025.

**Table 8:** Ten lessons of the great long-term investors for the private portfolio

| **Lesson** | **Institutional model** |
|---|---|
| 1. Put the investment policy in writing | Investment policies of all large houses |
| 2. Settle the horizon before choosing products | Norway: money for generations |
| 3. Diversify extremely broadly — stocks, countries, classes | NBIM: 7,200 companies; Markowitz (1952) |
| 4. Treat costs like an institution | NBIM: 0.04% management costs p.a. |
| 5. A fixed withdrawal rule, not withdrawal by need | Fiscal rule 3%; Yale 5.25% smoothed |
| 6. Rebalance by rule | Norway's bands; Swensen (2005) |
| 7. Illiquids only with a reserve and discount awareness | Harvard 2008/09; Yale secondary sale 2025 |
| 8. Stay a buyer in the bear market | Norway 2008/09 as a large buyer |
| 9. Choose managers by process, not by three good years | NBIM mandate awards; Goyal and Wahal (2008) |
| 10. Ethics as a deliberate, broad selection | Church guidelines; Hoepner and Schopohl (2018) |

*Source*: Own compilation from Chapters 3 to 7.

On the concept (lessons 1 and 2): every institution examined here possesses a written investment policy that fixes purpose, horizon, asset classes, bands, and exclusions before any single product is discussed. A private investor needs one page for this: what the money is for, when it will be needed, what fluctuation is bearable, what will never be bought. The gain lies less in the paper than in the order — first the task, then the horizon, then the assets. Whoever determines the horizon honestly usually finds it is longer than assumed: a fifty-year-old is investing for a retirement that reaches into the 2060s — closer to the horizon of an endowment than to that of a savings book.

On implementation (lessons 3, 4, and 6): the diversification of the giants can be bought by anyone today — a global equity index fund holds thousands of companies and costs a few basis points, plus a bond or money market quota according to risk tolerance; world equities have returned around five per cent a year in real terms since 1900, and the MSCI world index around nine per cent nominal since the end of 1987. What matters is the Norwegian addition: fixed bands and rule-bound resetting. Whoever trims the equity share back to target after a strong year and tops it up after a weak one automatically sells dear and buys cheap — without forecasts, without heroics. That is precisely what Swensen recommended to private investors: broad, low-cost index funds and disciplined rebalancing — expressly not the imitation of his Yale portfolio.[48]

On withdrawal (lesson 5): the most important transfer concerns the retirement phase. Institutions withdraw three to five per cent — smoothed — because this range, on all historical experience, preserves a fortune in real terms. A private fortune from which four per cent of a smoothed value is withdrawn each year is practically a small endowment; withdrawal by cash position — much in good years, sales at the bottom — is the opposite,

[48] Dimson, Marsh and Staunton (2026); MSCI factsheet as at 31 July 2026 (9.0 per cent per annum since end-1987, gross in US dollars); Swensen (2005).

and the most common way of using a fortune up after all. Whoever means to bequeath had best introduce the rule in two stages at once: withdrawal for one's own needs, the rest growing for the next generation — which is literally the Norwegian model in household format.[49]

On illiquidity and crisis (lessons 7 and 8): the illiquidity premium is real, but it is paid only to those never forced to sell — Harvard sold at 45 per cent of book value in 2009, Yale at a discount in 2025 despite record wealth. For private investors this means: private holdings, closed-end funds, buy-to-let flats, and other hard-to-sell assets only from money demonstrably dispensable for decades, and always with a liquid reserve alongside. The crisis itself is then no danger but the harvest of the patient: between mid-2007 and early 2009 Norway's fund bought equities worth more than a thousand billion kroner net by rule — the larger part of it while prices were falling; not out of courage, but because the phasing-in of the higher equity share and the bands demanded it. A private investor with a savings plan and a rebalancing rule automatically does the same in a bear market.[50]

On selection and ethics (lessons 9 and 10): whoever chooses managers, funds, or advisers takes over the institutional question: is the process comprehensible, repeatable, low-cost — or are three good years being sold? And whoever wants to invest ethically can take his bearings from the oldest sustainability investors: clear exclusions, broad remaining diversification, no promises of miracles. The experience of the churches and of Norway shows that well-considered exclusions cost little return; the limit runs where the selection becomes so narrow that diversification suffers. Questions of conscience belong in the investment policy — as with the churches: written down, reasoned, reviewable.[51]

# 9 Conclusion

Churches, sovereign wealth funds, and university endowments are separated by mission, origin, and legal form — and united by the investment task: to run a fortune so that it fulfils its task across generations in real terms. Their answers resemble one another more than the labels suggest: extremely broad diversification, an unshakeable horizon, fixed withdrawal rules, low or at least hard-negotiated costs, written policies, an ordered selection of managers. Where they differ — Norway's index proximity against Yale's mass of private holdings, the church's property against the fund's securities — the comparison shows no victor, but it does show a condition: the Yale model presupposes access and staff that no one outside the leading group possesses; the Norwegian model presupposes nothing but discipline.

[49] On passing wealth between the generations in detail, Rupprechter (2026c).
[50] NBIM puts the net purchases of the phasing-in period at NOK 1,010 billion; cf. Rupprechter (2026a) on partial commitments, the reserve, and buying in weak phases at a discount.
[51] Hoepner and Schopohl (2018); on the selection question, Goyal and Wahal (2008) and Jenkinson, Jones and Martinez (2016).

Three insights of this paper strike the author as the most durable. First: investment history is written by the patient — the largest fund in the world arose in thirty years out of rule-binding, not out of genius. Secondly: the long horizon is the only institutional advantage that can be privatised in full; diversification and cost discipline are its purchasable siblings. Thirdly: even the giants fail where they leave their own rules — in the liquidity squeeze, in buying on track records, in wealth without accountability. The private investor who runs his portfolio like a small endowment — with a task, a horizon, a rule, and a report to himself — has already adopted the best of what the managers of billions have to teach. Money for generations is not a question of size. It is a question of attitude.

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