Investing in demographics – an update

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This paper updates an earlier paper published in 2013. It argues that the equity market is less efficient at valuing companies benefiting from structural growth, which creates opportunities for long-term investors. Three demographic megatrends are identified – population growth, the rise of the emerging market consumer, and the impact of ageing – which, in turn, support a number of structural growth themes that allow identifiable companies to benefit from strong and compounding cash returns over investible timescales.

- This paper argues that the equity market is disproportionately focused on the short term and less efficient at valuing companies benefiting from structural growth, which creates opportunities for longer-term investors.
- Three demographic megatrends are identified in the shape of population growth, the rise of the emerging market consumer, and the impact of ageing, which can be expected to play out with a high degree of certainty.
- These demographic megatrends support a number of structural growth themes that allow identifiable companies to benefit from strong and compounding cash returns over investible timescales. Case studies are provided to illustrate and validate the point.
- Investment strategies that combine an understanding of demographic drivers with fundamental company research can develop powerful insights into longer term corporate profitability that go beyond the market's short-term focus. Such strategies are worthy of close consideration by all patient, longer- term investors.

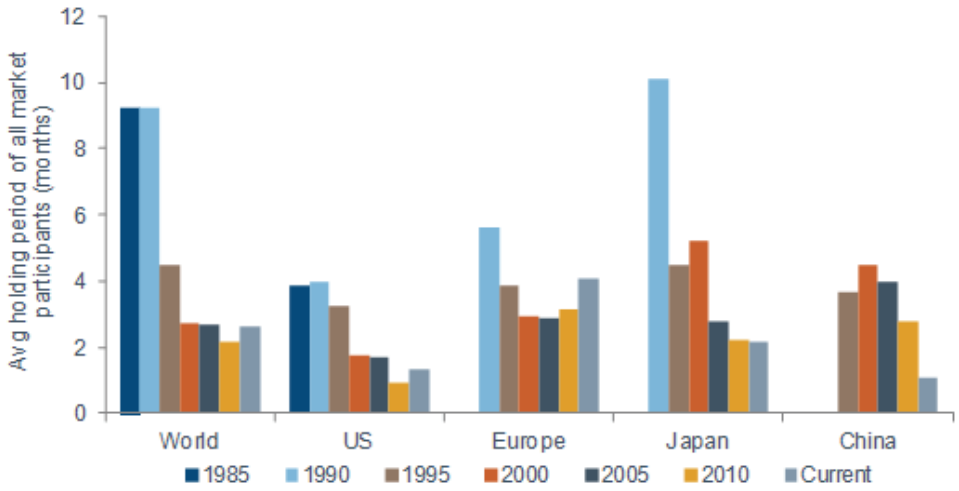
SECTION I: LOOKING BEYOND THE SHORT TERM

For investors facing a life cycle of investing to fund their retirements, the task at the outset is to accumulate wealth over a relatively long time horizon. The job of the investment industry is to construct strategies for these investors that generate attractive cumulative returns over these time horizons. While numerous academic studies have demonstrated the value of long-term buy-and-hold approaches to investing[1], the use of such approaches remain at odds with the short-term behaviour that has become increasingly characteristic of equity markets and parts of the investment industry itself.

Equity markets and investors have developed an increasingly acute focus on the short term. This is evidenced by the decline in the average holding period for stocks on global exchanges. In the US, the average holding period of a share on the NYSE was around seven

years in 1940.[2] The average holding period globally is now under three months (Figure 1). This is only partly due to the entry of short-term, technically-driven investors; there is also evidence of short-termism among institutional investors.[3]

Figure 1: Average holding periods have fallen (now under three months globally)



Source: Goldman Sachs. Average holding period of all market participants by region, January 21 2016.

1.1 Hard-wired for the short term - learnings from behavioural finance

> "Human nature desires quick results, there is a peculiar zest in making money quickly, and remoter gains are discounted by the average man at a very high rate." J.M. Keynes[4]

It turns out that investors are hard-wired for short-termism. The field of behavioural finance shows us that investors are not the rational agents assumed under Modern Portfolio Theory and the Capital Asset Pricing Model. Instead, investors are subject to a range of cognitive biases that can interfere with optimal decision-making.[5]

One of the most challenging biases investors are subject to is that they value short-term gains more than they value delayed gains. Neuroscientists have shown that different parts of the brain are responsible for valuing short and long-term monetary payoffs.[6] To illustrate, behavioural studies have shown most people would take £100 today over £200 in a year's time, but would not take £100 in six years over £200 in seven. There is no rational reason for this inconsistency; the tradeoffs are identical in monetary terms.

This powerful preference for immediate rewards is caused by the inconsistent way in which we discount value over time – described in behavioural literature as hyperbolic discounting.[7]

Figuratively speaking, as points in time are pushed into the future, we come to view them as indistinct points on a fuzzy horizon. This helps to explain the challenge of getting people to invest for far-off retirements. A range of other behavioural biases exacerbate short-termism; for example, availability and recency biases can both cause investors to give undue weight to prominent or recent events and overreact to current information.[8]

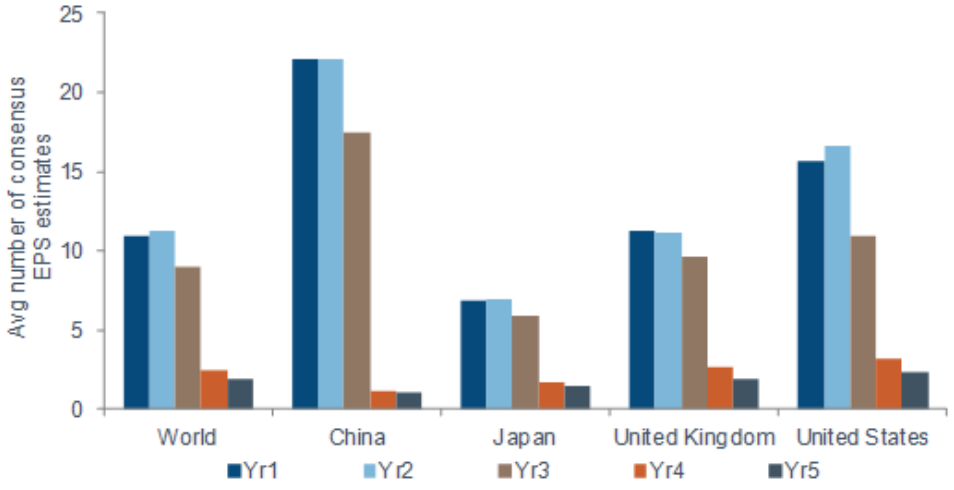
1.2 Myopic markets are losing sight of the long-term value of a business

A key issue which feeds short-termism within the equity market is the habit of most sell-side analysts to focus heavily on short-term earnings projections. In fact, while the overall number of analysts covering large-cap global stocks continues to grow, the focus remains disproportionately on near-term earnings forecasts. Figure 2 shows the extent of analysts' short-termism and the fact that few forecasts exist beyond the third forecast year.[9]

With the greater short-term focus of both market participants and sell-side analysts, the equity market has become relatively efficient at pricing near-term earnings expectations (as measured by a declining error rate in one-year I/B/E/S forecasts 2006-11).[10]

Critically, the corollary to that point is that the market is less effective at evaluating longer-term earnings, showing a relative neglect for the longer-term value of companies exposed to structural growth drivers. This represents a clear opportunity for investment strategies which can sensibly exploit this equity market failing.

Figure 2: Focus of sell-side analysts is on near-term earnings forecasts



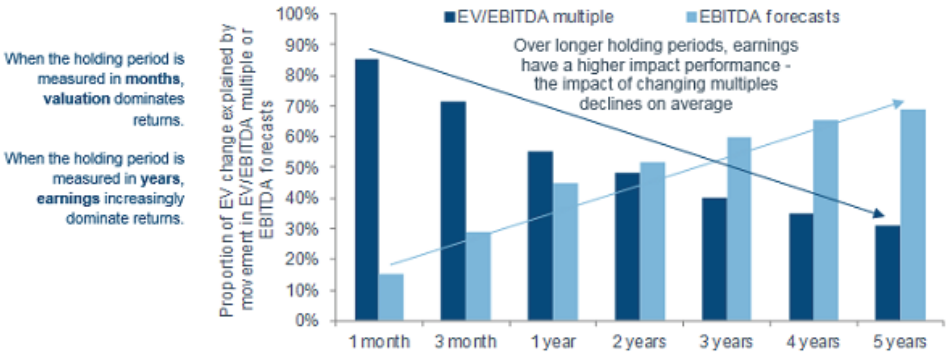
Source: DataStream, Goldman Sachs. Number of I/B/E/S consensus EPS forecasts for US$1 billion firms. January 21 2016.

1.3 Earnings drive returns in the long run

Stock outperformance is driven by either superior earnings growth or a higher valuation multiple being applied to the earnings profile of a company. Over short holding periods, changes in valuation multiples are the key driver of returns since earnings expectations do not typically change by large amounts in the short term. However, over time periods beyond a year, the opposite is true. Performance is increasingly explained by changes in earnings growth and the importance of entry and exit multiples diminishes. A number of academic studies, such as Sorensen and Ghosh (2010), support this point.

The spread of multiples between leaders and laggards tends to be volatile and driven by sentiment, but generally multiples tend to move around within a relatively narrow range. Earnings and cashflows on the other hand can diverge and keep diverging over time.[11] This is illustrated in Figure 3 which shows the proportion of shareholder returns explained by either expansion of the valuation multiple (EV/EBITDA) or by changes in earnings expectations (EBITDA) for the 500 largest listed companies globally.

Figure 3: Profits (not valuations) drive returns over time



Source: Goldman Sachs. Proportion of shareholder return for explained by changes in valuation multiple (EV/EBITDA) vs. change in earnings (EBITDA) forecasts. Based on the top 500 largest listed companies globally since 2010. Figures do not sum to 100. Holding period returns are the average of multiple holding periods between 2010 & 2015. As at January 21 2016.

1.4 Implications for company analysis

The focus of the equity market is on the relatively small part of a company's value determined by the earnings it will generate in the next three years – not on the large part of its value represented by its profitability after that period. However, with the knowledge that earnings are more important than multiples in the long run, how is it best to go about assessing the long-term value of companies?

Earnings multiples are commonly used to make snapshot comparisons between similar companies within industries or to measure value versus sector or market averages. For

companies sensitive to the business cycle, these measures run the risk of overstating the value of the business based on peak earnings in periods of strong economic activity.

Discounted Cash Flow (DCF) analysis is an alternative method of valuing a company where the value of an asset is defined as the present value of its estimated and discounted future cash flows. Instead of trying to project a company's cash flows to infinity however, a terminal value is applied to cash flows beyond the next few years (at which point forecasts drastically peter out in any case).

In DCF models, 60% to 75% of the value of a company is typically determined by this terminal value and great care must be attached to its calculation. For many high-quality businesses, the calculation of this rate can be sensibly informed by their exposure to structural growth themes, which, in turn, can justify higher growth rates than GDP.

1.5 Identifying earnings growth compounders

There is a type of company for which DCF models are particularly useful to establish a valuation that reflects long-term drivers. Such companies are high-quality earnings growth compounders exposed to structural growth themes, whose earnings are less sensitive to the business cycle.

Exposure to structural growth (such as an industry-leading position in a strongly growing market) allows a company to generate a steady stream of cash which can be reinvested into a growing business. It is the ability of these companies to reinvest that cash into the strong structural growth opportunities in their markets – by increasing capital expenditure, which in turn, enables stronger sales and profits growth – that provides the compounding engine for sustained growth in earnings. A case study helps to demonstrate the point.

Compounder case study: Novo Nordisk

Novo Nordisk is an example of a company exposed to strong and sustainable growth in the market for diabetes via its insulin products. It is also a company whose value has been better judged by DCF analysis than earnings multiples. The stock price has risen from 28.6 DKK (2005) to 297.2 DKK – a compound annual growth rate of 26.3%.[12]

Diabetes affects more than 387 million people worldwide; by 2030, this is expected to rise to 552 million.[13] Novo Nordisk has a commanding 47% share of the global insulin market. Having built a reputation for innovative treatments, the company continues to spend around 15% of its sales on research and development of new products.[14]

Figure 5 shows that the PE multiple for Novo Nordisk has gone up substantially during periods of strong market sentiment. Rich valuations (in 2008 and 2010) would have encouraged many investors to sell during a period of sustained growth in both the company's earnings and its share price.[15]

Using the earnings multiple would have given little thought to the long-term sustainability of Novo Nordisk's earnings growth. However, a discounted cashflow analysis using a terminal value informed by its exposure to structural growth would have been able to look through short-term sentiment-driven swings towards a longer-term value of the business.

Given the importance of the terminal value, the compounding effect of higher terminal values over time can have a significant impact; it can make earnings growth compounder stocks that look relatively expensive on other valuation measures look cheap, implying significant upside for investors who are simply prepared to be patient. As Warren Buffett says "Price is what you pay, value is what you get."

Figure 5: Earnings multiple (PE) – a poor signal of long-term value

Source: DataStream, as 21.01.16.

1.6 A final word

The interesting thing about the market's consistent under-estimation of Novo Nordisk's earnings growth is that it has been well known in the investment community throughout this

period (2005-12) as an 'earnings growth compounder'. In spite of this, the market still underestimated the ability of Novo Nordisk to sustain its earnings growth.

Why does this happen? Specifically, it is the failure of analysts to properly account for the reinvestment of cash into a compounding business franchise in three-year-plus models. And, the reason for this seems to lie in a flawed but widespread belief in "earnings fade" and earnings mean reversion. While mean reversion is a valuable concept in the context of valuations, it is much less useful in the context of earnings growth. Consensus estimates (I/B/E/S) regularly forecast a decline in returns of companies with high return on equity and an increase in returns for companies with low return on equity. However, the expectation for mean reversion in earnings is in contrast to the sustained bifurcation evident in many industries, where the strong get stronger and the weak get weaker.[16]

The combination of the market's short-termism and its expectation of earnings convergence creates opportunities for investors who can identify the companies able to avoid mean reversion via exposure to structural growth themes. The next section shows how to increase conviction around structural growth themes with an understanding of the underlying demographic drivers.

SECTION 2: DEMOGRAPHIC DRIVERS

"Demography is destiny." – Auguste Comte (1798-1857)

2.1 The relevance of demographics

Section I noted that short-termism is hard-wired into human nature – and this is apparent in analysts' focus on near-term earnings forecasts. Market participants tend to overemphasise the importance and sustainability of recent events when making investment decisions (and seemingly 'rich' multiples can also encourage investors to sell winners too early). While the market is reasonably accurate in making near-term earnings forecasts, it is less efficient in terms of long-term projections. This is because the market tends to overlook the compounding effect on long-term winners' profits. Investors able to identify earnings growth compounders exposed to structural growth themes can take advantage of these inefficiencies. For this, an understanding of demographics is critical.

2.2 The certainty of demographics

Demographic trends describe the historical and projected changes in populations over time. Such a definition is abstract given demographic changes have the power to bring about significant economic and social changes, affecting income and expenditure at all levels: countries, companies, and individuals. The fact they are slow-moving and play out over time means their cumulative impact is not properly discounted by myopic markets.

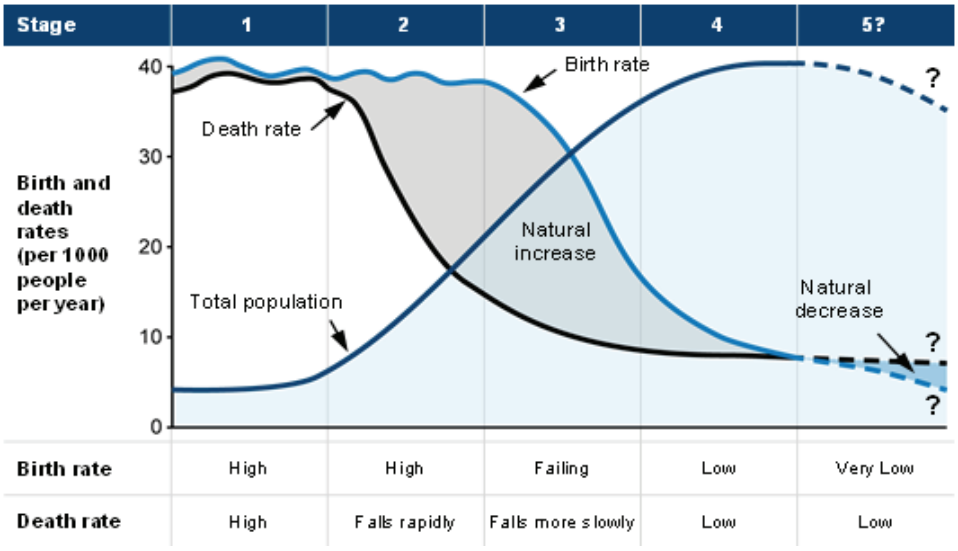
Demographic trends do not emerge accidentally, but systematically. In fact, demography is one of the few social sciences where projections can be made with a relatively high level of certainty. Looking 10 years into the future, it is possible to predict with some certainty the working-age populations of most countries (barring wars, epidemics or catastrophes) and with greater certainty than the GDP of those countries.[17]

2.3 Demographic transition – How demographics impact economic growth

A rapid and substantial increase in population over the last century has underpinned significant growth in the world economy. To the extent that economic output has tracked population growth with a lag, we can expect prevailing population trends to underpin equally impressive growth in global GDP. This is already happening – helping to explain not only the strong growth in global output but, in particular, the structural growth in GDP in many developing economies over the last 30 years.[18]

Developed countries have undergone what is known as a demographic transition.[19] This describes the progression from the high birth and mortality rates of pre-industrial economies to the low birth and mortality rates of present developed economies.

Figure 6: Demographic transition model



Source: FIL Limited, for illustrative purposes only.

In the traditional transition model, populations start from a pre-industrial stage where mortality and fertility rates are high and in balance (stage 1). High fertility rates but declining mortality rates (stage 2) produce a mid-stage demographic dividend where populations expand via growth in the younger age groups, leading to a favourable bulge in the working population. At stage 3, population is still growing but the pace of growth slows as fertility

rates decline towards mortality rates. Most developed countries are now at stage 4 or 5 of the model characterised by both low birth rates and low death rates, meaning stable or declining populations.

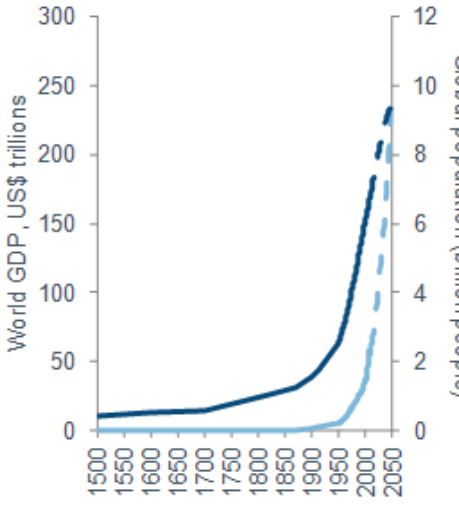
The demographic dividend is essentially a sweet-spot within the demographic transition where the working age population is growing faster than the broad population. This provides a tailwind to economic growth as measured by real per capita GDP (typically at a time when countries are industrialising). Developing countries like India and Nigeria are entering this highly favourable stage.[20]

2.4 Megatrend 1: Global population growth

The global population passed the seven billion mark in 2011, having grown by a full billion since 1999. The current level represents a doubling since 1970; a period of particularly rapid population growth akin to a global demographic dividend. Future growth will take numbers to nine billion by 2050.[21]

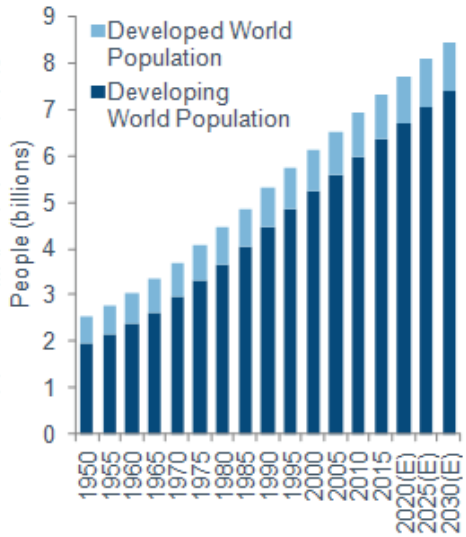
The overwhelming driver of this population increase has come from developing countries and this will remain the case, as will the general trend for urban populations to expand at the expense of rural populations. This is having a significant impact on the demand side of the global economy, creating opportunities for companies to expand sales and earnings in growing global marketplaces.

Figure 7: Population growth is a 'developing' story



Sources: OECD Historical population data and projections, January 25 2015.

Figure 8: Population growth is a 'developing' story



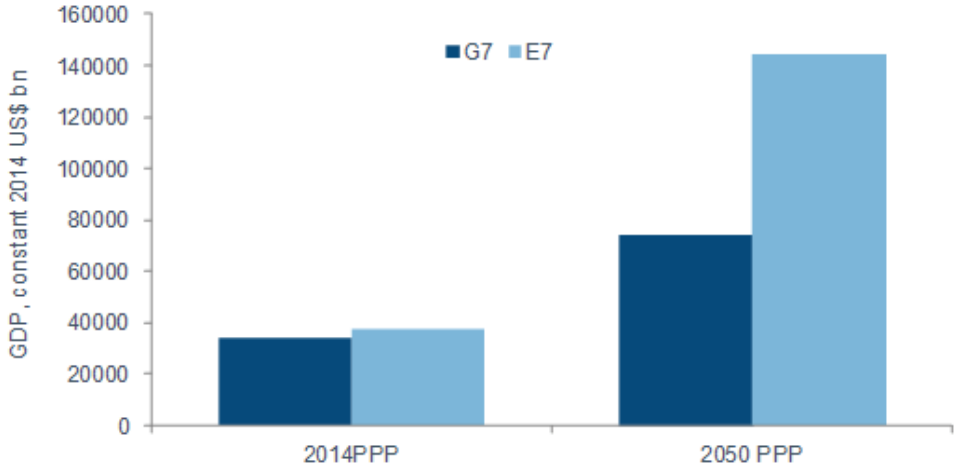
Sources: OECD Historical population data and projections, January 25 2015.

2.5 Megatrend 2: Emerging middle class

The composition of the global population is also changing in some important ways. The number of people considered to be in the 'global middle class' is projected to more than double to 1.2 billion by 2030 (from 7.6% of the world's population to over 16%).[22] This represents a compound annual growth rate of 5.2%.

Most of the new entrants will come from the developing world. In fact, the World Bank predicts that by 2030, 93% of the global middle class will be from developing countries. This ongoing shift is reflected in the rebalancing in regional shares of global economic activity as shown in Figure 9 for the G7 and E7 economies.

Figure 9: Relative size of G7 and E7 economies, 2014 and 2050



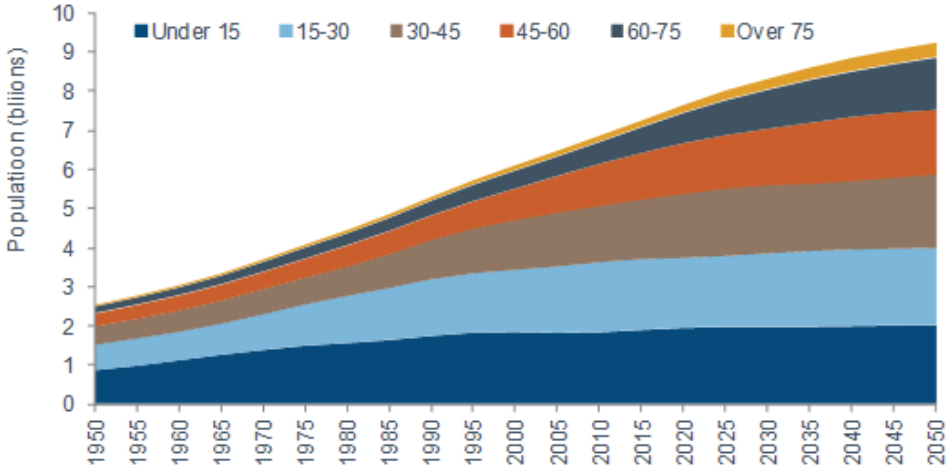
Source: : IMF for 2014 estimates, PwC projections for 2050. Note: The E7 is a group of seven emerging economies: China, Russia, India, Indonesia, Mexico, Brazil and South Korea.

2.6 Megatrend 3: Ageing populations

According to the United Nation's Population Division, the world is going through a period of population ageing that is 'without parallel in the history of humanity'. This process is a result of the combined effects of declining fertility and mortality rates as countries move through the demographic transition model discussed earlier.

The trend is most prominent in developed countries, yet as developing countries progress through the demographic transition, ageing will become a reality for virtually all countries in the world. Indicative of this, globally, the number of 'older persons' (aged 60 and above) is expected to exceed the number of children (aged under 15) for the first time in 2045. In 2050, one in three people in developed countries will be aged 60 and over, up from around one in five today[23].

Figure 10: Growing global population is ageing quickly



Source: OECD Historical population data and projections, January 25 2015.

SECTION III: STRUCTURAL GROWTH THEMES

This section highlights just some of the structural growth themes and investment opportunities which are consequences of the demographic megatrends.

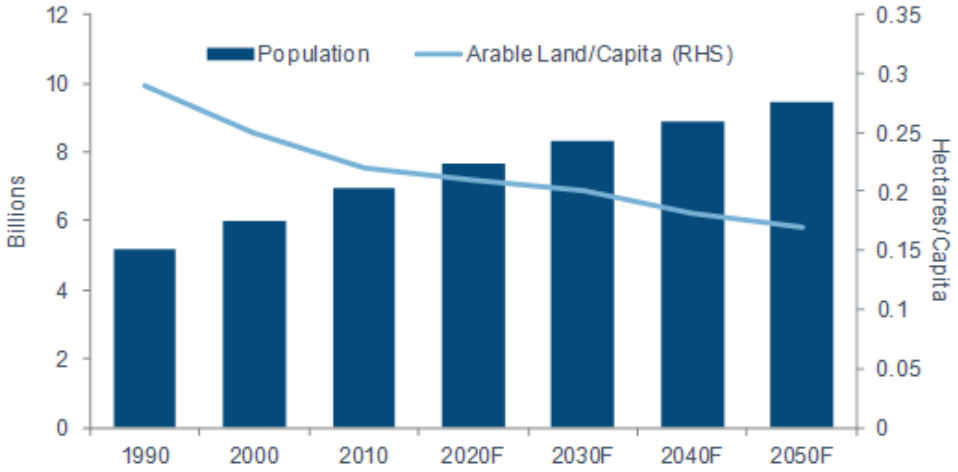
3.1 More people, finite world

One consequence of population growth is that it raises demand for resources, such as food, water, arable land and energy, as emerging economies consume a larger share of the world's resources. It is reasonable to expect population growth to provide a structural tailwind behind the pricing of many finite assets. The World Bank estimates that demand for food will rise by 50% by 2030.[24] This poses a serious challenge for food production, particularly in light of the fact that the amount of arable land in the world is being reduced due to industrialisation and urbanisation.

Indeed, in China, a combination of rapid industrial development and population growth is estimated to have resulted in the loss of more than 13 million hectares of arable land since 1952 (total agricultural land is around 111 million hectares at 2011).[25]

With more mouths to feed yet declining arable land (see Figure 11), there is a clear impetus to increase crop yields. Given that livestock is reared on grain, higher demand for meat has a multiplier effect on grain demand.

Figure 11: : More mouths to feed, less arable land per person



Sources: Food and Agriculture (FAO) Organisation, United Nations, Potash Corp, August 31 2014. Figure shows available global arable land per capita.

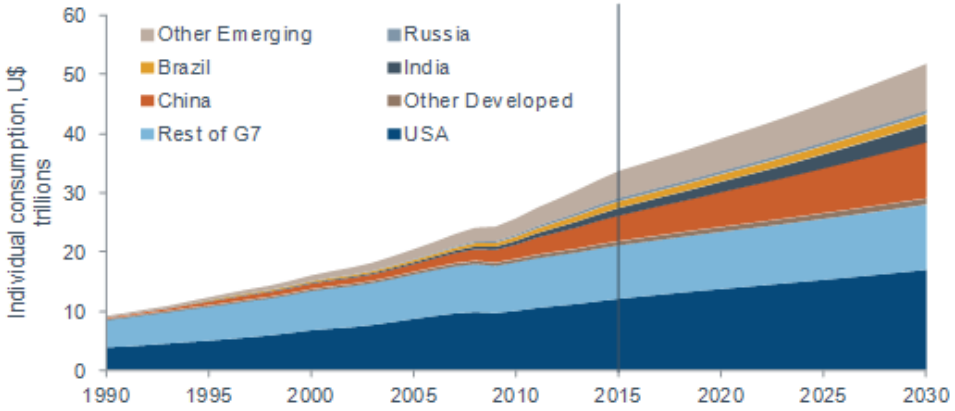
According to the UN, grain output needs to rise by 70% over the next 40 years to satisfy growing demand for food, feed and fuel. Since much of the arable land in the developing world is inefficient, significant gains in yields can be made via the use of fertilisers, higher-yielding seeds and agriculture mechanisation equipment. The demand for such products is likely to grow strongly.

3.2 The emerging consumer

Emerging market consumption growth will have a significant impact on all consumer markets. Firstly in basic products, there is huge dollar value potential from emerging market populations moving towards spending levels in staples commensurate with developed markets. Developed markets make up 14% of the global population and spend US$2,041 per capita on consumer staple products. The equivalent figure for emerging markets with 86% of the population is only US$207.[26] Food, beverages, and household products will all benefit from higher penetration rates in emerging markets.

The growth in the emerging middle class provides strong support for a wide range of discretionary products from phones to fashion, and from electronics to automobiles. Car ownership levels are still a fraction of developed country levels (only 220 per thousand in China versus 804 per thousand in the US).[27]

Figure 12: Consumer spending by region – rapid growth in emerging economies



Source: Goldman Sachs, January 21 2016

Healthcare spending is also set to grow strongly as higher disposable incomes allow more people to afford medicines. From around $6 trillion dollars in 2010, healthcare spending could hit $10 trillion in 2020, with developing countries responsible for $2 trillion (a 15.2% compound annual growth rate).[28] The US accounts for 40% of global healthcare expenditure with per capita spending in 2010 at $5,335; global per capita spending (ex US) was only $596[29]. There is clearly considerable scope for other economies to catch up with the US on a per capita spending basis. In many emerging economies, healthcare spending is growing faster than GDP. A McKinsey study suggests that if healthcare spending simply keeps pace with projected GDP growth, the size of the Chinese healthcare market will double from US$240 billion to US$480 billion by 2018.[30]

3.3 Changing lifestyles and behaviours

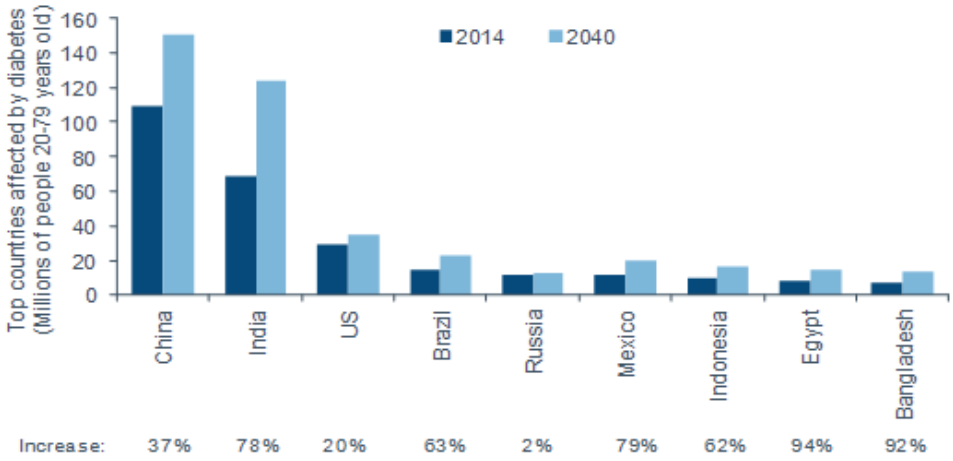
As populations grow, gain wealth, become more urbanised, and get older, there will be a range of consequences for lifestyles, diets, health and wellbeing, and leisure time.

One prominent lifestyle theme is the use of the internet which is fast becoming an essential part of work and life. Internet access is growing quickly in developing countries with many consumers accessing the internet solely on smartphones. In China, the estimated internet penetration rate of 39% is less than half the c.90% penetration rates that are commonplace in countries like the US.[31] One area of significant change will be in the way people shop, with a growing proportion of sales activity taking place online.

Rising incomes in emerging economies are also enabling changes in diets as consumers move from healthy, low-calorie diets that are high in grains and vegetables to higher-calorie, Western-style diets that contain more meat, dairy and sugar. This change in diets combined with urbanisation, less physically demanding work and greater use of transport

has led to less healthy, more sedentary lifestyles for many people. The increasing incidence of Western lifestyle factors is fuelling a concomitant surge in 'western' diseases such as obesity, diabetes (see Figure 13), hypertension, heart disease, stroke and cancer. Unfortunate as this outcome is, it means many healthcare companies are seeing structural growth in demand for their products.

Figure 13: Rising incidence of diabetes worldwide

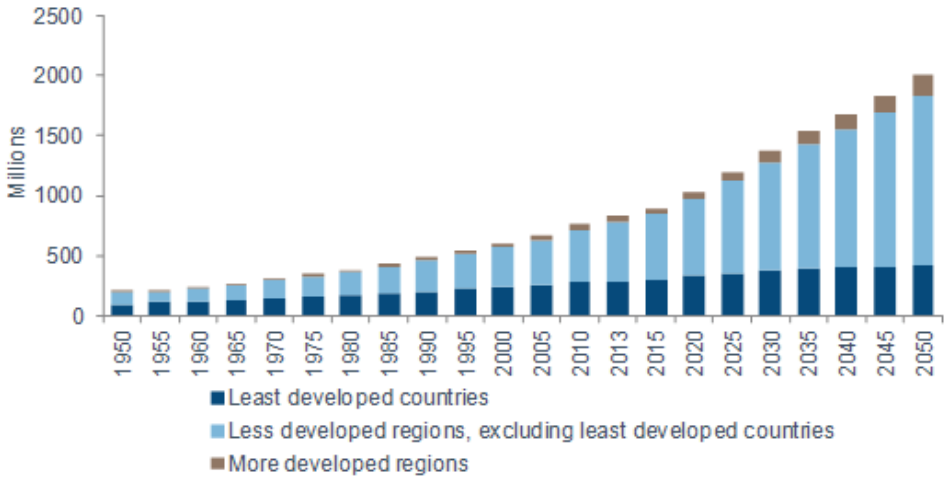


Source: International Diabetes Federation, 2015 Update

3.4 Age-related spending

The number of older persons (over 60) has more than tripled since 1950; it will almost triple again by 2050[32]. Although people are living longer than in the past, the functionality of the human body inevitably declines over time, thereby increasing demand for a wide range of healthcare products (drugs, hearing aids, orthopaedics and eye care) and services (private hospitals and care services). This powerful demographic trend will affect all countries but particularly the more developed countries (see Figure 14 next page).

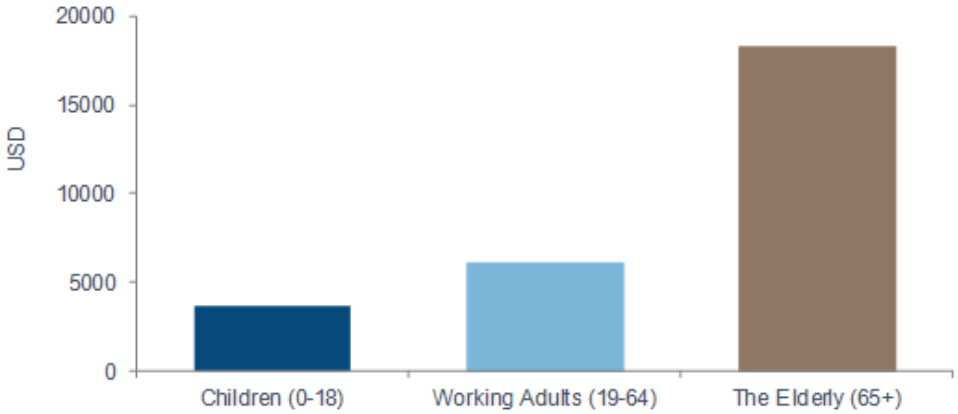
Figure 14: Population aged 60 years or over by development region, (1950–2050)



Source: UN 2014 Revision.

Figure 15 shows the lifetime distribution of healthcare costs by age in the US. It is clear that as more people move into older age brackets, total spending (both private and public) on healthcare will rise disproportionately. As a result, many healthcare companies can expect to see strong structural growth. For example, hearing aid manufacturers will see higher demand from greater numbers of older people as well as growing replacement demand from those people living longer. Similarly, orthopaedic manufacturers can be expected to gain from growing demand for hip and knee replacements.

Figure 15: Healthcare spending increases with age

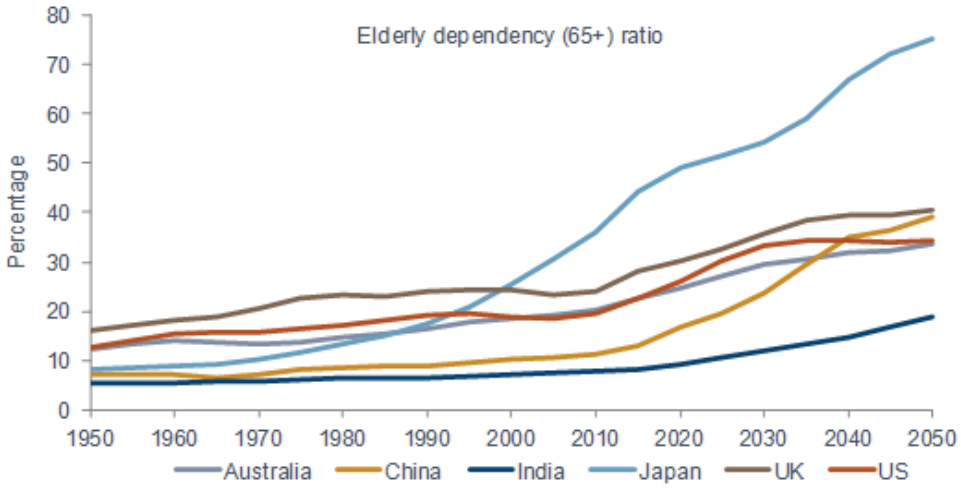


Source: U.S. Personal Health Care Spending by Age and Gender 2010 Highlights, CMS.

Financial services firms could also be expected to benefit from people living longer and needing to fund their retirements. There are problems here for investors interested in accessing the pure structural growth theme, however. This supportive demographic factor tends to be dominated by other (more variable) factors such as macroeconomics, policy and regulation in the performance of financial companies (as evidenced by the global financial crisis). These other factors introduce a higher element of risk that diminishes the structural benefit and the ability of these companies to compound growth over time.

Rising dependency ratios (Figure 16) bring a host of challenges for developed economies. The reduction in the working age population means a reduced labour supply. Other negative effects for governments include rising age-related expenditure, in terms of higher public pension costs and increased healthcare costs. These increasing costs put upward pressure on government budget deficits and national debt levels. Generic drug manufacturers, pharmacy benefit managers, drug distributors and health insurers should therefore see rising demand not only from population growth and ageing, but also from government efforts to control the inexorable upward pressure on public healthcare costs.

Figure 16: Rising dependency ratios present a real problem for some countries



Source: OECD Historical population data and projections, January 25 2015.

SECTION 5: CASE STUDIES

The structural growth themes highlighted are investible now and underpinned by the demographic trends discussed in Section 2. By combining an understanding of the themes with the framework from Section I, earnings compounders can be identified and the market's inefficiency in recognising long-term value exploited. Having highlighted a compounder case study in Section I, two further case studies are provided here as validation.

Case Study: Essilor International

Essilor is the world leader for corrective lenses with a 36% share of global volumes.[33] Responsible for Varilux, the world's first progressive lens which corrects presbyopia (the age-related diminishing ability to focus on near objects); one in every two varifocal lenses sold worldwide is made by the company.

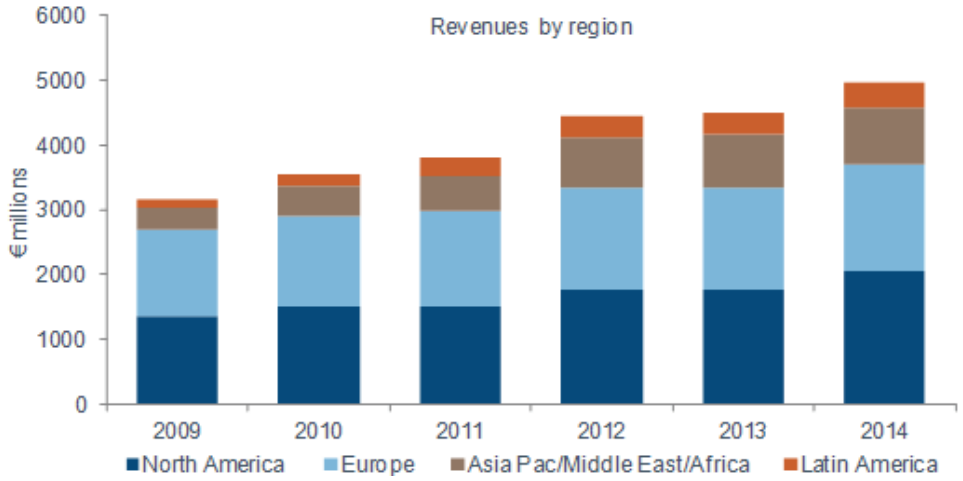
Structural growth drivers – Four factors should create significant growth in demand for corrective lenses. Basic population growth increases the pool of people requiring vision correction. Ageing not only means that people are more likely to need corrective lenses, it also means they are likely to replace their lenses more times. The emerging middle class should drive strong demand growth in developing countries. Changing lifestyles with more emphasis on computer work is also likely to support demand for vision correction.

Industry outlook – Essilor estimates that 60% of the present global population of seven billion need vision correction. By 2030, this will increase to 72% of the 8.3 billion population (i.e. six billion people) due to ageing and lifestyle changes. Only 51% (1.7 billion) currently have their vision corrected, but this proportion can be expected to rise to around 63% (3.1 billion) due to rising incomes and awareness. This equates to a 3.4% compound annual growth rate in the company's core market between 2012 and 2030.

Earnings growth – Strong structural growth in the market for lenses has already been reflected in Essilor's consistently rising revenues (see Figure 17), which were relatively unaffected by the global financial crisis and ensuing recession. Emerging markets constitute over 26% of revenues (as at 2014, versus 15% in 2009), yet penetration rates remain low, meaning there is significant scope for sustained growth. For example, India has only a tenth of the opticians of France on a per head of population basis.[34] The company spends €150 million a year on R&D, a figure in excess of

peers which keeps it at the forefront of the industry.[35] Its ability to sustain earnings has positively surprised the market and handsomely rewarded investors (Figure 19).

Figure 17: Essilor has delivered rising revenues despite the financial crisis



Source: Essilor Annual Report – Consolidated Financial Statement (end 2014). In € millions.

Case Study: Maruti Suzuki

Maruti Suzuki is the largest automobile manufacturer in India and a subsidiary of the Japanese automobile and motorcycle manufacturer Suzuki. The company is the dominant player in the Indian market with a market share of around 50%. It has an extensive distribution network with over 1400 sales outlets and over 3000 service stations in Indian cities.

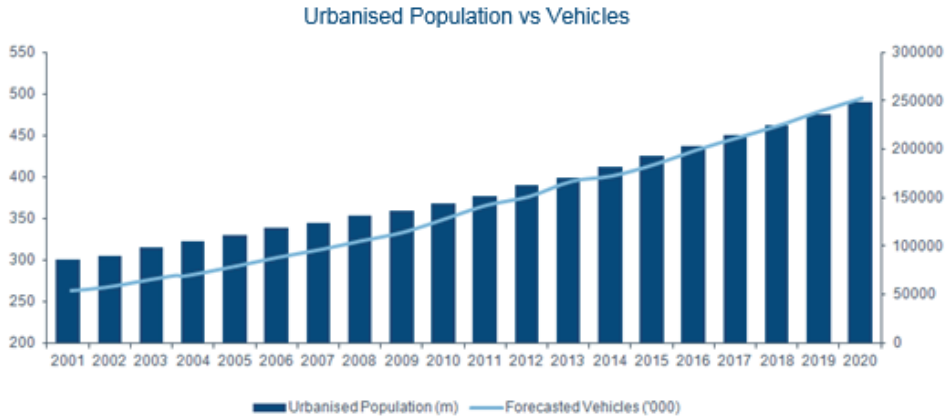
Structural growth drivers – India is the second most populous country in the world with over 1.2 billion people, and it is forecast to overtake China within the next two decades. India benefits from a young population, a fast-growing economy and a rapidly growing middle class. GDP per capita has grown significantly from $450 in 2000 to around $1600 in 2015.[36] As incomes continue to grow, the outlook for discretionary spending is structurally favourable.

Industry outlook – Automobile penetration is extremely low with only 18 per 1000 people currently owning cars. The equivalent numbers in the US are around 800 per 1000, meaning there is huge potential for growth in car sales as the economy and personal

incomes continue to grow. In India, 90% of car sales by volume are attributable to first-time buyers.[37] Maruti Suzuki is a leader in the entry car market.

Earnings growth – Maruti Suzuki has produced strong revenue and earnings growth over the last decade. Net revenues have grown from 120,034 rupees in 2006, (with an after-tax profit of 11,891 rupees) to 486,055 rupees in 2015, generating an after tax profits of 37,112 rupees.[38] Investors in Maruti Suzuki have enjoyed excellent growth in the company's stock price, which has quintupled over the last decade (Figure 19).

Figure 18: Growth of Middle Classes – Maruti Suzuki



Sources: PPP, Indian Stat Agency, July 2014.

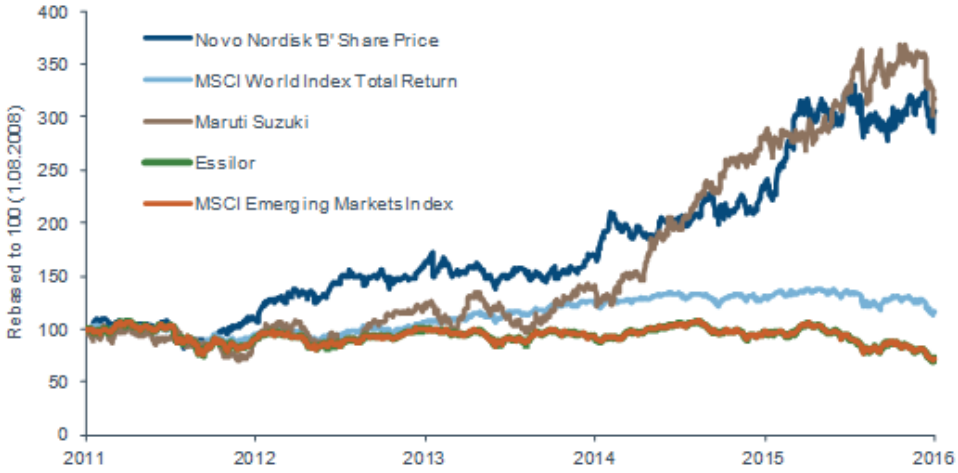
CONCLUSION

The demographic trends and structural growth themes discussed here are happening now and can be expected to play out with a greater level of certainty than the macroeconomic trends on which many investment strategies are predicated. Structural growth themes allow identifiable companies to benefit from strong and compounding cash returns over investible timescales.

Positive structural growth outlooks tend not to be fully reflected in the valuations of companies given the inefficiency of the equity market in recognising the cumulative impact of compounding earnings growth. It is the reinvestment of cashflows back into a business enjoying strong market growth that is the hallmark of an earnings growth compounder. Earnings growth compounders like Essilor, Maruti Suzuki and Novo Nordisk have all significantly outperformed the broader market (Figure 19).

The evidence supplied in this paper strongly suggests that time spent identifying companies with a strong competitive advantage and valuable intellectual property in industries benefiting from structural growth is time well spent. And, investment strategies that take this approach are certainly worthy of close consideration by investors.

Figure 19: Three compounders have significantly outperformed the broader market



Sources: DataStream, as at 21 January 2016.

ENDNOTES

1. Dimson, Marsh and Staunton (2002) showed dividend paying stocks outperform. Fama and French (1992) showed stocks with high earnings/price ratios earn higher returns.

2. Source: NYSE.

3. A 2004 MORI survey commissioned by the NAPF and IMA found the belief that investment mandates create short-termism was held by a third of NAPF (National Association of Pension Funds) members and two-thirds of IMA (Investment Managers Association) members (MORI, 2004).

4. Keynes, J.M. (1936).

5. See Montier (2007); Kahneman (2011); Kahneman & Tversky (1973), (1979); Shiller (2000).

6. McClure et al (2004) found that the parts of the brain associated with the dopamine system and implicated in impulsive behaviour are triggered when short term rewards are on offer, while delayed rewards were valued by a different part of the brain associated with calculation. For more, see McClure et al (2004) and Knutson and Peterson (2005).

7. See Frederick et al (2002). The shape of that discount factor is inconsistent over time, taking the form of a hyperbolic function rather than the exponential function economists would expect if value were discounted consistently over time.

8. See De Bondt & Thaler, (1985)

9. This can be partly explained by availability bias (mentioned above) as there is a wealth of information available at any point to inform short-term forecasts.

10. Source: IBES.

11. Sorensen & Ghosh (2010), Easton (1985), Ball & Bartov (1996) and Bernard & Thomas (1990) and others provide evidence for the dominant impact of earnings growth on returns over time. Analysis by Credit Suisse confirms the point regarding the persistency evident in earnings growth. Using a measure of cash flow return on investment (CFROI), they found that more than half of the companies in the top quartile of returns are still in top quartile five years later. The same is true for the bottom quartile. Only 9% of companies in the top quarter drop to the bottom and only 6% of the bottom quartile make it back to the top. The highest persistency was seen in the household products and food and beverages sectors. Credit Suisse, 'Was Warren Buffet Right: Do Wonderful Companies Remain Wonderful?', June 2013.

12. Source: DataStream, as at 31.12.15.

13. Novo Nordisk, International Diabetes Federation.

14. Novo Nordisk Annual Report 2014

15. Peter Lynch recognised the limitations of valuation multiples in valuing long-term winners in his book 'One Up on Wall Street' (1989) when he said "If I'd bothered to ask myself, 'How can this stock go any higher?' I would have never bought Subaru after it already went up twenty-fold. But I checked the fundamentals, realised that Subaru was still cheap, bought the stock, and made sevenfold after that."

16. Research papers from Goldman Sachs, (The Die is Cast April 2011) and Credit Suisse ('HOLT Wealth Creation Principles: Was Warren Buffet Right: Do Wonderful Companies Remain Wonderful?', June 2013) support the point.

17. Arnott and Chaves (2012) describe demography as a social science with "startlingly little uncertainty".

18. Academics have tried to establish a more immediate link between demographics and GDP. Arnott and Chaves (2012) found a strong link between demographic transitions and GDP growth, with young adults being the driving force behind GDP growth. Arnott and Chaves postulate attractive economic outlooks for India and many African countries in particular thanks to their large working age populations (and relatively small numbers of senior dependents).

19. Demographic transition theory is based on an interpretation of demographic history originally developed in 1919 by the American demographer Warren Thompson (1887–1973). For more, see Caldwell et al (2006).

20. See Aiyar (2013) and Nwakeze (2011).

21. Source: United Nations, Department of Economic and Social Affairs, Population Division (2013). World Population Prospects: The 2012 Revision.

22. Source: World Bank, March 2011. The World Bank defined the middle class as individuals earning an income falling between the per capita income of Brazil and Italy.

23. Source: All figures, UN Population Division, 'World Population Prospects: The 2012 Revision'.

24. Source: World Bank (2006) 'Reengaging in Agricultural Water Management: Challenges and Options'".

25. Source: State Statistical Bureau (SSB), 1997. China price statistical yearbook. Beijing: China Statistical Publishing House. Total arable land is from FAO division of the UN, 2011.

26. Source: Euromonitor, Goldman Sachs 'Demographic Dynamics: a case study for investors' August 2010.

27. IHS Automotive, Datastream , The Ministry of Public Security in China, July 2015.

28. Bain & Company, 2011 'The Great Eight: 20 Trillion Growth Trends to 2020.'

29. WHO National Health Database, 2010 data. Total health spending is the sum of public and private health expenditures.

30. Sussmuth-Dyckerhoff, C. and Wang, J. (McKinsey), (2010)

31. European Economic Intelligence Unit, as at 2011.

32. United Nations Department of Economic and Social Affairs, Population Division (2009)

33. All figures, Essilor, 2013 Annual Shareholder Presentation

34. Essilor Investor Day, December 2010, based on internal analysis.

35. Ranked among the world's 30 most innovative companies by Forbes in 2011 and 2012.

36. IMF, World Economic Outlook Database October 2015

37. Indian Stat Agency, July 2014.

38. Maruti Suzuki annual reports, as at January 2016.

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