

MEGATRENDS – DRIVING SOCIETAL CHANGE, THE ECONOMY, AND FINANCIAL MARKETS

Richard BARWELL
Head of Macroeconomic Research and Investment
Strategy, BNP Paribas Asset Management



BNP PARIBAS
ASSET MANAGEMENT

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INTRODUCTION

'Megatrends' is our preferred framework for thinking through the underlying drivers of slow-moving but fundamental and pervasive change in society, the economy and, ultimately, financial markets.

We highlight four principal drivers of that change:

- **Demographics**, or changes in the characteristics, beliefs and behaviours of different populations
- **Innovation**, or changes in our material environment through technological progress
- **Environment**, or changes in our physical habitat, and above all in the climate
- **Geopolitics**, or changes in the laws, regulations and norms that govern interactions within and between countries across the globe.

We view each megatrend as an umbrella concept that encompasses numerous themes and sub-themes. Each one also spans a range of academic disciplines including sociology and political science, economics and finance as well as the natural sciences. Collecting these diverse strands together within each megatrend helps to bring greater clarity on the significance and scope of the underlying change in the world around us.



DEMOGRAPHICS

Demographics shape economic growth and market dynamics. Aging populations drive demand for healthcare services and retirement planning. Urbanisation and growing middle classes fuel infrastructure development and consumer spending.



ENVIRONMENT

The environment, driven by climate change and the low-carbon transition, is transforming economies. The rise of green policies and technologies is fueling growth in renewable energy, sustainable materials, and energy efficiency.

INNOVATION



Innovation in artificial intelligence, biotechnology, renewable energy, and automation drives economic growth, boosts productivity, and tackles global challenges. As companies invest in R&D, new technologies disrupt traditional sectors and create new ones.



GEOPOLITICS



Geopolitics shapes markets via trade, resources, and global stability. Political shifts, conflicts, and alliances affect industries like defence, technology, and energy, creating risks (e.g., supply disruptions) and opportunities (e.g., innovation demand).

These megatrends are not discrete independent forces. Rather, they both influence and are influenced by each other. By considering them together rather than focusing on any one megatrend in isolation, we can achieve a more rounded perspective on what is driving the gradual but fundamental changes in our world.

We frequently use two key lenses to evaluate the consequences of change: productivity and inequality. In simple terms, productivity and inequality describe how big the national income 'cake' is, and how that cake is divided up. Together, they help us keep track of trends in prosperity and profitability across both households and companies.

We research these megatrends because we believe the insights that provides can usefully complement more orthodox research agendas, adding value to investment debates. Most research in our industry falls into one of two familiar categories.

1. High frequency, top-down research that focuses on incremental change in the economy, society or politics and the associated impact on the valuations of 'macro' asset classes.
2. Low frequency, bottom-up research into the business model, customer base and balance sheet of individual companies, the sector-specific trends that influence them and hence the implications for the value of securities issued by those companies.

In contrast, our megatrends approach involves low frequency, top-down research: the search for the slow-moving forces that simultaneously underpin both the incremental economic change that preoccupies top-down research and the sector-specific trends that preoccupy bottom-up research.

We do not expect our megatrends perspective to deliver insights that will prove decisive in any single investment discussion about the price of any specific security, but we do believe it can provide valuable context in countless such discussions.

In short, research into these secular, socio-economic trends should improve our understanding of the fundamental anchor for the discussion of the fair value of all assets. Almost every financial security should be exposed to these megatrends on some level.

This note does not include a review of the extensive research literatures devoted to each of the countless sub-themes that comprise each megatrend. Nor do we draw a direct link between that research and specific investment theses or positions in portfolios.

Instead, we provide a flavour of some of the important themes within each of these multi-faceted megatrends, highlighting key points of interest.

DEMOGRAPHICS

The demographics megatrend captures change in who we are as human beings, how we behave, what we believe in, and the consequences for society, the economy and markets. Even by the standards of a megatrend, pure demographic shocks can play out over a long period of time. The identity of the set of cohorts alive at any moment in time changes slowly. Persistent shocks to fertility and mortality rates trigger long-lasting shifts in the size and composition of the population.

The world has experienced three profound demographic developments over the last century:

- **The first concerned large parts of the global population undergoing the ‘Demographic Transition’.** Medical progress delivered a material decline in infant mortality. This eventually prompted a decline in fertility rates, but in the interim, the size of the birth cohort surviving to adulthood increased significantly, and so did the population.
- **The second was an improvement in life expectancy across all age groups,** with many more people surviving until what was once considered old and even very old age.
- **The third was a decline in the fertility rate, particularly in advanced economies,** below the rate required to sustain the size of the population in steady state, which can be explained in part by a retreat from marriage.

The cumulative impact of these shocks has delivered a global population that is much larger, quadrupling from less than two billion to more than eight billion in less than a century. In the advanced economies, the population is much older and, in many places, set to contract over the coming decades, creating what a former Japanese prime minister called a ‘silent emergency’. Meanwhile, Africa will increasingly become the last remaining engine of global population growth and home to the world’s youth population.

A country’s demographic destiny is not pre-determined

Governments have policy levers they can use to either help repel demographic shocks or mitigate the socioeconomic consequences.

Countries have experimented with a range of pronatalist measures to arrest and reverse the decline in fertility to below the replacement rate. These measures have ranged from the provision of incentives, in the form of ‘birth bonuses’ and preferential treatment of families with children in the tax and benefit system, to addressing the broader socio-factors that might discourage people from having children, such as reliable access to affordable childcare. Even if such measures are effective, there is a long lag before they impact the adult population.

In contrast, changes in immigration policy can have a more immediate impact on the size of a country's working-age population. In fact, immigration has become the primary source of population growth in the Global North in recent decades. The scale of those migrant inflows has varied significantly from place to place, which is the predominant reason why the populations of some advanced economies are expected to contract over the coming decade, while others are not. However, immigration has become increasingly politically contentious in some jurisdictions, which may limit the extent to which countries rely on this lever in future.

An alternative, complementary strategy to leaning against the demographic tide of ageing is to try and squeeze more workers out of a shrinking working-age population. This can involve a focus on the specific impediments that systematically depress labour force participation among certain groups in the population: mothers of very young children; the low skilled; those with serious health conditions; and those approaching what was traditionally thought of as the age of retirement.

There is scope for judicious policy interventions to boost labour supply among these groups and thereby offset the demographic squeeze on the size of the workforce. This is even more the case in countries where participation rates are currently low by historical standards.

Financial markets and demographics

The debate within financial markets about population ageing tends to fixate on three issues that are ultimately interconnected via the bond market:

- Calibrating the timing and extent of the asset market meltdown when the baby boomer generation retires
- Quantifying the inevitable demographic drag on the public finances
- Exploring the uncertain consequences of demographic change on inflationary pressure and central banks' monetary policy stance.

It is a basic fact of economic life that your earnings will vary significantly over your lifetime in a predictable fashion, typically peaking around middle age and falling close to zero beyond retirement. Most people will prefer to smooth their spending in the face of that predictable volatility in labour income: to consume more than they earn in early adulthood and retirement, and less in middle age.

This 'micro' observation can have 'macro' consequences when there is an imbalance in the size of different cohorts thanks to shocks to the fertility rate.

When the baby boomers reached middle age there would have been a large number of people trying to save, potentially driving up asset prices. The long-standing concern has been that when the baby boomers retire, the process will run in reverse: there will be too many people dipping into their savings, selling assets, driving prices down.

The baby boom cohort are currently in their 60s and 70s, so this asset market meltdown should already be apparent, but it is not. It transpires that spending tends to drop and wealth continues to rise after retirement while those still of working age may save more than previous cohorts given the expectations of a longer lifespan beyond retirement and less generous support from the state. And, at least for the moment, a savings glut in the emerging economies may continue to provide a buyer for every advanced economy boomer looking to sell financial assets.

Your net financial contribution to the state will also vary significantly over your lifetime in a predictable fashion. People are net contributors in middle age when their earnings and hence income tax payments are high, and they make little use of public services. Conversely, people are net recipients at the beginning and end of their lives when they receive significant benefits and pay little to no income tax.

Tax receipts will therefore tend to fall and government spending rise as population ageing shifts the composition of the population away from the former towards the latter. Without corrective action, the primary balance will deteriorate and in theory the debt burden could be placed on an unsustainable path. At some point, tax rates may have to rise, and spending curtailed.

However, the greying of the electorate further complicates the task of consolidation, at least as far as measures which disadvantage the old are concerned. In the short term, more borrowing may be the political path of least resistance at least until rising bond yields – technically, rising term and sovereign credit risk premia – make that option prohibitively expensive.

If the monetary policy framework is credible, low frequency shocks such as demographics will affect the neutral rate of interest rather than the trend rate of inflation. Interest rates will rise or fall as necessary to offset any sustained demographic impulse to the balance between demand and supply in the economy that might otherwise cause inflation to deviate from a central bank's target.

The weight of evidence suggests that population ageing will lead to a lower neutral rate, even if the impact on the supply side is unambiguous: a shrinking working age population means weaker supply. However, the impulse to demand could be even more pronounced, as rising longevity prompts prime age workers to save more, fiscal authorities are obliged to consolidate to offset the demographic drag, and the marginal return on investment will tend to fall as the workforce is set to shrink.

Public health and societal perspectives

From a public policy perspective, the topic that is routinely linked with demographics is the health of the population. Slowing the decline in physical and mental health as people age will become ever more important with an ageing population, with a particular focus on dementia, given the severity of its impact and its prevalence among those in very old age.

Technological advances, such as the Internet of Healthcare Things (IoHT), hold out the promise of improved outcomes, but there is a concern that less technologically sophisticated older cohorts may not fully reap the benefits.

There are disturbing trends in the health of the prime-age population that urgently demand attention. With around one in eight people affected around the world, the World Health Organization (WHO) speaks of a global epidemic of obesity – a condition that has a major detrimental impact on the quality of life and is linked to many serious health disorders and increased risk of death.

There has been an alarming rise in mental ill-health, which has been particularly acute among young people, such that – in contrast to the established pattern of the past – [the young are now the least happy people in society](#).

From a sociological perspective, we should view demography as an engine of change. The arrival of new birth cohorts into the adult population has long been understood by sociologists as a key mechanism that triggers changes in social beliefs and norms.

For example, in the 1960s, that ‘demographic metabolism’ ushered in a greater emphasis on post-materialist values, including concern for the environment, as cohorts entered the adult population who had not experienced the physical and material insecurity of previous generations.

These changing patterns of behaviour can be felt in the economy too, with the rise of collaborative consumption as younger cohorts increasingly prioritise the value of experiences over ownership of assets.

INNOVATION

The Innovation megatrend describes the socioeconomic impact of scientific breakthroughs and advances in our stock of knowledge, and their commercial application in the form of more efficient modes of production or the emergence of new goods and services.

Innovation is the engine that drives increased prosperity in society

Innovation expands the quantity, quality and variety of output that can be produced and hence consumed. The story of this megatrend extends back into ancient history with the discovery of fire, or the Neolithic revolution when mankind switched from a hunter-gatherer existence to a more sedentary lifestyle. However, the story begins in earnest with the Industrial Revolution in the 18th and 19th centuries, and was boosted more recently by the rapid pace of technological change since the Second World War.

Nothing encapsulates the eye-watering pace of technological change in society better than Moore's Law.

Dubbed the 'greatest technological prediction of the last half-century', Moore's Law predicted an exponential rate of growth in the complexity of semiconductor chips that enabled an explosion in the processing power of computers.

However, the revolution in the economy, with the adoption of the computer and, more broadly, information and communications technology (ICT), had not translated into a surge in the productivity of the workforce, even by the late 1980s.

Economists were not short of explanations: perhaps the gains that ICT delivers are hard to measure, or perhaps they are slow to emerge because companies need to make complementary investments in intangible capital to reap the benefits, or perhaps they are zero sum at the sectoral level, or perhaps companies made poor investment choices with ICT.

There was a belated pick-up in productivity in the late 1990s that appears to reflect the cumulative consequence of massive investment in ICT, but there is an important lesson here about the seemingly ethereal link between innovation at the workplace and aggregate outcomes.

Progress almost invariably involves some element of disruption as an existing production process or product become outdated. As patterns of production and consumption shift, the innovators stand to gain significantly and the public benefits as the quantity and quality of products available for consumption improves. However, those who have invested physical or human capital in outmoded technology lose out.

The disruptive face of innovation

In particular automation, where machines replace workers, has been a constant source of concern in the story of innovation, a concern that periodically spills over into resistance. However, the specific grievances of the 'machine breakers' through history was often more nuanced than the myth of 'collective bargaining by riot'. For example, the Luddites were skilled craftsmen whose primary concern was being undercut by cheap labour.

Economists have traditionally been sanguine about the risk that automation would lead to mass unemployment, arguing that new jobs will be created elsewhere in society to replace those displaced by the new technology as aggregate income and demand increases.

To be fair, the economist Keynes was concerned that the pace at which automation destroyed jobs would outstrip the pace at which new jobs were created, although he foresaw a future in which technological progress would solve the basic economic problem of satisfying needs, and people would be working far fewer hours each week in an 'age of leisure and abundance'.

The concern around automation has shifted away from the number of jobs destroyed through automation and towards the nature of the new jobs created elsewhere in the economy. Although some new high-wage jobs that are tied directly to the new technology may be created, there is no guarantee that the stock of high-wage jobs or even total jobs will not decline. According to one published estimate, the addition of one robot per thousand workers in the economy reduces the fraction of the population that is employed by 0.2 percentage points and wages by 0.42%.

Technological change is thus routinely linked to a key macroeconomic development: rising inequality. One striking demographic trend over recent decades has been the rise in the share of the population attending university. Had nothing else changed, that increase in the relative supply of skilled (versus unskilled) workers should have compressed the wage differential between those two types of workers and – under the reasonable assumption that the two complement each other in production – should have raised the absolute level of unskilled workers (in just the same way that more capital equipment would raise the production of an unskilled worker).

However, the skill differential widened and the wages of the low skilled fell. In other words, labour market outcomes are consistent with a significant skill-biased shift in labour demand (dominating the supply shock) with technological change being the main suspected culprit.

The nature of that skill-biased technical change has morphed over time. At the outset, the demand shift appeared to be at the expense of low-skill tasks, whereas it now increasingly appears to be at the expense of routine tasks. In other words, new technology is increasingly becoming a compelling substitute for labour in performing well-defined, cognitive and manual tasks that are completed by following a clear set of rules. Looking ahead, according to some estimates, around half of the jobs in the economy could be at risk of automation over the next decade or two as this process unfolds.

The winner takes it all

In markets where customers can differentiate between producers, technological advances that render consumption increasingly non-rivalrous (so the marginal customer can be serviced at zero cost) can give rise to 'winner takes almost all' markets in which a small number of superstar companies dominate. The secular rise of the digital economy, in which output is weightless, has created a fertile breeding ground for these superstars. The distribution of profits was always tilted towards those at the top of the corporate league, but evidence suggests that it has become increasingly skewed towards these superstars.

Indeed, the apparent increase over recent decades in profitability across the corporate sector appears to have been almost entirely accounted for by the most profitable companies, with mark-ups rising thanks to declining costs.

Looking backwards, we know that a very small number of companies have accounted for the lion's share of the increase in shareholder wealth over the last century. Looking forwards, the 'superstar' phenomenon suggests more of the same, with a highly concentrated distribution of activity and profitability across the corporate landscape.

Sustaining and disruptive innovation

Innovations in products and processes do not occur in a vacuum; they are directed by companies. The choices that individual companies make around innovation will determine their fate over the long run.

Academic literature differentiates between 'sustaining innovations' – defined as those that deliver a high-quality product geared towards the middle to upper echelons of the existing customer base – and 'disruptive innovations' – those that cater to customers looking for a simpler, cheaper, more rudimentary product or that involve creating a new product for which there is no pre-existing customer base.

Incumbents tend to focus on sustaining innovations, which offer the promise of higher profit margins in the short term. They leave potentially disruptive innovations for new entrants and marginal players to exploit. Over time, those challengers may come to supplant the incumbent.

One classic example of this is Blockbuster turning down the opportunity to acquire Netflix for \$50 million in 2000 – a mere fraction of what Blockbuster earned in late fees on rentals at that point. This blind spot of incumbents around disruptive innovation may reflect rigidities within the company, where the core strengths that define the company (knowledge, beliefs and structures) and are a blessing in business-as-usual model, but become a hindrance when it comes to contemplating radical change.

Looking ahead, one innovation looks set to eclipse all others when it comes to the breadth and depth of its socio-economic impact: Artificial Intelligence (AI).

AI is considered by some to be genuinely transformative and could potentially qualify as one or even both of the categories of game-changing innovations: general-purpose technologies (GPTs) and inventions of a method of invention (IMIs).

A GPT is an engine of economic growth: a development that is widely used, amenable to continuous improvement and liable to foster innovation elsewhere in the economy, thus leading to a virtuous circle of progress. An IMI creates a new playbook for innovation, raising productivity in the knowledge-generating sector.

Some have even argued that AI could lead to a technological singularity, where ‘the first ultra-intelligent machine is the last invention that man need ever make’; after that, AI could iteratively produce ever more advanced machines.

In the meantime, we return to the lesson from Moore’s Law: the adoption of AI may lead to a lull in productivity, as companies are required to make significant investments in re-shaping their production process to exploit the potential gains; it is only later that productivity surges.

The debate is about where we currently sit on that productivity J-curve and how large the eventual productivity dividend could be. The disruptive impact on the labour market could be profound – according to the managing director of the International Monetary Fund, akin to a ‘tsunami’ – with massive job destruction fuelling further polarisation in society.

Finally, there are wider concerns about the enormous carbon footprint of AI and the degree of existential threat it poses. As the Godfather of AI, Geoff Hinton, once quipped: *“How many examples do you know of a more intelligent thing being controlled by a less intelligent thing?”*

ENVIRONMENT

Our third megatrend is the story of mankind's impact on our physical environment, the repercussions for society and the economy and the steps that are being taken to mitigate the damage that has been done. Humanity's impact on the physical environment has been so profound that some geologists speak of a new epoch having begun, perhaps as early as the 17th century – the Anthropocene – to signify how we have fundamentally changed the world we live in.

There are numerous dimensions along which we can quantify mankind's impact on the planet. Approaching half of the habitable land on the Earth's surface has been given over to agriculture to feed a global population of more than eight billion people, with the lion's share of that devoted to livestock.

Ecosystems – from the Arctic tundra to rainforests to coral reefs – are collapsing, contributing to a calamitous breakdown in biodiversity. There is a wide range physical scars left by human activity:

- The depletion of natural resources
- Disruption to ocean gyres
- Failure to adequately decommission production facilities at the end of their working life
- The proliferation of microplastics and spheroidal carbonaceous particles in the environment
- The fall-out from nuclear weapons tests.

Above all, the concern is with climate change.

The evidence in favour of anthropogenic climate change is overwhelming. The pace of climate change over the past century has been extremely rapid (relative to the norm since the last ice age 12,000 years ago) and science has established a clear link between human activity and climate change, with greenhouse gas (GHG) emissions trapping heat in the atmosphere.

The level of GHG emissions may have plateaued, but at historically unprecedented levels and with considerable variation in the regional trends. Global temperatures are already around 1.5°C above the pre-industrial level and until we achieve 'net zero' – when emissions are brought into balance with removal of GHGs from the atmosphere – temperatures are likely to continue to climb. The window of opportunity to contain global warming to 'just' 2°C above the pre-industrial level is rapidly closing, raising the prospect of dire global outcomes.

Achieving net zero will require nothing less than a transformation of the economy. An 'energy transition' away from fossil fuels towards renewables is imperative given that the production of energy accounts for such a large share of GHG emissions. This process is underway, with renewables forecast to account for almost half of global electricity generation by 2030, thanks predominantly to an increase in solar photovoltaic generation and driven in no small part by massive investment in China.

Accompanying that increase in renewable capacity is a steep decline in the cost of generation, particularly for solar photovoltaic generation, where the levelized cost of electricity has fallen from several multiples to a mere fraction of what can be achieved with fossil fuels.

However, the energy transition also demands a reconfiguration of the entire power network. A huge investment in storage capacity is required to address the intermittency problem that is the Achilles' heel of renewables, which has fortunately been facilitated by a collapse in the cost of battery power. Moreover, the power grid will have to be adapted to fit a more geographically dispersed network of smaller plants and to meet the shift in demand, in particular from electric vehicles and heat pumps.

Progress towards net zero will prove disruptive. The lion's share of the fossil fuel energy ecosystem will have to be decommissioned. In addition, production of energy intensive activities will have to be scaled back.

Such a shift in economic activity inevitably implies an underlying shift in the pattern of employment. The principle of a 'just transition' – which was formally adopted by world leaders in the Silesia Declaration at COP24 – is the idea that 'nobody should be left behind' on the path to net zero. Implementing that agenda – identifying and then compensating those disadvantaged in the pursuit of net zero – will not prove straightforward, particularly in an era of strained public finances.

The policy objective is clear: reduce GHG emissions. Economics provides policymakers with a range of levers which can be used to achieve that goal:

- Taxes that incentivise companies to abate pollution or cut production
- Regulation of the production of pollution at the company or sectoral level
- Subsidies for investments in cleaner technology
- Establishing property rights.

In a real-world setting, where policymakers are unsure about the costs to companies and the benefits to society of reducing pollution, those policy tools are likely to be set imperfectly and the decision whether to deploy instruments that work via prices (such as a carbon tax) or via quantities (such as cap and trade) will influence how sub-optimal the final outcome is.

In practice, controlling quantities through emissions trading schemes has proved popular, not least because they provide a means to encode national targets for emissions reductions (the so-called Nationally Determined Contributions, or NDCs). With a cap-and-trade approach, the policymaker sets emissions levels and the market determines the price of carbon; under a carbon tax, the opposite is true.

However, carbon taxes are also playing a role in the path to net zero, including at the border, via carbon border adjustment mechanisms (CBAMs), through which jurisdictions that lead on the climate agenda can mitigate the risk of carbon leakage through which carbon-intensive activities shift abroad.

The most controversial policy proposal for reducing emissions is to reduce economic activity – known as ‘de-growth’ – but policymakers are likely to choose that option only as a last resort, given the consequences for material living standards, if all attempts to decouple activity and emissions fail.

The societal consequences of climate change are potentially catastrophic and will fall disproportionately on certain regions.

Extremes of temperature and humidity, food scarcity and rising sea levels will make parts of the Earth’s surface uninhabitable and could contribute to a rise in conflict and the spread of infectious disease, including increased risk of pandemics. The WHO estimates that climate change will cause 250,000 additional deaths each year over the coming decades and displace millions more both within and across national borders. Furthermore, there is the collateral damage to the physical environment: the further collapse of ecosystems and an acceleration of the Anthropocene extinction event.

The macroeconomic consequences of climate change are obviously on a different scale, but nonetheless still material. There is likely to be a hit to the supply side of the economy from several sources:

- The loss of productive land
- Periodic damage to capital stock from increasingly frequent natural disasters
- Reduced productivity from heat stress
- A possible drag from the diversion of resources away from innovation towards emissions abatement.

On the demand side of the economy, a huge investment in building a green capital stock is required. On the other hand, concern about climate-related damage to capital goods that is difficult to insure against will tend to weigh on investment spending, with increased uncertainty about both the scale of that physical risk and the nature of the policy response further depressing capital expenditure. Fear and uncertainty about the future may also prompt households to save more and spend less.

Ultimately, monetary policy must bring aggregate demand and supply into balance, so a higher neutral rate of interest may be required to preserve price stability in the medium term. In the meantime, central banks may have to contend more often with inflationary episodes brought about by natural disasters, although the transition to renewables could ultimately deliver lower energy prices.

Asset prices will likely reflect these implications of climate change. A higher neutral rate implies higher long-term bond yields, which in turn act as the core discount rate for a broad constellation of assets. That said, climate change could indirectly lead to a shift in the term premium, either moderating or exacerbating the news for long rates.

For example, increasing government borrowing to finance climate policy, greater uncertainty about the future path of inflation and a perception that central banks will have to tighten policy in response to more frequent cost shocks all point towards a wider term premium and higher long-term bond yields. Those sovereign bonds viewed as true safe havens in the climate crisis may trade at an even greater premium than today, while the consequences of climate catastrophe are priced into risky assets, including bonds issued by sovereigns that are most exposed to global warming.

At the level of individual companies, valuations appear already to embed a pollution risk premium that seemingly compensates investors for the possibility of a future tightening in emissions standards that would disadvantage polluters.

In principle, climate change poses a potential threat to financial stability. Losses will arise from two generic sources: the direct destruction of property and disruption to activity (physical risk), and the disruption created on the path to net zero (transition risk).

This threat to financial stability will likely increase with the severity of the climate crisis, since that entails larger losses via physical risk, but also likely a more extreme policy response, and hence greater transition costs, too.

But there is also a possibility that defensive actions by banks and insurance companies to limit their exposure to climate change could lead to a withdrawal of key financial services to sectors of the economy leading to a 'climate credit crunch'.

Rising awareness of mankind's impact on the planet is also driving important shifts in consumer behaviour at the micro level, away from products that are implicitly part of the problem, or towards those that are part of the solution. The rise of the circular economy is a case in point, with individuals embracing the core ideas of extending the life cycle of products and minimising waste. Here too, public policy can play a role by introducing 'green nudges' to encourage more sustainable behaviours.

GEOPOLITICS

Our final megatrend captures changes in the 'rules of the game' – the national and international laws, regulations and norms – that govern how individuals, companies and even governments behave and interact with each other.

For this megatrend, we consider changes to the key features of economic policy:

- The size of the state
- The progressivity of the tax code and generosity of the welfare system
- The bite of regulatory and antitrust policy
- The legal framework under which trade unions operate
- The role of industrial policy
- The size of barriers to trade in products, labour and capital across borders
- The extent to which economic policy is delegated to unelected experts.

Our particular interest is in fundamental shifts in the tectonic plates of public policy that result in simultaneous, significant changes to the rules of the game along multiple dimensions. The rules will often be re-written by conviction politicians, but their election will often be facilitated by shifts in public opinion, reflecting deeper changes in society including those captured by our other megatrends.

The geopolitics megatrend is our way of framing fundamental shifts in the rules of the game. We choose to focus on the shift that has occurred since the tail end of the last century and the breakdown of what had seemed to be a secure consensus around a set of guiding principles for how to manage both the economy and international relations.

At the time, the end of the Cold War was thought to have marked 'the end of history', and the 'universalisation of Western liberal democracy'. Radical reforms that had been implemented by conservative administrations in the 1980s were gradually embraced by their political opponents in the 1990s, cementing a 'neoliberal order' – the doctrine that 'markets, left to their own devices, can produce the greatest economic growth and thus the greatest economic good'.

On the global stage, the so-called 'Washington Consensus' emerged around a 'free markets' recipe for economic success:

- Financial liberalisation
- Privatisation
- Lower barriers to entry in domestic markets
- Lower tariffs and non-tariff barriers
- Light touch regulation
- Prudent fiscal policy
- Independent monetary policy.

In the realm of international relations there was the 'unipolar moment' with the United States revealed as the only superpower capable of projecting power on the global stage, Russia no longer perceived as a threat and China increasingly perceived as an economic partner on a pathway to entry into the World Trade Organization. To varying degrees, this multi-faceted consensus has unravelled over the past quarter of a century.

In a democracy, the ballot box ultimately defines the centre of political gravity, and the basic principles of public choice suggest that the gravitational pull of the median voter on the positions of political parties should be strong. In principle, the unravelling of the neoliberal order, the Washington Consensus and the primacy of liberal democratic values should therefore have been the result of an underlying shift in the views of the electorate on these issues.

However, many of these specific policies – trade barriers, industrial policy, antitrust regime, independent central banks – are not particularly salient for the general public, relative to core issues such as the cost of living. The rules of the game have instead been rewritten as part of a broader realignment in the political sphere.

Party politics has typically become more polarised. In multi-party systems, the established parties of the centre have lost ground and the process of compromise in taking decisions or forging stable coalitions has become more complex; in a two-party system the same process has taken place within those parties, which are themselves coalitions.

At the same time, there appears to have been a rise in affective polarisation – at least in some jurisdictions – where the strength of feelings people have towards the politicians they support and against those they oppose becomes more intense – which may have contributed to this more fragmented and polarised political landscape.

Perhaps the defining feature of this new political dynamic has been the rise of populism and populist parties.

Populists understand the central question of politics as a struggle between the people – whom they claim to defend and often define as a homogenous unit, often in nativist terms – and a corrupt elite. Populists therefore tend to instinctively push back against the norms of liberal democracy: pluralism and constitutional safeguards that protect minorities. Populist parties have been gaining ground on both wings of the political spectrum, but it is the rise of populists on the right that has been particularly pronounced.

The rise of populism is often framed as a backlash by certain elements within the electorate against mainstream parties and the status quo. Some commentators focus on a cultural backlash, by older, more conservative cohorts who are gradually losing their hegemonic status and resent the shift in social norms driven by younger, more progressive cohorts and the changing face of their country driven by immigration. Others focus on an economic backlash, with those workers who have been the victims of rising inequality created by globalisation, automation and the erosion of institutions designed to protect living standards.

Both arguments sound compelling but are only partially supported by the data: populist parties are winning support beyond these specific groups who feel alienated and impoverished by socio-economic change. Another plausible catalyst is rising dissatisfaction with mainstream politics, with people who believe that government does not act in the interests of ordinary citizens more likely to vote for anti-establishment parties.

Arguably the most significant change in the economic rules of the game has been the retreat from globalisation.

Once upon a time, politicians and CEOs championed the benefits of belief in the merits of the free flow of goods, services, labour and capital across borders, and the wisdom of decoupling production from consumption. That's no longer the case.

In part, the retreat from globalisation has been driven by a greater appreciation within the corporate sector of the risks involved in relying on long supply chains that were exposed during the pandemic. But the retreat has also been fuelled by a shift in government policy. President Trump has reinstated tariffs as a major tool of economic policy, appealing to both commercial and national security considerations.

While there remains considerable scepticism within the economics community about the merits of taxing imports, there has been a clear shift in the assessment of subsidising domestic producers. Where once economists argued that the 'the best industrial policy is none at all', there is now a far more favourable assessment of industrial policy, in pursuit of a range of objectives, from strategic competitiveness to climate policy to national security.

A new intellectual framework has emerged – geoeconomics – which recasts the conduct of economic policy across a broad array of instruments, particularly by regional hegemons, within a broader geopolitical context as modern statecraft.

There are also important shifts taking place in the domestic rules of the game. In principle, the neo-liberal order championed the removal of all anti-competitive frictions in the economy. In practice, however, it involved an assault primarily on the market power of organised labour, not large companies.

In contrast, the populist movement is pre-disposed to take the side of the worker against the elite and is therefore liable to adopt a less hostile approach to trade union power and minimum wage floors, and a more sceptical approach to outsourcing, free movement of labour into the country and non-compete clauses.

Likewise, the neo-liberal consensus on antitrust policy – the non-interventionist Chicago School doctrine – is also buckling under growing concern across the political spectrum about not only the huge profits generated by mega corporations, but also the power they wield in society, referred to by one conservative commentator as ‘private tyranny’.

Finally, the last quarter of a century has seen a profound shift in international relations.

On 9/11, one commentator declared the end of our holiday from history, precipitating the War on Terror, or what Trump has dubbed “endless, ridiculous, stupid, foreign wars in countries that you’ve never even heard of”.

The unipolar moment has given way to Great Power Competition and growing tension between superpowers. Europe was slow to appreciate the shift in Russian foreign policy that President Putin unveiled at the Munich conference in 2007 and only finally grasped the full consequences with the invasion of Ukraine, leading some European politicians to speak of a ‘pre-war era’. But with the return of Trump’s ‘America First’ doctrine, Europe could no longer rely on the American security umbrella to deter that looming threat.

Increasing spending on defence has become an urgent priority but more fundamentally strategic autonomy – the capacity to act and deter aggression without relying on traditional allies – has now been embraced as a goal of European policy. The question is how to achieve that objective given the competing national interests and limited fiscal room to manoeuvre.

CONCLUSION

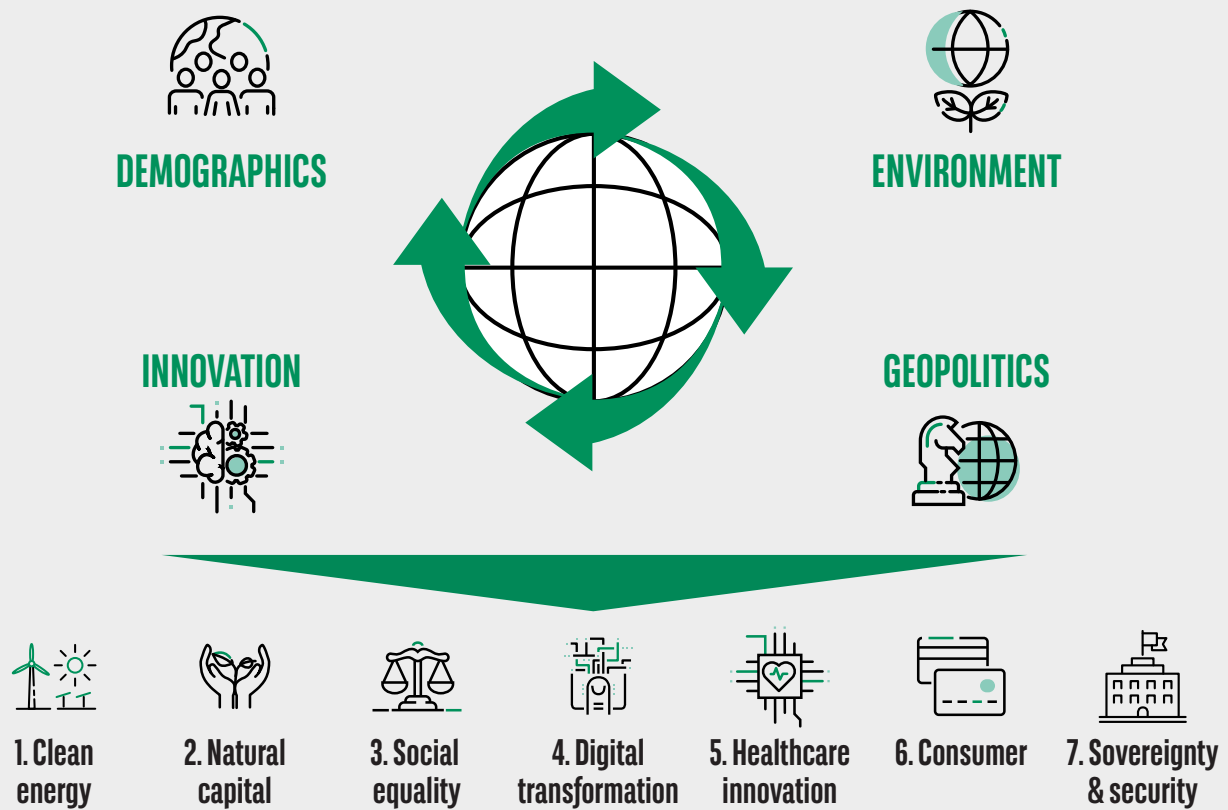
We have presented four megatrends in this paper: change in who we are as people (demographics), change in our material environment (innovation), change in our physical environment (environment) and change in the laws, regulations and norms which govern how individuals, companies and states interact (geopolitics). Between them, we believe these megatrends collectively capture much of the slow-moving but pervasive change in the world around us.

Each megatrend should be seen as a composite of numerous underlying themes. For example, the demographic megatrend is not just about population ageing. It encompasses trends in fertility and marriage, in the scale and direction of migrant flows, in the changing location of the source of global population growth and the home of the world's youth population, in the mental and physical health of groups within the population, in the norms and beliefs of different cohorts, and in the changes in public policy that these various themes trigger.

The salience of these different underlying themes within the investment community will vary from time to time. For example, the conversation about geopolitics is currently preoccupied with increased spending on defence, whereas, during the acute phase of the pandemic, the focus was on supply chain resilience and near-shoring. Back in 2016, the Brexit referendum and the election of Donald Trump put the focus on the rise of populism. The geopolitics megatrend provides a framework within which these separate but related conversations can be both understood and not forgotten when the focus of the market shifts elsewhere.

This paper does not explicitly make the link between the megatrends and specific investment processes or investment decisions. However, we have described numerous links between various aspects of these four trends and outcomes relevant to investors. That link is arguably most apparent for the rates market: the market for long-term government bonds. This should not come as a surprise given that many of the underlying themes have implications for the medium-term stance of monetary and fiscal policy, which in turn influence the expected future path of the policy rate and the term premium that pin down long-term bond yields.

However, the megatrends do speak to developments throughout society and across markets, which are reflected in trends in valuations at the sectoral and even security level.





RICHARD BARWELL

Head of Macroeconomic Research and Investment Strategy,
BNP Paribas Asset Management



Richard Barwell has been Head of Macro Research and Investment Strategy at BNP Paribas Asset Management since February 2020. Prior to that he managed the Macro Research Team and he joined the company as a Senior Economist in 2015.

Before joining BNP Paribas Asset Management, Richard was a Senior Economist at RBS between 2010 and 2015. Prior to this, he worked at the Bank of England between 2001 and 2010 in various roles within the Monetary Analysis and Financial Stability Directorates.

Richard holds a PhD in Economics from the London School of Economics and has written several textbooks on economic policy.

Richard is based in London

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VIEWPOINT



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