

Long Finance
Evidence of Worth
 2016









Long Finance seeks to expand frontiers, stimulate discussion, educate and inform in order to change systems and deliver services which foster a long-term approach to finance. The Long Finance programme delivers this goal by creating communities of interest and delivering research, publications, and events on issues at the leading edge of finance.

This document presents ‘Evidence of Worth’¹ by reviewing Long Finance achievements during 2016.

2016 Summary



International Reach

Top 10 Countries		Number of views (percentage of total)
	United Kingdom	16,611 (20.31%)
	United States	12,018 (14.69%)
	Russia	5,966 (7.29%)
	Hong Kong	3,141 (3.84%)
	Germany	2,835 (3.47%)
	Canada	2,726 (3.33%)
	France	2,551 (3.12%)
	India	2,497 (3.05%)
	China	2,296 (2.81%)
	Switzerland	2,217 (2.71%)

¹ Ian Harris, Michael Mainelli and Mary O’Callaghan, “Evidence of Worth in Not-for-Profit Sector Organisations”, Journal of Strategic Change, Volume 11, Number 8, John Wiley & Sons (December 2002), pages 399-410 - http://www.zyen.com/index.php?option=com_content&view=article&id=135&Itemid=359

New Projects

- ◆ **Das Coin** commissioned a white paper and economic simulation to explore how DasCoin will work in practice, analysing key features and including an economic simulation.
- ◆ **PWC and the London Market** Group sponsored a series of research reports into how mutual distributed ledgers might impact on the future of insurance.
- ◆ **The Cardano Foundation and the States of Alderney** sponsored research into the development of standards for Mutual Distributed Ledger systems.
- ◆ **A new members club for financial centres** was established. Vantage Financial Centres (VFC) is for financial centres who wish to dig deeper into the data behind the GFCI. VFC now has 14 international financial centres amongst its members.

The London Accord

Well over 500 freely accessible reports have been shared by over 65 contributors from around the world, with topics spanning finance, cities, environmental, social, and governance (ESG) issues.

563 reports were available on the London Accord at the end of 2016, representing a 9% increase from 2015. Several new contributors joined the London Accord in 2015 – including the FAIRR initiative, the Sustainable Fisheries Partnership, and the Institute for Climate Economics (I4CE).

The Farsight Award rewards the best individual piece of analysis done by an investment research institution that integrates traditional financial analysis with longer-term environmental, social, and governance issues.

First created by Z/Yen in 2006, with support from Gresham College, Universities Superannuation Scheme and the London Accord, this award scheme ran independently until 2008. Since 2009, the Farsight Award is an award category of the Sustainable City Awards organised by the London Sustainability Exchange and sponsored by the City of London Corporation. The Sustainable City Awards recognise and reward UK organisations, from multinational businesses to small charities, and promote outstanding achievements and innovation across all aspects of sustainability.

Five reports were shortlisted out of the 2016 reports. The winner, chosen by a panel of expert judges was Sustainalytics for their report "**Water Scarcity: Will Investors Be Left High And Dry?**"

Our judges said that "*The Sustainalytics report addresses a well-known theme in a balanced way, pointing at challenges and opportunities, as well as sectors and companies impacted. As the problems are local but the solutions global, the report is very timely in the current geopolitical environment*".

The Runner Up was Standard and Poor's for their report "**Storage: The Final Piece In The Global Energy Transition Puzzle**". Our judges stated that *"This report was a detailed and accessible analysis of the opportunities for investors in energy storage technology. Examining in detail the performance of the key companies developing the solutions which will unlock the promise of renewable technologies, this report is a must read for anyone with an interest in this field."*

Chart 1 gives an indication of the research areas that were most explored by our contributors over 2016.

Chart 1

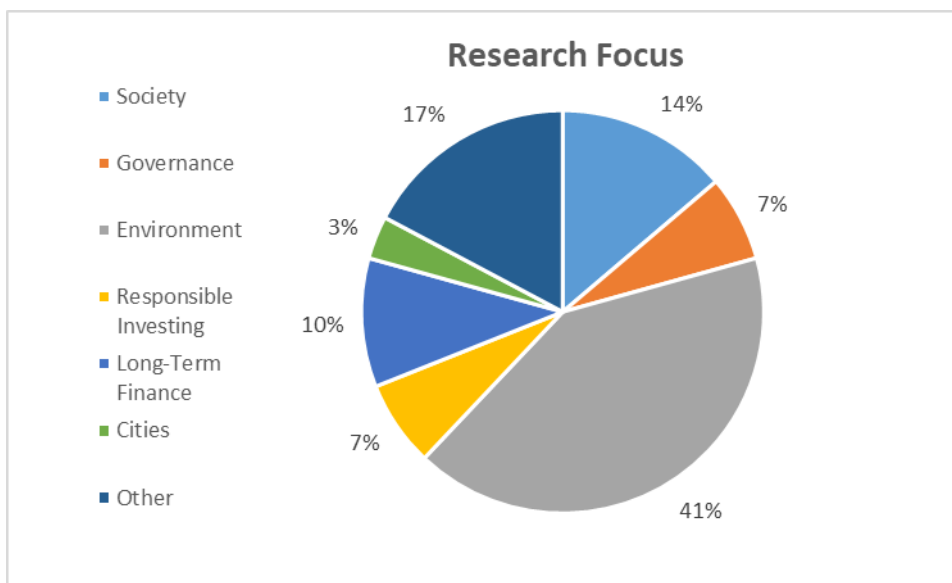


Table 1 Most Popular London Accord Reports (downloads)

Institution	Report Title	Date	Number of Downloads
Deutsche Bank	The Logistics of Supply Chain Alpha	2015	199
Arabesque Asset Management and University of Oxford	From The Stockholder To The Stakeholder: How Sustainability Can Drive Financial Outperformance	2015	136
Z/Yen Group & Long Finance	Financing the Transition: Sustainable Infrastructure in Cities	2015	117
Bank of America Merrill Lynch	Feed the World: Global Food Security Primer	2015	103
Barclays	Climate Change: Warming Up For COP-21	2016	63
Bank of America Merrill Lynch	No Time to Waste - Global Waste Primer	2013	54

Financial Centre Futures

The 19th and 20th edition of the GFCI were released. 103 financial centres are now actively researched. 87 financial centres appear in GFCI 20. The remaining 16 'associate centres' will join the index when they receive sufficient assessments.



The Global Financial Centres Index continues to reach a global audience and has been covered at a wide selection of events, including in the UK, China, Qatar, Dubai Morocco and Canada – and through global media press outlets, such as the Financial Times, CNBC, Irish Times, Wall Street Journal, and the Washington Post. The widespread media attention granted to the GFCI in 2016 confirmed that it remains one of the most widely respected and used indicators of financial centres' competitiveness.

Sponsored by the China Development Institute, the Financial Centre Futures programme is always looking to expand, develop and learn from the index.

2016 saw three new cities added to the GFCI – Chengdu, Hangzhou and Astana. 16 financial centres are waiting to acquire the minimum 200 assessments to be included in the GFCI.

Over 2016, the GFCI used 101 instrumental factors (third party measures and indices), alongside over 23,000 financial centre assessments from more than 2,400 financial services professionals. The charts below give an indication of the respondents' location and sector of activity.

Chart 2

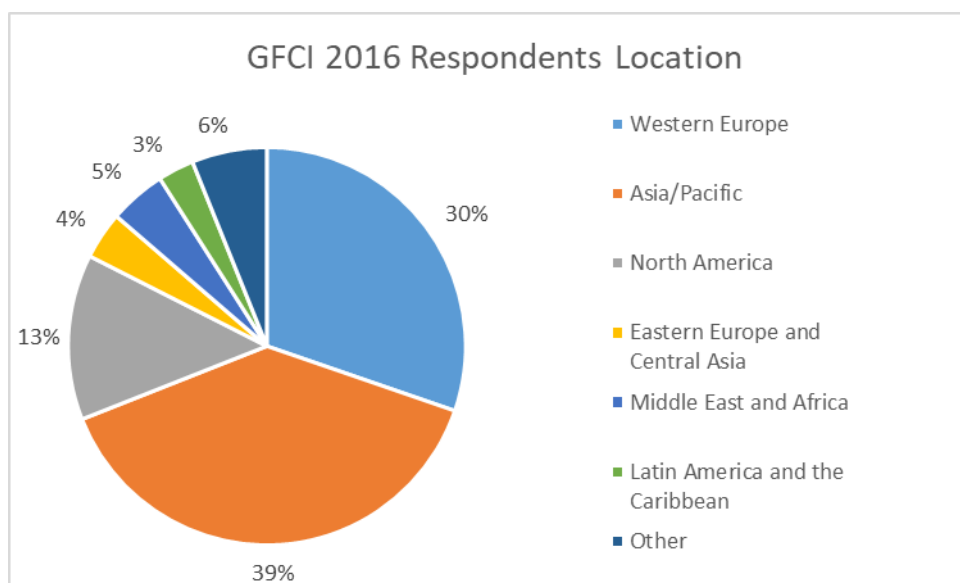
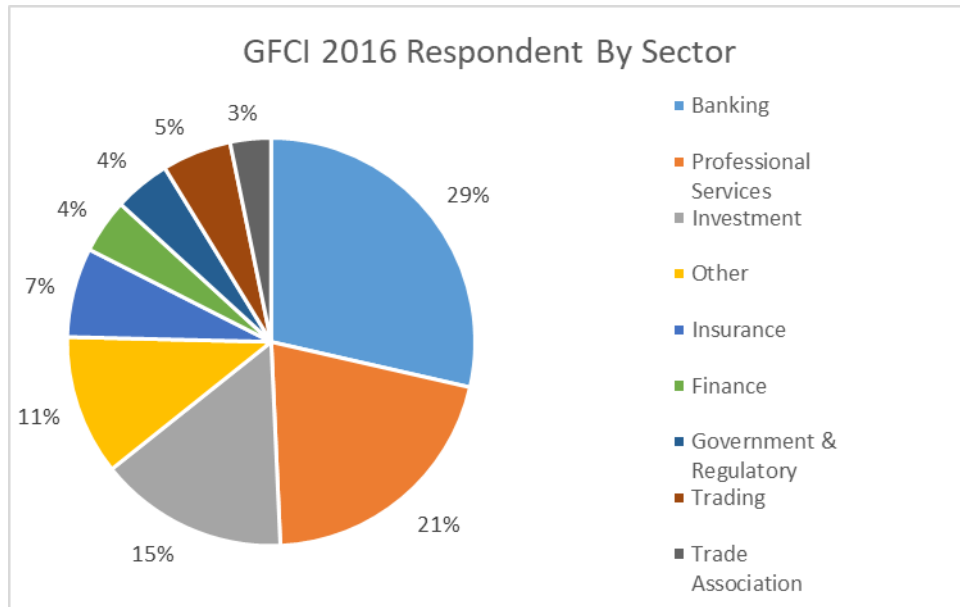


Chart 3

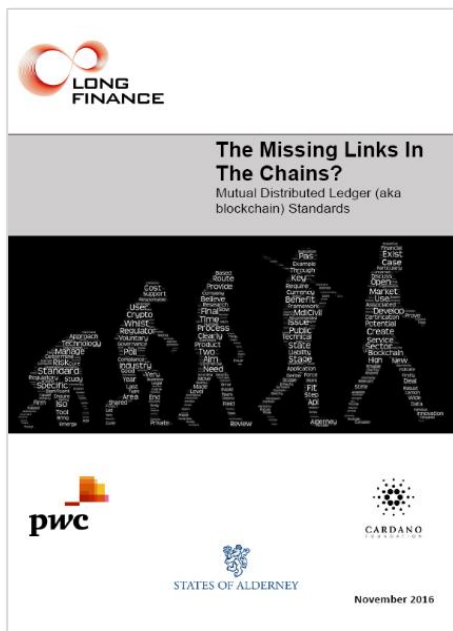


Research & Publications
 50 research publications are free to download, with more to come expanding on the Long Finance research agenda.

Table 2 Long Finance Research Themes

Theme	Research
Behaviour	<ul style="list-style-type: none"> ▪ Concepts of 'Fairness' ▪ Folklore, Myths and Finance ▪ The Future of Price
Cities	<ul style="list-style-type: none"> ▪ Finance Toolkit for Sustainable Cities ▪ Financing Tomorrow's Cities (shared research on finance and cities)
Financial System	<ul style="list-style-type: none"> ▪ Insured Utility Banking ▪ Futures of Finance ▪ Clustering ▪ Asset Management ▪ Global Financial Centres ▪ Emerging Markets ▪ Sell-Side Research
Smart Ledgers	<ul style="list-style-type: none"> ▪ Distributed Futures ▪ Mutual Distributed Ledger (aka blockchain) Technology
Governance	<ul style="list-style-type: none"> ▪ Good Governance ▪ Ethics ▪ Ethical Banking

Measurement	<ul style="list-style-type: none"> ▪ Confidence Accounting ▪ Long-Term Performance Measurement ▪ Uses and Abuses of Discount Rates
Monetary Systems	<ul style="list-style-type: none"> ▪ Common Tenders ▪ Eternal Coin
Regulation	<ul style="list-style-type: none"> ▪ Mortgages ▪ Voluntary Standards Markets ▪ Compliance Architectures
Risk Mitigation	<ul style="list-style-type: none"> ▪ Public-Private Cyber-Catastrophe Reinsurance
Structure	<ul style="list-style-type: none"> ▪ Pensions Indemnity Assurance and Internal Growth Rate Measures for Pensions
Sustainability	<ul style="list-style-type: none"> ▪ London Accord 2007 (24 integrated reports) & London Accord ▪ Burn it all?! ▪ Policy Performance Bonds (Index-Linked Carbon Bonds & Index-Linked Forestry Bonds)



The Missing Links In The Chains? Mutual Distributed Ledger (aka blockchain) Standards -

Commissioned by the States of Alderney, PwC, and the Cardano Foundation, Z/Yen engaged with over seventy people representing developers, regulators, standards bodies, lawyers, financiers, businesspeople, accountants, and potential users, to answer a number of questions:

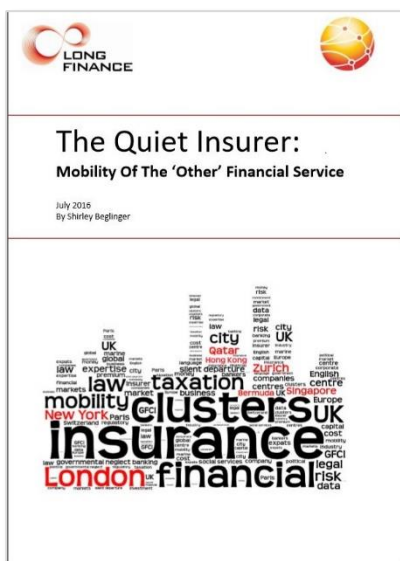
- ◆ What are the potential risks associated with future widespread use of mutual distributed ledgers (MDLs), and what are their implications?
- ◆ How do distributed ledgers fit within existing regulatory frameworks? Are existing laws sufficient to cover the activities supported by distributed ledgers, or is new legislation is needed?
- ◆ Would MDLs benefit from the development of standards?
- ◆ Which sectors and services might need MDLs most?
- ◆ What different paths could be taken to create standards?

“The Missing Links in the Chains” confirms that the establishment of a voluntary standards market may be beneficial in promoting the uptake of MDLs by providing certainty to both users and developers, while assisting regulators in fulfilling their duties. A PAS route seems the most likely, but further consideration is needed on the scope of ‘taxonomies & performance’, ‘data governance & liability’, and ‘commercial governance & liability’. And of course, a big question mark about what group is prepared to pay to take standards forward?

Chain Reaction: How Blockchain Technology Might Transform Wholesale Insurance - Sponsored by PWC

The goal of this study was to review the wholesale insurance market in order to understand major business processes, to identify where there are perceived problems or inefficiencies, and to analyse where the new technology of blockchain can provide part of a solution. Over 50 market participants and other stakeholders were interviewed over the course of the research.

Blockchain technology is high on the agenda of global insurers and reinsurers, with many of them investing in trials; in our research, smaller organisations also expressed a great deal of awareness and interest. Blockchain technologies will initially deliver change at the process level. The fact that no central authority exists through which changes must be initiated makes it possible for distinct groups of market participants to work together on new initiatives. Through collaboration, trial and experiment, these groups will be able to explore what works (and what doesn't). And over time, the most successful process level changes will be adopted at a market level.



The Quiet Insurer: Mobility of the 'Other' Financial Service - In this excellent analysis of the strengths and weaknesses of London's insurance market, our author, Shirley Beglinger, points out that insurance not only thinks long-term about finance but also about location.

Insurers have clustered around London since the 16th century. Continental financiers were attracted to Sir Thomas Gresham's homage to their bourses when he opened the Royal Exchange (Byrsa Londinensis) in London in 1571, as wars on the Continent forced them to decamp from the bourses of Antwerp and Bruges. Despite the surprising nimbleness and jitteriness of some insurers, Shirley has a positive view of insurance clustering and London's global role. She puts her finger accurately on the weaknesses of North American markets, Chinese

markets, Middle Eastern markets and others. but Shirley argues it's only London's market to lose. To paraphrase Johnson, "when an insurer is tired of London, he is tired of [life] insurance." Londoners will hope that future decisions over regulation and tax only strengthen their insurance cluster. Other financial centres will always examine an opportunity to poach business, and Shirley highlights perhaps Singapore as the leading long-term contender. London is heading toward a half-a-millennia run of success. Shirley wills London a good ten centuries. That's what Long Finance is about.

Table 3 Top 10 Most popular downloads (long finance publications)

Publication Title	Year
Chain Of A Lifetime	2014
GFCI 20	2016
GFCI 18	2015
GFCI 19	2015
London As A Global Financial Centre	2005
Comparative Regulatory Environments: A Comparison of Financial Services Regulation in Eight Jurisdictions	2015
Chain Reaction: How Blockchain Technology Might Transform Wholesale Insurance	2016
Uses and Abuses of Discount Rates: A Primer for the Wary	2015
The Quiet Insurer	2016
Confidence Accounting – A Bold Proposal from Long Finance, ACCA and CISI	2012

Long Finance blog [the Pamphleteers](#) also attracted significant attention in 2016.

Table 4 shows a selection of popular articles released in 2015

Author	Article	Date
Tim Connell	Pantomime in a Cross-Cultural World	Dec 2016
Rob Julian	Remember When Inflation Used to be a Good Proxy for Monetary Expansion, and When New Money Was for More Than Just Houses?	Nov 2016
Con Keating	A Company is a Juridical Person	Oct 2016
Con Keating	Responsible Capitalism?	Oct 2016
Djellil Bouzidi	Green Discounting for the Future Edit	Oct 2016
Chris Yapp	Funding the Housing Targets	Oct 2016
JB Beckett	MegaCity Lon: Are Sky Cities Sustainable in 2000AD?	Aug 2016
Michael Mainelli	Staying in EU Relationship is Hard Work – With or Outwith the UK	Jun 2016
Daniel Howitt	Understanding The Pension Crisis	Jun 2016
John Anderson	The Triple a Phenomenon Around the Value Web	Jun 2016
Ian Harris	A 25 Year Horizon Long Finance Look At The EU Referendum	Jun 2016
Gill Ringland	In Safe Hands? The Future of Financial Services Revisited	May 2016
Chris Yapp	Fintech and Unintended Consequences	May 2016
Chris Yapp	A Transparency Tax?	Apr 2016
Dudley Edmunds	Tinker, Tailor, Soldier, Banker? Confidentiality & Family Offices	Mar 2016
Con Keating	The Comparison Of Distributions – Employing Affine Transformations To Assess Risk And Return	Feb 2016
Con Keating	The Comparison of Distributions	Feb 2016
Chris Yapp	The Future of Cash?	Feb 2016
Matthew Rees	Explaining Discount Rates with Mini Case Studies	Feb 2016
Ian Harris	PostCapitalism: A Guide to Our Future - a Critique	Jan 2016
Rob Julian	All is Fair in Love and War (and Free Market Economics ?)	Jan 2016

Events

In 2016, Long Finance held 12 Forums, contributed to 14 international conferences, hosted 7 seminars, and ran 19 training courses and three workshops

Table 3 Selected Long Finance Events held in 2016

Event Title	Attendance
Intelligent Insurance: The Confluence Of Smart Ledgers, Fintech, & The Internet-of-Things - Workshop	40
DasCoin: A Hybrid Digital Store Of Value System – Breakfast Seminar	30
The Missing Links in the Chains - Report Launch	35
The Potential for Blockchain Technology in Wholesale Insurance - Report Launch	74
Inter-Governmental Standards for Mutual Distributed Ledgers - Webinar	17
What Blockchain Technology Might Mean for Wholesale Insurance - Workshop	18
In Safe Hands? The Future of Financial Services Revisited - Workshop	18
Shrewd Markets & Smart Settlement On Blockchains? – Breakfast Seminar	22

The Long Finance Conference provides a forum for professionals to discuss topics that will be significantly influential over the long term. The 2016 Conference “**Are You Interested Or Discounted? Long-term Social Finance**” was kindly hosted by Gresham College at Barnard’s Inn on 1 March 2016. This conference examined the implications of discount rates on society’s long-term decisions such as health, education, infrastructure, and the environment. The speakers included Professor Michael Mainelli, Z/Yen Group; Professor Mark Freeman, Loughborough University; Dr Nick Goddard, Long Finance; Con Keating, Brighton Rock Insurance; and Matthew Rees, National Audit Office.

BUILDING COMMUNITIES

62000 people visited the Long Finance website in 2016, an increase of 100% compared to 2015.

In 2016, 86 new members joined the Long Finance online community, which now includes 1030 members from about 50 countries. The online community allows like-minded individuals to cooperate, share ideas, participate in discussions and network. Long Finance’s wider network includes over 4,000 people globally.

THANKING OUR PARTNERS

We would like to express our gratitude to The China Development Institute, the City of London Corporation, Gresham College, and Z/Yen Group for their long-standing support. We would like to thank all the London Accord contributors for sharing research, and members of the Long Finance Advisory Board for their wise guidance. Finally, we would like to thank those in our community who contribute their thoughts and time to the Long Finance events, blogs, and discussions on the online community.



“When would we know our financial system is working?” is the question underlying Long Finance’s goal to improve society’s understanding and use of finance over the long term. In contrast to the short-termism that characterises today’s economic views the Long Finance time-frame is roughly 100 years.

Long Finance aims to:

- ◆ expand frontiers - developing methodologies to solve financial system problems;
- ◆ change systems - provide evidence-based examples of how financing methods work and don’t work;
- ◆ deliver services - including conferences and training using collaborative tools;
- ◆ build communities - through meeting, networking and events.

Long Finance runs programmes exploring four major themes:

1. **London Accord** – looking at environmental, social, and governance investment research issues;
2. **Financial Centre Futures** – seeking to explore how finance might work in the future;
3. **Meta-Commerce** – aiming to identify and structure the critical questions underlying the long-term viability of the financial system;
4. **Eternal Coin** – encouraging a global discussion on the nature of money and the concept of value.

www.longfinance.net