www.pwc.com/jg

Asset Management 2020 A Brave New World

6 March 2014



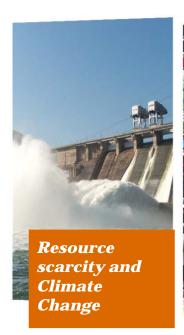
Introduction

Karl Hairon

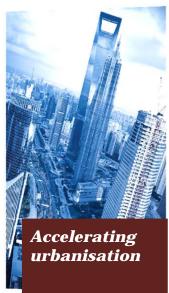
Why do Mega-trends matter?

Will Day

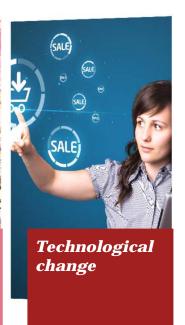
Which ones matter most?





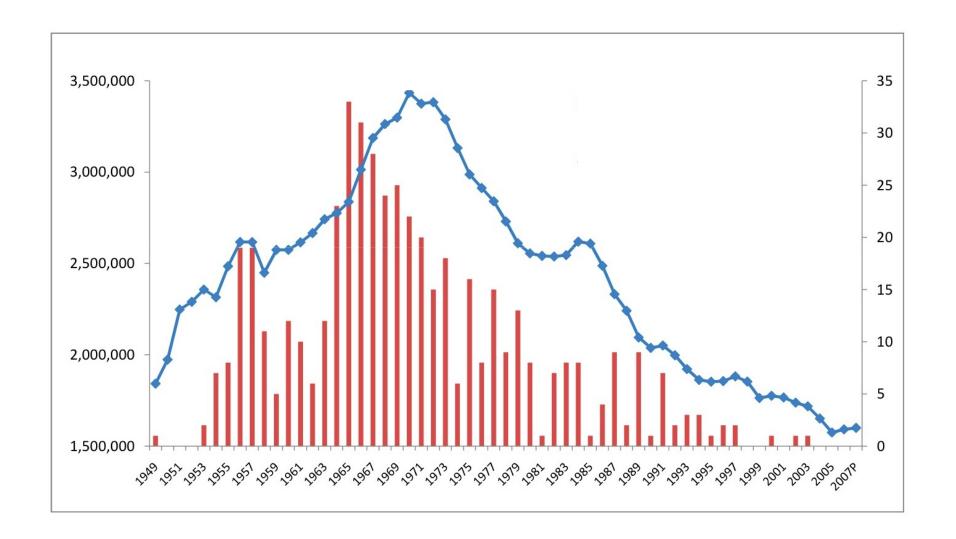






Prediction is very difficult, especially about the future.'

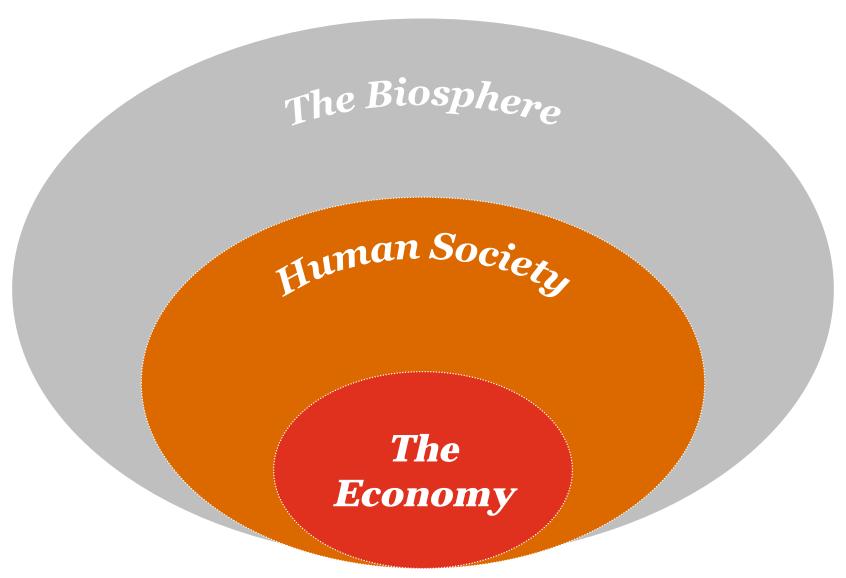
Niels Bohr, Danish physicist (1885 – 1962)





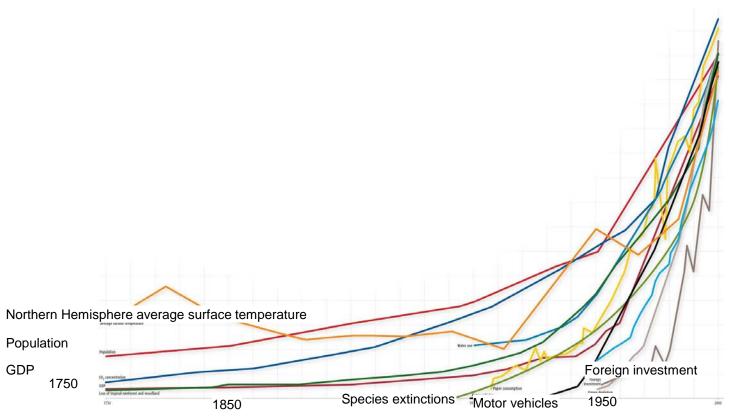








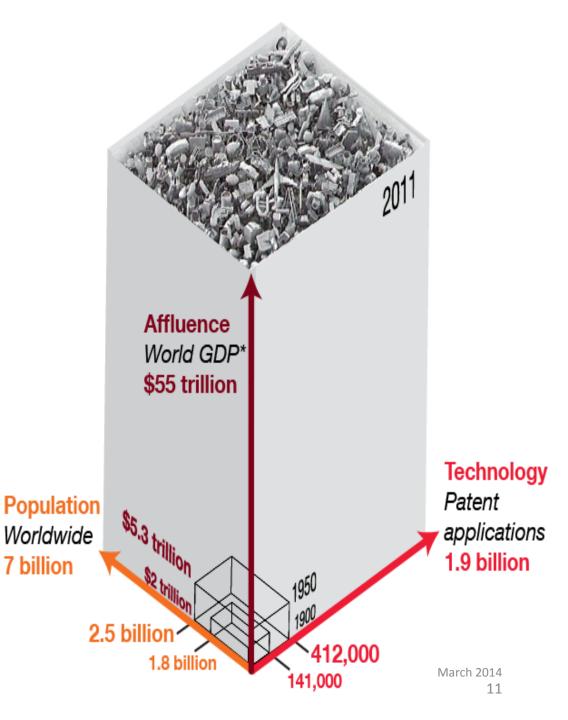
The great acceleration



New Scientist 2008 from Steffen et al 2004



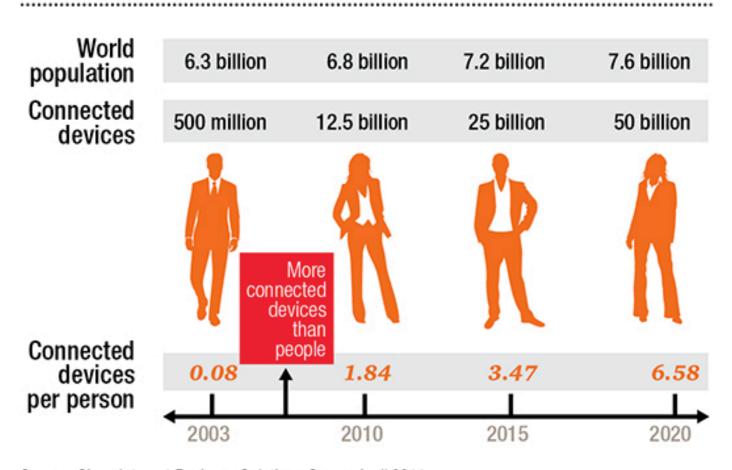
Our impact is increasing exponentially



Source: National Geographic

PwC

The rise of the 'Internet of Things'



Source: Cisco Internet Business Solutions Group, April 2011

12

Technology – Problem or solution?

Decarbonising? – LED, Solar, renewables
De-materialising? – Downloads
Closed loops? – Recycling
Efficiency? – Metering, insulating, IT
Communicating?

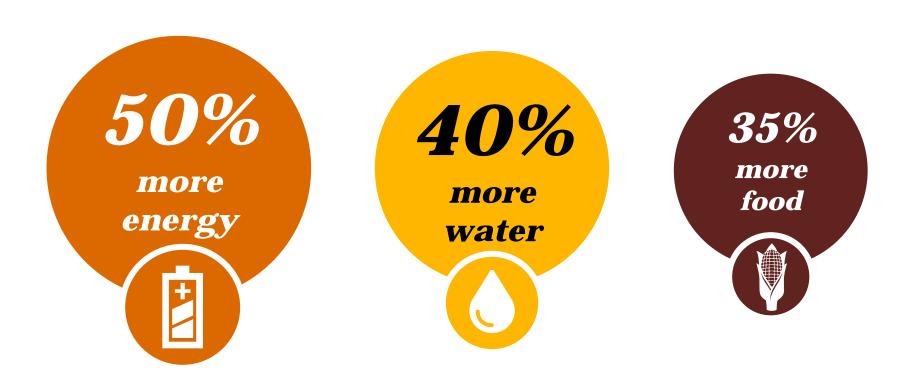
Or enabling overshoot?

13

Manufacturing?



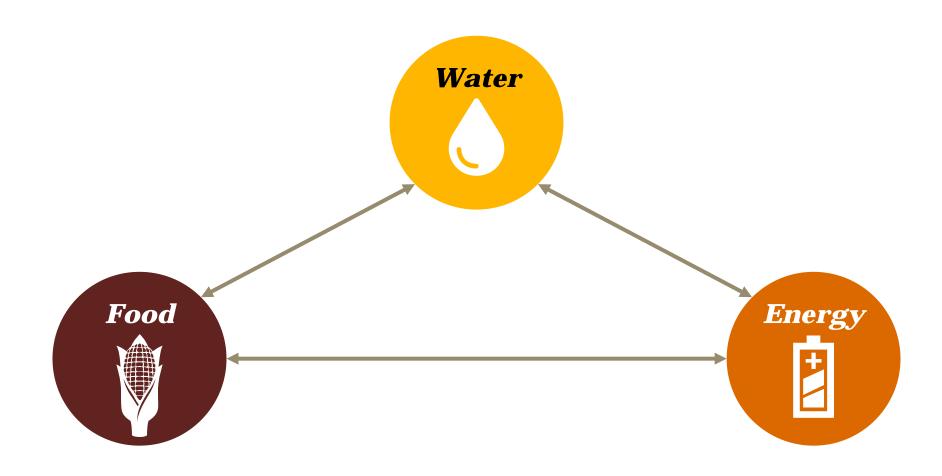
With a population of 8.3 billion people by 2030, we'll need...



Source: OECD; Dan Hammer, Center for Global Development



The Food-Water-Energy Nexus



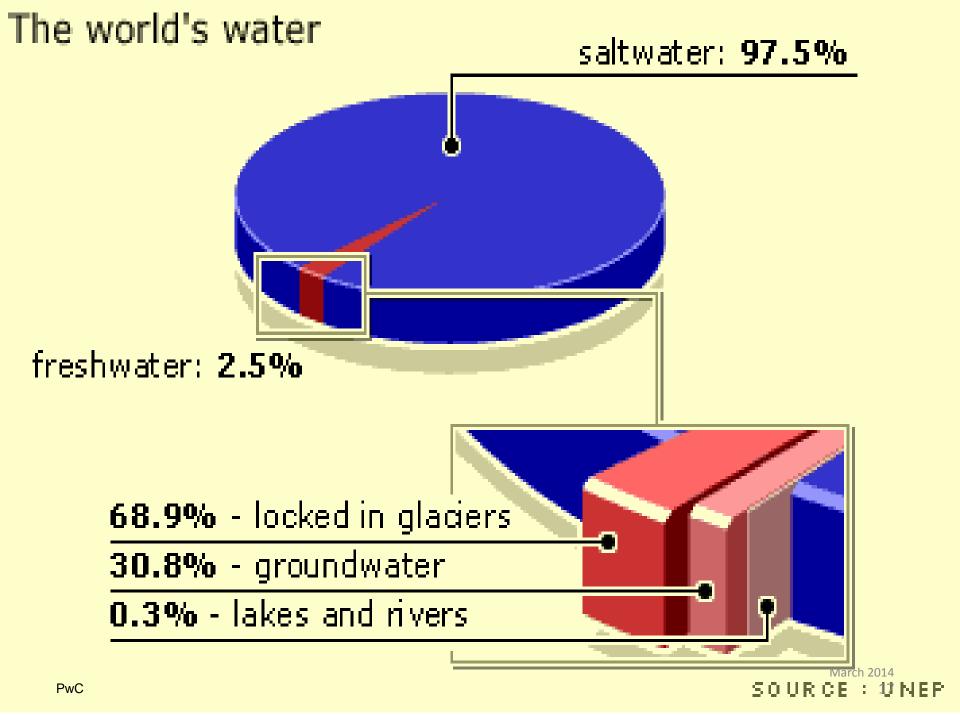
Scarce resources



All the water and air in the world. On the left, all the world's water (some 1.41 billion cubic kilometers) is shown as a ball covering central Europe. On the right, the entire atmosphere (5140 trillion tonnes) at sea level pressure is a slightly larger ball.

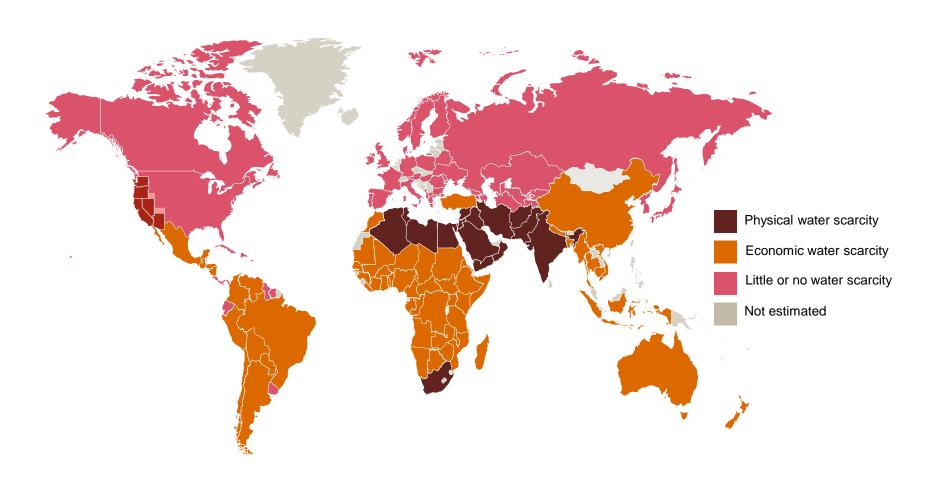
Composed by Dr Adam Nieman from topographical data

March 2014





Projected water scarcity in 2025



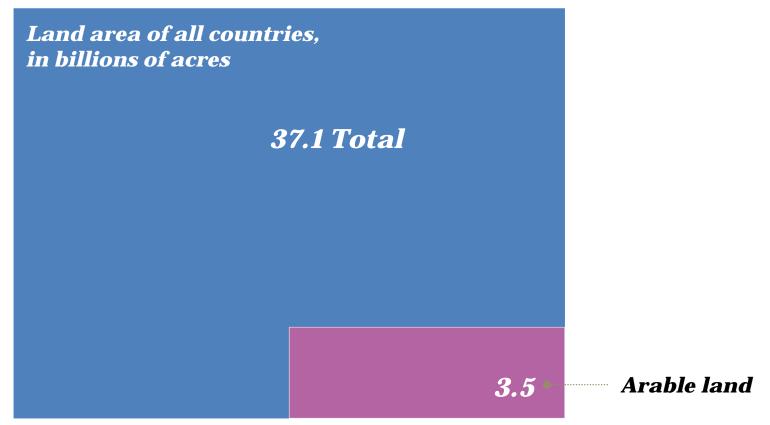


To meet the increasing demand from a growing population, we will need to produce more food in the next 40 years than has been produced in the previous **8,000** years.

Jason Clay, Senior Vice President WWF



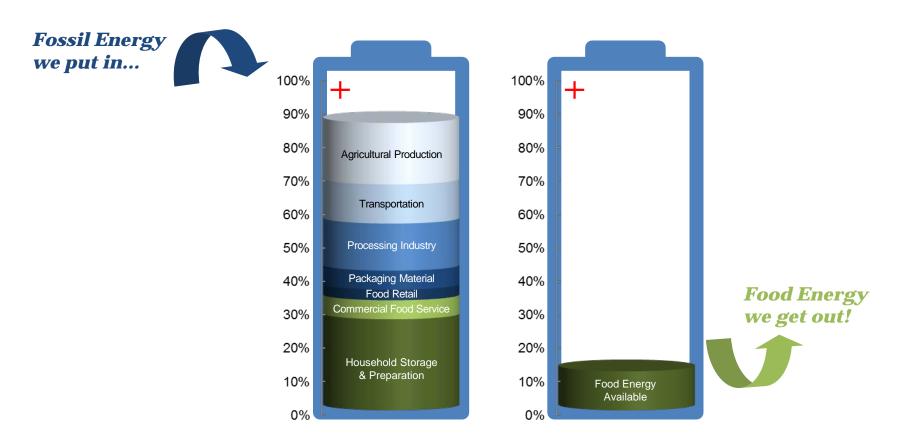
There is less land than you think



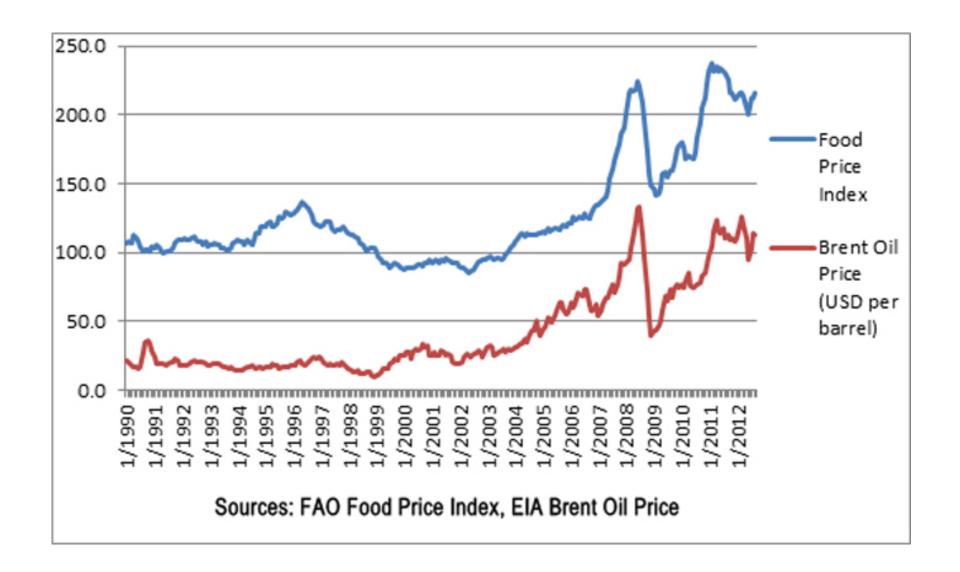
Source: Center for Sustainability and the Global Environment, University of Wisconsin



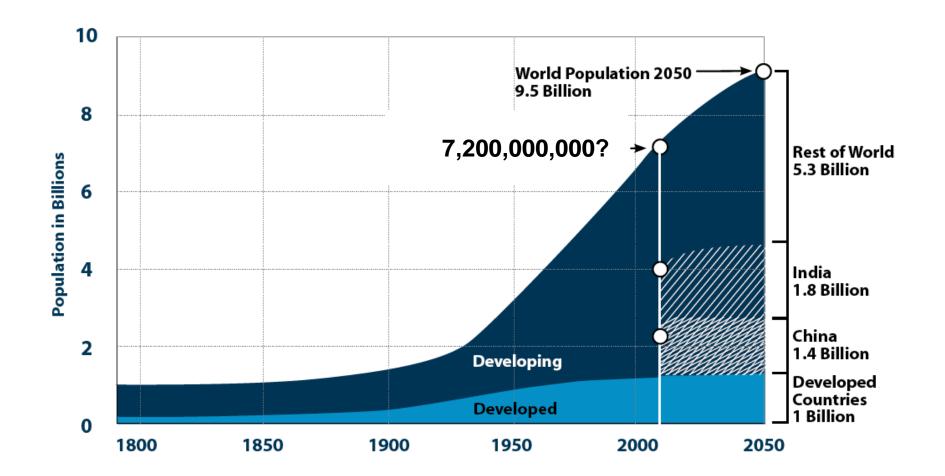
Food production is very energy intensive



Source: University of Michigan study by Hellar and Keoleian done in 2000



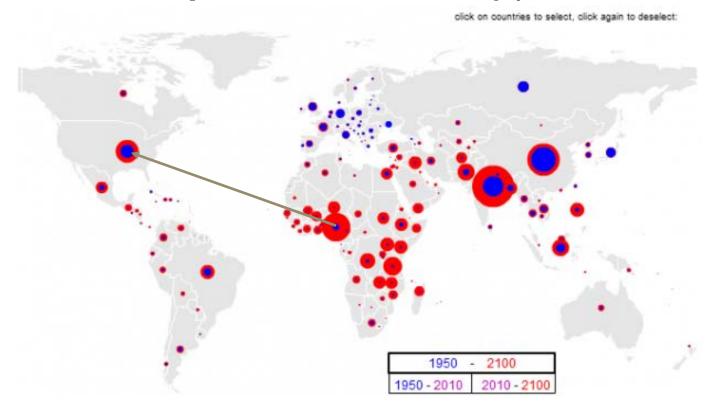
22



23

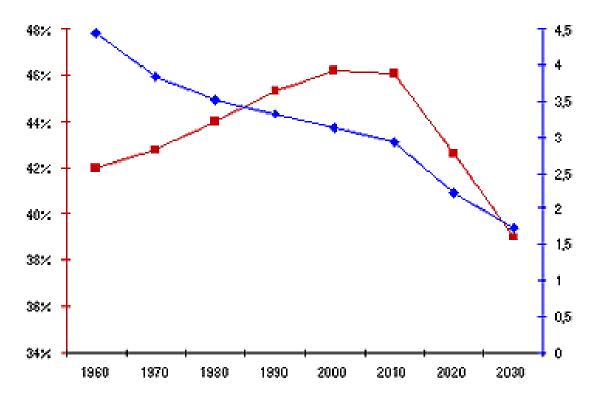
Country populationPast, present, future

This interactive visualisation depicts dramatic population changes, based on data released by the **UN Department of Economic and Social Affiars/Population Division** for 1950 - 2010 and a projection for 20100.



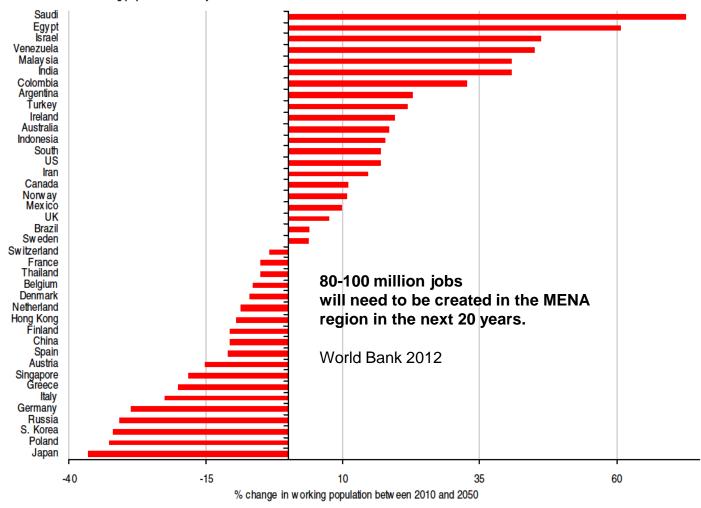
2/3rds

Employment ratios for OECD countries



- Percentage share of total population in employment
- Numer of employees for one person aged 65 and over

4. The outlook for working population is vastly different across economies



Source: UN projections, HSBC calculations

27



Urban economic clout moves east.

World's top 50 cities, ranked by GDP1

Dropout-included in 2007 but not in 2025

Top 50 city in both 2007 and 2025

Newcomer-absent in 2007 but included in 2025

Already, 100 cities account for 30 percent of the world's economy.

Newcomers in 2025	Dropouts in 2025
Bangkok	Athens
Beijing	Barcelona Citi
Chengdu	Denver
Chongqing	Detroit
Delhi	Hamburg
Doha	Lille
Foshan	Melbourne
Guangzhou	Minneapolis-St. Paul
Hangzhou	Munich
Mumbai	Nagoya
Nanjing	Oslo
Shenyang	Rhein-Main

Rio de Janeiro

Stuttgart

Taipei

Vienna



Cities consume 75% of the world's natural resources and produce 50% of the world's waste.



Cities projected to be home to 70% of world population by 2050.



on map and in lists refer dictions, aggregating with 14 of the 17 world's mega-cities located on coasts. hr in Germany; Los Angeles, pai and Thane in India).

Source: McKinsey Global Institute

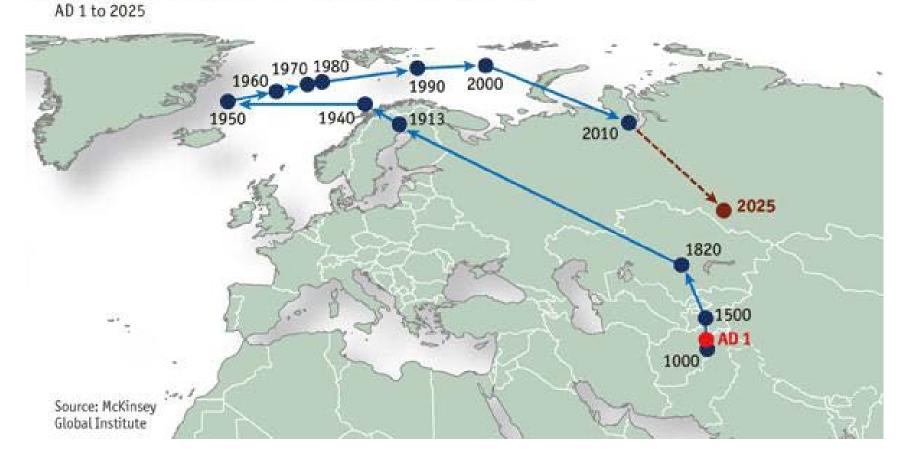
Shenzhen

Tianjin

Wuhan

Xi'an

Evolution of the earth's economic centre of gravity



Positive proof of global warming. 18th Century 1900 1950 1970 1980 1990

Carbon emissions and sinks since 1750



Where our carbon emissions have come from: carbon emission sources 1750-2012 (Gt CO₂)



Where our carbon emissions have gone: carbon emission sinks 1750-2012 (Gt CO₂)

Notes: Both emissions and sinks sum to 1,997 Gt CO2. Land, ocean and atmospheric sinks represent the increased carbon dioxide absorption due to human emissions between 1750 and 2012. *Coal emissions are mostly coal but also include signficant biomass emissions. Gas emissions include a small volume of flaring emissions. Land use change emissions are the net change in carbon stocks resulting from human-induced land use, land use change and forestry activities.

Sources: IPCC (2007) WG1, Global Carbon Project, CDIAC, NOAA.

Further information: shrinkthatfootprint.com/carbon-emissions-and-sinks

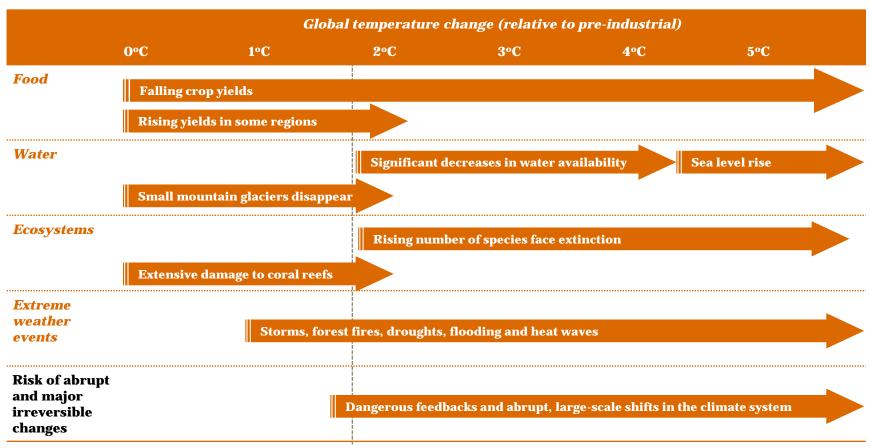
shrinkthatfootprint.com

March 2014

PwC



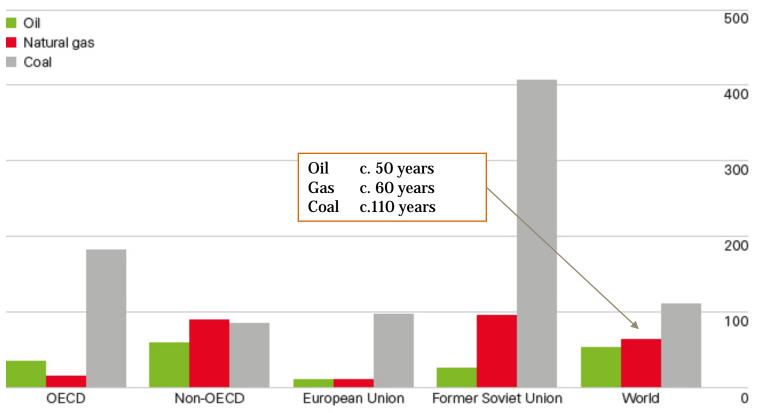
The significance of 2°C



Source: Stern review

Fossil fuel reserves-to-production (R/P) ratios at end 2011

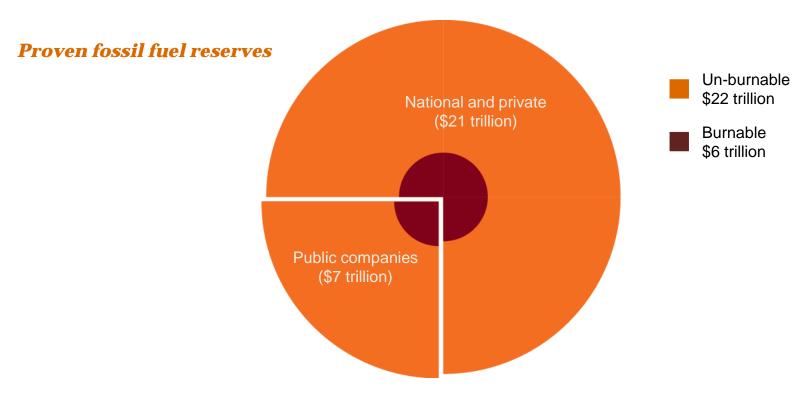




http://www.bp.com/extended section generic article. docategory Id=9041234 & content Id=7075077



Not all fossil fuels available should be used...

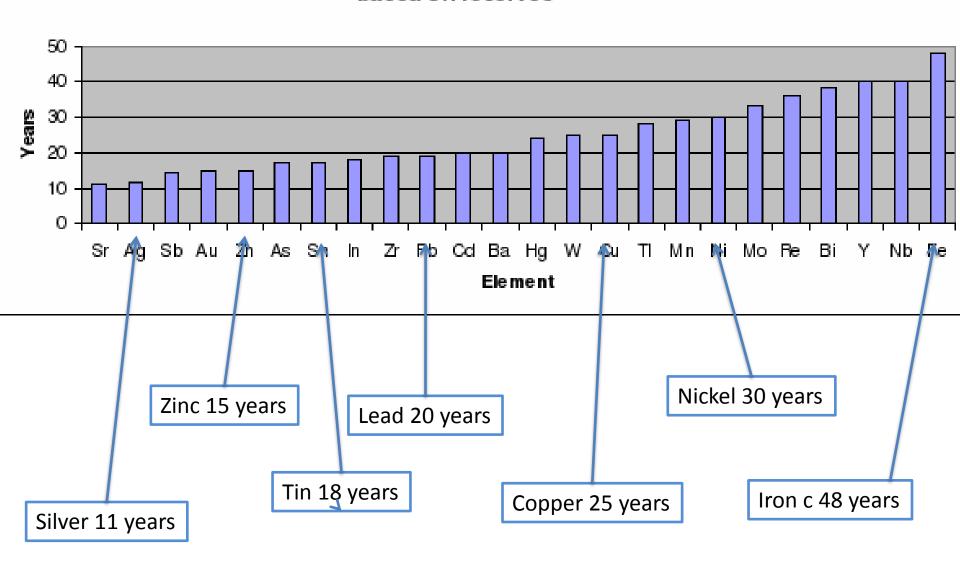


...and are they overvalued?

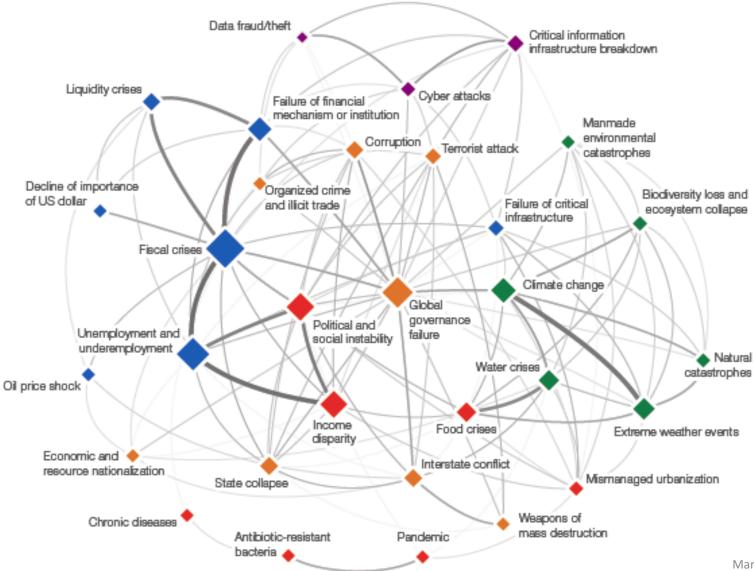
Source: Carbon tracker

PwC 35

Years left at sustained 2% annual primary production growth, based on reserves

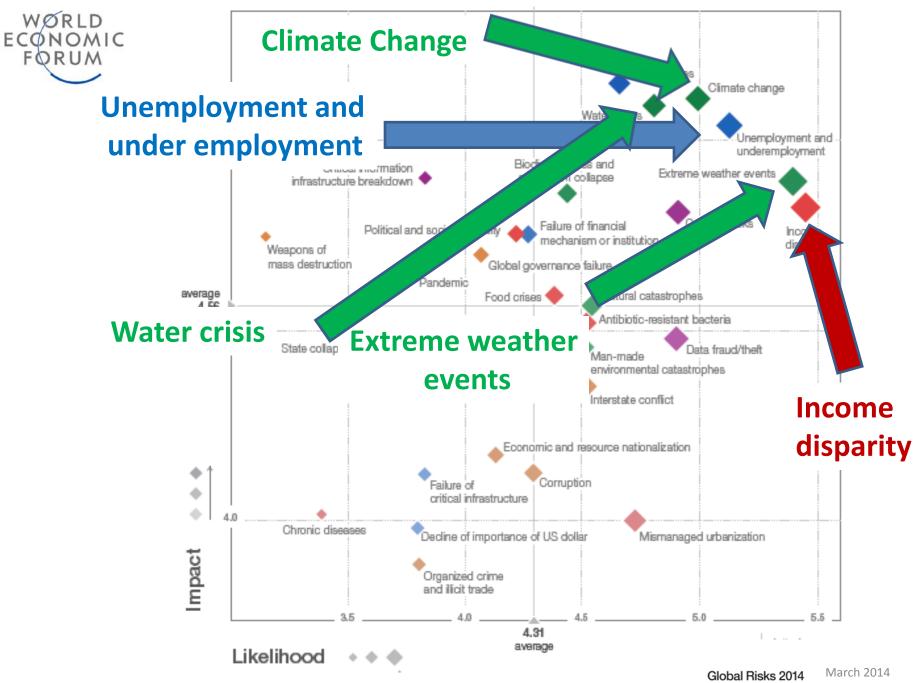




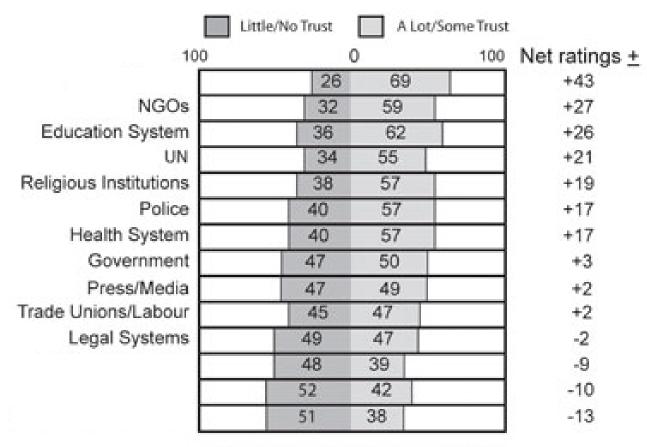


March 2014

Global Risks 2014

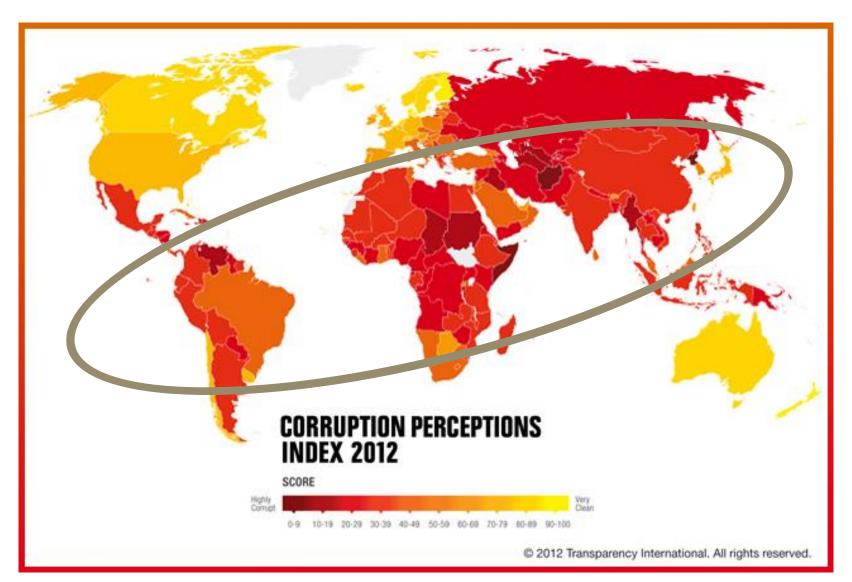


Trust in institutions to operate in society's best interest



^{* %} trust minus % distrust = net rating

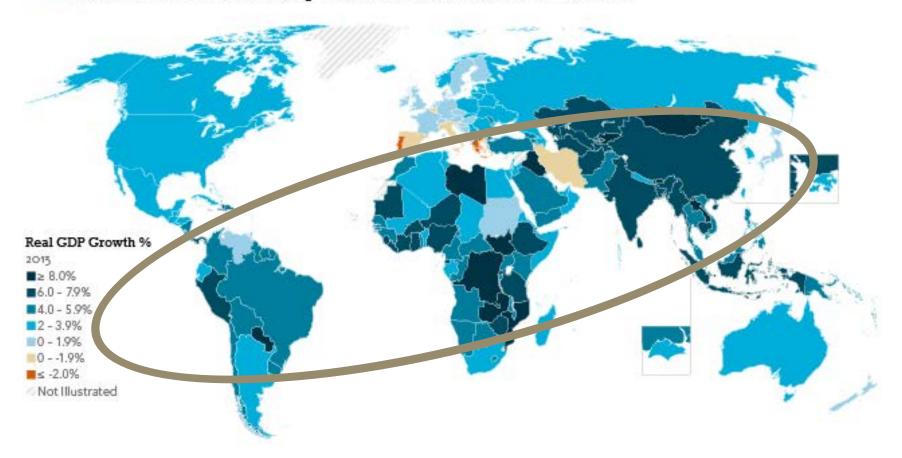
Source: WEF - - Voice of the People, 2002





DATAGRAPHIC COUNTRIES AND CONSUMERS

Real GDP Growth Prospects for Global Economies in 2013





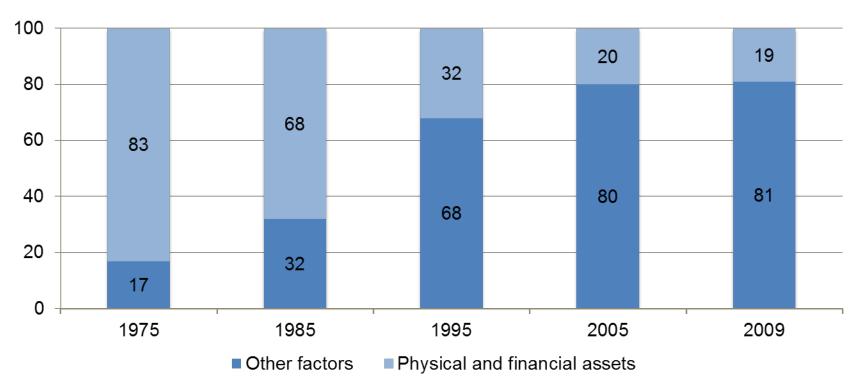
Changing expectations

'It may be legal, but is it moral?'



Value of businesses more linked to 'other' factors

Components of S&P 500 market value





We will incorporate ESG issues into investment analysis and decision-making processes

We will be active owners and incorporate ESG issues into our ownership policies and practices

We will seek appropriate disclosure on ESG issues by the entities in which we invest

We will promote acceptance and implementation of the Principles within the investment industry

We will work together to enhance our effectiveness in implementing the Principles We will each report on our activities and progress towards implementing the Principles

The Principles for Responsible Investment, UN-PRI





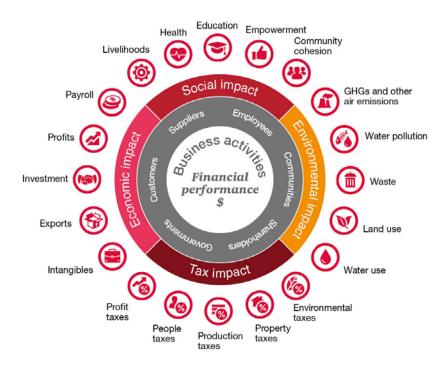














Option 1:

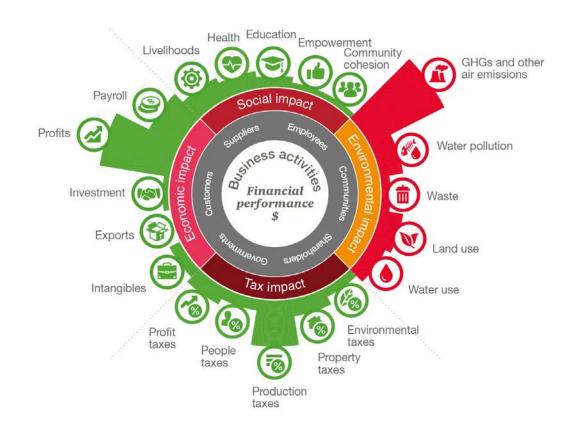
I'll import

Upside:

more water for the community

Downside:

higher GHG emissions





Option 2:

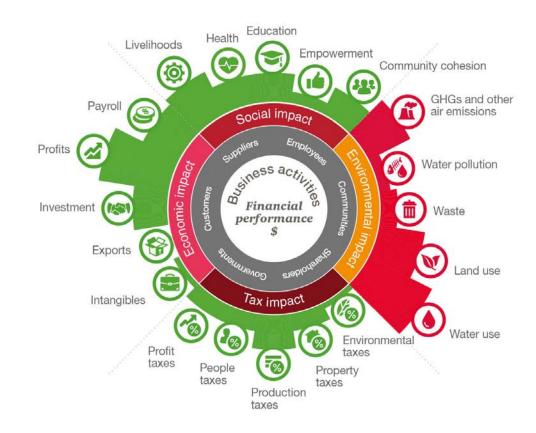
I'll grow locally

Upside:

communities benefit more (jobs, health etc) + lower GHG emissions

Downside:

more scarce water used



Mega-trends do matter



Asset Management 2020 A Brave New World

Robert Mellor

Agenda

- Mega trends and Highlights from PwC Global CEO Survey 2014
- **2** Strategic Drivers of Change
- 3 AM 2020 outlook
- 4 Conclusion

Mega trends and Highlights from PwC Global CEO Survey 2014

Mega trends

PwC's Industry Research focused on 5 areas



Customer Behaviors

- Social Networking
- Customer Expectations
- Risk Awareness
- Health

Talent Drain

Stakeholder Trust

Corporate Social Responsibility



- Changing Middle Class
- New Family Structure
- Dependency Ratio
- Aging



Urbanisation

New Growth Opportunities

Fiscal Pressure

Inflation/Deflation

Risk Sharing & Transfer

Social Security & Benefits

Distributor Shift

Partnerships



Information & Analytics
Devices & Sensors
Software & Applications
Medical Advances



Political

Regulatory Reforms

Geo-political Risk

Rise of State-Directed Capitalism

Terrorism

Tax Treatment

Sharia Compliance (Takaful)

Climate Change & Catastrophes
Sustainability
Pollution

March 2014

56

PwC

PwC's 17th Annual Global CEO Survey



Global business leaders

1,344

In countries across the world **68**

AM respondents

123

In countries across the world **37**

- Gauge CEOs' confidence in the global economy
- Search for growth is getting more and more complicated as opportunities become more nuanced, leading CEOs to revise the portfolio of overseas markets they will focus on.
- 3 forces that business leaders think will transform their business in the next five years:
- technological advance
- demographic change
- global economic shifts.

In short:

- the demands being placed on business leaders to adapt to the changing environment are increasing exponentially;
- CEOs are having to become hybrid leaders who can successfully run the business of today while creating the business of tomorrow.

57

PwC

Highlights from PwC Global CEO Survey 2014

Confidence in Growth

- 97% of AM CEOs are confident about the revenue prospects over 3 years
- 58% plan to expand their workforce in the next 12 months
- 41% intend to expand through M&A, JVs or strategic alliances

Preparing for a brave new world

53% are changing their strategies to invest in technology

Regulation & Trust

- 80% worry over threats from over regulation
- 78% worry over threats from fiscal austerity measures
- 46% consider that regulation is improving product and service delivery

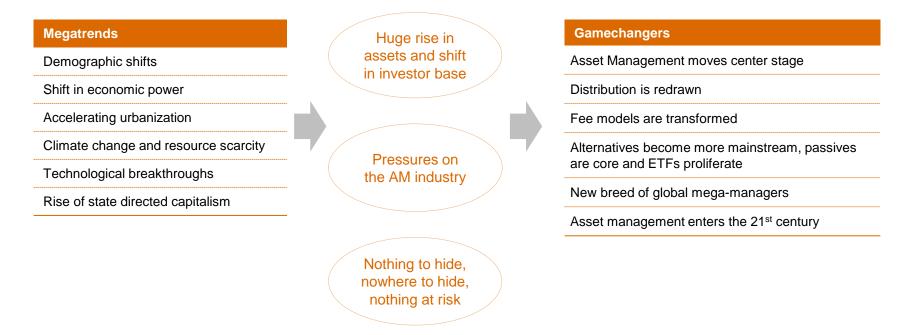
Strategic Drivers of Change The Industry expands, the investor base morphs

Strategic Drivers of Change

Megatrends and AM 2020: making the connection

Megatrends will continue to influence and shape the operating environment for asset managers in the years to come. In *Asset Management 2020, A Brave New World,* PwC shares perspectives on how the landscape will change by 2020 as well as how industry participants can prepare for future challenges and turn them into competitive advantages.

A brave new world



PwC

Huge rise in assets and shift in investor base

- Global investable assets for the asset management industry will increase to more than \$100 trillion by 2020.
- Increasing government mandated shift to individual retirement plans Pension fund assets will reach close to \$57 trillion by 2020
- Rise of SAAAME
 - 2010 Asia ex Japan contribution to Global GDP 18%
 - 2020 Asia ex Japan contribution to Global GDP 25%
- Mass affluent clients and HNWI in SAAAME regions are key drivers of growth
- A more prominent role for SWF in global capital markets

CEOs recognise a change in global population composition will impact the workplace

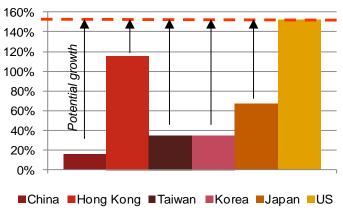
- The composition of the global population is changing radically. And that's going to have a big impact.
- By 2025, the population will hit 8 billion, and this growth won't be homogeneous; the West, Japan and China will continue to age, whilst Africa will experience a population explosion.
- The global middle class is expected to rise by 180% between 2010 and 2040.
- The growing number of high-networth and mass-affluent people, especially in Asia, is likely to lead to a surge in demand for asset management.

AM CEOs who believe demographic shifts will transform their business over the next five years.

Rise of SAAAME

Growing allocation of funds in SAAAME region



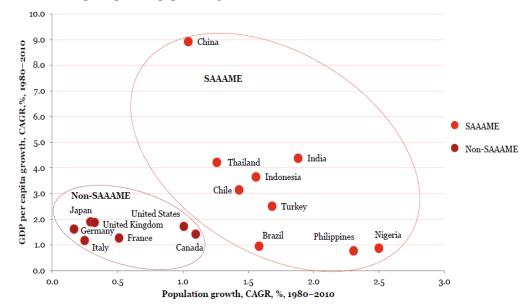


Source: Hong Kong Securities and Futures Commission, Asset Management Association of Korea, SITCA, Nomura, BCG, McKinsey, Lipper, Cornell University Press, Factiva, PwC analysis

- A growing proportion of the world's AUM are managed and controlled from SAAAME
- In contrast to the West, SAAAME markets are opening up, eg. China, Indonesia, India and Chile etc

 Potential for upside is much more obvious, given the economic and consumption patterns over time

Growth in GDP per capita and population growth for selected countries, CAGR, 1980-2010



Sources: United Nations Population Division; World Bank World Development Indicators; PwC analysis Notes: GDP per capita is in constant 2005 US\$

Mature markets (US, UK, Germany) and HK/China are priorities for growth in 2014

Mature markets first for growth

Over a third of AM CEOs eye the US for growth. Germany (21%) and the UK (16%) follow up in mature markets. Other sectors look more to emerging markets.

AM CEOs who rate the US as their top growth market

39%

China leads in emerging economies

In emerging economies, China is the priority for growth over 12 months. But Indonesia (5%) is also popular, with its large population and growing middle class.

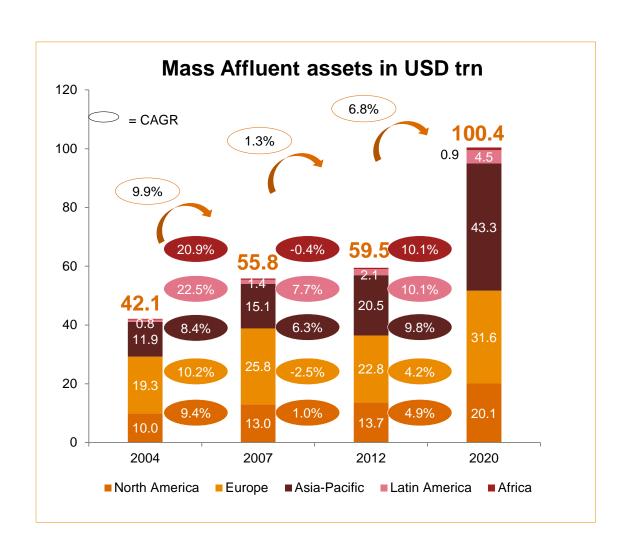
AM CEOs who think China is most important for their growth over 12 months

31%

Recovering Japan claims interest

And Japan is stirring interest as 'Abenomics' reflates the economy.

AM CEOs who see Japan as important for growth



65

Pressures on the asset management industry

- Rising costs as increased transparency to investors and regulators becomes mandatory.
- Impact and investment required in further developments of alternative distribution networks and establishing in new markets and responding to rapid evolutions of social media and technology.
- The search for and retention of talent will be critical as new investment products are developed and as the emerging and frontier markets become areas of focus.

Nothing to hide, nowhere to hide, and nothing at risk

- Myriad of regulations
- Focus on Transparency
- Focus on distribution expenses and the ultimate cost to the retail investor
 will have a significant impact on how firms distribute, the cost they incur
 for distribution and the disclosure of how distribution expenses are
 incurred during the sales cycle
- Anti-tax avoidance measures

Build extensive KYC and AML system

But what governments do could have a big impactThat's reflected in many of AM CEOs' top concerns

Over-regulation

AM CEOs, like their peers in banking and insurance, are concerned that regulation could put the brakes on their growth. It's a consistent worry over the past several years.

Percentage who are concerned about over-regulation

80%

Slow growth in developed economies

In spite of their rising optimism, CEOs are wary about economic growth prospects. This is a common worry across the sample, but more so in AM.

Percentage who are concerned about slow or negative growth

80%

Fiscal austerity

Even more than their peers across the sample, AM CEOs are also concerned that fiscal austerity could postpone or limit recovery.

Percentage who are concerned about government response to debt burden

CEOs say regulation is having a big impact It's affecting them in many ways

Operating costs

AM CEOs, like their peers in Banking and Insurance, find regulation is increasing operating costs.

Percentage who say operating costs are rising

83%

Ability to innovate

At a time when there's a need for new investment products, CEOs say regulation is preventing innovation. This is a common worry across the financial services.

Percentage who are concerned about ability to innovate

46%

But delivery quality is rising

CEOs do see some benefits from regulation. Almost half think it's improving the quality of product and service delivery.

Percentage who see product and service delivery standards rising

Trust is still being rebuilt, five years on from the crisis

Governments & regulators have less trust in sector

Five years on from the crisis, almost half of AM CEOs think government and regulators trust them even less.

AM CEOs who see levels of trust declining

45%

Customer trust may be improving

Customer trust appears to be improving slightly. Almost four fifths of CEOs say it's improved, while slightly more (42%) think it's stayed the same and 20% say it's worse.

AM CEOs who think customer trust has improved over 5 years

37%

And ethical behaviour has become a priority

The tough regulatory environment is making ethical behaviour a clear priority for AM CEOs.

AM CEOs who see ethical behaviour as a priority

AM 2020 Outlook

Gamechangers

Megatrends and AM 2020: making the connection

A brave new world

Megatrends

Demographic shifts

Shift in economic power

Accelerating urbanization

Climate change and resource scarcity

Technological breakthroughs

Rise of state directed capitalism

Huge rise in assets and shift in investor base

Pressures on the AM industry

Nothing to hide, nowhere to hide, nothing at risk

Gamechangers

Asset Management moves center stage

Distribution is redrawn

Fee models are transformed

Alternatives become more mainstream, passives are core and ETFs proliferate

New breed of global mega-managers

Asset management enters the 21st century

March 2014

72

PwC

AM 2020: Gamechangers

Asset Management moves centre stage:

- Regulatory pressures forcing banks to abandon proprietary investing as well as non core businesses. This will create a vacuum into which asset management will step and place itself at the centre of efforts to reinvigorate the world economy – Shadow Banking, Peer to Peer lending.
- Retirement and healthcare will become critical issues as the world ages. Asset managers will need to focus on product creation to fund lifestyle choices.
- Responding to the need of capital raising and deployment required to meet the demands of growing urbanisation and cross border trade (invoice factoring / trade finance)
- Responding to the needs of SWFs to deploy and diversify their huge pool of assets.
- Infrastructure and development funding for the developing world.

Distribution is redrawn:

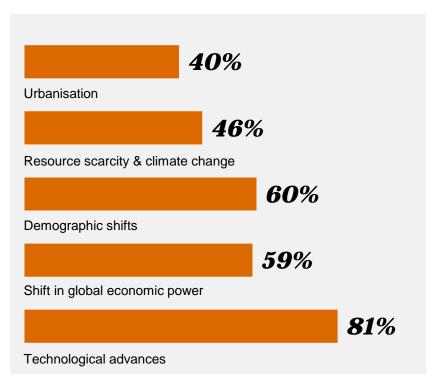
- Emergence of tailored/local products to meet investor needs and regulatory expectations in new markets in SAAAME regions.
- Four distinct regional fund distribution blocks will have formed that will allow products to be sold pan-regionally: North Asia, South Asia, Latin America and Europe.
- UCITS V / VI will we have sophisticated and non-sophisticated UCITS?
- Will an onshore AIF become the norm and replace "NewUCits"?
- 1940 Act regulated alternative funds in the US/
- Active ETF's?

Fee models are transformed:

- Increasing transparency on fees that an adviser charges a customer.
- Introduction of regulation to better align interests for the end customer through the introduction of some form of prohibition on having the asset manager allocate to the distributor e.g UK Retail Distribution Review (RDR).
- Implications : different distribution models will need to emerge; investors will become more self directed with increase use of social media
- Driving lower cost model and hence promoting ETF and passive investing further.

"Cost matters, transparency is key and the firms who adapt quickly to this environment will be among the winners in 2020"

Technological advances will transform business the most, but other trends are vital too



AM CEOs told us they think three big trends will transform their businesses more than any others in the coming five years.

More than four-fifths of them identified technological advances such as the digital economy, social media, mobile devices and big data. More than half also pointed to demographic fluctuations and global shifts in economic power, in line with the global sample.

To cope with technological advances, asset managers may need to ramp up investment

- 57% of AMCEOs are concerned about the speed of technological change — more than across the overall sample
- What's more, 54% see cyber security as a threat again more than in other sectors.
- That's why AM CEOs are investing in technology: 53% are changing their technology investments, while 50% are exploring better ways of using and managing big data.
- But that's a lot less than in other financial services sectors. For example, 70% of Banking & Capital Markets CEOs are changing their technology investments, as are 62% of Insurance CEOs. And 64% of Banking & Capital Markets CEOs are looking into better ways of managing big data, along with 58% of Insurance CEOs.

We think CEOs will need to maintain or increase investment in technology and data management to maximise distribution opportunities or to benefit from new opportunities offered by new technologies and social networks.

What's more, the mounting rigours of regulation and reporting will force them to make technology a priority.

77

PwC

Alternatives become more mainstream:

- Alternatives and passive products together will represent 35% of total assets managed by the industry while ETFs will continue to gain momentum globally across all channels.
- HF's will disappear as a label Active asset management vs Passive debate.
- SWF's will grow significantly and drive allocations to "Alternatives".

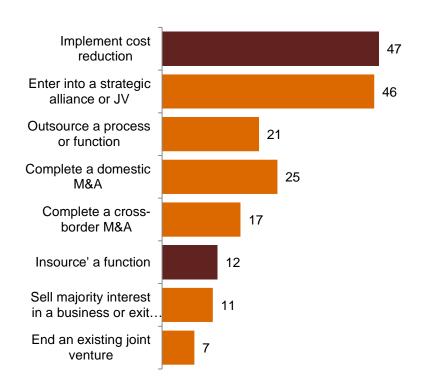
New breed of global "mega-managers":

- Creation of new regional blocks and new fund platforms will place an emphasis on cost, scale and efficiencies.
- Economies of scale will become more important.
- Asset managers will need to create new distribution platforms.
- Branding will become important not just for sale but also for capital raising.
 Mega-managers will be listed / raise listed debt.
- Remuneration models will be more aligned with investor needs rather than those of the firm.

Asset Management enters the 21st century:

- Creation of optimal operating model / infrastructure for front and back offices.
- Not impossible to imagine mergers between asset managers and IT vendors.
- Most likely source of disruption will come from social media or technology companies
- Social Media as a distribution tool?
- How do you distribute across the globe technology? Global sales force?
 Marketing JV's?

Plans being made equally for both M&A, alliances and JVs, and cost cutting



- 46% of AM CEOs plan to enter a new strategic alliance or joint venture in the next 12 months. 25% plan to make a domestic acquisition; 17% a cross-border acquisition.
- But costs remain an issue. 47% plan to implement a cost-reduction initiative. What's more, 21% plan to outsource a process or function.

Q: Which, if any, of the following restructuring activities do you plan to initiate in the coming 12 months?

Base: AM respondents (123)

Conclusion

82

Now

INVESTORS



DISTRIBUTORS
Banks
Insurers
IFAs



ASSET MANAGERS

Asset Management moves centre stage - 2020





Platforms? On-line portals?

ASSET MANAGERS

A shared vision

- Coming years will bring the industry higher volumes of assets than ever before
- Confers a responsibility on firms to manage these assets to the best of their collective ability
- Asset managers must clearly outline their value proposition to customers while being fully transparent over fees and costs
- Educating investors in the products and solutions that exist will be critical to the mission
- Tailoring investor needs will be crucial to maintaining trust and meeting investor needs
- Asset managers must both create a positive impact and deliver the message that they are a force for good to investors and policy makers.

Contacts

Karl Hairon (PwC Channel Islands - Jersey)

+44 (0) 1534 838282

karl.hairon@je.pwc.com

Robert Mellor (PwC UK)

+44 (0) 20 7804 1385

robert.mellor@uk.pwc.com

Will Day (PwC UK)

+44 (0) 207 804 0222

william.day@uk.pwc.com

Thank you!

This publication has been prepared for general guidance on matters of interest only, and does not constitute professional advice. You should not act upon the information contained in this publication without obtaining specific professional advice. No representation or warranty (express or implied) is given as to the accuracy or completeness of the information contained in this publication, and, to the extent permitted by law, [insert legal name of the PwC firm], its members, employees and agents do not accept or assume any liability, responsibility or duty of care for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it.

"© 2014 PricewaterhouseCoopers CI LLP. All rights reserved. PwC refers to the Channel Islands member firm and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details. PricewaterhouseCoopers CI LLP,

a limited liability partnership registered in England with registered number OC309347, provides assurance, advisory and tax services. The registered office is 1 Embankment Place, London WC2N 6RH and its principal place of business is 37 Esplanade, St Helier, Jersey JE1 4XA."