BREXIT

An Analysis of Economic Exposure

with data provided by MSCI
Contents

Foreword 3

Executive Summary 4

Research 5

Methodology 13

Contact details 14
Foreword

It is a truth universally acknowledged that a pension scheme in possession of a UK equity portfolio must be in want of a better understanding of the international exposure it brings. This fascinating analysis from OM Asset Management with data from MSCI, not only highlights the extent to which UK plc relies on both the EU and the rest of the world for revenue but also shows the likely impact of Brexit on different sectors and company sizes. The electorate is crying out for impartial and objective information ahead of the imminent referendum so it’s very timely to see just how important trade with our EU neighbours is to UK listed companies.

Hugh Nolan, President
Society of Pension Professionals
1 June 2016
Executive Summary

Assessing the impact of Britain’s potential exit from the EU on UK equity investors, based on an analysis of the geographic sources of revenue of UK listed companies

- Approximately 17% of the revenue of UK listed companies in 2015 was derived from the EU, an equivalent of GBP 350 billion. This compares to 32% of revenue from the UK (GBP 650 billion), and accounts for much less than their income from the rest of the world where 51% (GBP 1,040 billion) was generated.

- There is an inverse relationship between company size and domestic revenue exposure. In general terms, the larger the company, the greater the exposure to the international markets; smaller businesses are typically more focused domestically.

- Telecoms, Information Technology, and Consumer Discretionary companies derive the highest proportion of their revenues from Continental Europe, giving them the biggest potential exposure to a Brexit.

- The effect of Brexit on pension allocation to UK equities is unlikely to be neutral in the short to medium term. The international nature of UK stock market listings, long hailed as a proof statement of the UK’s attractiveness for global businesses, may be viewed very differently by UK investors if the UK leaves the EU.

- Currency volatility and sterling weakness post Brexit would likely impact many companies and market cap segments, given the international mix of revenue sources of UK listed equities. However, smaller companies should be more insulated than larger ones.

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1 In addition to the EU, the EEA and Switzerland were incorporated in the study to give a complete picture of the UK equity market’s exposure to the entire Continental Europe.
The upcoming referendum on 23 June on the UK’s membership in the European Union will have lasting consequences for the British economy and savers. In the midst of heightened uncertainty, this report primarily attempts to assess the impact of a Brexit on UK equity investors, based on an analysis of the geographic sources of revenue of UK listed companies. In a subsequent section, the research identifies the most likely economic scenarios post referendum and the possible consequences for UK pension schemes, their members, and other UK equity investors.

This study is a continuation of the ‘Allocation Illusion’ report, sponsored by OM Asset Management (OMAM) and the Society of Pension Professionals (SPP) in 2015 with data provided by MSCI, which sought to uncover the level of country risk exposure for UK pension savers given their default allocations.
What is the UK equities market’s economic exposure to Brexit?

To understand the degree of dependence of UK listed companies on income from the European Union, we analysed the MSCI UK Investible Market Index (IMI) which comprised 353 companies with a total market capitalisation of GBP 1.9 trillion (as of 31 December 2015) accounting for approximately GBP 2.1 trillion of revenue. MSCI uses a detailed economic exposure methodology to assemble granular data on where companies listed in the UK derive their revenues from. A detailed explanation of MSCI’s methodology is available on page 13.

The MSCI data showed that approximately 17% of the revenue generated by UK listed companies in 2015 was derived from the EU, EEA and Switzerland, an equivalent of GBP 350 billion. This compares to 32% of revenue from the UK (GBP 650 billion), and accounts for much less than their income from the ROW where 51% (GBP 1,040 billion) was generated. Therefore, in terms of revenues, the rest of the world matters as much to UK listed companies as the UK and Continental Europe markets combined.

Revenue exposure of UK listed companies (through analysis of MSCI’s UK IMI)

Source: MSCI

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2 In addition to the EU, the EEA and Switzerland (CH) were incorporated in the study to give a complete picture of the UK equity market’s exposure to the entire Continental Europe.

3 ROW definition is everywhere excluding UK, EU, EEA and CH.
To delve deeper, MSCI applied the same analysis to UK companies by size, using its standard definitions of large, medium and small cap stocks. The data shows an inverse relationship between company size and domestic revenue exposure. This is consistent with the intuition that large caps have more exposure to foreign markets, including the EU, and small caps are more exposed to the domestic market.

**Revenue exposure of UK listed companies by size (through analysis of MSCI’s UK IMI)**

- **UK Large Cap**
  - ROW: 58.1%
  - EU: 32.7%
  - UK: 23.9%

- **UK Mid Cap**
  - ROW: 32.7%
  - EU: 50.8%
  - UK: 16.5%

- **UK Small Cap**
  - ROW: 31.8%
  - EU: 55.2%
  - UK: 13.0%

Source: MSCI
Finally, a breakdown by economic sectors reveals that sectors such as Materials, Healthcare and Energy are the most internationally exposed while Telecoms, Information Technology, and Consumer Discretionary companies derive the highest proportion of their revenues from Continental Europe.
What could happen if Britain leaves the EU?

There have been several predictions about the possible outcomes of a Brexit. This report does not purport to list nor endorse any of them. Rather the objective is to examine the likely impact on UK equities of the most often cited or plausible scenarios.

1. Economic shock

Both sides of the political debate on Brexit, “Vote Leave” and “Stronger In”, have made arguments that reflect their world view: the Leave campaign broadly argues for the economic benefits that a Brexit would bring through lower regulation and increased economic dynamism, while the Stronger In campaign has claimed that uncertainty over renegotiation would have a negative effect on business investment and consumption. In macro-economic terms one could say the Leave campaign rests its case on a positive supply side shock that would in time help raise UK output, while the Remain campaign is concerned about a negative demand side reaction that would lastingly damage UK GDP.

Irrespective of which view comes to be realised post-referendum, we can already detect some of the implicit positioning biases of both camps from an equity market perspective.

1. In the long-term, the ‘Leave’ perspective should benefit more domestically-oriented companies, which should stand to benefit the most from any renewed domestic economic strength.

2. Also in the long-term, the ‘In’ perspective should benefit larger companies at the margin, given their more significant exposure to EU markets.

3. Shorter term, should UK GDP weaken substantially during any post Brexit transition period, the impact on smaller capitalisation companies could be significant given their relative lower level of international diversification.
2. Currency volatility

Many commentators have forecast that the recent weakening of sterling, evidenced towards the latter part of Q1 2016, would likely be exacerbated in the event of a Brexit, at least in the short term. In the context of this report, we consider both the possibility of a sterling weakness and recovery. We also think it reasonable to posit that currency volatility will push the boundaries of the recent historical ranges, should the referendum result in Britain leaving the EU.

The data presented in Section 1 lends itself to a two-fold scenario. If sterling weakens considerably post Brexit vs the Euro and other continental European currencies, the positive impact on the revenues of UK listed companies should be more muted the smaller the company - as the data showed, smaller caps typically have lower exposure than their larger ones to international revenues including the EU.

An additional consideration, however, is that sterling weakness, if it materialises, is unlikely to be only versus European currencies. In the case of broader pound weakening, the substantial amount of revenues derived from ROW countries would also likely be affected. Should the UK currency appreciate post a Brexit vote – which is not in the mainstream forecasts, but could be induced by more global factors such as US interest rate policy – we would expect the opposite effect to hold true.

The conclusion here is therefore that currency volatility and sterling weakness would likely impact many companies and market cap segments listed in the UK, given their international mix of revenue sources. On balance, however, smaller capitalisation companies should be more insulated than larger ones.
3. Re-domicile of UK listed companies

A less talked about potential development, but one with a significant potential impact on UK savers’ portfolios, is companies relinquishing their UK primary listing domicile as a result of Brexit. Leaving aside the debate as to whether or not the UK would remain as attractive to international companies looking to raise equity capital post Brexit, the MSCI data sheds some light on those sectors most likely to reconsider their UK listing.

In addition to the notoriously International Energy and Materials sectors, the industries with the highest revenues from outside the UK are Healthcare, Information Technology, and Telecoms. They feature flagship names, such as Anglo American, Arm Holdings and Vodafone. By virtue of their size, international reputation and profitability, such companies often hold one of the top 10 or 20 positions in UK equity portfolios. Should one or several of these companies change their listing domicile - to better align with their revenue sources - significant changes in the composition of holdings could occur relative to what savers are used to seeing historically.

Highlighting the international revenue exposure of select UK listed companies

<table>
<thead>
<tr>
<th>Vodafone</th>
<th>Anglo American</th>
<th>ARM Holdings</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>15.4%</td>
<td>UK</td>
</tr>
<tr>
<td>EU ex UK</td>
<td>52.1%</td>
<td>EU ex UK</td>
</tr>
<tr>
<td>ROW</td>
<td>32.5%</td>
<td>ROW</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>Total</td>
</tr>
</tbody>
</table>

Source: MSCI
Conclusion

The UK pension saver perspective

Previous research conducted by OMAM and the SPP, with data from MSCI has shown that UK pension savers have a high perceived allocation to the UK economy. On average, UK default funds had a 41% exposure to UK listed companies (as at March 2014). However, the real economic exposure to the UK economy of those UK listed companies was only 14%, based on their revenue sources. This distorted perception yields some interesting facts in light of the Brexit referendum.

Whilst this report does not officially support either camp in the debate, it exposes some incontrovertible facts about where the exposure lies for UK pension savers. This in turns can lead to some assumptions about the likely impact of that exposure for UK investors should Britain break up with the EU.

Put simply, the effect of Brexit is unlikely to be neutral in the short to medium term, given the high average allocation to UK listed equities of most pension plans in the UK - and the high international revenue mix of those UK listed equities. The international nature of UK stock market listings, long hailed as a proof statement of the UK’s attractiveness for global businesses, may in coming months be viewed very differently by UK investors witnessing both the foreseen and less foreseen consequences of this crucial vote in UK history.
Methodology

Economic Exposure — where companies obtain their revenues

With the continued integration of world markets, companies are increasingly exposed to economic activity beyond their domestic borders.

Understanding the geographic distribution of company revenues — both current and historical — in this global context can significantly enhance the investment decision processes for constructing, analysing and managing portfolios.

The MSCI Economic Exposure methodology applies a simple and transparent method for quantifying a firm’s economic exposure to the range of countries and regions that generate its revenues.

This approach is reliable and consistent, despite significant disparities in the way companies report their revenues across geographic segments.

MSCI breaks out each stock’s reported revenues into country-by-country estimates. Using this, investors can then examine an equity portfolio and determine its economic exposure by aggregating the revenues of its constituents at a country or regional level.
Contact details

About OM Asset Management

OM Asset Management is a global, multi-boutique asset management company with approximately $212 billion of assets under management as of December 31, 2015 through a diverse portfolio of asset managers that serve institutional investors around the world. Its business model combines the investment, talent, entrepreneurialism, focus and creativity of leading asset management boutiques with the resources of and capabilities of a larger firm.

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