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Demographic Impact on Investment Strategy

Schroders
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Gavin Marriott

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Introduction

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Why care about demographics?

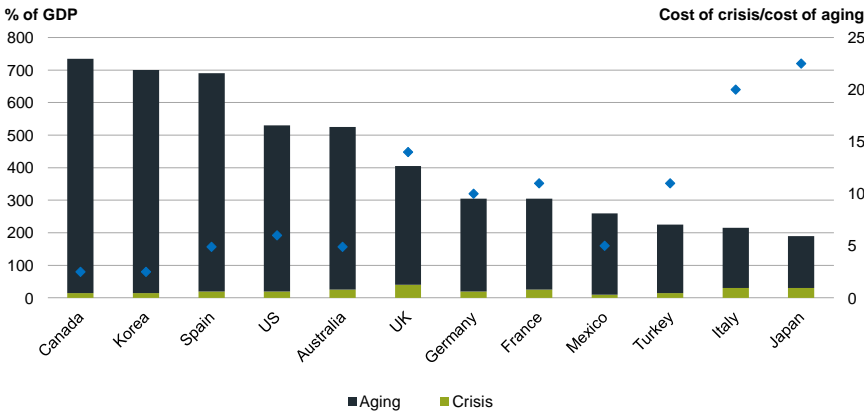


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Demographics and debt

NPV of fiscal impact of the financial crisis and population aging



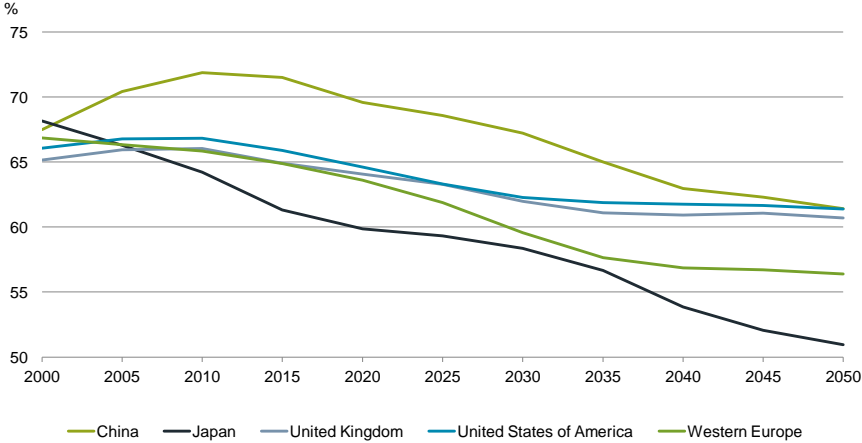
Source: IMF (2009)

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Demographics and growth

Proportion of population of working age (15-64)



Source: UN World Population Prospects, 2010 Revision
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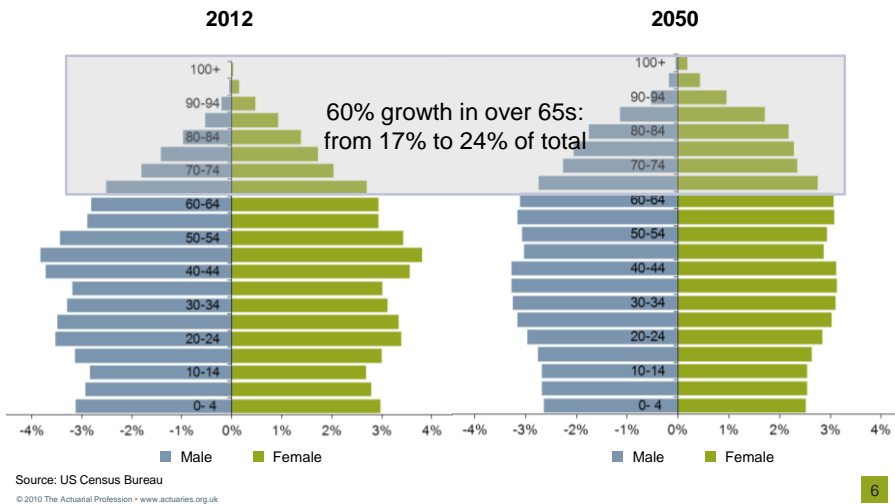
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Demographic trends in the UK (and Overseas)

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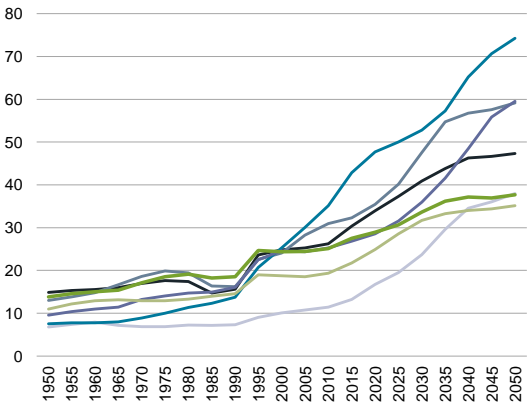
The UK is ageing



But not as fast as other countries

Old-age dependency ratio

Over 65s as a % of working age population

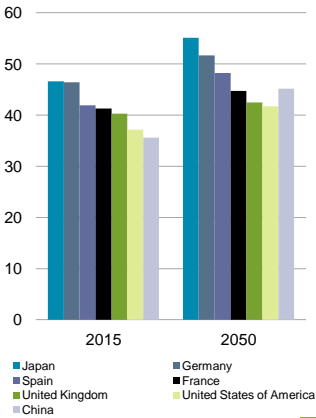


Source: UN World Population Prospects, 2010 Revision

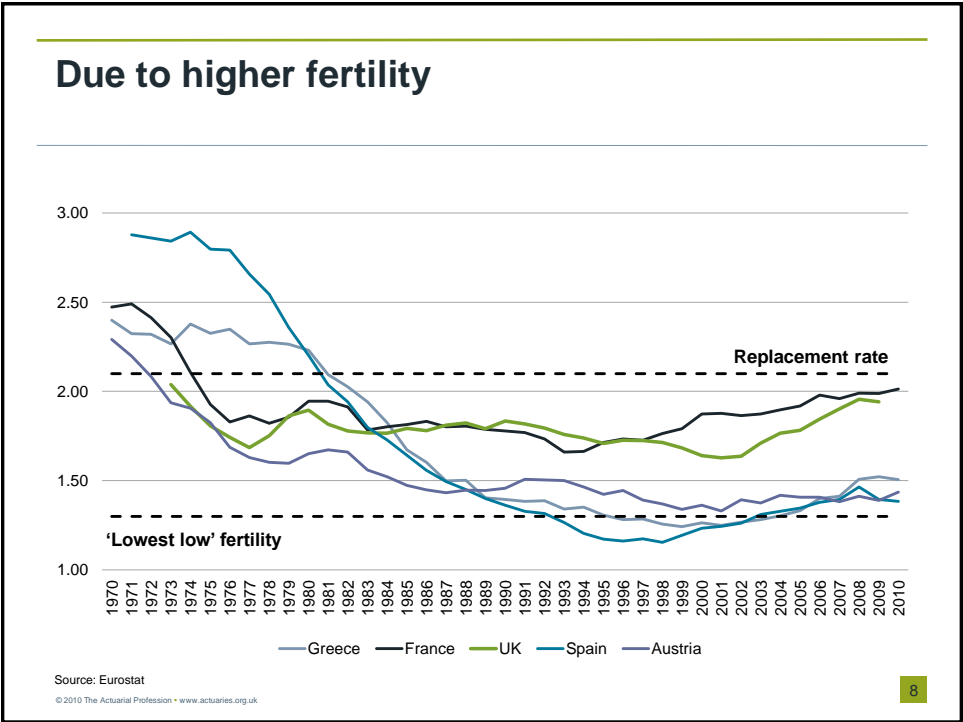
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Median age

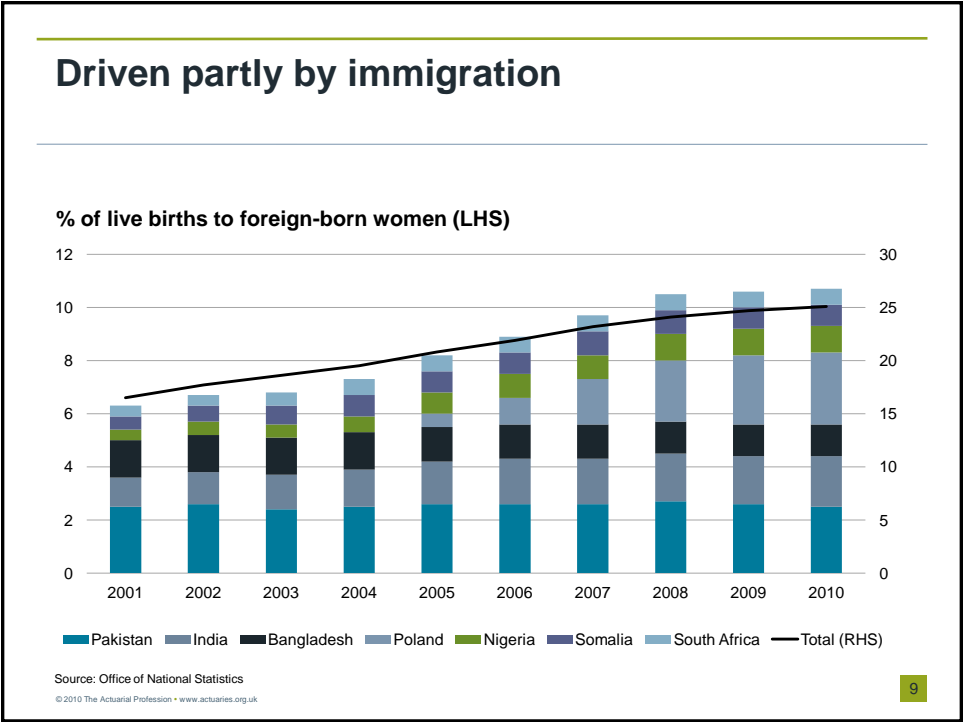
Years



7



8



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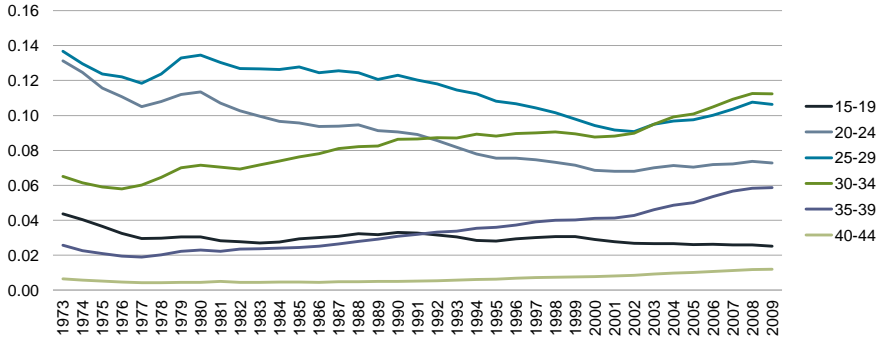
But not exclusively

Total fertility rate of UK residents by country of birth

Country of birth	2010	2009	2008	2007	2006	2005	2004
UK	1.88	1.85	1.85	1.80	1.76	1.68	1.69
Outside UK	2.45	2.48	2.52	2.54	2.42	2.44	2.50
Total ⁵	2.00	1.97	1.98	1.92	1.87	1.79	1.80

UK age-specific fertility rates

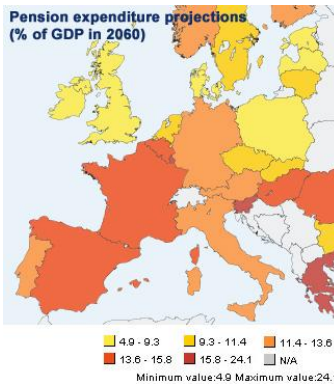
Children per average woman in given age group



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Europe: structural challenges



- Working age population in decline. By 2050, there will be **1 retiree for every 2 workers** in Western Europe
- Potential GDP growth will almost halve.
- Fiscal cost of aging will reach **28% of GDP** p.a. by 2060
- Europe would need **1.4bn immigrants** to sustain its current population structure: equivalent to the entire Chinese population!
- Structural reforms are a necessity, and will fundamentally alter investment environment.

Source: UN World Population Prospects, 2010 Revision; European Commission, OECD.

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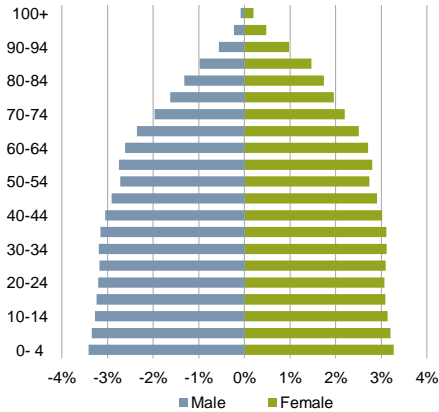
United States: manageable headwinds

- Most favourable demographic profile in developed world: **‘country competitive advantage’**
- Higher fertility, especially among ethnic minorities.

BUT

- Boomer retirements raise possibility of skills shortage in some industries
- Healthcare system **most expensive** in the world
- Unfunded liabilities **>\$200 trillion**.

USA 2050



Source: US Census Bureau, Lawrence Kotlikoff, OECD
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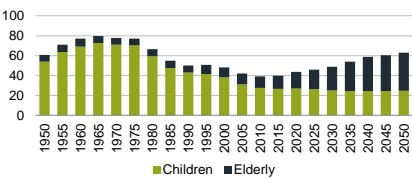
Popular misconceptions of demographic trends

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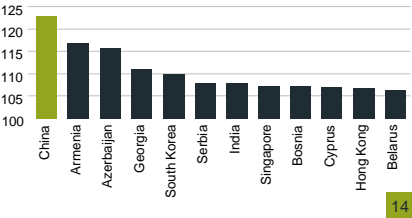
China: size isn't everything

- China is **aging faster than Western Europe**
- 1.3bn people, but the working age population will **shrink from 2015**. Surplus labour likely overestimated
- Wage inflation accelerating
- End of the demographic dividend will make it **harder to sustain growth**
- Distorted sex ratio poses **serious social problems**
- Abolishing one child policy unlikely to have an impact.

China's dependency ratio
% of working age population



Males per 100 females at birth
2005-10



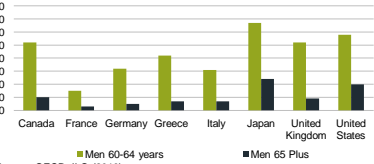
Source: UN World Population Prospects, 2010 Revision, Economist
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Japan: growing old (relatively) gracefully

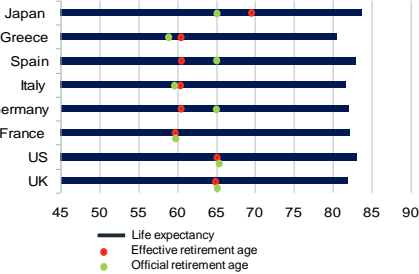
- Debt still the highest in the world, but quirky accounting overstates the degree
- Healthcare and pension **spending under control**: spending per retiree well below OECD average
- Participation rate for older workers **highest in the world**. Flexible 're-hiring' program limits wage burden
- **Still opportunities for investors** as industries emerge and adapt to serve older workers.

Economic Activity Rate, %, 2009



Source: OECD, ILO (2010)

Retirement age and Life Expectancy



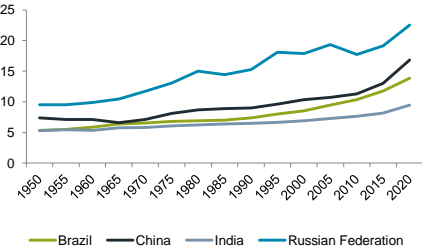
Source: OECD, The Economist. Data for men as at 2010 or latest

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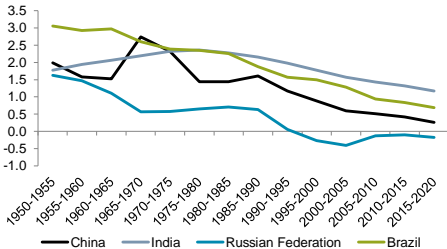
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All BRICs are not created equal

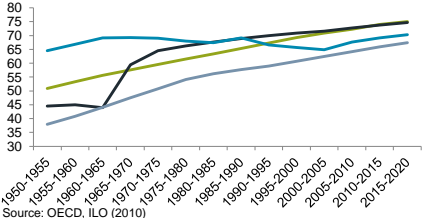
Old-age dependency ratio, %



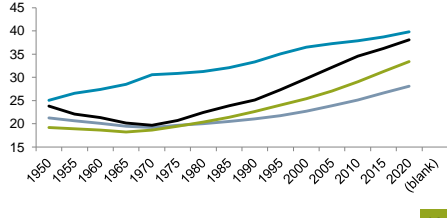
Population growth, %



Life expectancy at birth, years



Median age, years



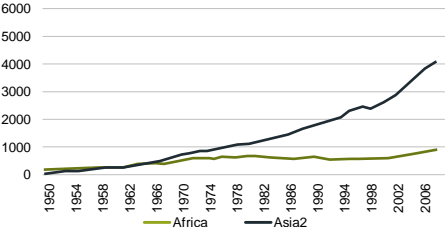
Source: OECD, ILO (2010)
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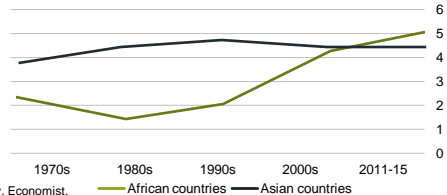
Africa: basket case or breadbasket?

- 50 years ago, **Africa was richer than Asia**. GDP per capita in South Korea was lower than Somalia; now its output is higher than the whole continent
- 60% of the world's uncultivated arable land; rich in minerals, precious metals and fossil fuels. Sahara could supply whole world's electricity
- Coming **demographic dividend** as fertility falls
- Lagos and Kinshasa will be bigger than Beijing by 2025
- McKinsey estimates **GDP could double by 2020**; consumer goods market will be as big as India.

Average GDP per capita (PPP terms)



Africa's GDP growth is steadily on the rise*



Source: Maddison tables, SocGen, UN World Urbanisation Prospects, McKinsey, Economist.
* Excluding countries with population <10m, Iraq and Afghanistan

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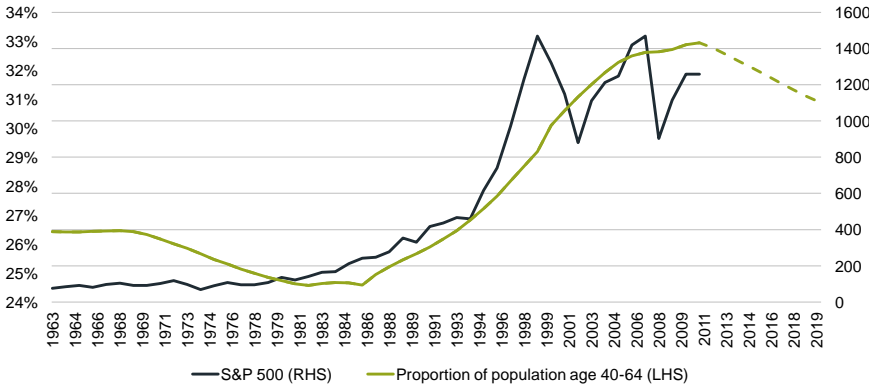
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Implications for asset class returns and investor behaviour

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Demographics and asset prices
The ‘Market Meltdown’ Hypothesis

“The words “Sell? Sell to whom?” might haunt the baby boomers in the next century. Who are the buyers of the trillions of dollars of boomer assets? [They] threaten to drown in financial assets...” – Jeremy Siegel



Source: Thompson Reuters Datastream, Schroders

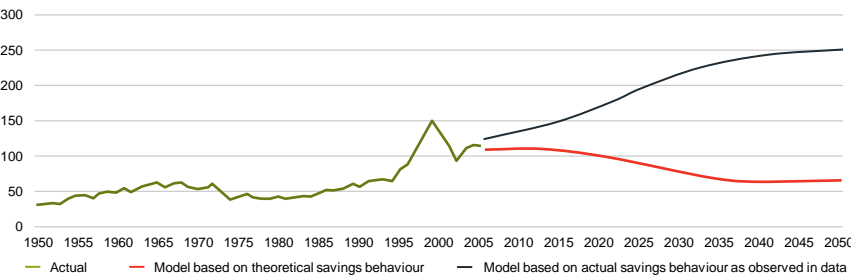
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Demographics and asset prices

The counterarguments

- In reality, people do **not** run down their assets as per theory
- Rising saving in emerging markets and capital liberalisation
 - Today, 91% of US market cap is owned by domestic investors; by 2050, this could be as low as 30%.

Projected real stock prices for the US



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Demographics and asset prices

Equities versus bonds

Alternatively, pension funds and individuals de-risking may put pressure on equities versus bonds?

- Inconclusive empirical evidence for changing household asset allocation
- Rising life expectancy
- Underfunded plans need higher equity exposure for longer

Company Name	Exp'd return %	Pension deficit % of mkt cap	Theoretical equity allocation*
FirstGroup	7.76%	25.14%	172%
Greene King	7.40%	4.42%	149%
Stagecoach Group	7.38%	7.14%	148%
BG Group	7.30%	0.23%	143%
Tesco	7.30%	5.38%	143%
BP	7.25%	3.84%	140%
Babcock Intl	7.20%	7.58%	137%
National Grid	6.70%	2.43%	106%
Diageo	6.63%	2.24%	102%
BT Group	6.35%	11.48%	85%
Royal Dutch Shell	6.30%	3.14%	81%
Imperial Tobacco	6.14%	3.14%	72%
UK government	6.80%		112%

Source: Citigroup, Schroders.

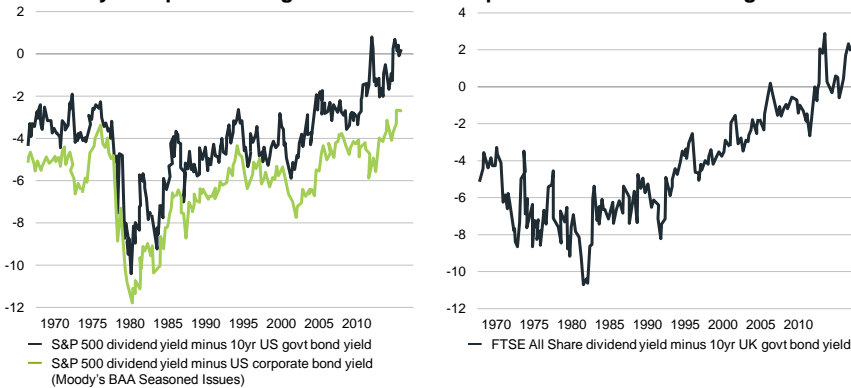
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Demographics and asset prices

Equities versus bonds

- QE-driven bond bubble? Equities cheap vs. bonds, provide inflation protection
- Are dividends the new coupons?

Dividend yield spread over government and corporate bonds at record high

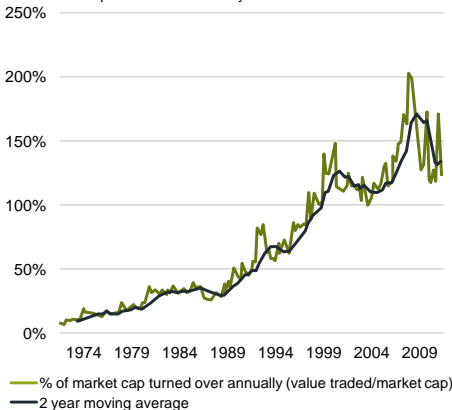


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Markets increasingly short-term leading to a structural rise in volatility

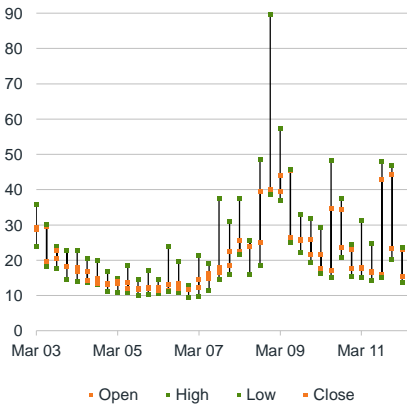
Holding periods declining

% of market cap turned over annually



Structural rise in equity market volatility

VIX Index



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Opportunities for equity investors

Demographics and investment

“Demography is the most powerful and most underutilized tool we have to understand the past and to foretell the future.”

David Foot

Professor of Economics at Toronto University, Canada
Author of “Boom, Bust & Echo: Profiting from the Demographic Shift in the 21st Century”

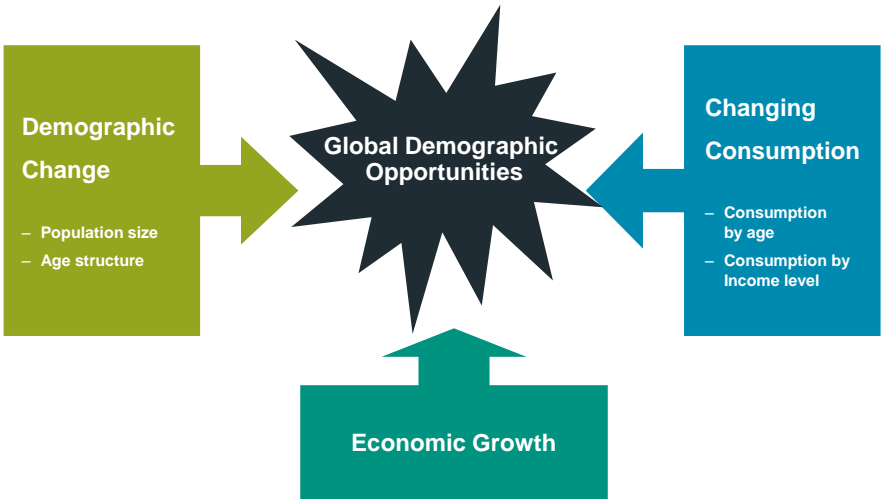
Yet...

“Investors neglect long-term demographic variables.”

Stefano DellaVigna and Joshua Pollet

National Bureau of Economic Research
Authors of “Attention, Demographics and the Stock Market”

Demographic Opportunities

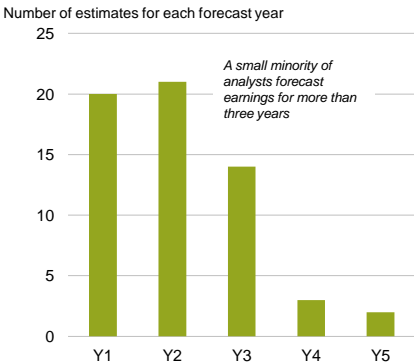


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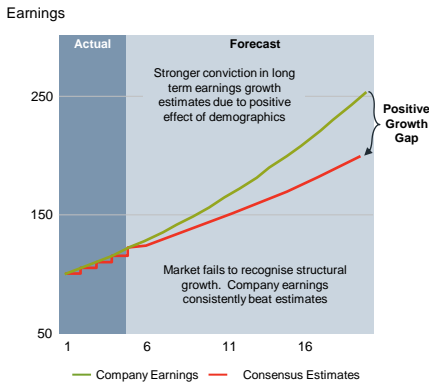
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Demographics give long-term investors an edge

Few analysts forecast long-term earnings



Demographics affects earnings estimates & valuations, TODAY



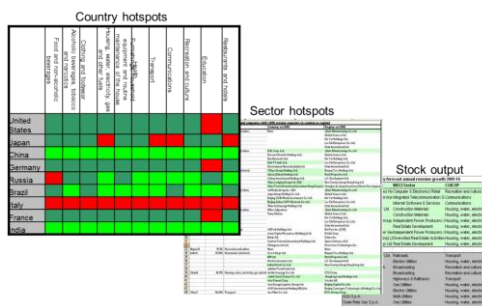
Source: Goldman Sachs, Schroders

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Our analysis

- Identify changing patterns of expenditure and consumption by demographic trends
- Screens indicate growth potential at country, sector, industry and stock-level
- Further research on companies exposed to the 'hotspots' with highest growth potential.



Source: Schroders

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Stock examples –Yum!



- YUM! Brands owns a worldwide system of restaurants, with over 37,000 units in more than 110 countries and territories through the five concepts of KFC, Pizza Hut, Taco Bell, LJS and A&W.

Understanding Demographic Drivers

- Rising income and young demographic profile increase fast food consumption
- Leading Western fast-food brand in China, similar positions building in other Asian markets
- Most well-recognised US brand in China and India.

Company's business strategy matches our demographic hot spots

2010-15 CAGR	Restaurants and hotels
United States	
China	
United Kingdom	
Indonesia	
Vietnam	
South Africa	
India	
Russia	
Malaysia	
Thailand	
Japan	
Italy	

Where Yum has significant presence or is focusing on developing market share

Where Yum has little or no presence at all

*Source: Schroders Demographics Database.

Please note that this is an estimate of future growth and past events are not necessarily a guide to the future. As at 30 June 2011

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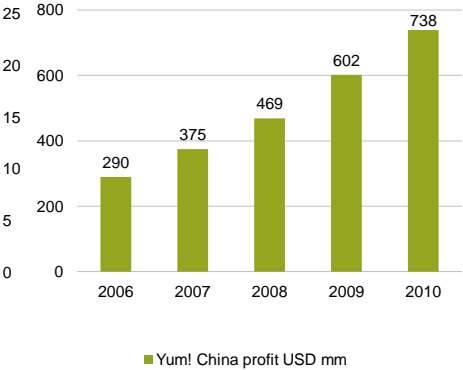
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Stock examples –Yum!

PE reacts to changes in China Same Store Sales*



... despite consistent growth in operating profit



*Source: Yum!, Thomson Reuters Datastream
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Stock Examples – Unicharm

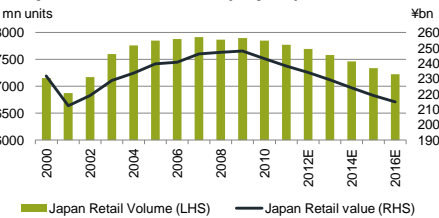


Unicharm corporation is a Japan-based company mainly engaged in the manufacture and sale of baby care products, feminine care products and pet care products.

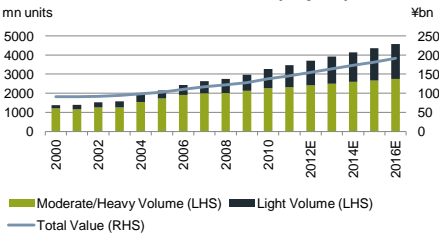
Understanding Demographic Drivers

- Benefits from rising penetration of diapers and feminine care products in emerging Asia
- Exposure to aging in Japan via petcare and health segments.

Diapers Market Trend (Japan)



Adult Incontinence Market (Japan)



For illustrative purposes only and not a recommendation to buy or sell shares
Source: Euromonitor, BofA Merrill Lynch Global Research
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Which all goes to support the fact that



"Research shows people of my age, ethnicity, height, weight, residential preference and income, invest in demographics."

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Summary

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Conclusions

- Demographic trends have significant explanatory power
- Trends are often misinterpreted or simply overlooked
- Demographics affect asset flows and investor preferences
- If properly understood, can be harnessed to increase confidence about areas of structural growth and alpha generation

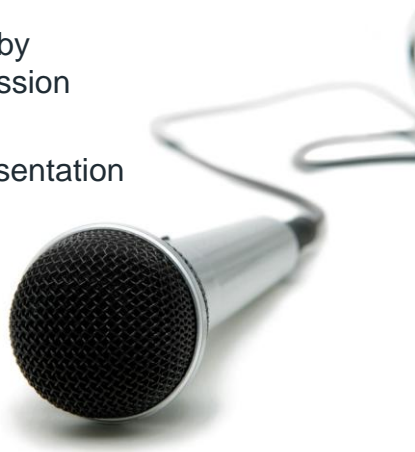
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Questions or comments?

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