

Long Finance  
**Evidence of Worth**  
 2017

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

This document presents ‘Evidence of Worth’<sup>1</sup> by reviewing Long Finance achievements during 2017.

### 2017 Summary



### New Projects

- ◆ **The Global Green Finance Index** was initiated with sponsorship from the Mava Foundation. This global review of financial centres’ performance on green finance is being delivered in partnership with Finance Watch.
- ◆ **The Cardano Foundation** sponsored a new programme of research, entitled Distributed Futures, focussing on distributed ledger technology.
- ◆ **Das Coin** sponsored research into the auditing of mutual distributed ledgers (aka Blockchains).
- ◆ **The European Federation of Financial Analysts Societies** sponsored research into the risk structure and contractual accrual rate of Defined Benefit pensions.
- ◆ **Review Banque** commissioned a book on green bonds.
- ◆ **Toronto Financial Services Alliance** commissioned research into trends and innovations in financial services.
- ◆ **The London Market Group** commissioned two pieces of research into the use of “smart contracts” in the insurance sector.
- ◆ **The London Token Fundraising Manifesto was launched**, laying down an ethical framework and a personal “code of conduct” for token issuers. The manifesto had 41 signatories at launch and has gathered momentum after extensive coverage in the financial and trade press.

<sup>1</sup> 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](http://www.zyen.com/index.php?option=com_content&view=article&id=135&Itemid=359)

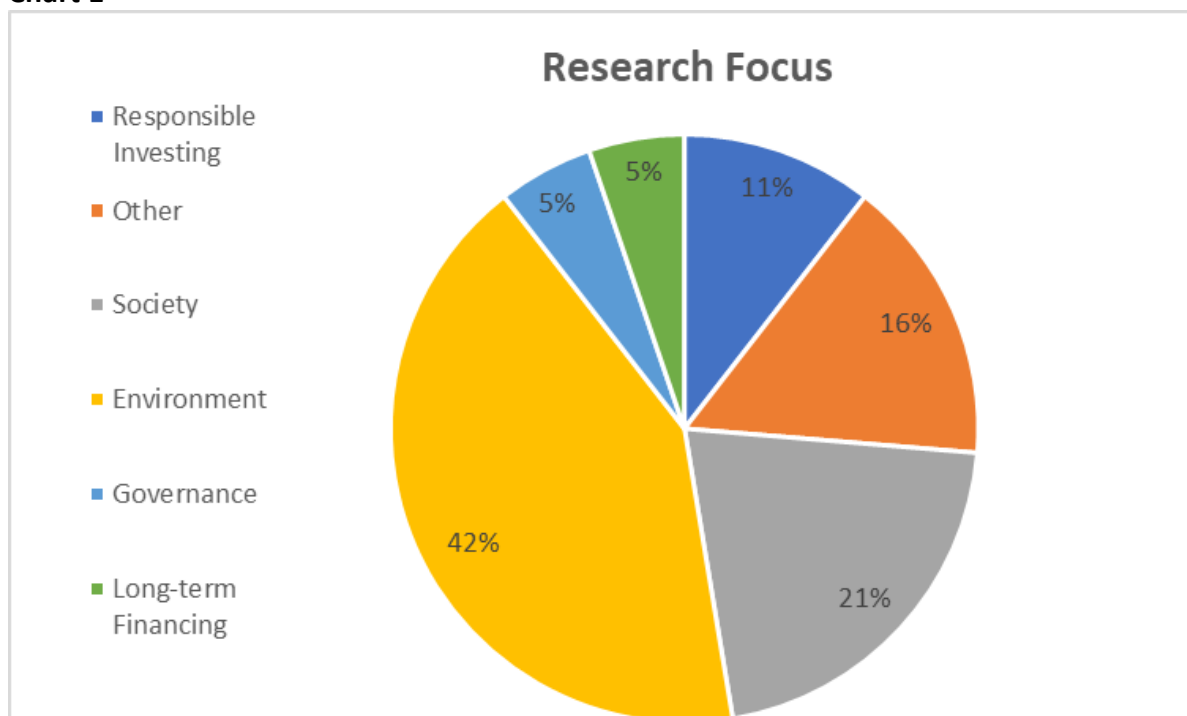
**The London Accord**

Nearly 600 freely accessible reports have been shared by more than 70 contributors from around the world, with topics spanning finance, cities, environmental, social, and governance (ESG) issues.

**582 reports** were available on the London Accord at the end of 2017, representing a 3% increase from 2016. Several new contributors joined the London Accord in 2017 – including Ranking Digital Rights, Finance Watch and Smith School of Enterprise and the Environment at Oxford University.

Chart 1 gives an indication of the research areas that were most explored by our contributors over 2017.

**Chart 1**



**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.

Six reports were shortlisted out of the 2017 reports. The winner, chosen by a panel of expert judges, was Trucost (part of S&P Dow Jones Indices), for their report on *"Plastics And Sustainability: A Valuation Of Environmental Benefits, Costs And Opportunities For Continuous Improvement"*.

Receiving coveted “Highly Commended” status were:

- ◆ Ranking Digital Rights for "*Poor Digital Rights Performance— Who Pays the Price?*";
- ◆ UBS for "*Extreme Automation And Connectivity: The Global, Regional, And Investment Implications Of The Fourth Industrial Revolution*" and;
- ◆ FAIRR Initiative, Alliance to Save Our Antibiotics & Aviva Investors for "*Superbugs And Super Risks: The Investment Case For Action*"

Our judges agreed that the quality of the 2017 entries was a powerful demonstration that analysts in the financial services sector identify key environmental and social issues well before they enter public consciousness.

### Financial Centre Futures

The 21<sup>st</sup> and 22<sup>nd</sup> edition of the GFCI were released. 108 financial centres were actively researched.

A new index, The Global Green Finance Index was launched. The first report, charting how financial centres around the world are delivering “green” finance was scheduled for publication in March 2018.



**The Global Financial Centres Index** continues to reach a global audience and has been covered by the press through 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 2017, sharpened by the continuing fallout from Brexit and the United States election, confirmed that it remains one of the most respected, authoritative and widely used indicators of financial centres’ competitiveness.

Sponsored by the China Development Institute, the Financial Centre Futures programme continues to seek to expand, develop and learn from the index. 2017 saw three new cities added to the GFCI – Wellington, Buenos Aires, Hamburg, and Chengdu from the associate centres list. 16 Centres remained in the associate list, waiting to ascend to the main index when they receive sufficient appraisals.

Over 2017, the GFCI used 102 instrumental factors (third party measures and indices), alongside 23,812 assessments from 3,159 financial services professionals. The charts below give an indication of the respondents’ location and sector of activity.

Chart 2

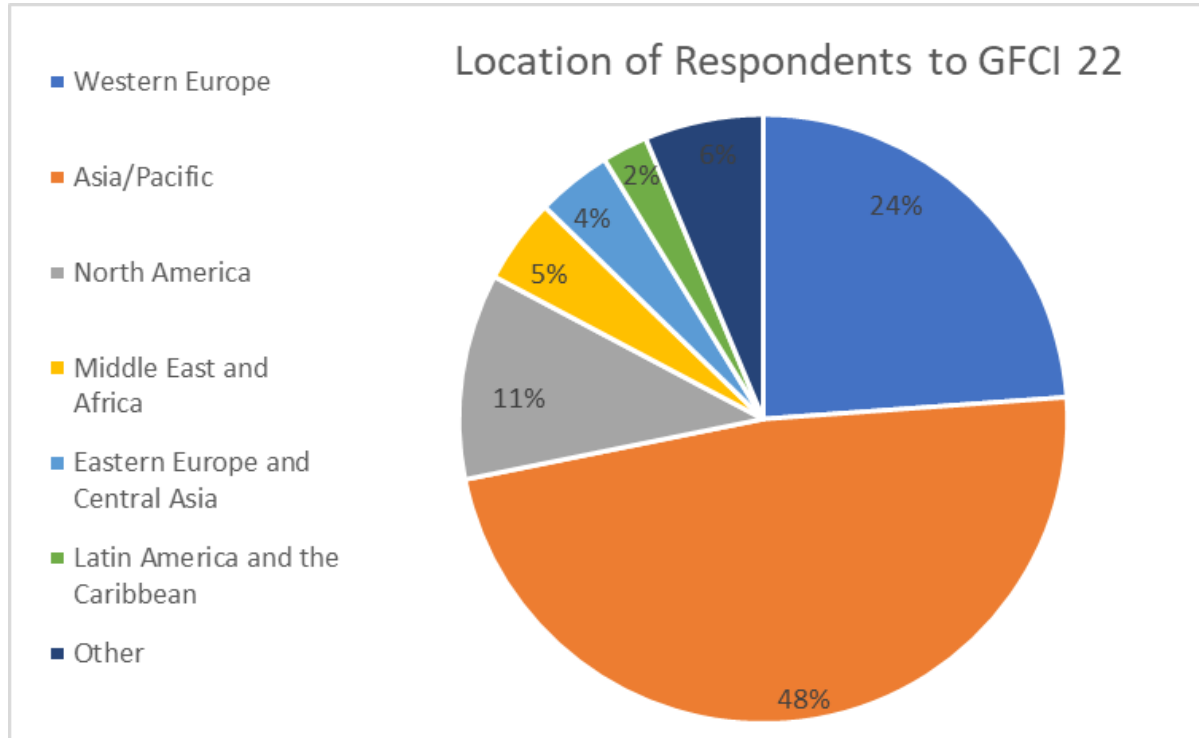
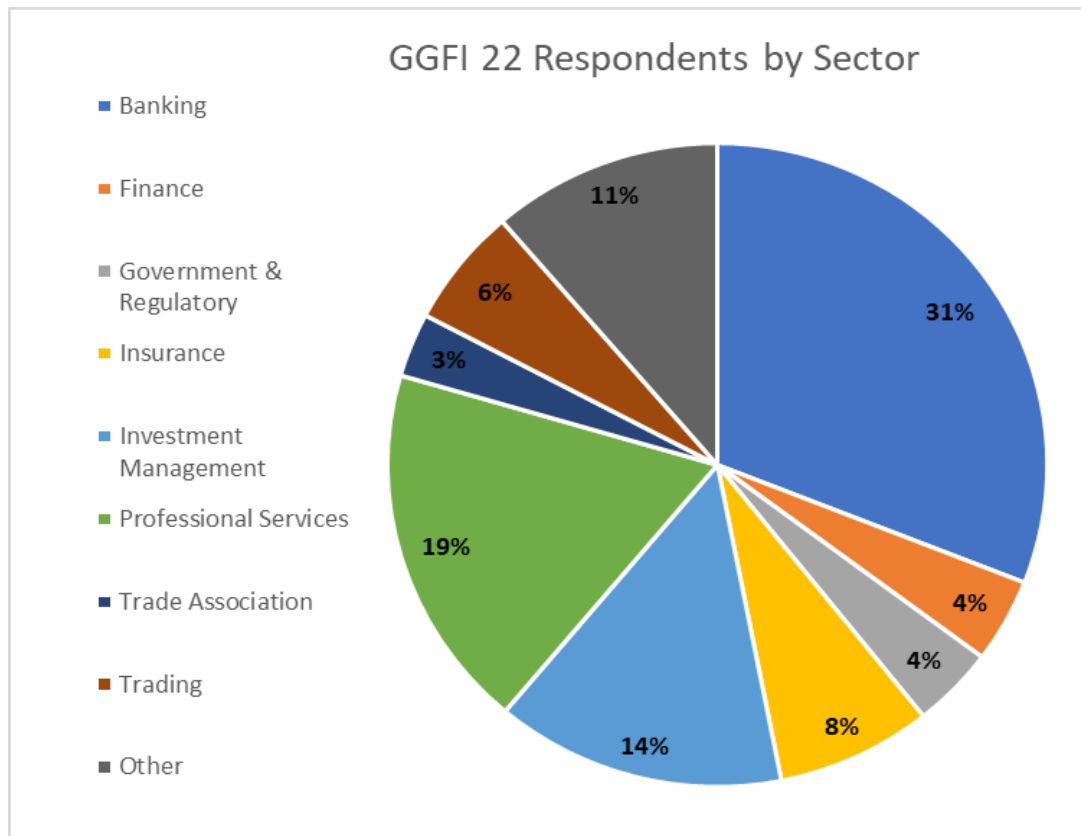


Chart 3



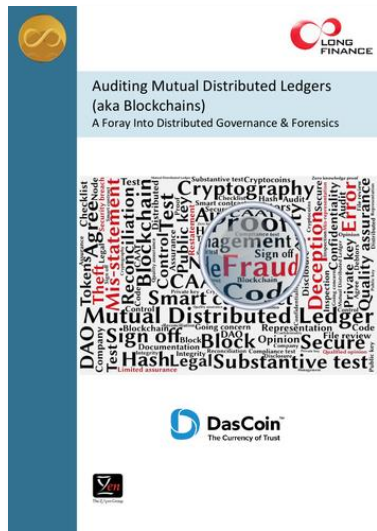
## Research & Publications

73 research publications were free to download at the end of 2017, an increase of 23 on 2016, expanding on the Long Finance research agenda.

**Table 1 Long Finance Research Themes**

Theme	Research
Behaviour	<ul style="list-style-type: none"> <li>◆ Concepts of 'Fairness'</li> <li>◆ Folklore, Myths and Finance</li> <li>◆ The Future of Price</li> </ul>
Cities	<ul style="list-style-type: none"> <li>◆ Finance Toolkit for Sustainable Cities</li> <li>◆ Financing Tomorrow's Cities (shared research on finance and cities)</li> </ul>
Financial System	<ul style="list-style-type: none"> <li>◆ Insured Utility Banking</li> <li>◆ Futures of Finance</li> <li>◆ Clustering</li> <li>◆ Asset Management</li> <li>◆ Global Financial Centres</li> <li>◆ Green Global Financial Centres</li> <li>◆ Emerging Markets</li> <li>◆ Sell-Side Research</li> </ul>
Smart Ledgers	<ul style="list-style-type: none"> <li>◆ Distributed Futures</li> <li>◆ Mutual Distributed Ledger (aka blockchain) Technology</li> </ul>
Governance	<ul style="list-style-type: none"> <li>◆ Good Governance</li> <li>◆ Ethics</li> <li>◆ Ethical Banking</li> </ul>
Measurement	<ul style="list-style-type: none"> <li>◆ Confidence Accounting</li> <li>◆ Long-Term Performance Measurement</li> <li>◆ Uses and Abuses of Discount Rates</li> </ul>
Monetary Systems	<ul style="list-style-type: none"> <li>◆ Common Tenders</li> <li>◆ Eternal Coin</li> </ul>
Regulation	<ul style="list-style-type: none"> <li>◆ Mortgages</li> <li>◆ Voluntary Standards Markets</li> <li>◆ Compliance Architectures</li> </ul>
Risk Mitigation	<ul style="list-style-type: none"> <li>◆ Public-Private Cyber-Catastrophe Reinsurance</li> </ul>
Structure	<ul style="list-style-type: none"> <li>◆ Pensions Indemnity Assurance and Internal Growth Rate Measures for Pensions</li> </ul>
Sustainability	<ul style="list-style-type: none"> <li>◆ London Accord 2007 (24 integrated reports) &amp; London Accord</li> <li>◆ Burn it all?!</li> <li>◆ Policy Performance Bonds (Index-Linked Carbon Bonds &amp; Index-Linked Forestry Bonds)</li> </ul>

Examples of 2017 Long Finance Publications

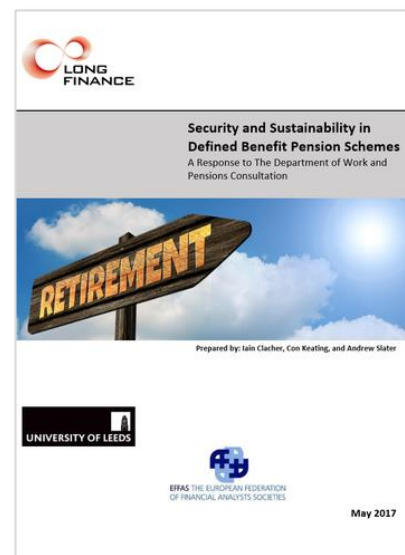


**Auditing Mutual Distributed Ledgers (aka Blockchains): A Foray Into Distributed Governance & Forensics** - This project was commissioned by DasCoin in the summer of 2017. Z/Yen’s Long Finance project team reviewed the literature on the topic to produce four discussion papers that described the issues and explored some potential ways of addressing them.

On 4 October 2017, Long Finance held a symposium to explore the discussion papers at Chartered Accountants’ Hall in London. The 28 participants included representatives from regulators, professional associations, external audit firms, technology companies, and academia.

The report included the background information chapters on “Auditing Distributed Ledgers”, “Auditing Distributed Data”, “Auditing Distributed ‘Smarts’”, and “Auditing Consortium Blockchain Systems”, along with a brief summary of the symposium discussions. The final chapter makes suggestions for the audit profession to address.

**Security And Sustainability In Defined Benefit Pension Schemes: A Response To The Department Of Work And Pensions Consultation** - In the best tradition of speaking truth unto power, the authors respond forthrightly to the questions posed in this green paper consultation. From fundamental first principles, they analyse, review, and discuss the green paper’s narrative framework, which supports and gives rise to the Green Paper’s questions. They conclude that a major public policy debate over pension scheme member security has never taken place, and such a debate is essential. They also conclude that it is possible, and highly desirable, to reinvigorate the provision of occupational defined benefit pensions – to this end, they make eleven principle recommendations.



The analysis supporting the responses to the six multi-part questions of the Green Paper exposes the shortcomings, conflicts, and perverse incentives arising from the existing legislation and its institutions. The deficiencies in regulation and supervision motivate the authors’ call for the creation of a Royal Commission to investigate and report on the operations, accountability, and role of the Pensions Regulator. In contrast, reform of the Pension Protection Fund (PPF) needs only that it be required to pay the full benefits of members of schemes, along with being privatized, and opened to free market competition.













**Responsibility Without Power? The Governance Of Mutual Distributed Ledgers (aka Blockchains)** - Mutual Distributed Ledger (MDL, aka blockchain) technology is in an emergent phase. New applications are under development; new uses are being researched; new consortia are being formed to explore MDL applications. Considering appropriate governance structures has had a lower priority so far, but trust in the increasingly popular systems will depend on their incorporating good governance principles.

It was the aim of this study to identify those principles, in order to provide a roadmap for developers and users alike.

**The Long Finance Community**  
 The London Accord seeks to engage our community of financial services professionals, policy makers, academics and interested lay-people in debate, discussion and interaction.

The Long Finance website saw 62,000 visits in 2017 with visitors spending an average of seven and a half minutes interacting with our content- a total of more than 7,200 hours viewing Long Finance content.

**Table 2 The top 10 countries accessing the Long Finance Website**

Top 10 Countries		Number of views (percentage of total)
	United Kingdom	17,445 (26.24%)
	United States	9,515 (14.31%)
	Japan	2,589 (3.89%)
	Canada	2,042 (3.07%)
	India	1,960 (2.95%)
	Germany	2,099 (3.16%)
	China	2,217 (3.33%)
	France	1,723 (2.59%)
	South Korea	1,662 (2.50%)
	Hong Kong	1,647 (2.48%)

The Long Finance blog [the Pamphleteers](#) attracted significant attention. Table 2 shows a selection of popular articles submitted by our community members in 2017

**Table 2 The Pamphleteers 2017**

Author	Title	Downloads
Chris Yapp	<a href="#">In Praise Of Higher Taxes?</a>	921
Ian Angell	<a href="#">There's One Born Every Minute - Black Sky Thinking About Crypto-Currencies</a>	1735
Con Keating	<a href="#">A Vision Of Collective Defined Benefit (CDB) – Defined Ambition By Another Name</a>	873
Bob McDowall	<a href="#">The History &amp; Current State Of Financial Regulation Of Cryptocurrencies Globally</a>	1547
Con Keating	<a href="#">A Vision Of Collective Defined Contribution Pensions</a>	748
Con Keating	<a href="#">Eurocrat Pensions</a>	748
Bob McDowall	<a href="#">The Folklore Of Cryptocurrencies - Alchemy Revisited?</a>	1733
Con Keating	<a href="#">Defined Benefit &amp; Collective Defined Contribution</a>	780
Michael Mainelli	<a href="#">The London Token Fundraising Manifesto</a>	12823
Simon Mills	<a href="#">Responsibility Without Power? The Governance Of Mutual Distributed Ledgers (AKA Blockchains)</a>	980
Dr Shann Turnbull	<a href="#">Should Money Have A Stable Predicable Value?</a>	3538
Chris Yapp	<a href="#">Where Next For Trade?</a>	1424
Michael Mainelli	<a href="#">Puzzling Productivity Paradoxes</a>	1512
John Heffernan	<a href="#">The Search For Sunken Gold</a>	1293
Toby Birch	<a href="#">The Mad Tea Party</a>	1668
Philip Ross	<a href="#">Breaking The Shackles On The Precariat: Could BlockChain Technology Free The Self-Employed From Late Payments And Unwritten Contracts?</a>	2361
Michael Mainelli	<a href="#">Does Money Stink In Space?</a>	2858
Alex Goddard	<a href="#">A Millennial's View Of 2016</a>	3014
Chris Yapp	<a href="#">Misreading Change</a>	1944



**Events**

In 2017, Long Finance held 35 events around the world as well as contributing to almost a dozen international conferences and seminars organised by other institutions.

**Table 3 Selected Long Finance Events held in 2016**

Date	Event	Event Type & Location
20 December 2017	Smart Ledger Geostamping - Steps Towards Interoperability & Standards	Workshop- London
7 December 2017	Make Your Financial Centre More Competitive	Workshop - London
4 December 2017	Distributed Futures Forum	Forum- London
30 November 2017	Global Green Finance Index Breakfast Workshop	Workshop - Paris
29 November 2017	Global Green Finance Index Breakfast Workshop	Workshop - London
22 November 2017	Global Green Finance Index Breakfast Workshop	Workshop - Frankfurt
16 November 2017	Financial Services Development in Jinan	Conference- London
9 November 2017	Trading The Future	Dinner- London
9 November 2017	Make Your Financial Centre Competitive	Training - London
1 November 2017	Vantage Financial Centres Seminar	Seminar - Gujarat
23 October 2017	Digital Currencies Educational Trade Fair	Trade Fair- London
11 October 2017	ICO Event London - Post-ICOs - Pain or Pleasure? And What's Next?	Conference- London
9 October 2017	Security Forward Risk & Intelligence Forum	Forum- London
5 October 2017	Distributed Futures Forum	Forum- London
4 October 2017	Auditing Mutual Distributed Ledgers	Symposium- London
21 September 2017	Make Your Financial Centre Competitive	Training- London

20 September 2017	<a href="#">Blockchain Live</a>	Exhibition- London
11 September 2017	<a href="#">Global Launch of GFCI 22 (Abu Dhabi)</a>	Conference - Abu Dhabi
11 September 2017	<a href="#">Global Launch of GFCI 22 (Chengdu)</a>	Conference - Chengdu
27 July 2017	<a href="#">Make Your Financial Centre Competitive</a>	Training- London
19 July 2017	<a href="#">Responsibility Without Power? The Governance Of Mutual Distributed Ledgers</a>	Report Launch- London
13 July 2017	<a href="#">Security Forward Risk &amp; Intelligence Forum</a>	Forum- London
12 July 2017	<a href="#">Get More From Your Data With Predictive Analytics: Half Day Course</a>	Training- London
4 July 2017	<a href="#">Distributed Futures Forum</a>	Forum- London
28 June 2017	<a href="#">Make Your Financial Centre Competitive</a>	Training- London
22 June 2017	<a href="#">FS Club - Have We Fixed Our Financial System Yet?</a>	Dinner - London
23 May 2017	<a href="#">The Dark Side Of The Chain? Governing &amp; Auditing Mutual Distributed Ledger (MDL, aka blockchain) Systems</a>	Conference- London
24 April 2017	<a href="#">Make Your Financial Centre Competitive</a>	Training- London
4 April 2017	<a href="#">Long Finance Webinar 'Modelling the Economics of Cryptocurrencies'</a>	Webinar
4 April 2017	<a href="#">Distributed Futures Forum</a>	Forum - London
27 March 2017	<a href="#">Global Financial Centres Index 21 Launch - Shenzhen</a>	Launch - Shenzhen
27 March 2017	<a href="#">Global Financial Centres Index 21 Launch - Milan</a>	Conference - London
22 March 2017	<a href="#">Security Forward Risk &amp; Intelligence Forum</a>	Forum- London
19 January 2017	<a href="#">Distributed Futures Forum</a>	Forum- London

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**THANKING OUR PARTNERS**

We would like to express our gratitude to the Cardano Foundation, the Mava Foundation, Das Coin, Finance Watch, 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 and blogs.



“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](http://www.longfinance.net)