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Mind the (Generation) Gap

A comparison of the STOXX® Global Ageing Population and STOXX® Global Millennials Thematic indices

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Table of Contents

1. Introduction

Baby boomers, defined as people born between 1946 and 1954, came of age in the thriving post-World War II era. According to a recent Wall Street Journal article,[1] Americans over 70 control a record USD 35 trillion – nearly 27% of all US wealth and approximately 157% of US GDP. There's no question that the members of this group have had a profound influence on economic activity throughout their lives and continue to have an outsized impact on the economy due to their wealth.

As baby boomers get older, they are increasingly passing on assets to their millennial heirs in the greatest wealth transfer the world has ever experienced. This has spurred a flurry of economic activity – from buying homes to starting businesses to donating to charity, and has made the millennial generation one that should not be overlooked in terms of its future economic contribution, despite the large debts its members have amassed.

In fact, millennials – defined as those born between 1980 and 2000 – are currently the largest generation in US history, accounting for approximately 92 million people. It's no secret that their values, experiences, behaviors and spending habits differ from those of their baby boomer parents, since they have grown up during a period of great technological change, increased globalization and significant economic challenges. Given their sheer numbers and the enormous wealth transfer ahead, millennials are poised to have a major impact on the future economy.

Together, these two generations represent a significant source of economic growth around the world and present interesting investment opportunities if investors can accurately capture their contributions. However, they also have vastly different behaviors, and their needs and spending habits therefore differ greatly. Investors who seek exposure to them may be best served by investing in strategies specifically designed to capture each generation's unique characteristics.

Below we evaluate two thematic investment strategies – STOXX® Global Ageing Population ("Ageing Population") and STOXX® Global Millennials ("Millennials") – which seek exposure to these two distinct generations.

While some in the Ageing Population bucket may feel like Millennials, we found vast differences across style characteristics, sector weightings and especially performance, with Millennials consistently outpacing the older folks. However, both indices outpaced the broad market, albeit only slightly in the case of Ageing Population.

2. Index construction

Both thematic indices start with a broad market index as their initial universe, and apply liquidity and sustainability screens to these. Ageing Population uses the STOXX® Global Total Market index, while the STOXX® Developed and Emerging Markets index is used for Millennials. In a next step, industries that reflect the structural trends in the two population cohorts are identified. Companies are then screened and selected for each thematic index based on a detailed breakdown of their revenue exposures to the relevant industries.[2]

The STOXX Global Ageing Population index is designed to invest in those lines of business that are favored or needed by a population that is getting older. As has already been mentioned, companies are chosen based on

[1] WSJ, "Older Americans Stockpiled a Record $35 Trillion. The Time Has Come to Give It Away", July 2, 2021.

[2] Please see the STOXX Index Methodology Guide for further details.

their sources of revenue, with the older population expected to focus on health care, insurance, leisure activities and financial services.

Millennials, in contrast, have different needs and interests. Industries that capture their behaviors, needs and interests include a number of technology-related areas, apparel, budget travel, sports and fitness, and nutrition.

As the two indices seek exposure to different buying behaviors and generational needs, there are meaningful differences in performance, risks and exposures over time that should be taken into account when making investment and asset allocation decisions.

3. Performance

As expected, the indices produced very different active returns over the observation period from 2012 to 2021 (Figure 1). Although both outperformed the broader market,[3] Ageing Population did so by a very small margin and mainly in the earlier part of the observation period. The Millennials index, on the other hand, has produced impressive Sharpe and information ratios, and performed better more recently.

Figure 1. Returns and volatility, June 29, 2012–June 30, 2021

	Annualized return	Volatility	Sharpe ratio	Active return	Active risk	Information ratio
STOXX Global Millennials	25.85%	16.17%	1.60	13.39%	7.92%	1.69
STOXX Global Ageing Population	13.12%	14.59%	0.90	0.66%	4.57%	0.14
STOXX Global Total Market	12.46%	13.19%	0.94	--	--	--

Source: Qontigo

4. Risk characteristics

Due to their targeted focus, both indices had higher realized and predicted volatility than the broader market – something that is not surprising given their smaller number of holdings. However, there were notable differences in the two indices' tracking error (active risk). As of June 30, 2021, Millennials had an active risk of almost 8%, while that for Ageing Population was about 4.5%. With only 16 assets and 5.3% of the weight in common, the predicted active risk of Millennials versus Ageing Population was more than 9%, a figure that highlights the substantial differences in the indices. We examine some of the sources of these differences below.

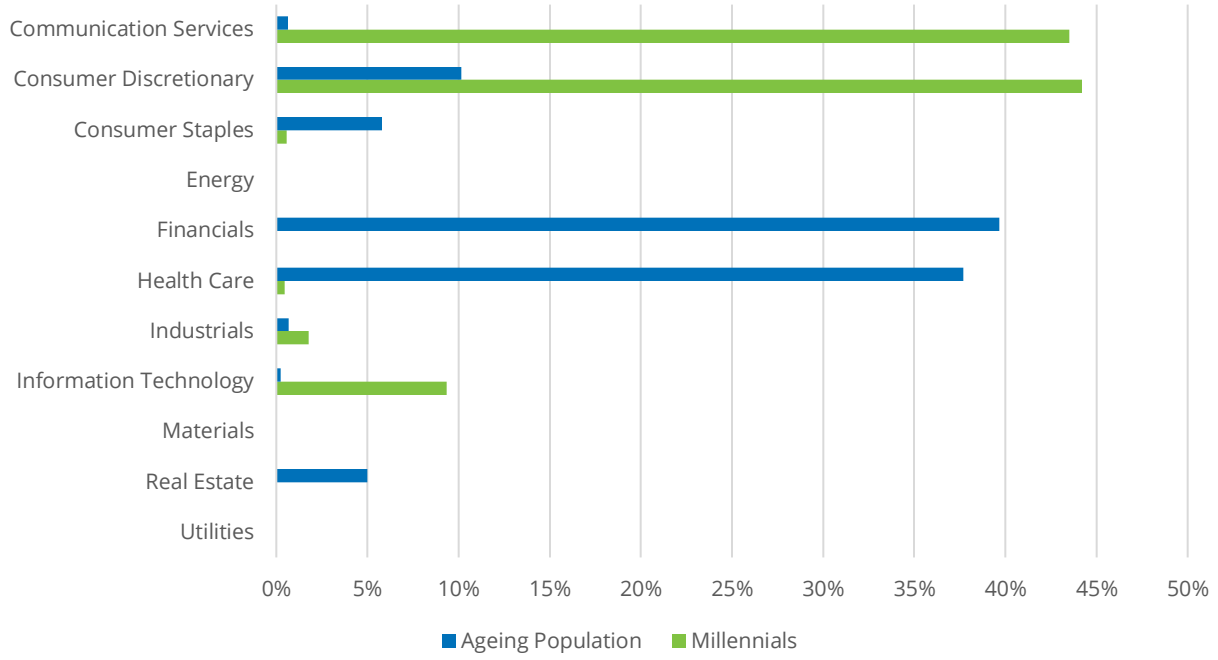
[3] As represented by the STOXX® Global Total Market Index.

5. Sector exposures

Of course, the two indices are designed to have substantially different sector exposures, and also exhibit significant sector concentrations. Ageing Population had, on average, approximately 77% of its weight in Health Care and Financials (Figure 2), a meaningful 50% overweight compared to the broader market (Figure 3). It also had holdings in Consumer Discretionary and Real Estate, although those sector weights were roughly in line with the broader market. In contrast, the Millennials portfolio held almost 90% of its weight in two sectors, Consumer Discretionary and Communication Services, while Information Technology's average weight approached 10%.[4,5]

It is also apparent that the weights do not change much over time – something that again is not surprising given the index methodology.

Figure 2. Average Global Industry Classification Standard (GICS) sector weights, June 2012–June 2021

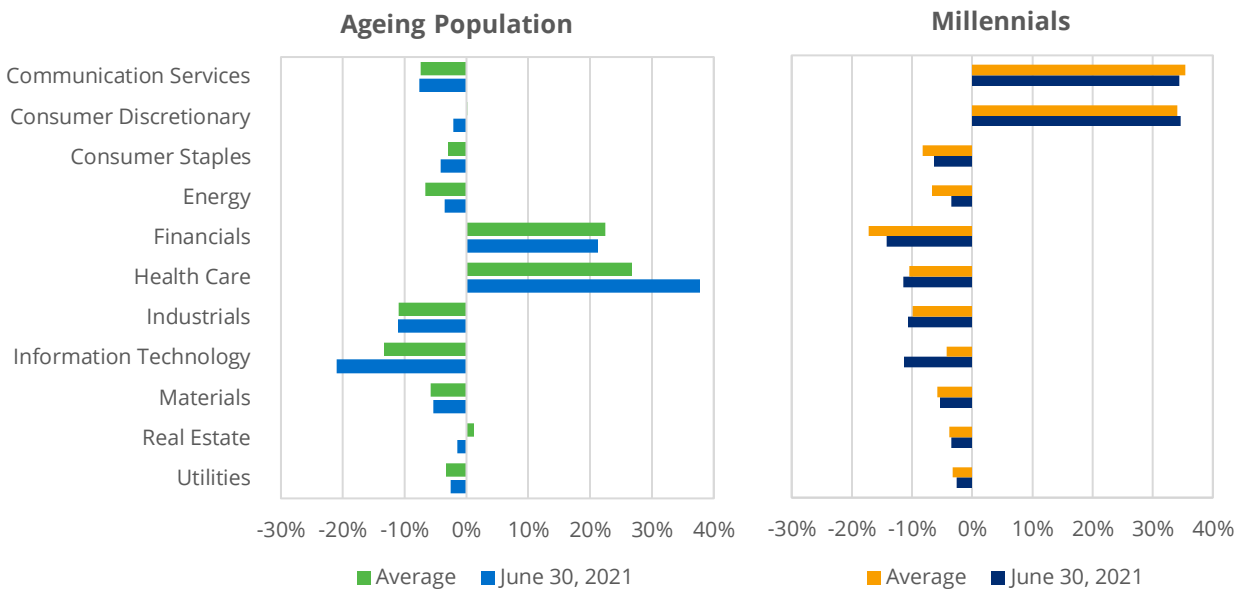


Source: Qontigo

[4] Please note that the biggest names in the Millennials portfolio are FAANG (Facebook, Amazon, Apple, Netflix and Alphabet [Google]) stocks. These tend to generally fall into the Communications Services and Consumer Discretionary sectors, not Information Technology as might be assumed.

[5] Please also note that these sector allocations are based on GICS designations.

Figure 3. Active GICS sector weights, averaged over time and on June 30, 2021



Source: Qontigo

6. Style factor exposures

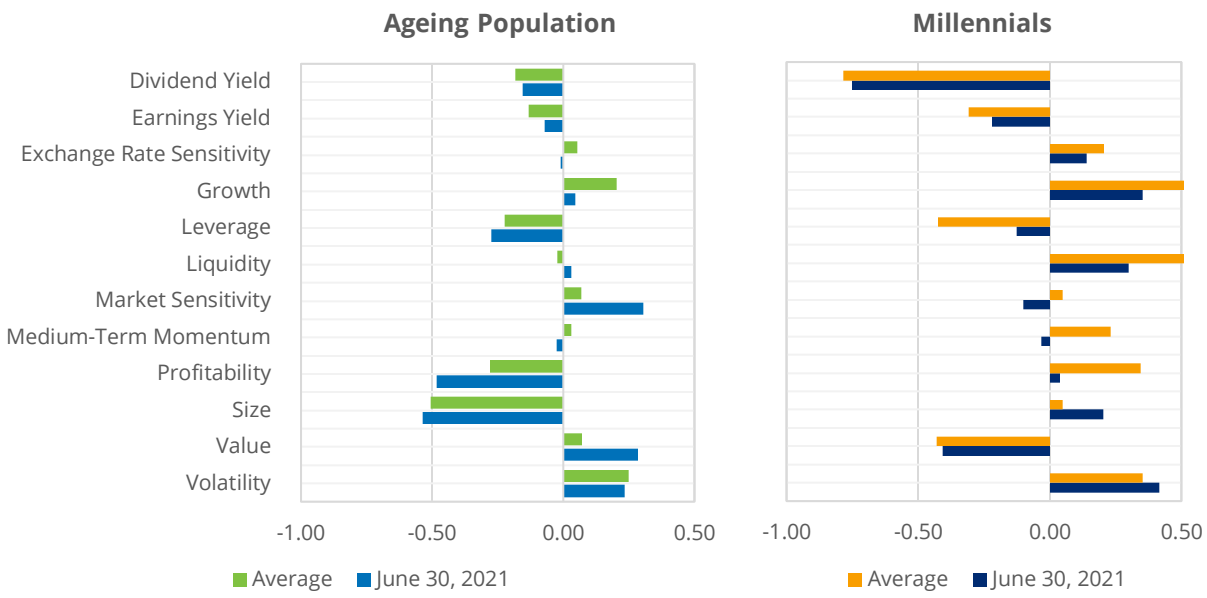
In addition to slicing the indices by sector exposures, we can view them through a style factor lens and look at their exposures to long-term drivers of returns such as Size, Value, Momentum, etc. These style factors can impact how indices will perform in different market environments and may be considered in the portfolio construction process. Despite differences in performance, risk and sector exposures, the two indices are not quite as different with respect to many of their factor exposures as one might expect (Figure 4). Ageing Population's most notable average exposures are low Profitability and small Size. It also tends to be exposed to companies with less Leverage and higher Volatility. Millennials had more pronounced factor exposures, and in particular a negative exposure to Dividend Yield and Value, and a high exposure to Growth, Profitability and Volatility.

On average, Ageing Population has a higher Dividend Yield and Earnings Yield than Millennials (although both factors' exposures were still slightly negative), and a positive Value exposure compared to Millennials' quite negative one (in other words, the stocks are more expensive relative to their book value). Ageing Population also has a small cap bias (in relation to both asset selection and its equal weighting scheme) and holds less-liquid stocks than Millennials. The extra Value exposure should help Ageing Population's performance relative to the underlying benchmark, since we expect the return on Value to be positive over the long run. However, the index's tilt on Growth is lower and its Profitability exposure is negative, in contrast to a positive average exposure for Millennials. Both things could hurt returns over time. Later on we will show that the Profitability exposure differential was in fact the biggest negative style factor contributor to the indices' return differential.

It should also be noted that exposures to certain factors will change over time, as the component industries take on more or less Value or Momentum, among other factors. In addition, the Market Sensitivity of certain names may vary over time. Overall, however, the levels at mid-year 2021 are almost all in line with the long-term average, with the exception of Momentum.

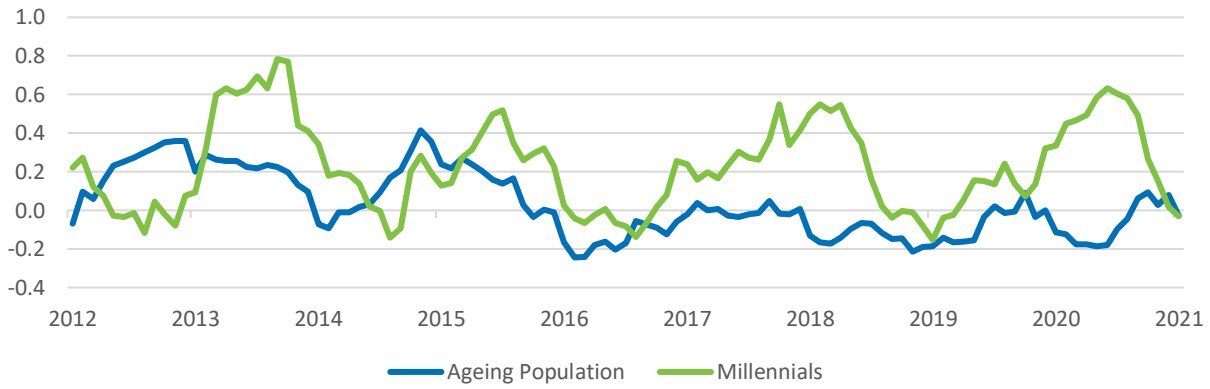
Momentum exposure tends to indicate whether the names in each portfolio are in or out of favor. Interestingly, Ageing Population saw a relatively stable, low-magnitude exposure with only a few exceptions in the first years of our study, when it was higher and positive (Figure 5). Millennials' Momentum, on the other hand, fluctuated substantially over time, although it was almost always positive. Highlighting the differences between the age cohorts, the Momentum exposures were often a mirror image of each other.

Figure 4. Style-factor exposures,* averaged over time and on June 30, 2021



Source: Qontigo. Exposures defined using the Axioma Worldwide (WW4) medium-horizon fundamental model.

Figure 5. Index momentum exposures



Source: Qontigo

7. Factor attribution

Factor-based attribution can lend unique insights into how an index's industry, country, style and individual stock exposures have contributed to its return over time. Factor-based attribution for Ageing Population versus the broader market shows that industry allocations contributed the most to the active return, followed by style exposures (Figure 6). On the other hand, country exposures – the largest of which was an 11% underweight in the United States – detracted, as did stock-specific returns.

From an industry allocation standpoint, it was actually the *absence* of Energy stocks that kept the industry contribution in Ageing Population positive, while a large underweight in Information Technology was the biggest drag on returns (Figure 7). The two largest overweight sectors (Financials and Health Care) produced positive returns. In Financials, the overweight hurt but the individual names selected offset the drag. However, the opposite was the case for Health Care, where the sector overweight helped returns but the individual names chosen detracted to some extent from that benefit.

Drilling down into the style factors, it can be seen that Market Sensitivity was the most positive contributor (Figure 8). Although the index's exposure to this factor was small on average (something that we wrote about many times in 2020 – see 'Market Sensitivity Exposures: "And the 'New Normal' is..."', for example), Market Sensitivity exposures for many stocks and sectors changed as a result of the pandemic. This was certainly true for Ageing Population, where industries such as luxury travel tanked all of a sudden and market sensitivities rose. This positive exposure to Market Sensitivity[6] actually helped performance, as higher-beta stocks fared far better than their lower-sensitivity counterparts for the rest of 2020 (Figure 9). Finally, the tilt toward less profitable names had a substantial negative impact on the return, as did the overweight of higher Volatility stocks.[7]

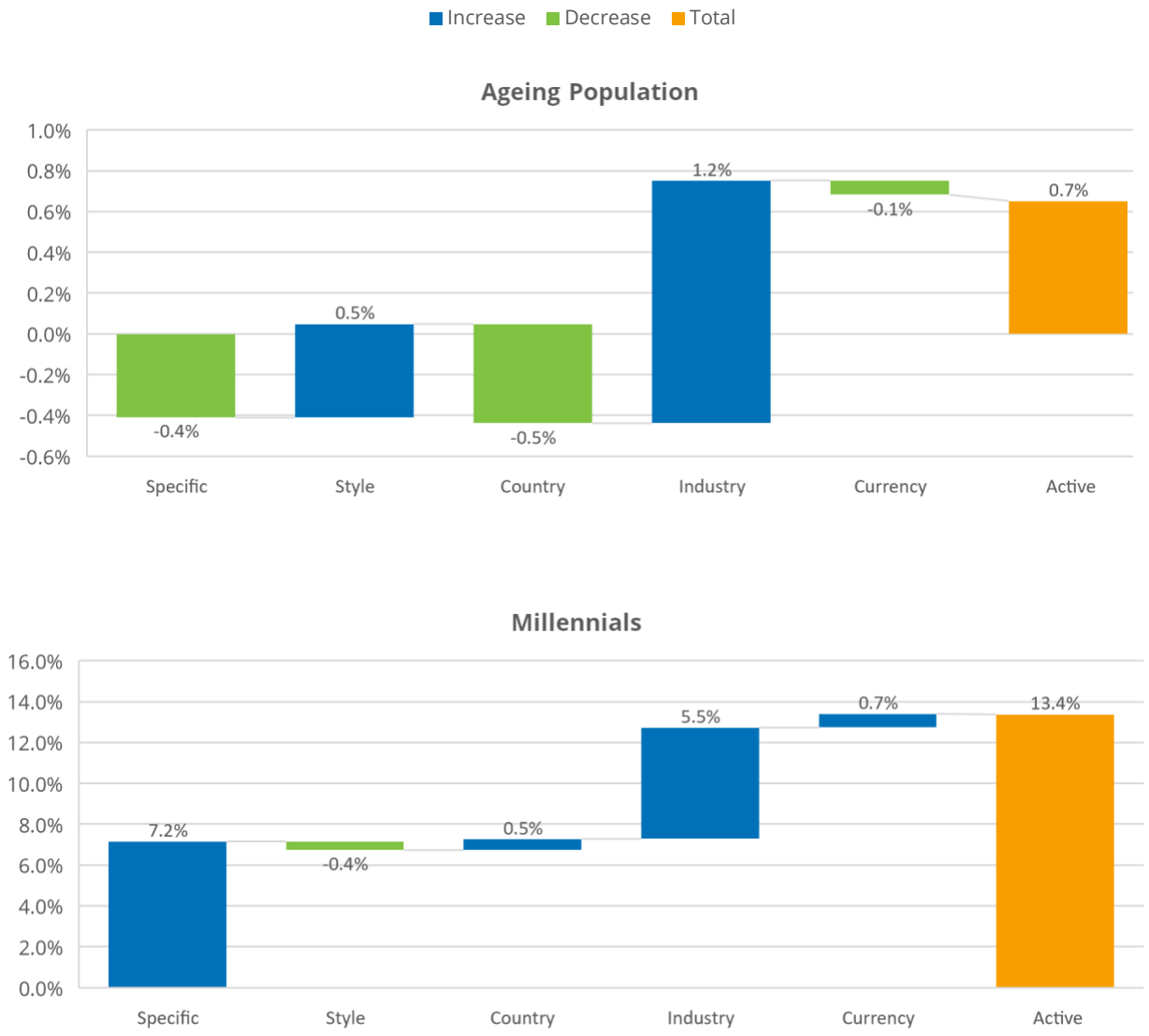
Much of the spectacular return achieved by the Millennials index was stock-specific, with industry exposures also contributing positively. A large proportion of the industry contribution stemmed from the Communications Services sector, and more specifically from many of the FAANG stocks. In the aggregate, style factors detracted from Millennials' performance. The index's exposure to more names with a higher Profitability had quite a positive impact; however, this was more than offset by its tilt away from Value and towards higher Volatility stocks.

Interestingly, Momentum was a highly positive contributor to both indices (Figure 10). The contribution made by the factor was the same in both indices for the first five years of the study, but it has diverged since then and the timing of the exposure's fluctuations in the Millennials index (shown above) was better.

[6] Market Sensitivity is a measure of how the stock moves in relation to the market over time. In other words, it is very similar to beta, but varies around a mean exposure of zero and is standardized.

[7] A distinction is made between Volatility, which is based on cross-sectional volatility within a universe of stocks, and Market Sensitivity, a time series measure of how an individual stock moves in relation to the market.

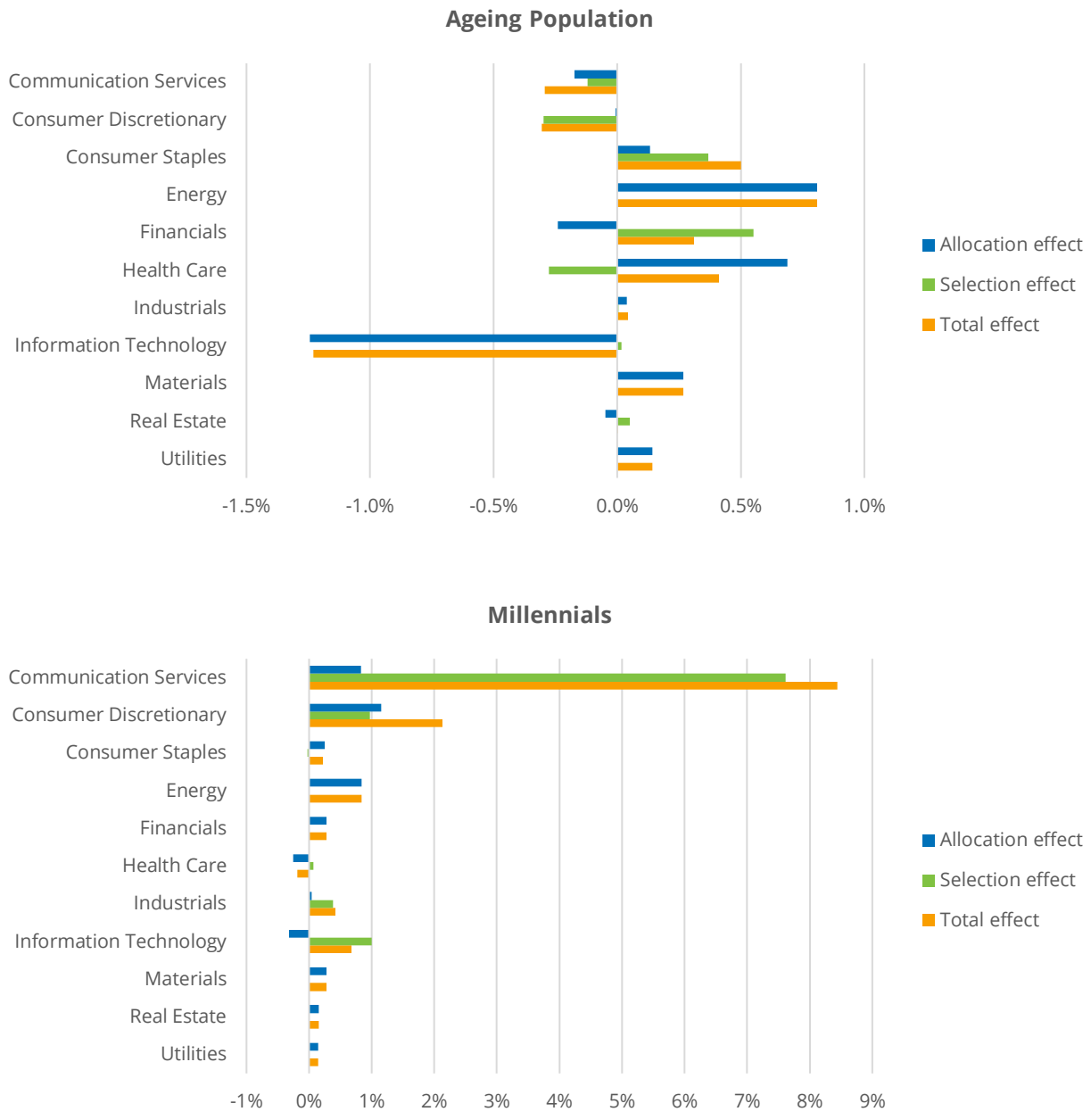
Figure 6. Annualized active performance attribution, July 2012–June 2021



It should be noted that the attribution for the portfolios is plotted against different scales, highlighting the relative contribution made by each component to the overall active return.

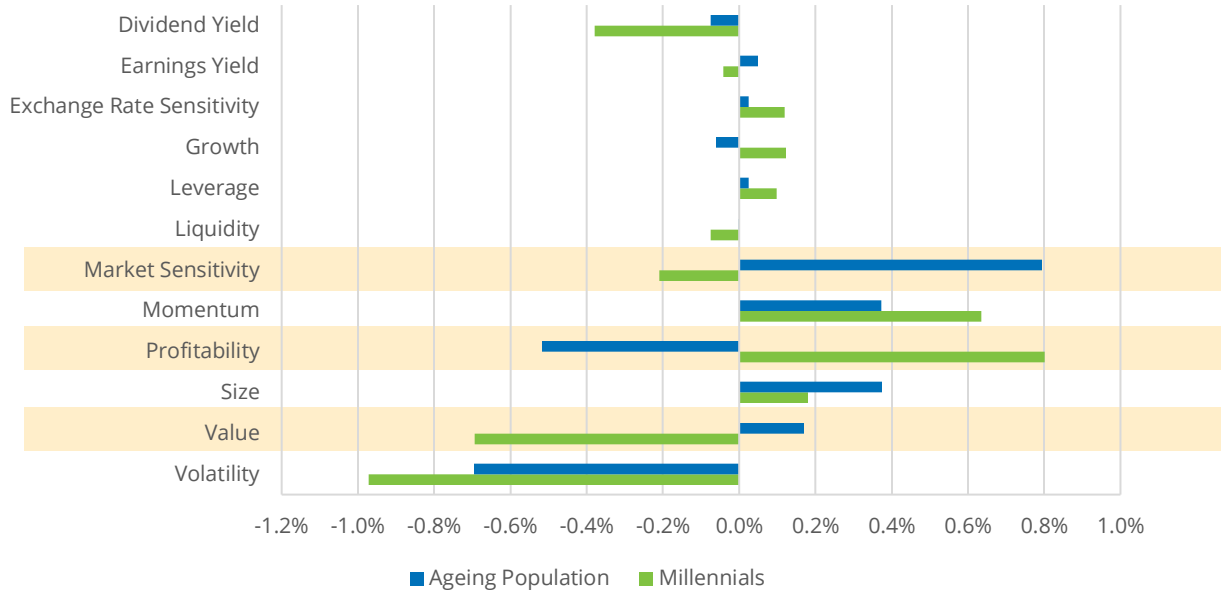
Source: Qontigo

Figure 7. Annualized sector return contribution, July 2012–June 2021



Source: Qontigo

Figure 8. Style factor return contribution



Source: Qontigo

Figure 9. Ageing Population Market Sensitivity exposure and return contribution

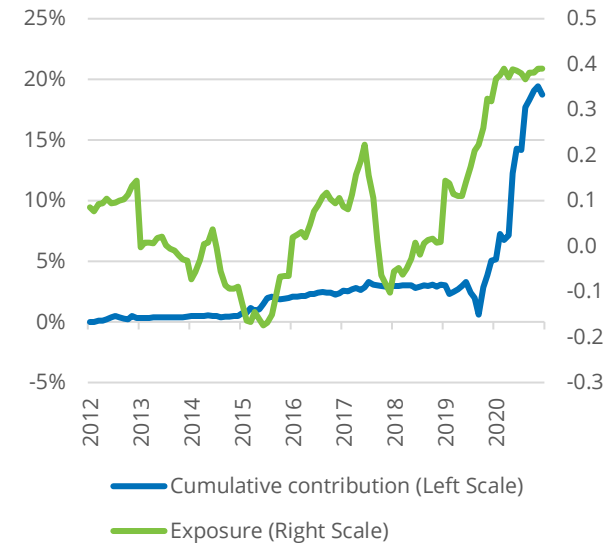
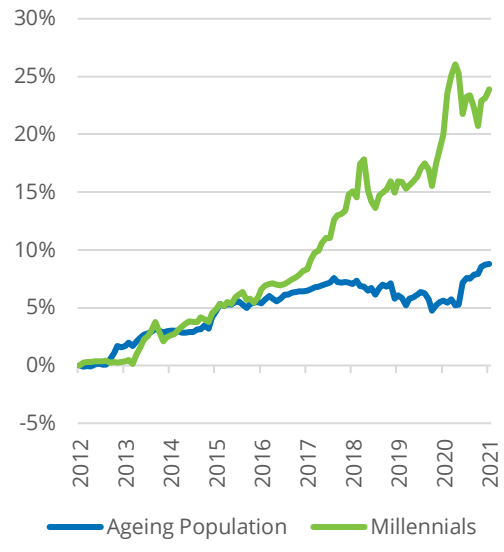


Figure 10. Momentum contribution



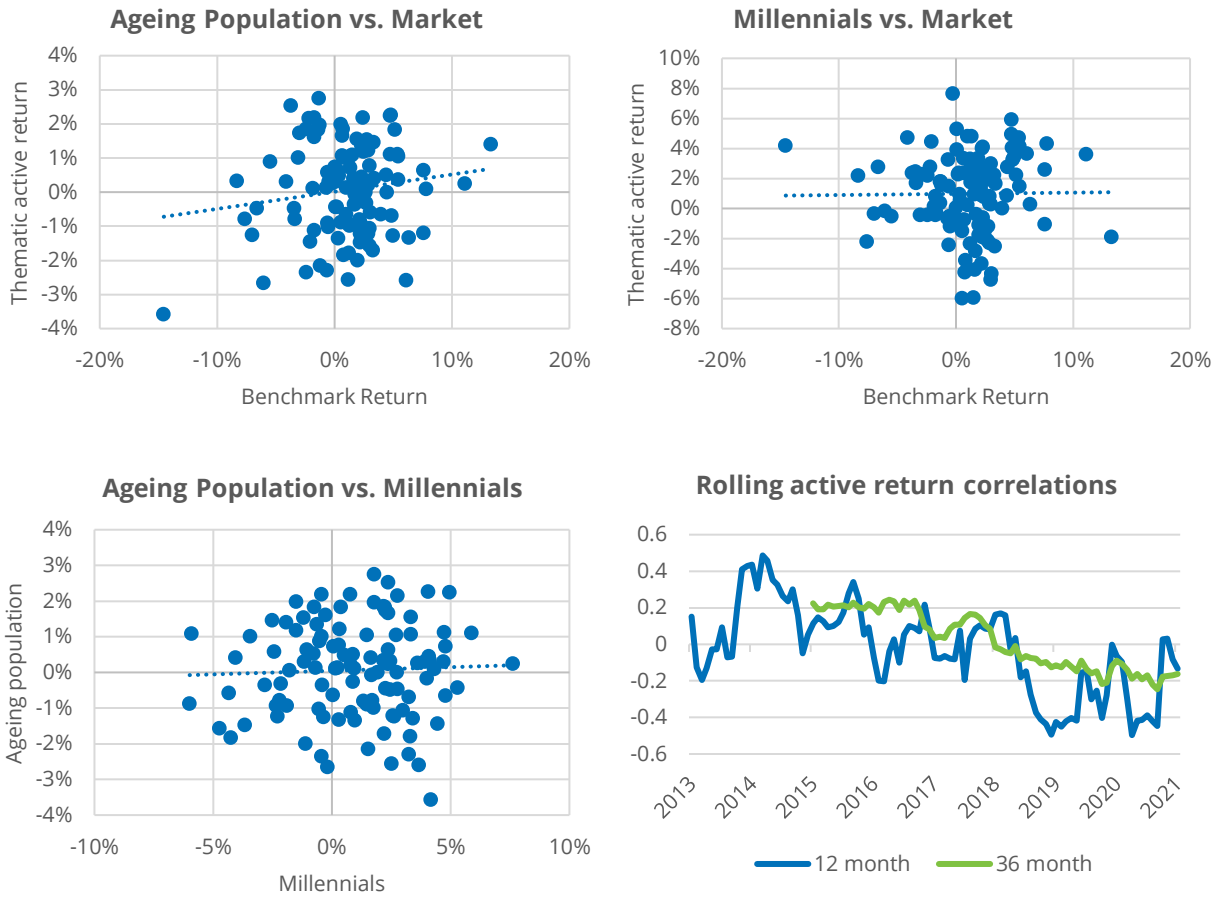
Source: Qontigo

It might be tempting for an investor to avoid the older population in favor of investing in the young; however, given the wealth, size and unique behaviors of the two generations, both populations could provide attractive investment opportunities. Rather, one should ask:

- Do the stocks, industries and characteristics of each portfolio make sense to me?
- Do they fit my investment objective?
- Will they add to or reduce my overall portfolio risk?

Of course, each individual investor's portfolio will be different, but we can use correlations between the excess returns generated by the indices and the overall market to understand what adding such an index might do to overall portfolio risk. Figure 11 shows that, for the full test period, the correlation between the monthly excess returns generated by the Ageing Population and Millennials indices and the overall market was very close to zero, and the same applies to the correlation between the two indices themselves. In addition, the 12-month and 36-month correlations have been declining over time. Assuming that one expects a positive return for one or both of these indices, adding them to a broadly diversified portfolio should produce a return without additional risk, and hence improve the overall risk-return trade-off.

Figure 11. Correlations of monthly returns



Source: Qontigo

8. Conclusion

Each of these thematic indices does an excellent job of representing the needs and desires of a distinct generation. Their performance over the past several years may reflect the Wall Street Journal's idea that wealth – and hence future economic growth – is being transferred from one generation to the other, and therefore that better opportunities lie with the Millennials. However, more and more people are entering the Ageing Population cohort, which remains economically strong and also offers investment opportunities. This index offers more exposure to Value, while Millennials consists of more profitable companies. In addition, the sectors making up the two indices are quite distinct, with very little overlap between the two. Potential investors should first evaluate whether they subscribe to the indices' value proposition and then, if they do, determine how these characteristics fit their overall portfolio. Believing the premise is just the first step; ensuring a positive risk-return trade-off for a specific portfolio is the key point.

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