**Introduction**

In a 1989 essay “The End of History”, author Francis Fukuyama laid the groundwork for his 1992 book “The End of History and the Last Man”, in which he suggested that:

“What we may be witnessing is not just the end of the Cold War, or the passing of a particular period of postwar history, but the end of history as such.... That is, the end point of mankind's ideological evolution and the universalization of Western liberal democracy as the final form of human government.”

At the time at which this was being written, it must indeed have seemed that the most effective economic and political system had been developed, certainly in contrast to the major ideological competitor of the previous 70 years or so. Without arguing or suggesting that the approach was by any means perfect or without fault, it is indeed fair to suggest that market economies - typically at that point embedded in liberal democracies - had delivered huge overall progress by almost any qualitative measure globally - and if anything this accelerated in the period after 1989 - again at a global level.

However less than 20 years later much of the world endured the consequences of the largest financial and economic crisis since the 1920’s - and its effects continue to reverberate through economic, financial and political systems to this day. It is unsurprising that this has raised fundamental questions about the functioning of the global economy, the outcomes being delivered, and the social and therefore political sustainability of these outcomes. Much of the challenge to the current model is centred on political systems in Western developed markets. However this probably reflects differing stages of economic development. The reality of a major challenge to this model in a globalised interconnected and interdependent world means that the potential implications are significant for all economies.

These concerns have - equally unsurprisingly - fed into the political process in many developed economies in particular, with explicit challenges to hitherto widely accepted assumptions about global free trade, financial markets, and technology.
Objectives of this working paper

This working paper sets out to:

• Analyse how and why an apparent misalignment between business activities and economic growth on the one hand, and sustainable and acceptable societal outcomes on the other has arisen. How and when did economic progress diverge from societal progress (if this is indeed the case)?

• Analyse why such a divergence may have taken place to facilitate a better understanding of how a realignment might take place – what kinds of intervention might support such a realignment, and what principles might be used to identify and underpin such interventions?

• Suggest that some of the debates taking place that seek to roll back some of the realities of a globalised, interconnected world might make things worse rather than better (in societal and therefore political terms). There are some parameters which perhaps should be considered foundational.

• Inform a different kind of discussion with a broader range of stakeholders – including businesses, governments and citizens.

This working paper intentionally does not make firm or formal recommendations but offers a framework for discussion and debate over some of the world’s most pressing challenges today. It can and should be critiqued – and therefore improved upon. The hope and expectation is that by facilitating a debate about some of the fundamental assumptions about the relationship between business, the economy and society, the systems which support this relationship will evolve in a manner that reflects experience to date and lessons learned (good and bad), and will develop for the future in a successful and sustainable manner.
Let’s start at the beginning
**What is the nature and purpose of an economy?**

It is useful to start with a fundamental question over the nature and purpose of an economy – because the assumptions that underpin both are often subject to debate.

For the purposes of this working paper, an economy is considered the “engine” by which human needs (and desires) can be met through opportunities. Human needs must be addressed by virtue of being addressed as opportunities that reflect human behaviours and attributes – which in turn then meet some of the same human needs.

An economy is therefore a dynamic and evolving framework of rules, habits, agreements, behaviours and practices that leverage human attributes to match human needs.

Innovation in opportunities drives the evolution of needs (or desires) and therefore demands, which in turn drives opportunities. As long as the ‘engine’ can function effectively – in other words, that the institutional framework supports the realisation of opportunities – the greatest opportunities arise (at least in theory) when and where the needs are demonstrably greatest.

This means that the effectiveness of the “engine” itself largely determines the degree to which needs will be met and opportunities will be realised.

Since the objective of the economic engine is to match human needs with opportunities and capabilities (including leveraging technology and other innovative capabilities), the starting point must be to identify and deliver on these ever evolving needs and then leverage the engine to match them with opportunities, on dynamic basis.
A high level overview of where we have been
This paper suggests three fundamental drivers of change have shaped the course of our current system:

- **Globalisation.** The process of integrating economies, industries, markets and policy making around the world, leading to greater trade, the rise of multinational companies, innovation, knowledge dissemination and capital transfer across borders.

- **Technology.** Spurred by the computer and internet leading to unprecedented connectivity and information flows and ultimately the development of robotics and artificial intelligence (AI), enabling new business practices and delivering exponential impacts on nearly every aspect of our lives.

- **“Financialisation”**. A sustained focus on financial metrics – primarily Gross Domestic Product (GDP) at a macro level and shareholder value at a corporate level – to measure performance and guide decision making.

These drivers’ initial impacts were intended, positive and successful, and all three forces have served us very well. Each has contributed enormously to the massive economic and therefore societal progress seen in the world over the past several decades. Put simply, they worked.

As they began to interact, each driver fundamentally transformed the nature of the other and together, their combined impact on the economic system as a whole has been profound.

Each individual driver in its current form has probably run its course in terms of delivering societal progress and needs to evolve for the next stage.
Globalisation, technology and “financialisation” have all evolved and interacted over the past few decades – the periods post-World War II (WWII), the fall of the Berlin wall in 1989 and the 2008 global financial crisis were particularly significant.
All three drivers are dynamic, inter-related and self-reinforcing over time

All three drivers evolved

• Well managed market economies – typically embedded in liberal democracies - delivered social progress relatively effectively for many years.
• Economic growth in developing economies was low with the advanced economies driving much of growth in global GDP.
• ‘Re-globalisation’ took hold as the world recovered from the World Wars with the global economy dominated by the US.
• Multilateral economic institutions were founded, including the International Monetary Fund (IMF), World Bank and (General Agreement on Tariffs and Trade) GATT (now WTO), representing a vision of a more cooperative world.
• A globally interconnected economy emerged with increasing levels of global trade and its primary business driver – the Multinational Company (MNC).
• Beginnings of increased financial deregulation and “financialisation” of economies fuelled by the growth of capital markets - funded MNC growth.
• GDP and shareholder value used as primary measures of success and suitable proxies for societal progress.

All three drivers converged and accelerated

• A succession of trade agreements enabled more trade with emerging markets and spawned greater economic integration in the global economy, innovation, better knowledge sharing and capital transfer.
• Technology advances accelerated globalisation through an explosion of internet usage and greater connectivity.
• A reduction in communication and transport costs - as well as new technologies that helped standardise, automate, centralise and offshore business processes - facilitated labour and tax arbitrage, and a shift of some industries from advanced to emerging economies.
• Technology advances, more global trade and greater access to capital significantly increased the number of MNCs and enabled them to unbundle their value chains, access billions of new consumers, achieve economies of scale and experience greater cost competitiveness through global sourcing.
• Globalisation facilitated growth of capital and broad application of technology, delivered lower prices, higher consumption and more free time in advanced economies.
• Growing focus on corporate short-termism – regulatory requirements, automated trading and executive incentives all drove corporate decision making, weakening the connection between business and societal good.
• Credit boom masks effects of three drivers.

There are signs that all three drivers have run their course in their current form

• The global financial crisis exposed the weaknesses of all three drivers.
• Huge increase in global market of outsourced services (doubled from 2000 – 2014).
• In a multi-polar world, emerging markets - with very different political economies – now account for over 70% of global growth.
• MNCs are no longer outperforming their domestic peers.
• Persistent use of financial metrics for macro and corporate performance – but no longer adequate proxies for social progress.
• Rapid increase in number of mobile phone subscriptions and smart phone usage – technology now morphing from personal connectivity to the Internet of Things.
• Greater automation and productivity gains leading to growing market for AI and robotics, with huge implications for the future labour force. Some regions – e.g. sub Saharan Africa – risk being left behind.

During the same period, on average, the world has seen enormous progress on key measures including GDP, poverty reduction and life expectancy.

For many, their lives are no better than they were a decade or so ago and they share real concerns that their children’s lives will be worse. This is despite the fact that on average, since the Second World War, the world has seen remarkable economic and social growth, greater peace, longer lives and billions of people brought out of poverty.
While the global picture, on average, is very positive, benefits have been unevenly felt over time

**Global**

- Increasing concentration of wealth among top income earners.
- Increasing free trade, the rise of MNCs and technological improvements facilitated labour arbitrage, driving investment and growth in the emerging economies which in turn drove up real wages.
- Wage stagnation took effect in advanced economies as productivity gains overtook wage growth.
- Growth of the middle class in advanced economies stagnated as it received few of the advantages of economic growth and income inequality increased.
- Dramatic increase in the middle class in emerging economies due to growth in wages. Millions move to cities in search of better paying jobs.
- Technology including mobile and internet contributed to rapid development in some emerging economies by leapfrogging a lack of infrastructure.
- Deindustrialisation resulted in high unemployment in communities most vulnerable to outsourcing with few opportunities for low skill workers to deploy into other industries.
- Global life expectancy increased and some countries experiencing challenges of ageing populations.
- Massive global GDP growth – by 2014, global GDP had multiplied by 5x 1960s value.
- Global real wage growth dropped sharply during the crisis, recovering by 2010 but then decelerating again to the present day.
- Global inequality has fallen by some measures due to reduced poverty in China and India, but many advanced economies experiencing increasing income inequality.
- Most of the growth in wages driven by emerging economies, which have seen significant growth in GDP.
- Rising wages and standards of living in emerging economies expanded the middle class’s share of the global economy and lifted millions out of poverty.
- At the same time, the middle class in advanced economies has seen its income stagnate - incomes for the top decile increased by 40 percent in the past two decades, while growing only modestly at the bottom.
- MNCs have become more removed from their cities and countries of origin – a factor exacerbated by a focus on shareholder value and short-term results.
- Where real incomes are stagnating or in decline, the hardest hit are the young, less educated workers – raising a generation growing up possibly poorer than their parents.
- Concerns over the future are now manifesting as fears, and being played out in political dynamics.

**Advanced/emerging economies**

- Widening gap between GDP of advanced and emerging markets, leading to high global inequality.
- Wages in advanced economies rose steadily from 1945 to the 1970s.
- Income inequality fell within most advanced economies.
- The middle class in advanced economies grew exponentially, driving demand and increasing average life expectancy.
- High levels of poverty in emerging markets.
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**Local**

- End WWII (1945)
- Fall of Berlin Wall (1989)
- Global Financial Crisis (2008)
- Present day
From alignment to misalignment: All three drivers evolving, converging and accelerating over time

A deeper dive into the data shows the interaction of the drivers of change – globalisation, technology, “financialisation”
With the end of World War II (WWII), a virtuous cycle began which continues to influence how we think about business, economics and society today. The cycle centred on the unprecedented alignment among the three forces – globalisation, technological advance and “financialisation”.

The Marshall Plan, a group of loans and grants from the US to other countries were intended to rebuild Europe. The programme involved not only funding but structural changes too - for example, lessening regulations and trade barriers. Together with the Bretton Woods agreement of 1944, which established international monetary exchange among nations, these measures helped lay the foundation for a globalised economy.

The result was extraordinary for economic and social progress. Well managed market economies – typically embedded in liberal democracies at this time – delivered huge societal progress for many years, especially in the US and Europe, and almost by any qualitative measure (on average) globally. These years saw record levels of international trade, with world exports increasing more than 8% per annum between 1950 and 1973.

Internationally, a new set of institutions – the IMF, World Bank, OECD and the General Agreement on Tariffs and Trade (the precursor to the World Trade Organisation) – oversaw the reconstruction of Europe and promoted global economic development. This reflected a vision of a more cooperative world.

The extent to which market economies had delivered successfully for their citizens was starkly demonstrated by the fall of the Berlin Wall in 1989. It was no coincidence that the subsequent years saw a major acceleration in measures to drive free trade on a global basis between market economies, supported and facilitated by a globalised financial system and an emphasis on financial metrics at both macro and micro-economic levels, leveraged by technology.

The 1990s saw a succession of trade agreements - including the North American Free Trade Agreement (NAFTA) and the European Economic Community (EEC) (with the EU single market launched in January 1993) – which enabled much greater integration of the global economy.

These agreements opened up massive new consumer markets for business. They promoted innovation transfer, economies of scale and specialisation, and increased efficiency of resource use worldwide, which in turn led to economic growth.

Exports of goods and services as % of GDP and multilateral trade agreements (1945 – 2015)

![Graph showing exports of goods and services as % of GDP and multilateral trade agreements (1945 – 2015)]
The World Bank has reported that per capita real income grew more than three times faster for developing countries that lowered trade barriers (5.0% per year) than other developing countries (1.4% per year) in the 1990s.

A study of 150 countries found that on average a 1% increase in the ratio of trade to GDP (trade intensity) was associated with an increase of between 0.9 and 2% in per capita income (OECD, 2010).

This ‘hand-in-hand’ growth between trade and GDP can be seen, for example, in East Asia and the Pacific, where almost all countries have embraced outward-oriented development strategies.

![East Asia & Pacific economies: GDP per capita vs trade intensity](source: World Bank)
The “financialisation” of economies, fuelled by the growth of capital markets throughout the world, funded the growth of MNCs

As financial services were increasingly deregulated, greater access to capital and the availability of leverage spurred a period of dramatic growth. For example, between 1971 and 1996, the UK financial sector grew at a rate of 2.7% p.a., outstripping GDP at 2.2%. In the decade preceding the financial crisis, the UK financial sector grew at an average rate of 6.1% p.a. (Bank of England). This pattern was mirrored by other advanced economies and latterly in emerging markets. A focus on GDP growth and shareholder value created the conditions for massive foreign direct investment.

Foreign Direct Investment as % of GDP, outbound

Market capitalisation of listed companies and key dates in financial deregulation
**Multinational companies – the primary business driver in an interconnected global economy - grew and went from strength to strength**

As new markets opened up, regions became more connected through trade agreements, and capital was made more available through deregulation, companies began to do more and more business outside their home territories. Global stock of FDI (cumulative FDI flows) grew 11-fold from 1980 to 2015 (UNCTAD). A focus on GDP growth and shareholder value created the conditions for massive foreign direct investment.

Corporations expanded their reach as they achieved unprecedented economies of scale, much greater efficiencies and higher cost competitiveness through global sourcing. From the 1990s to 2010, the number of MNCs grew from 37,000 to 104,000. Within this period, foreign assets owned by the largest MNCs tripled and foreign sales more than doubled.

In 2015, MNCs and their foreign affiliates generated an estimated $7.7 trillion in sales, employed some 16 million workers and had more than $12 trillion in assets (UNCTAD World Investment Report 2016).

Today, MNCs globally account for one third of the value of the world’s stock markets and a substantial share of intellectual property (The Economist, 28 Jan 17), and their value chains account for 80% of $20 trillion in global trade each year (UNCTAD, 2012).

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### Global stock of FDI 1980 - 2014

![Graph](image1.png)

**Source:** UNCTAD; PwC analysis

### Growth in MNCs: Number of multinational parent companies and their foreign affiliates

![Graph](image2.png)

**Source:** Jaworek et al. (2015) using data from UNCTAD
GDP was used as the primary measure of national success

GDP is a monetary value of all the goods and services bought by a final user produced in a country in a given period of time. In other words, it is a measure of all the outputs generated within the borders of a country.

An increase in real GDP (i.e. adjusted for inflation) is generally interpreted as a sign that an economy is doing well. This is because GDP growth suggests that consumers are buying more and that businesses are investing more and hiring more people. It provides a lot of information about an economy in a single measure. GDP has therefore been used widely by governments, economists and businesses to make decisions about monetary and fiscal policies and investments.

GDP was used as the primary measure to understand a country’s success within an increasingly globalised world. It was simple, measurable and introduced at a time when economic growth and societal progress were aligned.

By 2014, global GDP had multiplied by around 5 times its 1960 value. This was driven by technological change, new methods of production and the development of inexpensive sources of energy and was supported by demographic shifts such as urbanisation.

Source: World Bank
Shareholder value provided a single goal to guide business performance

Within business, the concept that a company’s main objective should be to ‘maximise shareholder value’, while commonplace today, is relatively new. In the mid-twentieth century, corporations worked ‘in the balanced best interests of all’ (General Electric Annual Report, 1953).

However, there were concerns that this created inefficiency and waste. In 1970, Friedman argued that corporations were taking on too many social responsibilities, and to the detriment of shareholder interests. Jensen & Meckling built on this view, arguing that management can make more intelligent decisions if it has a single goal, rather than trying to trade off against multiple objectives for different stakeholders. The suggestion was that shareholder value should be this single goal, rather than the concerns of customers, creditors, employees and the community.

This mind-set was further reinforced in the 1980s and 1990s by business people like Jack Welch, who believed in delivering constant profit increases, even if this meant aggressive restructuring of underperforming workforce and company assets. During his tenure as CEO of GE from 1981 to 2001, its market value grew from $14 billion to $484 billion.
From the end of World War II to the 1990s, the foundations were laid for the adoption of personal technologies—for example, the mass production of personal computers began in the 1980s—with the early years of Moore’s Law, electronic technologies doubled in power per dollar every 18 months. Since 1990, new innovations have swept the globe—including the rapid spread of the internet, significant improvements in Wi-Fi and broadband speeds, the explosive growth of social media, and the emergence of cloud computing, AI and robotics.

The growing speed with which technology has advanced has arguably been felt most strongly in emerging economies, where technology has allowed some countries to leapfrog a lack of infrastructure to increase their connectivity. Between 2008 and 2016, the number of internet users in developing countries tripled to 2.4 billion, whereas the developed world saw an increase of only 36% in the same period.

Between 2005 and 2016, the number of mobile phone subscriptions increased almost 5-fold to 5.8 billion in the developing world compared to an increase of 60% to 1.6 billion in the developed world (ITU, 2017).

Similarly, smartphones have been the fastest selling gadget in history. According to Pew Research, approximately a third of people across emerging and developing nations reported owning a smartphone in 2015 vs only 21% in 2013.

Technology has driven both transparency and connectivity via social media to significantly influence perspectives and engagement from individuals and groups.

Technology advancement - timeline

Mobile-cellular subscriptions and individuals using internet per 100 inhabitants in the developing world, 2001-2016

The developed/developing country classifications are based on the UN M49, see: http://www.itu.int/en/ITU-D/Stats/Note: * Estimate; Source: ITU World Telecommunication /ICT Indicators database

Globalisation allowed the creation of more effective value chains through technology advances and labour arbitrage

The benefits of Moore’s Law have been realised as technology becomes cheaper and reaches further. Greater interconnectivity has enabled far greater knowledge dissemination while also reducing communication-and transportation costs, fuelling new industries and allowing the unbundling of production - a key driver of globalisation. Goods no longer needed to be produced near to consumers and components no longer needed to be manufactured together – for example, it became commonplace to use supplies from one country, secure investors in another, pay taxes in a third country and sell new and diverse consumer products to a fourth region entirely.

Technology costs are plummeting (and reach is increasing)
Technology also accelerated labour arbitrage. As it became increasingly faster and cheaper to transfer and store data via the internet, the 2000s saw more and more companies outsource their (low-skill) functions, often overseas to low-cost countries such as India and China. The size of the global market of outsourced services more than doubled from $46 billion in 2000 to a peak of $105 billion in 2014 (Statista, 2017).

It is not just the manufacturing industry that has taken advantage of the reduced costs and increased flexibility offered by offshoring. Financial services account for roughly a third of offshore services (Elixirr, 2014), and almost 60% of high tech/telecom companies have an offshore call centre (PwC, 2010).

Offshored services are increasingly technical, such as accounting and legal services, allowing companies to tap into the highly skilled, as well as low-skill, talent in developing countries.

New technologies are continually evolving and changing the way we work; for example financial technologies like blockchain are rapidly changing the way businesses transact.
Labour arbitrage also contributed to a shift in manufacturing and other industries

As trade barriers were removed – and in combination with better access to education, infrastructure investments and new technologies - jobs were moved to countries where the cost of labour and doing business was lower.

Labour arbitrage led to China together with the rest of Asia significantly increasing their share of global manufacturing output by over 200% between 1990 and 2013.

Despite increasing wages, China’s factories are still cheaper for business than those in advanced economies. Many factory workers in China are paid just above minimum wage, which is about $270 a month – less than a quarter of minimum wage in the United States (The Economist, Mar 2015).

McKinsey found that labour productivity also increased by 11% a year in China from 2007 – 2012. With Chinese factories starting to invest in automation, there is significant scope to improve productivity further. China became the biggest market for robots in 2013, buying 20% of all those made that year, according to the International Federation of Robotics (The Economist).
Emerging markets grew as they became more integrated in the world economy

Emerging markets benefited from the new jobs, exports and technology that MNCs have brought.

FDI inflows into emerging markets increased exponentially. So much so, the E7 – seven of the largest emerging market economies (China, India, Indonesia, Brazil, Russia, Mexico and Turkey) – have begun to dislodge the G7’s – seven of the world’s largest economies (United States, France, Germany, Japan, Canada and Italy)– share of world trade.

Although the G7’s share still remains above that of the E7 overall, they have struggled to compete in labour intensive industries due to labour arbitrage. Emerging market and developing economies now account for over 70% of global growth and more than half of world GDP (measured at purchasing power parity) (IMF, 2016).

Globalisation has been so successful that we now have countries that have achieved great economic and social progress with dramatically different views of how a political economy should operate. What we learned is that a liberal democracy is not an essential requirement for a market economy to be successful, at least in its origins. Thus, we now have a world that broadly agrees that markets are effective engines of economic success, but have quite different views of how best to govern a country and an economy.
Globalisation delivered lower prices, higher consumption and more free time in advanced economies

As the World Economic Forum has pointed out, globalisation created a world where we drink coffee from Brazil, wear a t-shirt stitched in Cambodia, check a phone assembled in China with IP from the USA, and think nothing of it.

At a macro level, globalisation - facilitated by technology and “financialisation” - has had an enormous impact. It has driven competition, innovation and efficiency, as well as providing consumers with new and diversified products at lower costs - prompting increased consumer spending worldwide.

The sharing of knowledge, capital and talent has helped businesses grow and innovate, and greater productivity has reduced average working hours in advanced economies. Lower priced goods and increasing prosperity in the developing world significantly expanded the demand for goods.

Consumption

Global Consumer Spending on Goods and Services ($ trillion – real US) 1990 – 2020 (e)

Decrease in average working hours over time

Sources: PwC analysis, US BLS

Sources: Euromonitor, A.T. Kearney analysis
The World Bank has estimated that the share of the global population living in extreme poverty – living on or less than $2 a day - has fallen below 10% for the first time – down from over 40% just thirty years ago.

Economic growth in developing countries is thought to be the primary driving force behind the rapid reduction in poverty. Globalisation, trade, and technology helped create jobs in South and East Asia, which in turn drove consumer demand and development of internal markets. Reduction in income inequality in some countries has also contributed, helped by increased investment in education, health and social safety nets (World Bank; The Economist).

In China alone, over 600 million people were lifted out of poverty between 1990 and 2013, when poverty rates fell from 67% to just 1.9% (at US$1.90/day) (World Bank, 2017). Now, as wages in China rise, some low-cost jobs are moving to neighbouring countries with large low-income populations such as Myanmar and the Philippines.

Source: The World Bank

WORLDVIEWS DRAFT for discussion

PwC
There are now signs that each driver of change, in its current form, has run its course
All three drivers have together have led to a separation of economic success and societal progress

Social Progress Index vs GDP per capita

For the purposes of this Social Progress Index (left), social progress is defined as the capacity of a society to meet the basic needs of its citizens, establish the building blocks that allow citizens and communities to enhance and sustain the quality of their lives, and create the conditions for all individuals to reach their full potential.

As the chart shows, there is a positive and strong relationship between social progress and GDP. On average, countries with a higher income tend to have higher social progress e.g. Finland ranks highest while the Central Africa Republic ranks lowest.

But the relationship between social progress and GDP is not linear. At lower income levels, small differences in GDP can cause big leaps in social progress. However, easy gains of social progress are exhausted as economies grow at the upper end due to social and environmental challenges. The index also shows that countries with comparable GDP have highly variable performances in relation to social progress.

As globalisation, technology and “financialisation” began to interact and transform each other’s effects, GDP became an inadequate proxy for sustainable social progress.

When GDP was first introduced, economies were dominated by agriculture and manufacturing, producing goods at market prices - therefore the value of outputs were easier to measure. At this time, the assumption that economic growth would deliver societal progress still held.

Financial performance is an essential measure of performance or success in a globalised economy which is leveraging ever increasing technology capabilities but other broader outcomes must also be considered.
Globalisation has, by some measures, reduced international income inequality since the 1950s, but not equally, and the use of averages is inadequate

Differences between countries’ GDP per capita have risen substantially over the 20th century. Long-term studies estimate that in the 19th century, the ratio between the per capita income in the richest countries (the Netherlands and the UK) and the poorest countries (Sri Lanka – then Ceylon - and China) was around 4 to 1. This ratio rose to more than 100 to 1 in 2007 (Maddison, 2004; Milanovic, 2011a). This has led to an increase in ‘unweighted’ inter-country inequality (which effectively gives each country equal weight, regardless of size) – blue line in chart.

However, when population is taken into account, it paints a slightly different picture of inequality. Population-weighted inter-country inequality (red line in chart) is much higher in the 1950s, but declines rapidly in the 1990s due to rapid GDP growth in China and India, fuelled by globalisation and offshoring in particular.

**Income inequality between countries and individuals 1963 – 2009 (Gini coefficient)**

Sources: Lakner and Milanovic (2013); Milanovic (2013); and IMF staff calculations.

Note: Unweighted inter-country inequality (blue line) is calculated across GDPs obtained from household surveys of all countries in the world, without population-weighting. The population-weighted inter-country inequality (red line) takes into account population weights. Finally, the global inequality concept (green dotted line) focuses on individuals, instead of countries. The calculation is based on household surveys with data on individual incomes or consumption.
Continued use of primarily financial metrics at a corporate level has persisted, driving a focus on short term results

While the original ideas behind shareholder value may have had long-term cash flows in mind, in practice the focus has increasingly been on short-term results. This is due to a number of factors. For example, the introduction of Net Present Value (NPV) in the 1950s discounts the value of future cash flows and results in emphasis on short-term results (“a dollar earned in the future isn’t worth as much as a dollar today”).

Another factor driving short-termism is regulation. With the idea of improving transparency for shareholders, regulatory bodies such as the US Securities & Exchange Commission (SEC) and UK Financial Conduct Authority (FCA) have increased the frequency and amount of information that public companies have to disclose e.g. quarterly management statements.

Also, there was a movement from long term shareholder investment to extremely short term holdings driven by automated trading, day trading, etc. For example, the average holding period for stocks in professionally managed funds fell from 7 years in 1960s to 1 year in the 2000s (HBR, 2006).

Furthermore, incentives such as introducing stock options as part of executive compensation, which were intended to align goals of management and shareholders, led to even greater focus on short-term results. Executives often also had the choice to exercise their options early, meaning they did not always feel incentivised to consider long-term cash flows.

The requirement to deliver on short term results left little room for longer term focus on broader stakeholder considerations.

Growth of high frequency trading: NYSE annual trading volumes 1970 to 2009

Source: New York Stock Exchange (NYSE)
In many (but not all) cases, companies prioritised returning capital to shareholders over investment and innovation.

In 1982, the SEC instituted new rules which made it less restricted for companies to repurchase their shares on the open market. Since then, there has been a significant increase in share buybacks, in absolute terms but also as a percentage of net income (see chart).

In theory, companies justify share buybacks for reasons such as their belief that their shares are undervalued, or that the company has extra cash and no investment opportunities that would offer better return than distributing to shareholders.

However, some suggest that companies are increasingly using share buybacks due to rising pressure to demonstrate short-term positive results e.g. increasing quarterly earnings per share (EPS) (reducing the number of shares increases the EPS even if income is stagnant) or increasing share price (buybacks tend to increase stock prices for the same reason).

In general, “financialisation” and a focus on short term results has made large enterprises less able to serve the communities around them. Corporations have been further removed from the communities in which they had been headquartered or carried out business, weakening the relationship between them.

*Dividends and share repurchases as % of company net income 1981 – 2012*

MNCs are no longer outperforming their domestic peers and we are seeing a growth in family owned businesses

Globalisation has meant that firms have become less and less rooted in their towns and cities of origin. Furthermore, while Western MNCs experienced extraordinary growth over the last 30 years, there are signs that they have may have plateaued. Multinationals are no longer achieving superior returns. In six out of the ten sectors MNCs have lower ROEs than their domestic peers (Economist).

Over 85% of global stock of multinational investment was created after 1990 (UNCTAD, 2017), but foreign investment has stagnated since the financial crisis in 2008 (OECD).

Profits of the top 700 MNCs based in developed countries have dropped by over 25% in the past five years. Domestic firms are gaining market share – over the same period, the profits of domestic firms rose by 2% (The Economist, 28 Jan 17).

Enterprises in China, for example, now make up 20% of the Fortune Global 500. The share of US and Western European companies on the same index fell from 76% in 1980 to 54% in 2013 (McKinsey Global Institute, 2015).

FDI inflows have stagnated since mid 2007

A growing number of family-owned businesses in emerging markets could hit $1 billion in sales in the years from 2010 - 2025

In contrast to large publicly-owned companies in the West, many firms in emerging markets are family-owned. In fact, 60% of emerging markets’ private sector companies with revenues over $1 billion or more were owned by founders or families in 2010. McKinsey analysis suggests that such companies will represent nearly 40% of the world’s largest enterprises by 2025.
Technology could bypass some regions, hindering their development

The global tide of technological innovation has not lifted all boats and, because advances are so rapid, those who are not benefitting fully now are in danger of being left further and further behind.

One area at risk of meeting such a fate is Sub-Saharan Africa.

- Despite the benefits of mobile banking, for example, the African Development Bank Group has stated that poor technological capability remains one of the major constraints to Africa’s efforts to achieve sustainable development.
- Almost 75% of people in Africa are non-users of the internet (compared to only 21% of Europeans who are offline).

By end 2016, more than half – 53% - of the world’s population were not using the internet

- 632 million people, representing 65% of Sub-Saharan Africa, are without access to electricity, making it impossible to reap major benefits from the internet and other technologies.

According to the World Economic Forum, growth in Africa’s manufacturing sector was only 4.3% a year between 2010 – 2014 which was lower than growth of the African economy for the same period.

This lag is only likely to be exacerbated with the potential shift of manual labour - which has helped many people in countries like China and India rise out of poverty - to robots.

Robotic ‘full time employees’ (FTEs) are 20 - 33% cheaper than hiring people offshore (and 80 - 90% cheaper than hiring people onshore). Furthermore, 50 – 70% of work generally carried out by outsourced operations can be automated (Sutherland Global Services 2015, Institute of Robotic Process Automation 2017, UiP Ath 2015).

Technology has now morphed into a vehicle to enhance human productivity and communication to the Internet of Things and a factor that replaces labour.

Increased automation and use of AI may mean that parts of Africa will miss the opportunity to take advantage of labour arbitrage to boost economic activities and lift people out of poverty as India and China have done.
The global financial crisis exposed the underlying weakness of all three drivers

The years preceding the global financial crisis in 2007-2008 were known as a ‘credit boom’: where credit to the private sector rose significantly above long-run trends. This had both positive and negative impacts – stimulating demand and the availability of capital in the short term but at levels that were ultimately unsustainable.

One aspect of the credit boom was loosened lending requirements in the mortgage market e.g. affordable-housing targets, low-down-payment requirements.

This was an ‘easy’ policy solution to help less skilled workers, who were experiencing wage stagnation due to globalisation and technological progress. Home ownership levels reached record highs but also created a housing bubble.

When the housing bubble ‘burst’, homeowners defaulted on their payments and the collapse of the associated ‘subprime’ mortgage market triggered the global financial crisis of 2007-08. Since the crisis, however, credit levels in Western economies have stagnated.

The financial crisis highlighted the systemic risks of an economy and its component parts (especially the financial system) being assessed on the basis of relatively short term and largely financial outcomes. It also underscored the risks associated with the interdependent global financial markets, which allowed the crisis to spread rapidly.

Total credit to private non-financial sectors in advanced economies*

![Graph showing total credit to private non-financial sectors in advanced economies from 1999-Q4 to 2016-Q4. The graph indicates a significant increase during the years 2007-2008, corresponding to the global financial crisis.]

Source: Bank for International Settlements (BIS), 2017

*Advanced economies include: Australia, Canada, Denmark, the euro area, Japan, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States

Truly global impact of the 2008 financial crisis – FTSE All World Index 2004 - 2016

![Graph showing the impact of the 2008 financial crisis on the FTSE All World Index from 2004 to 2016. The index shows a significant decline during the crisis year 2008.]

Source: FT, 2017
Prosperity and its discontents

There are asymmetrical implications of the separation of economic success and societal progress
If we take a global view, based on averages, we have never been doing better

We are richer than we’ve ever been in the history of humankind

Between the years 1900 and 2000 world GDP grew at an average annual rate of 3 percent. Population growth also increased significantly in the twentieth century, catapulting the world population from 1.6 billion inhabitants at the beginning to over 6.3 billion people at the end of the century.

New technology coupled with growing economies has generally meant that we can buy more for less

To illustrate the consumer benefits, the IMF has cited the work of one analyst who recently compared products listed in the 1971 edition of the Sears-Roebuck catalogue with comparable modern-day items. He found that almost everything in its pages was made in the US and that, after adjusting for inflation, products are significantly cheaper today.

For example, a three-speed air conditioner was advertised for $139.95, which would come to more than $820 adjusted for inflation. Today Frigidaire offers a model with the same features for $139.99.

The average American worker today works only about 17 weeks to live at the annual income level of the average worker in 1915. There has been similar progress in all countries in recent decades where trade has spread and shared economic gains.

Source: World Bank

DRAFT for discussion
Not only are economically better off, we are also physically better off in terms of our health

In addition to being more prosperous we are now living longer and healthier lives.

For example, more than 90 percent of humanity lived in extreme poverty in 1826. That dropped to 37 percent in 1990 and less than 10 percent in 2015 – single digits for the first time in human history.

In addition to being more prosperous, human lives are also longer and healthier. Back in 1900, average life expectancy around the world was 31 years; it is now 71 years. Of course, life expectancy varies greatly across regions – from a low of 61 years in Africa to a high of more than 80 years in northern America, Japan, and many European countries.

Improvements in medical technology, sanitation, and vaccination have helped reduce the death rate globally and, despite declining birth rates, the world population has kept rising as people enjoy longer lives. In the mid-1960s, life expectancy at birth was about 55 years; today a newborn is expected to live about 70 years.

Life expectancy globally and by world regions since 1770

Source: DATASTREAM
In a more globalised world, a well placed minority has accumulated significant wealth

Higher wealth gap

While globalisation spread wealth around the world, it has done so unequally across and within countries, both developed and developing. The number of ultra high net worth individuals (with net worth of over USD 50 million) is on the rise again, after the 2007-08 financial crisis, particularly in China and the rest of Asia Pacific.

High inequality is associated with lower economic growth: the rise in inequality of 2 Gini points between 1985 and 2005 in 19 OECD countries is estimated to have knocked 4.7% off of cumulative growth between 1990 and 2010 (OECD, 2015). The World Economic Forum’s 2017 Global Risks report ranked rising income and wealth disparity as the top trend to shape global developments over the next decade (WEF, 2017).

The Global Wealth Pyramid

Cumulative change in the number of ultra high net worth individuals since 2000, by region/income group
In recent years, inequality has increased in advanced economies

Income inequality fell in most developed countries post-World War II until approximately 1980. From 1980s onwards, Gini coefficients increased in most advanced economies, sometimes significantly, which is also when wages and productivity started to diverge as a result of globalisation and technology.

Gini coefficient by region, 1890–2000

Furthermore, wealth became increasingly concentrated within the top income earners while the middle class experienced income stagnation, within both developed and emerging markets. For example, in advanced economies the top quintile of income earners had 3.5% more of the income share in 2009 compared to 1990, whereas the middle quintile had 1% less.
While there have been gains at the ‘top’ and ‘bottom’, the middle class in advanced economies is losing out

The middle class in advanced economies is not much better off than 20 years ago

Former World Bank economist Branko Milanovic’s research revealed how large numbers of people in the middle are being left behind by global prosperity. The chart showed big income gains at the bottom and very top. However, the era of globalisation seemed to offer little for the people in between: households in the 75th to 85th percentile of the income distribution (who were poorer than the top 15% but richer than everyone else) seemed scarcely better off in 2008 than they had been 20 years before.

60 – 70% of households in 25 advanced economies experienced income stagnation or decline between 2005 – 2014

In Italy, for example, 100% of households experienced flat or falling disposable income between 2005 and 2015. Just 12 years prior to 2005, less than 2% of incomes were in segments with flat or falling incomes. Furthermore, in the same period, jobs and gender gaps were not shrinking, neither was the level of youth unemployment nor the share of young people in education or training.

Percentage of householders in segments with flat or falling income, 2005 - 2014

<table>
<thead>
<tr>
<th>Country</th>
<th>Market income</th>
<th>Disposable income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Weighted average</td>
<td>From wages and capital</td>
</tr>
<tr>
<td>Italy</td>
<td>97</td>
<td>100</td>
</tr>
<tr>
<td>United States</td>
<td>81</td>
<td>&lt;2</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>70</td>
<td>60</td>
</tr>
<tr>
<td>Netherlands</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>France</td>
<td>63</td>
<td>10</td>
</tr>
<tr>
<td>Sweden</td>
<td>20</td>
<td>&lt;2</td>
</tr>
</tbody>
</table>


2 Population-weighted average of 25 advanced economies.

Source: Bank of Italy; Central Bureau voor de Statistiek (CBS); Institut national de la statistique et des études économiques (INSEE); Statistics Sweden; UK Office for National Statistics; US Congressional Budget Office; McKinsey Global Institute analysis.
Labour productivity is up while pay and male labour force participation in advanced economies are trending down

Pay to workers has not risen despite increases in productivity levels

From 1973 to 2015, net productivity rose 73.4 percent in the US, while the hourly pay of typical workers essentially stagnated – increasing only 11.1 percent over 42 years (after adjusting for inflation). When GDP is measured at market prices, the average labour share for 9 countries in the G20 with data from the 1960s declines from a peak of over 65% in 1970s to 56% in 2012 (OECD, 2015). This means that although people are working more productively than ever, the fruits of their labours have not accrued to them. Technological improvements, globalisation-driven wage stagnation, increased capital returns to shareholders, and financialisation of executive pay (compensation in the form of capital gain rather than salaries) are all thought to have contributed to the decline in labour share (OECD, 2015).

Male labour force participation rates continue to be on a downward trend in advanced economies

This is partly due to changing demographics (retiring baby boomers, and younger people spending longer in education), but globalisation and technological change are also thought to contribute. In the US, for example, studies suggest that men with lower levels of educational attainment are the ones leaving the labour force, suggesting a reduced demand for lower-skilled jobs (Brookings).

![Growth in wages vs productivity (1948 – 2015)](image1)

Source: World Bank

![Male Labour Force Participation Rates](image2)

Source: World Bank
As manufacturing shifted toward emerging markets, new opportunities were created in these countries but others have been left without work

Deindustrialisation has left groups in advanced economies suffering from high long-term unemployment

Regions which had previously specialised in manufacturing industries have suffered from above average rates of unemployment and a lack of alternative employment opportunities to match their skill set. Unemployment tends to be more concentrated among low-skilled workers. There is also a lack of redeployment opportunities for displaced low-skilled workers, as evidenced by the growing disparity between the skills of the labour force and the skills required by employers.

White working class males are falling behind by many measures

This chart looks at labour-market indicators to illustrate what has happened to white working class men (WWCM) and how they are being left behind. The first indicator is the unemployment rate (number of jobless people who have actively sought work in the past four weeks, as a percentage of the total labour force). At the end of 2016 the rate stood at 4.7% for all men, but among WWCM it was 6.4%: a difference of 30% (The Economist).

Given that the unemployment rate risks under calling the problem as it doesn’t count those who have given up looking for work, the second indicator is labour-force participation, which counts workers, employed or not, as a percentage of the working-age population. This has fallen steadily, from 87% in 1948 to 69% today. For WWCM it has declined to 59% (The Economist).

And finally over the past 27 years, average hourly wages have risen by 2.9% a year before adjusting for inflation. Meanwhile the hourly earnings of WWCM (industries weighted by their share of WWCM employees) have increased by 2.8% a year. A small difference but, when compounded over 27 years, the gap in wage levels between all workers and WWCM has widened from an average of 3.7% in 1990-92 to 6.9% over the past two years (The Economist).
The combined impact of globalisation, technology and “financialisation” have led to persistent societal barriers for some in local settings. According to McKinsey, in advanced economies where real incomes are stagnating or in decline, the hardest hit are young, less educated workers – raising the possibility of a generation growing up poorer than their parents.

Globalisation and technological progress led to a relative increase in demand for skilled labour vs unskilled labour in developed countries, but investment in education and training has not kept up. This means that the less educated are suffering from an ever-widening wage gap.

In the 1970s, 90% of 30 year olds in the US earned more than their parents. Today, this figure is only 50% (Chetty et al., 2014), suggesting steep declines in upward income mobility. Research shows that this decline is due to growing inequality rather than slowdown in overall growth.

Education is widely thought to improve social mobility; however Ivy League colleges still have more students from the top 1% than the bottom 50% of the income distribution (Chetty et al., 2016), and there is strong correlation between a student’s parents’ income and the ranking of the college they attend.

In the developing world, education is also seen as a route out of poverty, but is reliant on families having access to basic needs including nutrition, clean water and sanitation, healthcare, and personal safety. These factors are interactive: they can create a virtuous cycle out of poverty, but can also keep people in a vicious poverty trap.

Increasingly, people are moving to cities in search of better opportunities such as formal wage jobs. Researchers found that young people who moved to regional towns in Tanzania saw their incomes rise twice as fast as those who stayed in villages, and four times as fast as if they moved to cities (Keeble et al., 2011). It is estimated that three million are moving to cities per week (UN Habitat, 2009), and it is projected that two in three people will live in cities by 2050 (UN, 2014).

However, social mobility within cities can also be challenging. About a third of the urban population of developing countries (860m) live in slums. These can offer an important foothold for people but evidence suggests it can be hard to leave a slum once there. Research also shows that the longer a family has lived in a slum, the lower their income, even if there has been a growth in living standards in the country more generally (The Economist, 5 May 2014). In 79 low- and middle-income countries, children in the poorest fifth of urban households were twice as likely to die before 5 than those in the richest fifth (WHO, 2015).

Probability that a child born to parents in the bottom fifth of income distribution reaches the top fifth

<table>
<thead>
<tr>
<th>Country</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>13.4%</td>
</tr>
<tr>
<td>Denmark</td>
<td>11.70%</td>
</tr>
<tr>
<td>UK</td>
<td>9%</td>
</tr>
<tr>
<td>USA</td>
<td>7.50%</td>
</tr>
</tbody>
</table>

Source: Chetty and Machin 2016
Multiplier effects

These symptoms will be made more acute by broader demographic and societal trends
Technological advancements will continue to appear, rapidly and simultaneously, in fields as disparate as healthcare and industrial manufacturing, because of several concurrent factors.

First, the three fundamental technologies of computation, storage, and connectivity are exponentially cheaper and more capable today than just a few decades ago. The rapid growth of the Internet, mobility, and cloud computing, combined with the open-source movement and increased access to capital, has lowered the barriers to entry for startups and nontraditional competitors, enabling them to scale swiftly and to upend the playing field in industry after industry.

Next, for the first time, the developed and developing worlds are creating, collaborating, communicating, and consuming on similar technology platforms, spurring global innovation. For example, a company virtually anywhere in the world can access information about potential suppliers through sites such as Alibaba (China’s biggest online commerce company).

Further, individual technologies build on each other and amplify each other’s effects, setting the stage for what some are calling a “fourth industrial revolution.” While the benefits of these accelerating advancements are many, there is no question that they will disrupt corporations, institutions and individuals as business models change, transparency increases and larger share of jobs are replaced by robots and AI.

Source: PwC. CEO Agenda: Pulse on Robotics, 2016

DRAFT for discussion
The world is ageing

Population growth from 1950 – 2010 years was rapid – and the global population nearly tripled. But according to Pew Research, growth 2010 – 2050 is projected to be significantly slower, and skewed globally towards older age groups. In fact, according to the Global Monitoring Report (GMR) 2015/16, by 2050, the elderly could account for 16% of the global population, up from 5% in the 1960s.

A population decline is expected in the economies that currently account for three quarters of all global growth. The share of people over 65 will rise dramatically in these countries. The World Economic Forum notes that by 2050, the global population of those 60 years old will exceed the number of young (under 15 years) for the first time in history.

**Young children and older people as % of global population, 1950 - 2050**

The decline in working age populations in advanced economies will mean that numerous organisations will be unable to find enough employees in their markets to sustain profitability and growth. Older workers will need to learn new skills and work longer. Moreover, their work may be supplemented by migrant populations and, in some cases, higher participation of women in the workforce.

Although some older people will be encouraged to remain in the workforce, the numbers of the very old are increasing and putting a strain on healthcare, pensions and public debt. In many countries, social safety nets are already failing and where they are working effectively, governments cannot afford them.

**Proportion of population over 60 (% of total)**

Eroding trust is contributing to growing populism and new political dynamics

Research by Edelman shows that ongoing globalisation and technological change (and particularly automation and a perceived risk to jobs) are now further weakening people’s trust in global institutions - including governments, business, the media and NGOs - which they believe have failed to protect them from the negative impacts of these trends. The 2017 Trust Barometer finds that only 15% of the general population believe the present system is working while 53% do not and 32% are uncertain. Edelman argues that the trust collapse has now become a systemic threat.

Many people’s legitimate concerns over their prospects now and for the future are becoming fears in the current environment. These fears are fuelling populist movements and political dynamics that, in part, explain recent referendum and election results across Europe and the United States.

According to the World Economic Forum, these dynamics are triggered by different issues: slow growth and stagnant median wages, rising inequality, persistent unemployment, the implications of increased migration, insecurity posed by globalisation and technological change. The common feature is that significant segments of populations feel that, whereas others have gained despite an economic slowdown, they have lost out and feel more insecure about their future. The claim that “elites are out of touch” has struck a chord.

In the World Economic Forum’s 2017 Global Risk Report, respondents cited “rising polarisation” as the third most important trend for the next ten years. Rising populist movements could lead to resurgent nationalism leading to more protectionist policy making.
According to PwC’s annual CEO survey, the impact on CEOs has been significant: in 2013, 37% worried that lack of trust in business would harm their company’s growth. In 2017, the number has jumped to 58%. The breakdown in public trust now poses a potent risk to political, economic and social systems the world over.

Some CEOs think business has a role to play in promoting the benefits of globalisation. Others favour localisation, seeing the retreat from globalisation as a chance to embed a ‘glocal’ approach that benefits their markets.

- 69% of CEOs say it’s harder for businesses to sustain trust in the digital age
- 87% of CEOs believe social media could have a negative impact on the level of stakeholder trust in their industry over the next five years
- A full 91% say breaches of data privacy and ethics will have a negative impact on stakeholder trust in the next five years.

There is a risk that the changing political dynamic will influence policy making that constrains business and further exacerbates the issues.

The three drivers have fed into the political process in many developed economies in particular, with explicit challenges to previously widely held assumptions about global free trade, financial markets and technology. The interconnected, interdependent nature of the world we now occupy means that there are inevitably implications for emerging economies too. Unless current systems are addressed, there is a risk that we will see further dislocation, dissatisfaction and therefore political extremism.

Support for Anti-Business Policies

- Nearly 1 in 2 agree with the statement: “We should not enter into free trade agreements because they hurt our country’s workers.”
- 69% agree with the statement: “We need to prioritize the interests of our country over those of the rest of the world.”
- 72% agree with the statement: “The government should protect our jobs and local industries, even if it means that our economy grows more slowly.”

Source: Edelman Trust Barometer 2017
We have reached a fork in the road
Globalisation, “financialisation” and technology have been dynamic and self-reinforcing, and together have irreversibly changed the world

The three drivers of change, globalisation, technology and “financialisation”, would not - and could not - have had such a transformational impact in isolation. However, their combined impact was profound. Not only did each one reinforce the effect of the other two, together they began to change the very nature of the effect that each driver alone would have had. Although each one has contributed enormously to the massive economic and therefore societal progress seen in the world over the past several decades, each one in its current form has probably run its course and needs to evolve for the future.

Equally significant is the timeframe over which this evolution has taken place. The fall of the Berlin Wall in 1989 was psychologically important – and it was no coincidence that the subsequent years saw a major acceleration in measures to drive free trade on a global basis between market economies. This was supported and facilitated by a globalised financial system and an emphasis on financial performance at both business and macro-economic levels, and in each case leveraged exponentially by ever increasing technology capacity and capabilities in the same period.

It is critical not to lose sight of the progress and impact which each of these drivers has had in positive terms – the data is strong and supportive. Well managed market economies have consistently delivered more successfully than alternatives, and have continued to do so. A globalised world is a reality – issues (and opportunities) will not respect national boundaries – technology, disease, security, migration, ideas, climate not to mention enormous degree of economic interaction and interdependence.

In each case, it is not the driver that is the problem – but arguably the degree of emphasis on each driver in isolation that became problematic, and so a realignment is needed. A globally interdependent economy is a reality, and attempting to roll back some prior state will almost certainly be destructive. However, it is not sufficient to aim for global progress on average. Human needs must be met – progress must be made – on a local basis, albeit in a global context.

There is an urgent need to revisit the very basic purpose of the economy – an engine to match human needs and opportunities, and to consider how emerging technologies can help us re-imagine how to meet human needs previously incapable of being addressed in a traditional manner. How can we combine humans and these technologies to do so, and how can we evolve the global and local financial and economic systems to create the conditions to allow this to happen.
We have reached a fork in the road

Globalisation, technology and “financialisation” worked as a system to create both economic growth, social good and broad benefit, but retaining them in their present form is unsustainable. We cannot go back but need to reframe the alignment of these forces or face a challenging future.

**If we do not intervene, we believe we can expect many of the trends we are seeing now to continue....**

- Growth in advanced economies will slow.
- The middle class will continue to be eroded in advanced economies.
- Pay to workers in advanced economies will continue to stagnate.
- Workers in certain sectors and regions will struggle to find employment, exacerbated by automation.
- Africa will miss out benefits of globalisation and fall further behind.
- Increasing risk of societal concerns feeding political extremism with policies that could exacerbate the underlying issues, creating a negative spiral.

**We should consider what steps might be taken to change the course of these trends. The next section sets out some principles and parameters to help frame such a discussion.**
What comes next?

Principles of a new approach to re-aligning business, economics and societal outcomes
Where do we go from here?

It is one thing to analyse the drivers of change - how can these help contribute to the development of appropriate responses?

First, it is critical not to lose sight of the progress and impact which each of these drivers has had in positive terms - the data is strong and supportive. This means that it is critical not to throw the baby out with the bathwater. Well managed market economies have consistently delivered more successfully than alternatives, and can continue to do so.

A globalised world is a reality - issues (and opportunities) will not respect national boundaries - technology, disease, security, migration, ideas, climate - many critical factors will be relevant for all countries regardless of borders - to say nothing of an enormous degree of economic interaction and interdependence, globally and regionally. Which means that addressing both issues and opportunities will continue to require a high and perhaps ever increasing level of engagement on a cross border basis - and this engagement will need to take place between broader groups of stakeholders, including businesses and governments, but also citizens generally.

Second, the manner in which the drivers of the change have evolved the systems within which they operate offers some suggestions for considering how these systems might evolve in order to reintroduce some greater alignment between business, the economy and society. In each case, it is not that each driver is the problem - it is arguably the degree of emphasis on each driver in isolation which became problematic, and so a re-balancing is needed.

A globally interdependent economy is a reality, and attempting to roll back to some prior state will almost certainly be destructive (in terms of outcome). However it is not sufficient to aim for global progress on average. Human needs must be met - progress must be made - on a local basis, albeit in a global context. This duality of emphasis - global and local - applies to the other drivers also.

Financial performance is an essential element underpinning a market economy, but it cannot be the only measure of performance or success in a globalised economy which is leveraging ever increasing technology capabilities - other broader measures reflecting target outcomes in societal terms must also be considered - and these measures must be tailored to local circumstances and must be aligned between business performance and macro economic or societal performance.

This represents a significant and urgent challenge for policy makers, but also for businesses, especially businesses operating on a global or multi-territory basis. And finally technology. As technology begins to disrupt ever broader swathes of traditional employment, it is simplistic to suggest that this process can be halted or even delayed, or to suggest that there needs to be a largely financial solution (such as minimum guaranteed income for displaced workers).

There is an urgent need to revisit the very basic purpose of the economy - an engine to match human needs and opportunities - and to consider how the emerging technologies can help us re-imagine how to meet human needs previously incapable of being addressed in a traditional manner, how we can combine humans and these technologies to do so, and how we can evolve the global and local financial and economic systems to create the conditions to allow this to happen. Humans displaced from their jobs are very likely to want a far more fulfilling and human response than simply to be offered a basic income to meet the most basic of financial needs.
We need to re-imagine the current system to realign business, economics and society

• We need to rethink the basis of success of a country to include factors beyond just GDP, factors that incorporate a broader understanding of societal good. Having done that each country needs to measure its success in achieving those outcomes and manage to them, as well as require companies doing business in a country to understand they exist to serve both shareholder interests and the public good as defined by that country. This will require recognising a duality of economic and social well being.

• We need to refocus on the village, the town and the city as the location where social progress and economic success most naturally meet, and recognize that a key requirement of nation states is to create conditions for locales to thrive. We need to reimagine globalisation as a force of local economic and social well being. This will require recognising a duality of global and local economies.

• We need to rethink the nature of work and fulfillment and apply technology to enhancing the growth of those two factors and adjust how we manage careers and jobs to reflect the answer to these questions. This will require recognising the duality of humanity and technology.

• We need to recognise that the essential creation of valuable work will require a dramatic growth in the number of new firms, many with a focus on creating new forms of work. To succeed, these firms will need to draw on global platforms, thus requiring the recognition of the duality of large global firms and local entrepreneurs.
Looking forward – some possible parameters

In order to frame the discussion, it is useful to suggest some possible parameters:

- Well managed market economies serve as an effective means of delivering societal progress
- Countries cannot operate in isolation. Too many issues are cross border and events in one place will inevitably be felt elsewhere (e.g. migration, disease, ideas, technology, the environment). There is a mutual self interest in collaborating to address, overcome and solve these issues, and realise opportunities
- Economies and societies are mutually interdependent – a healthy economy requires a healthy society, and vice versa
- The overarching objective is to realign business, economies and societal outcomes
- These issues cannot be addressed without collaborative engagement among governments, businesses and other stakeholders both internationally and within countries
- The seeds of a potential response can be seen in the analysis of the impact of the three drivers – it is necessary to leverage all three (rather than deny them) in order to realign business, economies and society.
- This requires an emphasis on an essential “duality” – to deliver local outcomes in a globalised economy, to deliver societal as well as financial outcomes, and to leverage technology to address human needs and realise human potential.
Looking forward – observations

One of the challenges which quickly becomes evident is that reflecting and especially acting on this analysis requires the engagement of multiple stakeholders – governments, businesses and other stakeholders must engage together to refine and reframe both the manner in which the system operates as well as its intended outcomes. This is undeniably complex. It may be helpful, therefore, to describe some observations which emerge from the analysis, and which can underpin the approach of all such stakeholders. These observations are not intended to be exhaustive or complete – they are intended to facilitate a starting discussion between interested parties and to help frame potential approaches which might apply in a whole range of different policy areas.

• Globalization is unavoidable. Many critical elements don’t respect national boundaries: ideas, innovations, diseases, refugees, climate, and market demand among them. Some form of globalization is thus inevitable.

• Economic growth (as currently measured) is not always benign. One of the key assumptions underlying the last 70 years of economic development has been that if you grow the economy as measured in financial terms, social good will follow. That isn’t now necessarily true as the analysis shows.

• “Average” success or progress is not enough. It is not sufficient to aim for economic opportunity across a country or region, unless there are people gaining opportunity in most critical communities within that country or region.

• Technology in particular is indifferent to its impact on people. It is critical to consider how emerging technologies can help meet human needs previously incapable of being addressed in a traditional manner, how we can combine humans and these technologies to do so, and how we can evolve the global and local financial and economic systems to create the conditions to allow this to happen.

• An explicit framing of target outcomes – financial (GDP) and societal – is required, with a key role for government and citizens – and must reflect local communities, cities and regions – as well as countries as a whole.

• There is a likely prioritisation or hierarchy of such outcomes – an example of such a potential hierarchy for a city is attached (and is based loosely on an extrapolation of Maslow’s hierarchy of needs).
Looking forward – observations for consideration

• Delivering on these outcomes, by country, by region, by city etc., should leverage the potential of market economies operating in a globalised environment.

• A key role for government is to create the conditions necessary for these locales to effectively address opportunities and challenges - to create the institutional framework to encourage the economic engine to match human needs and opportunities.

• Reporting at a macro-economic level should adjust to reflect the broader objectives – financial and societal – and should evolve as appropriate.

• Business level reporting and performance should also evolve to reflect the broader objectives - financial and societal.

• Governments and businesses should engage to develop policy to align on the factors which influence business outcomes and the broader objectives – especially in the context of global businesses operating locally – reflecting the “license to operate” and broader “purpose”.

• The factors that created the world we are experiencing today form a coherent system, any solution must take that into account. However, any efforts at change needs to understand that a host of institutions and measures were created to make the system work as it does, “one off” changes will be brought back to the center as a result of all of the other forces in place.

• Therefore there is a need to assess the legacy frameworks of institutional elements that currently influence business behaviours and outcomes (regulatory, legal, fiduciary, compensation, tax etc.) to align with a re-framed system – government and business.
Looking forward – observations for consideration

• The arithmetic of potential job loss suggests we will need to create a significant number of entirely new jobs, in addition to redefining what we mean by work. Opportunities to do valuable work will require a dramatic growth in the number of new firms, some recasting of the nature of work and people willing to adapt. This is likely to be the most important challenge of the next few decades – matching evolving human needs with evolving opportunities leveraging technology, market economies and a globalized world to do so.

• Target large scale establishment of businesses locally, leveraging global platforms and technology, to drive target outcomes – with a priority focus on areas of greatest need.

• Engage the very wealthy to participate in activating capacity and capital in an aligned manner reflecting broader outcomes.

• Focus on education with direct engagement between governments and business to deliver skills for the future matched to expected needs and opportunities with an emphasis on technology enablement.

• Plan to engage broader stakeholder communities on a sustained basis in relation to needs, priorities, choice, plans, progress, reporting, pilots etc. – governments and business
“Duality”— leveraging the drivers of change for the future......

For each policy option or element of the framework, the three key drivers can and should be embedded in the decision and debate process in order to leverage “duality”:

- Leverage globalised and interdependent market economies to deliver in broad societal terms to local communities and societies

- Economic performance for both business and at a macro level must reflect both financial performance and broader societal performance.

- Increasing technology capacity and capabilities must be leveraged to address an ever increasing range of potential human needs, and must leverage a combination of human and the machine to do so.
**Establishing outcomes, based on a hierarchy of needs**

A healthy economy needs a healthy society, just as a health society needs a healthy economy. This is a defining lesson from the post World War two period. It is not sufficient to aim for global progress on average. Human needs must be met – progress must be made – on a local basis, albeit in a global context. Just as individuals have a hierarchy of needs (defined by Maslow), so do societies.

More basic needs must be met first before gradually shifting to higher order needs as the expectations of the citizenry increase. Measuring progress against a more holistic index of outcomes at both a macro and micro level helps keep these interventions in balance. Here is an example for cities but the same logic can be applied to any societal issue e.g. education, employment, healthcare etc.

**Working example : SMART cities**

The city becomes more efficient & competitive

**Reactive:**
Struggling to meet demand, unattractive to live, work & do business

**Basic:**
Infrastructure & utilities to ensure more basic needs are met: healthcare, education, transport reliable power provided to households and businesses.

**Advanced:**
Infrastructure geared more to economic growth, productivity, competitiveness and economic efficiency. Building mass transit systems, property for commercial gain, technology, global connectivity, advanced universities & research. Will address risk of natural disasters to protect the economy and competitiveness.

**Quality of Life**
Infrastructure focus more to advanced human needs, seek to improve all aspects of the quality of life & sustainability. Including elderly care, green space, leisure & cultural provision, as well as embracing the latest technology SMART, environmental infrastructure, promoting quality lifestyle.

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*PwC*
Governments, policy makers, business leaders and others can influence how the future system can evolve.

There is a need for a different conversation by taking stock of the many inter-related challenges society is facing, diagnosing the complex problems people are encountering at a local level and creating the conditions for these issues to be both addressed and measured more holistically.

This is a process and one that can – and should – prompt a high degree of experimentation across sectors and communities within a broader framework in order to achieve a dual global/local, financial/societal goal.

The current system needs to evolve if we are to forge a path towards better and more sustainable and therefore politically acceptable societal outcomes, and to enable well run market economies in a globalised world to deliver them, leveraging huge technological capabilities to do so.

It has long served business and policy makers well to have created the conditions for commonality of interest between an economy and society. It is time for the next stage of evolution – to create the conditions for greater commonality of purpose.