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Global real estate scenarios

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GLOBAL

Global Real Estate Scenarios

SCENAIOS



Ming Sturge



Summary

We live in turbulent times. It is an era of astounding change, where we are becoming almost accustomed to fantastic feats of technological wizardry, medical marvels and spectacular scientific breakthroughs.

Crucial questions are posed at a global level about demography, natural resources, the environment and human culture.

While some things old in these areas are coming apart at the seams, other new things are emerging.

The boundaries between disciplines, industries, sectors and social enterprises are becoming ever more blurred. Everything, we are told, affects everything else.

As the boundaries fade and the networks grow, so the need for a more enlightened, holistic and future-orientated understanding of events, issues and opportunities arises.

In this complex, chaotic and uncertain world, the real estate industry can scarcely be exempted.

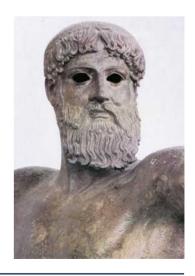
More than ever before, there is a call for leading thinkers in the property field to look around and look ahead.

Global real estate scenarios do not claim to have provided the answers to the future, nor are they a reliable predictive tool.

The purpose is to raise awareness. We live in turbulent times where major, or even minor, events can radically change our lives. Success will depend on being prepared for the unexpected.







List of Contents The following pages set out the King Sturge and Dublin Institute of Technology scenarios for the future of Global Real Estates. It is based on a research project undertaken by Professor John Ratcliffe at DIT over the last two years. Summary 1 The report is set out covering the following areas: The context for foresight and scenario planning 3 The driving forces of change making reference to: 6 • Cultural change Demographic change • Economic change • Environmental change • Governmental change • Technological change Put another way, the new, the many and the connected. Issues and trends in real estate This sets out the methods by which more than 100 leading real estate practitioners and academics were involved in the Global Real Estate Foresight scenario programme. This programme made reference to: Context shapers Significant trends • Pivotal uncertainties Potential jokers We then set out the three principal scenarios which emerged from the interactive research sessions. These are: "Lords of Misrule" relating to a social reaction to over rapid change 11 3 "Bazaar" relating to complexity managed by "marketising" decision processes 14 "Socratic Systems" relating to harnessing the knowledge economy 17 Property perspectives, policies and predictions 20 Each scenario is tested against the concept of future: City planning Property investment Property development Property consultancy Property sectors are then examined with reference to issues which might influence the: a) Office, workspace and productivity b) Industry, warehousing and distribution c) Retail, leisure and spending d) Residential, rest and community

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Global real estate scenarios - some suggested conclusions

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The context of foresight and scenario planning

What is foresight?

In essence, foresight is **the process of attempting to broaden the boundaries of perception** by carefully scanning the future and clarifying emerging situations. Foresight pushes these boundaries of perception forward in at least four major ways:

- By assessing the implications of present actions and decisions (consequence assessment).
- By detecting and avoiding problems before they occur (early warning and guidance).
- By considering the present implications of possible future events (pro-active strategy formulation).
- By envisaging aspects of desired futures (normative scenarios).

What are scenarios?

Scenarios are instruments for ordering people's perceptions about alternative future environments in which today's decisions might play out.

Scenario planning is now widely regarded as a basic tool for thinking strategically about the future. Scenarios have long been used by government planners, corporate strategists and military analysts as powerful aids in decision-making in the face of uncertainty.

In practice, scenarios resemble a set of stories built around carefully constructed plots. Such stories can express multiple perspectives on complex events, with the scenarios themselves giving meaning to these events.

How do you create scenarios?

The process is highly interactive, intense and imaginative. It begins by isolating the decision to be made, rigorously challenging the mental maps that shape people's perceptions, and hunting and gathering information, often from unorthodox sources.

The next steps are more analytical: **identifying the driving forces**, the predetermined elements and the critical uncertainties. These factors are then prioritised according to importance and uncertainty.

Subsequently, three or four thoughtfully composed scenario "plots" are constructed, each representing plausible alternative futures, against which policy options can be tested and implications identified.

Why use scenarios?

Scenarios are powerful planning tools because the future is unpredictable. Their main characteristics being:

- Scenarios **present alternative images** instead of extrapolating trends from the present.
- Scenarios embrace qualitative perspectives as well as quantitative data.
- Scenarios allow for sharp discontinuities to be evaluated.
- Scenarios require decision makers to question their basic assumptions.
- Scenarios create a learning organisation possessing a common vocabulary and an effective basis for communicating complex – sometimes paradoxical – conditions and options.

Good scenarios are plausible and surprising. They have the power to break old stereotypes; by rehearsing tomorrow's future, they produce better decisions today.

The scenario process

EXHIBIT 1: THE SCENARIO PROCESS

Set the Strategic Question

Identify Driving Forces of Change

Determine the main Issues and Trends

Clarify their level of Impact and degree of Uncertainty

Create Different Scenarios

Test policy options against scenarios and visions of the future



The scenario study

A scenario study was undertaken during the year 2000 to test the methodology and refine the approach. What follows is a very brief description of the process.

1. The strategic question

Resulting from a workshop, and reinforced by selected interviews, the strategic question was set as:

"What are the major forces of change affecting the global real estate industry, and how should the property profession position itself now to face the future".

In defining this question, participants in both the initial workshop and the opening interviews were asked to "think the unthinkable" in identifying the one or two vital issues that would affect the nature and direction of the real estate industry. Two things they would most wish to know were:

- i) the level of government intervention in city planning and development
- ii) the relative degree of economic prosperity prevailing internationally, regionally and locally

These two fairly familiar factors were used to form the scenario matrix within which the alternative scenario logics or story lines were developed. At this stage, the time horizon of 2015 was established.

2. The driving forces of change

A combination of environmental scanning, a brainstorming session at a second workshop and later interviews identified the driving forces of change. These were the most significant elements at play in the external environment.

In this exercise, the "six-sector system" widely employed in strategic planning and business management was used: Culture, Demography, Economics, Environment, Governance and Technology.

3. Issues and trends

From the exploration of the general driving forces of change, more particular issues and trends pertaining to real estate futures were identified. Some 115 issues and trends were diagnosed and classified according to the six sectors.

4. Impact and uncertainty

The issues and trends identified were evaluated for **the likely impact and degree of uncertainty** they would have on prospective priorities, policies and plans. For clarity and simplicity, these were plotted on a grid.

5. Creating the scenarios

It was decided to construct a set of three plausible, differentiated, internally consistent, yet challenging, scenarios of the world in 2015 against the two axes of economic growth and government intervention.

6. Scenario testing and interpretation

Following the presentation of the global scenarios, the **policy proposals** (formulated from an analysis of the issues and trends, the scenario construction process and the selective interviews) were tested against each vision of the future.



All the dimensions of change – frequency, magnitude, complexity, rapidity and visibility – are happening at an ever-accelerating pace. In the past, there has been a discernible pattern to change. This time, however, it is different, for change is far less sequential and certain, showing much greater discontinuity and unpredictability.

To get a vision of real estate in the future, it is first **necessary to gain a vision of society in the future.** This requires an understanding of the forces – cultural, demographic, economic, environmental, governmental and technological – that are driving change.

Cultural change

- Twin forces homogeneity and diversity are at play in transforming society into something new and unexpected. On the face of it contradictory, but in fact mutually supportive, the first is leading to an awareness of the second.
- The greatest threat to future world order and peace is the potential clash of civilisations, not of countries.
 Future flashpoints will lie not along national boundaries, but where different civilisations meet.
- A new business culture is emerging one that is based as much on principle– centred leadership as it is on the pure profit motive.
- The 21st century will see the culture of universal education for all people, worldwide, and throughout their lives.
- There is a changing culture of healthcare stemming from such issues as new medical discoveries, alternative or complementary treatments, the duties and rights of patients and the roles and responsibilities of providers.
- Advances in information technology raise cultural questions about security, surveillance, control, access, privacy, crime, taxation, propaganda and social colonisation.

• It is possible to discern a movement in society **towards** a rediscovery of certain fundamental values. A shift away from materialism towards more enduring philosophical and spiritual values. Ethical business, more cynically, is now good business.

Demographic change

- The world's population is growing, moving and getting older.
- Income disparities between rich and poor nations continue to grow in a world of around 4 billion poor people, 2 billion aspirants and something over a billion citizens of wealthy nations. The first group creates less than 1% of world product, while the last creates over 85%.
- The average age is increasing in the "industrialised" world and will be around 40 by 2020.
- A "grey" future is faced by most industrialised nations as their populations age and elderly dependency ratios rise.
- Immigration will become a crucial issue over the next 20 years, as a tidal wave of people seek to surge from developing to developed countries.
- The phenomenon known as "the global teenager"
 will become a powerful demographic force.
 Connected, communicating, concerned, cyclical,
 idealistic, ambitious, global youth could exercise
 enormous social, economic and political power but in
 what direction?
- The next 10 years will witness about half the world's population living in urban centres, almost 400 million people having homes in the biggest 25 cities, and well over 300 cities in the developing world will have a population of over a million.

Economic change

 A radical restructuring of the world's economic order is taking place. Economic globalism is the name of the game. The dynamics of this new economic world,



however, are largely untried, decidedly uncertain and little understood.

- Capitalism is the only economic system that has been seen to work anywhere, but even its foundations are shaking with the speed and force of change, so that the eternal verities of capitalism growth, full employment, financial stability, rising real wages are threatened.
- The third of humanity, and the quarter of the landmass, which was previously communist, is joining the old capitalist world with serious problems in such sudden assimilation.
- There will be a continued shift to an era dominated by "brainpower" industries.
- Advances in technology, transportation and communications are creating a world where anything can be made anywhere and sold everywhere.
- The 21st century will be a period where there is no dominant economic, political or military power, and no single country able to design, organise and enforce the rules of the economic game.
- The main foundations underpinning economic growth will be the development of a ubiquitous digital economy, increased research and innovation, and improved skills and knowledge of the workforce.
- Above all, the businesses that flourish in the 21st century will be those that master the art of getting information to and from their customers.
- A new financial architecture in terms of global standards, regulation, compliance, taxation, risk assessment and corporate governance, will emerge.

Environmental change

- Environmental issues will form a major dimension of change and the concept of "sustainability" will increasingly dominate the formulation of public policy at all levels.
- **Four basic questions** will constantly be addressed: Is there a **crisis?** Can the world **feed** itself? Is there enough **water?** Will there be sufficient **energy?**
- Top of the environmental agenda will be the issue of

- **global warming,** with consequent climate change and rising sea levels, resulting from high levels of greenhouse gas emission due to fossil fuel burning and land use change.
- There will be a steady growth in the number of environmental policy instruments introduced at international, national, regional and local level.
- Attention will increasingly be focused on the shape, density and functioning of cities.
- Organisations, of all kinds, will progressively have to demonstrate a sound and effective approach towards environmental resource management, and improved performance.

Governmental change

- National governments throughout the world will become less and less powerful. Power will be passed upwards to supra-national bodies, and downwards to subsidiary authorities at regional, federal, provincial, and town or city level.
- **Fiscal and monetary policy** will increasingly be determined by the world's financial markets.
- Governments generally will be expected to do less and not more.
- The accent by government will be placed on regulation to secure effective, efficient and equitable provision of services.
- Persuasion will accompany regulation through better public education, public relations and public disclosure.
- Electorates of the developed world will be more and more disinclined to vote for increased **taxation**.
- Social security and welfare systems will come under greater pressure, with a growing tension between those in work and those not working.
- User charges, for erstwhile free or subsidised public services, will be more common.
- Cities will emerge as the critical focus of economic activity, of governance and of social organisation for the future.

Technological change

- Over the next generation, until around 2020, the emphasis will be not so much on inventing new technologies but on creating new and cheaper ways of applying existing ones; greater efficiency.
- Essentially "mechanical" technologies will be comparatively slow to change, whereas those that can be classified as "electronic" will be very fast.
- The continued growth in computing capacity means that the process of data collection, data analysis and change will become continuous, so that in terms of decision-making and production, more and more things will be brought into "real time" management.
- The world will be embedded in a largely unbroken system of data exchange by 2020, and costs will continue to fall.
- Profound changes will occur in workstyle and workplace resulting from advances in information and communications technology (ICT).
- Corporations will have to respond to an increasingly dynamic business environment by creating flexible networked structures characterised by the emerging "virtual organisation", where loose, transient agglomerations join together to create new products and services, dissolving and reforming in different formats according to business imperatives.
- Corporate infrastructure will have to respond to two critical and competing needs of the business organisation in a globally dispersed operating environment – the need for organisational "proximity" and the need for organisational "mobility".
- Advances in information and communication technology will have an impact on urban structure, layout and form, producing pressures for both centralisation and decentralisation.

Three predetermining elements run through all studies of change – the new, the many, and the connected. These are the driving forces that shape the global business environment, and that will persist in any scenario.

- In terms of the "new", not only will social and technological innovation lead to the development of many new products and services, but there will also be new aspects of the global economy new players, new countries entering the international trading regime, new businesses, new partnerships, new arrangements and new financial mechanisms.
- With regard to the "many", the next 20 years will see the world's population rise from 6 billion to 8 billion, and rise again to around 11 billion by 2050.
- In respect of the "connected", as the power of technology grows, so the communication infrastructure develops, and the economic systems become more interdependent.
- There is "a global techosphere" to rival the global ecosystem. The extent of the inter-connectedness has changed the speed with which knowledge and information is transferred and problems are perceived but not the speed with which the problems are solved.



Issues and Trends in Real Estate

Method

Over a hundred leading real estate practitioners and academics were surveyed to ascertain what they considered would be the main issues and trends over the next 15 years. 115 issues and trends were diagnosed.

Subsequently, the same group were asked to rate these issues and trends according to their likely "level of impact" and "degree of uncertainty". From their responses, the various factors were grouped as follows:

Context-shapers: these are relatively certain, and therefore, will surely shape the future context.

Significant trends: these impact more directly on the question in hand and it should be possible to anticipate their effect.

Pivotal uncertainties: these are likely to have a direct impact, but their outcome is uncertain. They are pivotal in the sense that the way they turn out may have strong directional consequences.

Potential jokers: these are pretty uncertain as to their outcome and less relevant. However, it could be dangerous to treat them as mere "noise"; they represent factors to monitor on the "corporate radar".

EXHIBIT 2: POSITIONING ISSUES AND TRENDS



Context-shapers

- House more than a home
- · Niche housing markets develop
- · Household fragmentation
- · Health an emerging sector
- Education an emerging sector
- · Lifestyle communities an emerging sector
- The arts, crafts and culture a catalyst of urban development
- · Heritage assets exploited more
- Demand for travel will increase
- · Car ownership will grow
- · Accent on "middle class" values
- · Accent on quality, reliability and service
- · Acceleration of microeconomics in retailing
- · "Feminisation" of work
- · Flexibility of labour
- Increasing sophistication of real estate finance
- · Growth of real estate consortia
- Profit margins on property will narrow
- · Real estate consultants competency
- Only either large, or specialist small, consultancy firms will survive
- Social values will be given greater weight than market values
- Property development proposals will be judged by their social worth
- International standards and regulations regarding real estate practice will be strengthened
- · Post-Thatcherite, Third Way capitalism, will spread

Significant trends

- Globalisation of property markets
- Shopping as entertainment
- · Leisure an emerging sector
- Professional accountability heightening
- Safety and security a prime consideration
- Convenience and leisure shopping more polarised
- Ageing population
- Growth of sheltered accommodation
- Innovation and enterprise determine prosperity of urban areas
- Power of the "grey" spend will grow
- The role of transnational companies
- · Mobility of capital

- · Buildings more environmentally efficient
- Property market research will become more important
- · The office market will become highly disaggregated
- The distribution sector will be revolutionised
- Price transparency will put pressure on profits
- "Sustainable" development will be the watchword
- Environmental quality of urban areas will be at a premium
- Mixed-use development will be more common
- Transportation systems will determine the success of towns and cities
- The private car will remain an icon
- Optimisation of existing land use will be a priority
- Fiscal measures for urban regeneration will be more popularly applied
- Market values will be given more weight than social values
- · Cities will have to compete
- Town-centre management will grow in importance
- Partnership arrangements between public and private sectors will grow
- Traffic congestion will impact on property investment decisions
- · Controls on out-of-town development
- · Real estate will get "smarter"
- There will be the smart office/shopping mall/business part
- Better-informed customers will demand better real estate services
- The degree of "smartness" will become a critical factor of market value
- Buildings will have to be more flexible
- Real estate professionals will have to appreciate "connectivity" considerations
- The role of facilities management will grow
- GIS will be applied to a wider range of property-related issues
- Property marketing will be revolutionised by the internet

Pivotal uncertainties

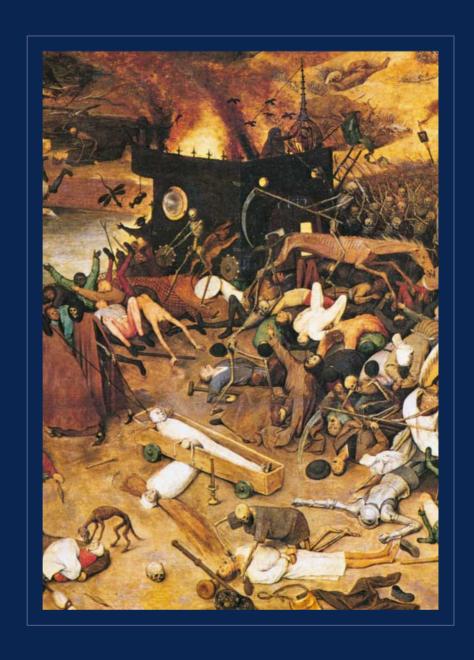
- Metamorphosis in the nature of work
- Culture of competition fiercer
- Quality of life a prime consideration
- Problems of social exclusion
- Increasingly mobile population
- · Fortress or gated communities developed
- Affordable housing an imperative
- Decline in freehold tenure

- People not companies determine location
- Importance of European Union
- Importance of Eastern Europe
- Importance of Far East
- Importance of China
- · Growth of securitisation
- Economic value of buildings determined more by function than location
- Building specification more geared towards flexibility and adaptability
- Conventional valuation methods questioned
- · Electronic shopping will transform the retail sector
- Domination of retail by big business
- Town centres will flourish as speciality centres
- Industrial sector location will favour access to targeted customers with smaller plants in more places
- · Increase in disposable incomes
- Higher welfare costs
- Urban densities will increase/decrease
- Environmental quality of buildings will affect value
- Building specification will become more environmentally orientated
- Urban management will be crucial to investment decisions
- Protectionist policies will founder
- The "grey" agenda will be powerful
- There will be the "smart city" / "smart community"
- There will be the "smart house"
- Property investment decisions will be driven by technology
- Wide variations in market performance due to differences in technological capacity will appear
- Virtual enterprise will burgeon with profound effects on real estate
- Prefabrication and customisation will become more important in development

Potential jokers

- Second Gulf War
- Wall Street crash
- Terrorism goes biological
- · Inner cities arm and revolt
- Worldwide epidemic breaks out
- No-carbon energy breakthrough
- Altruism outbreak
- Global warming accelerates

"Lords of Misrule"





"Lords of Misrule"

Social reaction to over rapid change

This scenario assumes there will be a socio-political backlash against the forces of change. This will lead to regressive developments in institutions, a failure of cohesion among the wealthy world and a dislocation in the developing nations. The world moves towards increasing instability.

It is a "fortress world" in the year 2015, where the global market boom remains highly concentrated. Fewer than two dozen developing nations benefit to any significant degree from private investment, while in more than 70 countries incomes are lower than they were in 2000. Islands of prosperity co-exist within an ocean of poverty and frustration.

Economic stagnation spreads as wealthy enclaves devote ever more resources to maintaining security and stability. Inevitably, there is growing conflict between rich and poor, with a future threat of escalating violence and social disorder.

Coupled with this, a rising tide of illegal immigration washes around the world. Furthermore, the dark side of capitalism is all too evident in the sweatshops and horrendous pollution of industrialising Asia, and in the expanding popularity of gated communities in the United States.

Europe, however, remains as a relative haven of comfort and security – but at a high economic cost. Nevertheless, the disparity of wealth is more and more skewed, and severe social upheaval results. Global criminal organisations operate with seeming impunity, corrupting many developing nations, while new and more deadly forms of terrorism proliferate.

For Europe, this is a "turbulent and insecure world". Twenty-five years after the end of the Cold War, political instability is a growing problem the world over, and there is little indication that the situation will improve in the

near future. Circumstances in Europe are particularly precarious.

The European Security Council has deployed troops on four major occasions to restore or maintain order in its own backyard. There is also a recurring series of terrorist outrages. Safety and security, thereby, become a preoccupation with everyone in all aspects of life.

Europeans tend to exhibit a fearful view of the world beyond their borders and an anxiety about what the future holds for them. This siege mentality goes a long way towards explaining the stagnation in domestic policy.

Governments have tried repeatedly to cut unemployment and social security benefits in a bid to stimulate recruitment and reduce labour costs. As a result of international recession and budget overshoots there have been a number of austerity measures, which have resulted in widespread trade union unrest and violent clashes in many European cities.

For real estate it has been a depressing period, with little interest in joining the ranks of the profession, and a bare trickle of money for research.

The following trends are apparent:

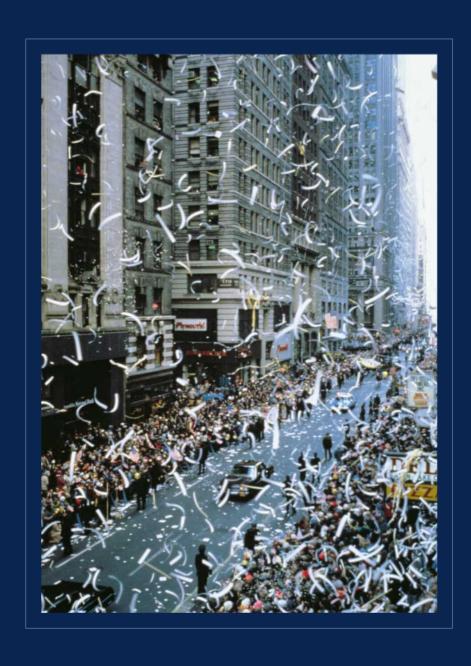
- Waves of hot money flow around the world's capital markets, seeking better returns, but moved in ignorance of the risks entailed.
- This excess capital seeks a safe harbour and stops around financial markets, creating discontinuity, rapid conventional industrial change and serious asset price inflation.
- Developed societies are ageing, and many have weak provision for welfare support, especially in the area of pensions and health
- Political parties organised around "grey power" emerge and teenage anarchists proliferate, both movements subverting previous societal protocols and policies through internet activism.
- The euro devalues against the dollar, trade barriers develop, and China reneges on a series of social, political and economic agreements.
- Japan vacillates between the Americanisation of its institutions and a hankering after the European ways, while experiencing serious problems with its immediate neighbours.
- China dissolves into an array of competing city states, India fragments to its ethic heartlands, and the Middle East is torn in its various affiliations.



- Different areas seek different solutions, creating a new range of fractured lines.
- · Fortress communities are established around and within cities.
- · New barriers to movement are erected.
- · Incomes and living conditions decline in rural areas.
- · Health conditions deteriorate in deprived areas.
- Organised crime grows and criminal fraternities control certain cities and countries.
- Disenfranchised and disadvantaged voices grow louder, but there is no one to listen.
- Information is increasingly sparse and unreliable, with communications networks spasmodic and unsound.
- Nihilist and terrorist groups grow, and there is a breakdown of law and order in the inner city.
- Unemployment, particularly among the over-40s and the lowskilled, is high in Europe, rises sharply in Japan and is held in check by falling real wages in the United States.
- Fragmentation occurs, as the United States becomes more market driven (but without concomitant economic growth) while Europe becomes protectionist, collectivist, antagonistic to US values, and the rest of the world experiences instability, ideology and introversion.
- Transnational corporations clash with the remnants of national governments.
- There is a slowdown in growth. Europe is increasingly at a disadvantage in world competition, especially in the hi-tech sectors. Political interference in the re-organisation of large enterprises.
- Growing risk aversion. Fear of the future. "Back to roots" intolerance. Gender backlash. Creeping racism. Concern with economic and even physical security. Urban crime, mafias, war in the near abroad.
- Large nation states exploiting threat to security to reassert government authority. Law and order politics. Shift of political centre of gravity towards right-wing populism. Fortress Europe ethos. Re-legitimisation of the state.
- Political passivity and diffuse support of authoritarianism.
 Media encouraging fear of diversity.
- Rollback of public sector reform. Security prevailing over transparency. Centralism discouraging spread of flexibility in administration. Obsolescence of public services.
- Initial disregard for mounting security problems around the EU forces the member states to take muscular military action to restore peace.
- "Thirst wars" in central and eastern European countries. Heavy EU military intervention led by big member states. Persisting instability beyond EU borders. Chaos engulfing part of Eastern Europe. Major problems with organised crime, terrorism and immigration.
- Risk of political and social explosion around the Mediterranean.
 Vicious spiral of Islamic terrorism and military repression.

- Aborted attempt at EU/Med partnership. Closed frontiers and rising migratory pressure lead to high illegal immigration into the EU from the region.
- In the USA economic performance falls below the historic trends. Mounting isolationism. Concentration on the Americas. Military withdrawal from Europe.
- Russia experiences increasing political and economic disintegration. Stranglehold of organised crime. Involvement in regional conflicts.
- Asia undergoes a difficult economic transition, due in part to a world economic slowdown and increasing protectionism. Fierce China-Japan rivalry. Regional conflicts.
- Limited reform of EU institutions. European Security Council established, and a common border set up. Reduction of powers of the Commission and the European Court of Justice. Enlargement by five central eastern European countries, but further enlargement drags on.
- Economic policies conditioned by security concerns. EMU working under close political supervision. Single market hampered by re-assertion of national industrial policies.
- Slowdown in globalisation. World trade and policies increasingly organised around regional blocs. Neglect of gaps in world economic order, especially international finance and development.

"Bazaar"







Complexity managed by "marketising" decision processes

This scenario assumes there will be new technologies rapidly changing the fundamental principles by which industry and commerce are structured. Social and governmental institutions will be weakened at the national and international level. Industrial nations are fragmented into many differentiated and competing sub-national regions and interests.

It is a "market world" in 2015, where the United States' extended economic boom shows that free market policies, corporate restructuring and entrepreneurship offer a model for the rest of the world, leading to increased global integration, unprecedented technological innovation, pressures for independence of thought and action, and rising standards of literacy in most parts of the world.

Free market reforms have moved governments everywhere to downsize, deregulate and privatise. The pace of innovation breeds now opportunities at astonishing speed.

The thesis is: let markets work, turn loose the private sector, break down the barriers to free trade, and all will be Sooner or later, rapid economic growth and increasing prosperity will happen or "trickle down" in virtually every region of the earth. The rising tide floats all boats.

For Europe, this is a world that has witnessed the "triumph of trade over war". Western economies are optimistic and have returned to full employment. World trade continues to grow in a spectacular fashion, and, helped by technological innovation, productivity has soared. The economic ideas of the developed countries are dominating everywhere, with most states in the world (with a few notable exceptions) having espoused the principles of free trade and disengaged from controlling economic activity.

Europe has followed suit, breaking with long-held

traditions of extravagant social expenditure and strong public intervention. In the space of a few years, thanks to a series of radical reforms, the EU has gone from wobbly competitiveness to a performance comparable with that of the United States.

As for the social cataclysm predicted by some, it has yet to happen. Inequality and exclusion have increased, but remain at tolerable levels, judging by the absence of mass popular protest.

The real estate industry enjoys a sustained revival, offering an attractive and rewarding career path for graduates, and great opportunities for industry-orientated research.

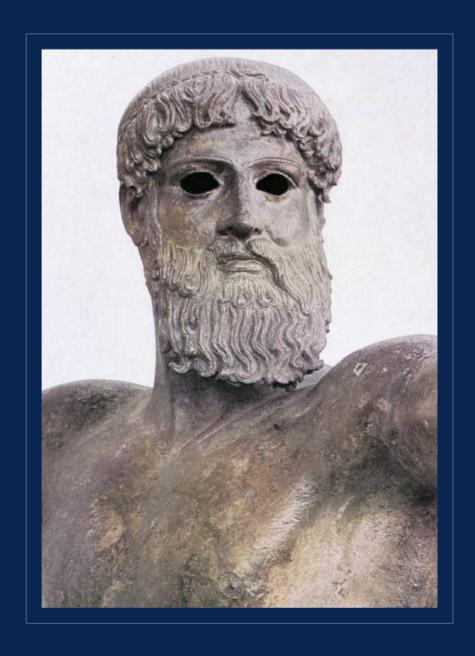
The following trends are apparent:

- Commercial and industrial structures dissolve as rapid technological and organisational change occurs.
- Supply chains become supply webs which can be reconfigured rapidly in response to changing events.
- Commercial returns in new products and services swiftly become eroded through "commoditisation" by which global resources are deployed to converge on international best practice.
- Intellectual property becomes ever more valuable, and defending it becomes a central concern.
- Government becomes increasingly pragmatic, with policy and regulation focusing on distinct problems as they arise.
- Society tends to resemble a disassembled machine, with each part working to fit a particular purpose, but operating less and less as a whole.
- There is greater transparency, with much more informed judgements of performance.
- Regulation is concerned with special issues of governance such as transparency and access to data, so as to provide the information that markets, policy-makers and analysts require in order to avoid crude mistakes and economic disruption.
- Trans- and multinational corporations increasingly determine economic policy, and chambers of commerce influence political agenda.
- The entrepreneurism innate in developed societies generates enough wealth for communities to cope with most welfare
- Competitive positioning between cities and regions becomes ever more evident, with local facilities and capabilities nurtured to meet these needs (eg software, biochemicals, entertainment, tourism, health, education and retirement).
- Developed and many developing nations become far more fragmented and like a cluster of city states.

- Education is available at a price.
- Security is provided by private operators.
- Production methods and consumer patterns increasingly converge.
- Concern about social and environmental issues is slow to emerge.
- There is a "greying" of the population in the developed world.
- Europe and America vie for trade with China.
- Widescale in-migration from developing to developed nations leads to a polarisation in society, with consequent conflict and the formation of ghettos.
- The threat of urban terrorism (nuclear and toxic) from the disadvantaged developing world grows.
- "Third Industrial Revolution" accompanied by an explosion in entrepreneurship. Virtual enterprise. Unchallenged leadership of the America model in technological innovation and enterprise organisation. Shareholder value.
- Strong emphasis on self-reliance. Widespread feeling of insecurity. Residual family solidarity. Materialism and consumerism. Demonisation of "idleness" and acceptance of social exclusion.
- New political elite take on bureaucracy and the trade unions.
 Regions vie against central governments national and EU.
 "Inequality of governance" across localities and social groups.
 Importance of lobbies and private media. Law and order politics.
- People withdrawing from public life. Mistrust of collective action. Success of single-issue non-governmental organisations.
- Downsizing of the public sector. Outsourcing of public services.
 Private sector taking over traditional public functions.
- Free trade and market integration bind the continent together.
 Lack of determined policies to deal with rising insecurity becomes a problem.
- "Fast and loose" enlargement of EU towards central and eastern Europe poses problems regarding non-respect of the rules. Some countries emerging as "economic tiger". Absence of major conflicts and lack of EU security policy. Threat of organised crime.
- Mediterranean becomes a free trade area. Economic growth only partially offsetting demographic and environmental problems.
- The USA demonstrates superior economic performance and unchallenged world leadership. Continuing pivot of NATOcentred network of alliances, but diminishing requirement for military intervention.
- Russia experiences gradual political stabilisation and economic recovery. Reinforced bilateral relationship with USA. Stronger relations with China.
- Asia enjoys successful economic transition along free market lines. Economic growth in China resulting in increasing regional inequalities and weakening of central power. Erosion of economic supremacy and weak regional role of Japan.
- Some institutional reform of EU. Weakening of common

- policies. Nationalisation of CAP. Deep cuts in structural funds. Commission reduced to Single Market authority. Enlargement by 10 central eastern European countries, plus Cyprus, Malta, EFTA countries and Turkey.
- Deregulation and individualisation of industrial relations.
 Terminal decline of trade unions. Downsizing of safety nets and privatisation of social services, expansion of private pensions and private health care.
- Tax and public expenditure reduction. EMU working without the need of enhanced policy co-ordination. Project of worldwide exchange rate arrangement. Reduced industrial policies targeted at SMEs and R&D.
- Steadily increasing freedom of trade and investments. Growing importance of "intangibles". Complete removal of trade barriers proposed over next 10 years. Insufficient attention paid to noneconomic issues such as crime and the environment. Increasing inequality.

"Socratic Systems"





Harnessing the knowledge economy

This scenario assumes there will be commercial and institutional renewal accelerating across the developed world. Policy-making and decision-taking become increasingly delegated and expert. Institutional improvements worldwide facilitate sustainable development.

It is a "transformed world" in 2015, where social and economic change gives rise to enlightened policies and voluntary actions that shape or supplement market forces. Civic society has the power to frame social and political agendas; there has been the "greening" of a growing number of global corporations; and the imaginative use of new technologies has expanded communications networks and services worldwide.

There is a trend towards a more peaceful, equitable and environmentally stable world. Greater access to information exists, power is more widely shared, new grass roots coalitions shaping the actions of governments and institutions have sprung-up, and the form of governance has generally been broadened.

Communities make use of market forces and private enterprise, but align free market forces with social and environmental goals, accepting economic competition but not losing sight of the need for making deliberate social choices and meeting basic human needs.

For Europe, this is a world of "shared responsibilities". Europe has undergone profound changes over the past 10 to 15 years. In a favourable world economic climate it has found a way of reconciling its ideals of solidarity and respect for the individual with technological innovation and the pursuit of economic efficiency. The explanation for this change undoubtedly lies in the transformation of the public sector.

After 10 years of ambitious reforms the political authorities and administrations have become facilitators or partners, helping individuals, firms and civic associations to assume their share of responsibility for the life of the community.

Finance for research has increased enormously but criteria for disbursement are strict and selective. The EU has embraced expansion and integration, which has led to a greater degree of legitimacy being conferred on it. As a result, substantial progress has been made in such areas as social affairs and environmental protection. The EU has also become more self-assured in its relations with the rest of the world, and forged a set of solid political and economic partnerships.

The following trends are apparent:

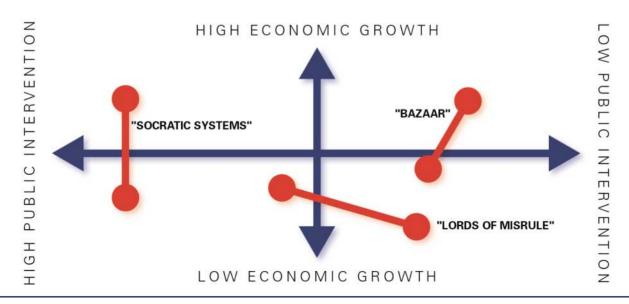
- Technology enables almost anything to be done; deciding what to do becomes a critical skill.
- Fast change takes place, but with cadres of informed and active organisers of events supervising the machinery in order to see how best to make use of it.
- In both public and private sectors managers seize on mechanisms for transferring knowledge from individual expert domains to systems-related policies.
- High returns attract focused investment, leading to rapid economic growth, critically relying on new kinds of capability and expertise that open unbounded horizons.
- Research and strategy departments in successful organisations are replaced by a concentration on building interactive flows of process and teamwork, so that relevant knowledge is defined, configured, refined and deployed.
- · Knowledge management is king.
- The agencies of the state are locked together in a web of mutual scrutiny and task-setting.
- Central government becomes a many-layered concept with the primary task of using knowledge management to seek harmonisation among expert agencies, in process design, spotting issues in the longer term and posing the major questions around which national debate takes place.
- The populations of the wealthy nations are old and a pensions time-bomb is beginning to tick.
- There is increasing concern about the development and spread of dangerous technologies.
- A recognition exists that sustainable development requires institutional growth and modernisation.
- Wealthy nations feel that their own well-being depends on a hegemony of military and economic power, increasingly aimed at influencing or changing governments of nations that are managed erratically, exploitatively or ineffectually.
- A growing movement exists towards a discovery, or rediscovery, of certain fundamental values.
- Migration pressures build up between wealthy and poor nations.
- · Education is more accessible and affordable.
- Tax reforms favour ecologically beneficent industries and punish polluters.



- Electric-powered transportation becomes an economic and efficient reality.
- There remains a threat of urban terrorism.
- "Third Industrial Revolution" facilitated by policies for reorientation of technologies toward the users – public/private partnerships. Stakeholder model of enterprise. "Win-win flexibility".
- Renaissance of social/ecological awareness. Belief in responsibility and civic solidarity. Widespread tolerance of diversity. Some political correctness.
- New politicians contest against old bureaucrats. European initiative for reform of public sector. Subsidiarity at all levels.
- Important minority of "active citizens" conditioning political and community life. Broad consensus for reform of public sector and social institutions.
- Reform of public sector according to the principles of decentralisation, transparency, responsibility, and subsidiarity.
 Increased role of evaluation and control mechanisms relative to regulation and implementation. Shrinking of traditional ministries.
- EU enlargement accompanied by forceful neighbourhood policy based on "partnerships" with adjoining countries. Regional security improved.
- Gradual enlargement of central and eastern Europe accompanied by robust neighbourhood policies. Development of a pan-European security umbrella addressing soft-security concerns.
 Positive socio-economic development in the region.
- Gradually improving social and economic situation around the Mediterranean. Strengthening of economic and political EU/Med co-operation. Democratisation making progress.
- The USA experiences continuing economic dynamism. Less political involvement and occasional clashes with a more

- assertive Europe. Multilateral approach to international relations slowly gaining ground.
- In Russia there is political stabilisation and economic recovery.
 Reinforced bilateral relationship with the EU. EU-Russia free trade agreement.
- Asia enjoys successful economic transition, but some inward recentring. Strengthening of regional organisations around Chinese leadership. China increasingly involved in global cooperation. Economic recovery in Japan, with ambitious in-depth reform, but persistently weak political role.
- Considerable reform of EU institutions. Enlargement to 10 central and eastern European countries, Cyprus and EFTA countries. Strengthening of new common policies towards foreign and security policy, justice and home affairs. Decentralisation in implementation. Increase of EU budget. Council reformed on "collegial" principle.
- "Competitive corporatism". Trade unions reaching out to noncore workers. Employers renouncing individualisation of industrial relations. Government implementing labour market and welfare reform with employment subsidies and personal social insurance accounts. Local confidence and employment pacts.
- EMU working in the framework of enhanced policy coordination. EU cyclical stabilisation mechanism. EU rules for taxation of mobile factors. Increased co-ordination of education and R&D policies targeted at learning information and communication technologies.
- Globalisation and regionalisation advancing. EU-led attempts at greater international co-ordination in economic and noneconomic areas such as development, crime and the environment. Emerging global civil society increasingly integrated into international institutions.

EXHIBIT 3: PLOTTING THE SCENARIOS





The scenarios

The three scenarios constructed ("Misrule",
"Bazaar" and "Socratic") can be used to test policy options in three separate dimensions:

- as three distinct alternative futures 15 years hence, or
- to describe a continuum of changing events and circumstances over time, or
- as a portrayal of different parts of the world at the same time.

Some of the more significant findings from the scenario planning process are listed below as relating to city planning, property investment, property development and property consultancy. Note: there is no ideal; readers may wish to re-allocate these issues to different scenarios

City planning

- Urban densities will increase, with planning policies everywhere directed towards optimising the use of land in existing urban areas and containing sprawl.
- The management of security will make some cities more prosperous than others.
- There will be a polarisation between cities, resulting in a preferential ranking by investors, developers and occupiers.
- Cities will have to compete as businesses, with superior quality real estate as one of their prime assets.
- The goal of sustainable urban development will permeate every policy field of city government in advanced economies.
- n Environmental quality in urban development will be placed at a premium.

Property investment

There will be further disaggregation in traditional sectors (retail, office and industrial) and the rise of new

- ones (health, education and leisure).
- Prospective occupiers will have greater influence on investment and development decisions.
- International real estate markets will become more obviously tiered.
- Real estate finance will become ever more sophisticated as property markets are further integrated with other capital markets.
- The future economic value of buildings will be determined more by function and less by location.
- in Investment in education in the "learning society" will influence decisions.

Property development

- Safety and security will be more assiduously sought, and the notion of "designing-out crime" will gather adherents.
- Walled or "gated" development will be increasingly in demand.
- Quality of location will predominate, with people rather than companies determining where economic activity and development takes place.
- Mixed-use development will be much more common.
- in Building specification will become increasingly environmentally conscious and conscientious.
- m Buildings will have to be more flexible in terms of structure, use, expansion, divisibility, access and heating, lighting, ventilation and communication services.

Property consultancy

- Property consultants will have to alter their perspectives towards location, time, distance, use, ownership and responsibility, as well as value, in meeting the transforming demands for workspace.
- Bribes and other unaccounted-for payments to "accelerate" decisions will dominate consultancy.
- The professional culture of the real estate industry will continue to change in the face of fiercer competition, stricter standards and heightened accountability.
- Real estate professionals, especially those in the corporate realm, will have to learn the economic and operational trade-offs between "occupancy" and "connectivity" considerations.



- in Technologically, real estate at every scale is going to get "smarter and smarter".
- n Partnership arrangements between public and private sectors, and alliances between professional disciplines, will expand and develop.

Property sectors

The following issues are suggestions only; readers may wish to re-categorise into alternative scenarios for each of the different types of real estate.

Office, workspace and productivity

- Offices will be more like condominiums, associations for temporary residents gathered together for their mutual convenience.
- There will be an increasing number of people and corporations choosing where to locate for tax reasons, so that fiscal policy with attractive tax regimes will act as a catalyst for growth and have a significant impact on property investment and development.
- Niche markets in all sectors of the property market will develop and strengthen.
- & Knowledge workers will break-off from large corporations and form new virtual and transient alliances, choosing where they live and work, and demanding customised accommodation and facilities.
- Fiscal measures for urban regeneration will be more popularly applied, but more focused.
- Prefabrication, customisation and smart new materials will assume more and more importance in the construction and development processes.
- in The growth of knowledge-based business operations will stimulate the development of top-flight, suburban, campus-style settings for individual corporations and communities of similar producers alike.
- in Governments in older developed economies, notably Western Europe, will confront the issue of traffic congestion and inadequate transport planning policies.
- in The role of facilities management in the broad field of property will grow.

Industry, warehousing and distribution

Industry will seek proximity to targeted "protected" consumers, so that smaller plants in more locations

- will replace the larger conventional factory.
- The distribution industry seems to be in a constant state of radical evolution, and with it the distribution property sector, being particularly susceptible to such issues as road-pricing, "just-in-time" policies, rail freight economics, handling and packaging technology and resistance to out-of-town development.
- In all aspects of real estate decision-making, the use of expert systems will assist in improving the formulation and implementation of investment, development and management evaluation.

Retail, leisure and spending

- Continued disaggregation will occur in the hotel sector, where the stratification between full service, limited service, budget, aparthotels, extended-stay and luxury hotels will be more distinct.
- Eleisure and recreation will play an increasingly important part of everyone's life, and form a growing challenge to the creative abilities of the real estate industry.
- The keynotes to consumer satisfaction in all sectors will be quality, service and reliability, with a movement away from mass-market standards to nichemarket differentiation.
- in Shopping centres and town centres will have to be more fun in the future, offering as much entertainment as retail.

Residential, rest and community

- The house will become more than a home providing a base for home working, a study centre for the whole family, a safe haven and an integrated system for entertainment and social contact.
- Health parks, as a sub species of the business park, will spring up, providing a wide range of health and medical care related activities and facilities.
- The propensity for proprietary ownership will decline as society becomes wealthier and more mobile.
- in Masterplanned communities, along North American lines, will become a more familiar feature of urban development worldwide.
- III Education will become one of the drivers of the 21st century, and commercial opportunities for real estate investment and development will abound.



The scenarios presented in this report raise an important issue; will these three scenarios replace more than 2000 years of cultural heritage across different countries of the globe?

Very broadly, we suggest that the world may be increasingly divided into zones:

Western European civilisation is based on the **Socratic** system of government, despite periods of war and unrest. But will this continue for the next few decades?

North America is based on the **Bazaar** concept of cultural change. Increasing, American corporations dominate the global economy. But how will this trend inter-act with other part of the world?

Africa appears to conform increasingly to the **Lords of Misrule** concept, with national and tribal strife apparent in several countries. But will this continue or will global forces result in a change?

Other parts of the world remain far more difficult to categorise. It has been suggested that **Russia** is an enigma, but currently the **Lords of Misrule** scenario may be more applicable in some areas.

Japan, and to some extent other parts of Asia (including China), fall into the Socratic scenario, although it is clear that the Bazaar scenario is also changing Asia, and some countries currently display elements of Lords of Misrule scenario.

The **Middle East** and **South America** remain a fascinating **mixture** of all three scenarios.

Global real estate scenarios do not claim to have provided the answers to the future, nor are they a reliable predictive tool.

The purpose is to raise awareness. We live in turbulent times where major, or even minor, events can radically change our lives. Success will depend on being prepared for the unexpected.

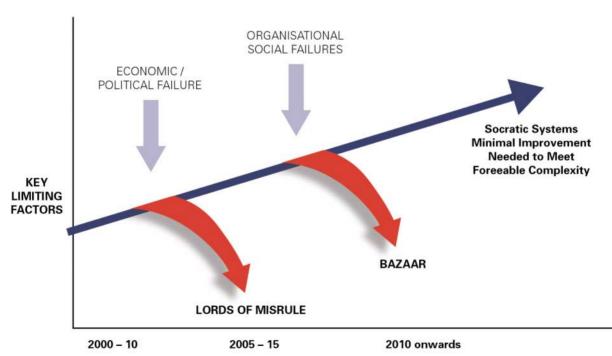


EXHIBIT 4: OVERLAPPING PHASES



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Biographies

John Ratcliffe

John Ratcliffe is a chartered surveyor with over thirty years experience as an academic and a consultant in the fields of urban planning and real estate development. Currently he is Director of the Faculty of the Built Environment at Dublin Institute of Technology which is the largest university level institution in the Republic of Ireland

The author of a number of books and numerous articles on land and property matters, John Ratcliffe has also acted as a consultant to national and international organisations and agencies in both the public and private sectors. He is currently Chairman of the Policy and Practice Committee of the Urban Land Institute (Europe).

Over the past six years or so he has become heavily involved in the application of the Foresight Principle and the use of Scenario Planning and Learning in the exploration of issues and policies relating to the built environment.

Dr Angus McIntosh

Dr Angus McIntosh joined King Sturge as Head of Research in 2000 from Insignia Richard Ellis where he was previously a Director and Head of Research for 7 years. He also ran the research team for Healey and Baker for 9 years after enjoying a career in both the public sector and private practice and as a University Lecturer.

A specialist land economist, as well as being a Chartered Surveyor, Dr McIntosh is ideally suited to provide the level of research that will be required in a project of this nature. Over the years he has been involved with a wide variety of consultancy assignments in the UK and overseas.

These include; strategic research for the retailers Mappin & Webb, Gap Inc, and Asprey, market reports for Nomura of Japan, investment analysis for Scottish Power and Old Mutual of South Africa and office location studies for Prudential and National Power.

Across Europe Angus wrote the first definitive market reports for the RICS on Prague, Budapest and Warsaw in 1990, was involved in the first in-depth analysis of the investment performance of French Shopping Centres, and wrote feasibility reports for projects in Spain, Portugal and Germany.

Angus has also worked with a number of UK local authorities including; Reading Borough Council, the London Borough of Islington on the Kings Cross project, the Royal William Yard project in Plymouth and the London Borough of Brent in connection with leisure and retail development and the Wembley Stadium project.

perty speculation in Eastern Europe, January 2010. Working week fixed at 20 hours - EU Directive, tember 2012. Break-up of World's Leading Real Estate Consultancy "Back to Basics - Back to Base" state ctors, April 2004. City office tower sold for 100 euros, July 2007. Affordability for all - almost achieved.

LOCATIONS

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Southampton • Swindon

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