The search for a long-term premium
Long-horizon investing working group

This document has been written by members of the Thinking Ahead Group 2.0 (Tim Hodgson, Liang Yin, Jeremy Spira) following the research and discussion conducted by the Thinking Ahead Institute’s long-horizon investing working group. The authors are very grateful to the members of the working group for their input and guidance but stress that the authors alone are responsible for any errors of omission or commission in this paper.

While the key objective of the group is to deliver to Thinking Ahead Institute members a series of publications that form a holistic framework for practically implementing long-horizon investing, a secondary objective is to positively influence the investment industry outside the membership. We hope this paper serves both purposes.

The members of this working group are as follows:

- Ciaran Barr, RPMI Railpen
- Daniel Godfrey, The People’s Trust
- Jamie Twiss, First State Investments
- John Green, Investec Asset Management
- Leon Kamhi, Hermes Investment Management
- Michel Bernard, Amundi Asset Management
- Olivier Lebleu, OMAM
- Stephen Miles, Willis Towers Watson
Executive summary

- In this paper we identify eight building blocks of value creation via long-horizon investing. Together, they provide evidence of a sizeable net long-term premium of 0.5% to 1.5% pa depending on investors’ size and governance arrangements.
- We can split these building blocks into strategies that: 1) provide long-horizon return opportunities and 2) lead to lower costs and/or mitigate losses.
- The long-horizon return opportunities:
  - Active ownership and investing in long-term oriented companies
  - Liquidity provision
  - Capturing systematic mispricing
  - Illiquidity premium
  - Thematic investing
- The cost-reduction and loss-mitigation strategies:
  - Avoiding buying high and selling low
  - Avoiding forced sales
  - Lower transaction costs
- Capturing the benefits of long-horizon investing may require a major shift of mindset and expanded skillsets by asset owners and asset managers. The cost of strengthening governance capability to address these requirements could be significant in some cases.
- Additional returns to institutional investment portfolios from long-horizon investing are likely to be meaningful. We propose that with reasonable assumptions a smaller asset owner focusing its long-horizon efforts on avoiding costs and mistakes can see an increase in investment returns of about 0.5% a year. A larger fund with the governance and financial resources to consider all available options for capturing premia could see a net uplift to returns of around 1.5% a year.
- If such a premium exists, why are institutional investors not already exploiting it? Subsequent Institute papers will consider feedback to these findings and explore long-horizon investing in more detail. Potential subjects include exploring long-horizon investing beliefs, how to implement long-horizon strategies as well as its potential obstacles, and which investment solutions are likely to be most effective and practical.
Introduction

“In investing, what is comfortable is rarely profitable.”

Robert Arnott

The long term is not universally popular. People are impatient. The mystery of mortality means we are hardwired to focus on the shorter term. In investment, the long term is viewed as full of opacity and uncertainty. Commitment to long-horizon outcomes is rare and, where commitment exists at the outset, investors’ resolve can be tested by events.

And yet, evidence of the benefits of long-termism is compelling. Although the quarterly earnings cycle and shareholder and media pressure argue against long-termism, those companies and managements which have focused on creating value three, five and 10 years into the future, have reaped benefits.

Numerous studies attest to these benefits. In one of the more comprehensive studies, McKinsey found that from 2001 to 2014, revenues of companies with long-term outlooks grew on average 47% more than the revenues of other firms, and with less volatility. Meanwhile, the earnings of those long-term firms grew 36% more than other companies. In addition, their market capitalisations grew US$7bn more than firms with shorter-term horizons, and they added nearly 12,000 more jobs on average.

But can investors identify and extract this value? And, if so, do the extra returns obtainable from long-horizon investing outweigh the costs of building a long-term investment approach?

In this first paper of a series on long-horizon investing, we seek to answer these questions and set the scene for further investigation around the subject. Later papers will assess a number of long-horizon principles and implementation options.

---

1 “Measuring the economic impact of short-termism”, McKinsey Global Institute, February 2017
Hunting for evidence of long-term premia is easier said than done. In an ideal world, we would run a regression of net investment returns against investors’ time horizons. A statistically-significant positive relationship would lend empirical support to the existence of a premium.

Sadly, to our knowledge, the data to run this regression does not exist. Obstacles to the creation of this data include:

- How to accurately measure an investor’s time horizon
- How to select a sample: long-horizon investors are a relatively new and mutating group. Long-horizon investing is not widely undertaken in practice because of short-term pressures, so the potential universe is restricted
- The opacity of private investment returns
- Since long-horizon investors tend to employ shorter-term strategies in tandem, how would we disaggregate performance?

In the absence of a readily-available direct method, we propose an “indirect” approach. This approach is based on the belief that long-horizon investing offers investors both return opportunities and the possibility to reduce drag on returns.

This belief led us to the identification of 13 empirical studies and two investment models that quantified a number of long-term premia. Each is practical to implement, albeit with changes required to the investment process.
The building blocks

From discussions within the Institute and with reference to the empirical evidence from the studies, we identified eight building blocks of long-horizon value. Together, they provide evidence of a sizeable premium from long-horizon investing.

We can split these building blocks into strategies that:
1) provide long-horizon return opportunities and
2) lead to lower long-term costs and/or mitigate losses.

Long-horizon return opportunities

1. Active ownership and investing in long-term oriented companies

The above mentioned McKinsey study provides strong evidence of corporations creating value by taking a long-term approach. Investors with sufficient skill can harvest this premium by actively building a portfolio of companies that have a genuine long-term focus relative to their shorter-term peers.

Alternatively, investors can choose to engage with their investee companies to improve their focus on the long term. Engagements with investee companies on average generate positive abnormal returns of 2.3% over the year following the initial engagement. This study examined 2,152 highly-intensive engagements with 613 US public firms between 1999 and 2009. The success rate for engagements was 18% and on average it took two to three engagements before a successful outcome was produced. Successful engagements generated a cumulative abnormal return of 7.1% in the year following the initial engagement. There were no negative outcomes to unsuccessful engagements. Engagements on corporate governance and climate change issues were found to produce the highest returns. What’s more, after successful engagements, investee companies continued to improve their operating performance and governance.

A second study analysed CalPERS’ corporate engagement effectiveness by simply measuring the performance of the stock prices of 183 companies targeted by CalPERS from 1999 to 2012. In the three years before the initial engagement, these companies on average underperformed the Russell 1000 Index by 38.9% cumulatively. Over the five years following CalPERS’ engagements, the companies produced average excess returns of 12.3% above the Russell 1000 Index cumulatively.

2. Liquidity Provision

When investors are willing to pay for liquidity – in other words, sell assets below “fair value” – someone on the other side of the trade gets paid. Long-horizon investors have the potential to earn additional returns of 1% pa at the expense of shorter-horizon investors by providing liquidity when it is most needed. Long-horizon investors are best placed to take advantage of these buying opportunities when holding cash in reserve. As well as enhancing their returns, long-horizon investors providing liquidity perform a societal good by helping stabilise the market at a time of stress.

3. Capturing systematic mispricing

Exploiting various mispricing effects via smart betas adds more than 1.5% pa relative to the cap-weighted index over decades of data. The study discovered that all alternative weighting strategies lead to outperformance against the cap-weighted benchmark. Even randomly-selected weighting strategies (a blindfolded monkey throwing darts) outperformed the benchmark. The authors suggest that this is a consequence of unintended and almost unavoidable value and small-cap tilts, which are naturally occurring unless a portfolio is deliberately constructed with a positive relationship between price and portfolio weights (ie the cap-weighted index).

What is particularly interesting to long-horizon investors is whether an alternative weighting strategy can be constructed to systematically capture mispricing in companies that take long-term approaches relative to those that don’t – could a long-termism factor exist?

4. Illiquidity premium

The illiquidity risk premium (IRP) is worth 0.5%-2% pa – and even higher returns might be available to very long-horizon investors. The IRP compensates investors for tying up their capital and incurring a potential opportunity cost. When investors accept illiquidity, they accept greater uncertainty about the outcome because they are less able to liquidate the asset. The longer the capital is tied up, the more return investors expect by way of compensation. Investors need to be nimble in seeking to capture the IRP. Willis Towers Watson’s modelling (see figure 1) suggests the illiquidity premium is currently within the fair value range. In 2007-08, it was significantly below fair value, but by 2009 it had burst above its fair value range.

2 “Update to the “CalPERS Effect” on Targeted Company Share Prices”, Junkin, 2013, Wilshire Associate
6 “Understanding and measuring the illiquidity risk premium”, Willis Towers Watson, 2016
5. Thematic Investing

Investors have long been aware of thematic investing, but few allocate to it because of the complexity of implementation. A belief that education, renewable energy, ageing, technology and so on, are key value drivers, is held by many investors. But many eschew attempting to execute on these beliefs.

Nevertheless, some investors have taken tactical and creative approaches to implement certain investment themes. Some have implemented thematic investment within the risk limits and structure of the current portfolio, while others have put in place an overlay. Others have created single asset class or multi-asset thematic mandates. The lack of consistency in approach means we have been unable to find empirical evidence that categorically demonstrates the success of a thematic approach. However, belief in thematic investing is certainly strong: 93% of 2016 Institute New York roundtable attendees believed that it was possible to enhance portfolio value by investing thematically.

6. Avoiding buying high and selling low

A study1 of 3,400 US plan sponsors looked at their selection and termination of investment management firms between 1994 and 2003. To gauge the opportunity costs associated with hiring and firing decisions, the authors constructed a sample of 412 round-trip decisions between 1996 and 2003 to compare post-hiring returns with the returns that would have been delivered by fired managers (see Figure 2).

Prior to manager change decisions, the ex-post return differences are large and statistically significant. The managers that would be hired outperformed the managers that would be fired by 4.6% over one year and 9.5% over three years, a strong signal that plans were chasing past performance.

By replacing their investment managers, the plan sponsors on average cumulatively gave up 1.0% in the three years following the change.

A second study2 found that mutual fund investors gave up 1.9% per year because of poor timing decisions. Money-weighted returns (realised internal rate of returns) were calculated to compare with buy-and-hold (time-weighted) returns to analyse the effect of timing on investor results. Institutional investors were slightly better than retail investors in terms of achieving a higher money-weighted return (7.1% vs 6.8%) and in terms of the money- vs time-weighted return gap (-1.8% vs -2.0%). The return gap was larger for investors who invest in funds with higher expense ratios.

---

7. Avoiding forced sales

An investment fund’s liquidity-driven trading, in particular motivated by redemptions, can have a materially negative impact on performance. That is, “fire sales” in which managers sell assets at below fair value to meet redemption calls, destroy value.

One study\(^1\) found that liquidity-driven trading in response to flows (both in- and outflows) has reduced abnormal returns in US open-ended mutual funds by 1.5%-2.0% pa (assuming 100% annual turnover) from 1985-1990.

A second study\(^2\) shows a similar cost for US open-ended mutual funds of 112 bps pa. The study is based on a proprietary database that includes all shareholder transactions within 10 funds between 1994 and 2000.

While we are not suggesting that closed-ended is in all conditions a superior structure (eg lack of monitoring and alignment in the absence of the threat of redemption can lead to serious agency issues), these studies provided reasonable proxies for the potential loss of value caused by being forced sellers.

“We concluded that significant savings in transaction costs can be made by avoiding unnecessary turnover as a long-horizon investor.”

8. Lower transaction costs

Willis Towers Watson’s biennial “UK food chain” study estimates the size of each component of fund expenses, based on a medium-sized UK pension fund with an average asset allocation.

In the latest study (see Figure 3), transaction costs were some 44.1 bps. We concluded that significant savings in transaction costs can be made by avoiding unnecessary turnover as a long-horizon investor (see Figure 4).

---

3. The calculation of transaction costs involved making a number of assumptions with regards to bid-ask spread, commission and importantly average turnover for each asset class. The current set of assumptions has turnover ranging from 100% to 175% for different active managers. The sensitivity analysis re-sets all turnover assumption to an arbitrary level across all active strategies (leaving turnover level for passive strategies unchanged) and calculates the corresponding transaction costs.
The cost of building a long-horizon approach

Capturing the benefits of long-horizon investing is likely to require a major shift of mindset and significantly expanded skill-sets by asset owners and asset managers (see Figure 5). The cost of strengthening governance capability to address these requirements could be significant, depending on the starting place.

In many cases, it entails incremental spending – expanding the investment expertise in active ownership by hiring a specialist, or increasing the number of trustee meetings to build or strengthen long-horizon investing beliefs.

The potential benefits of this additional spending are in many cases return enhancements (or in the form of reducing drags on returns). All other things being equal, larger investors are better positioned to achieve economies of scale and harvest a larger net long-term premium than smaller funds.

Many smaller low-governance pools of money are likely to be engaged in value-destroying activities (eg buy-high, sell-low). Simply avoiding these activities can result in significant return enhancement, but at a much lower governance cost than seeking return enhancements.

Figure 5 – Mind-set and skillset required for long-horizon investing

<table>
<thead>
<tr>
<th>Shift of mind-set</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistency with liabilities/obligations/mission</td>
</tr>
<tr>
<td>Clearly articulated, documented and socialised long-horizon investment beliefs and objectives</td>
</tr>
<tr>
<td>Organisation, board and sponsor buy-in to long-term ethos; low “career risk” threat</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expanded skillset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well-framed, documented and skill-based long-term decision processes</td>
</tr>
<tr>
<td>Resources to undertake complex qualitative monitoring</td>
</tr>
<tr>
<td>Evaluated on long-term accomplishment/success measures with progress checkpoints</td>
</tr>
</tbody>
</table>
Putting long-horizon investing into practice

Now we have identified the building blocks for a long-term premium (see Figure 6 for a summary) and have acknowledged the potential costs of execution, let’s put our assumptions into practice by considering the possible impact on institutional investment portfolios of long-horizon investing.

<table>
<thead>
<tr>
<th>Return opportunities</th>
<th>Lower costs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Active ownership</strong></td>
<td><strong>Avoiding buy-high-sell-low</strong></td>
</tr>
<tr>
<td>▪ Average excess return of 2.3% was generated over one year after engagements with investee companies</td>
<td>▪ Chasing past performance cost US pension funds 1% (over three years post manager change)</td>
</tr>
<tr>
<td><strong>Liquidity provision</strong></td>
<td><strong>Avoiding forced sale</strong></td>
</tr>
<tr>
<td>▪ Long-horizon investors have the potential to earn additional returns of 1% pa by providing liquidity when it is most needed</td>
<td>▪ Liquidity-driven trading in response to redemption reduced returns of open-end mutual funds by 1.5% pa</td>
</tr>
<tr>
<td><strong>Capturing systematic mispricing</strong></td>
<td><strong>Lower transaction costs</strong></td>
</tr>
<tr>
<td>▪ Exploiting various mispricing effects in smart betas added more than 1.5% pa relative to cap weighted index in the past decades</td>
<td>▪ 26bps could be saved in transaction costs if UK medium-size pension funds reduce their active strategies turnover to 60%</td>
</tr>
<tr>
<td><strong>Illiquidity premium</strong></td>
<td></td>
</tr>
<tr>
<td>▪ Illiquidity risk premium is worth 0.5-2% pa—additional returns might be available to truly long-horizon investors</td>
<td></td>
</tr>
<tr>
<td><strong>Thematic investing</strong></td>
<td></td>
</tr>
<tr>
<td>▪ 93% of 2016 TAI New York roundtable attendees believe that it is possible to create value through investing thematically</td>
<td></td>
</tr>
</tbody>
</table>
If we sum the return potential of all eight building blocks, we would see an uplift in returns of around 10%. That’s simply illusionary, because the building blocks are not completely independent of each other. For example, providing liquidity when it is most needed has an element of value investing (ie investors on the other side of the trade are willing to sell assets below “fair price” to gain liquidity), which overlaps with capturing systematic mispricing (value being one of the smart betas).

Some building blocks are even contradictory. Exploring the value of liquidity provision requires investors to set aside cash, while harvesting the illiquidity risk premium requires being invested and even locked up for a long period of time. As a result, the aggregate benefit of moving from short-term to long-term orientation for any investors will be significantly lower than combining all the building blocks together.

We take two hypothetical pension schemes to explore a more reasonable estimate of potential long-term premium in practice. The first is at the smaller end of the spectrum and manages $1bn of assets. The second is a large scheme, with around $100bn under management. Both are assumed to invest 60% in equities, 40% in bonds, and have an equal (50%) weighting to passive and active assets.

The smaller fund focuses its long-horizon efforts on avoiding costs and mistakes. It reduces manager turnover, avoids chasing performance as well as forced sales and moves part of its passive exposure into smart beta strategies. The rationale is: if you don’t have the resources to win big, at least don’t lose. The net benefit of these efforts is potentially an increase in investment returns of about 0.5% a year (see Table 1).

Table 1 – Potential benefit of a smaller asset owner adopting long-horizon approach

<table>
<thead>
<tr>
<th>Actions</th>
<th>Incremental annual governance costs</th>
<th>Return gain at the fund level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce turnover for all active mandates</td>
<td>Small</td>
<td>20bps pa</td>
</tr>
<tr>
<td>Avoid chasing past performance when hiring managers</td>
<td>Medium</td>
<td>15bps pa*</td>
</tr>
<tr>
<td>Move 20% of the total portfolio from open-ended funds to a more fit-for-purpose structure to avoid being forced sellers</td>
<td>Small</td>
<td>15bps pa** (20%*75bps)</td>
</tr>
<tr>
<td>Move 40% of total passive exposure (20% of total AuM) to smart beta</td>
<td>Medium</td>
<td>15bps pa*** (20%*75bps)</td>
</tr>
<tr>
<td>Total</td>
<td>Say 15bps ($1.5m)</td>
<td>65bps pa</td>
</tr>
</tbody>
</table>

Total net benefit ~0.5%pa

“... the aggregate benefit of moving from short-term to long-term orientation for any investors will be significantly lower than combining all the building blocks together.”

---

* 1% US plan sponsors gave up over three years post manager change – 33bps pa – then adjusted for implementation shortfall ie perfect timing of switching managers is unattainable in practice

** 1.5% pa lost due to forced selling – adjusted down to 75bps pa when taking into account that closed-end structures bring higher agency issues and the fact that investors can still, when panic, sell their holdings at say a 50% discount to NAV

*** Exploiting various mispricing effects in smart betas added more than 1.5% pa relative to cap weighted index. However in a portfolio of multiple factors, they won’t all outperform at the same time. As a result, it is assumed that outperformance in practice may only be half of that (75bps)
The larger fund has the governance and financial resources to consider all available options for capturing premia. It introduces long-horizon return-seeking strategies, while reducing its exposure to mistakes and costs. The net uplift to returns is potentially around 1.5% a year with our assumptions (see Table 2).

<table>
<thead>
<tr>
<th>Actions</th>
<th>Incremental annual governance costs</th>
<th>Return gain at the fund level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce turnover for all active mandates</td>
<td>Small</td>
<td>20bps pa</td>
</tr>
<tr>
<td>Avoid chasing past performance when hiring managers</td>
<td>Medium</td>
<td>15bps pa</td>
</tr>
<tr>
<td>Move 20% of the total portfolio from open-ended funds to a more fit-for-purpose structure to avoid being forced sellers</td>
<td>Small</td>
<td>15bps pa (20%*75bps)</td>
</tr>
<tr>
<td>Move 40% of total passive exposure (20% of total AuM) to smart beta</td>
<td>Medium</td>
<td>15bps pa (20%*75bps)</td>
</tr>
<tr>
<td>Set aside 5% allocation to cash to exploit forced selling</td>
<td>High</td>
<td>25bps pa* (net of opportunity cost)</td>
</tr>
<tr>
<td>Become active owners for 30% of the equity holding (18% of total AuM)</td>
<td>High</td>
<td>41bps pa (2.3%*18%)</td>
</tr>
<tr>
<td>Invest 10% in illiquid assets</td>
<td>High</td>
<td>20bps pa (2%*10%)</td>
</tr>
<tr>
<td>Allocate 5% of total portfolio to thematic exposures</td>
<td>High</td>
<td>10bps pa**</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Say 8bps pa ($80m)</td>
<td>161bps pa</td>
</tr>
<tr>
<td><strong>Total net benefit</strong></td>
<td></td>
<td>~1.5% pa</td>
</tr>
</tbody>
</table>

* Assumptions: opportunity to buy 50% under-priced assets comes around every 7 years and then it takes another three years for it to be fully re-priced. That is 50bps gain at the fund level each year (100% gain on 5% for 10 years). Opportunity cost of forgoing other market risk premia (assuming ER=5% a year) = 5%*5%=25bps
** Assuming 2% return enhancement via thematic investing
Conclusion – “Houston, we have a premium”

We strongly believe that a long-term premium exists and can be meaningful depending on implementation. The costs of developing the mindset and acquiring the skillsets to address long-horizon investing challenges are substantially outweighed by the return enhancements. It is reasonable for investors to expect a net long-term premium of 0.5% to 1.5% pa, depending on their size and governance arrangements.

Long-horizon investing can also be argued to be beneficial for the wider economy and financial ecosystem. By focusing on long-term value drivers, investors can encourage longer-term thinking in both their target companies and across the corporate universe. This has the potential to give rise to a virtuous circle for investors and companies.

We know, for instance, that companies with higher levels of ownership by long-horizon investors improve along various dimensions of managerial behavioural and corporate decision-making. As a result, risks are reduced, profitability is enhanced and shareholder value increases. Long-term investor ownership also improves the quality of the board, reduces sales, costs and earnings volatility, increases dividends and share repurchases, lowers takeover defences, and encourages firms to become more innovative.

Subsequent Institute papers will consider feedback to these findings and explore long-horizon investing in more detail. Potential subjects include exploring long-horizon investing beliefs, how to implement long-horizon strategies as well as its potential obstacles, and, finally, present a range of practical solutions.

We invite your thoughts.

1 “Do Long-Term Investors Improve Corporate Decision Making?”: Harford et al, January 2017
About the Thinking Ahead Institute

The Thinking Ahead Institute seeks collaboration and change in the investment industry for the benefit of savers.

It was established by Tim Hodgson and Roger Urwin, who have dedicated large parts of their careers to advocating and implementing positive investment industry change. Hodgson and Urwin co-founded the Thinking Ahead Group, an independent research team in Willis Towers Watson, which was created 15 years ago to challenge the status quo in investment and identify solutions to tomorrow’s problems.

What does the Thinking Ahead Institute stand for?

- Belief in the value and power of thought leadership to create positive investment industry change
- Finding and connecting people from all corners of the investment industry and harnessing their ideas
- Using those ideas for the benefit of the end investor.

The membership comprises of asset owners and asset managers and we are open to including membership of service providers from other parts of the industry. The Thinking Ahead Institute provides four main areas for collaboration and idea generation:

- Belief in the value and power of thought leadership to create positive investment industry change
- Global roundtable meetings
- One-to-one meetings with senior members of the Institute
- Working groups, drawn from the membership, and focused on priority areas of the research agenda.
Limitations of reliance

Limitations of reliance – Thinking Ahead Group 2.0

This document has been written by members of the Thinking Ahead Group 2.0. Their role is to identify and develop new investment thinking and opportunities not naturally covered under mainstream research. They seek to encourage new ways of seeing the investment environment in ways that add value to our clients.

The contents of individual documents are therefore more likely to be the opinions of the respective authors rather than representing the formal view of the firm.

Limitations of reliance – Willis Towers Watson

Willis Towers Watson has prepared this material for general information purposes only and it should not be considered a substitute for specific professional advice. In particular, its contents are not intended by Willis Towers Watson to be construed as the provision of investment, legal, accounting, tax or other professional advice or recommendations of any kind, or to form the basis of any decision to do or to refrain from doing anything. As such, this material should not be relied upon for investment or other financial decisions and no such decisions should be taken on the basis of its contents without seeking specific advice.

This material is based on information available to Willis Towers Watson at the date of this material and takes no account of subsequent developments after that date. In preparing this material we have relied upon data supplied to us by third parties. Whilst reasonable care has been taken to gauge the reliability of this data, we provide no guarantee as to the accuracy or completeness of this data and Willis Towers Watson and its affiliates and their respective directors, officers and employees accept no responsibility and will not be liable for any errors or misrepresentations in the data made by any third party.

This material may not be reproduced or distributed to any other party, whether in whole or in part, without Willis Towers Watson’s prior written permission, except as may be required by law. In the absence of our express written agreement to the contrary, Willis Towers Watson and its affiliates and their respective directors, officers and employees accept no responsibility and will not be liable for any consequences howsoever arising from any use of or reliance on this material or the opinions we have expressed.

Copyright © 2017 Willis Towers Watson. All rights reserved.

Contact details
Tim Hodgson
+44 1737 284822
tim.hodgson@willistowerswatson.com
About Willis Towers Watson

Willis Towers Watson (NASDAQ: WLTW) is a leading global advisory, broking and solutions company that helps clients around the world turn risk into a path for growth. With roots dating to 1828, Willis Towers Watson has 40,000 employees serving more than 140 countries. We design and deliver solutions that manage risk, optimise benefits, cultivate talent, and expand the power of capital to protect and strengthen institutions and individuals. Our unique perspective allows us to see the critical intersections between talent, assets and ideas – the dynamic formula that drives business performance. Together, we unlock potential. Learn more at willistowerswatson.com.