

Analysis of UK Equities Ownership by the Norwegian Sovereign Wealth Fund Which May Help Inform Investment Decisions

**Copyright © 2026 Peter Bentley, School of Business, Computing and Social Sciences,
University of Gloucestershire, Cheltenham, UK**

Abstract – The Norwegian Sovereign Wealth Fund manages revenue from Norway’s oil and gas resources to benefit current and future generations. The fund publishes data on its holdings from which it possible to gain a high-level view of the fund for investment decisions. Papers have been written which analyse the fund at a macro-statistical level but no analysis could be found for the individual equities level.

This paper discusses analysis of Norwegian Sovereign Wealth Fund held UK Equities data from the years 1998 to 2024, providing a view of long, medium and short-term holdings. The analysis is done only using Spreadsheets. In the business of IT/Cyber only using publicly available software is known as Living Off The Land.

The analysis finds that the active management of the fund could help inform personal or professional investment decisions.

Keywords – Norwegian Sovereign Wealth Fund; NSWF; Government Pension Fund Global; Investment; Retirement Income; Microsoft; Excel; Spreadsheet; Living Off The Land.

1. Introduction

This paper is the eighth in an occasionally issued series of Monographs. It is produced to demonstrate a cost-effective way to help identify possible investment decisions.

The formal name for the Norwegian Sovereign Wealth Fund is the Government Pension Fund Global. This paper will use the acronym of the former, more well-known name: NSWF.

The aim of the fund is

“ ... to ensure a long-term management of revenue from Norway’s oil and gas resources, so that this wealth benefits both current and future generations.”.

(Norges Bank Investment Management, 2025).

At the time of analysis, the fund divided its investments into four: Equities (70.6% of all investments); Fixed Income (27.1%); Real estate (1.9%); and Infrastructure (0.4%). This paper concentrates on Equities which, for the retail investor, may be the easiest in which to invest. Note: percentages are as the time of analysis not writing. There has been a time lag between analysis and production of this paper. This may not be the most recent data but it does provide demonstration of technique.

This paper does not constitute investment advice.

2. Literature Review

No analysis could be found of the type presented in this paper for NSWF. Caner and Grennes (2010) provide statistical analysis but not a view presented by individual companies.

No fund could be found that emulates the NSWF although a world fund like Vanguard Total World Stock ETF may be close (Vanguard, 2025).

Institutions and individuals manage their money for the future. On a personal investment level, one needs to estimate how much is needed for a good level of retirement income and how can one make this last. Bengen (1994) suggests that a drawdown rate of 4% in the first year followed by inflation adjusted withdrawals should provide a retirement fund where the fund is not exhausted before life end and may even provide generational wealth transfer. Gillies (2026) discuss the same. Neuberger Berman (2019) suggest that the rule stills holds. Latterly Bengan (2026) has introduced the concept of "safe max" which is the maximum safe withdrawal rate to a particular set of circumstances e.g. time horizon, asset allocation, type of account from which withdrawals are made, generational wealth transfer.

Many institutions have an endowment fund. Harvard's endowment (Harvard University, 2026) is made up of approximately 14,765 funds and, although the payout rate can vary each year based on endowment returns, it generally is 5.0 to 5.5% of market value. Similarly, Stanford (Stanford, 2026) aims to pay out around 5 percent of its endowment each year. Princeton trustees usually decide to spend between 4% and 6.25% each year (Princeton Alumni Weekly, 2026).

Elsewhere, Standard Life (2026) offer the 1 in 300 rule for inflation linked annuity pricing: £1 of monthly income requires £300 in the retirement fund; and Pensions UK (2026)

suggest three levels of retirement (Minimum, Moderate and Comfortable standard) with associated annual income.

These examples demonstrate that drawdown rate vary by circumstance.

3. Data Cleanup

In the interests of transparency, the NSWF publishes data on all its holdings, both historical and current. The historical may be filtered in many ways but for this paper the data for UK Equities for each of the years 1998 – 2024, inclusive, was used.

The NSWF allows users to download the filter-selected data in various formats. This work downloaded all Equities data by year and then stored as Microsoft Spreadsheets (.xls). Half year data for 2025 was not used. Not all spreadsheets had the same format. The next step was to aggregate all spreadsheets to a new spreadsheet with a common format for each column: year, company; value (NOK); sector; ownership; country; incorporation country. This set of data was manipulated using a pivot data presenting companies, by year, to provide a view of existence of the NSWF stake.

4. Analysis

The first few rows of the pivot table are presented in Appendix A for illustrative purposes. The final 10 columns are a view of the length of time equity in a company has been held by the NSWF. These first seven columns are for equities held for 27 years; then 25 - 26 years; 20 - 24; years; 15 – 19 years; 10-14 years and 1 year. The next two columns highlight equities that are new investments in 2024 and those which are no longer held in 2024. The final column is highlights consecutive rows that add up to 27 to highlight companies held for all 27 years but which may have undergone a name change. There is no scientific reason for the first seven columns apart from the first and last: we may wish to know which companies are a long-term hold, which are no longer considered a good investment and companies which are recently considered a good investment.

Appendix B to |F present a summary of companies held for various years. Some companies have gone through name changes. Some of these are obvious but other less so. Not all the seven columns from the pivot table are presented in the appendices; some of the work is left to the reader.

It is clear from the pivot table and the appendices that there are some equities are held for the long-term. This does not mean that they will always be held as at least one long-term hold was completely sold during the last year.

A second pivot table was constructed consider to percentage of ownership of each company. This data may be presented in a future paper.

5. How Can We Make Use of This Information?

This data could be used to guide the personal and professional investor. It would be surprising if this were not already being done, especially by the latter. Indeed, some may track the NSWf and charge for this work.

This work was done over a period of in stages but it is estimated that the initial data download and manipulation, in aggregate, took less than half a day. It would take no more than an hour each working day to check on investments and act upon the outcome. The real-time aspect of the NSWf website may make it possible to see which companies were being traded. This would take more work but could probably still be done by Living Off The Land.

6. A Critique of this Work

This analysis is performed on end of year data. There is a time-lag to the analysis. Investors looking for more immediate analysis are unable to use it for time-critical investments. However, as mentioned above, the NSWf website does seem to provide real-time updates of equities.

Although there has been a time lag between analysis and production of this paper, and the data may not be the most recent data, the work does provide demonstration of technique.

The analysis is incomplete in that not all company name changes may have been identified.

The analysis does not include levels of equities held for each company which may vary over time.

7. Suggested Lines of Further Work

A better view would be to include company sector. This would enable the analyst to use more information in the decision to balance any portfolio and hence reduce Concentration Ratio Risk.

A wider way of reducing this risk would be to invest in equities in different countries but this then exposes the investor to currency exchange fluctuations. The analysis may be enhanced by considering all company name changes.

The data is complete for the years up to and including 2024. Adding subsequent years to this data and modifying the pivot table is a relatively small amount of work compared to the original data aggregation and clean-up.

8. Concluding Remarks

This paper has demonstrated a cost-effective method of analysis of the Norwegian Sovereign Wealth Fund investment data, using Living Off The Land techniques which could help inform personal or professional investment decisions.

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Appendix A: First 13 row of Pivot Table

Count - Year	Year																											Total	Sum	N	O	S																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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2997	2998	2999	3000	3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011	3012	3013	3014	3015	3016	3017	3018	3019	3020	3021	3022	3023	3024	3025	3026	3027	3028	3029	3030	3031	3032	3033	3034	3035	3036	3037	3038	3039	3040	3041	3042	3043	3044	3045	3046	3047	3048	3049	3050	3051	3052	3053	3054	3055	3056	3057	3058	3059	3060	3061	3062	3063	3064	3065	3066	3067	3068	3069	3070	3071	3072	3073	3074	3075	3076	3077	3078	3079	3080	3081	3082	3083	3084	3085	3086	3087	3088	3089	3090	3091	3092	3093	3094	3095	3096	3097	3098	3099	3100	3101	3102	3103	3104	3105	3106	3107	3108	3109	3110	3111	3112	3113	3114	3115	3116	3117	3118	3119	3120	3121	3122	3123	3124	3125	3126	3127	3128	3129	3130	3131	3132	3133	3134	3135	3136	3137	3138	3139	3140	3141	3142	3143	3144	3145	3146	3147	3148	3149	3150	3151	3152	3153	3154	3155	3156	3157	3158	3159	3160	3161	3162	3163	3164	3165	3166	3167	3168	3169	3170	3171	3172	3173	3174	3175	3176	3177	3178	3179	3180	3181	3182	3183	3184	3185	3186	3187	3188	3189	3190	3191	3192	3193	3194	3195	3196	3197	3198	3199	3200	3201	3202	3203	3204	3205	3206	3207	3208	3209	3210	3211	3212	3213	3214	3215	3216	3217	3218	3219	3220	3221	3222	3223	3224	3225	3226	3227	3228	3229	3230	3231	3232	3233	3234	3235	3236	3237	3238	3239	3240	3241	3242	3243	3244	3245	3246	3247	3248	3249	3250	3251	3252	3253	3254	3255	3256	3257	3258	3259	3260	3261	3262	3263	3264	3265	3266	3267	3268	3269	3270	3271	3272	3273	3274	3275	3276	3277	3278	3279	3280	3281	3282	3283	3284	3285	3286	3287	3288	3289	3290	3291	3292	3293	3294	3295	3296	3297	3298	3299	3300	3301	3302	3303	3304	3305	3306	3307	3308	3309	3310	3311	3312	3313	3314	3315	3316	3317	3318	3319	3320	3321	3322	3323	3324	3325	3326	3327	3328	3329	3330	3331	3332	3333	3334	3335	3336	3337	3338	3339	3340	3341	3342	3343	3344	3345	3346	3347	3348	3349	3350	3351	3352	3353	3354	3355	3356	3357	3358	3359	3360	3361	3362	3363	3364	3365	3366	3367

Appendix B: List of Companies Held for all 27 Years (1998 – 2024)

Associated British Foods Plc	Barclays (Plc)
Centrica PLC	(The) British Land Co Plc
Hammerson PLC	Bunzl
HSBC Holdings PLC	Diageo (Plc)
Legal & General Group PLC	Hays (Plc)
Next PLC	Johnson Matthey (Plc)
Rank Group PLC	Kingfisher (Plc)
Schroders PLC	Land securities (Group Plc)
Smith & Nephew Plc	Marks & Spencer (Group Plc)
Tesco PLC	Pearson (Plc)
Unilever PLC	Provident Financial (Plc)
	Rentokil Initial (Plc)
	Severn Trent (Water) Plc
	Standard Chartered (Plc)
	Tate & Lyle (Plc)
	Vodafone (Airtouch)(Group) Plc
	National Grid (Transco) (Plc)

The companies in the right-hand column have changed their name at least once in the 27 years and have been reconstructed from at least two entries. Alternative names are in parenthesis. Other companies may be in the original data but not in the above list.

Three companies have been held for 25 years but not consecutively.

Appendix C: List of Companies Held for 20-24 years consecutively:

AstraZeneca PLC	J Sainsbury PLC
Aviva PLC	James Fisher & Sons PLC
Balfour Beatty PLC	John Wood Group PLC
Barclays PLC	Mitchells & Butlers PLC
Bellway PLC	Pennon Group PLC
BP PLC	Persimmon PLC
BT Group PLC	Petrofac Ltd
Bunzl PLC	Premier Foods PLC
Burberry Group PLC	Prudential PLC
Carnival PLC	Renishaw PLC
De La Rue PLC	Rotork PLC
Greggs PLC	SIG PLC
Inchcape Plc	Smiths Group PLC
Informa PLC	Speedy Hire PLC
InterContinental Hotels Group PLC	Travis Perkins PLC
Intermediate Capital Group PLC	Victrex PLC
ITV PLC	Whitbread PLC

Appendix D: List of Companies Held for 5-9 years consecutively:

AG Barr PLC	M&G PLC
Airtel Africa PLC	Man Group PLC/Jersey
AJ Bell PLC	NatWest Group PLC
Aston Martin Lagonda Global Holdings PLC	NCC Group PLC
Bakkavor Group PLC	Ninety One PLC
Bank of Georgia Group PLC	OSB Group PLC
Breedon Group PLC	Oxford Biomedica PLC
Bytes Technology Group PLC	Pagegroup PLC
C&C Group PLC	Paragon Banking Group PLC
Clarkson PLC	Plus500 Ltd
CMC Markets PLC	Primary Health Properties PLC
Coats Group PLC	Quilter PLC
ConvaTec Group PLC	Raven Property Group Ltd
Entain PLC	Reach PLC
Flutter Entertainment PLC	S4 Capital PLC
Funding Circle Holdings PLC	Softcat PLC
Galliford Try Holdings PLC	Strix Group PLC
GlobalData PLC	TBC Bank Group PLC
Helical PLC	Team17 Group PLC
Hilton Food Group PLC	TI Fluid Systems PLC
Ibstock PLC	Trainline PLC
Invinity Energy Systems PLC	Victoria PLC
IP Group PLC	Vistry Group PLC
JET2 PLC	Watches of Switzerland Group PLC
JTC PLC	XP Power Ltd
Kainos Group PLC	XPS Pensions Group PLC
Knights Group Holdings PLC	

Appendix E: List of Companies Previously Held but no Longer Invested in 2024:

Accrol Group Holdings PLC	Immunocore Holdings PLC
Amedeo Air Four Plus Ltd	Indivior PLC
Ascential PLC	International Distributions Services PLC
Avon Protection PLC	IQGEO Group PLC
Balanced Commercial Property Trust Ltd	IWG PLC
Barratt Developments PLC	LXI REIT Plc
Centamin PLC	Marlowe PLC
Close Brothers Group PLC	Moneysupermarket.com Group PLC
CVS Group PLC	Network International Holdings PLC
Darktrace PLC	Pendragon PLC
Dechra Pharmaceuticals PLC	Redde Northgate PLC
Dowlais Group PLC	Redrow PLC
DX Group PLC	Smurfit Kappa Group PLC
Exscientia Plc	Spirax-Sarco Engineering Plc
Ferguson PLC	TUI AG
Gym Group PLC/The	UK Commercial Property REIT Ltd
Helios Towers PLC	Virgin Money UK PLC
Hostelworld Group Plc	Wincanton PLC
Hotel Chocolat Group PLC	

Appendix F: List of Companies Invested in for the First Time or after a break in 2024:

1Spatial Plc
Aquis Exchange PLC
Avon Technologies PLC
Barratt Redrow PLC
Canal+ France SA
International Distribution Services PLC
International Workplace Group PLC
iomart Group PLC
Marex Group PLC
MONY Group PLC
PPHE Hotel Group Ltd
Rosebank Industries PLC
Secure Trust Bank PLC
Smurfit WestRock PLC
Spirax Group PLC
Tracsis PLC
Yu Group plc
Zigup PLC