IPPR

The Centre for Economic Justice

THE UK IN THE GLOBAL ECONOMY

The IPPR Centre for Economic Justice

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EXECUTIVE SUMMARY

The UK economy is not delivering. Employment growth since the financial crisis has been accompanied by the weakest decade for average real earnings growth in 200 years. Over the last 40 years, only 10 per cent of national income growth went to the bottom half of the income distribution. The UK is Europe's most geographically unbalanced economy, with wide disparities between nations and regions, and once-thriving communities suffering economic decline. These problems are not glitches in an otherwise healthy system; they are the result of structural flaws in our economic model.

For the past three years all attention has been turned inwards to the Brexit process. But trends and changes in the global economy pose risks to both the short and long-term viability of our economic model: we must now look outward to what is coming down the track. Doing so shows that the task of addressing the structural weaknesses at the heart of our economy cannot wait.

Post-war history suggests that recessions in the UK economy occur on average once every 10–15 years, and a decade on from the collapse of Lehman Brothers there are good reasons to prepare for instability and a potential recession:

- **Global slowdown**: The global economy is reaching the late stage of the financial cycle. Growth in China, the world's second largest economy, may be running out of steam, structural problems continue to afflict the Eurozone, and there is a significant chance that the US will face a recession in the next three years.
- **Financial instability**: 2019 is the beginning of the end of the post-crash decade of easy money, as banks are expected to start winding up quantitative easing and increase interest rates. This could cause credit to dry up and increase debt distress. China is particularly exposed to a private debt crisis, but households in the global North are also overleveraged.
- **Political uncertainty**: The US-China trade war, the possibility of a no-deal Brexit and political uncertainty in Europe pose threats to trade and investment in the coming years.

Longer-term, the very system upon which our economic model relies – the natural system – is under threat. Climate change poses risks to the stability of our financial system and future economic activity. Business-as-usual is no longer an option: the question is when, not if, we move to a less extractive model.

Technological change also demands a different economic strategy if we are to succeed in the global economy of tomorrow. Technological change is reshaping production, working lives and who captures the gains of increased productivity. As with previous waves of technology, this presents opportunities, but also could create 'losers', and absent intervention is likely to fuel inequality.

Many of these shifts are occurring outside the influence of UK unilateral and domestic political institutions. But while policymakers may not be able to control the changing global economy, they can choose how to prepare and how to respond. We argue three responses are needed:

- *Strengthening the UK economy to succeed in the global economy of the future.*
  We must address longstanding weaknesses such as low investment, poor productivity and an overreliance on consumption-led growth fuelled by debt. This must include an industrial strategy with a focus on technological adoption including in the 'everyday economy', and a just transition to a green economy.
- *Preparing the tools and institutions to respond to instability and recession.*
  With interest rates at their lower-bound, a wider set of tools will need to be considered and coordinated, such as fiscal stimulus through a National Investment Bank. Distributional effects of macroeconomic policy must be considered.
- *Being ready with a programme for a fairer economy.*
  Moments of crisis and change can be shaped and provide a means for many different ends. Those who value the goal of a stronger and fairer economy must be ready with a bold and coherent policy programme to offer in response to crisis and deep change.

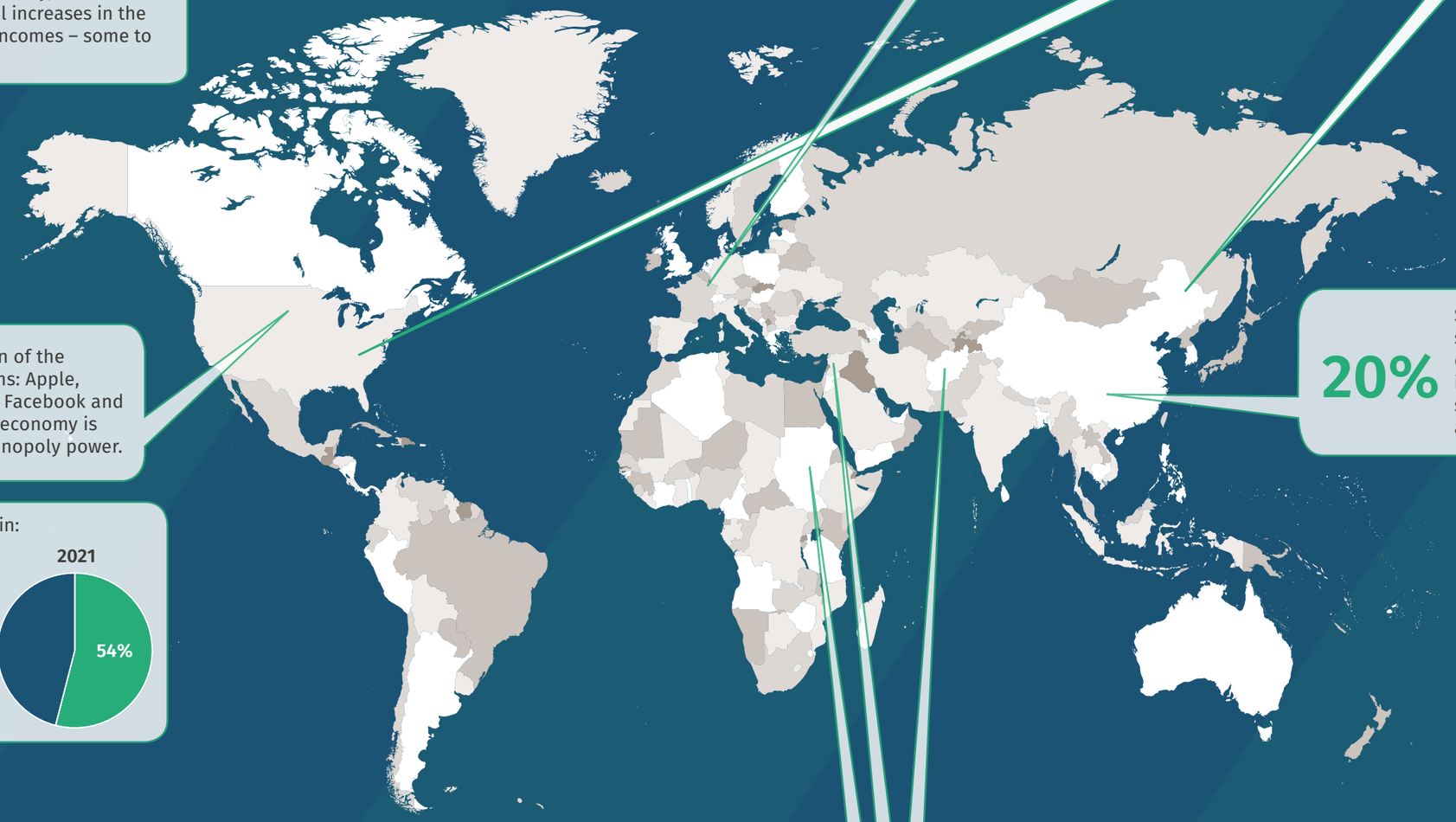
65% Decline in cross-border capital flows between 2007 and 2017.

31 Number of countries currently in debt distress, up from 22 in 2015. A further 82 are at risk of debt crises.

Household debt has continued to rise since the financial crisis. Australia, Canada, Norway, Sweden and the UK have all seen substantial increases in the ratio of private debt to disposable incomes – some to higher than pre-crisis levels.

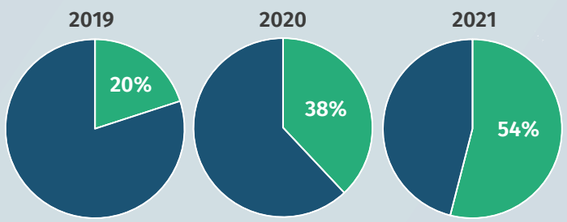
Many European countries are experiencing resurgences in nationalist and populist politics, that could lead to the imposition of trade tariffs and weaken the European Union.

The US has imposed tariffs on Chinese imports of some goods, and China has retaliated. The US is threatening to scale tariffs up further.



$4tn Market capitalisation of the 'big five' US tech firms: Apple, Alphabet, Microsoft, Facebook and Amazon. The digital economy is characterised by monopoly power.

Blackrock estimates of a US recession in:



20% Size (%GDP) of China's fiscal stimulus programme that has driven high growth rates and is one of the biggest fiscal stimulus programmes ever attempted in economic history.

2040 The estimated year in which, at current warming rates, the world will reach 1.5°C warming. Current policies around the world are projected to result in about 3.3°C warming by 2100.

Wealthier nations tend to impact more on the environment, and within rich countries, the wealthiest 10 per cent of people contribute far more to greenhouse gas emissions than other income groups.

70m Number of refugees, 85 per cent of which are being hosted by states in the global South. Almost 60 per cent of them have come from South Sudan, Afghanistan and Syria – with 6.3 million from Syria alone. The increase in refugees seeking safety in Europe has coincided with an increase in anti-migrant sentiment in many states on the Continent.

INTRODUCTION

A BROKEN ECONOMIC MODEL

The UK economy is not delivering. On the surface it has some impressive strengths: employment levels are high, fewer older people are living in poverty than in the past, and we have a number of globally successful sectors, such as finance, aerospace, life sciences, and the creative industries. But there aren't enough such sectors and too few people have been sharing in their successes. In recent years our economy has been growing, but most people are no better off than a decade ago. For many people the economy does not appear to be working at all.

WAGES AND WORK

At 75.8 per cent of 16-64 year olds, the employment rate is at its highest since comparable estimates began in 1971.[1] Yet the growth in employment since the financial crisis has been accompanied by the weakest decade for average real earnings in 200 years.[2] Many more people work in insecure jobs than in the past, with almost 1 million people on zero-hours contracts, and 15 per cent now self-employed. The prevalence of low and insecure pay means that a majority of people living in poverty are now in working households. Meanwhile, five in six people in low-pay work are unable to escape low-pay over 10 years.[3] Employment and pay gaps by gender, ethnicity and disability persist.

UNEQUALLY DISTRIBUTED REWARDS

Over the last 40 years, only 10 per cent of national income growth went to the bottom half of the income distribution, while almost two-fifths went to the richest 10 per cent. The UK is the fifth most unequal country in Europe in terms of income, while inequality of wealth is even greater: the top 10 per cent of households own more wealth than the bottom 80 per cent.[4]

INTERGENERATIONAL INEQUALITIES

The huge growth in property values in the past three decades means that many young people are priced out of the housing market, and cannot attain the same security or wealth as their parents' generation did at their age.[5] The amount of wealth inherited is increasing, meaning that younger generations face a less equal future. Access to the bank of 'mum and dad' increasingly determines people's wealth and security.

GEOGRAPHIC DISPARITIES

The UK is Europe's most geographically unbalanced economy, with wide disparities between the nations and regions, and many once-thriving communities suffering economic decline.[6] Average wages in most English regions and Wales are now 30 per cent lower than in London and the South East, and in Scotland, more than 20 per cent.[7]

These problems are not temporary glitches in an otherwise healthy system; they are the result of structural flaws in our economic model. The 2007-08 crash revealed that the previous decade of apparently strong growth had been built on weaker foundations than had been understood at the time. On investment, research and development (R&D), trade and productivity, the UK performs worse than most of our European neighbours, and has done for much of the last 40 years. Many of these factors flow from deliberate policy choices. We have less a 'British economic model' than an 'economic muddle'– a mixture of powerful strengths and profound weaknesses in which different parts and policies often act against one another and do not combine into a coherent whole.

1. **We have both world-leading businesses and world-lagging productivity**.

   Measured by output per hour, productivity in the UK is 7 per cent below the G7 average.[8] The UK already had lower productivity prior to the financial crisis, but since 2008 productivity growth in the UK has more or less stalled altogether, and the gap has widened. Our leading firms are as productive as elsewhere, but we have a longer 'tail' of low-productivity businesses, in which weak management and poor use of skills leads to 'bad jobs' and low wages. Too many businesses are stuck in a low-productivity, low-pay equilibrium. We are an economy of laggards and leaders.

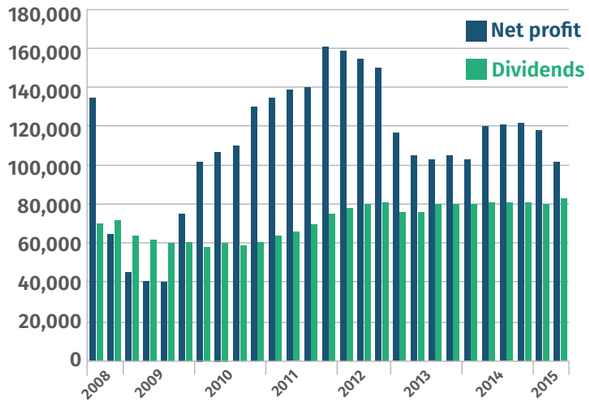
2. **We have one of the world's largest financial sectors, yet a lower rate of investment than most of our major competitors**.

   At around 17 per cent of GDP, the rate of public and private investment in the UK economy is around four percentage points below the OECD average.

FIGURE I.1

Giving shareholders predictable returns has come to dominate dividend payout behaviour, almost irrespective of profitability

Dividends and profits for FTSE 350 firms (£m, rolling 12 month) Q3 2008–Q1 2015



Source: Big Innovation Centre (2016)[9]

This gap has widened over the last 50 years; indeed, the UK investment rate has been falling for most of the last 30 years.[10] Among the causes are a banking system that is not sufficiently focussed on lending for business growth, and the increasing short-termism of our financial and corporate sector. Businesses are distributing an increasing proportion of their earnings to their shareholders rather than investing them for the future. This trend is unrelated to profit levels: since the 2007–08 financial crisis, dividend payments have remained relatively constant even as profits have fluctuated.

3. **We are both succeeding and failing in international trade.**

   The UK has a trade surplus in services, but an overall current account deficit that has been negative for 20 years, and – as a percentage of GDP – is the largest of all the G7 countries.[11] This indicates a serious problem of competitiveness, made worse over recent decades by an overvalued currency. The UK's manufacturing sector now makes up less than 10 per cent of GDP, lower than in most other major economies.[12] The UK's exports are concentrated in a small number of sectors and many of our industrial supply chains are highly dependent on imports, in contrast with the most successful export economies.

4. **We have experimented with bold monetary policy, but are constrained by pre-Keynesian fiscal orthodoxy.**

   Since the financial crisis, the UK economy has been supported by extremely low interest rates and a major programme of 'quantitative easing' (unconventional money creation) by the Bank of England. Fiscal austerity – public spending reductions and tax rises – has moved in the opposite direction, and left the UK's recovery in this period slower than almost all of our major competitors. Growth is now being fuelled again by consumer spending, based on rising debt and falling savings. The Office for Budget Responsibility (OBR) estimates that, since late 2016, household consumption has driven four-fifths of the entire (2.9 per cent) growth of the economy.[13] Household debt has risen since 2016 and is forecast to reach 143 per cent of disposable income by 2024.[14]

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1. GLOBAL POLITICAL ECONOMY

GLOBAL SLOWDOWN

The global economy is reaching the late stage of the financial cycle. Is a recession around the corner?

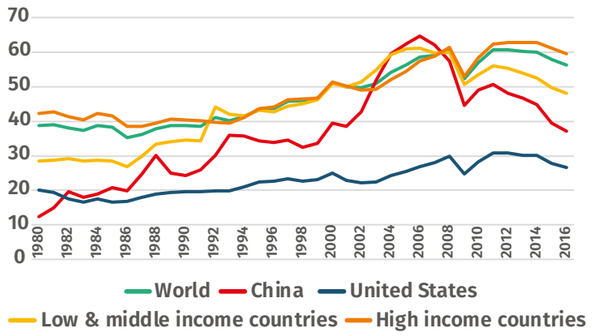
GROWTH IN CHINA – IS THE WORLD'S SECOND LARGEST ECONOMY RUNNING OUT OF STEAM?

- Contrary to the mythology around the Chinese growth model, exports have not been a significant contributor to growth since their collapse during the global financial crisis.[1] Today, the Chinese current account surplus is shrinking as imports have increased.[2]
- Instead, since 2009, China's high growth rates have been driven one of the biggest fiscal stimulus programmes ever attempted in economic history, worth almost 20 per cent of GDP, replacing exports to generate growth.[3]
- But this can't go on forever. The hugely successful programme is reaching the limits of its effectiveness and the Chinese state is running out of 'fiscal space': its ability to spend without risking the sustainability of government debt.

FIGURE 1.1

Trade flows have been in decline since 2011

World trade, % of GDP

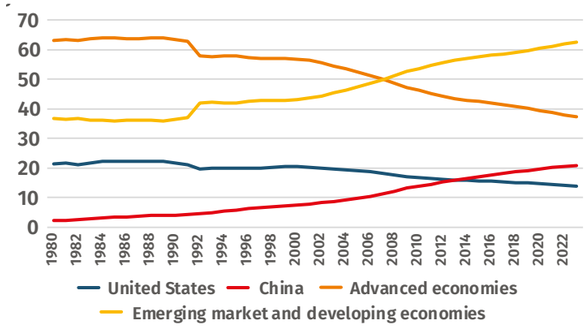


Source: World Bank (2019)[4]

FIGURE 1.2

China has overtaken the US as the single biggest contributor to global growth, exposing the global economy to Chinese economic performance

Contributions to global growth (GDP based on PPP, share of world)



Source: IMF (2019)[6]

THE UNITED STATES COULD ENTER RECESSION BY 2022

- The US has experienced a very long, slow recovery – but there is evidence it is now coming to an end. Growth in 2018 was strong on the back of Trump's stimulus, but now rising employment alongside inflation suggest there is little extra capacity in the economy.
- Whilst it is unlikely the US will experience recession in 2019, there is a significant chance that it will have by 2022.[5]
- This timeline may be accelerated in the event of a financial shock – the greatest dangers being corporate debt and a trade war.

STRUCTURAL PROBLEMS CONTINUE TO AFFLICT THE EUROZONE, MEANING POLICYMAKERS WILL BE LESS ABLE TO RESPOND TO A SLOWDOWN

- In 2018, Italy entered recession while Germany narrowly avoided one. Greece and many other southern European economies have only managed to return to growth through a programme of internal devaluation in which wages have been hit.[7]
- Ongoing slowdowns in the rest of the world will have an impact on the Eurozone, which has an overall current account surplus, and its ability to generate growth through exports.
- The currency union may be unable to respond to a change in global fortunes given constraints on both fiscal and monetary policy. And, the inability of the states to agree a stimulus programme or debt mutualisation to boost competitiveness could lead to ongoing divergence in economic outcomes, which might threaten the integrity of the Eurozone.[8]

STIMULUS PACKAGES HAVE KEPT THE GLOBAL ECONOMY GOING SINCE THE CRASH, BUT SOME HAVE BEEN MORE EFFECTIVE THAN OTHERS

- The Chinese stimulus programme was worth nearly 20 per cent GDP in 2009.[9]
  - The programme allocated 40 per cent of the total to public infrastructure, with the remainder being spent on reconstruction following the Sichuan earthquake and environmental and cultural investments.[10]
  - The stimulus has maintained demand despite the fall in exports following the recession. As a result, China's economy has grown by more than 6.7 per cent each year since the crisis, and by as much as 10.6 per cent in 2010.[11] In the first year of the stimulus, 2009, China overtook the US in terms of investment in the clean energy economy.[12]
- The US' original stimulus programme served to boost demand after the recession despite being much smaller at 5 per cent of GDP, or $800 billion over 10 years.[13] But, the more recent programme of tax cuts has boosted corporate profits and exacerbated the volatility in equity markets without boosting long term investment.[14]

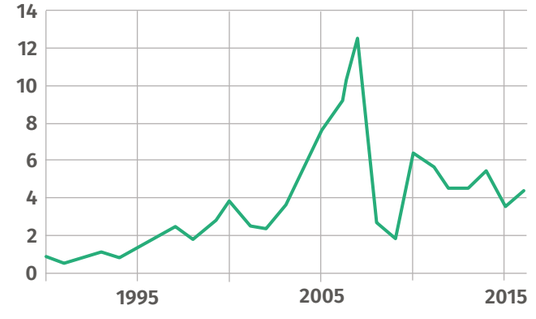
IS GLOBALISATION IN RETREAT?

- Some have termed our current period 'slowbalisation' – a slowdown in the rate of globalisation seen since the financial crisis.[15]
- Trade flows have fallen from around 61 per cent of global GDP in 2010 to 58 per cent today (figure 1.1).[16]
- The most significant slowdown has taken place in financial flows. Between 1980 and 2008, global cross-border capital flows increased three times faster than global trade flows in a period of what some have termed financial globalisation. This came to an end in 2008 and financial integration has slowed markedly since then: cross-border capital flows in 2017 were 65 per cent lower in dollar terms than in 2007 (figure 1.3).[17]
- Globalisation has created a huge amount of kick-back in those places most affected and has led to a backlash against further economic integration.[18]

FIGURE 1.3

Capital flows remain below their pre-crisis peak, and continue to fall

Global cross-border capital flows ($ trillion)



Source: Lund et al (2017)[19]

A GLOBAL BUSINESS CYCLE? BOOM AND BUST IS HARMONISING ACROSS COUNTRIES

- Today, the global economy is subject to a global cycle – with coordinated upswings and downswings.
- 2008 was the first recorded contraction in global growth in modern times, and the global recovery has also been increasingly coordinated based on the largest economies – the US, China and the Eurozone.
- Today, many analysts are warning the global economy is 'late cycle': the last phase of the economy before a recession, marked by decelerating economic growth and peaks in profit margins, sales and stock multiples. A fall in demand and recession could be around the corner.[20]

IMPLICATIONS

FOR THE WORLD

- A slowdown in China would have a significant impact on the rest of the world. It has been the single largest contributor to global economic growth in recent years, contributing 31 per cent on average between 2010 and 2013 (figure 1.2).[21] It would have a massive impact on the many economies that are reliant on exports to China.
- If a slowdown in China coincided with a recession in the US, this could lead to a global recession.

FOR THE UK

- UK banks are uniquely exposed to China and indirectly to China via Hong Kong. In fact, UK banks' exposures to mainland China and Hong Kong exceed exposures to the US, Euro area, Japan and Korea combined.[22] The BoE find that a 10 per cent fall in Chinese GDP due to a financial crisis would lead to a 1.4 per cent fall in UK GDP through lower trading volumes.[23]
- A recession in China and the US would be likely to tip the UK into recession too, if it is not already experiencing one by 2022.

FINANCIAL INSTABILITY

‘LOOSE’ MONETARY POLICY HAS BEEN IN PLACE FOR A DECADE

- When the financial crisis hit, central banks reduced interest rates to record lows. Eventually they hit the zero-lower bound, where rates couldn’t be reduced further[24] – in some countries, interest rates actually turned negative in real terms, with investors paying to hold government debt.
- Unable to reduce interest rates lower, central banks pursued quantitative easing (QE), under which central banks digitally created money to buy short-term government bonds – the Fed, Bank of England (BoE), European Central Bank (ECB) and Bank of Japan (BoJ) implemented QE programmes worth $10 trillion collectively.[25]
- QE worked through a ‘portfolio rebalancing’ effect that saw yields – or returns - fall on government bonds as prices rose, pushing investors into higher-yielding assets.[26]

High debt levels, the rebirth of shadow banking and tightening monetary policy all pose threats to financial stability

THE IMPACTS OF MONETARY POLICY SINCE THE GLOBAL FINANCIAL CRISIS

EQUITIES

- Equity prices have been pushed up all over the world, particularly in the US, but also the UK, Japanese and European stock markets. This has boosted the wealth of equity-owners.[27]
- US equities have been further boosted by President Trump’s tax cuts. The ‘Buffet indicator’, or US market capitalisation to GDP, stands at over 140 per cent. A figure around 100 per cent or higher indicates stocks are overvalued.[28]

INVESTMENT IN THE UNPRODUCTIVE ECONOMY

- The generalised asset price inflation of this period alongside the low cost of credit has also seen investors put their money into other assets, including property, pushing up asset prices in the unproductive economy.[35] The UK, Australia and Canada have all experienced property booms, with highly unequal gains.
- QE has done little to improve underlying economic growth – in the US and the UK, private investment is still very low,[36] as is productivity;[37] in most of the Eurozone, private investment has also been much poorer since the crisis, and underlying rates of growth have also been poor.[38]

EMERGING MARKET DEBT

- QE has caused money to flow into emerging market bonds, giving many developing states cheap access to borrowing.[29] But borrowing in a foreign currency leaves them highly exposed to the risks of exchange rate and interest rate changes.
- 31 countries are currently experiencing debt distress, up from 22 in 2015 – a further 82 are at risk of debt crises.[30]

CORPORATE DEBT

- Corporate debt has risen around the world due to the lower cost of borrowing. This is particularly true of the US, where it reached a record high of 73 per cent GDP in 2017 which is even worse than the levels reached during the dot-com bubble and US housing and credit bubble.[31] Some have now termed this the ‘everything bubble’.[32]
- Corporations have been using the proceeds of their borrowing to boost their stock prices via share buybacks, dividends, and mergers and acquisitions, instead of making the long-term business investments and expansions that were typical in the past.[33]
- Of particular concern is a recent rapid rise in leveraged loans, made to firms that already have high debt levels or a poor credit history, echoing the period prior to the last recession.[34]

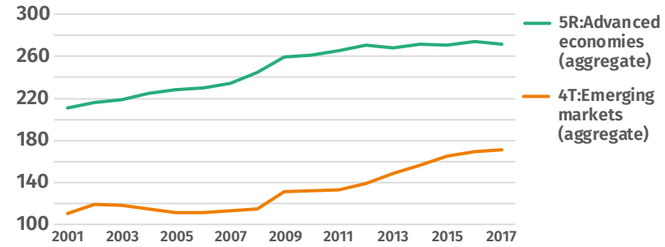
QUANTITATIVE EASING IS COMING TO AN END, AND INTEREST RATES LOOK SET TO RISE OVER THE COMING YEARS, PUTTING STRAIN ON ECONOMIES STILL LADEN WITH DEBT

- 2019 is the beginning of the end of the post-crash decade of easy money, as central banks are expected to wind up quantitative easing and increase interest rates.
- Higher interest rates could cause a big readjustment, particularly for emerging market economies that borrowed in foreign currency after the recession, and indebted corporates.[39]
- No one knows what will happen when QE is wound up, as it has never been done before. If central banks sell all the assets on their balance sheets and return the money to the Treasury, bond yields could spike.

FIGURE 1.4

Total debt has increased around the world

Total credit to the non-financial sector (%GDP PPP adjusted)

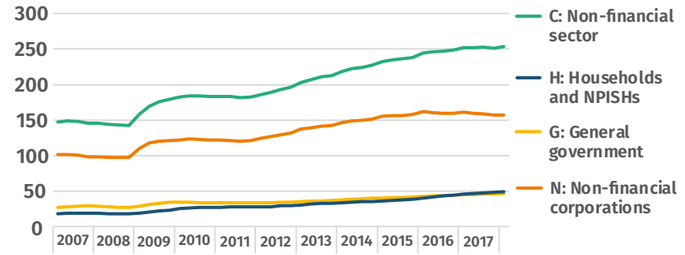


Source: BIS (2019)[40]

FIGURE 1.5

China's household, corporate and government debt have all risen since 2008

Chinese debt by sector (US$bn)



Source: BIS (2019)[41]

FIGURE 1.6

Household debt in several advanced economies has risen substantially since the financial crisis

Household debt % disposable incomes 1995-2017

Source: OECD (2019)[42]

CHINA IS PARTICULARLY EXPOSED TO A PRIVATE DEBT CRISIS

- ‘China’s debt buildup since the global financial crisis has been one of the largest in modern history’. Total debt-to-GDP, excluding financial sector debt, rose to 252 per cent of GDP in 2017 (figure 1.5).[43]
- Much of this debt is concentrated in the shadow banking system – less regulated financial institutions without state deposit insurance or recourse to central bank funds.[44]

HOUSEHOLDS IN PARTS OF THE GLOBAL NORTH ARE ALSO OVERLEVERAGED

- Household debt has continued to rise since the financial crisis.[45] Australia, Canada, Sweden, Norway and the UK have all seen increases in the ratio of private debt to disposable incomes – some to higher than pre-crisis levels (figure 1.6).[46]
- Much of this debt is now being securitised – or turned into financial securities like the mortgage-backed securities which played a decisive role in the financial crisis.[47]
- With wages stagnant, government spending low and large current account imbalances in many of these countries, these debt levels are not sustainable.

IMPLICATIONS

FOR THE WORLD

- With the global economy approaching the late stage of the business cycle, tightening monetary policy could cause credit to dry up, and perhaps tip some corporations and households into debt distress.
- Volatility in financial markets is also likely to increase, partly due to uncertainty.
- With the recovery having been so dependent on rising debt levels, if the supply of credit dries up, this could have implications for global growth.

FOR THE UK

- The UK has a severe private debt problem, alongside a housing boom and a large current account deficit.[48] Rising interest rates could tip some households into insolvency.
- The wider issue is that growth in the UK since the crash has been dependent on rising consumer debt and asset prices.
- If the BoE raises rates too quickly, or cuts of QE in a disorderly manner, this could tip the economy into recession. But low interest rates also pose a threat that the bank won’t have the tools it needs to boost demand in the event of a recession.[49]

POLITICAL UNCERTAINTY

TRADING RELATIONSHIPS ARE THREATENED BY ECONOMIC NATIONALISM

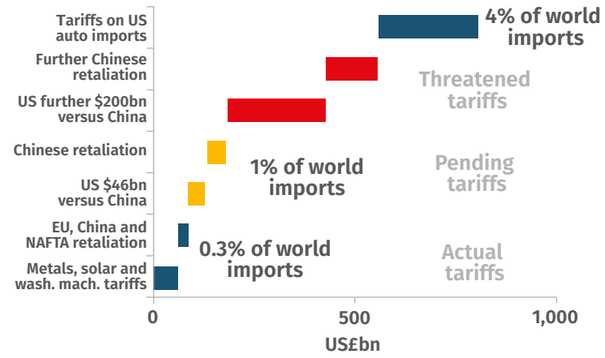
- Donald Trump's presidency has triggered a trade war between the US and China, part of a wider war of geopolitical position. The US has imposed tariffs on Chinese imports of some goods, and China has retaliated. The US is threatening to scale tariffs up further (figure 1.7).
- The IMF has highlighted the trade war as one of the biggest threats to global growth in 2019 and 2020. Tariffs that have been introduced are already having an impact on demand in both economies: if proposed tariffs are implemented, this could reduce global GDP by up to 0.8 per cent.[50]
- Brexit is highlighted as the second biggest risk to global growth by the IMF. A nodeal Brexit would result in higher tariffs and could constrain UK growth by up to 8 per cent over the long term.[51] Slower growth in the UK would have a knock-on impact on its major trading partners, most notably the EU.
- With political polarisation mounting, and an ongoing backlash against globalisation taking place, politicians will continue to reap electoral gains from opposing global economic integration, suggesting that trade tensions are likely to continue.

Ongoing trade tensions, conflict and political uncertainty pose threats to trade and investment in the coming years

FIGURE 1.7

The share of global imports affected by actual, pending and threatened tariffs is over 5 per cent

World trade conflict: escalation



Oxford Economics (2018)[52]

THE BREXIT VOTE AND ENSUING UNCERTAINTY HAS DAMAGED THE UK ECONOMY. CONTINUED UNCERTAINTY WILL ONLY DEEPEN THIS PROBLEM

- When the UK voted to leave the EU, the value of sterling declined by 25 per cent, sending the price of imports up and increasing inflation. This eroded workers' pay and has contributed to ongoing wage stagnation.[53]
- Ongoing uncertainty has impacted business' investment decisions, especially for those businesses dependent on exports. The UK has now experienced three consecutive quarters of falling business investment – the first time this has happened since 2008-09.[54]
- House prices have also started to fall, which alongside other factors is likely to be in part due to Brexit, as international investors put their money elsewhere and domestic buyers put off purchases. This will impact consumption spending, much of which has been driven by the wealth effect associated with rising asset prices.[55]

POLITICAL INSTABILITY IN EUROPE

- The political problems that have been created by the currency union in the Eurozone are also a threat. Unless a more sustainable solution is found, the northern and southern countries will continue to diverge economically and politically (figure 1.8).
- Many European countries, including the UK, are experiencing resurgences in nationalist and populist politics. This could increase the political popularity of tariffs, as well as strengthen domestic support for the break-up of the EU in member states.
- Conflict in the Middle East and North Africa has led to an increase in refugees seeking safety in Europe. Today, there are almost 70 million refugees – 85 per cent of which are being hosted by states in the global South.[59] Almost 60 per cent of them have come from South Sudan, Afghanistan and Syria – with 6.3 million from Syria alone. As climate change escalates, the refugee crisis is only going to get worse, as large parts of the global South will be badly affected.[60]

ONGOING UNCERTAINTY IMPACTS INVESTMENT, AND THEREFORE GROWTH

- Investment in fixed capital is already extremely low in most parts of the global North, especially the more heavily financialised economies of the US and the UK.[56] This is a long-term trend that has had a significant impact on productivity.
- Uncertainty is the enemy of investment, as Keynes showed over a century ago, because uncertain economic actors are more risk-averse and prefer to hold liquid cash.[57] If you think a recession is around the corner, you are unlikely to invest in a business.
- If businesses' confidence about the future suddenly turns, for whatever reason, then they are likely to stop investing. This slowdown in investment will affect other business' profits, wages, and tax revenues, creating a multiplier effect that can drag the economy into recession.
- In this sense, it is uncertainty that drives the business cycle. It also drives the financial cycle – when businesses are optimistic, they will borrow more to invest, increasing their debt levels. But when the economic cycle turns, they will all start trying to pay down their debts, which can cause panic and recessions.[58]

FIGURE 1.8

Germany is pulling away economically from other Eurozone members

Eurozone current account balances (€bn)

Source: Eurostat (2019)[61]

IMPLICATIONS

FOR THE WORLD

- An escalation of the trade war between the US and China could have significant implications for global growth – if the US goes ahead with plans to increase tariffs further, this would amount to a quadrupling of the US tariff rate, bringing it up to levels not seen since the 1960s. Global trade would decline an estimated 2 per cent and business investment across the OECD would decline by about 2.75 per cent on average.[62]
- The impact of the exit deal between the EU and UK will extend beyond UK borders to our trading partners, particularly the EU.
- Ongoing political uncertainty in the Eurozone poses the greatest, but least certain threat to global growth over the long term. If a political solution is not found, the currency union may struggle to survive.

FOR THE UK

- The nature of the UK's departure from the EU will shape its economic model and trading relationships for the future, with corresponding impacts on growth and stability. Ongoing uncertainty about what this look like will continue to affect trade and investment.
- The slowdown in global trade flows will also make it harder for any post-Brexit economy to rely on export growth to boost demand.

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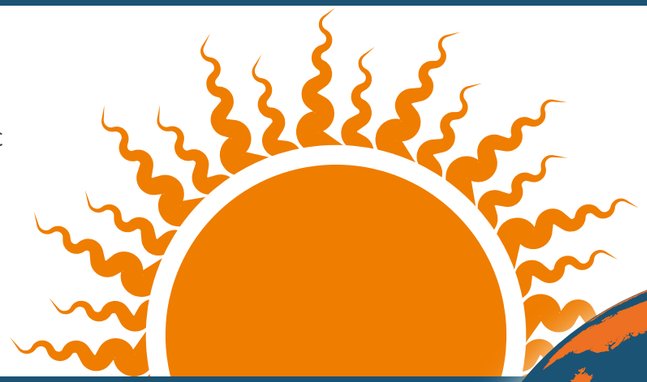
2. THE AGE OF ENVIRONMENTAL BREAKDOWN

WE HAVE ENTERED THE AGE OF ENVIRONMENTAL BREAKDOWN, CAUSED BY HUMAN ACTIVITY

ENVIRONMENTAL BREAKDOWN HAS REACHED A CRITICAL STAGE

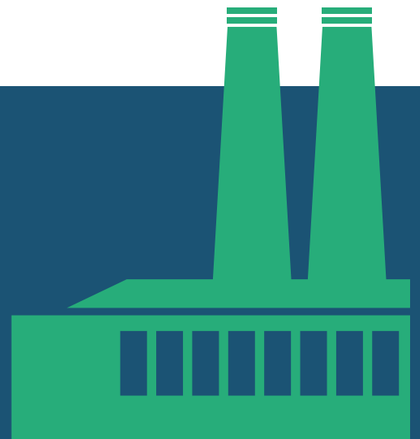
The 20 warmest years since records began in 1850 have been in the past 22 years, with the past four years the warmest ever recorded.[1] At current warming rates, the world will reach 1.5°C warming around 2040,[2] and current policies around the world are projected to result in about 3.3°C warming by 2100.[3] Under business-as-usual scenarios, the Earth could warm to a climate not seen in 50 million years over the next 130 years, reversing a multi-million year cooling trend in less than two centuries.[4]



Vertebrate populations have fallen by an average of 60 per cent since 1970.[5] Extinction rates have increased to around 1,000 times the 'background rate' of extinction.[6]

More than 75 per cent of the Earth's land is substantially degraded.[7]

Soil is now being lost from agricultural areas 10 to 40 times faster than it is being replenished by natural processes, and 95 per cent of the Earth's land areas could become degraded by 2050.[8][9]



Human activity is the primary driver of environmental breakdown.

Climate change results from the combustion of fossil fuels and the removal of natural carbon sinks through deforestation (among other, primarily anthropogenic factors). Biodiversity loss is primarily being driven by unsustainable exploitation of species, farming practices and land use changes, including deforestation.[10]

ENVIRONMENTAL BREAKDOWN IS A SOCIAL JUSTICE ISSUE

LESS WEALTHY COUNTRIES AND GROUPS ARE LEAST RESPONSIBLE FOR CAUSING ENVIRONMENTAL BREAKDOWN[11] AND ARE MOST EXPOSED TO ITS EFFECTS[12]

Despite significant improvements in many measures of social outcomes, the global economic model fails to provide adequate social and economic opportunities to all, or even meet all basic needs.[13] Global undernourishment and obesity are simultaneously rising,[14] and extreme poverty is also increasing.[15]

Poverty and class

Wealthier nations tend to impact more on the environment,[16] and within rich countries, the wealthiest 10 per cent of people contribute far more to greenhouse gas emissions than other income groups.[17] Poorer nations are often located in regions experiencing higher levels of environmental stress.[18]

Ethnicity

The dynamics that produce racism and environmental breakdown are related. Within countries and internationally, hazardous waste and toxic products are often 'exported' to communities of colour.[19]

Gender

Poor women's livelihoods are often compromised by shrinking agricultural yields,[20] and women and children are 14 times more likely than men to die during a disaster.[21] Natural disasters have been shown to lower the life expectancy of women more than that of men.[22]

OUR CURRENT ECONOMIC MODEL IS FUNDAMENTALLY UNSUSTAINABLE

In the age of environmental breakdown, we have entered a new 'domain of risk', which includes the risk of the collapse of key human systems, including the global economy.[23] It is doubtful that societies are adequately prepared to manage this risk.

ENVIRONMENTAL BREAKDOWN ACTS AS A 'THREAT MULTIPLIER', DRIVING AND AMPLIFYING SOCIAL AND ECONOMIC DISRUPTION.[24]

LOCALISED IMPACTS

Environmental breakdown will and is already having direct socioeconomic impacts such as ill health. For example, 125 million more vulnerable people experienced heatwave events in 2016 than 2000, and, in 2017, 153 billion hours of work were lost due to heatwaves.[25]

SYSTEMIC CONSEQUENCES

Impacts affect socioeconomic systems which transmit and amplify effects across borders. For example, 1-in-100-year food production shocks could become 1-in-30-year events over the coming decades, with price shocks transmitted across borders.[26]

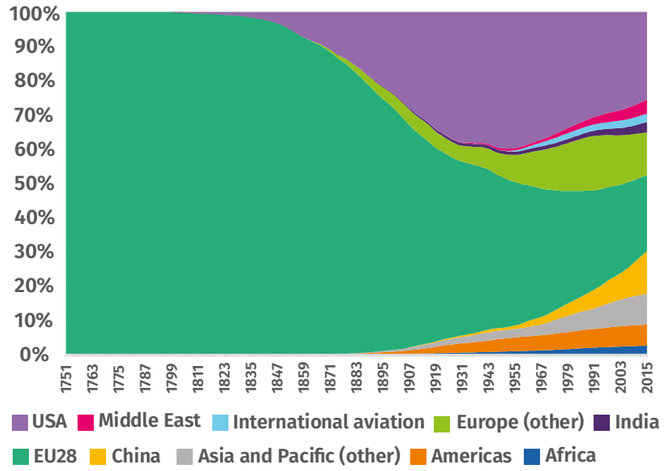
INTERACTION WITH EXISTING SOCIOECONOMIC CONTEXT

The impacts of environmental breakdown will interact with existing trends, compounding and exacerbating them. Food systems are already experiencing high levels of stress and failing to meet needs, with high levels of obesity and malnutrition, but under current diet trends, food production may need to increase by 60 per cent by 2050.[27]

FIGURE 2.1

Cumulative CO^2 emissions by region from 1751

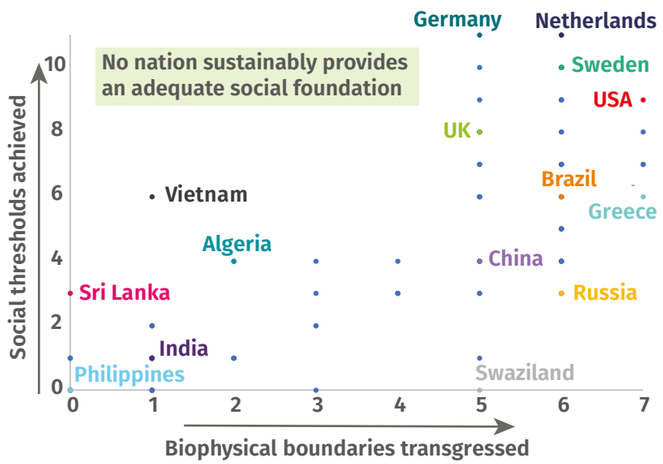
Based on production-based territorial emissions. Does not account for emissions embedded in trade



Source: Ritchie and Roser (2017)[28]

FIGURE 2.2

Social thresholds achieved versus biophysical boundaries transgressed



Source: O'Neill et al (2018)[29]

THE CURRENT ECONOMIC MODEL RELIES ON UNSUSTAINABLE APPROPRIATION OF HUMAN AND NATURAL LABOUR FOR GROWTH

Our economic model relies in part of drawing new realms of nature into economic production. Yet these may be running out, and because of unsustainable exploitation, using natural resources may become more expensive, and reduce profit.

GDP is the primary measure of economic success, but fails to capture the loss of 'stocks' of natural assets that facilitate human life and our economies.[30] For too many countries, growth is predicated on increasing consumption and consumerism that is not only risky for consumers today, but depletes the environment and therefore is a risk to humanity tomorrow. Economic policymakers use discount rates that prioritise returns for people alive today over those in future generations. So too, our businesses focus on short-term profit, and lack democratic legitimacy or effective governance for long-term outcomes.[31]

If investors fail to anticipate the changes required, they will find themselves holding stranded assets (fossil fuel resources which cannot earn an economic return because of a transition to a low-carbon economy).[32]

ENVIRONMENTAL BREAKDOWN PROPOSES ECONOMIC DEVASTATION OF A DIFFERENT ORDER TO PREVIOUS SHOCKS[33]

Some research suggests a 51 per cent chance that climate change will reduce global output by more than 20 per cent by 2100,[34] while other studies suggest this may be an underestimate.[35]

As a comparison, the Great Depression reduced global GDP by about 15 per cent, and the Great Recession by about 2 per cent.[36]

Unlike previous economic shocks, the economy may not recover and return to growth after disruption caused by environmental breakdown, as climate effects are likely to deepen and make a 'business-as-usual' approach untenable.[37] Rather, a 'new normal' of disruption, or a new economic system, may emerge.

ACTING NOW TO REDUCE THE ENVIRONMENTAL IMPACT OF THE GLOBAL ECONOMY IS LIKELY TO HAVE ECONOMIC BENEFITS

The longer we wait to avert environmental breakdown, the higher the costs of mitigating future impacts will be. These will include direct costs such as protecting society from extreme weather events, but also the costs of responding to poverty and migration flows caused by environmental change.

The costs of inaction are also the benefits of action. Immediate measures to make the economy sustainable, just and prepared would be more cost effective than delaying action.

Transitioning to a low-carbon, sustainable growth path could deliver a direct economic gain of US$26 trillion through to 2030 compared to business-as-usual.[38] Green investment could also facilitate the shift to a just economy if this is made an explicit goal, for example by providing new high-quality employment.

NATURE AND THE ECONOMY

The economy is often described as if it is distinct from nature. But everything that humans make depends on and is coproduced with the rest of nature. Human activity sits within nature, and nature is also part of the economy – a human activity.

The division that is commonly drawn between 'social' and 'natural' processes is a construct. Like divisions between genders, ethnicities, and classes, it is often used to promote inequality.[39]

The current global economic model relies on the 'great cheaps' of nature – including the environment, fossil fuels, and human labour and care. It succeeds when nature is mobilised with as little investment and compensation, and as much profit, as possible. The damage done in the process is not accounted for.[40] This exploitation is eroding the conditions upon which socioeconomic stability is possible.

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3. TECHNOLOGICAL CHANGE

TECHNOLOGY IS RADICALLY RESHAPING PRODUCTION AND DISTRIBUTION IN THE GLOBAL ECONOMY

AUTOMATION

Automation is the substitution of labour by capital, reducing or eliminating the need for people to perform specific tasks in the production process. As well as replacing the need for human labour, automating technologies can augment the capabilities of, and demand for, human effort and ingenuity. Automating technologies have the potential to process language, develop self-learning machines, and execute complex analytical work. In workplaces in the UK and across the globe, automation promises to raise productivity, drive economic growth, and transform the work humans do.

Automation will change the daily tasks that workers do, from manufacturing lines, to fashion design, to social care. Whilst the number of jobs which could be wholly automated is relatively low, nearly every occupation has potential to be at least partially automated through individual constituent tasks.[1] While less than 5 per cent of all occupations can be automated entirely using demonstrated technologies, about 60 per cent of all occupations have at least 30 per cent of constituent activities that could be automated.

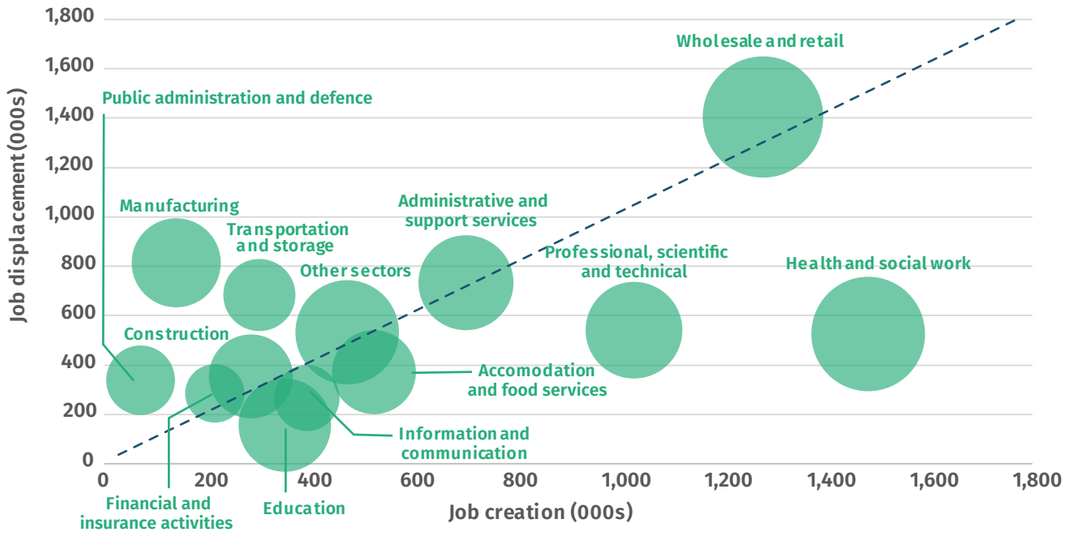
FUTURE WORK

As falling technology costs and rapidly improving machine performance drive up rates of productivity, the impact of automation on aggregate employment will depend on social, political and economic responses. Productivity gains will be cycled back into new sources of demand for employment, with workers' time reallocated to tasks deemed better suited to humans than machines (see figure 3.1).

Taking a long-view on automation shows that more jobs have been generated than destroyed by previous waves of automation. But automation has enabled the long-term reduction of hours worked per worker – and certainly the hours worked to produce the same output. This raises the tantalising promise of both growing incomes, and rewards in more time for life outside of the workplace.

FIGURE 3.1

Effect of AI and related technologies on UK job creation/displacement by sector



Note: PwC projections for 2017-2037, based on 2017 job market; size of circles expresses the scale of change in a given sector in terms of net jobs created/lost as a proportion of total jobs

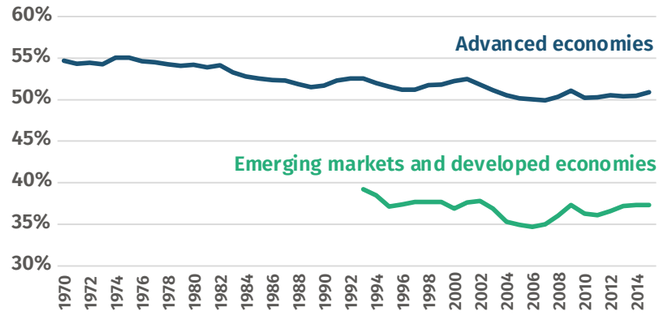
Source: PwC (2018)[5]

AUTOMATIC FOR THE PEOPLE?

As well as increasing productivity and output, technological progress plays a role in redistributing the pie through changing market prices and wages.[2] How far this process of redistribution raises or reduces wages, and for whom, will determine whether the forces of technological innovation help or hinder efforts to build a more just economy. And, if capital intensification increases, it is likely that the owners of capital will gain at the expense of workers. Indeed, this has already happened: about half of the decline in the labour share of income in advanced economies in recent decades can be explained by technological change.[3] In the UK, £290 billion of wages are associated with jobs that could technically be automated today. A core challenge for the future economy concerns who benefits from the economic gains of new technological frontiers, and how these gains are distributed.[4]

FIGURE 3.2

The global labour share of income has been on a downward trend. In advanced economies, half of the decline in the labour share of income can be traced to the impact of technology



Source: IMF (2017)[6]

ARTIFICIAL INTELLIGENCE

Artificial intelligence (AI) is changing how we make, buy, sell and behave. Artificial intelligence is driving new technologies that promise to raise productivity across the global economy, as algorithms predict preferences and systems learn to self-improve. New technologies are integrating machine learning into manufacturing production processes, reducing long-run costs, promoting energy efficiency, and improving labour productivity as errors and malfunctions are reduced.

In agriculture, artificial intelligence driven by machine learning is improving soil fertility and increasing crop yield as farmers can harness deeper insights and respond to live data. In our NHS, AI that predicts which patients are most likely not to show up to NHS appointments promises to deliver large-scale savings. AI is also at the forefront of climate change response, transforming our ability to predict extreme weather, manage the intermittency of renewable energy, and improve energy efficiency across cities as smart meters and Internet of Things data enable us to better predict demand.

THE RISE OF DIGITAL CAPITALISM

Whilst digital platform technologies continue to expand rapidly, the market power of giant platforms is tending towards monopolisation – with negative knock-on effects. Monopoly behaviour and rent-seeking are dampening innovation in new markets, with large platforms purchasing innovative start-up firms and undertaking mergers and acquisitions on an unprecedented scale. The 'big five' US tech firms – Apple, Alphabet, Microsoft, Facebook and Amazon - have a market capitalisation of US$4 trillion.[7]

The rise of digital monopolies appears to be driving up inequality too. Rising market power is widening wage inequality and globally, a declining share of national income is going to labour in wages and salaries.[8] Whilst these platforms rely on data we collectively produce, platforms are becoming more and more adept at findings means of capturing, analysing and monetising this data for private gain.

NEW FRONTIERS OF TECHNOLOGY

As **Internet of Things** technologies expand into households across the UK at accelerating pace, the owners of this new form of technological capital gain access and control over vast pools of data. Those with access to these new insights have power to shape human behaviour in new and deeper ways, and shape future consumption. To harness the power of data for collective good, we can look towards possibilities for shared ownership and use of data to offset the privatisation of new spheres of knowledge and the emergence of data monopolies.

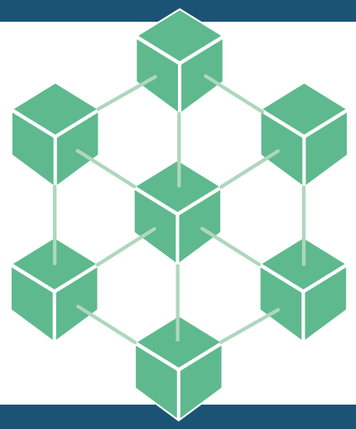
The deployment of **smart health technologies** to improve patient care and outcomes promises new frontiers for human health. But how fast and how far this technology is shared beyond the wealthy and healthy will have far-reaching effects on economic inequality and our future workforce.

As the accelerating transition towards a **cashless economy** drastically increases the volume of financial data available to banks and their intermediaries, proactive intervention will be needed to find new forms of support for groups who are cash-dependent, and to prevent people earning in the informal economy from being further marginalised.

“No human being should be condemned to do work that could be done by a machine”

Roberto Unger

Automation will disrupt our work and workforces. With disruption comes opportunities for change. As automating technologies take on repetitive tasks, workers’ time could be reallocated to tasks deemed better suited to humans than machines. This presents opportunities to re-evaluate what tasks and roles best enable humans to add value – and indeed, what work is valued. Creativity, communication and caring skills are likely to be used and valued in the future economy.[9]



BOOM AND BUST?

Automation and the digital economy present opportunities for the global economy and for the UK, if productivity is increased through investment in technology and the development of more world-leading, exporting businesses.

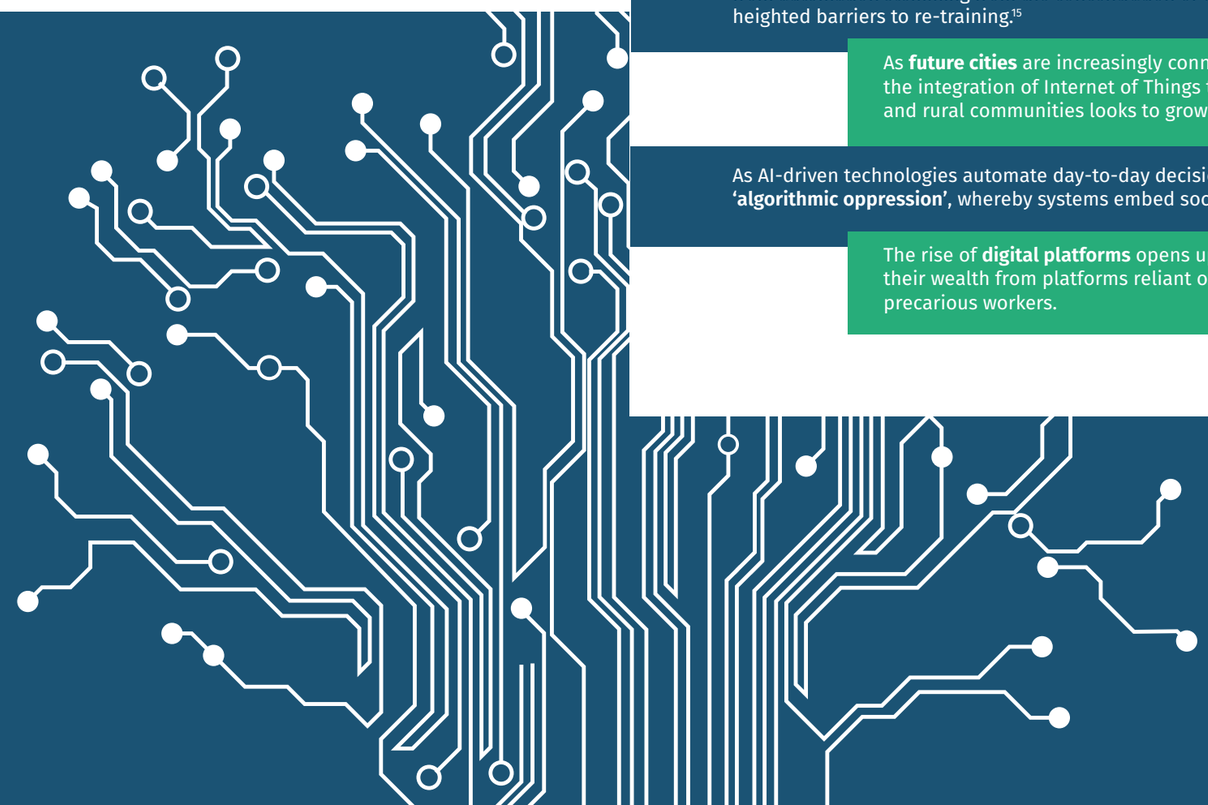
Technological change also brings risks. When new technologies emerge, financial capital funds the transformation but may also intensify ‘casino-type’ activities, creating bubbles that can catastrophically burst. The global financial crisis – originating in part from complex trading instruments and software that were opaque – can be understood as an example of this dynamic.[10]

WHO OWNS THE ROBOTS?

A new age of globalised digital capitalism raises new questions of ownership and control. In an automated economy, with machines and algorithms performing a greater proportion of work, it becomes more important who owns, controls and benefits from those machines and algorithms. Inaction risks sharpening inequalities of wealth and income.

But a new vision for the technological revolution can deepen justice and prosperity. Blockchain technology presents radical new opportunities for how we record, track and share data we value, with potential to revolutionise the public sphere and the provision of public services – from financial transactions to medical records. Use of these technologies could reduce error and delay, boost security and trust in public services, and cut costs. Government will need to prepare for disruptive influence these technologies pose to the core processes of public institutions – from financial transactions to the rule of law.

More broadly, shared ownership of data we collectively produce in a ‘data commons’ could empower technology users and encourage innovation if made available to start-ups and the public sector.



A PARADOX OF PLENTY? WINNERS AND LOSERS IN THE NEW ECONOMY

Automation risks delivering a ‘paradox of plenty’: where society is far richer in aggregate as a result of the greater output produced through the power of new technologies, but automation reinforces inequalities of both power and reward for already-marginalised individuals and communities.[11]

Technological gains rival globalisation as a driving force behind **rising inequality** across the globe, accounting for half of the decline in labour share of income between 1990 and 2015 in advanced economies, with economies in which a higher share of jobs could be automated experiencing a sharper decline in labour income share.[12]

Technological change has enabled greater ‘offshoring’ of labour, which without an appropriate policy response has led to deindustrialisation of previously prosperous areas. The political consequences can be seen in many developed countries today, including the US and UK.

Off-shoring and automation are catalysing the **hollowing-out of mid-skilled jobs**, accelerated by the automation of routine cognitive work, from factory work to office administration. This matters for progression out of low-skill, low-pay work, and for the growing divide in job quality between ‘lovely’ and ‘lousy’ jobs.[13]

Low-skilled workers are expected to be most exposed to the risks of automation, as machines take on a growing share of manual tasks. It’s critical that our skills systems proactively respond to these challenges, so that displaced workers are able to find new jobs. How we manage automation could result in more **gender-equal futures** or the deepening of gender gaps. As jobs and working time are re-ordered and re-constituted, there are new opportunities to shift gendered norms.

Countries with more **rapidly aging populations** appear to be adopting automating technologies faster and enjoying greater gains from growth.[14] Older workers could still be at greater risk of displacement from automation stemming from the concentration of older women workers in clerical occupations, and heighted barriers to re-training.[15]

As **future cities** are increasingly connected through 5G networks, cashless payment systems and the integration of Internet of Things technologies, the economic opportunity gap between urban and rural communities looks to grow larger.

As AI-driven technologies automate day-to-day decisions, AI poses the risk of embedding new forms of **‘algorithmic oppression’**, whereby systems embed social and commercial biases and imbalances of power.

The rise of **digital platforms** opens up new economic inequalities as platform billionaires grow their wealth from platforms reliant on populations handing over their data, or the labour of precarious workers.

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CONCLUSION

TIME FOR CHANGE

A decade on from the collapse of Lehman Brothers, the UK faces serious risks of instability and potential recession. The global economy is reaching the late stage of the financial cycle, marked by a global slowdown. Rising debt levels threaten financial stability in China, the US and UK: monetary tightening could increase debt distress. Political uncertainty is dampening growth and weakening investment.

Longer-term, the very system upon which our economic model relies – the natural system – is increasingly damaged by our activity and systematically unaccounted for in investment decisions across the globe. Climate change poses risks to the stability of our financial system, future economic activity and productivity.[1] Business-as-usual is no longer an option: the question is when, not if, we shift to a less extractive model.

Technological change is changing the shape of production, where it can occur and who captures the gains of growth. While this change presents economic opportunity, it also threatens potential 'losers' and, in the absence of policy intervention, is likely to fuel rising inequality.

The UK plays a part in generating these global risks and structural changes. We have agency in the global economy, and it is important that policymakers consider the role that the UK plays, particularly given the City of London's prominent role in the international financial system. Brexit and how it is handled will shape our economy and that of others for years to come.

But many of these shifts are occurring outside the influence of UK unilateral and domestic political institutions. Some are also difficult to predict: by definition economic shocks are characterised by uncertainty. Yet while policymakers may not be able to control the changing global economy, they can choose how to prepare and how to respond. We argue that three responses are required:

1. *Strengthening the UK economy to succeed in the global economy of the future*.
We must address longstanding weaknesses such as low investment, poor productivity and an overreliance on consumption-led growth fuelled by debt. This is to ensure the economy is in a strong position to weather economic shocks, and to succeed in the global economy of the future. This must include an industrial strategy with a focus on technological adoption including in the 'everyday economy', and just transition to a green economy.
2. *Preparing the tools and institutions to respond to instability and recession*.
With interest rates close to their lower-bound, policymakers are unlikely to be able to rely on reducing interest rates to stimulate demand. Quantitative easing has been unpredictable and pushed up the price of assets, benefitting asset owners, while low interest rates have encouraged levels of borrowing that could become unaffordable if interest rates rise. Instead of picking up the task that monetary policy is unable to perform, fiscal policy has pulled in the opposite direction, as almost a decade of austerity has slashed both benefits and spending on public services, which act as automatic stabilisers in times of recession. To prepare for future crises, institutional arrangements able to stimulate demand in a coordinated and equitable way will be needed, as well as macroprudential regulation to prevent instability.
3. *Being ready with a programme for a fairer economy*.
Moments of crisis and change can be shaped and provide a means for many different ends. Those who value the goal of a stronger and fairer economy must be ready with a bold and coherent policy programme to offer in response to crisis and deep change.

1 See: https://www.bankofengland.co.uk/knowledgebank/climate-change-why-it-matters-to-the-bank-of-england

THE AGENDA FOR THE CENTRE FOR ECONOMIC JUSTICE

FROM CONSUMPTION AND DEBT TO INVESTMENT-FUELLED GROWTH

The UK economy has an unbalanced model of growth. It is overly reliant on household consumption, much of it based on ever-rising property prices and excessive household debt. Public and private investment is below the developed country average. Low investment has several causes, including excessive short-termism among major companies and financial markets; a banking sector overly focused on lending for land and property rather than to businesses; and insufficient demand in the economy. Our research will set out how to:

- Direct investment into the productive economy and end the spiral of increasing house-prices and mortgage debt, including through macroprudential regulation.
- Help households avoid unaffordable debt and turn finance from 'bad master' to 'good servant' of society's needs.
- Improve corporate governance to focus on long-term success.
- Use public investment and spending to better support equitable economic growth, and enable macroeconomic policy to stimulate demand when interest rates are very low, building on our proposal for the Bank of England to delegate fiscal stimulus to a National Investment Bank.[2]

A BALANCED AND COMPETITIVE ECONOMY

We import far more in goods than we export. Deindustrialisation, without compensating policy intervention, has led to a country that is too divided by economic fortunes. To improve our international competitiveness, we need to diversify and expand our innovation-leading and exporting sectors. Our research will make the case for:

- 'New industrialisation': the development of innovation-based industrial clusters across the UK, anchored around our universities. We will set out how new industrialisation can be designed to bring about fairer local economies.
- An active industrial strategy for all regions of the UK, based around missions to solve the great challenges of our time, from environmental breakdown to increasing care needs.

EMBRACING THE ECONOMY OF THE FUTURE

Though strong in technology start-ups, the UK lags far behind other developed countries in adopting automating technologies, contributing to our poor productivity performance. The UK has too few robots, rather than too many. But managed poorly, automation could create a 'paradox of plenty': society would be far richer in aggregate, but, for many individuals and communities, technological change could reinforce inequalities of power and reward. So too, responses to the monopoly power of the digital platform giants are needed if entrenched inequalities are to be avoided. Our research will show how:

- The UK can embrace 'managed automation' – accelerating the uptake of new technologies across the everyday economy to boost productivity, while ensuring that the rewards are shared with workers, and protecting those whose jobs are lost. Our work will consider how automation could affect different groups by gender, ethnicity and age.
- A cashless society could be shaped to be a positive change for all communities in the UK, including rural economies and those who may not be digitally skilled.
- Policy can ensure the gains made by the digital platform giants can be shared more fairly, and markets made more open to innovators and entrepreneurs.

2 IPPR Commission on Economic Justice (2018) Prosperity and Justice: a plan for the new economy. www.ippr.org/cej

A FAIRER ECONOMY IS A STRONGER ECONOMY

It used to be thought that prosperity and economic justice were in conflict; we had to choose one or other but could not have both. The international evidence now points in precisely the opposite direction. A more equal economy generates stronger and more stable growth, lower social costs and greater wellbeing. Our work will set out how to:

- Reform taxes to be more efficient and just, including equalising taxes on income from work and income from wealth, and ensuring those most able to contribute pay their share.
- Spread asset ownership to hardwire the economy for justice. We will set out how collective and public models of ownership can work effectively.
- Redress imbalances of economic power, including from corporate management towards workers and trade unions, and from Whitehall towards the nations and regions of the UK.
- Set a new contract between business and society for a fairer and stronger economy.

AN ECONOMIC MODEL FOR THE AGE OF ENVIRONMENTAL BREAKDOWN

We're running out of time to save our planet and avert catastrophic climate change. Investing today for the planet tomorrow will bear huge economic returns, both for the planet as a whole and the UK. The scale of the crisis requires that we define the environmental limits within which the whole economy must operate, through a Sustainable Economy Act. Through IPPR's Environmental Justice Commission, our upcoming work will set out how to bring about a rapid green transition that is fair and just, including cutting emissions to net zero.[3]

THIS TIME MUST BE DIFFERENT

As previous crises show – from the Wall Street Crash to the global financial crisis – policy responses to crises shape not just the stability and level of growth, but also levels of inequality in society, who holds economic power and how people feel about their futures. The policies employed in the UK over the past decade have not addressed long-standing weaknesses in our economic model and have exacerbated some of its worst features. Rising employment has come at the cost of stagnant wages and insecure work. Austerity, introduced under the cover of household budget analogies, has stripped demand from the economy and placed unnecessary strain on public services. Quantitative easing has increased asset prices, benefitting the already wealthy.

Policy responses to structural changes in the global economy have also failed to deliver a just economy. Previous waves of technological change have enabled greater offshoring and changed the shape of the labour market, with differential effects on groups in society. Inaction on climate change will have the greatest impact on those who are most vulnerable and are least to blame.

This time must be different. The political response is and must be ours to determine; we must choose a way forward that points to both prosperity and justice. Policymakers who value the goal of a stronger and fairer economy must be ready with a bold and coherent policy programme in response to crisis and change.

This will be the agenda for the Centre for Economic Justice.

3 See: https://www.ippr.org/environment-and-justice

About IPPR

IPPR, the Institute for Public Policy Research, is the UK's leading progressive think tank. We are an independent charitable organisation with our main offices in London. IPPR North, IPPR's dedicated think tank for the North of England, operates out of offices in Manchester and Newcastle, and IPPR Scotland, our dedicated think tank for Scotland, is based in Edinburgh.

Our purpose is to conduct and promote research into, and the education of the public in, the economic, social and political sciences, science and technology, the voluntary sector and social enterprise, public services, and industry and commerce.

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