



# Deutsche Numis Indices

2024 Annual Review

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ISSN

1470-0506

## The Quick Guide to the Deutsche Numis Indices

### Coverage of the UK market

The Deutsche Numis family of indices traces its origins back to 1987 with the launch of a smaller companies' index developed by Elroy Dimson and Paul Marsh. Numis, acquired by Deutsche Bank in 2023, took over the index in 2012, since when it has become the pre-eminent benchmark for investors targeting UK small- and mid-cap companies. In addition to the original Smaller Companies index, Deutsche Numis now provides a range of indices covering the entire UK equity market. All the indices are produced on a daily basis as both capital gains and total returns indices, and both including (IIC) and excluding (XIC) investment companies. None of them exclude companies based on liquidity or free float. Those targeting the main market also include Standard listed stocks but exclude non-UK companies. The indices are rebalanced once a year at the end of December. While the full name of each of the indices includes the title of Deutsche Numis, throughout this publication we generally refer to their shortened name or abbreviation. The current range of indices and their short/abbreviated and full names are as follows:

<b>DNSCI</b>	The Deutsche Numis Smaller Companies index or DNSCI targets the bottom 10% of the main UK market by value. It was launched in 1987 and has a back history to 1955.
<b>DNSC plus AIM</b>	The DNSC plus AIM index includes all the constituents of the DNSCI and all companies listed on AIM that fall below the DNSCI size cut-off. It was launched alongside the DNSCI in 1987 and has a back history to 1955. Prior to the launch of AIM, the index and its back history included companies listed on the (now closed) USM and Third Market.
<b>DNSC 1000</b>	The DNSC 1000 index targets the bottom 2% of the main UK market (XIC) by value. Apart from a lower size cut-off, in all other respects its construction and composition are the same as the DNSCI.
<b>Mid Cap</b>	The Deutsche Numis Mid Cap index was launched in 2014 and targets the bottom 20% of the UK main market but excludes the smallest 5%. By design it covers 15% of the UK main list by value. The largest companies of the DNSCI are also constituents of the Mid Cap as the indices overlap.
<b>Large Cap</b>	The Deutsche Numis Large Cap index was launched in 2020 and targets the top 80% of the UK main list by value. It has a lower, but no upper size limit.
<b>Alternative Markets</b>	The Deutsche Numis Alternative Markets index was launched in 2017 and covers all companies listed on qualifying alternative markets. Currently only AIM qualifies but its back history to 1980 includes all constituents of the USM and Third Market.
<b>All Share</b>	The Deutsche Numis All Share index is the most recent addition to the family and was launched in 2021. It contains all fully listed stocks plus all stocks listed on AIM. It therefore includes all the constituents of the DNSCI, Mid Cap and Large Cap as well as all the constituents of the Alternative Markets index.

### The Deutsche Numis indices: their history, basis for inclusion, and characteristics at start-year 2024

Index	Launch year	Back history	Basis for inclusion	Mkt Value	No. of Cos	Smallest	Largest
DNSCI	1987	1955	Bottom 10% of main listed market	£252bn	699	£0.08m	£1,708m
DNSC 1000	1994	1955	Bottom 2% of the main listed market XIC	£93bn	562	£0.08m	£595m
DNSC plus AIM	1987	1955	DNSCI plus junior listed cos below DNSCI cut-off	£323bn	1,445	£0.08m	£1,708m
Mid Cap	2014	1955	Bottom 20% of the main listed market excluding the smallest 5%	£378bn	192	£845m	£4,619m
Large Cap	2020	1955	Top 80% of the main listed market	£2,008bn	89	£4,811m	£166,241m
Alternative Markets	2017	1980	All constituents of qualifying alternative markets (currently only AIM qualifies)	£79bn	749	£0.24m	£2,715m
All Share	2021	1955	All fully listed companies and all junior market (currently AIM) companies	£2,592bn	1,629	£0.08m	£166,241m

Source: Scott Evans and Paul Marsh, Deutsche Numis

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## Foreword

### by the Head of Indices, Deutsche Numis

During 2023 Numis was acquired by Deutsche Bank and gained the new name of Deutsche Numis. As part of this change, the Numis indices have adopted the new title of the Deutsche Numis indices. While the indices have gained a new title, their production and distribution remain unchanged. It is with great pleasure therefore, that we publish the 38th Annual Review of the newly named Deutsche Numis indices.

The indices were created by Professor Elroy Dimson and Professor Paul Marsh of London Business School. Through the launch of the smaller companies index and associated research on smaller companies, the Deutsche Numis index team has had a major impact on the practicalities of investing in smaller and mid-sized companies in the UK. With the subsequent launch of the Mid Cap, Large Cap and All Share indices, Deutsche Numis provides a complete set of benchmarks for the UK equity market.

During their careers at London Business School, and through their widely cited book, *Triumph of the Optimists*, and other publications, Elroy and Paul have made a profound contribution to investment research. As part of the original design team for the FTSE 100 Index, as well as their creation of the Deutsche Numis indices and the long-run DMS global investment return indices, they have also had a central role in the design of stock market indices in this country and around the world. Scott Evans joined the team in 2016 and brings a deep knowledge of UK equities and small-caps gained from over 20 years of working at a senior level in investment banking, together with his extensive experience as an academic and researcher.

The indices are a central part of the extensive range of research services that Deutsche Numis provides to investors as well as to corporate clients. With a back history to 1955, the indices provide a remarkable opportunity to set contemporary issues in a truly long-term context. It enables investors to take a strategic view on today's markets that is based on evidence that is comprehensive and authoritative, and underpinned by research of the highest quality.

The Deutsche Numis family of indices provides the definitive measure of the performance of low, mid, and large capitalisation companies. The indices are a unique research resource for the serious investor in smaller companies and in the UK equity market given their consistent definition and the length of the index history.

We congratulate the authors on completion of this detailed and comprehensive study. It contains many insights that will help you as an investor. Please do not hesitate to contact Deutsche Numis if you would like to follow up on the ideas presented in this volume.

**Will Wallis**

Deutsche Numis, 15 January 2024

# 1. Highlights

by Scott Evans and Paul Marsh

## A good start and finish

Performance of the Deutsche Numis indices in 2023 was akin to a novel from the Victorian era. A good start, an arduous middle and a racy ending. This was especially true for small- and mid-caps. They performed strongly in January, then entered a sustained period of volatility, lagging large-caps for much of the year. The last two months saw a reversal in fortunes. By year end, the Mid Cap XIC had returned 13.3% and the small-caps of the DNSCI XIC 10.1%. Both were ahead of the 8.1% for the Large Cap and Deutsche Numis All Share. The minnows in the DNSC 1000 XIC performed less well but still returned 6.6%. Figure 1 summarises the index returns in 2023.

## AIM underperformed

The story was very different for AIM which was more of a Shakespearian tragedy. The Alternative Markets index which includes all AIM companies was behind from the outset and by the end of October the index was down by over 20%. This was despite bid activity which saw 5.6% of the start value of AIM being acquired over the year. Even more poignant was that two industries that AIM has a high exposure to – technology and consumer discretionary – were two of the best performing industries for both the DNSCI and Deutsche Numis All Share. Technology was also a stand-out performer globally. For AIM, the reverse was true, as along with energy, these two industries made the largest negative contribution to AIM performance in 2023. By the year end the Deutsche Numis Alternative Markets index had returned -7.2%.

## International perspective

The 8.1% return on the Deutsche Numis All Share last year looks less impressive when viewed globally. The MSCI World index returned 23% in USD terms, and 17% in GBP. US equities gave an impressive 26% (19% in GBP terms). Indeed, among the world's 13 largest stock markets, the UK was the third worst performer in common currency terms. While globally, 2023 saw strong equity performance, this came mostly from large-caps, with small-caps underperforming in 8 of the 13 countries and the world index. For small-cap performance, the UK was mid-ranking in absolute terms, while achieving the fourth highest small-cap premium.

## Long-run small-cap premium 3.1%

Putting the performance of UK equities in the context of other UK asset classes, Figure 1 below shows that both the DNSCI XIC and Deutsche Numis All Share XIC beat inflation in 2023, so their real returns were positive. They also beat cash (Treasury bills), gilts, house prices and index linked gilts. Indeed, small-caps and mid-caps were the best performing UK asset classes in 2023.

Figure 1. Deutsche Numis Indices (left-hand chart) and comparative asset returns (right-hand chart) in 2023:



Source: Scott Evans and Paul Marsh, Deutsche Numis.

**More deaths than births: IPOs hit a low point**

A standout feature of the UK market, and hence the Deutsche Numis indices in 2023, was the continued decline in the number of listed companies. This can be seen by focusing on the Deutsche Numis All Share index which incorporates all fully-listed UK companies plus all AIM stocks. The index began 2023 with 1,717 constituents. By year-end, this had fallen to 1,629 – because there were more deaths than births. During 2023, 52 companies were acquired, while another 65 had their listings cancelled for other reasons – decisions to delist, voluntary liquidations, becoming valueless, moves to foreign exchanges and so on. This gave a total of 117 deaths (see the left-hand chart below). However, there were just 29 births (mostly IPOs), hence the number of index constituents fell by 88. The situation in 2023 was aggravated by the tiny number of IPOs – just 26 – one of the lowest numbers since the launch of the indices in 1987. There were just ten AIM IPOs, the lowest number since AIM’s inception.

**84% decline in listed companies (XIC) since 1955**

The decline in the number of listed stocks has a long history. At start-1955, there were some 3,500 fully-listed UK companies. This fell to 1,585 by the start-1987 launch date of the Deutsche Numis indices, and then subsequently fell further to 882 at the start of 2024. This represents a 75% fall since 1955, and an even greater decline of 84% if investment companies are excluded. Similarly, there has been a marked decline in the number of AIM listed companies which has fallen by 56% since its 2007 high.

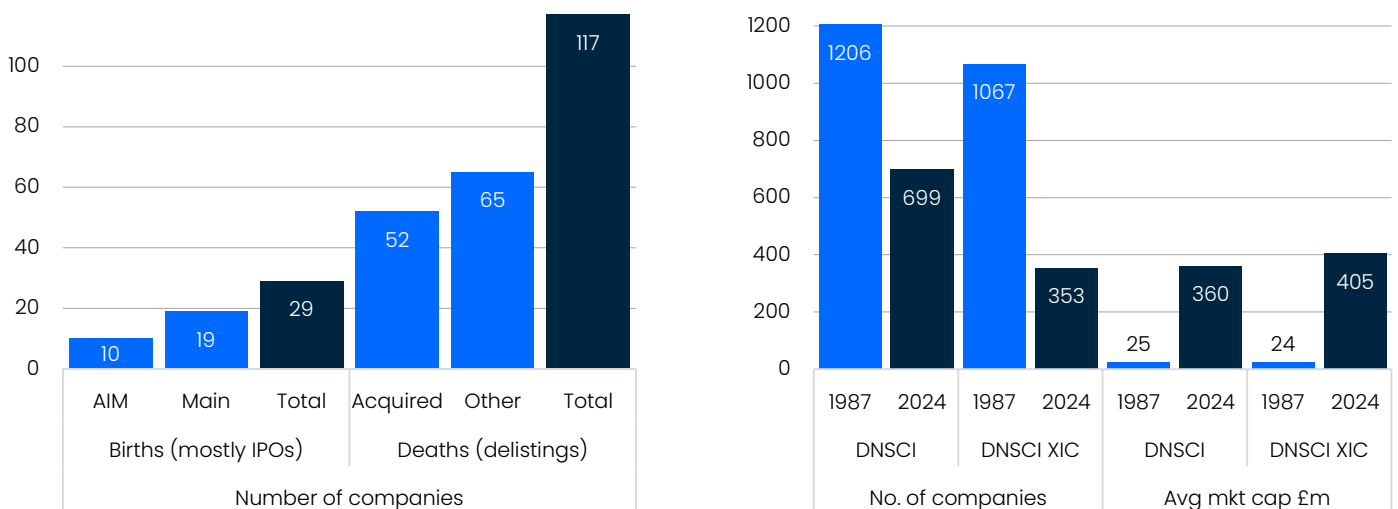
**66% decline in constituents of the DNSCI XIC since 1987**

Within the small-cap arena, the number of constituent companies in the DNSCI has fallen from 2,517 constituents in 1955, to 1206 at start-1987, to 699 at start-2024. On an XIC basis, the number of companies in the DNSCI XIC has fallen from 1,067 at index launch to 353 at start-2024, a two-thirds decline (see the right-hand chart below).

**Market more concentrated**

While the fall in the number of listed companies and hence index constituents has been substantial, the size of the market and the corresponding average company size has greatly increased. In 1987, the DNSCI index (the bottom 10% of the fully listed market) had a capitalisation of £31 billion, and this had grown to £252 billion by start-2024. Meanwhile, the average market capitalisation of constituents has increased from £25 million to £360 million. As a result, the bottom 10% of the main market is now made up of 42% less companies than in 1987 but is more than eight times larger. The Large Cap index, which represents 80% of the total market, starts 2024 with just 89 companies. The average market cap is £22.6 billion and the largest ten companies account for 47% of the Large Cap index and 36% of the All Share. The message is clear, there are less listed companies, but on average they are larger and the market is now more concentrated.

**Figure 2. All Share Births and deaths in 2023 (left-hand chart) DNSCI constituents and size since 1987 (right-hand chart)**



Source: Scott Evans and Paul Marsh, Deutsche Numis.

### Rebalanced indices

As we enter 2024, the rebalanced All Share has 1,629 companies and a total capitalisation of £2,592 billion. The cut-offs for entry to the indices are £1.61 billion for the DNSCI, between £845 million and £4.62 billion for the Mid Cap, while the smallest company in the Large Cap index at the rebalancing date was £4.81 billion.

### Small-cap premiums

Taking a longer-term look at the UK and global small-caps, Section 4 shows that over the 24-year period since 2000 (the longest period for which we have comparable data) small-caps globally have done relatively well compared to large-caps. In the 13 countries compared, only one (Taiwan) did not record a positive annualised size premium. The world small-cap size premium over the period is 2.9%, just behind the UK at 3%. Over the longer, 69-year period since 1955, the UK size premium has been 3.1% based on the difference in annualised returns on the DNSCI XIC and Large Cap.

### Long-run history

A major advantage of the Deutsche Numis indices is that the lengthy 69-year history since 1955 allows us to compare the total returns from investing in small-, mid- and large-caps, as well as the UK equity market as a whole. It also allows us to examine the performance of each index in different market and economic conditions. In Section 4, we show the cumulative capital gain and total returns for each of the indices updated to the end of 2023. This shows that over the 69-year period, the annualised returns from an investment in the DNSCI, the Mid Cap and Large Cap (all XIC) were 14.1%, 12.8% and 11.0%, respectively. For the minnows index of the DNSCI 1000 (XIC) the return has been even higher at 15.7%. In monetary terms, this means £1 invested in the smallest companies would be worth £22,572 today. This compares to £9,171 for the DNSCI, £4,159 for the Mid Cap and £1,357 for the Large Cap.

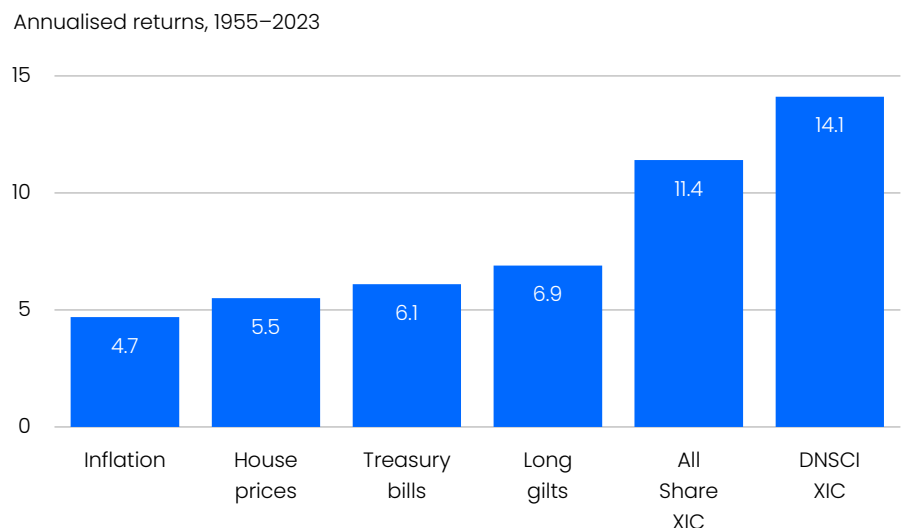
### Importance of dividends

These returns are based on the re-investment of dividends. As we highlight in this review, over the long-run, dividends have made a huge contribution to total returns. The global pandemic had a major impact on dividend income and as we show in our analysis of dividends in Sections 2 and 4, despite the rebound in dividend payments in 2021 and continued growth since, by start 2024 total dividend income for the All Share had not yet (quite) recovered to its pre-pandemic level.

### Best in class

To end on a positive note, the chart below compares long-run returns for various UK asset classes. As the chart clearly shows, all asset classes have beaten inflation. Bonds have beaten Treasury bills (cash) and house prices, although the latter comparison is unfair, as we do not include (or know) rental income. Equities, and in particular smaller companies with their annualised return of 14.1% (9% in real terms), have proved to be the best investment of all.

**Figure 3. Long-run comparison of UK asset returns, 1955–2023**



Source: Scott Evans and Paul Marsh, Deutsche Numis;