Long Finance
When Would We Know Our Financial System Is Working?

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[transcript of a talk to The Insurance Institute Of Ireland, 3rd Annual Industry Leaders Summit, “Aiding the Recovery - Practical Strategies to Insure Success”]

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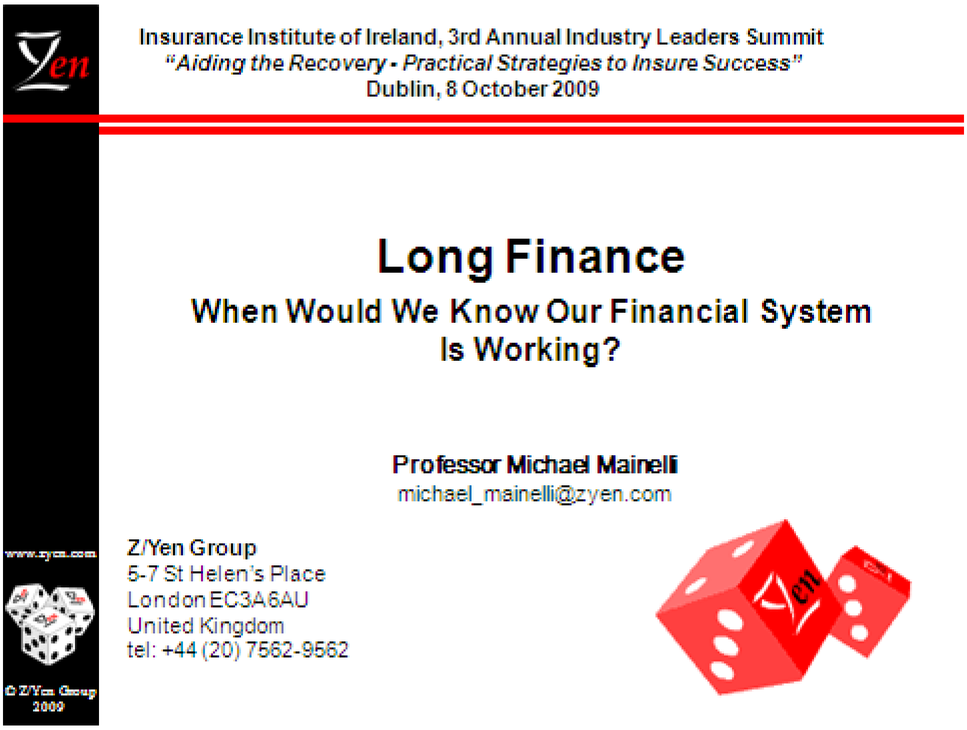


[SLIDE: Z/YEN GROUP]

The Importance Of Impertinent Questions

The renowned anthropologist Claude Lévi-Strauss studies people. Lévi-Strauss once concluded that, « Le savant n'est pas l'homme qui fournit les vraies responses, c'est celui qui pose les vraies questions ». "The learned man is not the man who provides the correct responses, rather he is the man who poses the right questions."

This is an old point that cannot be made often enough – or can it? The British scientist Jacob Bronowski believed good questions were at the heart of science - "That is the essence of science: ask an impertinent question, and you are on the way to a pertinent answer." More humorously, the US physicist Isidor Isaac Rabi tells the story: "My mother made me a scientist without ever intending to. Every other Jewish mother in Brooklyn would ask her child after school: 'So? Did you learn anything today?' But not my mother. 'Izzy', she would say, 'did you ask a good question today?' That difference - asking good questions - made me become a scientist."

[SLIDE: A GOOD QUESTION]

Long Now Question

In 1993 it was the run-up to the Millennium. The world was captivated by a twin dose of base ten digit rollover and apocalyptic Christian anniversaries. Z/Yen people were just beginning to discuss Taskforce 2000, the financial services and IT industry awareness programme for the Millennium Bug. So, when back in 1993 MIT Professor Danny Hillis posed a cool question - why couldn't we build a clock that would last 10,000 years – some people recognized it as a real corker (no pun intended here in Dublin). In Professor Hillis' own words back in 1993:

> *"When I was a child, people used to talk about what would happen by the year 2000. Now, thirty years later, they still talk about what will happen by the year 2000. The future has been shrinking by one year per year for my entire life. I think it is time for us to start a long-term project that gets people thinking past the mental barrier of the Millennium. I would like to propose a large (think Stonehenge) mechanical clock, powered by seasonal temperature changes. It ticks once a year, bongs once a century, and the cuckoo comes out every millennium."*

[SLIDE: HOW DO WE BUILD A CLOCK THAT LASTS 10,000 YEARS?]

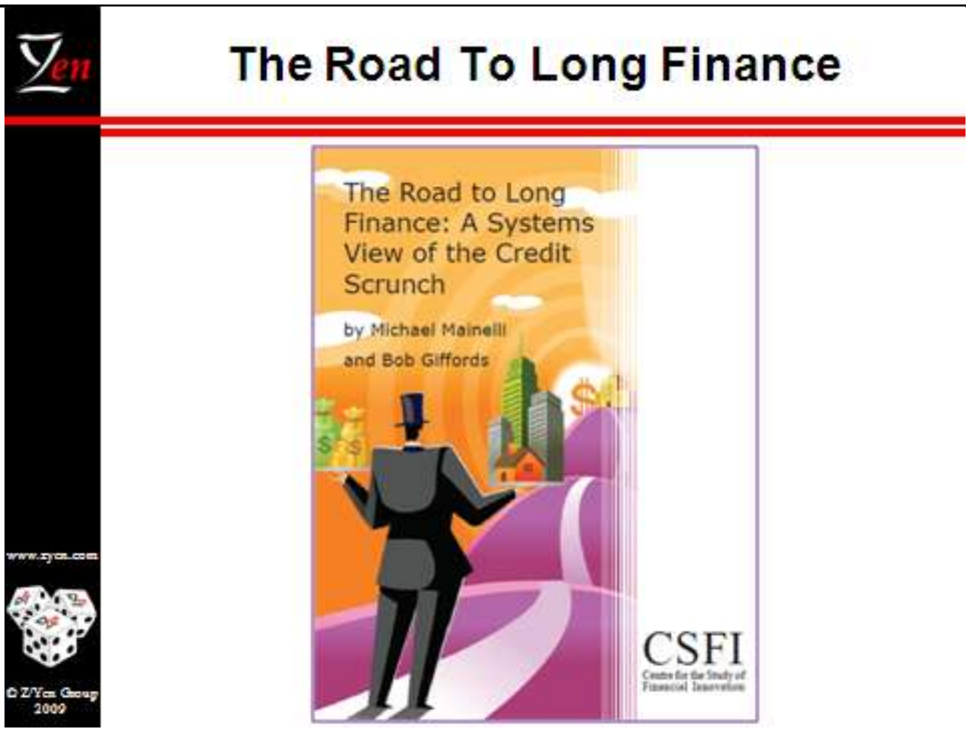
Hillis' question provides a counterpoint to today's 'faster/cheaper' mindset by promoting 'slower/better' thinking. Brian Eno coined the term "Clock of the Long Now". The question spawned the Long Now Foundation in 1996. The purpose of the Clock of the Long Now is to construct a timepiece that will operate with minimal human intervention for ten millennia, constructed of durable materials, powered by renewable sources, easy to repair, and made of largely valueless materials in case knowledge of the Clock is lost, while simultaneously reducing its attraction to looters. The Science Museum in London has displayed a prototype clock since 1999. Meanwhile the Foundation has bought land near Ely, Nevada and is beginning to install the giant clock in a cavern there.

And a good question begets other good questions. The Long Now Foundation spawned and nurtures several other projects:

- Rosetta Project – preserving languages that have a high likelihood of extinction over the period from 2000 to 2100;
- Long Server Project – developing long-term digital media and ways of viewing epochs;
- Long Bet Project – betting on long-term events that stimulate discussion about the future.

And just to remind us what 10,000 years means, they've added a digit to every year, so this is 02009. The Long Now has brought together and motivated people ranging from Mitchell Kapor who founded Lotus, to the speculative fiction author Neal Stephenson, whose related book, Anathem, was number one on the NY Times Bestseller list last year. Warren Buffet placed a $1 million bet: "Over a ten-year period commencing on January 1, 2008, and ending on December 31, 2017, the S&P 500 will outperform a portfolio of funds of hedge funds, when performance is measured on a basis net of fees, costs and expenses".

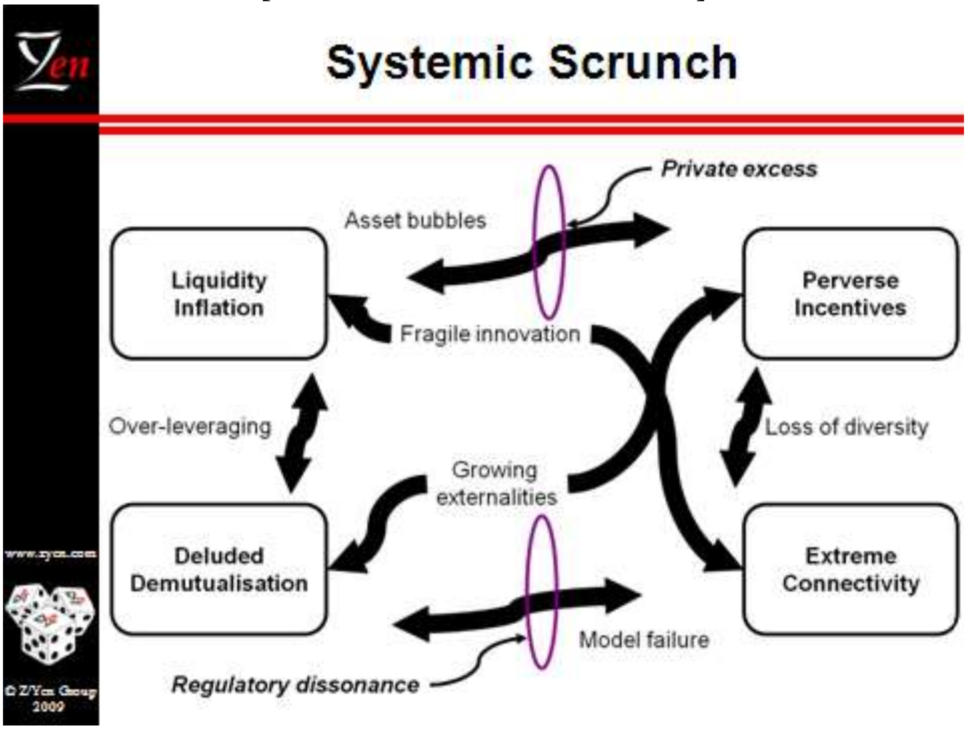
[SLIDE: THE ROAD TO LONG FINANCE]



The Road To Long Finance

Let's turn to finance. "Something threatens the entire global financial system: the entire global financial system". I've been touring the USA and much of Europe over the past two years analysing and presenting our firm's thinking about the financial crises, including three previous visits to Dublin, as well as talking with our firm's clients about the financial crises. I won't claim that we predicted the crises, I'll leave that to Roubini and others, but I can claim that for over a decade we've thanklessly published reports and articles that fingered many of the weak spots in the system, from lack of banking competition, to the immaturity of the CDS markets, to credit rating agency conflicts to the failures of the audit profession. So when Bob Giffords approached me about writing a book on the financial crises we had a lot of material to combine with his thought-provoking ideas.

[SLIDE: SYSTEMIC SCRUNCH]



Bob and I believe that the Credit Scrunch is a systemic failure with multiple causes and multiple effects. We believe that an important discontinuity requires a holistic rethink and response. We term the current financial crisis, "Credit Scrunch", in the firm conviction that much more is at stake than just recovery from current economic confusion. Scrunch means to crush, crumple or squeeze. We believe that reacting to current events with current mindsets could lead to the scrunching of the world economy, but likewise that we may need to crush, crumple and throw away traditional thinking about financial markets. We have analysed the Credit Scrunch's two tragic flaws of regulatory dissonance and private excess, the four fundamental failures of liquidity inflation, extreme connectivity, deluded demutualisation and perverse incentives, and the resultant six systemic exacerbations. We warn about complexity and its dangers, and about the focus on precision without purpose. The book has been made available to you today, and is distributed free online.

In summary, we say that an oligopolistic core of wholesale investment banks, auditing firms and credit rating agencies failed in an environment of increasing money supply and global saving imbalances. The Credit Scrunch is not amenable to quick fixes but, in today's world of 'keep-it-simple-stupid' bullet points, some high-level conclusions include:

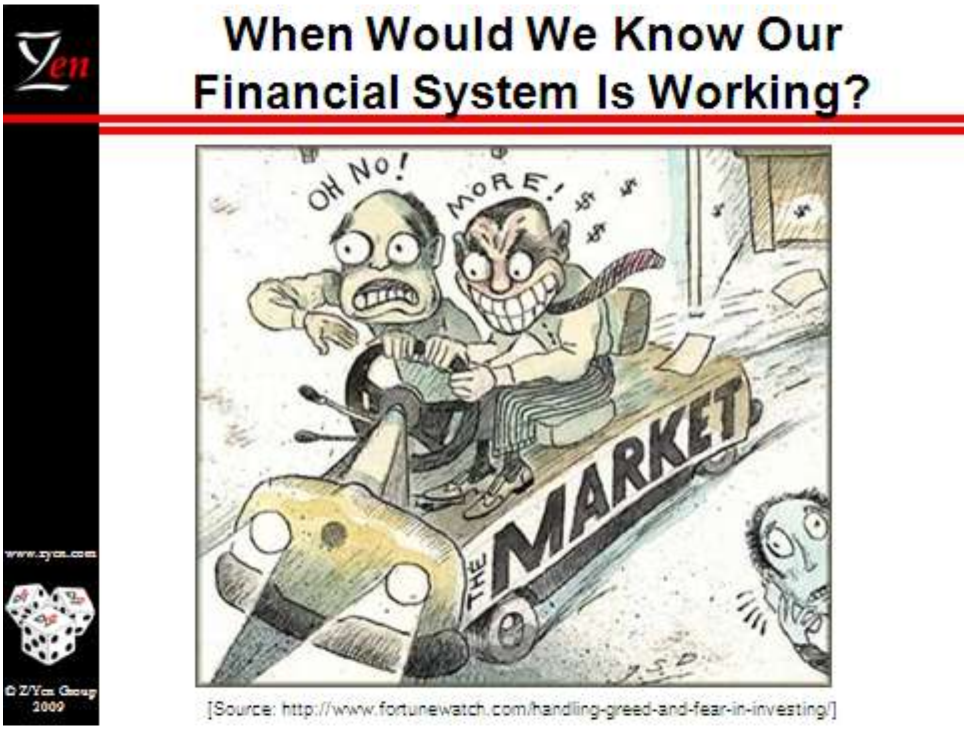
- the Scrunch was not a failure of open markets but a failure of heavily regulated markets that were closed. The two biggest failures, Fannie Mae and Freddie Mac, had no competition and their own regulator. Regulation creates barriers to entry, promotes the large over the small, reduces competitive variation and opens up huge exposures to risks behind closed doors. We look at three elements of intervention in markets – competition (having participants keep each other in check); knowing what's going on (supervision); and telling people what to do (regulation).
- 'too big to fail is too big to regulate' - tellingly, one investment bank in the 1990s had as its strategic objective: 'to become too big to be allowed to fail'. It succeeded. We don't need special rules for large complex financial institutions if we don't let them get too large. Society can afford a continual, low-level string of failures rather than periodic

catastrophes and expensive rescues of a few dominant players. A corollary is that ‘too big to fail is too big to manage’, as many former executives of failed firms admit.

- increases in regulation reduce diversity – a healthy financial services ecosystem should exhibit diversity, yet society appears to over-value presumed economies of scale and scope in financial services when it should encourage heterogeneity and the broadest possible range of market participants. Financial services regulation is a religion - “regulation failed because you really really didn’t believe in regulation. So pray harder.” The religious faithful of regulation want to go much further the other way and now seek powers to follow large systemically important financial institutions, rather than question whether their large size itself might be a sign of regulatory failure. There should be less talk about the FSA and more talk about EU and US anti-trust and anti-monopoly laws.

Our key recommendation is that competition must be at the heart of the global debate on reform. The debate should be about ‘open’ markets rather than dogmas of ‘free’ or ‘regulated’ markets. Injecting more competition means a serious re-examination of global investment banking concentration, audit firm concentration, credit rating agency concentration and actuarial firm concentration. There are real competition mechanisms to discuss, narrow banking, re-privatising retail banks in many pieces, requiring audit firms to provide indemnities for audits, or removing any special status for credit rating agencies. It is important to stress that many zones of financial services continue to thrive, such as foreign exchange, commodities trading, clearing houses or mainstream insurance, but interestingly these are highly competitive with a rich diversity of participants. We also need to discuss future controls on money supply and how to readjust our savings imbalances, especially pensions.

[SLIDE: WHEN WOULD WE KNOW OUR FINANCIAL SYSTEM IS WORKING?]



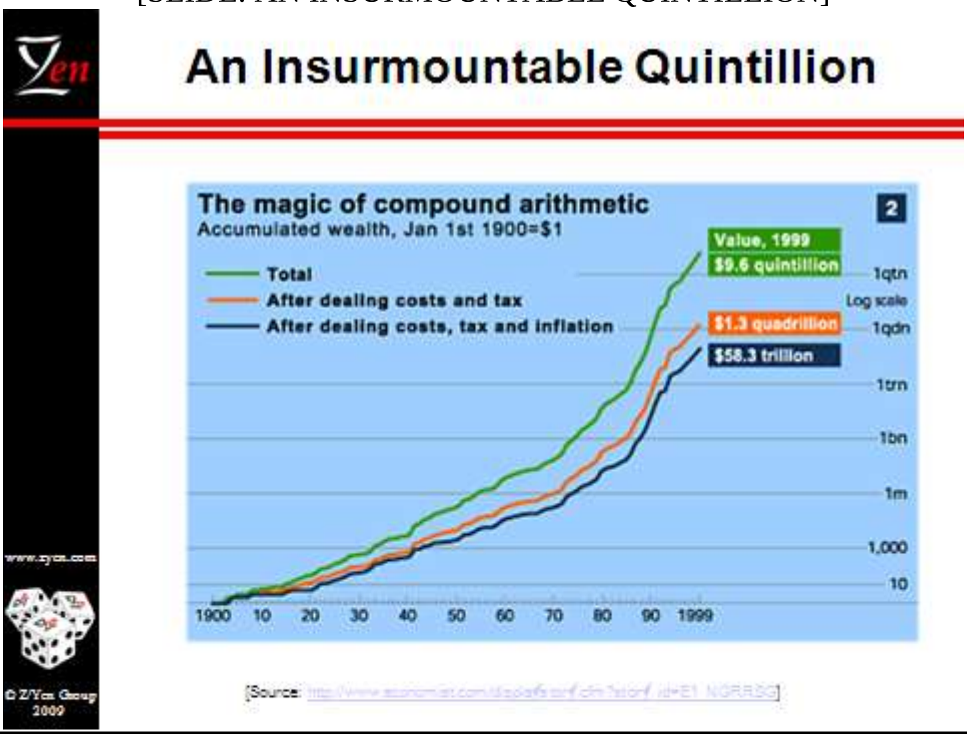
Society failed to push for open markets among global investment banks, audit firms and credit rating agencies, resulting in over concentration and loss of diversity, and a Scrunch. As Professor Niall Ferguson notes: “By the end of 2007, 15 megabanks, with combined shareholder equity of $857 billion, had total assets of $13.6 trillion and off-balance-sheet commitments of $5.8 trillion – an aggregate leverage ratio of 23 to 1. They also had underwritten derivatives with a gross notional value of $216 trillion – more than a third of the total." ["There's No Such Thing As Too Big To Fail In A Free Market", The Telegraph, 5 October 2009]

And look at the $9tn spent so far on the crunch… Everyone of substance agrees that the crunch emerged because (1) money supply growth exceeded GDP for over two decades, exacerbated by fractional banking leverage out of control, with (2) under-saving in the West, largely caused by lying about pension obligations, and (3) an over-concentrated oligopolistic cabal of 15 investment banks, four auditing firms and three credit rating agencies reduced diversity and encouraged herd behaviour. But the $9tn has been spent on (1) increasing money supply radically, that's quantitative easing (2) reducing your motivation to save, particularly as you realise that inflation is around the corner, and (3) consolidating the banking sector further. All this in a desire to "return us to 2005", i.e. ready to run up the next bubble.

Long Finance Question

Everyone has their favourite fixes, some of them contradictory, but the question we should be asking far more stridently is 'When Would We Know Our Financial System Is Working?' Mason Colley pointed out that "the question you're not supposed to ask is the important one." It surprised me that despite the biggest crash in our lifetimes I heard few good questions, just murmurs in the hallways about when things might return to normal. I'm not in the same league with Danny Hillis, but at each presentation I've been giving on the Credit Scrunch, I've asked, "When Would We Know Our Financial System Is Working?" Sadly, some common answers are "when LIBOR returns to normal" (not exactly long-term thinking) or "when things look like 2003 again" (perhaps Coldplay's "Clocks" 2003 hit tune is to blame).

[SLIDE: AN INSURMOUNTABLE QUINTILLION]



More permanent solutions need permanent questions, such as ‘can a 20-year-old responsibly enter into a financial structure for his or her retirement?’ Such a question raises a host of related issues. The question draws in actuaries, accountants, life insurance, savings, investments, security, fraud, risk, returns and firm defaults. An average 20-year-old today should, under reasonable actuarial expectations, live to 95. Most 20-year-olds with whom I talk assume they’ll live to 120. So the question implies a financial structure that should last 75 to 100 years.

Just before the Millennium, The Economist explored the investment performance of a mythical Felicity Foresight over the previous century. “Ms Foresight would predict which asset and which market around the world—shares, bonds, cash, property, precious metal, etc—would experience the highest total dollar return (income plus capital gain) over the following 12 months. Then, ignoring all the usual rules about risk diversification, she would invest all her wealth in that single asset and not touch it for a year.” Ms Foresight made an insurmountable quintillion, highlighting the absurdities of some of our views of finance. Yet *The Economist* (‘Where Have All Your Savings Gone?’, 6 December 2008: 11) equally observed last year that: ‘Any American who has diligently put $100 a month into a domestic equity mutual fund for the past ten years will find his pot worth less than he put into it; a European who did the same has lost a quarter of his money’. So 20-year-olds, and others, vote with their savings.

I do not know how 20-year-olds can responsibly enter into a financial structure for their retirement, but I do believe that the question matters. Another permanent question might be, ‘how do we fund a forest?’ The financial industry's answer to the relationship between long term value and today’s decisions has been present value accounting. It's a perfectly sensible concept, yet it has had horrific unintentional consequences - so how do we replace it or improve upon it?

[SLIDE: THE LONG FINANCE FOUNDATION]

The Long Finance Foundation

For me, the Credit Scrunch cries out for a Long Finance Foundation or, in line with another venture with long-term aims, Slow Food, a Slow Finance movement. What might a Long Finance Foundation do? Well, we're underway. Long Finance is a combination of the Long Now (www.longnow.org) project with some of the intellectual independence and rigour of the Santa Fe Institute (www.santafe.edu) on complexity and some of the community aspects of the London Accord (www.london-accord.co.uk).

The aim of the Long Finance Foundation is "to improve society's understanding and use of finance over the long-term". The Long Finance Foundation is a collaborative vehicle dedicated to creating long-term finance from an intellectual and systems perspective. The Foundation intends to move commercial, regulatory and government thinking from responsive to anticipatory and from local to global.

We are developing our concepts with a "kitchen cabinet" of enthusiasts and visionaries from different organisations, many senior individuals from traditional capital markets backgrounds in investment management and banking, but also journalists, Sharia financiers, government officials, regulators and academics. We held our first big event at Gresham College in London on 17 July 2009. We're holding our second big event at Willis in London on 1 February 2010. We've had green shoots sponsorship from the City of London Corporation, Gresham College, Willis, the Securities & Investment Institute and others, but now we are discussing material foundation sponsorship of research, fellows and scholars with financial centres, sovereign funds, financial information firms, accountancy firms and others.

[SLIDE: THE ETERNAL COIN]

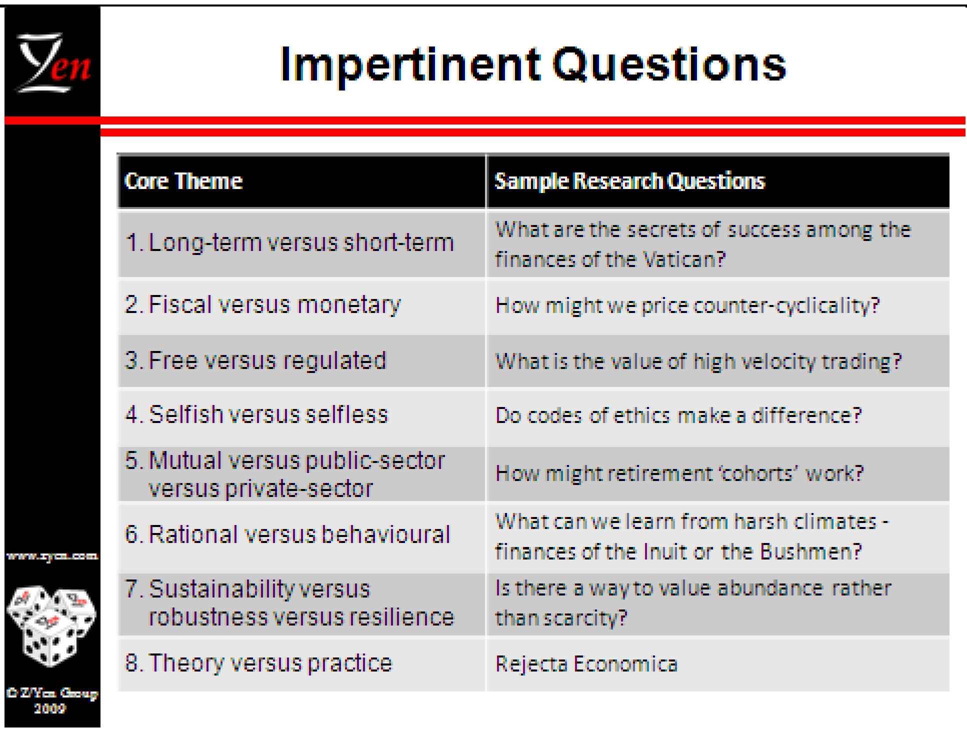
The iconic focus of Long Finance, comparable to the Long Now's focus on the Clock of The Long Now, is the paradoxical concept of Enduring Value and, thanks to Neal

Stephenson's push for something physical, The Eternal Coin. The Eternal Coin is a discussion project where people try to build the coin best suited to the long term. The Eternal Coin project should be explainable to the 'man on the street', and link through most of the research. We're building a website where people can create their own currencies and talk about what enduring value means in a sustainable financial system. Will it be combinations of bonds or shares or commodities or forestry or land or 'peak' – a basket currency weighted by the remaining life of key resources - or water or carbon or the dollar or Euro or yuan or Special Drawing Rights (SDRs)?

[SLIDE: THE ETERNAL COIN APP]

The logos are based around a Möbius strip – the coin you can't flip because it has one side. The coin's motto is "Real Money, Made From Eternal Coins" and "Eternal Coins, Made From Real Money". We're developing iPhone and Google Android applications so people can trade their own currencies. We're looking to create pedagogical materials leading to perhaps a one-day event rolling round the world.

[SLIDE: IMPERTINENT QUESTIONS]

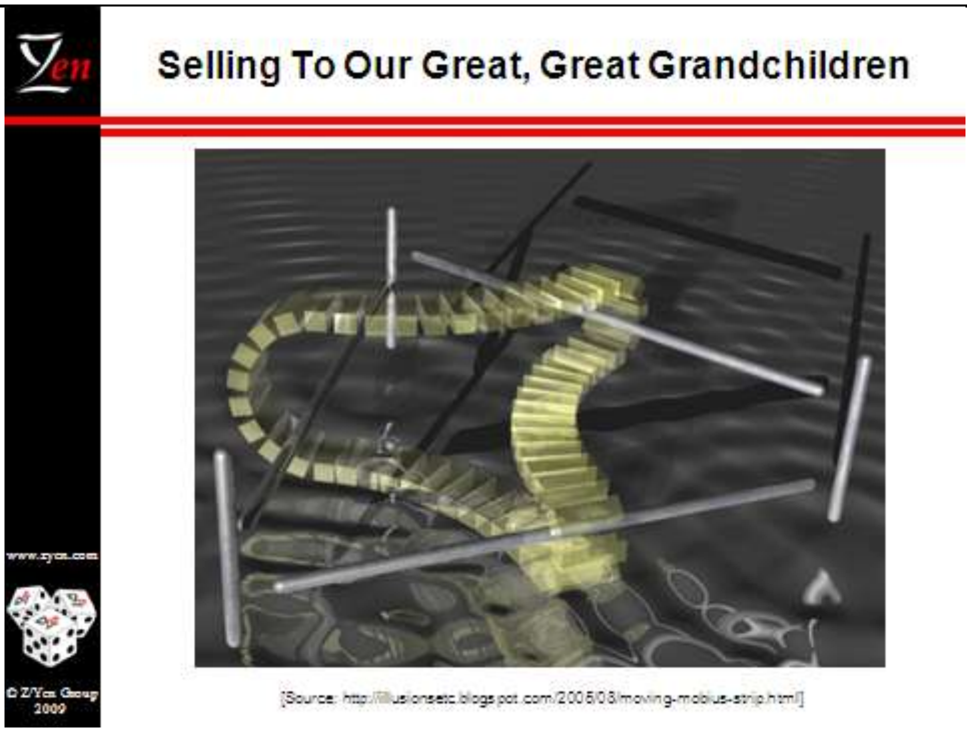

Impertinent Questions

Core Theme	Sample Research Questions
1. Long-term versus short-term	What are the secrets of success among the finances of the Vatican?
2. Fiscal versus monetary	How might we price counter-cyclicality?
3. Free versus regulated	What is the value of high velocity trading?
4. Selfish versus selfless	Do codes of ethics make a difference?
5. Mutual versus public-sector versus private-sector	How might retirement 'cohorts' work?
6. Rational versus behavioural	What can we learn from harsh climates - finances of the Inuit or the Bushmen?
7. Sustainability versus robustness versus resilience	Is there a way to value abundance rather than scarcity?
8. Theory versus practice	Rejecta Economica

We're also pulling together a formal research programme with nearly 100 proposed projects, and I give you a sample here, ranging from studying the finances of institutions of longevity, e.g. the Vatican, or what we can learn from economics in harsh climates to counter-cyclical pricing in today's markets and the value of high frequency trading. Some answers might reveal themselves to be a boring slog of regulatory reform, or a concession that there are no answers. Some answers might be revolutionary, e.g. direct personal retirement cohorts – you are chosen to join an impartially selected group of 600 people distributed around the globe who, under the management of a central coordinator, are responsible directly for each other's retirement. The central coordinator directs your 'retirement cohort' to save and sets outs the long-term transfers of risk and reward. However, the central coordinator, he or she, never controls your money, quite possibly held in some safe haven and governed by special laws. The cohort is your most important social network because it, not the state, is responsible for financial security in your retirement. Likewise, technology already permits insurance to be more direct – Robert Shiller at Yale and others have long remarked on the technological possibilities of peer-to-peer risk exchanges for unemployment, car insurance or property valuation. Peer to peer finance is underway in some lending firms such as Prosper or Zopa, as well as in alternative currencies.

Had the Long Finance Foundation existed in 1900 I hope it would have challenged you with ideas such as "car insurance will be commonplace in five decades" – why would everyone need car insurance? Or, "in the future you may be paying for shopping and meals with Bakelite" – how can plastic be used as money?

[SLIDE: SELLING TO OUR GREAT, GREAT GRANDCHILDREN]



Of course a Möbius strip is also without end, an endless conveyor belt from the past to the future. Money as a medium to exchange value across space and time cuts to the heart of what our society values. If you had an Eternal Coin, would you need to invest or could you just save what you needed for your retirement? A coin that buys five chickens today should buy five chickens a century hence. This Eternal Coin global thought experiment forces us to debate what will be of value to our great great grandchildren. People have been able to sell gold, pretty but largely useless, to their great great grandchildren ever since the Lydians invented gold coins some 2,600 years ago. Will it be oil or renewable energy for us? Intellectual property in films, stories and art, or property in land and buildings? What will society value in the future?

When discussing Long Finance with the German ambassador to the UK, he pointed out to me that his grandfather, who started his pension in 1916, drew it down in the 1960's after two world wars, the Weimar, etc., while many English and USA pensioners lived in poverty. His point being that financial structures are social constructs, and that the failures of democracy frequently turn up in finance. Anglo-Saxon socio-financial constructs need a lot of work. Once we accept today's financial system limitations, we can start to ask ourselves how we might design a financial system that can take care of Long Finance.

[SLIDE: LEADING OR FOLLOWING]

Future Proof

Once you look through the lens Long Finance, you realise that many of today's sustainability issues arise because society's core risk/reward transfer system, finance, isn't yet capable of handling long-term risk/reward transfers. Financiers have emphasised specialism – knowing more and more about less and less, when perhaps they should emphasise eclecticism, knowing less and less about more and more. For too long financial institutions reacted to past events rather than designing forward-looking control systems. Due to a groundswell of disappointment flowing from bad financial surprises, society has applied the blunt tools of law and regulation to financial institutions.

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[SLIDE: JOIN US]

If financial institutions want to take control of their destiny, they must affirm the power of competitive markets to make the world a better place. Equally markets are social tools requiring design and oversight to meet their objectives. I would argue that we in finance should lead the debate on Long Finance. So I'm betting it's worth founding a Long Finance Foundation for this research – or you can collect from me in 02078 when I'm 120. If you're interested in joining us, let me know. Meanwhile let's all keep asking uncomfortable, impertinent questions.

Reference

Michael Mainelli and Bob Giffords, "The Road To Long Finance: A Systems View Of The Credit Scrunch", Centre for the Study of Financial Information, 62 pages, ISBN: 978-0-9561904-4-4, (July 2009).