



“London Forever! Reality or Rhetoric?”

**The Financial Services Group of
Livery Companies’
inaugural FSG Lecture in memory of its
Founding Convenor, Jeremy Goford, Past Master Actuary**

**Alderman Professor Michael Mainelli
Emeritus Professor of Commerce, Gresham College; Executive Chairman, Z/Yen
Group**

**Wednesday, 20 September 2017
Mercers’ Hall, London**

Financial Services Group of Livery Companies



**London Forever!
Reality or Rhetoric?**

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by Alderman Professor Michael Mainelli

Tuesday, 20 September 2017
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Masters, Wardens, Fellow Liverymen. Jeremy Goford was an inquisitive thinker. Though I met him late in life, we enjoyed many conversations and disputations on the auditing, accounting, and actuarial professions, especially their use of numbers. Jeremy’s love of our City was palpable. I’m delighted that the Financial Services Group of Livery Companies chose to honour his memory with this inaugural lecture, “London Forever! Reality or Rhetoric?”, and humbled that I have been asked to address this challenging topic, intimidated even given the knowledge of the subject in tonight’s audience.

Outline

- ◆ What is forever?
- ◆ What is London?
- ◆ What is reality?
- ◆ Clocking it
- ◆ Rural idle, urban idyll
- ◆ Pulling rank
- ◆ Structural intensity
- ◆ Fair treatment



“Get a detailed grip on the big picture.”
Chao Kli Ning

The topic raises basic questions. What is forever? What is London? What is reality? Along the way we shall compare London with other cities and ask how some current rhetoric can be made reality.

What Is Forever?

Jane Jacobs published *Cities and the Wealth of Nations* in 1984. Although primarily a journalist, Jacobs criticised using nations as the economic unit of analysis. She insisted that cities are the true generators of wealth. “Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody.” But even economists who agree with Jacobs have struggled with cities as units of analysis.

Ozymandias Is Eternal



[1375 Catalan Atlas of the known world (mapamundi), drawn by Abraham Cresques of Mallorca]



London Forever! Reality or Rhetoric?

It is an odd observation, particularly if you've dragged yourself through numerous museums and history books, that we are woefully ignorant on how cities form and grow, and how they die. Financial centres do rise and fall, from Amsterdam to Zanzibar. Karina Robinson, Junior Warden of the International Bankers, referred me to the fall of Alexandria as a global centre. The 1375 Catalan Atlas of the known world by Abraham Cresques of Mallorca has an inscription: "This lord is Musa Mali .., so abundant is the gold which is found in his country that he is the richest and most noble king in all the land." Musa hailed from Timbuktu in today's Mali.

Mogadishu, Somalia and Medellin, Colombia are similar in size to Manchester. Mogadishu is a stark reminder of what can happen to a city when basic infrastructure and services break down. Yet Medellin's population of two million has moved from violent dystopia to a place where urban planners seek fresh ideas. The archaeological evidence indicates that London itself struggled for five centuries from the 410 AD departure of the Romans till the late Anglo-Saxon period, perhaps 950 AD.

Professor Michael Storper, an economic geographer at UCLA, summarises demographic change since 1980, "the economy became more urban; people began returning to the inner parts of metropolitan areas; regional inequality increased in most countries; some regions gained in income and employment, others lost people or had declines in their economic success; inequalities between persons increased in many countries; successful people migrated to certain regions and left others; a major wave of globalization occurred, increasing the economic specialization of city-regions all over the world; this made some regions very multi-cultural, but not all". [<http://luskin.ucla.edu/person/michael-storper/>]

London's recent five centuries of success are due to a sustained confluence of several factors, some 'accidental' ones being maritime location, early infrastructure, Continental wars, and the rise of the USA over the past century. Criticism of short-term City thinking is not new. Abraham Ricardo, father of famous economist David Ricardo, remarked in 1814, "They consider more, the immediate effect of passing events, rather than their distant consequences." I would emphasise a few 'intentional' factors, such as the business environment, a trading culture, and the rule of law.

The City of London's magisterial chronicler, David Kynaston, writes of the early 1800s, "the pattern is clear enough of a 'push' in the form of continental Europe becoming an untenable base for business and a 'pull' in the form of a critical mass of support facilities existing in London to maximise the trading or trade-financing potential of distinct areas of local knowledge." Or another passive strategy remark in 10 April 1848's Morning Chronicle, "England has only to be quiet, and the trade of the world must centre in her." These days we may need more than accidental success.

What Is London?

What Is London? Hop To It!



[68 Lombard Street - site of Sir Thomas Gresham's goldsmith business, then Martins Bank, later absorbed into Barclays.]

London is the capital and most populous city of England and the United Kingdom. Founded two millennia ago by the Romans, it is geographically uninteresting except for being on a large island and having an extensive tidal river, an unusual characteristic in Europe where only the Elbe is similar to the Thames in scale.

London's municipal population (corresponding to Greater London) of 8.8 million is 13.4% of the UK population, the largest of any city in the European Union. After Paris, London's urban area is the second most populous in the EU with 9.8 million inhabitants in the 2011 census. The city's metropolitan area is the most populous in the EU with 14 million inhabitants. The Greater London Authority puts the population of the city-region as 22.7 million, 35% of the UK population. From 1825 when London overtook Beijing, to 1925 when it was overtaken by New York City, London had the world's largest population.

London is a leading global city in the arts, commerce, tourism, transportation, education, entertainment, fashion, healthcare, media, science, professional, business, and financial services. London's universities form the largest concentration of higher education institutes in Europe. It is the world's most-visited city by international arrivals and more than 300 languages are spoken in the region.

Careful Of The Rhetoric

HK Hamburg Chamber of Commerce


ADVISING COMPANIES
MERGING INTERESTS
DEVELOPING PEOPLE

COMPARISON

Hamburg Metropolitan Area	London	Île de France (Paris)
		
<ul style="list-style-type: none">• ~ 5.0 million inhabitants• GDP: US\$185.544 bn• GDP per capita: US\$ 42,522 (2012)	<ul style="list-style-type: none">• ~ 14.6 million inhabitants• GDP: US\$835.000 bn• GDP per capita: US\$ 57,157 (2014)	<ul style="list-style-type: none">• ~ 12.5 million inhabitants• GDP: US\$715.000 bn• GDP per capita: US\$ 57,241 (2014)

London's largest industry is finance. Over 100 of Europe's 500 largest companies have their headquarters in central London, along with over 480 overseas banks, more than any other city in the world. It is the world's biggest currency trading centre, accounting for some 37% of the \$5 trillion average daily global volume. Over 85% of the employed population of greater London works in services. The finance industry is based in two Central Business Districts, the City of London's ancient core, a 'square mile' (2.9 sq km) following medieval boundaries, and Canary Wharf to the east.

To Know Is To Measure



I often say that when you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meagre and unsatisfactory kind: it may be the beginning of knowledge, but you have scarcely, in your thoughts, advanced to the stage of science, whatever the matter may be.

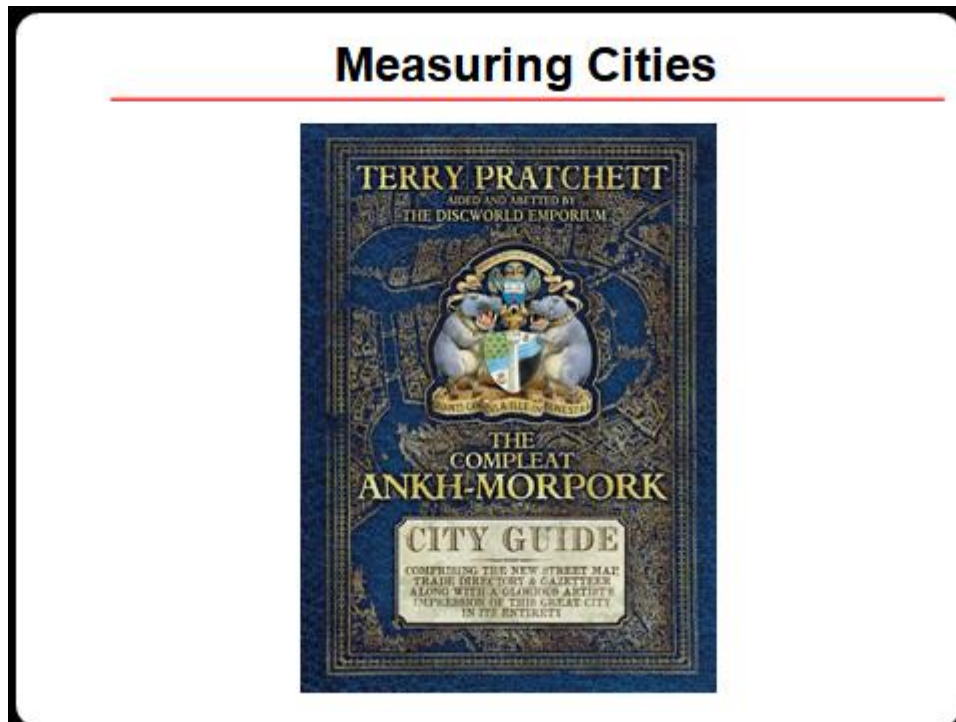
(Lord Kelvin)

What Is Reality?

You can feel the slipperiness in the numbers, ‘municipal’, ‘metropolitan’, ‘urban’, ‘city-region’. Sir William Thomson, better known as Lord Kelvin, said:

“When you can measure what you are speaking about,
and express it in numbers, you know something about it.”
[Lord Kelvin, *Electrical Units of Measurement*, Volume 1, 1883]

“We manage what we measure”. Petula Clark made us wonder about measuring ‘Downtown’. When you think about measuring cities do you think about height, colours, smells, taste, speed, pollution, opportunity, danger?

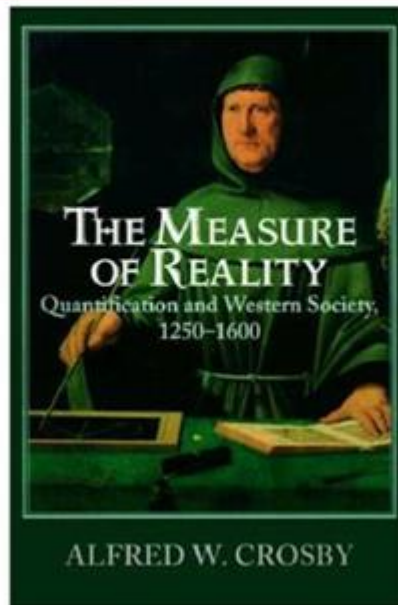


Sir Terry Pratchett’s Discworld fantasies feature a London doppelgänger, Ankh Morpork. Sir Terry summed up his faux London well:

*“As full of life as an old cheese on a hot day,
as loud as a curse in a cathedral,
as bright as an oil slick,
as colourful as a bruise
and as full of activity, industry, bustle and sheer exuberant busyness as a dead dog
on a termite mound.”*

David Boyle points out in *The Tyranny of Numbers*, we are often “exact about some of the least interesting things, but silent on wider and increasingly important truths.” [David Boyle, *The Tyranny of Numbers: Why Counting Can’t Make Us Happy*, Flamingo (2000), page 13].

What Is Reality?



Alfred W Crosby is a distinguished historian who advances an interesting thesis on why a bunch of tiny squabbling nations on the fringe of a continent with few outstanding natural resources, having squandered centuries of their own sweet time emerging from the collapse of their last empire in the fifth century, could take on and dominate massive empires east and west from 1500 till the end of the 20th century. His book, *The Measure of Reality: Quantification and Western Society, 1260-1600*, attributes European success to an explosion of quantification in numerous fields ranging across time, space, mathematics, visual perspective, music, painting, and even bookkeeping. Crosby Europe's fragmented and competing city-states were a source of strength, not weakness. Having to handle a diversity of approaches to metrology, differences in the length of the standard 'ell', different weights and measures, different coinages, led to a better facility and understanding of measurement. For Crosby, the Renaissance West's obsession with measurement was fundamental to its success.

I can't resist one city measurement joke here, "Why did Sherlock Holmes measure the Monopoly board? To see if the game was a foot." Cities are the best units of economic analysis, unique combinations of residential, industrial, business, and administrative activity, distinguished from other human habitations by a combination of population density, social importance, and legal status.

You Can't Beat A City – Clocks Past

Ghosts Of Clocks Past



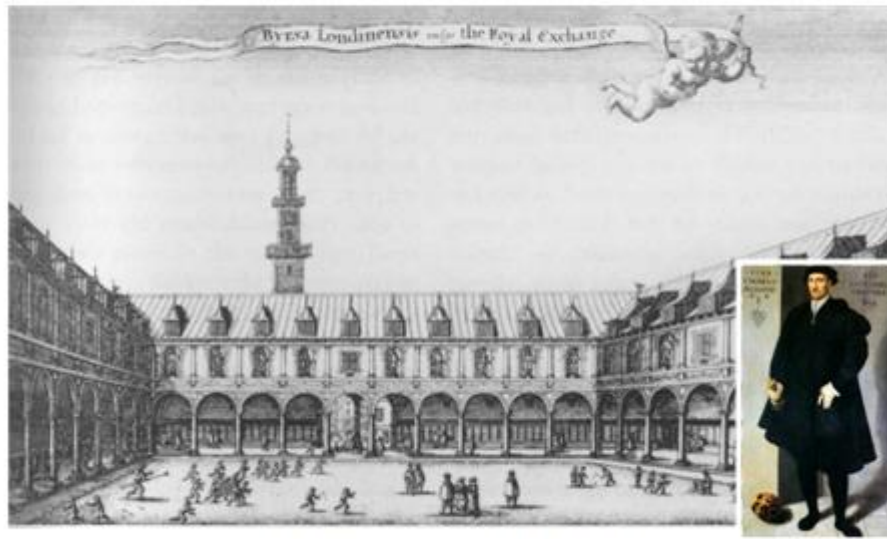
Salisbury Cathedral clock, 1386

I've heard metaphors comparing cities to communities, marketplaces, machines, engines, temples, psychic prisons, even as musical harmony or discordance, symphony orchestras or jazz bands. Clocks are a particularly strong measurement metaphor. When London was founded, sundials, clepsydra (water clocks), or candle clocks were the best technology available. Clocks and their bells and towers were enormous social projects, proliferating throughout Europe somewhere around 1270. Salisbury Cathedral has hosted a clock since 1306, and its current one, dating from 1386, is the oldest working clock in England. Cockneys are those born within the sound of the Bow bells and London has the "Oranges and Lemons" rhyme for several church bells. Until December 2016, London's oldest business was the Whitechapel Bell Foundry for church bells dating to 1420, which cast the Liberty Bell and Big Ben. Cities with clocks and bell towers had a measured beat of commerce. We could meet in the market at noon, not some vague idea of mid-day. Contact intensity grew. Efficiency and innovation increased. Cities achieved better economies of scale.

From the 9th century guilds focused on measurement and quality – the pendulum of trade in the City swung to the beat of volumes and lengths, weights and hall marks. One of the most significant contributions that guilds made was building a common wealth of knowledge. No longer would arcane technological advances die with their inventors, knowledge would be logged and, through a system of apprenticeship, passed on to future generations.

London's financial history retraces the exit and entry of foreign merchants and ideas. Following the expulsion of the Jews in 1290, King Edward I provided expensive land at the heart of the City for goldsmiths from Northern Italy, hence Lombard Street. Imagine today we wanted to attract Russian commerce and renamed a major City street in their honour, perhaps Russia Row – oh we've done that already, about 100 metres east from this Hall. The Italians made their mark, from coining (sic) the word bank ('banco') to the words for cash, debtor, creditor and ledger, as well as pound sterling - £sd (librae solidi denarii). Moves toward modern banking followed repeal of the usury laws under Henry VIII and further liberalisation under Elizabeth I.

A Man, A Plan, Buy A Panama



First Royal Exchange (1569 – 1666)

At the risk of seeming to pander to a City audience, I want to dwell for a moment on the innovation that the Tudor merchant and Mercer, Sir Thomas Gresham, imported from the Low Countries, the bourse. Londoners knew how to trade physical goods – Billingsgate for fish, Smithfield for meat, Leadenhall for poultry, Spitalfields for general foods. But in 1565 Gresham opened a London version of the Antwerp bourse, known as the Royal Exchange. For the first time, London had an organized market where intangible things could be sold, such as shares in ships. The concept is astounding. You just go and meet people and do business with them about things that don't physically exist, such as a share in a voyage. From this invisible trade sprang securities, insurance, commodities, foreign exchange, futures, and options.

Tempus Rerum Imperator



Marine Chronometer H5 by John Harrison
Clockmakers' Museum

The Worshipful Company of Clockmakers' motto underscores our metaphor – “Tempus Rerum Imperator”, “time is the commander of all things”. To see the Ghost of Clocks Past, we can visit their wonderful museum and explore how a world-beating (sic) industry thrived, giving us longitude, dominion of the seas, and manufacturing precision. A brushstroke history of financial London moves on to the Huguenots, the Empire, the Germans, world wars, the Americans and Eurobonds, the computers, the Asians.

Clocks Present

Ghosts Of Clocks Present



[Source: Gensler – London Stock Exchange]

The Ghost of Clocks Present, moves from Big Bang electronic markets in 1986 to trading today in less than a millisecond. A valid question in today's modern world of advanced



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telecommunications is why do people need to meet physically? As an international financial centre grows in fame, aspiring financial services job-seekers begin their careers by moving to the international financial centre, further reinforcing its reputation as a place to go to find suitably qualified staff. Studies show that experienced international financial staff significantly outperform regional financial staff trying to do international work. Productivity in global financial centres is higher than regional financial centres, despite significantly higher salaries.

You might think that 24/7 online ought to displace physical financial centres. The joke goes, “I saw a bank that said it offered 24 Hour Banking. I didn’t go in. I didn’t have that much time.” Technology too forces proximity. Last month my firm announced a trillion transaction-per-day mutual distributed ledger (aka blockchain) with the National Physical Laboratory. High frequency, or low latency, trading reinforces clustering around established exchange locations.

Physical proximity matters in many markets, efficiency, less miscommunication and faster decisions to name three reasons. Despite online chat rooms and instant messaging, face-to-face contact remains core to many financial transactions. To quote a participant from one of Z/Yen’s studies:

“You can access [international financial markets] from anywhere nowadays: but there’s a personal factor which requires proximity to other people...”

Modern telecommunications are still not as trusted as physical contact. Physical meetings limit information leakage, while online you’re only a broadcast email away from sharing a top-secret negotiating point. Modern financial transactions involve bringing together a wide range of skills at particular points – the buyer and seller, their brokers and agents, their lawyers, accountants, actuaries, surveyors, consultants, and public relations experts. An accountant working on a deal mentions to a principal an interesting company that becomes the focus of the next deal. As the team grab a meal in a nearby restaurant, one of them meets a colleague they’d been meaning to call. Everybody likes to ‘be in the loop’. A lot of innovation is trying to replicate trust, secrecy, and serendipity online. Physical financial centres may be in danger, but not yet.

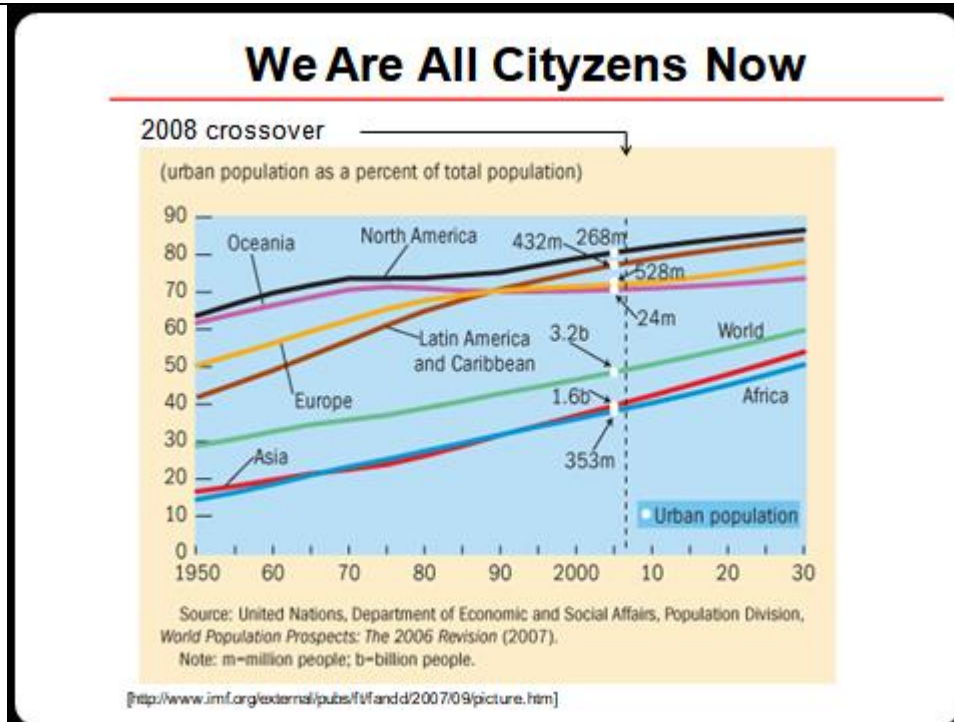
Clocking The Future

Clocking The Future



The Ghost of Clocks Future are wound up inside our computer networks. Every network has a beat. We are networking our taxis & our rental cars, our homes & our drones, our electrical systems. We are networking our social and organisational structures via Facebook, Instagram, and Snapchat, replacing a physical circle of friends with virtual ones. Social status defined not by your postcode but by how many followers you have on twitter. We are even networking our money. Professor Albert-László Barabási at Notre Dame University sees our future in networks, if nothing else because of resilience and robustness. “Most systems displaying a high degree of tolerance against failures share a common feature: Their functionality is guaranteed by a highly interconnected complex network.”

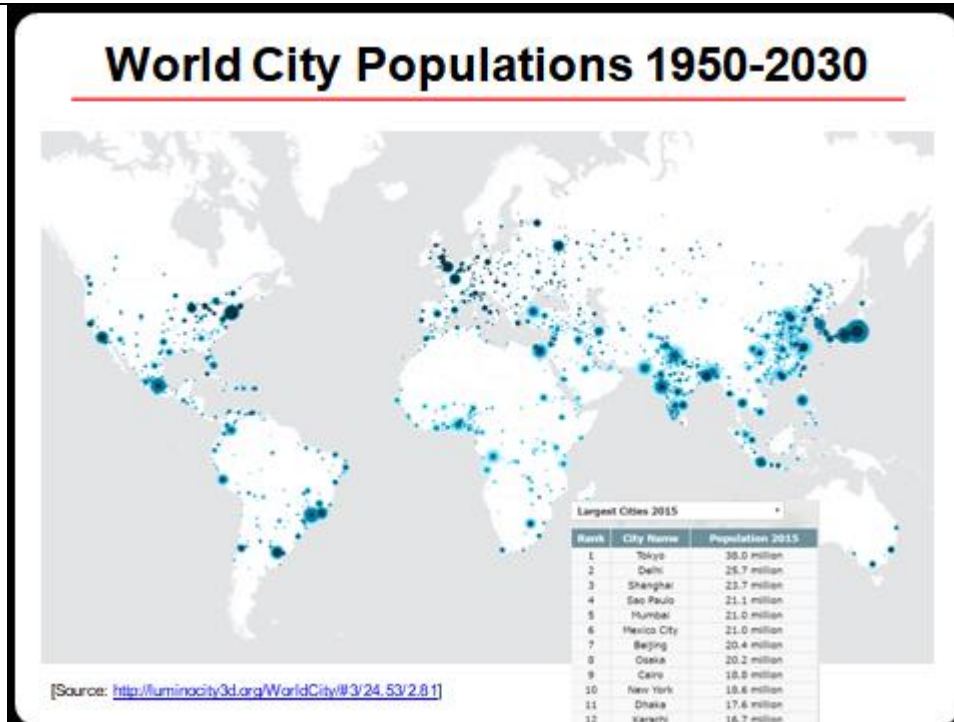
Marx and Engels referred to the idiocy and isolation of simple rural life. A London newspaper quip from 1882 runs, “Why are London jokes always appropriated by country newspapers? Because they are capital jokes!” Urban centres dominate the countryside. But cities can be nightmares of dark alleys, filth, squalor, disease, poverty, and crime. According to the IMF, one in seven urban dwellers lives in an urban slum. Despite the fortunes sometimes made here, soberingly, until the 20th century more people died in London than were born here. One big change in the past century is that cities are now places to live, not die.



In 1800, only 3% of the global population lived in cities. Only two cities, London and Beijing, had more than a million people; London, largely because of its unique renewable transport system, the tidal Thames, was arguably the only city able to feed properly a million people well before railways. By 1900, 14% of the world lived in cities, by 1950 30%. We crossed over the 50% mark in 2008 and have over 450 cities with more than a million people.

We persist in dreaming of bucolic rural life to escape urban dystopia, but we don't. Only on holidays are you attracted to places you can't get to and from easily. Urban utopia dreams of rivers of milk and roads of gold bring in the punters. Cities are greener than rural areas when populations are compared on carbon, water, waste, or energy footprints. Our dense populations are smarter about resource usage and the triple bottom lines of commerce, social well-being, and the environment.

I hesitate to point to one cause of this rapid well-being, but it might well be our starting to control infectious diseases around the end of the 19th century, combined with railways, increasingly better food storage and nutrition. The UN estimates that by 2050 75% of the earth's then 9 billion people will be living in cities. This concentration is starting to make our definition of cities easier. I would paraphrase the US bank robber Willie Sutton for my definition of a city in the late 21st century – it's where the people live.



A city can be defined by its historic heart, its Royal Charter, its diocesan cathedral. London has two cities, Westminster and the City of London. We have other twin cities such as Budapest and Minneapolis-St Paul. Many cities - London and New York spring immediately to mind - have burst their boundaries and expanded by swallowing older villages and boroughs. Maps are commonly pulled out to illustrate one or other aspects of cities, to give them outlines.

- ◆ A city might be defined by its government's ability to provide security to citizens, its control of territory, say the city walls of London or Rome's seven hills;
- ◆ A city can be defined by planning, who has the right to specify what can and can't be built, done or used, on such and such property.
- ◆ A city can be defined by its ability to tax citizens. Many cities, such as London, have incomplete abilities to tax, while others, such as Los Angeles, are unable to tax their greater metropolitan area.
- ◆ A city as a network examines economic value-added and social interaction, as well as air, land, & sea transportation, water, energy, waste, and communications infrastructure.

How do we protect cities from fire, flood, disease, climate change, economic crises, social and political upheaval, if we can't easily compare policies and outcomes to make informed decisions? We can wind up under-providing, leading to poverty, disease, and ignorance, or over-providing wastefully. We have time to raise just quickly three illustrative yet real problems in measuring cities.



How can we distinguish large cities from small? By surface area, many little known cities are larger than many countries - Altamira, Brazil (population 84,000) is bigger than Greece; Kalgoorlie-Boulder, Australia (population 32,000) covers more area than Ireland. At over 100,000 square miles, twice the size of England, the Chinese city of Hulunbuir in Inner Mongolia is the largest city in the world. “Even though the municipal district of Chongqing [China] has a total population of more than 30 million inhabitants, fewer than 6 million actually live in Chongqing city proper. Depending on which classification is used, Chongqing is sometimes listed as the world’s largest city and, in other cases, does not even appear in the top rung of urban population rankings.” [Bloom et al, 2010, pages 2-3].

How do we analyse population density? Central New York is three times denser than central London, but London is overall 50% denser than New York [<http://www.demographia.com/db-lonlanypar.htm>], and then must analyse commuters’ effects on daytime density, and so on. In 2013 The Economist argued that trying to revive places like Hull, Middlesbrough and Wolverhampton with lots of public money was foolish. People from Hull pointed out that Hull’s city boundary is tightly drawn, so wealthier settlements on its fringes are excluded, and Hull appears poorer than it really is.

How can we include the undocumented consistently in our figures? Some 1 billion people in the world are presumed to live in slums and favelas. And what might these numbers do to our economic measures if we included ‘black’ or ‘grey’ economies. Recall that the World Trade Organisation routinely estimates 25% to 40% of global trade is ‘non-monetary’.

Demographers typically use three terms to describe the extent of a city:

- ◆ ‘City proper’ is the legally fixed boundary of some form of local government. New York’s city proper dates from the formal incorporation of five counties into one city in 1898, today with a combined population of about 8.3 million, almost identical to London. The largest city proper is Shanghai with some 23 million people, though some believe that undeclared residents may bring that number up to thirty or more million.

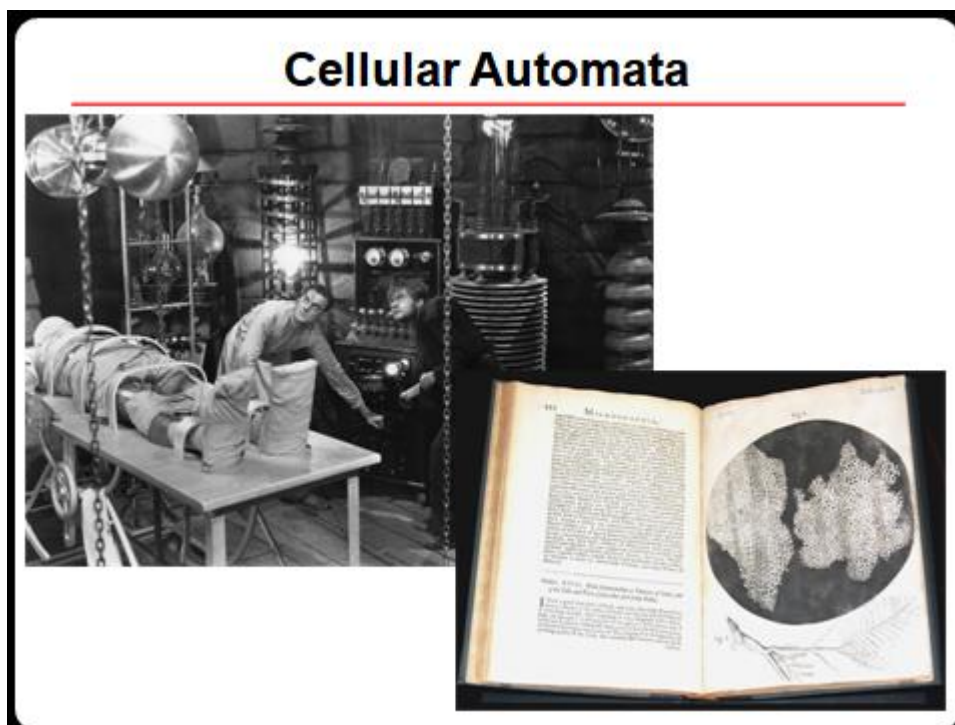


London Forever! Reality or Rhetoric?

- ◆ ‘Metropolitan area’ is a densely populated set of urban cores and surrounding territories sharing commerce, industry, and infrastructure. In the USA, they talk of 166 combined statistical areas. The New York, New Jersey, Connecticut and Pennsylvania Combined Statistical Area has a population of about 24 million, while the GLA estimates greater London’s metropolitan area population at about 21 million.
- ◆ ‘Urban agglomeration’, or conurbation, metropolis, or megaplex, is a term for contiguous built up zones which can span regions, states, or countries.

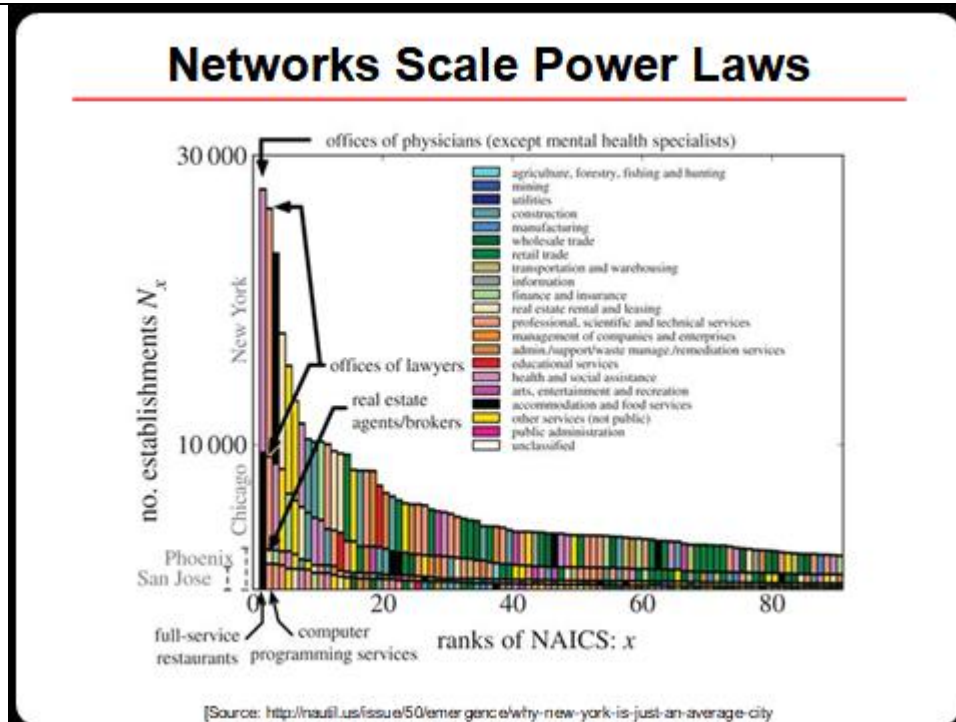
Another metric is megacities, those with over 10 million people. In 1950, there was one, New York. In 1985 nine, 2005 twenty-five, today thirty-nine megacities with Tokyo-Yokohama at the top holding nearly 39 million people and London at 28th with a comparable 14 million.

Cell, City, Or State?



Professor Saskia Sassen at Columbia University studies the denationalisation effects of globalisation and the increasing tension between nations and cities. We could discuss at length the disproportionate influence of London or Paris versus more federal America or Germany. She points to the complexity of cities being valued as nodes rather than places of production, the intricate networks of immigrants and diaspora, as well as the way information technology changes social relations. Analysing cities is more akin to analysing ecosystems or biological organisms than any straightforward decomposition analysis.

In 1665, Robert Hooke, a former Gresham professor, described cells in cork trees. Nearly four centuries later, while we know the components of cells, membranes, cytoplasm, ribosomes, we can’t assemble one. Sir Christopher Wren, another Gresham Professor, along with Frank Lloyd Wright, Henry Ford, Albert Speer, and Buckminster Fuller, all set out grandiose city schemes that never came together. Cities are Frankensteins. Somehow they come together, but we never quite know what sparks them to life.

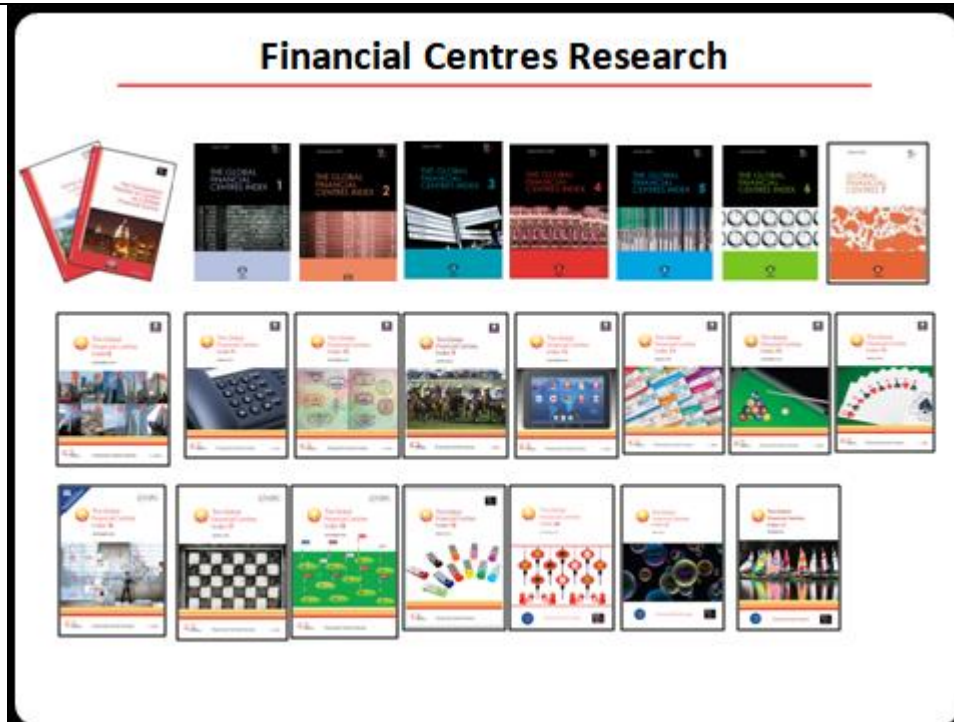


The Santa Fe Institute finds evidence of increasing returns to scale in city inventiveness and creativity. Increasing returns emerge from the fact that the value of connections rises with the number of participants in the network and show up as ‘power laws’ in the concentration of petrol stations or speed of information dissemination. Each participant connecting to the network improves their productivity markedly, while also contributing to the productivity of those already connected. A thought experiment affirms the idea of network benefits – if there were two world-wide webs, wouldn’t they be even more powerful if they were connected into one? And network dangers - might they also be more vulnerable?

Professor Geoffrey West at the Santa Fe Institute asks, "Why are large cities faster?" The Boltzmann Constant relates particle energy to temperature of a gas. Is there a Boltzmann Constant linking the energy consumption of a city to its social temperature or pulse rate? How do we measure tolerance, diversity, innovation, resilience? I might suggest that one measure is deal-making. Large cities are faster because people have more interactions per unit as the city scales up.

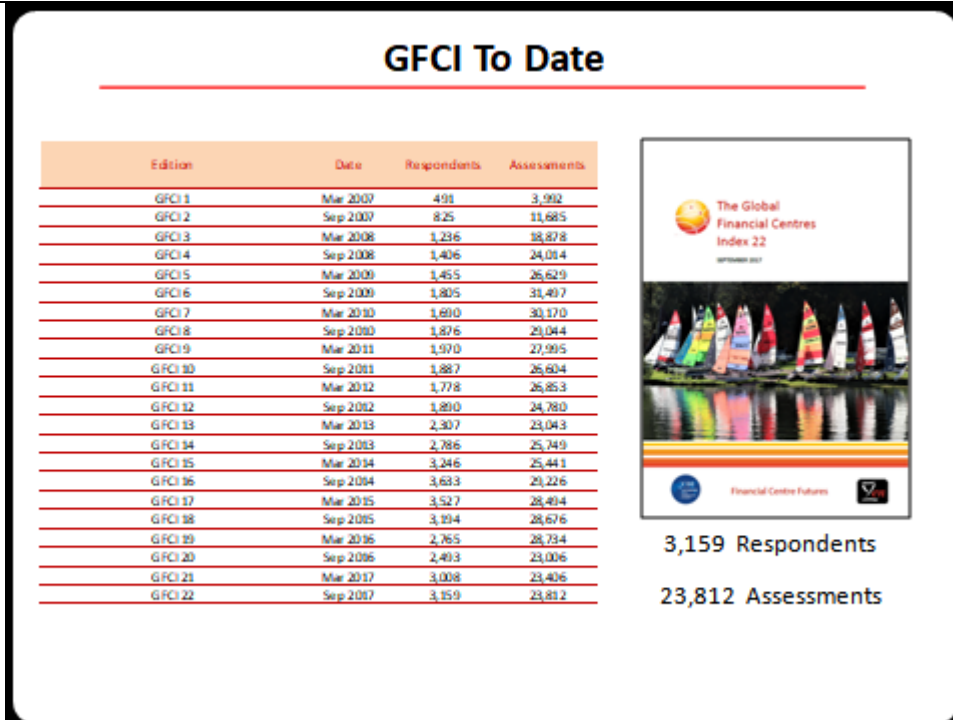
More interactions lead to more deals and more need for structures to prevent cheating. Structures that promote trust, clarity of contract, certainty of delivery, robust enforcement, in short the rule of law. So deals pull in professional, business, and financial services. Thus professional, business, and financial services activity can serve as a good indicator of the strength of ‘deal making’ and temperature of the city.

Pulling Rank



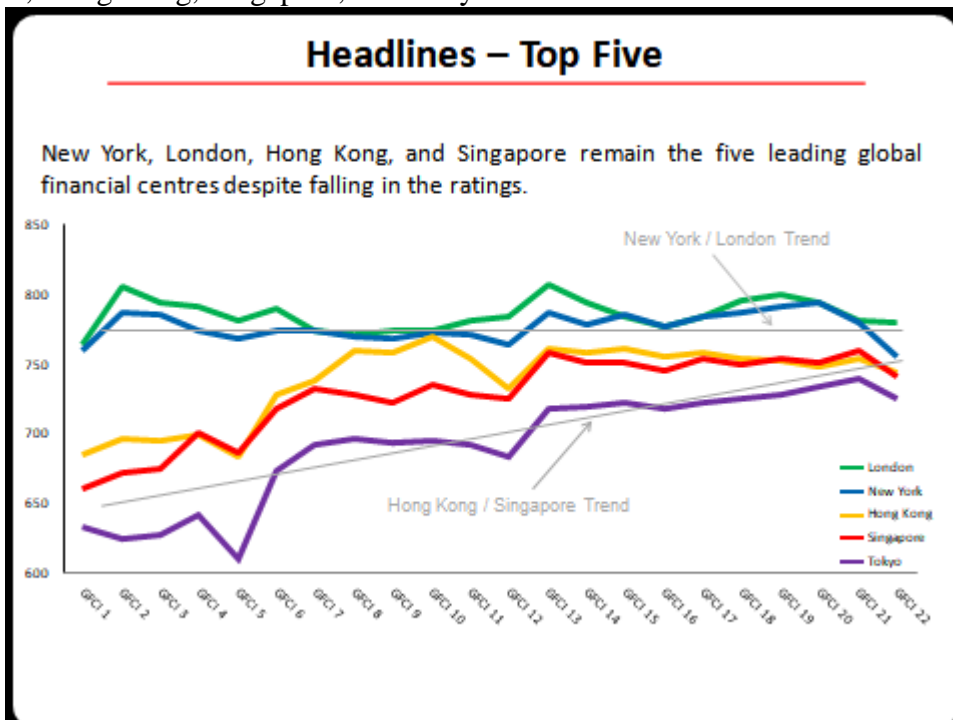
One can try to focus on ‘global’ cities using ranking systems, for instance the Globalization and World Cities Study Group and Network at Loughborough University (see <http://www.lboro.ac.uk/gawc/index.html>) have spent almost two decades ranking Alpha World Cities - New York City, London, Hong Kong, Paris, Singapore, Sydney, Tokyo, Shanghai, Beijing – as well as beta, gamma, and ‘just sufficient’ cities.

Fifteen years ago the City of London Corporation commissioned a study from the Centre for the Study of Financial Innovation, “Sizing Up The City”, to explore any harm to London from the UK remaining outside the euro-zone in 2000. That study used interviews to compare London with the leading global financial centres of New York, Paris, and Frankfurt. This absurdly narrow view of three competitors to London provoked a different approach in 2005, a much-wider index based on instrumental factors weighted by a global community of respondents using statistical learning theory, the Global Financial Centres Index.



On Monday last week our firm, Z/Yen Group, published the 22nd edition of the Global Financial Centres Index evaluating future competitiveness for 106 financial centres around the world. The index is compiled using 102 instrumental factors provided by third parties such as the World Bank, The Economist Intelligence Unit, the OECD and the United Nations. The instrumental factors are combined with 23,812 online questionnaire assessments from 3,159 respondents.

What stands out over the past twelve years is that the number of competitors exploded and combined with the remorseless rise of Asian centres to product a current top five of London, New York, Hong Kong, Singapore, and Tokyo.



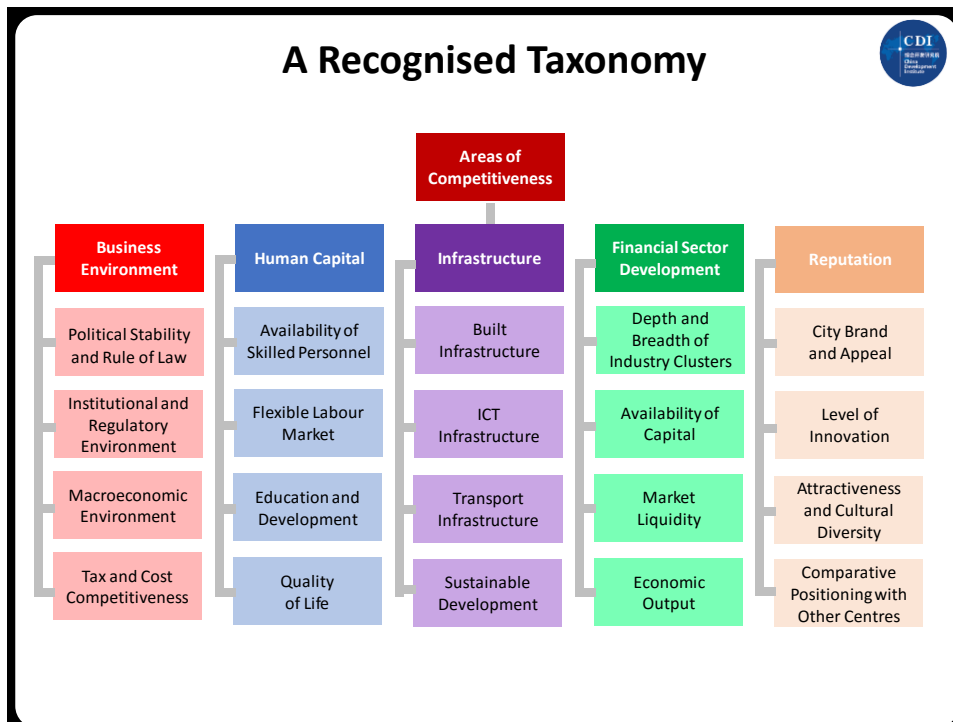


London Forever! Reality or Rhetoric?

Finance only exists to support the ‘real economy’ of commerce and trade. Milton Friedman points out that “The most important single central fact about a free market is that no exchange takes place unless both parties benefit.” But people cheat. Contemporary finance is built on two pillars; ‘mistrust’, if we trusted each other we wouldn’t need financial intermediaries; and ‘leverage’, fractional reserves in capital markets, pooling in insurance. Regulators are therefore concerned with protecting customers and controlling the money supply.

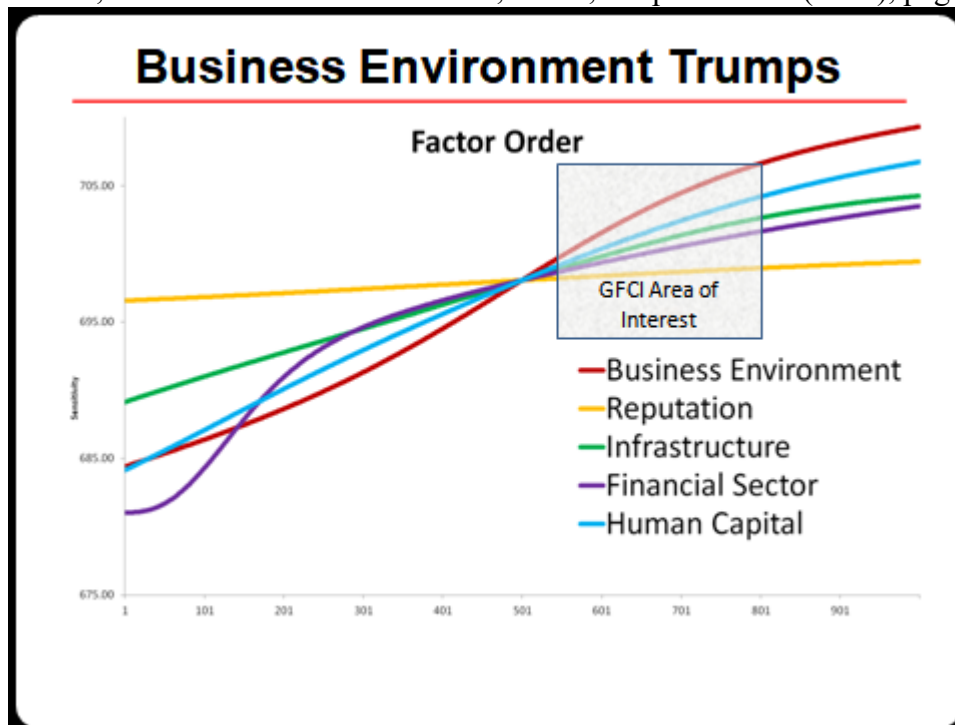
GFCI 22 showed that almost all major financial centres followed the downward lurch of London and New York in GFCI 21. In the top 20, only Frankfurt rose, quite significantly due to many London bank announcements of headquarter moves. This telling tumble among financial centres is due to fears over trade, not finance. ‘America First’, isolationist rhetoric damages perceptions of future US trade, while Brexit rhetoric harms perceptions of UK and European trade. Jacobs was right, cities are the unit of analysis, and commerce and trade drive them, and in turn their professional, business, and financial services.

Flights Of Finance-e



Our studies sketch out how to build a financial centre, grouping today’s 102 instrumental factors into five categories - business environment, human capital, infrastructure, financial sector development, and reputation. There is no single killer factor or category of factor. Cribbing from Tolstoy, “all happy families are alike”; cities need to develop factors simultaneously. However, once the infrastructure is in place, the people are educated, the financial sectors function, and there is a good reputation for safety and fun, the leading factor category is the “business environment”. There are some 32 factors here, including quality of regulation, press freedom, anti-corruption, rule of law, tax certainty, ease of doing business, and so on. These are all hard-to-measure, softer factors, but they are the crucial ones.

Boswell relates a story of Samuel Johnson, “Being asked by a young nobleman what was become of the gallantry and military spirit of the old English nobility, he replied, ‘Why, my Lord, I’ll tell you what has become of it: it is gone into the city to look for a fortune.’” [James Boswell, “The Life Of Samuel Johnson, LLD”, Harper & Bros (1860), page 171.]

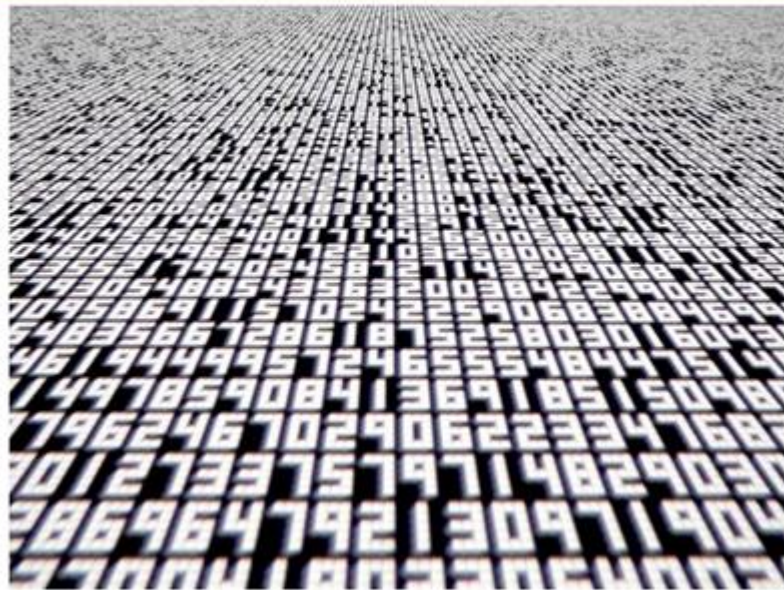


There is nothing wrong with gallantry in the city but when does a boring shipping transaction become ‘high finance’? Paying for fuel? Funding or insuring a vessel? Reinsuring a fleet? The OECD oddly only defines offshore financial centres starting with, “Countries or jurisdictions with financial centres that contain financial institutions...”. While the omission of normal financial centres from the OECD glossary strikes me as a large oversight, the implied definition is that “financial centres are places with strong concentrations of financial professionals and their firms”. It’s the financial people that matter.

The prevailing theory underpinning 1980s literature was that global financial centres grew from large domestic needs and concentration, thus the UK, then USA, then Japan. A 1990 consensus on the leading global financial centres would have been London, New York City and Tokyo. So why does London rank 1st to Tokyo’s 5th despite the Japanese economy being twice the size of the UK economy? A global centre is connected to the world not just its domestic economy. But after a point a well-functioning financial centre attracts global financial transactions in its own right. I point to the fact that I have often participated in deals in London that had no domestic commercial operation. A Chinese, Australian, and Swiss deal concluded in London. I cannot recall any New York deal without a US commercial operation. So far, I might only class London, Singapore, and Hong Kong as truly global for all.

Measuring Up – The Common Wealth Of Data, Information, And Knowledge

Common Wealth



Commonwealth is a 15th century term meaning ‘public welfare; general good or advantage’. The ‘common-wealth’ or ‘common weal’ comes from an old meaning of wealth as ‘well-being’ thus ‘common well-being.’ Edward Glaeser at Harvard [1994] challenges the view that accumulation and labour are the key factors in economic growth, emphasising rather human capital and the flow of ideas that urban environments foster.

Cities are factories of the mind, driving innovation and providing opportunity. Another Mercer, and a predecessor of mine at Broad Street Ward, Sir Dick Whittington, made the stuff of legend, well pantomime anyway, when he came to London to seek his fortune, This too was not lost on Terry Pratchett: “People came to Ankh-Morpork to seek their fortune. Unfortunately, other people sought it too.” [*Soul Music*, Corgi (1994), page 23]

Great networking projects are cooperative. It’s no surprise that ‘open source’ software drives most of the internet. Nor that peer-to-peer technology is so strong. ee cummings tells us, “believe me, dear, clocks have enough to do”. I’d like to leave you with a semi-liquid metaphor, blending cities, clocks, commerce, and networks - cities as data hydrants. Cities have always been places that generate data, in vast quantities. We have seen great examples of how freeing data for widespread use transforms our lives –music, books, films, online courses. Another hydrant has been the United States Department of Defense providing GPS, the global positioning system, freely, changing everything to do with maps and transportation.

A common weal of data irrigates ideas. The Royal Society could only have been founded in a city. Intense clustering in cities presents urban dwellers daily with more opportunities for decisions than some rural folk might have in a year.

Start The Clock?



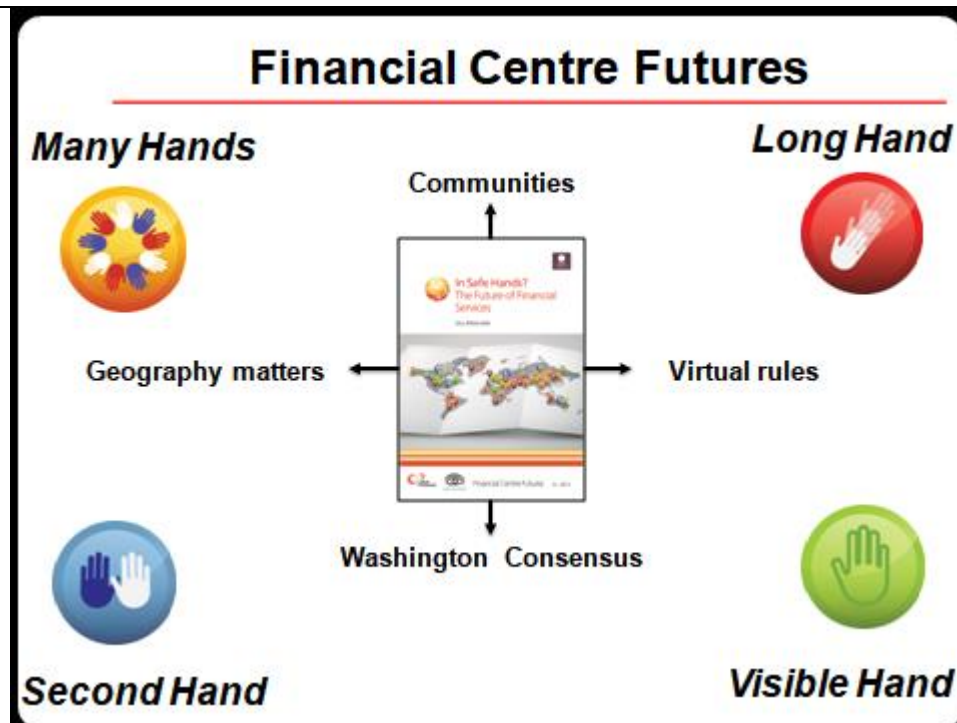
OPEN
SOURCE
ALL THE
CITIES

A place with a lot of data becomes the transaction hub of choice. ‘Big Data’, the use of computing power to provide automatic insights into large or complex data sets, is the new Big Ben. Food, energy, water, transportation, pedestrian movement, air quality, and waste data provide raw materials for Big Hypotheses we can test and Big Theories we can deploy.

Data-sharing created wealth from Corn Law returns and Bills of Mortality. I’d point to the past decade where Transport for London created a data hydrant for train and bus information. A number of innovative London firms played with the data and turned it into information on the smart phones you have in your pockets - hopefully switched off - today. Freeing data made London a global centre for software development of public transport apps.

Perhaps to enter a city in future our mobile app city passport will contract to supply our movement information to help transport planning. If I build a block of flats, I will have to provide ways of sharing energy, occupancy, or waste information with the city, which it anonymises, stores, and then shares more widely. I can link up with neighbours to consider new power or water treatment plants because I have the data on land registry, local consumers, their needs, their usage patterns. Cities might timestamp and geostamp identity, documentation, and agreement directories and exchanges. There are certainly liberty and security issues, but our common wealth starts with data, then information, then knowledge, and then, perhaps, even wisdom.

Avoiding Strategic Straightjackets



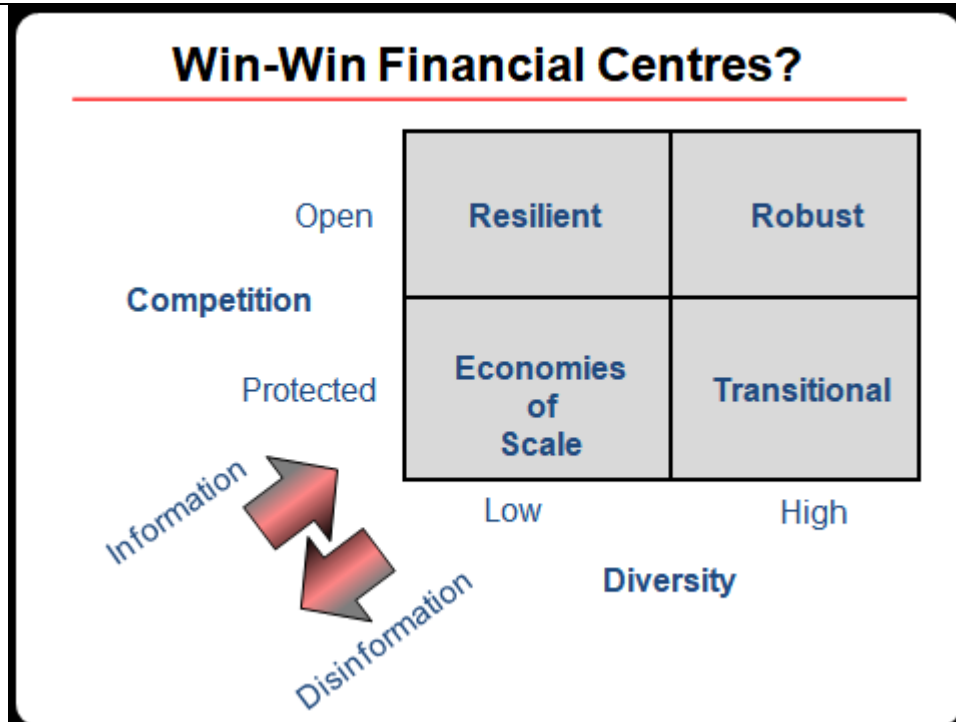
In 2011 Long Finance published “In Safe Hands?” looking at four scenarios for financial services to 2050. In **Second Hand**, today’s financial services are recognisable though largely automated, current players will have largely disappeared, and many of the new players will be based outside the OECD countries. **Visible Hand** sees the world trying to tackle the global financial systemic risks through Washington consensus methods. The homogeneous global culture is short-term. Gold is thought to protect best against volatility. In **Long Hand**, financial services are organised around communities of affinity, many spanning countries and regions. Assets are allocated by the market within a community and intermediated by technology. In **Many Hands**, financial services are organised around city-states. Permits to live or operate in desirable city-states are highly valuable assets. While the UK’s £73 billion trade surplus from financial services is largely exported via electronic pipes, deals need face-to-face trust to start, and often to complete. For all financial centres the ultimate challenge may be electronic – if trust can go electronic then all of the rules change. The dynamic world of Smart Ledgers (aka blockchains), Initial Coin Offerings, and cryptocurrencies is ripe for discussion tonight, and points to Many Hands or Long Hand.

So, what else might we discuss? Three things:

Planning versus Disorder



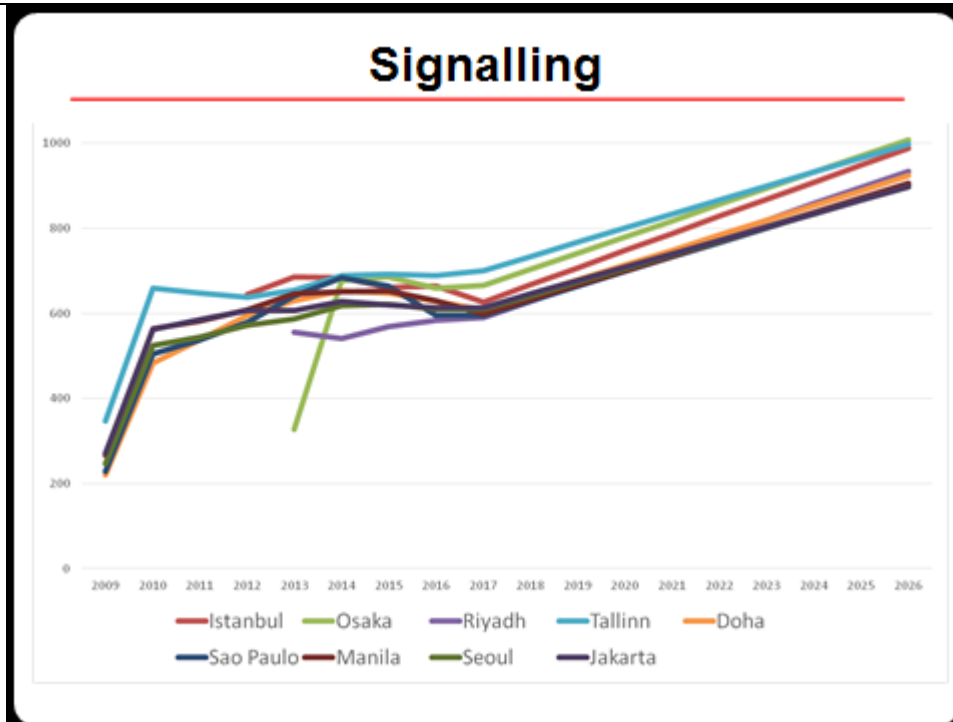
Planning versus disorder - There are two competing approaches to smart cities - the Wizard of Oz and the Hippie Entrepreneur. The Wizard of Oz sees smart cities as a super-connected, super-centralised system, in which the Mayor hides behind a green curtain, seeing all and controlling all in order to ensure the smooth running of the metropolis. The Hippie Entrepreneur believes that data wants to be free, and smart cities give free access to all civic data, so that a thousand innovative flowers can bloom. If cities are co-created by everybody, then great metropolises are about everyone's contribution, and thus as much about accident as design. With too much planning innovation wanders elsewhere. London was right after the 1666 fire to reject Sir Christopher Wren's grandiose scheme for a boulevarded London. The haphazard and serendipitous in cities creates opportunities for positive change.



Coopetition - Our competition are no fools. Here's a 2009 speech by Miss Au King-chi, Permanent Secretary for Financial Services and the Treasury, Hong Kong:

“What ... attracts investors and financial institutions to this city? The answer lies in our fundamental strengths. These include our simple and low taxes; high-quality services; free flow of capital with no foreign exchange controls, and a stable, fully convertible currency; as well as a free economy buttressed by the rule of law and an independent judiciary. Our regulatory regime is on par with international standards; and our regulators are tasked to ensure a fair, transparent and orderly market.”

[http://7thspace.com/headlines/321747/speech_by_psfs_at_hk_investment_funds_association_3rd_annual_conference.html] Yet we should cooperate. Society has many ways of resolving problems without finance. Many of them are neither pretty nor progressive, communism, military rule, legal prescription - the roads to serfdom. Cities have a mutual interest in showing that competitive financial centres can cooperate and self-regulate to deliver policy solutions based on finance for societal problems such as sustainability.

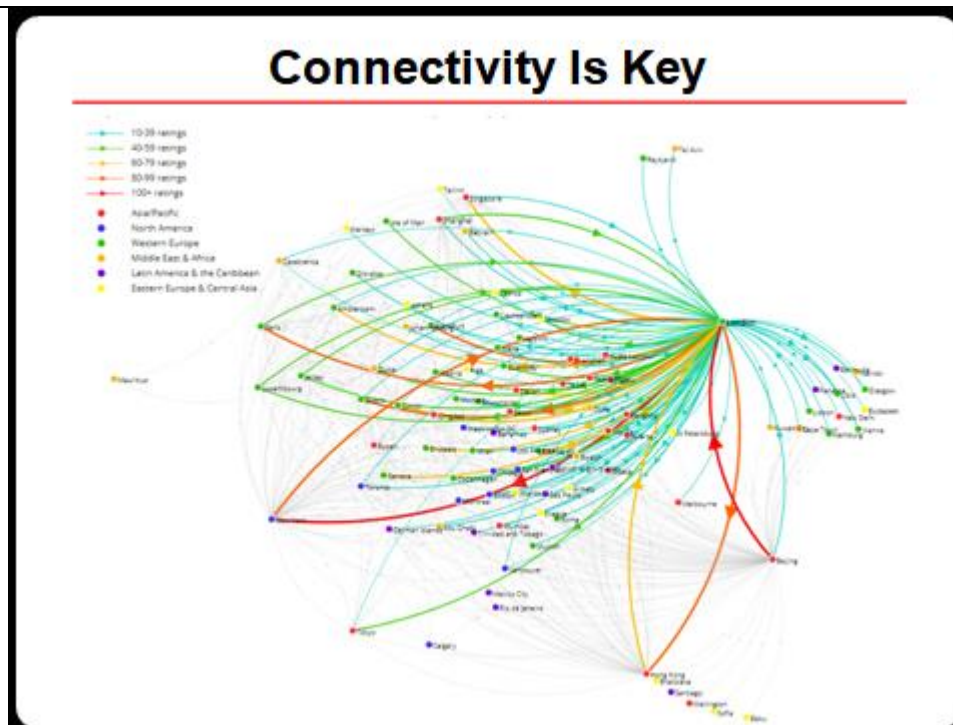


Signalling - Marc Lee of CityForum asked me to extrapolate wildly from our ten years of data, and thus this slide indicates big potential gains for Istanbul, Osaka, Riyadh, Tallinn, Doha, Sao Paulo, Manila, Seoul, and Jakarta. We might speculate that large states may have a comparative disadvantage in global finance. Small offshore centres ‘signal’, in economic terms, that finance is so important to them so they won’t make stupid decisions; yet too much flexibility risks looking like a banana republic. Large countries often don’t care about international finance, and accidentally ruin their centres. London has built on Russian, Chinese and US mistakes. Eurodollar markets grew swiftly in the 1960s when US tax rule changes meant multinationals found it attractive to leave dollars outside the control of US authorities. Then in the 1980s, US companies began to borrow offshore, finding euromarkets an advantageous place for holding excess liquidity, providing short-term loans, and financing imports and exports. Sarbanes-Oxley requirements after 2000 increased the attractiveness of London as a ‘light touch’ regulatory environment. When the UK makes mistakes, for example with the shipping industry in 2007, exodus is swift. Libor and FX scandals don’t help demonstrate policing or fair treatment. Singapore and Hong Kong are signalling well. New York not so well. Can London signal its long-term commitment to global finance or could wider UK disinterest overwhelm it?

How To Get Rich

In his essay “How To Get Rich” [1999], biogeographer Jared Diamond set out two principles for communities – connectivity and competition:

“First, the principle that really isolated groups are at a disadvantage, because most groups get most of their ideas and innovations from the outside. Second, [I also derive] the principle of intermediate fragmentation: you don’t want excessive unity and you don’t want excessive fragmentation; instead, you want your human society or business to be broken up into a number of groups which compete with each other but which also maintain relatively free communication with each other. [And those I see as the overall principles of how to organize a business and get rich.]”



On connectivity, I would go further than Professor Diamond, towards **structural intensity**. Coral reefs are rich in biodiversity and competition. They are interfaces between the pelagic ocean and the sun-blessed waters. They are boundaries between order and chaos. Opportunities to increase the intensity of interaction should be seized. Airplanes, telecoms, bicycles, even Uber, raise intensity.

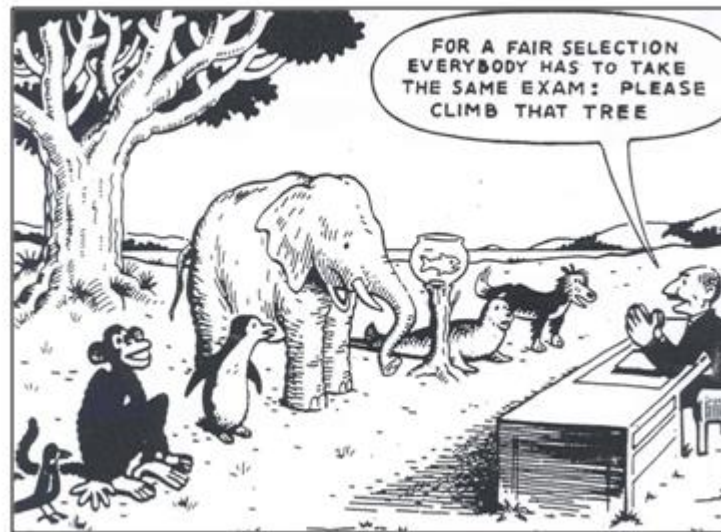
[INTENSITY – SHAKE HANDS WITH YOUR NEIGHBOUR]

All cities are intense, but structural intensity is special to the City of London. With only 9,000 residents and 450,000 commuting workers, it's a 98% chance anyone you meet on the street is working. There is nowhere on the world like it. And Crossrail's success will raise those odds over 99%. A temperate climate, twisting alleyways, and numerous drinking places ensured that from the time of the Tudors financial workers met each other frequently. From pubs to coffee shops to Americano & Cappuccino networking centres, supplemented by air transport and IT.

Former Chairman of Planning & Transportation and Chief Commoner of the City of London, Michael Welbank, worked towards the concept of 'groundage', enlarging the public realm by working with developers to increase contact intensity by trading height for more ground level space. The City team remain keen on more trading pedestrian movements for fewer vehicles, for example at Bank where 18,000 pedestrian crossing movements at peak hours compare to 1,600 cyclists, 220 buses carrying 4,500 passengers and 1,400 cars with 1,600 passengers. This has led to the Bank experimental closures trying to increase overall intensity of people movements, more possible interactions.

London – Attracting & Treating All Comers Fairly

One True Strategy For Success



"Treat All Comers Fairly"

On competition, I would also go further than Professor Diamond, emphasising scrupulously **fair treatment**. The heritage of London and the UK is treating all comers fairly. London thrives when it's open to foreigners – the 'Wimbledon effect' of hosting the tournament being more rewarding than winning the tournament. The belief that all comers will be treated fairly has been a London success factor since the 1290 mistake of expelling the Jews. London's subsequent welcoming history needs no recounting, from Lombards of old to welcoming back the Jews in 1655 to today's Syrians. All were increasingly treated with the same commercial rights as Englishmen. Rule of law is crucial, but long before anyone goes near a court, any nation that wishes to prosper must trade from an open, competitive, diverse, non-discriminatory society. Competition needs a well-educated populace with a state sector preventing cartels, barriers-to-entry, information asymmetries, and agency problems, while not crowding-out markets.

Five Home Truths

- ◆ You can't be an international centre without **international people**
- ◆ Successful people want to live in **successful places**
- ◆ Successful places are **cosmopolitan**
- ◆ **Reputation** is vital - 20 years to build a reputation and five minutes to ruin it
- ◆ **Trust** holds all relationships together



Freedom and trade are strongly related. The certainty and confidence that trade will deliver what we need gives us the confidence to think to the future, not paralysed by fear of surviving the present. The freedom to compete in trade keeps us innovative and relevant. If we get our own house in order, trade will come. If you wanted some home truths, perhaps you should have stayed at home, but I'll start with: You can't be an international centre without international people. Successful people want to live in successful places. Successful places are cosmopolitan. Reputation is vital, 20 years to build and five minutes to ruin.

We have problems certainly. If Britain is open for business, try opening a bank account. With or without Brexit, we need to stimulate investment in quality education and training, health, infrastructure, broadband; sort out the airports (plural), make the nation as 'visa less' to get to as possible, make financial account-opening a one minute process, create a competitive housing market, simplify the tax system, and so on. Brexit adds the complexity of 'transition' being woefully unclear, 'trade' structures breaking down, and welcoming 'talent' uncertain. So we need swift decisions on timing, on terms-of-trade, and talent, for example stop prevaricating on EU nationals' and students' status.

Brexit-tea-r?

Should the United Kingdom remain a member of the European Union or leave the European Union?

Remain a member of the European Union

Leave the European Union



Our reality must rise to meet our rhetoric, but it was ever thus. In the history of London we see the truth of Aldous Huxley's comment, "The charm of history and its enigmatic lesson consist in the fact that, from age to age, nothing changes and yet everything is completely different." Making London a great place to live solves most problems. We need to be honest about our faults and not let false rhetoric impede fixing them. We are deficient in some areas, but not desperate; in danger of having our Emperor's clothes disrobed, but with time to knit some new garments.

We've been being told for well over a year what we supposedly voted for in a non-binding referendum. Whatever, the vote was certainly a vote for change. Quality guru W Edwards Deming sets a low bar for the lazy: "It is not necessary to change. Survival is not mandatory." I am sceptical about claims that we businesspeople will find fabulous fortunes hitherto overlooked in far-flung foreign lands, but I am very positive the closest opportunity is change for the better at home, toward improved structural intensity and fair competition. Londoners are certainly not lazy.

London Forever! Reality or Rhetoric?



"Get a big picture grip on the details."
Chao Kli Ning

The inaugural FSG Lecture
in memory of its Founding
Convenor, Jeremy Goford,
Past Master Actuary

Thank you!

Trade reaps economic benefits from specialisation and comparative advantage. Trade creates wealth, shares prosperity, and enriches our environment. Trust holds all trade relationships together. The clearest sign of trust is that people want to live and work in London and the UK. If we keep that, we keep everything, including the top spot a century from now in Global Financial Centres Index 222.

Long before this point Jeremy would have been most heartily critiquing and challenging, but tonight, in his memory, you need to do that job for him. I look forward to your comments and insights. Thank you.

Thanks

Many people contributed to the materials included in this talk, including Malcolm Cooper, Laura Davison, Shevangee Gupta, Xueyi Jiang, Bikash Kharel, Marc Lee, Simon Mills, Ben Morris, Julian Perfect, Karina Robinson, Paul Sizeland, and Mark Yeandle, as well as the wider Z/Yen, Long Finance, Gresham College, and City of London communities. I extend my sincere thanks to all of them.

The Financial Services Group of Livery Companies kindly donated all the proceeds from this event to the CPotential London Centre for Children with Cerebral Palsy - <http://www.cplondon.org.uk/>.

Further Surfing

- ◆ Michael Welbank, *The Search For A Sustainable Urban Form*, in *The Compact City: A Sustainable Urban Form?*, Mike Jenks, Elizabeth Burton and Katie Williams (eds), Chapman & Hall (1006), pages 63-69. https://books.google.co.uk/books?id=MliRAGAAQBAJ&printsec=frontcover&dq=compact+city&hl=en&sa=X&ved=0ahUKEwjSoMenjbLWAhXmAMAKHSzhBnYQ6AEI_MjAC#v=onepage&q=compact%20city&f=false



London Forever! Reality or Rhetoric?

- ◆ Long Finance – www.longfinance.net
- ◆ Global Financial Centres Index – www.globalfinancialcentres.net
- ◆ “Plebicide or Silver Lining?” - <http://www.mainelli.org/?p=727>
- ◆ Financing Tomorrow’s Cities - <http://www.longfinance.net/programmes/london-accord/tomorrow-s-cities.html>