

konzepi

What we must do to















What we must do to rebuild

The rebuild begins. But how, exactly? This edition of Konzept presents our ideas for how economies, businesses, and societies should rebuild from the pandemic. From changing the way we stimulate labour markets, to implementing digital currencies, and even taxing those who work from home, this Konzept is designed to spark the most important of debates. Some of our ideas may seem radical, but we hope they will inspire decision makers as we rebuild from this bracing and tragic period.

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Editorial

How, exactly, should we rebuild from covid-19? With the positive vaccine news coming from Pfizer just before we go to print, the narrative

will shift in this direction soon. We know the world will be very different, but what should we actually do to make economies, companies, and societies better than they were before? That is the thorny territory onto which we tread in this edition of Konzept.

As Joe Biden prepares to take office in the US, it is clear that parts of our system are preparing for change whether in the US, Europe, or elsewhere. One pressing necessity highlighted by the pandemic is the need to redistribute from the older to younger generations. Our first article discusses specific options for doing this. It also explains that if we do not, there is a big risk that a populist politician will harness the anger of the youth and upend our capitalist system in ways that are detrimental to everyone.

With the world economy in its worst state since the war, there are many opportunities to rebuild a better system. We present three articles that discuss how US and European governments, along with their central banks, should build inclusive economies that are better able to adapt to the severe dislocation we have seen in labour markets. The world's other great economy, that of China, has been more resilient this year, however, focus is turning to its new and ambitious climate targets. Given China is one of the world's biggest polluters, we detail how changes to green financing can enable the transition.

Many expected ESG issues to fall down the priority list this year, however, nothing could be further from the truth. Our article on equality presents the steps companies should take amid increased investor focus. More broadly, the pandemic has revealed a great range in fortunes for those with and without reliable technology connections. We detail what must be done to achieve a society where connectivity is a fundamental right. Climate change has

never been more important and our two articles discuss how high-level policy makers must respond to growing calls for action, and also examine the tough choice that must be made if hydrogen is to become the 'miracle fuel' many hope it will be.

Working from home will be part of the 'new normal' well after the pandemic has passed. We argue that remote workers should pay a tax for the privilege. Our calculations suggest the amounts raised could fund material income subsidies for low-income earners who are unable to work remotely and thus assume more 'old economy' and health risks.

For corporates, we review the top-ten things managers should do to emerge stronger from the current crisis. We also take a deep dive into the luxury goods market and discover that purveyors of pretty things are adjusting to the new world with lessons that apply to many other sectors.

Finally, what to do with our empty city centres? As offices and shops downsize or vacate, we postulate that one way to avoid zombie cities is to consider 'radical urbanism'. This empowers new residents to take over city centres and develop them largely as they see fit. We detail how this can work.

There is no question that the world faces its biggest rebuilding challenge since the war. I hope this edition of Konzept can be a guide to our post-covid goals and how to achieve them.

Jim Reid Global Head of Fundamental Credit Strategy and Thematic Research

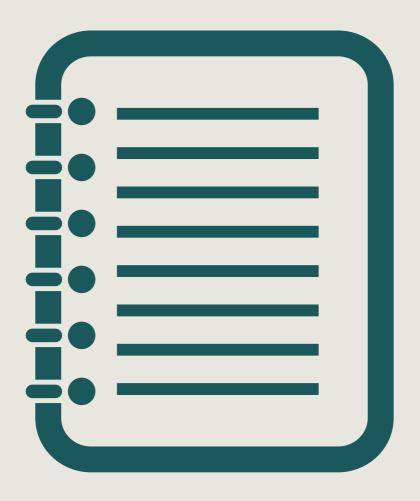
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What we must do to rebuild

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Summaries



To save capitalism we must help the young

Democratic capitalism is under threat as increasing numbers of young people view the system as rigged against them. The pandemic has only exacerbated their economic disadvantage. However, there is a growing risk that as the young gain an electoral advantage, a populist politician will harness the anger and upend capitalism in ways that hurt inclusive development. To avoid this, we must now redistribute from the old to the young in ways we have not yet considered.

Don't waste the crisis: How to address Europe's challenges for the next decade

Post-covid, Europe has a unique opportunity to make greater use of fiscal policy to support the strategic goals – green, digital, levelling up – of the EU with public investment. For this to work, fiscal expansion must be sustained, fiscal rules rewritten and common fiscal capacity created. We detail the actions that are needed.

The fundamental right to connectivity

The pandemic has shown how the 'haves' are more resilient than the 'have-nots'. Much of this is based on the gap between the two groups based on their access to technology. The divide in the US runs deepest along race and location (urban versus rural). To narrow this gap, we lay out our vision to develop an initiative that covers the more than half of households without proper broadband connection and a computer.

Rebuilding better economies and businesses – lessons from luxury

This year, ESG principles have escalated dramatically in the minds of customers and investors. Firms will have to produce less, avoid waste, and build products that last forever. In short, companies should: set the new trend; produce less, shop less, shop better; rethink the supply chain; spoil their local customers; reset the distribution footprint; build scale or be small and deal with second hand and rental models.

A work-from-home tax

People who can WFH and disconnect themselves from face-to-face society have gained many benefits during the pandemic. A five per cent tax for each WFH day would leave the average person no worse off than if they worked in the office. It could raise \$49bn per year in the US, €20bn in Germany, and £7bn in the UK. That can fund subsidies for the lowest-paid workers who usually cannot work from home.

China: Green finance to green transition

Chinese President Xi recently announced ambitious climate goals, and the country must consider the different paths possible to achieve these. To facilitate clean energy projects and other necessary actions, China must further develop its green finance system infrastructure. There are five different things China must do to support the country's transition to a green economy in the aftermath of the covid crisis.

Do not write the eulogy for shopping malls

Malls and shopping centres are not dead but should evolve post vaccine. First, they should embark on a strategy to reinvigorate footfall through densification and mixed-use (re)development. The best malls are already developing themselves into destination-based centres with mixed-use and lifestyle brands focused on driving traffic with experiential, residential, office, and entertainment options. These malls will become even more competitive over the coming years as the less-popular malls wind down.

How company actions on equality must change post-covid

Covid has shone a spotlight on deeper and more problematic social and racial inequality issues. Today, corporations should not ignore that they have the capability to drive change ahead of the next financial (and social) crisis. Companies will need to prove they are a strong social partner, can change their culture, and be held accountable for specific targets for change.

The tough choice to create a hydrogen economy

Europe's leaders want hydrogen to be a key part of the post-covid energy transition. If this is to work, we must accept that 'green' hydrogen will not be viable for at least a decade and 'blue' hydrogen should be considered even though it causes pollution. At the same time, both companies and governments have several options to boost demand to avoid the chicken-and-egg problem.

The steps required to promote digital currencies

Worldwide lockdowns and social distancing measures have only increased the use of cards over cash. To respond, companies and policymakers must design alternative to credit cards and remove middle man fees. For now, the priority must be on regional digital payment systems. In the long term, central bank digital currencies will replace cash.

A new approach to US monetary policy

This summer, the Fed announced fundamental changes in its monetary policy. In sum, the benefits of the Fed's new, less pre-emptive approach to exiting policy stimulus and greater acceptance of inflation overshoots will be potentially considerable in terms of gains in jobs, income, income distribution, and productivity growth. The change does carry manageable risks, so long as the Fed holds to moderate overshoots of inflation and strengthens the use of its macro prudential toolkit.

The delivery dilemma

Even prior to the pandemic, there was an inevitable shift to online purchasing. But how do we ensure this widening acceptance of online buying does not backfire on the planet in the form of unsustainable delivery levels? We propose a system to provide incentives for people to group non-urgent deliveries to certain areas on certain days, and also penalise them if they do not.

How big companies must respond to localisation

The pandemic has turbocharged five forces that are working against big companies as decades of globalisation begin to unwind. Meanwhile, customer trust in big companies is falling. To respond, big companies must leverage their data, balance sheet, and ESG credentials to win back not only customers and investors, but to compete with small companies that have more nimble supply chains and do not have legacy investments across the globe.

As labour markets adapt, so too should fiscal policy

This year, much of the credit for the US economic recovery should go to payroll subsidies. The next round of stimulus should focus on income support and job retraining as economic activity is still recovering while production is being automated. Longer term, policymakers should consider automating such income support measures, allowing for a quicker response to future exogenous shocks.

How the pandemic highlights the path to agility

We identify the top-ten identifiable traits of the best companies in 2020. These have been made all the more stark by the challenges that the pandemic has thrown down. Among them are the ways in which many companies have become flatter, faster organisations made up of networked teams and empowered individuals. While 'agility' has previously been used in a nebulous way, this year has shown tangible ways to achieve both 'agility' and a 'growth mindset'.

Climate neutrality: Are we ready for an honest discussion?

The EU's ambitious Green Deal wants to ensure that "nobody is left behind". Sounds excellent, but it is not realistic unless we ask some difficult questions. Quite simply, Europe cannot become carbon neutral with existing technologies, and various new technologies are politically unacceptable in the current environment. Unless that changes, the alternative is restrictions, either on consumption or trade.

The case for post-covid rural investment

People are already leaving cities as they seek more space amidst the threat of lockdowns. Meanwhile, companies are looking to reshore some operations to make supply chains more resilient. This is the perfect opportunity for governments to invest in rural areas. We outline four key things that leaders have to do in order to provide better incentives for industry, education, healthcare, and technology.

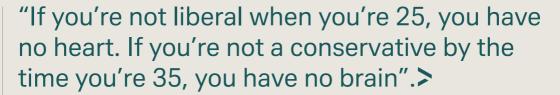
How to avoid zombie cities

Many city centres have been described as "postapocalyptic" this year. To avoid them becoming permanently lifeless, we need 'radical urbanism'. That is, convert retail and office buildings into residential space and allow people to run a business from their home. Allowing people to build their own environment, rather than have government plan it for them, will encourage craftspeople, artists and others to ignite urban culture and reinvigorate cities.



To save capitalism we must help the young

Jim Reid, Luke Templeman

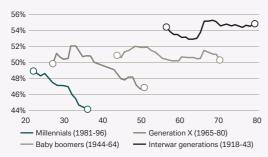


This quote has been attributed to Winston Churchill and is a blunt way of saying that as people age, and acquire income and wealth, they have a higher propensity to want to protect it. Essentially, they become more absorbed in the capitalist and democratic model or, at least, become more tolerant of the system.

Yet, that is not the case with today's young people. They are the most dissatisfied with democracy of any generation born in the last 100 years. Covid has only made things worse as the economic crash has disproportionately hurt younger workers. They have been more likely to work in industries such as retail or hospitality where working from home isn't possible, job hunting has become impossible for graduates, and most have little in the way of savings.

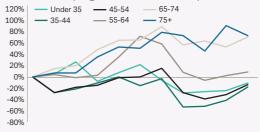
This problem will not go away after the pandemic recedes. The evidence shows that people who graduate in a recession see lower earnings than they otherwise would have for years after the recovery. That is an alarming prospect for young people given that the past 12 years have witnessed the two biggest economic shocks in almost a century.

Satisfaction with democracy by age



Source: Centre for the Future of Democracy, University of Cambridge

Percentage change in US median family net worth by age of head of family

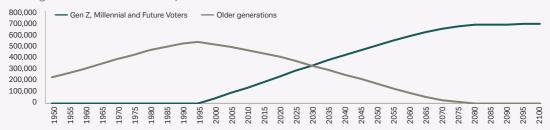


1989 1992 1995 1998 2001 2004 2007 2010 2013 2016 2019

Source: Federal Reserve Board, Haver Analytics, Deutsche Bank

The covid crisis should be the catalyst that policymakers use to level up the generations. In fact, if we do not act now, there is a serious risk that over the coming decade, when the younger generation of voters begins to outnumber the older generation, a populist politician could corral the anger of the young. That could lead to sudden and seismic shifts in the established capitalist order.

Millennials, Generation Z and younger cohorts will have nearly as many voters as those in older generations in the G7 by the end of this decade



Source: United Nations, Haver, Deutsche Bank. *Using midpoint of 15-20 age range to proxy voting age.

Of course, some may cheer a shake-up of capitalism. After all, the system is far from perfect. But it is the best system we know for human advancement. Over the last century, the spread of capitalism has coincided with life expectancy almost doubling after centuries of stagnation. Global poverty rates have collapsed and, over the last 40 years, global extreme poverty has fallen from 42 per cent to under 10 per cent. Child mortality has fallen from over 40 per cent in 1800 to under 5 per cent today. capitalist-driven economic growth has also coincided with decreasing inequality. From the second Industrial Revolution up until 1984, the share of wealth in the UK owned by the top one per cent fell from 70 per cent to 15 per cent.

The stalling and, in some areas, reversal of the decrease in inequality is one of the great problems of today. This phenomenon began in the 1980s and, thus, younger generations have been hit particularly hard while older folk have reaped the benefits.

In a liberal society, we should not over-engineer redistribution policies. They should incentivise work and the effective allocation of resources while providing an appropriate cushion to those who experience hard times. Yet, we must realise and accept the risk of a politician harnessing anger and upending capitalism such that it is detrimental to the lives of everyone in society. To reduce this risk, we must distribute to the young, even if it means cleaving away some of the assets of the old.

The gains we should redistribute from the old to the young

So, what is a 'fair' way to redistribute? For starters, we should avoid a simple age-related tax. A blunt instrument makes no sense. Similarly, we must acknowledge that many older people have worked hard for the wealth they have acquired. So, in order to assess what wealth should be redistributed, we must first identify where the older generation has made gains through mere luck of timing and forces outside

their control or expectations. The following is a list of five things that fit this criteria and have helped generate outsized gains.

Low interest rates: The ultra-low interest rates seen in recent years are the product of the authorities' attempt to prop up capitalism when it has over reached rather than allowing creative destruction. As such we artificially, and inadvertently, propped up the value of assets that the older generation are much more likely to own. Free markets would likely have now seen higher interest rates, less debt and lower asset prices.

Percentage of UK 25-year olds living with their parents



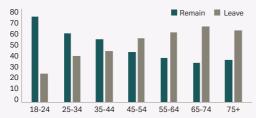
1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018

Source: ONS, Detusche Bank

Urbanisation: This is another factor that has inflated house prices, and its effects have been amplified by the inability of governments to encourage sufficient supply for newcomers. Over the last four decades, the proportion of the population who live in cities in the US has increased nine percentage points to 83 per cent. In the UK, it has increase six percentage points to 84 per cent, and in Germany four percentage points to 77 per cent. Excessive planning restrictions in many cities, combined with a lack of infrastructure investment in rural areas have combined to give a substantial boost to urban house prices.

Pollution: Harming the environment has been profitable for the companies in which the older generation invest. Cleaning up the mess will be

Brexit referendum vote by age

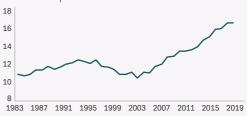


Source: Ipsos MORI, Deutsche Bank

So given that much of the growth in this wealth has been an unintended side effect of this monetary stimulus, it could be argued that older people who happen to own assets are at an unfair advantage relative to the younger generation that is, and will likely continue to, struggle to muster the wealth to buy them.

Even if the concept of 'fair' is subjective, the inability of young people to afford houses is bad for the overall economy as it stalls economic engagement and family formation. The following charts show just how the problem has grown over the past two decades.

Percentage of US 25-34 year olds living with their parents

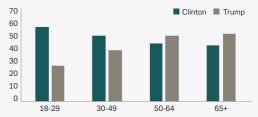


Source: Haver Analytics, Detusche Bank

costly for the young. It is true that overall carbon emissions in the US and many European countries have been falling for some years, however, a good chunk of these reduced emissions have merely been 'exported' along with manufacturing to China and other Asia countries. As the global consensus on green investment steadily builds, the cost of it will increasingly burden the young.

Size of cohort: The outsized weight of the baby boomer generation means they generally win the democratic process. This is illustrated by the following chart which shows the massive skew in age-based preferences for the Brexit referendum and the 2016 US presidential election. It is no wonder the young are disillusioned with democracy given their numbers make it impossible for them to win a vote.

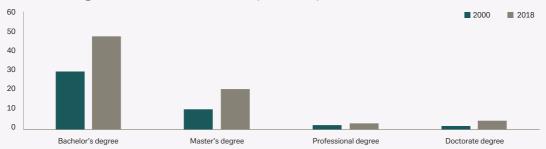
US 2016 Presidential election vote by age



Source: "For Most Trump Voters, 'Very Warm' Feelings for Him Endured. Also: A detailed look at the 2016 electorate, based on voter records." Pew Research Center, Washington, D.C., August 9 2018

Education: Quite simply, the young have to pay far more for their education than the older generation. Not only that, but they increasingly require more education than their parents did to do the same jobs. In the US, over 13 per cent of Americans now have an advanced degree, well up from the nine per cent that had one in 2000. Young people's financial and time commitment to education, therefore, is far higher than that of their predecessors.

Number of degree holders: 2000 and 2018 (in millions)



Source: U.S. Census Bureau, Annual Social and Economic Supplement to the Current Population Survey, 2000 and 2018.

Policies to consider

If we are to level the generational divide with regard to these five forces, there are several policies that should be considered. Some of these policies are more realistic than others, however, we will discuss some more radical and innovative ideas with a view to starting the conversation. Some of the policy ideas overlap so thus not all will be needed, however, they should form part of the conversation in how best to deal with a fair redistribution from the old to the young.

A tax on primary residence: Few countries employ such a measure, however, the extraordinary gains made on residential housing over the last few decades make a tax on them a necessity. And there are several ways to do this sensibly. First, a capital gains tax could be implemented. This could be enacted on houses above a certain value to avoid hitting lowerwealth groups, while acknowledging that richer, older groups have done doubly well from their house by virtue of the leverage involved. Fairness could be ensured by allowing house sellers to index the cost of their house to inflation. And if capital gains taxes on primary residences are not politically viable, then countries might consider a move to have sellers pay stamp duty rather than the current system in many countries where buyers pay and, for mortgage applicants, it is effectively an enormous tax on their deposit.

Additional taxes may also be needed on financial assets, such as stocks and bonds, due to their gains from loose monetary policy. This is particularly the case as the baby boomers begin to sell down non-pension assets into their

retirement. Consider that in the 30 years to 2019, the S&P 500 gained over 800 per cent, two-thirds more than the return seen in the three decades before. A sizable portion of those gains have come from policy makers and their stimulus packages.

Of course, the details of a more appropriate capital gains tax system for financial assets is a complex country-by-country discussion. However, one technique that should be considered is to base the tax on unearned income. That will catch those who wait until they leave work, have a lower income, and then sell their assets in a drip-feed way that lowers their lifetime tax bill. Alternatively, countries can remove capital gains tax discounts for specific financial assets, such as stocks and bonds. Other countries can do away with flat rates and base the tax on the investor's marginal tax rate which can be higher than the flat capital gains tax rate. This will acknowledge that many older investors see their non-pension financial assets as future income.

A 'super tax' on stocks will also go some way to providing recompense for the gains these companies have made through pollution. This pollution may be direct or indirect but it is near impossible for any company to argue they have not benefited over the last four decades of globalisation from the ability of their supply chain to harm the environment in ways we now acknowledge should be cleaned up. This 'super tax' could help fund massive investment in climate change.

In the end, our desire for more tax to be generated from capital gains is derived from the idea that we should avoid much higher income taxes. These can be an invasion on hard work

and, should they rise, there is a risk that work will be disincentivised.

Policies that level the playing field for urbanisation will be highly sensitive but if there is ever a time to discuss them, it is now. These can be achieved either through taxation, such as that described above, or through lowering house prices. Pushing for the latter may be desirable in areas where overly-restrictive planning policies have led to a dearth of house building and thus an extraordinary run-up in house prices. There are serious questions to be asked about the extent to which industrial parks are needed in cities.

The answer may be more centralised control of city planning. This is a dramatic step, and one that will be very controversial. But given the consistent failure of cities to build enough homes for its residents, it is hard to argue than anything other than a massive shake up of existing rules is needed. In fact, if this is not done now, it is likely that policies such as these will become some of the first to be implemented when the younger generation tips the voting scales. Consider that in Ireland this year, Sinn Féin saw a swell of support behind its housing policies which included the promise to build 100,000 new houses on public land.

Housing policies that focus on making land available can be better than ones that merely push developers to build quicker. The last thing cities need are cheap tower blocks being thrown up as quickly as possible. Experience from the 1950s and 1960s shows cities end up regretting these decisions. Rather, it is the availability of land that is the key thing. The construction will flow from there.

Finally, there is the issue of education and that young people are far more burdened by its cost, both time and money, compared with the older generations. Among the ideas that must be considered are dramatic government subsidies for higher education. Another idea is for countries in which university fees have grown quicker than have graduate salaries. The government could give new graduates a top-up grant for the first few years of their working life. This could be equivalent to, say, five or ten per cent of their salary and funded from the housing tax mentioned earlier.

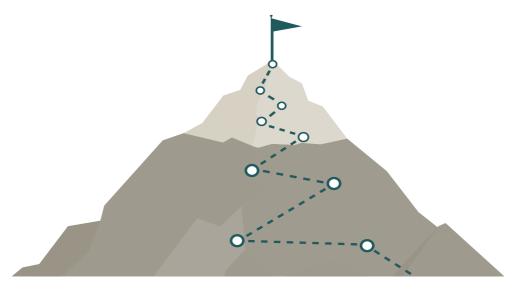
Over time, this subsidy could be slowly rolled back until the market for graduates adjusts for the debt they carry. Grants could be increased for those with graduate degrees to compensate them for the additional time they have spent studying, and attempt to reduce the inevitable delay that will occur in their family formation – something desperately needed in an age of demographic decline.

If we do not recognise the increased time and financial debt of education, two things will happen. First, when young people come to power, blunt policies to write off debt or shake up university funding could be enacted as a knee-jerk reaction. Second, as baby boomers retire, and companies find there are not enough qualified people to take their place in the smaller generations, salaries for younger people could suddenly shoot up. This will violently upend business models. To soften this blow, it is preferable to either see salaries for young people rise gradually or to reduce the cost of their education.

The problem of the imbalance in the size of generations, and their effects on elections is a difficult one to mitigate. Our liberal democracies are based on the concept of one-person-one-vote. More powerful youth advisory councils may be an answer. Many countries and organisations already have these, including the Council of Europe, however, they must be given better access to power. Their meetings must be regularly chaired by the country's leader and their representatives should be given 'observer' or 'shadow' membership in parliaments and the right to participate in panels.

Even if some in the older generation wish to exercise their right to remain self-interested, they should still accept a simple fact. They wish to retire into an economy that supports their pension, healthcare, and wellbeing. Yet declining demographics means younger people will have to support an increasing number of older people. Thus, the older generation is entirely reliant on the goodwill of young people, the fruits of their education, and their willingness to form larger families.

Currently, that goodwill does not exist. If we do not enact substantial change now, then a generation of young people will soon take power. When they do, all indications are that they will enact policies that not only forcibly redistribute in blunt ways, but also upend the very foundations of capitalism. This will be a detriment to everyone. It would be a great shame if the older generation realises too late that its size – the source of all its power over the last four decades – has become its biggest liability.



Don't waste the crisis: How to address Europe's challenges for the next decade

Peter Sidorov, Francis Yared

While the continuing health and economic crisis caused by the pandemic remains an immediate challenge for European policy, it also presents an opportunity to address the continent's underlying strategic weaknesses and put it on a more positive trajectory. Much of the change will have to be driven by fiscal policy. Thus, it is encouraging to see governments during the current crisis begin to play a larger role in addressing Europe's challenges. This has opened the door to pursuing even more decisive action. With fiscal policy as an anchor, other policy areas should complement to create lasting, positive change.

The cost to rebuild from covid will be substantial. In fact, at least €300bn of extra investment is needed per year. However, we should not question whether Europe can afford to pay for a growth-enhancing investment agenda, but if it can afford not to. Indeed, if the euro area can return to its pre-GFC pace of capital deepening and boost productivity growth to the levels seen in the US, the region can boost annual GDP by €1tn after 10 years.

Why governments have a larger role to play

Recent intra-European policy debate has often reflected tensions between those calling for a more proactive EU industrial strategy versus the proponents of free market functions. However, government influence and market competition are not mutually exclusive tools. This is best exemplified by the East Asian growth miracle in the 1970s-80s, which was driven by the combination of improved market functioning – free trade, protection of property rights, lower taxes – and proactive industrial strategies and state influence.

Indeed, many of the areas that present strategic challenges for Europe are ones where market failure has undermined the functioning of free markets in recent years and where governments have a role in fostering effective competition. Climate change is the most crucial area where negative externalities demand a role for government action. Other challenges to effective competition include multi-national tax avoidance and highly concentrated digital markets. At the

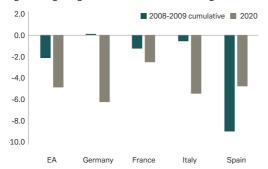
same time, at the global level there has been a move away from free trade, with geopolitical considerations playing an increasing influence in countries' economic strategies.

Don't waste the crisis

This year, the pandemic has caused a systemic reset in the willingness of European governments to pull the fiscal policy lever, as the crisis removed political and moral hazard barriers to an aggressive policy response. Compared with other crises through history, the scale of the policy response to covid has been extraordinary. Fiscal rules have been suspended and those countries with the most room to provide stimulus have been the most aggressive in using it. The EU made a big leap forward towards fiscal union with the Recovery Fund (NextGenerationEU). At the same time, low inflation has allowed the ECB to aggressively lean against the risk of high fiscal deficits leading to tighter financial conditions.

Discretionary fiscal response far greater than post-GFC in most countries

'Fiscal Stance' (change in the structural primary budget balance), pp of GDP positive numbers = tightening, negative numbers = loosening



Source: European Commission, Deutsche Bank. Updated as of September 2020. Final outturns may be higher given new stimulus in response to second wave of covid in O4.

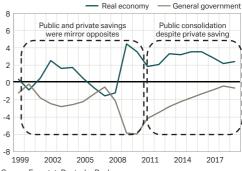
Fiscal support must continue – shifting from cyclical crisis support to structural (investment)

The near-term focus of the fiscal response must remain on supporting affected sectors of the economy and avoiding cliff edge effects while the covid shock persists. With the sharp rise in private saving, fiscal stimulus must not be removed too early as it will risk persistently lower aggregate demand.

As we move beyond the crisis phase, the need for income replacement policies and sectoral support will ease. However, a structurally easier fiscal stance needs to be maintained. This is a key lesson from the last euro crisis where high private savings, coupled with fiscal policy tightening, left the euro area with excess savings. This detracted from the dynamism of the European recovery and placed downward pressure on inflation.

Public consolidation despite high private saving has dragged on euro area growth over the past decade

Net lending/borrowing by sector, % of GDP

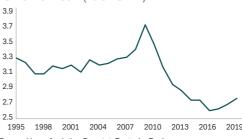


Source: Eurostat, Deutsche Bank

Three strategic goals for public investment: Green, Digital, Levelling up

It is critical that Europe does not allow a repeat of the demand-side drag of the past 10+ years. To avoid this, Europe must increase public investment to address the issue of weak demand. This will also provide lasting supply-side benefits that are necessary to offset the impact of the covid shock on potential growth.

Public investment in the euro area remains weak (% of GDP)



Source: Haver Analytics, Eurostat, Deutsche Bank

As new public investment is deployed, there are three key areas that should be the focus points.

Green: Europe should become a global leader

Arguably the most critical area for investment is in climate projects and green energy. Europe has led the world in the growth of green finance and emissions trading, and market-based solutions

should be used where possible. However, markets fail to accurately internalise the costs of climate change, with current carbon prices well below those necessary to limit global warming trends.

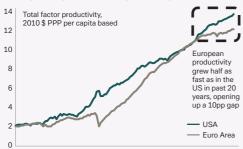
We must be careful. A much higher effective price of emissions – whether achieved through regulatory restrictions or market-based instruments – will represent a sharp negative energy supply shock and weigh on an already vulnerable post-covid recovery. To avoid this, large state-backed green energy investment is required. Such investment would both smooth the costs of transition and support the technological progress required to achieve carbon-light economic growth in the long run.

Digital: Catching up to the US and China

The importance of the digital agenda has been made all the clearer by the covid shock, with more digitally advanced countries better able to adapt to the new realities of work-from-home, online shopping and more.

Europe must therefore start closing its digital gap with the US and China and this must be a focus of new investment. While the EU has become a global rule setter for the digital economy, as exemplified by its GDPR standards, it lags far behind on digital innovation. Indeed, as the digital age as hit full stride over the last 20 years, total factor productivity in the euro area has grown half as fast as that in the US.

European productivity underperformance



1900 1910 1920 1930 1940 1950 1960 1970 1980 1990 2000 2010

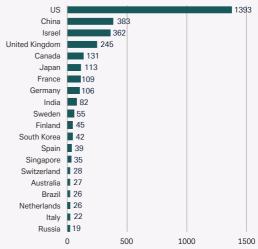
Source: Long Term Productivity Database; A. Bergeaud, G. Cette and R. Lecat

While the EU has talked up the need for a digital transformation, its efforts to date have been disappointing. The digital agenda has been underfunded, accounting for only one per cent of the upcoming EU budget. This is being addressed with the Recovery Fund, which targets 20 per

cent of its spending on the digital agenda, but implementation questions remain and larger support is still needed to help Europe narrow the gap in R&D spending in the digital sphere.

The EU lags far behind the US on digital innovation

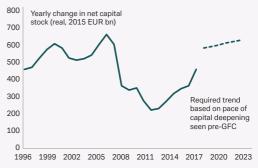
Number of AI startups per country (2018)



Source: Crunchbase retrieved from Center For Data Innovation (2019). Who Is Winning the AI Race: China, the EU or the United States?

In addition to greater R&D funding, the green and digital challenges require increased spending on infrastructure. Since 2008, the pace of capital deepening in the euro area has run at half that seen in the prior decade.

Europe's underinvestment in infrastructure since the GFC



Source: Eurostat

Merely returning to the pre-2008 pace of capital deepening requires an increase of €175bn in annual investments compared to 2019, with an even larger gap now after the covid shock. Coupled

with the need to boost R&D and other investment by around one percentage point of GDP, we see extra investment needs of around €300bn a year. This would total €2tn over the next seven years in the euro area alone compared to the €750bn size of the Recovery Fund for the EU as a whole. And this does not account for specific covid-related investment.

While the costs of investment will be substantial, the potential benefits of closing the investment gap and boosting productivity should not be underestimated. For example, if the euro area caught up to the US in terms of the pace of total factor productivity growth and the pace of capital deepening returned to its pre-GFC pace, this would boost annual GDP by €1tn after 10 years. The question is not whether Europe can afford to pay for a growth-enhancing investment agenda, but how can it afford not to.

Levelling up: A successful investment agenda to boost intra-EU convergence

The public investment agenda is not only about improving the prospects for the EU as a whole but also about creating inclusive growth that facilitates economic convergence. Infrastructure investment is a challenge across the euro area – with Germany among countries with lower-thanaverage spending on this – but the post-2008 decline has been most severe in the periphery. The Southern periphery also performs poorly when it comes to R&D spending and digitalisation in contrast to Northern peers.

Southern Europe underperforms dramatically on R&D spending (% of GDP, 2018)



A levelling up of economic wellbeing was a key selling point of the European project. Indeed, the promise of inclusive growth is required for political buy-in for common EU projects. The Recovery Fund is a crucial step in the right direction, with funds weighted towards countries with lower incomes and higher unemployment. By providing joint funds, it can overcome the political incentives that favour current spending over longer-term projects. By linking public investment and the structural reform agenda, it can offset the short-term costs of reform. At the same time, by directing funds to specific growthenhancing areas, it addresses moral hazard concerns about EU spending.

The Recovery Fund is not by itself enough. Attracting private co-investments can magnify its impact but overreliance on this could result in only 'low hanging fruit' projects being funded. Maximising private investment requires a strong strategic commitment and progress toward common fiscal capacity – the Recovery Fund cannot be merely a one-off. In the long term, joint revenue-generation will be needed to ensure sustainability of common fiscal tools.

Reforming EU fiscal rules

The much-needed public investment agenda must be credible. It must ensure that fiscal policy can sustainably enhance growth without risking fiscal profligacy. For this to happen, the EU must reform its fiscal rules and simplify them to move away from the situation where testing the flexibilities of the system has become an annual negotiating game between the European Commission and some member states.

Most importantly, the rules need to be made economically relevant. This requires moving away from the 3% deficit and 60% debt limit criteria of the 1992 Maastricht treaty. These levels never had a fundamental economic justification and their rule-of-thumb relevance for fiscal sustainability is based on long-outdated realities of growth, inflation and interest rates.

Going forward, the EU should consider debt sustainability from the perspective of gross financing needs and debt stabilisation. The deficit criteria should move towards a 'golden rule' framework that reflects the importance of growth-enhancing public investment. More explicit allowances for countercyclical stimulus would be also welcome.

While the fiscal rules are suspended for 2020 and 2021, reform is still an urgent matter. The major changes outlined above would require

Treaty change, a multi-year process. The reform process should be started without delay as uncertainty frequently undermines the effective allocation of resources. Indeed, countries' budgetary plans show signs of reluctance to use Recovery Fund loans until there is clarity on fiscal rules.

Competition and tax policies to complement public spending in supporting the EU strategic agenda

Some will argue that the aggressive use of fiscal policy to further Europe's strategic agenda will distort the functioning of the free market. However, state influence and market competition are somewhat different dimensions on which to judge the structure of the economy. Instead, government action must be well tailored and limited to areas where effective market functioning is at risk of failing, rather than simply be indiscriminate or politically-driven intervention. A fiscally-driven investment agenda, as well as competitive markets, can then complement each other and foster growth.

One way for the EU to create complementarity is to complete the Capital Markets Union. This will facilitate the growth of green financial instruments and support the climate agenda. Deeper equity markets would direct additional funding to early stage innovation, which is key if the EU is to challenge the US dominance in the digital space. Developing deeper equity markets would also require reforming the savings system and reducing the tax advantages of debt funding.

Competition policy – an area where the EU has achieved much success in the past 20 years – faces two key challenges. The top anti-trust priority will be facilitating the EU's digital agenda by ensuring effective competition in the digital space. The emergence of platform monopolies in which entire marketplaces are controlled by individual corporations is an unusual challenge for free markets. The other challenge is to adapt state aid rules in areas where strategic support is needed to address market failures (climate change, geopolitical challenges to free trade).

Enhancing competition will also require progress on tax reform and digital taxes to address multinational tax avoidance. Unified support for the OECD's corporate taxation proposals will speed these reforms. Of course, some member states that benefit from the status quo will push back, but their support could be garnered as part of a larger grand bargain that includes the creation of common fiscal tools.

To support inclusive growth, shifting the tax burden from earned income towards unearned income and wealth should be explored. Popular concern over inequality is likely to grow worse post-covid, particularly among the young and lower-earning workers who have suffered the most in the crisis. The increase in private savings has largely accrued to those at the higher end of the income spectrum, who have also seen their wealth protected by monetary stimulus.

External policy: Combining multilateral efforts and strategic autonomy to support the EU agenda

Many of the policy challenges above are most effectively addressed at the global level, particularly climate and corporate taxation issues. This highlights the importance of the EU's external policy. A push for greater multilateral co-operation – which should include reform of multi-lateral institutions – will be more achievable under a Biden administration. However, the transatlantic relationship will still have key challenges. Areas of tension such as lower defense spending are likely to remain on Washington's radar, while a divided Congress would make it less likely that the US can match EU ambitions on climate change.

Recent experience highlights that Europe cannot be over-reliant on the US in geopolitical matters. So while multilateral efforts should be pursued where possible, Europe must also maintain the push for greater 'strategic autonomy'. This also applies to defence, with the need for a deeper EU common defence policy becoming more pertinent after Brexit, with France now the only nuclear power and UN Security Council member in the EU. Meanwhile, a stronger common migration policy would boost the levelling up agenda and provide greater support for exposed Mediterranean countries.

Conclusions

As we rebuild from the pandemic, Europe must not return to a status quo of national interests that lead to paralysis. Worryingly, this could become a 'Japanisation minus' scenario of secular stagnation with excess savings as well as low growth, inflation, and real rates; but with a less cohesive and stable internal environment.

Europe has already taken one big step forward by allowing common and more proactive fiscal policy to go mainstream. Post-covid, we have a unique opportunity to make greater use of fiscal policy to support the strategic goals of the EU with public investment. For this to work, fiscal expansion must be sustained. We must rewrite the fiscal rules and create common fiscal capacity. 'Core' country concerns over fiscal union can be mitigated if the EU fiscal remit is well defined and is accompanied by complementary growthenhancing policies. Europe cannot afford to waste this opportunity.

We should not question whether Europe can afford to pay for a growth-enhancing investment agenda, but if it can afford not to. >

The fundamental right to connectivity

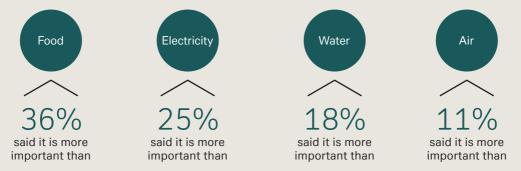
Apjit Walia



The founding fathers gave Americans several basic rights with life, liberty and the pursuit of happiness as the inalienable rights. This decree that was signed almost 230 years ago with several amendments continues to evolve, and with the events of this year, a basic question comes to mind. Do we need to have tech connectivity as a fundamental right for every American?

Earlier this year, we ran a survey of Americans with dbDIG where we asked how important tech connectivity is to them. The responses were fascinating from across all age groups but the ones from 16-24 year olds showed us where we might be headed as a society. More than one in three Americans in this age cohort said connectivity is more important to them than food; 11 per cent said it is more important than air.

In a survey of 16-24 year olds, when asked how important is connectivity to them



Source: dbDIG

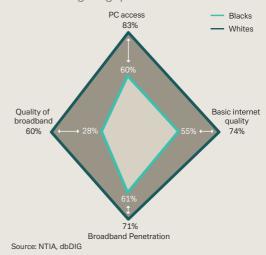
Given the level of entrenchment tech connectivity has reached in the sociopsychological roots of the country, it is only a matter of time before this premise will start to gain a much larger narrative nationally. As covid has shown, not having tech connectivity does not just impact one's quality of life or their "pursuit of happiness" as the founding fathers wanted us to have, lack of tech in the year of 2020 could be a death sentence. With the economy recovering post-covid in a potential K shape, the haves seem to be recovering faster but the have-nots are struggling even further. Inequities have manifested in many places, and significantly in Tech. This Tech divide in America runs deepest along two vectors: 1) The gap that is based primarily on race, 2) The gap that exists between urban and rural areas.

The Racial Gap

We wrote in September on the digital race divide in our report ("America's racial gap and Big Tech's Closing Window") where we found vast disparities across race in access to connectivity and ownership of basic tech hardware. The results show a staggering gap across all

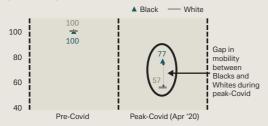
parameters – the most important being that broadband penetration among Blacks, at 61 per cent, is a decade behind that of Whites. As shown in the following chart, the gap between Blacks and Whites permeates across the tech spectrum from computer ownership to quality of internet and even basic levels of connectivity.

US racial digital gap – Blacks vs. Whites



To understand the effect of the inequity in tech, we worked with DbDig to examine the movements in majority Black areas versus majority White areas. Across the three major cities in the country, one sees significantly higher mobility during peak covid lockdowns in Black neighbourhoods than in White neighbourhoods. The average of the three is a breathtaking gap for the month of April, the peak for covid lockdowns, as shown in the following chart.

Mobility levels of Blacks vs. Whites pre and post-covid

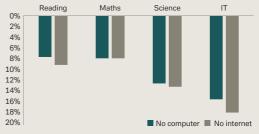


Source: dbDIG

Not surprisingly, the racial digital gap also impacts educational outcomes of school students. A survey conducted by the US Census earlier this year of households with children in K-12 schools revealed that just 62 per cent of Black households said that they had the technology to allow children to do their online schoolwork at all times compared with 73 per cent for White households. Furthermore, 9 per cent of Black households stated that they "rarely" or "never" had the technology for online education versus 4.3 per cent for White households. A 2018 report by the US Department of Education highlights the significant gap in education outcome of schools students based on access to technology – eighth grade students who did not have access to a computer or to internet scored 8-18 per cent lower in four subjects (reading, mathematics, science, and IT) compared with students who had access as shown in the following chart. Expectedly, the gap was highest in IT - 16 per cent lower for students who did not have access to computer and 18 per cent for those without access to internet.

The \$15bn Racial Digital Gap Initiative we propose is a five-year program that would cover 10 million low-income Black and Hispanic households (annual income of <\$30,000). More

Score underperformance of students with no access to computer/internet



Source: US Department of Education

than half of these households do not have proper broadband connection and a similar proportion do not own a computer. These households would be provided a broadband plan, a computer and a one-year tech training program targeting middle and high school students within the target population.

The training program would seek to provide a foundation of tech skills, covering a range of topics from basic computer literacy to professional computer applications to coding. Our contention is this plan be sponsored by Big Tech companies, giving them an unprecedented opportunity to address the issue of digital inequality while generating significant goodwill across the political spectrum. To put this figure in context, it is just 0.75 per cent of the \$2tn increase in market cap that Big Tech has benefitted from during the post-covid period. Another comparison is the close to \$20bn Big Tech has invested in an emerging market such as India in just the last few months to gain access to the Tech market there. In comparison, the average per capita income of the minority demographic in the US is more than 2.5 times that in the Indian market.

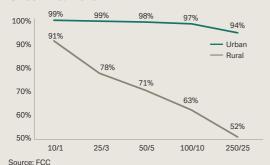
Our plan argues for \$15bn of investment into US minorities over five years where Big Tech can drop close to \$20bn in just couple of months in an emerging market to gain a foothold. The framing of context is key – there is an incredible emerging market right here in the big cities in America and investing here would go a long way in addressing the racial digital gap.

The Rural Gap

While the racial digital chasm is primarily underpinned by affordability, or rather lack thereof, the gap between urban and rural areas

is one related to network availability. Given the low population density of vast parts of rural America, fixed broadband infrastructure is not a very commercially feasible proposition. Further, the rural-urban gap in terms of network coverage widens rapidly with increasing speeds as shown in the following chart. In the not-so distant future, speeds of 25/3 mbps will be grossly insufficient.

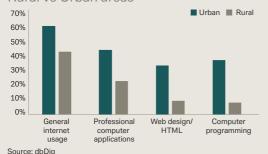
Fixed broadband coverage – Urban vs. Rural



The rural sector also suffers from significant deficiencies in terms of digital skills – as our dbDIG survey shows, the proportion of rural population with expertise on key tech skills (not considering internet usage) is only about a quarter (web-design, programming) to a half (computer applications) of their urban peers. The lack of access to broadband and digital skills drives a meaningful gap in

Percent of people with tech expertise – Rural vs Urban areas

economic productivity in the rural sector.



The debate on how to address this rural gap continues unabated and there have been several proposals over the years to address it from the Connect American Fund to the Rural Digital Opportunity Fund, mostly arguing for dramatic increase in funding to broadband or mobile broadband. We believe Low Earth Orbit (LEO)

broadband services, while still at a nascent stage commercially, have the potential to eventually provide affordable high speed internet to rural areas, especially the highly underserved/ unserved remote ones. The sceptics, including the FCC, remain adamant given the nascent stages of development, but we believe one has to take a radical step here given the dire need for bandwidth in these areas.

LEO satellites differ from the traditional GEO satellites as they operate as a constellation of very small satellites (that can weigh up to 97 per cent less than GEO satellites) and at a much shorter orbit to earth (about 1/20th the distance from earth of GEO satellites). The latter is the critical feature which enables LEO broadband to overcome the major stumbling block of traditional satellite broadband services – that of high latency.

There are stumbling blocks including high launch costs and short life expectancies, but there have also been successful breakthroughs with Telesat testing speeds as high as 1.2 gigabits per second and SpaceX downloading speeds of 100 megabits per second and noting that speeds of 1 gbps are achievable, equivalent to fiber broadband. We envision that if the government and technology leaders, such as Amazon, form an ecosystem that evolves the revenue and business models of these companies, the combined investments and effort will drive down launch costs rapidly and dramatically reduce complexities to a point that this medium will become affordable and reliable to homes anywhere in sparsely populated areas in the country.

As we emerge post-covid, the growing need for uniform Tech access across the population is gaining a national narrative. If policy makers and the corporate sector approach this issue holistically, we hopefully will not be in a world where a person has to risk their life during times of peril just because they live in a different part of the country or have a certain skin color. Covid has taught us many things. Tech connectivity being a lifesaver and eventually a fundamental right should be the foremost lesson of this time.



Better business post-covid: lessons from luxury

Francesca DiPasquantonio, Jaina Mistry

It is a shocking thought – along with many other things this year – that never before has the gap between the best and worst performing luxury companies been as wide as it has been in 2020. But just as companies are looking to rebuild, they have been charged with doing so in a different way. That is because ESG principles have escalated dramatically in the minds of customers and investors this year. Firms will have to produce less, avoid waste, and build products that last forever. This shift has forced some introspection over an existential question: Is the definition of luxury in tune with today's consumers?

This urgent need for self-reflection is not confined to luxury firms. Indeed, companies across many other industries face a similar challenge. From our vantage point as specialists in the luxury sector, we can identify several steps that luxury firms should take as they shift to a different business model – one that enables them to recover from the current crisis while addressing rising ESG concerns. Companies in other sectors should take note.

No place for complacency

Covid hit the luxury goods industry at a moment of very healthy expansion. However the market, worth €1.3tn of which €280bn is personal luxury goods, has seen uneven growth over the last five years.

Covid: an unprecedented blip in personal luxury goods demand growth



Source: Bain & Co., Deutsche Bank estimates

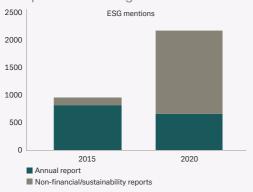
During this time there has been significant demand polarisation towards a few relevant brands able to drive consumer appetite through newness, recognisability, captivating marketing strategies, and direct client engagement.

Ongoing changes are further testing companies' ability to stay on top and drive the changes.

These include (i) the emergence of a new younger and more volatile consumer, (ii) the role of the Chinese nationality as a key driver of demand and of Mainland China as an increasingly strategic domestic market, (iii) a new set of values and priorities which are raising ESG awareness, (iv) the digital acceleration and its implications for distribution and communication.

Many companies have witnessed a significant margin compression as store productivity is suffering from sub-optimal top line performance, and as escalating costs became necessary to sustain brands and implement successful strategies. The profitability divide between

Companies are ticking the formal boxes...



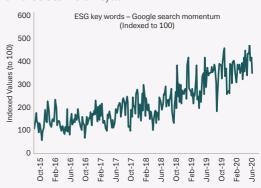
Source: Deutsche Bank on Alphasense. Search terms: Environment, Responsibility, Inequality, Sustainability, Climate change, Biodiversity, Clean water, Poverty, Education, Responsible production, Upcycling, Recycling, Emissions. Based on a representative sample of listed luxury companies the best and worst performers has never been larger, and many companies have embarked in extensive turnaround or brand relaunch strategies in the last few years.

ESG matters: need to walk the talk

The sustainable revolution has begun and covid has accelerated the awakening: the environment is the defining issue of our time, and younger consumers are seriously concerned about it. A new generation of consumers increasingly back their beliefs with their shopping habits, favouring brands that are aligned with their values and avoiding those that don't.

Luxury goods companies are rushing to shine in ESG terms by ticking all the possible boxes from a reporting standards and an objective setting viewpoint, but this is still in more PR territory than reality. We believe ESG is here to stay, and the ability to blend newness, quality and CSR themes will shape the winners of the future.

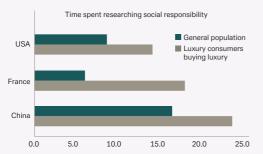
Covid has accelerated consumers and public opinion attention towards ESG and sustainability...



Source: Deutsche Bank, Google trends search

All the buzz is forcing all brands to accelerate on ESG. However, there is a disconnect: consumers are not yet walking the talk, despite being more sensitive to ESG issues.

... however consumers do not walk the talk



Source: dbDIG, Consumers Survey, October 2020, Deutsche Bank research

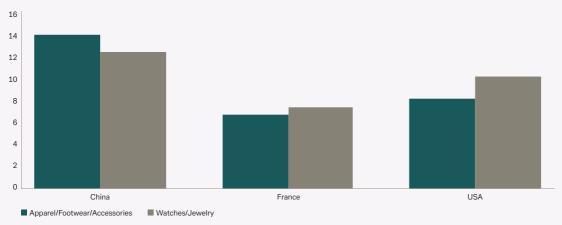
... while for companies ESG is a focus



Source: dbDIG, Corporate Survey, October 2020, Deutsche Bank research

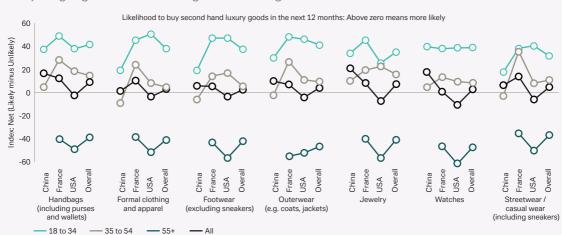
- Yet, the pandemic has brought the moment closer when consumers will adopt more sustainable shopping behaviour. Successful companies will be ready for when they do and, thus, they must embark on the following changes.
- Formal change. For now, companies are focusing on formal requirements: ticking all the boxes to achieve sustainability scores, which translates into positive publicity. This is a relatively fast change which will be perfected once universal reporting standards will be adopted, making targets and progress measurable and comparable.
- 2. The next phase is substantial change, adapting to World 2.0. This means implementing radical changes to products, durability, production processes, distribution and ultimately the business model. Companies will have to think differently: they will have to produce less, avoid waste, and make products that last forever. Companies will have to conceive products ecologically. This includes sourcing, localised manufacturing, upcycling, and recycling in production processes. Other considerations include building circularity in the business model and whether to have a direct involvement in new models like resale or rental. This will take time and effort.

Consumers are willing to spend only a touch more for ESG-friendly products (per cent of those willing to pay more)

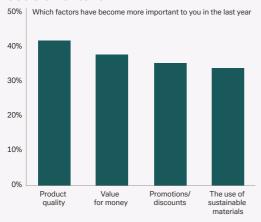


Source: dbDIG, Consumers Survey, October 2020, Deutsche Bank research

The younger generation is driving interest in regenerative business models



Sustainability is not the key decision criteria



Source: dbDIG, Consumers Survey, October 2020, Deutsche Bank research

Don't waste a good crisis

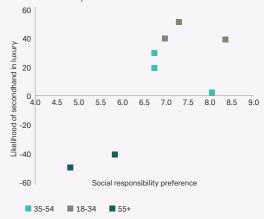
Covid has opened the door to World 2.0. Irrespective of the negative impact on global economies from the virus, the next decade will be disruptive for the luxury sector. A strong response requires, first of all, leadership and a mentality which is fit to the task.

The adoption of new, versatile business models is needed and this increases risks for luxury players, as it requires higher fixed costs, investments, and a potential reset in operating leverage. Larger players and conglomerates therefore have an advantage, and we believe this will drive more consolidation in the sector.

So what should companies do?

1. Set the new trend: A wave of vounger consumers is hitting the sector: it is expected that the 45-and-younger demographic will represent about 50% of demand in 2025. They are voicing new values for their shopping, they are more thoughtful, they want to buy less and buy better. Buying luxury is conventionally buying a product (or experience) to blend in, to be accepted, or to stand out, while choosing an aesthetic or a set of values. Yet luxury is moving from being the mere hedonistic satisfaction of one's impulses to a higher level purpose. Ethics will be as important as aesthetics and customers will favour brands with a purpose. Sustainability will be an integral part of consumers' perception of quality. Firms must position themselves to stimulate conversations on values and debates for the environment and society.

Younger consumers prefer second-hand, sustainable products



Source: dbDIG, Corporate Survey, October 2020, Deutsche Bank research

- 2. Produce less, shop less, shop better: This should be a given in luxury. But it is not. perhaps sometimes because of the quality or durability of the products, or that fashion styles change so drastically so frequently. Either way, many luxury products have seen their life cycle shorten. The answer is a greater product quality through use of best materials and a stricter production process. The aim is to extend the life of products and reduce waste. In addition, this will provide brand and product appeal with scarcity value and extend the desirability of a product while helping extend the cycle through a resale channel, thus generating a circular economy. Exclusivity, quality, transparency and traceability will shape demand trends. We cannot but quote the key advertisement of a famous outdoor brand, "Don't buy this jacket", as the perfect example of a more sustainable approach to consuming, and selling. The theme is: reduce, repair, reuse, recycle, reimagine.
- 3. Rethinking the supply chain: A new definition of luxury should encourage companies to rethink the end-to-end product lifecycle, the supply chain, and the management of unsold stock. What is the impact on people and society? This year's supply chain disruptions have highlighted the need for a manufacturing processes that are closer to home and directly controllable. Essentially, this will shorten the supply chain and reduce lead times, and can assist in a rethink of the whole value chain from creativity to delivery to post sale services and CRM. It may require greater

internalisation of manufacturing, which is incidentally also a positive in terms of ESG control. Here are the key points in the process:

- Start from the full price sell though to eliminate excess production. Plan production in line with real underlying demand. Flex the manufacturing process so that small batches, just in time production or in season replenishments become the norm. This helps pricing and brand equity over time. Over time, produce less to sell the same value.
- Products should be forever. Quality, durability, scarcity, and the ability to blend with changing tastes should be favoured as they will underpin the strength of brands and aid sustainability.
- Categories mix: Should all brands produce everything? Why not stick to core competences? This reduces complexities and could strengthen a brand. Of course, sales potential will fall and distribution may have to be resized, but if managed well, profitability will benefit in the long run.
- Walk away from the nonsense product calendar and roll out of the recent past.
 This means readjusting the product flow and the fashion shows to the actual seasons. This involves shortening the time to market to enable better control of the product journey to the end consumer
- "Think global, buy local" may require supply chains to shift closer to the end consumers
- Upstream integration could become necessary in order to ensure the quality of a product. It will also ensure the legitimacy and quality of the production process enabling the firm to meet ESG criteria (internally and externally)
- Sourcing: Adopt new technologies (like blockchains for traceability) and materials (eco-friendly materials, renewable materials, recycled material etc).
- Inventories management Better planning and discipline on volumes should minimise unsold stock. Excess inventory can no longer be destroyed but channelled through legitimate off-price channels including the resale channels
- 4. Spoil your local customers: If there is something this pandemic has highlighted, it is the importance of local consumers. It is true that business models focused on serving the globetrotter consumer has led to many improvements in client engagement and

- global CRM platforms. However, sometimes these efforts have been directed more towards tourists rather than local buyers. Even when travel eventually recovers, strengthening local client engagement will diversify the risks.
- 5. Resetting the distribution footprint: The digital revolution, from social media to online shopping, has been accelerated by covid. The shift to online shopping has jumped forward several years and online sales have doubled or even trebled as a percentage of sales for many companies. It could soon become the most important sales channel, exceeding 30% of the contribution to sales in 2025 (from 12% in 2019), according to several industry sources, as brands leverage on the steepened learning curve to expand online assortment, further improve user experience and digital marketing. This completes the transformation into omnichannel integrating the digital and the physical space but questions the role of stores and wholesalers, especially physical ones. Yet, the ritual of buying luxury in a store is part of the industry's proposition, and stores are the perfect window onto a brand and its philosophy. Hence companies must adapt their stores into being a privileged space for customers to benefit from a unique experience. Stores will also be increasingly used as a stock or collection point for online purchases. Stores must change, though. Fewer will probably be needed, especially in a more sustainable world, and those that remain might be smaller. Network downsizing and store relocations/refurbishment will require broad shoulders.
- 6. Make a decision: Build scale or be small.
 Companies have several options to adapt their business models to World 2.0 but they all involve costs and change. Large firms can use some advantages from their existing scale. They can use data more effectively than small companies. They can also experiment with new trends and businesses in ways smaller firms cannot. They can also afford diversification. Furthermore, scale may drive a return to strategic consolidations and 'rescue' mergers and acquisitions along the value chain.

Large companies will need to do this to compete with new independent brands or

new business models that include digitally native brands, ESG native brands, or circular economy models like resale and rental. Niche brands offering unique products or perspectives will be the ones able to navigate the challenges of a polarised industry.

7. Deal with second hand and rental models.
Brands need to tackle the rent and second hand models head on. In the interest of brand equity, they may want to step in and control the distribution, or partner with key players, or even consider proprietary second hand platforms. This will be an interesting space to monitor as the push to ESG and regenerative economies might create unavoidable diversification. Indeed, key pillars of the circular economy for fashion and luxury will include second hand and rental models. These will become more and more important as sustainability becomes a more pressing matter.

It is encouraging that these steps are not just confined to the luxury industry. That is because it means that investors, customers, and society more broadly are approaching a more unified vision of what we want our post-covid companies to look like. But while that makes the future somewhat more visible, it still leaves companies with the significant challenge of needing to pour investment into new business models. This requires the fortitude of leadership and that is perhaps the key thing that will differentiate the post-covid winners from the rest of the pack.





A work-from-home tax

Luke Templeman

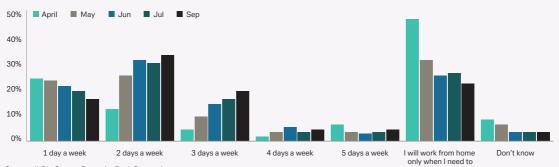
For years we have needed a tax on remote workers – covid has just made it obvious. Quite simply, our economic system is not set up to cope with people who can disconnect themselves from face-to-face society. Those who can WFH receive direct and indirect financial benefits and they should be taxed in order to smooth the transition process for those who have been suddenly displaced.

The popularity of WFH was growing even before the pandemic. Between 2005 and 2018, internet technology fuelled a 173 per cent increase in the number of Americans who regularly worked from home¹. It is true that the overall proportion of people working from home before the pandemic was still small, at 5.4 per cent based on census

data, but the growth was still way ahead of the growth in the overall workforce.

Covid has turbocharged that growth. During the pandemic, the proportion of Americans who worked from home increased ten-fold to 56 per cent. In the UK, there was a seven-fold increase to 47 per cent. Many of these people will continue to work remotely for some time. Indeed, two-thirds of organisations say that at least three-quarters of their staff can work from home effectively, according to S&P Global Markets. Meanwhile, a DB survey shows that, after the pandemic has passed, more than half of people who tried out WFH want to continue it permanently for between two and three days a week.

Once coronavirus has passed, how many times a week do you think you will work from home?



Source: dbDig Survey, Deutsche Bank Research

¹ GlobalWorkplaceAnalytics.com

The sudden shift to WFH means that, for the first time in history, a big chunk of people have disconnected themselves from the face-to-face world yet are still leading a full economic life. That means remote workers are contributing less to the infrastructure of the economy whilst still receiving its benefits.

That is a big problem for the economy as it has taken decades and centuries to build up the wider business and economic infrastructure that supports face-to-face working. If a great swathe of assets lie redundant, the economic malaise will be extended.

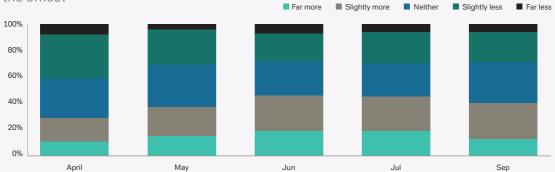
WFH is financially rewarding

WFH offers direct financial savings on expenses such as travel, lunch, clothes, and cleaning. Add to these the indirect savings via

forgone socialising and other expenses that would have been incurred had a worker been in the office. Then there are the intangible benefits of working from home, such as greater job security, convenience, and flexibility. There is also the benefit of additional safety.

The newly-discovered gains of home working, both tangible and intangible, all have value. And they generally outweigh the costs. The latter have mostly come in the form of additional mental stress of juggling work and children, and dealing with an imperfect home-office setup. These costs should not be underestimated, however, they usually pale in comparison with the gains. Hence why the vast majority of home workers want to continue remote working, on at least a part time basis, after the pandemic passes.

Are you currently more or less productive working from home compared with working in the office?



Source: dbDig Survey, Deutsche Bank Research

How will a WFH tax work?	UK	Germany	US	
Total full-time workforce m	24	35	104	
Total part-time workforce m	9	10	21	
% people who worked from home during pandemic	47%	67%	50%	
Proportion of new WFH workers who will WFH post pandemic – DB survey (not country specific)				
1 day per week	16%			
2 days per week	33%			
3 days per week	19%			
4 days per week	4%			
5 days per week	4%			
Total annual WFH days post-pandemic (bn)	1.0	2.0	4.6	
Average salary of a taxable WFHer (local currency)	35,000	40,000	55,000	
Tax rate on WFH per day	5.0%	5.0%	5.0%	
Tax per day for average person	6.73	7.69	10.58	
Tax raised (bn – local currency)	6.9	15.4	48.7	
People on low incomes to be given a wage top-up m	3.0	10.0	29.2	
Annual pay rise possible from WFH tax (local currency)	£2.307	€1,538	\$1,666	

Sources: Deutsche Bank Research

First, the tax will only apply outside the times when the government advises people to work from home (of course, the self-employed and those on low incomes can be excluded). The tax itself will be paid by the employer if it does not provide a worker with a permanent desk. If it does, and the staff member chooses to work from home, the employee will pay the tax out of their salary for each day they work from home. This can be audited by coordinating with company travel and technology systems.

The tax rate? Those who can work from home tend to have higher-than-average incomes. If we assume the average salary of a person who chooses to work from home in the US is \$55,000, a tax of five per cent works out to just over \$10 per working day. That is roughly the amount an office worker might spend on commuting, lunch, and laundry etc. A tax at this rate, then, will leave them no worse off than if they had chosen to go into the office. If we apply the same tax rate to workers in the UK with an assumed average WFH salary of £35,000, it works out to just under £7 per day. In Germany, a WFH salary of €40,000 leads to a tax of just over €7.50 per day.

A tax at this level means that neither companies or individuals will be worse off. In fact, companies may be far better off as the savings from downsizing their office will more than make up for the cost of the WFH tax they will incur.

How much will the tax raise?

First the US. Of the 104m Americans who work full time, half worked from home during the pandemic. That is up from the 5.4 per cent who already worked from home before the pandemic. Of that additional 45 per cent, our survey shows that three quarters want to work from home to some degree post-covid with 16 per cent wanting one day a week, 33 per cent two days, 19 per cent three days, 4 per cent four days, and 4 per cent five days.

Adding this up, there could be 4.2bn new days every year being worked from home post-covid. With an additional 394m days for those part time and full time staff who already work from home and are not self-employed, that gives 4.6bn WFH days per year. At an average salary of \$55,000 and a tax rate of five per cent, the WFH tax will raise \$48bn per year. The same calculation in the UK and Germany (using country specific WFH data and the

salary levels assumed above) yields a tax take of £6.9bn and €15.9bn respectively.

What can the government do with this money?

In the US, the \$48bn raised could pay for a \$1,500 grant to the 29m workers who cannot work from home and earn under \$30,000 a year (excluding those who earn tips). Many of these people are those who assumed the health risks of working during the pandemic and are far more 'essential' than their wage level suggests.

Similarly, in Germany, the €15.9bn raised could fund a €1,500 grant to the bottom 12 per cent of people in the country who have a standard of living equivalent to €12,600 (after adjusting for the size of their household)². Similarly in the UK, the £6.9bn raised could provide a grant of £2,000 to the 12 per cent of those aged over 25 who work for the minimum wage³. Of course, the exact amount of the grant could be based on an asymmetric tapering system.

Some will argue against the tax. They will say that engagement with the economy is a personal choice and they should not be penalised for making that decision. Yet, these people should remember that governments have always backsolved taxes to suit the social environment. Consider that in centuries past, when it was socially unpalatable in the UK to introduce an income tax, the government implemented a window tax. As society changed, the window tax was abolished and, eventually, an income tax was introduced. In the same way, as our current society moves towards a state of 'human disconnection', our tax system must move with it.

Best of all, a WFH tax does not merely subsidise businesses that have no long-term future. If, for example, a city-centre sandwich shop is no longer needed, it does not make sense for the government to support the business in the medium term. But it does make sense to support the mass of people who have been suddenly displaced by forces outside their control. Many will have to take low-paid jobs while they retrain or figure out their next step in life. From a personal and economic point of view, it makes sense that these people should be given a helping hand. It also makes sense to recognise that essential workers that assume covid risk for low wages. Those who are lucky enough to be in a position to 'disconnect' themselves from the face-to-face economy owe it to them.

² lwkoeln.de

³ Office of National Statistics Annual Survey of Hours and Earnings

China: Green finance to green transition

Linan Liu

The covid crisis in 2020 is a wakeup call to the existential challenges of climate crisis, biodiversity crisis, pollution and waste crisis we face. It has reinforced the importance of accelerating the transition of the global economy towards an inclusive, sustainable, and green recovery.

For China in particular, there are big challenges. President Xi recently announced ambitious climate goals, and the country must consider the different paths possible to achieve these. To facilitate clean energy projects and other necessary actions, it is imperative that China further develop its green finance system.

In this article, I review the key aspects of China's green finance system and discuss five different things China must do to develop its green finance infrastructure to the point where it can support the country's transition to a green economy in the aftermath of the covid crisis.

The targets

During the United Nations General Assembly on September 22nd, President Xi reiterated China's goal of achieving a peak in carbon dioxide emissions before 2030. He also announced that China will effectively achieve carbon neutrality (net zero emissions) by 2060. This marked the first

time that China has set an absolute, rather than a carbon-intensity, target tied to GDP growth.

Specifically, President Xi promised that China will scale up its intended nationally-determined contributions to the Paris agreement by adopting more vigorous policies and measures. He urged all countries to pursue a "green recovery of the global economy in the post-covid era."

The pledge by China, as one of the world's biggest carbon emitters, represents an ambitious bid to meet the climate change mitigation challenge, and will have profound implications for the energy sector and commodity and financial markets over the medium to long term. China has committed in its 14th Five-Year Plan for the years 2021-25 to making progress on ecological civilisation and will make an action plan to peak China's carbon emission before 2030 and become carbon neutral by 2060.

China has already made good progress over the past five years of the thirteenth five-year plan. It cut carbon emissions per unit GDP by 18 per cent, built the largest ultra-low emission clean coal power supply system in the world. Clean energy now supplies over 23 per cent of the nation's energy. That drove significant improvements in



air quality. Between 2015 and 2019, China halved the proportion of days registering high PM2.5 pollutants in 337 cities from 17.5 per cent to 8.5 per cent. And the average daily concentration of PM2.5 fell by 35 per cent to 36 micrograms per cubic metre in 2019.

Green Finance: The China approach

Green finance is necessary for the energy transition as it offers a market-oriented financing solution which the world needs to address the substantial gap between the supply and demand of green finance. In fact, the Global Infrastructure Hub estimate that global economies face a \$15tn infrastructure gap for the period 2016 to 2040. Therefore, we must further develop our green finance systems.

Strong private capital participation, though, usually requires reorienting the institutional structure and mechanism of domestic and global financial system. China's approach shows that green finance has played an important role in mobilising private and public capital into green investment opportunities.

China's rapidly evolving green finance system over the past few years was underpinned by coordinated macroeconomic policy, regulatory, institutional and technological developments. This stemmed from a combination of a "top-down" approach in political push/strategy architecture and a "bottom-up" approach in ground-level experimental work and implementation. Among many other this, detailed policies were developed with respect to green bonds, green credits, environmental information disclosure, third-party assessment and appraisals.

In addition to a policy framework, regulatory measures are needed to incentivise financial institutions, investors, and corporations to allocate financial resources to green investments. China's monetary policy incentives have included incorporating green credits to regular macro prudential assessment. For example, in 2018, the PBoC expanded the eligible collateral pool for its Medium-term Lending Facility to include green financial bonds, AA+ or AA rated green corporate credits and high-quality green loans. This helped attract investments into green bond markets and support lending to green projects.

On fiscal incentives, a number of local governments introduced interest subsidies and

provided credit guarantee and risk compensation to investors of green loans and green bonds. In 2017, eight cities in five provinces (Zhejiang, Jiangxi, Guangdong, Guizhou and Xinjiang) set up pilot zones of green finance reform and innovation. Sichuan province offered interest subsidies to local financial institutions which issue green financial bonds, while Jiangsu provinces offered 30 per cent interest subsidies for two years on green corporate bonds. Last year, Shenzhen government offered green credit enhancement scheme which compensates lenders for up to 50 per cent of the notional amount of green loans in the event of default, and 50 per cent interest subsidies to the low carbon emission enterprise borrowers.

Additional incentives being considered include the possible relaxation of risk weighting requirement on green assets for commercial banks. This will provide some relief on the capital charge for green loans and promote green lending.

The next step

It is critical to integrate climate with environmental, social and governance risks in assessing investment opportunities by corporations and investors to promote sustainability. Enhanced disclosure obligation (ESG disclosure or non-financial disclosure) by corporations, borrowers and investors is therefore a key regulatory requirement to support the growth of China's green finance.

The process has already kicked off. After new company law took force in 2006, the Shenzhen and Shanghai stock exchanges published guidelines urging listed companies to disclose corporate social responsibilities. This included environment-related information. In 2008, stateowned enterprises were required to publish their social responsibility reports each year and other guidelines were published. And in 2018, the CSRC established the ESG disclosure framework for listed companies.

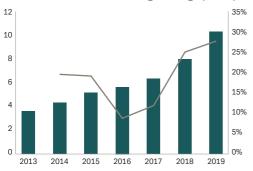
This has helped spur the growth in ESG investors. There are now over 130 green investment funds that collectively manage assets worth Rmb 69bn. That figures has more than doubled since 2013. In addition, 22 local government sponsored green industrial funds have been launched with assets worth over Rmb46bn.

To continue the necessary developments, the

CSRC and other financial regulators must continue working towards mandatory requirement for listed companies and bond issuers to disclose ESG risks. This should apply to both A and H share issuers.

This will recognise that green loans are the most important financing tools for green projects in China. According to CBIRC credit data for twenty-one systemically important commercial banks, the total amount of outstanding green loans as of June 2020 was Rmb11tn, up from Rmb3.7tn in 2013. That is average annual growth of 19 per cent and ensured the share of green loans to total loans was over ten per cent in 2019. Key beneficiaries of these loans have included green transportation, and renewable

Green loans in China are growing quickly

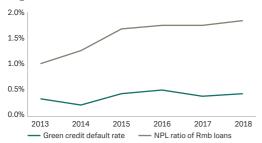


Source: CSRC

and clean energy projects for electricity, gas, and water production and supply.

So far, green loans have also been safer than other forms of lending. Indeed, the default rate of green credits has consistently stayed well below the non-performing loan ratio of aggregate Rmb loans during 2013-2018. In 2018, the default rate was

Green loans have been safer than regular loans



Source: CSRC

just 0.42 per cent, less than a quarter of the 1.83 per cent default rate of overall Rmb loans portfolio held by systemically important commercial banks.

While further policy developments are necessary to promote the green loan market, they should not ignore the growing size of China's onshore and offshore green bond market. While much smaller than the green loan market, green bond issuance has growth grown from Rmb240bn in 2016 to Rmb386bn in 2019. That made China's green bond market the world's largest by annual gross supply in 2019 and there are Rmb1.2tn outstanding green bonds currently in the market.

As policy evolves it must recognise the importance of non-financial corporations and new products. Rapid recent growth now means they account for 37 per cent of China's green bond market supply. Meanwhile, the issuance of green asset-backed securities exploded by 350 per cent to over Rmb50bn. Furthermore, green stocks have emerged as green enterprises tapped into China's equity market for financing. In 2018, they raised over Rmb22bn through equity IPOs and equity refinancing. Other new products such as green insurance, green trust, green PPP, and green leasing products have started to develop.

How to promote green finance in the post-covid era

The United Nation's 2030 Agenda requires significant public and private investment to realise the Sustainable Development Goals, and goals of the Paris Agreement on climate change. Yet, the financing gap to achieve the SDGs in developing countries is estimated to be up to \$3tn per year. Financing needs to fund the post-covid recovery may increase that gap by at least ten per cent.

To achieve carbon neutrality by 2060, China needs to invest about Rmb100tn in green projects over the next four decades, according to estimates by Tsinghua University in its "China's Long-term Low-carbon Development Strategy" report. That implies Rmb2.5tn (\$370bn) of green finance demand per year and is equivalent to China's 2019 green finance demand, which itself was about ten per cent of China's annual aggregate social financing need.

Surging demand for green finance, and rising appetite for ESG/green investment, means the following aspects deserve greater policy attention in order to develop a more robust green finance system in China.

 Strengthen monetary, fiscal and regulatory incentives for green investment. As monetary and fiscal policies are critical in supporting a green recovery post-covid, there is ample room to design more innovative monetary, fiscal, and regulatory incentives and policy tools to foster green investment. Policymakers may consider these potential policy options:

First, dedicated green liquidity facilities in the medium to long term range (three to five years): Currently, given commercial banks are the largest investors in the green loans market, strengthening monetary incentives to them should be effective in supporting the growth of green credits.

The PBoC now accepts eligible green credits and bonds for its relending, MLF/ SLF/PSL facilities. We suggest to consider creating dedicated green medium to long term liquidity facilities for commercial banks to obtain direct liquidity support from the central bank collateralised by eligible green loans and bonds, such facilities also help address the issue of duration mismatch between especially long-term green projects and the relatively short duration of commercial banks liabilities.

Second, relax capital requirement on green loans: Currently, the risk weighting of most green loans is 100 per cent. Lowering the risk weighting will release capital which will allow commercial banks to deploy more resources to green lending.

2. Develop a comprehensive green finance structure to support China's medium to long term "dual circulation" growth strategy. China's green finance at present has a simple structure in that the financing has primarily been supplied by large financial institutions. Borrowers are generally large and listed corporations, with green debt instruments (green loans and green bonds) being the main financing tools. However, green finance should incorporate the fact that the Chinese economy is undergoing a structural transition towards a greener and more sustainable economy based on the "dual circulation" growth strategy.

Such transition requires green finance to expand to more sectors and more participants. It also requires product offerings to be more diverse. In other words, a more comprehensive, more flexible green finance structure is needed to better serve China's green investment demand. The following should be considered.

First, the current lack of financing access by green private business and green small and medium enterprises is particularly concerning. This is especially so considering they are very active in technology innovation, such as green initiatives and digital technology. To address this issue, it is important to incentivise small and medium banks to join large banks in providing green credits. Local governments and insurance companies can explore green credit enhancement schemes for private business and SMEs. It is also important to attract private equity capital such as venture capital and other type of alternative equity investors to make early-stage green investment into these companies. Also, local government should consider setting up green industrial funds which will join private capital in supporting equity investment into private business and SMEs.

Second, China's green finance investor structure is biased towards commercial banks, policy banks and asset management funds. Meanwhile, long-term investors such as domestic insurance companies and pension funds are relatively less active. Better aligning green investment interests with such long-term investors by promoting responsible investment and incorporating ESG investment into performance assessment of insurance companies.

Third, a missing piece in China's green finance market is the carbon emission trading market. It is likely China will launch such a new market before 2025.

3. Improve secondary market liquidity of green finance products. China's green finance market is largely for primary financing and most existing green products (loans and bonds) are not tradable in the secondary market. The lack of secondary market liquidity restricts the ability of effective risk pricing and risk management on green investment and limits potential investment inflows to green finance market. A potential solution to grow secondary market liquidity is through the securitisation of green loans and favourable terms of repo eligibilities of green bonds.

- 4. Implement mandatory environmental ESG disclosure requirements for the financial services sector. Currently, the CSRC and other financial regulators are working to implement mandatory disclosure for listed companies and bond issuers by the end of 2020. However, China's financial institutions (investors of green assets) are yet to fulfil their obligation for ESG disclosure. The EU has already moved ahead by enacting the Disclosure Regulation which required sustainabilityrelated disclosures in the financial service sector as at the end of 2019 and is expected to apply the new regulation in April 2021. It is likely China will adopt international practice and apply similar mandatory ESG disclosure requirements in its financial services sector over the next five years.
- 5. Integrate China's green finance into the global green finance market. China collaborated with both advanced and developing countries to develop the global green finance market through multilateral organisations such as G20 and the Network of Central Banks and Supervisors for Greening the Financial System. Also helpful have been bilateral dialogues with the UK, France, and

others. China should continues to pursue multilateralism and global coordination in green finance by both sharing its own experience and learning from the best practices from other countries. This acknowledges that the US and Europe are leading the development of parts of the green finance market. Over the medium term, China's domestic capital market is expected to increasingly open up to foreigners both for financing and investment. As part of this, China is expected to gradually integrate its green finance market with the global market in taxonomy, financial and regulatory incentives, and green products specifications.

These recommendations will help continue the momentum that China's green finance market has shown since 2016. If it does, the market could grow to be worth Rmb100tn by 2060. Over the next few decades, I am hopeful that China will continue to build on its early success and develop a more efficient and more open green finance system. This will mobilise private and public capital to support the structural transition to a greener and more sustainable economy. Most importantly, it will help the country achieve the long-term goal of carbon neutrality by 2060.

The pledge by China, as one of the world's biggest carbon emitters, represents an ambitious bid to meet the climate change mitigation challenge, and will have profound implications for the energy sector and commodity and financial markets over the medium to long term. >

Do not write the eulogy for shopping malls

Derek Johnston

Much has been written about the demise of the shopping centre. The tales are of consumers preferring online purchases and returns, clearly loathing the trek to plazas and malls where they may be inconvenienced and perhaps even hawked by salespeople. Ugh the pain!

This narrative was prevalent even before the pandemic induced shutdowns, delivered severe financial pain for retailers, and unleashed fear among landlords as rents went unpaid and bankruptcies spiked. Many now claim the pandemic has officially delivered the mall death knell. Mall valuations have plummeted and, conversely, industrial (largely e-commerce distribution centres) valuations have surged. Thus, some claim the post-covid retail landscape will largely be driven by stay at home shoppers,

smart phone purchases, and bored workers. Mall centres will therefore close at a rapid clip – as uptake of risk aversion to comingling with other humans delivers the final blow to traditional 'brick and mortar' retail centres.

We challenge this theory, especially in a post-covid world, evidenced by the fact we don't hear of "the new normal" as much these days. But why are we hearing less of 'the new normal'? Nobody wants a new normal, we want the old normal and this includes not fearing the confines of others and recalling the joy of inperson shopping, the curiosity of the unknown, people watching and the warmth that we naturally bring to each other.

We will review how retail shopping centres can evolve and change post a vaccine, what retailers can do to get people excited about returning to malls and the way leading retail companies



are viewing the long term as 'brick and mortar' converges with omni-channel strategies, and profit optimisation determines the physical store fleet in modern retail boardrooms.

There seems no question that continued near term scepticism regarding mall viability is likely and the tenant demand fog should persist into 2021. But the mall apocalypse theory is overdone. Given the ongoing retail evolution amid a backdrop of an over-retailed US with far too many centres, we see 2021 as being a year of internal focus for the premier Class-A malls. They will have to work to replenish footfall and ultimately get consumers excited about returning to centres while also engineering their own traffic to ensure their long term survival.

Primarily, we see US and international malls and shopping centres embarking on a strategy to reinvigorate footfall through densification and mixed-use (re)development. Post a reliable vaccine, we expect experiential and emerging entertainment concepts ramp openings as evidenced by Simon Property's equity investments in Pinstripe, Allied E-Sports, Parm and the Soho House which should drive customer traffic in addition to escape rooms, co-working and fitness centres.

A key example is Simon Property Group's Phipps Plaza's repositioning in Buckhead, Atlanta – which we believe represents a blue print of a mall of the (not so distant) future. Simon is repurposing anchor space as anchor mall tenants pay very little in per square foot rent or outright own the real estate. This historically worked because anchor tenants used to drive traffic but this is no longer the base case. Thus at Phipps Plaza, Simon repurposed one pad into a Nobu Hotel, restaurant and rooftop lounge, another into 350+ luxury apartments. It is entitled to a 13 story attached office complex which will fully reposition the asset, engineering its own footfall and driving renewed retailer demand for space within the best centres. This lays the foundation for rent growth.

Importantly, something that is not well appreciated by investors is the earnings accretion associated with going vertical. Since anchor tenants paid little rent you can take \$1m in earnings offline and with a reasonable development yield and prudent underwriting,

re-introduce \$12m to \$15m in earnings upon stabilisation. Simon is demonstrating a vision and appetite to fully reposition select centres. The key is that Simon has the financial flexibility and balance sheet to execute this strategy, while maintaining control and capturing the earnings accretion of going vertical.

Second, Class-A malls will benefit from funnelling as we envision the roughly 1,100 US malls today will wither to approximately 450 regional centres over the next few years – a trend that has vastly accelerated due to the covid pandemic. This thesis hinges upon retailers accelerating closures post-covid, targeting out-of-favour or less profitable stores in lower quality malls while concurrently vying for exposure to the top US mall destinations. Mall owners such as Simon, Taubman, Macerich plus the Class-A mall assets of Brookfield and Westfield are all in this position. These mall companies have updated modern centres in top markets with attractive demographics such as population density and household income. We see the remaining Class-A malls well positioned in a post-covid landscape with long term staying power, a more balanced supply and demand profile and view them to be well represented and positioned when the current retail evolution matures.

We conclude that the eulogy for malls and in-person shopping, dining, and entertainment is premature and misguided. US and international leading malls and even shopping centre strips will weather the disruption and emerge stronger with less competition. Retailers are utilising their physical store fleet as a key pillar of an emerging omni-channel sales approach to maximise profits. Physical stores attract shoppers but now also serve as distribution hubs where online orders are fulfilled, BOPIS (buy online pick-up in store), curbside 'grab and go', and online purchases can be returned or exchanged at the retail store. This is all evolving briskly due to the pandemic. Further, malls will (re)develop into destination-based centres with mixed-use and lifestyle brands focused on driving traffic with experiential, residential, office, and entertainment options. Of course, there will continue to be near term retail headwinds and pivots, but we see large scale closures and pain as largely a Class-B mall issue and risk.

How company actions on equality must change post-covid

Debbie Jones

When I started my job at Deutsche Bank in 2006, I was very green. I am referring to the inexperienced implication and not the ecofriendly one. Having just finished my MBA degree, I was concerned that the variable rate on my student loans (co-signed by my parents) seemed to perpetually move higher. The Great Recession would soon begin. It feels like a lifetime ago, but I do remember my computer screen consistently flashing like red Christmas tree lights. I probably should have been more concerned. Grown men were walking around the office in a curious dishevelled state. Had I lost my job, I would have lasted in New York for a few months before flying to my parent's home to hide in my childhood bedroom. For context, this room had been turned into a shrine of my marginal college soccer glory and failed high school volleyball effort.

I would have been miserable. Yet, having a safety net, I would have been one of the lucky ones.

Like most periods of financial instability, the Great Recession highlighted significant socioeconomic inequality. At that time, efforts to create a healthier economy focused on mortgage lending reform and financial sector regulation. This time, with covid, a spotlight shines on deeper and more problematic social issues. The pandemic also coincides with the elevation of the Black Lives Matter movement which has amplified our unnerving level of racial inequality.

Learnings from this should be part of the rebuilding conversation. Today, corporations should not ignore that they have the capability to drive change ahead of the next financial (and social) crisis.

The impact of inequality and the corporate response

The pandemic's impact provides tangible evidence for this generation that inequality can exacerbate and prolong a financial crisis. The statistics and estimates below show a fraction of the problem:

- Women are 19 per cent more likely to lose their job. Women represent more than half of the total job losses resulting from the pandemic, despite making up about two-fifths of the global labour force¹.
- Job losses during the pandemic are disproportionately impacting the poor.
- Learning loss is highest among black and Hispanic students. For grades K-12 in the US, learning loss is estimated to be ten per cent for white students compared with 40 per cent and 30 per cent for Black and Latino students, respectively².
- Blacks and other minorities have experienced the highest death rates from the pandemic.
 This has been attributed to black people (as well as other minorities) having higher representation among essential workers rather than in jobs where they could work from home. Additionally, they are more likely to live in multigenerational households and crowded housing conditions. Moreover, in the US, they have less access to healthcare.
 For context, the APM Research Lab claims there have been 108 deaths per 100,000 for Blacks double the rate for white Americans.

These growing concerns over racial disparity are a key reason why the "S" factor in ESG has been raised as a result of this pandemic.

¹ McKinsey & Co.

² McKinsey & Co.

Black & Indigenous Americans experience highest death tolls from covid-19



Source: APM Research Lab Note: All intervals are 14 days apart, except for 5/11-5/26, which is a 15-day period. 9/1 and 9/29 data has been interpolated. Pacific Islander data prior to 10/13 did not include Hawaii, as it was not releasing data; its inclusion resulted in an overall drop in the Pacific Islander rate, which begins a new series at 10/13.

Corporations cannot be expected to solve issues like inequality alone. But, they have levers to drive improvement. What can they do? In addition to setting targets for change, companies need to be accountable. The best way to do this is to link their goals and commitments to managerial and executive compensation. This includes (but is not limited to) initiatives to improve diversity & inclusion, pay parity, health & wellness, safety, and community outreach. Management teams willing to address relevant social issues will not only support a healthier economy, they will also create stronger and more resilient companies.

As companies take more responsibility for the world around them, it is likely their stocks will become more attractive to investors. That is because the number of purpose-driven investors is growing quickly. Inflows into sustainable retail funds have increased at a record setting pace in 2020. This comes after a record setting 2019. Moreover, amongst all actively managed retail funds, only branded ESG funds are growing, while non-ESG funds have seen outflows.

First and foremost, there is a problem with disclosure

In order for companies to improve on social metrics, they must first collect the relevant data and feedback from employees to create a baseline. Aggregated statistics should be disclosed and measurable targets introduced. Unfortunately, many publicly traded companies currently do not disclose social data, especially

ESG-related definitions of terms used in this report

	Actively Managed ESG US Equity Mutual Funds		Non ESG
	Sustainable	Exlusionary	NOILE20
Fund Category Definition	A fund "focusing on sustainability impact; or environmental, social, and governance, or ESG; factors in its prospectus or other regulatory filings."	A fund defined by Morningstar Direct as "employs exclusions" which exclude certain sectors, companies, or practices.	All other funds not classified as sustainable or exclusionary irrespective of their Sustainability Rating are classified as Non ESG.
AuM (as of 2Q20, \$bn)	89.5	150.6	6,391.8
Average Quarterly Performance from 4Q18 to 2Q20			
Quarterly Average S&P 500	2.3% 1.8%	1.4% 1.8%	1.7% 1.8%
Organic AuM Growth	6.2%	-0.7%	-5.0%

at the employee level. If it does exist, it can be difficult to find or compare.

To be fair, in certain European countries, restrictions on obtaining and processing of employee information make collection of the data difficult. In contrast, US regulators require most companies to track health and safety data and employee demographic statistics including those regarding diversity. Results are aggregated by industry and available on the US Bureau of Labor Statistics. Today, the SEC does not deem these metrics to be material to financial reporting so they often are not made available by the company.

Overall, the extent of reporting is poor. Indeed, almost three quarters of Russell 1000 companies choose not to disclose diversity data while 61 per cent do not publicly disclose gender data³. European companies may be slightly better in disclosure practices, but in the UK, the Financial Reporting Council states that only 14 per cent of FTSE 100 companies and 2 per cent of FTSE 250 companies have measurable ethnicity targets.

Let's move to some good news

Some companies are taking action. This is especially true of consumer facing firms attempting to address social inequality highlighted by both the pandemic and BLM. Many are providing diversity training and mentorship programs, emphasising community outreach efforts, changing hiring practices, and setting clear diversity and inclusion targets for employees and boards.

One example is Starbucks. After receiving backlash regarding its diversity, the coffee chain operator announced a goal of achieving black, indigenous and non-white representation of at least 30 per cent at all corporate levels, and at least 40 per cent at all retail and manufacturing levels by 2025. With these new targets comes a commitment by the company to link its broader goals to executive pay in order to increase accountability. Note that Starbucks reports one-hundred per cent pay parity.

Another example is Under Armour. In May this year, the apparel brand announced that in addition to an existing commitment to have 30

per cent of director and above positions filled by black, indigenous and non-white members, the company has now committed to a more specific target of filling 12 per cent of those roles with black talent by 2023. Those percentages also now apply to members of the Executive team. The company has also linked the enhanced goals to annual incentive pay for executives and some prior goals were already linked.

A third example is Lululemon. In October, it announced targeted diversity goals and revealed it will invest \$75m in equity well-being programs. It also expanded gender pay equity to full pay equity for all employees.

Companies will need to prove they are a strong social partner

A simple Google search will provide a plethora of data available prior to the pandemic that supports the benefits of diversity within an organisation. McKinsey showed in a study that companies in the bottom quartile for gender, ethnicity, and race are statistically less likely to achieve above-average financial returns than average companies. The bottom line is that potential for less diverse companies is constrained. Businesses that are diverse are likely to be better.

Coming out of covid, there will be additional hurdles for organisations that do not make an effort to address social inequality. In October, Yale's veteran endowment chief, David Swensen, told investment firms that they will be measured on progress towards increasing the diversity of their investment staff. The message was that they need to hire more women and minorities or they may be excluded from managing the university's money.

In an interview, Mr. Swenson said that he had previously held off on efforts to encourage more diversity at asset managers in part because of a belief that there was an insufficient pipeline of diverse candidates. The Black Lives Matter movement has changed his view and approach. He is not the first nor will he be the last person to come to this conclusion. Indeed, any company, regardless of industry, could soon find themselves in a position where a key customer, partner or stakeholder will make a similar demand.

The infrastructure for customers to place demands on their suppliers already exists. One would think increasing pressure on manufacturing companies to be sustainable is coming from sustainability-minded investors. In my experience, if you speak to companies about this, they will tell you that the real pressure is coming from customers. If environmental objectives are important to a consumer company, it becomes important to their supplier. As "S" objectives are becoming more important for consumer-facing companies, suppliers and partners will also be expected to show improvement.

Increasing representation takes time; it is best to start now

Among the 15+ financial analysts at the various research firms that cover paper and packaging stocks, I am the only female. It has been this way for most of my career. I do not often notice when I am the only women in the room at industry events and more. I did when I was younger and then again after I had a child. Again, I was one of the lucky ones. I had strong female (and male) mentors and supportive colleagues along the way.

I have noticed that organisations with a more inclusive and supporting culture, have made a commitment to their diversity efforts for some time. The companies also typically disclose social metrics annually and they set thresholds and targets for improvement.

During my career I have seen more women move into managerial and executive roles, but the pace has been slow. Diversity in the boardroom has moved at a faster pace. Unlike other social metrics, this number of women on the board is typically disclosed by publicly-traded companies. Thus, companies have been more accountable to show progress. That said, most firms, including paper and packaging companies, do not meet the 25-30 per cent threshold advocated for by investors, such as BlackRock.

Progress on the ethnic diversity of boards and management has been minimal. This is true of most sectors. Companies can make a consistent effort to hire employees that contribute to diversity, but in order to retain talent they need to create an inclusive organisation. This includes having a diverse set of leaders to the

top of the organisation. Attracting and fostering those leaders can take time.

Coming out of this financial recession, if a stakeholder asks a company to show its commitment to improving an element of social inequality, the management team will not be able to wait until the next financial crisis to show change. Organisations that are not inclusive are likely to experience negative outcomes. Moreover, penalties imposed by stakeholders could be more severe in three, five and ten years' time compared with what they are today. More resilient companies are aware of their social contribution and address deficiencies, which is also part of their role in making economies stronger.

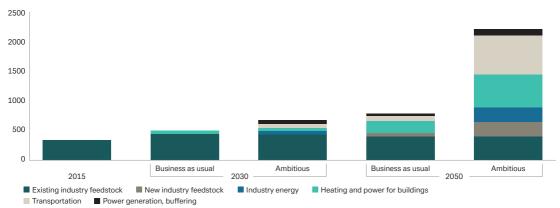
Corporations should not ignore that they have the capability to drive change ahead of the next financial (and social) crisis. >



"Clean hydrogen is the perfect alternative to fossil fuels". So said European Commission President von der Leyen in October. Many disagree, and no wonder given that green hydrogen is significantly more expensive than other renewable energy sources. Nonetheless, European leaders see the gas as a big part of the continent's energy transition. Indeed, the EU's Hydrogen Roadmap says that hydrogen may satisfy a quarter of total energy demand by 2050.

The buzz around hydrogen is two-fold. First, there are a lot of potential applications. Already, the technology is powering trains, a small number of cars and a myriad of other small projects. There are also many potential uses in heating, shipping, heavy industry, energy storage, and more. Second, as the source fuel is water, it is virtually unlimited, while green hydrogen production creates no harmful emissions.

Hydrogen could provide 24 per cent of total energy demand in the EU by 2050 (TWh)

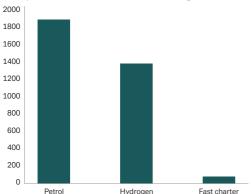


Source: Hydrogen roadmap Europe

So if hydrogen is so important, should governments simply shovel subsidies at it? That would be the wrong solution. If hydrogen is going to be part of the world's energy transition, there are a few things we need to accept, and a lot we must do beyond simple subsidies.

The key thing we need to accept with hydrogen is that because the technology is a long way behind other clean energy sources, we cannot aim for perfection. Instead, we have to look for what is good now, in order to hit the bigger goal later. Green hydrogen is currently expensive and inefficient. Today, there are only a handful of hydrogen projects that are commercially viable, and many in the industry believe green hydrogen will not become widely viable until at least 2030. Hence, the legitimate debate about whether subsidies should be better allocated to other climate change projects that are more developed and closer to being commercially viable.

Refuelling speed (km per 15 minutes of refuelling)



Source: Hydrogen roadmap Europe

behind that of electric vehicles. No government wants to fund a potential 'white elephant'.

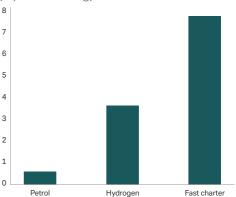
Demand, though, can be created in other ways. First, governments could require that the natural gas that flows through pipelines be blended with five per cent green hydrogen. Cue immediate demand. Furthermore, ports could mandate that the trucks that pass through it be zero-emission vehicles. They could start small and work their way up. For example, they could mandate that five per cent of trucks be zero emission by 2025 and half of trucks by 2030. Of course, those proportions can change depending on the progress of clean vehicle technology.

Now the action points. For the hydrogen economy to develop we need a better market for it. Currently, about two-thirds of hydrogen is 'captive'. It is produced in-house and is used for producing other products. And ninetenths of hydrogen demand comes from heavy industry, such as chemicals, refineries, and metal processing plants.

To move outside a 'captive' environment and create a deep market, we need two things: customer demand, and support of financial institutions.

First, demand. The obvious problem with creating demand is the 'chicken and egg' issue. No one will buy a hydrogen fuel cell car if there are no refuelling stations. Yet, the latter will not appear until there is enough of the former. Of course, governments could simply build the refuelling stations, but that is extremely risky given that hydrogen fuel cell vehicle technology is way

Investment costs per refuelling (€ per refuelling)



Source: Hydrogen roadmap Europe

Such a system would not only help establish a market but also encourage market-based solutions. If it turns out that electric trucks are better than the hydrogen fuel cell alternative, then so be it – money will not be wasted on subsidising a failed application.

The second call to action is that the industry needs support from financial institutions. On this topic, there is good news and bad news. The good news is that since the outbreak of covid, investors, lenders, and other financial stakeholders have invigorated the climate change agenda. Companies have taken notice and change is occurring faster now than it

has in previous years. The bad news is that large investors are relatively uneducated about hydrogen compared with other forms of renewable energy. Therefore, in order to push the hydrogen agenda, financial institutions must educate themselves.

For European investors with an ESG agenda, this means encouraging companies to make changes to climate policies that include a perspective on markets that could include hydrogen. Following the example above, it means encouraging ports and logistics companies to enter the market for hydrogen alternatives. This could include nudging them to issue sustainability-linked bonds that include higher interest payments if certain climate targets are not met. This would push them to require more zero-emission trucks, and thus promote the hydrogen economy.

Aside from creating a better market to assess the potential for hydrogen, there is no escaping the fact that government subsidies will be needed for hydrogen to cross the threshold of commercial viability. How this is done is important. If it is going to take a decade or two for green hydrogen to stand on its own two legs, then we need something to smooth the transition process and ensure sufficient applications are ready to go when green hydrogen is ready.

Thus, governments should consider allowing 'blue' hydrogen. This is hydrogen that creates carbon emissions during its production, but those emissions are captured and stored or reused. The benefit of this approach is that pricing in the blue hydrogen industry is already close to the level at which various projects can be commercially viable. Therefore, significant government subsidies are not necessary for operators to start using in a range of applications. When those applications are developed using blue hydrogen, the fuel can transition to green hydrogen when it is commercially viable. All the while, government support can be poured into green hydrogen research with a view to enabling a ten-year transition process.

There are some hurdles to this idea. Among them is that various countries have different policies on blue hydrogen. In Germany, the mood is very much against the underground storage of blue hydrogen emissions. Despite that, Germany is still keen on the applications and has

earmarked €9bn for green hydrogen projects. The Netherlands may be more supportive and has plans for a 'hydrogen valley' in the country's north. Another hurdle is EU agreement on how subsidies will work. Already, there has been disagreement between Brussels and the Netherlands over the latter's subsidy plans.

Subsidies in the right areas, though, are badly needed to encourage research into green hydrogen in order to reduce its cost. So too are harmonised regulations, whether they be in Europe, or between other regions and countries in the world. That will help with the efficient distribution of the €145bn of public support that is needed to scale up the EU's hydrogen sector by 2030, according to Hydrogen Europe, a trade body whose members include many of the continent's biggest energy companies.

In the end, there is a difficult but necessary choice for policymakers to make. If hydrogen really is to become a key part of the clean energy transition, they must accept that we should encourage the market-based use of blue hydrogen today despite the fact that it produces polluting by-products. If they do, then when green hydrogen becomes commercially viable over the next decade or two, it will immediately have many applications, which will only encourage exponential growth. Given hydrogen's unlimited abundance and ability to produce clean energy no matter what the weather, that is a tantalising prospect that should not be mismanaged.

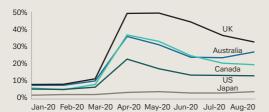
The steps required to promote digital currencies

Marion Laboure



The handling of cash has come under much scrutiny during the pandemic as various studies have shown how viruses can stick to money for days or weeks. Worldwide lockdowns and social distancing measures have only motivated the increased use of cards over cash. In the UK, the number of sellers using only digital payments this year jumped from eight per cent in February to 50 per cent in April. By August, the number of businesses with digital-only payment systems had stabilised at about 33 per cent.

Share of cashless businesses



Source: Square

While the pandemic has hastened the need for digital cash, more important is how it has highlighted how far behind many countries are in their progress for digital currencies. With countries, such as China and Sweden, leading the digital currency development, if other countries do not catch up, they may find that their companies are forced to adopt the digital currencies and policies of other countries as payment mediums.



This article outlines some of the developments that are necessary to help countries catch up. Among these are that Europe needs a joint and independent payment solution. In addition, central banks should collaborate with governments, large banks, and clearing systems on several initiatives. Furthermore, companies must design alternatives to credit cards and remove middle man fees. This piece holds up several models as examples.

Cash evolved

Central banks are slowly beginning to rethink the seventeenth-century cash model and accelerate the development of central bank digital currencies (CBDCs). But this is taking time, especially in advanced economies where interest rates are low and privacy is a major concern.

The great winners in this trend are the US card companies, such as Visa and Mastercard. They wield significant power to set prices, which is not great news for retailers or consumers. Moreover, considering today's tense global trade context, it could foster retaliation against US card companies.

For this reason, public and private institutions should cooperate to design alternatives to credit card payments, thereby removing middlemen fees. Good models, which we describe later, include payment platforms such as Swish, Alipay, and WeChat Pay.

In the long term, CBDCs will replace cash.

Central banks have been working for some time on ways to digitise cash, and the pandemic has accelerated the process. Over the past two years, central banks and governments have multiplied and sped up digital cash initiatives. A January 2020 survey by the Bank of International Settlements revealed that 80 per cent of central banks are developing a CBDC, and 10 per cent, mostly in emerging markets, are already running pilot tests.

The race is led by Sweden and China and both have started piloting e-currencies earlier this year. They have three factors in common: (i) Both countries have for many years embraced digital payments; (ii) cash payments in both nations were declining well before covid; and (iii) their governments play a pivotal role in promoting and supporting a digital payments infrastructure.

Although both countries share these common factors, they each have a distinct motivation for developing a CBDC. China explicitly set up its digital currency to improve financial inclusion. Sweden, which has a very high financial inclusion rate, is pursuing its CBDC simply as a natural next step; after all, Sweden already has one of the lowest cash payment rates in the world at about one per cent of GDP.

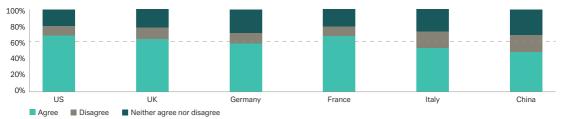
It is imperative that the US and Europe catch up. However, development in both is too slow. In the US, the Federal Reserve Bank of Boston and the Massachusetts Institute of Technology started a multiyear CBDC initiative in August this year. At first, this was helped by initial drafts of the covid stimulus bill which included plans to create digital dollar wallets to distribute social benefits. Sadly, those plans were later discarded.

In Europe, the ECB this year released a report on the possible issuance of a digital euro. But the ECB is still currently in an exploration phase and it does not plan to decide whether and how to launch a digital euro until at least mid-2021.

Leaders of advanced economies must overcome two key challenges if they want their populations to adopt a CBDC: low interest rates and cultural/privacy norms.

Most importantly, an environment of higher interest rates will help bring about the end of cash as a store of value. According to our survey, one-third of Americans and Europeans ranked cash as their favourite payment method, and more than half of people in developed countries believe that cash will always be around. This statement pertained to survey participants regardless of their country, gender, or age.

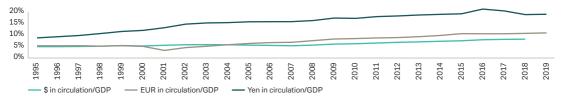
Cash will always be around – preferred method of payment by country



Source: Deutsche Bank dbDIG. Note: percentage of respondents who think that cash will always be around.

One way to look at the popularity of cash is by the value in circulation. Indeed, during the three months prior to May 2020, the increase of banknotes in circulation in the euro zone was €75bn. This is a new all-time high and exceeded the increase during the three months following the collapse of Lehman Brothers in late 2008.

Value of currencies in circulation (% GDP)



Digital currencies would be a help in today's environment of negative real interest rates in many advanced countries. That is because consumers currently have little incentive to deposit or save money. So, moving cash from under the mattress into a bank account is unlikely to happen (at scale) in the near term.

Similarly, with bank accounts paying low interest rates, a CBDC could help disintermediate the banking system. People might choose to hold their money directly at the central bank. Obviously, this would disrupt legacy bank franchises and impact financial stability. Credit card volumes, interchange fees, payment transaction fees, and deposit interest margins could be seriously affected. This would shake up the current two-tier system and create additional responsibilities for central banks in areas such as 'know your customer' issues, disputes, monitoring transaction levels, preventing money laundering, terrorism financing, and tax compliance.

As governments go about accelerating digital currency initiatives, they must be cognisant of cultural factors related to convenience, usage, and privacy. These will influence adoption rates. For example, the digital renminbi in China will allow regulatory authorities to see and trace every transaction (unlike cash transactions).

Perspectives on these two poles – privacy versus convenience – vary from culture to culture.
Our survey showed that citizens in advanced economies are more worried about privacy than

people in emerging economies. Only a tenth of Chinese survey participants reported concerns about anonymity and traceability, well below the Americans (22 per cent), British (21 per cent), French (29 per cent), Germans (42 per cent), and Italians (19 per cent).

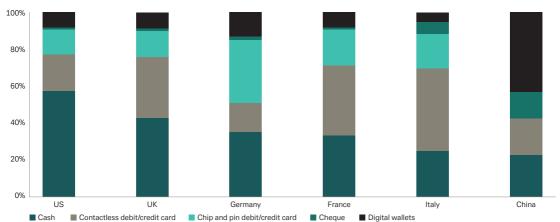
By contrast, most emerging economies do not face these challenges. The absence of these barriers explains why China is leading the world's transition toward CBDCs. Even if other countries do not want to go down some avenues of the Chinese route, they can learn from other factors, such as a higher penetration of mobile payments and younger demographics, as these will also act as catalysts for the advance of CBDCs.

For now, the priority of most governments must be on regional digital payment systems.

Considering the current geopolitical situation, it is important to strengthen the euro and maintain a position of sovereignty in data. To do this, we must have an independent European payment solution. At the moment, payments in eCommerce and point-of-sales are dominated by American providers although there is a strong emergence of Asian providers.

On a region-by-region basis, the penetration of the smartphone, the rollout of 5G technology, and the advance of digital ledger technology, or blockchain, could all disrupt traditional card payment systems. For example, in 2012, Sweden launched Swish, a mobile digital payment system. Europe must accelerate similar plans.





The idea of an independent European card solution is not new; Monet as a project, however, ten years ago did not succeed. The idea was to bypass the dominance of card providers, such as Visa and Mastercard, and to compete with the Chinese (Alipay and WeChat Pay) and huge US firms such as Google and Apple. This project was renamed the European Payments Initiative last summer and was expected to be completed in four years. The key challenge is to upgrade the acceptance and issuing layer to support a European solution. Once this is done, clearing and settling in euros or in a digital currency can be done.

In light of these regional technological disruptions, central banks, governments, large banks, and the clearing system must collaborate to set up digital payment initiatives that allow consumers to transfer funds from one bank account to another without relying on cards. Here, there are two scenarios each with a roughly equal chance of occurring. Either the market finds a solution itself or, if the market fails, it should be imposed by regulation.

Finally, an example, Swish enables private users to make digital payments instead of traditional

cash transactions. This mobile (smartphone) service connects users' phone numbers directly to their bank accounts thereby bypassing card providers. Swish users can transfer money in real time, within a few seconds after the confirmation of both parties.

Swish is free for private users, but companies and registered organisations must disburse between 1 and 3 kronor per received payment, plus a small yearly fee.

The Swish fee is equivalent to 0.096 - 0.29 euros per transaction, with fees being set by each bank to foster competition. By comparison, a card payment could cost 10 to 50 cents per transaction plus a commission of between 2% and 4% for independent retailers and e-commerce websites. In the end, this is the key benefit all of us will see from the digitisation of currencies. Disintermediation will lead to lower fees, quicker payments, and more information for those who need it. After centuries of the cash economy, we are finally ready to move into the next age of money.

Case Study: China vs. US Payment Initiatives

So far, Apple has failed to replicate the successful adoption rates of the Alipay platform. Only nine per cent of US consumers have adopted Apple Pay compared to 81 per cent of Chinese consumers who have used Alipay (by the end of 2019).

This occurred because Apple missed two strategic drivers: (i) create value for all parties, and (ii) monetise the ecosystem.

Apple Pay has focused solely on consumers even though switching from cards to smartphone payments offers consumers only marginal benefits. Banks and merchants have had little incentive to adopt the technology. Apple Pay has charged banks and issuers approximately 0.15 per cent per transaction, in addition to the regular credit card processing fees, which are between 1.15 per cent + \$0.05 and 3.15 per cent + \$0.10 per transaction. Apple has also relied on NFC technology, which is not mainstream in the US; only about 10 per cent of all point-of-sale terminals were NFC-enabled during Apple Pay's launch year.²

By comparison, Alipay charges merchants a fee of about 0.6 per cent per transaction, which is roughly that of credit card fees. For merchants, the implementation cost to accept Alipay in stores is extremely low because Alipay relies on QR codes (not NFC), which only require a camera and an internet connection.

Cultural factors also played a role in Alipay's rapid adoption rates. China jumped straight from cash to mobile payments. Thus, the nation bypassed the entrenched credit card culture found in many Western nations.

Finally, Alipay was able to monetise data by sharing it with many with third-party businesses. This could more readily occur because Chinese citizens typically have fewer concerns about privacy than people in Western cultures.

¹ From kick-off towards funding the EPI interim company 12 months are needed. This included agreeing on a vision, technical feasibility study, and legal documents for the interim company as well as funding. Then 3 additional years to replace cards and upgrade the merchant infrastructure. However, digital EPI cards, digital EPI wallet, EPI P2P are expected to be available much earlier.

² The implementation costs for new NFC-equipped point of sale terminals was between \$1,000 and \$2,000 when accounting for necessary software and training for employees.

A new approach to US monetary policy

Peter Hooper, Matthew Luzzetti

In the aftermath of the US election of 2020, Washington seems destined to face continuing political gridlock, though likely with a new Democratic administration in place. Yet one place that will clearly remain unfettered in adopting a substantive new approach to macro policy in the years ahead is the Federal Reserve. The need for a new approach to monetary policy is found in the struggles that the Fed and other major central banks have faced in recent decades to come even close to achieving their inflation objectives. Over the twelve years since the global financial crisis, inflation has averaged nearly one-half of a percentage point below the Federal Reserve's two per cent objective and even further below the ECB's target. While the covid crisis has only widened these gaps, it has not always been so. Prior to the 1980s, inflation ran far above desired levels for a time, especially in the US. Indeed, it was the Fed's success in quelling excessive inflation during the Volcker years that ultimately contributed to the current condition of insufficient price pressures.

Following a year-long review of its policy objectives and strategy, this summer the Fed announced fundamental changes in its approach to monetary policy aimed at resolving problems with how too-low inflation can limit monetary policy's effectiveness. This shift, which entails the Fed only responding to "shortfalls" on its employment objective and aiming for an overshoot of two per cent inflation for some time, has already pushed the Fed to adopt a more aggressive commitment to keeping rates at zero for an extended period. More importantly down the road, as the economy recovers from the covid shock, the Fed will be taking a new, less pre-emptive, approach to exiting from its current ultra-stimulative stance, a shift that we endorse.

In our view, this pivot is overall well placed to deliver better outcomes for the labour market and economy than the past several decades of overly-preemptive

policy. However, it also carries risks – some of which are unique to the post-covid world -- that will require deft management by the Fed in the coming years. The ECB and other major central banks currently engaged in their own policy introspection would therefore be wise to pay close heed to the Fed's experience with this new approach.

Why change?

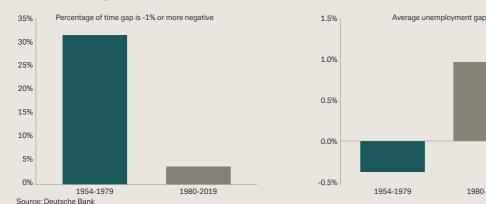
Before we describe just what the Fed's new exit approach will be, it is important to understand what was wrong with the previous one. Since the Great Inflation of the 1960s and 70s. the Fed has taken a decidedly pre-emptive approach to tightening monetary policy during economic expansions. That period led to lingering fears of incipient inflation just beyond the horizon, which have ingrained a policy bias in favour of avoiding tight labour markets. For example, since 1980, US unemployment has averaged more than three-quarters of a percentage point above the level believed to trigger inflation pressures, often referred to as the natural rate (see the following chart). Very tight labour markets (with unemployment more than one percentage point below the natural rate) have occurred less than five per cent of the time. It has not always been the case. Central bankers used to tolerate tighter labour markets: during the 1950s, 60s, and 70s, unemployment averaged nearly one-half of a percentage point below the natural rate, and labour markets were "very tight" nearly one-third of the time.

Unemployment has generally run above the natural rate since 1980



Source: BLS, CBO, Haver Analytics, Deutsche Bank

Incidence of tight labor markets down sharply since 1980



While excessive tightness in the labour market was a key factor leading to the Great Inflation, the shift in the direction of pre-emptive policy was overdone. As evidence, since the global financial crisis, US inflation has averaged one-half of a percentage point below the Fed's two per cent target. Central bank success in slaying inflation and stabilising inflation expectations at relatively low levels has also contributed to a flattening of the so-called Phillips curve, the relationship between unemployment and inflation. With inflation much less responsive to movements in unemployment than it was in the past, unemployment may be able to go significantly lower than previously thought.

Inflation has underperformed for most of the past 25 years



The Fed's policy review was also motivated by a second realisation - monetary policy has become increasingly constrained by the zero lower bound (ZLB) on interest rates. The relentless march lower in central bank policy rates has been due to two factors. First, the persistent inflation shortfall has bled into inflation expectations, reducing the Fed's scope to lower real rates. Second, the level of the policy rate that is neither stimulative nor contractionary – often referred to as r-star - has fallen dramatically over time, due to structural factors, such as demographics, and

market features, such as the safety premium of holding US treasury securities. The Fed's hope is that achieving higher inflation will help to better anchor inflation expectations at a higher level and give the Fed more scope to lower rates before being constrained by the ZLB.

1.0%

0.5%

0.0%

-0.5%

1980-2019

The Fed's new approach

The Fed's new approach to monetary policy was laid out in some detail in a speech (and a number of accompanying staff papers) that Chair Powell delivered at the Fed's Jackson Hole conference in late August.¹ It features three key modifications.

First, the Fed expanded its definition of the maximum level of employment it strives to achieve to being "broad based and inclusive." Implicitly, this refinement recognises, for example, that black unemployment runs well above overall unemployment. Concerns about these persistent inequalities, which featured prominently during meetings between Fed leadership and community stakeholders during the review, is a reason to push harder than in the past to reduce overall unemployment.

Second, the Fed said that going forward it will adjust policy only in response to "shortfalls" in employment from estimates of its maximum level. This is an explicit shift to an asymmetric employment objective: policy can remain easy so long as employment falls short of maximum, and there is no requirement to tighten policy simply because unemployment is low.

Third, the Fed is moving to a form of inflation averaging that will call for overshooting its two per cent objective to make up for past misses to the downside. While the Fed has said it will be flexible rather than formulaic in its approach, it has made it clear that it will not be tightening policy until it sees inflation on the way to overshooting two per cent, an important shift from the past when the "whites of the eyes" of inflation were all that was needed to tighten policy.

Bringing these three changes together, the Fed can be much less pre-emptive and more reactive in setting monetary policy, especially when exiting a very easy policy stance as the economy is recovering, as is currently the case following the covid crisis. In some sense, this marks a return to the pre-Volcker conduct of monetary policy at the Fed, but with the benefit of the lessons from that episode.

Benefits from the new approach

The potential benefits from this new approach are clear. If successful, the Fed should be able to simultaneously achieve better labour market

outcomes and provide more monetary policy space by engineering higher inflation, which will re-anchor inflation expectations around the two per cent objective.

A simple calculation is illustrative. If the Fed aimed to push the unemployment rate one percentage point lower than otherwise, this could create \$100bn of additional income.2 To offset this in terms of real income, inflation would have to rise by a bit more than half a percentage point. The typical Phillips curve relationship suggests that inflation rises initially by only about 0.1 percentage points in response to a one percentage point fall in unemployment.3 As such, a significant increase in the sensitivity of inflation to unemployment (i.e., a dramatic steepening of the Phillips curve) would be needed to eliminate the welfare benefits of this trade-off. This simple calculation is further supported by the empirical fact that wage growth remains far more sensitive to labour market outcomes. As such, we can be reasonably confident that a lower unemployment rate will, on balance, be associated with improved real incomes.

The gains of this approach are not constrained to the short-run. Indeed, our research has demonstrated that labour market slack and wage growth are important drivers of the medium-term cycle in productivity growth⁴. That is, by making labour scarcer and more expensive on average over time, the Fed can help to incentivise firms to invest in capital and more efficiently use inputs, ultimately to the benefit of longer-run growth prospects. These improvements could be quantitatively important: A sustained one percentage point drop in the unemployment rate could lift the trend growth of productivity by around a quarter to a half a percentage point.

Risks in the new approach

The preceding discussion is not to say this new approach is without downside. While a return to the high-inflation 1970s is unlikely, an unexpected rise in inflation cannot be ruled out. One lesson we have taken from the past decade is that the relationship between macroeconomic variables and inflation is fickle. Consequently,

See Powell, Jerome H. (August 27, 2020), "New economic challenges and the Fed's monetary policy review." At "Navigating the decade ahead: Implications for monetary policy", an economic policy symposium sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming.

² Pre-covid, a 1 percentage point fall in the unemployment rate would mean 1.5 million additional jobs. Using a median household income of about \$70,000, this translates into \$105bn of additional income. While it may be optimistic to assume all new jobs are paid the median income level, this calculation does not account for the fact that wage growth for all employees will rise as the labor market tightens.

³ Over the longer-run, this rises to only 0.2pp.

⁴ See Luzzetti, Matthew and Avik Chattopadhyay (October 10, 2018), "Chicken or the egg: Are firmer wages a precursor to a productivity pickup?" Deutsche Bank US Economic Perspectives.

we should not blindly assume that the conditions that have delivered too low inflation over the past decade will continue to do so over the next ten years. This point of caution is particularly warranted in the current environment, where key conditions have in fact changed. On the inflationary side, covid has required massive fiscal stimulus that has lifted debt levels and led to a sharp rise in the Fed's balance sheet, all at the time when the Fed has shifted its bias towards running a hotter economy that delivers higher inflation. On the disinflationary side, covid has introduced substantial slack into the economy and raised precautionary savings motives.

Fed officials are cognisant of these risks, noting that they will aim for only a "moderate" overshoot, one that is not large or permanent, to use Powell's words. The Chair also emphasised in his Jackson Hole speech that the commitment to accommodation is limited by "signs of unwanted increases in inflation or emergence of other risks that could impede the attainment of our goals."

What level of inflation would be unwanted? Our perception based on what the current FOMC leadership and membership has said is that they do not want to see inflation running persistently above 2.5 per cent. The fact that a flat Phillips curve requires even higher unemployment to bring inflation lower, prospects for nonlinearities in the Phillips curve that could bring unexpectedly-higher inflation, and difficulty understanding how inflation expectations are determined, all contribute to the Fed's aim to inflation well above two per cent.⁵

Wherever you stand on this inflation debate, the inability of monetary policy to fine-tune inflation suggests to us that central bankers should be humble in predicting inflation outcomes in normal economic conditions, let alone in a post-covid world.

Powell's Jackson Hole caveat also referred to "the emergence of other risks." These refer primarily to financial stability concerns, something the Chair has noted have been the consequence of periods of economic overheating in recent decades. This observation is consistent

with a secular stagnation view of the world, in which achieving maximum employment requires extraordinarily easy monetary policy, which can incentivise excessive risk taking. While we take the Fed at its word that it will depend primarily on macro-prudential policies to deal with these risks, the reality is that these tools are somewhat limited in the US. For this reason, the Fed has left financial stability concerns as an escape clause from achieving two per cent average inflation. While this is sensible, it is also unfortunate that the blunt tool of monetary policy could be used inefficiently to counteract financial stability risks.

For this framework review to be truly transformative, we therefore believe it requires two conditions. First, the Fed will have to be nimble in handling the trade-off of committing to dovish policy outcomes into the future to credibly commit to this policy shift versus being too slow to respond to a regime shift in the inflation process. Second, it could well require more active use of the Fed's current macroprudential tools, such as the countercyclical capital buffer, or an expansion of the central bank's toolkit.

Conclusion

In sum, the benefits of the Fed's new, less preemptive approach to exiting policy stimulus and greater acceptance of inflation overshoots will be potentially considerable in terms of gains in jobs, income, income distribution, and productivity growth. The change does carry risks, but those risks are manageable, so long as the Fed holds to moderate overshoots of inflation and strengthens the use of its macroprudential toolkit. Looking beyond the US, the ECB and Bank of Japan have struggled even more than the Fed in falling short of their inflation objectives in recent decades. Both would be well placed to follow the Fed's example. Indeed, neither is officially fettered by having employment as an objective in their mandate, and both appear to be open to inflation overshoots if not informal inflation averaging.6 The key challenge, of course is encouraging inflation to high enough levels to achieve some degree of overshoot of the inflation target. Any sense that an overshoot of inflation will be tolerated should be helpful.

⁵ See Hooper, Peter, Frederic Mishkin, and Amir Sufi (February 2019), "Prospects for inflation with a high-pressure economy." Presented at the 2019 US Monetary Policy Forum.

⁶ For the Sintra conference last year, Draghi wrote, "What matters for our policy calibration is our medium-term policy aim: an inflation rate below, but close to, 2%. That aim is symmetric, which means that, if we are to deliver that value of inflation in the medium term inflation has to be above that level at some time in the future." See https://www.ecb.europa.eu/press/key/date/2019/html/ecb.sp190618~ec4cd2443b.en.html. In September 2016, the BoJ announced a commitment to continue expanding the monetary base until actual inflation exceeds its target of 2%. See https://www.boj.or.jo/en/mopo/outline/qqe.htm/.



In a year that has been completely turned upside down by the covid outbreak, it is hard to look for silver linings. However, while the pandemic has taken a toll on certain industries, others have flourished; for instance, shopping online. From the heart of the developed West in a street in central London, to a suburb in Jakarta in emerging Asia, the sight of a courier carrying a package has become a daily occurrence in most neighbourhoods. But with the volume of deliveries now growing so quickly, we must implement a system to mitigate the effect of these deliveries on the environment. This piece details how we think such a system should be set up.

Even prior to the pandemic, there was an inevitable shift to online purchasing. Globally, individuals have become more tech-savvy and have discovered the convenience of the online channel. Meanwhile, sellers have become more equipped to venture into e-commerce. However, this structural shift has been brought forward by at least a year by the current pandemic. Categories that were previously slow to get on the bandwagon, such as online groceries, have also seen a step up as people across the world embraced the safety (limited human interaction) and convenience (delivered to your door) of online purchasing. This trend is here to stay, and the question then is how do we ensure this widening acceptance of online buying does not

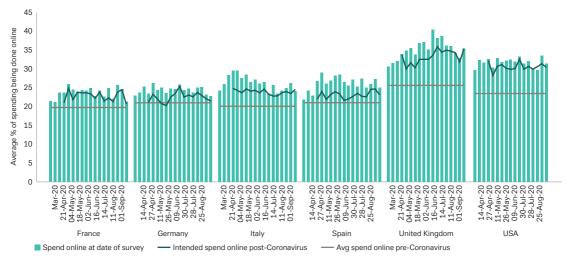
backfire on the planet in the form of unsustainable delivery levels?

Daily deliveries have become a norm for many of us

According to a proprietary survey carried out by Deutsche Bank's dbDIG Primary Research team, consumers all over are purchasing more than they ever have online and they are likely to keep spending at above-average levels going forward (Chart 1). In categories such as fashion, where online penetration has reached nearly 20% pre-pandemic, growth has reached double-digit rates for even the most mature players in the last two quarters.

In online grocery, where online penetration levels were previously around two per cent in developed markets, growth for some players have been in the triple digit range. Our recent survey also tells us that spending is on the upswing as consumers across the globe attempt to return to a more normal lifestyle (Chart 2). However, their spending in online channels does not appear to be abating looking at the third quarter results of several e-commerce players. As a result, the sight of a daily delivery person at your apartment doorstep or in the neighbourhood is a scenario that is unlikely to change; in fact it is only likely to be more prevalent.





Source: dbDIG Primary Research

Can we think of a better way of structuring this going forward?

For the longest time, there has been a race among several of the larger online players to stay ahead of the competition with the fastest delivery solutions. This was driven by Amazon's ambition to win customers with almost instant gratification and same-day or next day deliveries with Amazon Prime. It was an inevitable development in order to stay relevant in the eyes of the consumer. However, with the volume of deliveries expanding at such a rate, as consumers, we need to ask ourselves a question: Is this the best solution given the impact on the environment and cities?

According to a study done by the World Economic Forum, published in January 2020 prior to the covid outbreak, the demand for online purchasing would result in the number of delivery vehicles in the top 100 global cities increasing by 36 per cent until 2030. As a result, emissions from delivery traffic is expected to increase by 32 per cent with congestion rising by 21 per cent leading to 11 minutes of extra commuting time for passengers. On the flipside, some studies say online shopping is better for the environment compared with physical retail given, for instance, the emissions you save with fewer trips to the store or accounting for the optimised routes that the larger logistics companies can take. However,

there is a very real opportunity presenting itself at this point in time, where we can figure out a better way to ensure that, while online shopping continues to grow, the impact it has on the environment could be made less detrimental.

Funnily, it is the company that created the race to be the fastest deliverer in the market that has inadvertently also created a potential solution. Amazon offers rewards to customers who are willing to be patient and are willing to take the "No Rush" delivery solution in some markets. The reward could be a coupon for a future purchase or reward points. This gives Amazon the flexibility to structure its deliveries in the most cost-efficient manner. In other words, having the highest volumes clubbed together to be delivered to one location. The opportunity is to create a system where the vendors, e-commerce companies and their logistics partners, constantly communicate. Then, consumers can be incentivised to accept a delivery date where the efficiencies are greatest and the emissions are lowest. This would be a win-win for the entire industry.

Incentivise customers to order on a specific date?

How could this work? We imagine a world where, for non-essential items, deliveries are done on certain days for certain postcodes. We imagine a three-way system where the key

stakeholders in the environmental debate and the economic debate communicate, that is the government, e-commerce companies, and the logistics providers in this scenario. For instance, there should ideally be a platform which tracks emissions in cities and communicates on a real-time basis what the ideal dates should be for deliveries to certain postcodes from a municipality's perspective. This should be communicated to the logistics companies, who could also double check the anticipated volumes on certain dates. This could then be communicated to e-commerce companies which in real-time show consumers options for delivery.

There could be positive or negative incentives to ensure a specific date is chosen. For instance, if Friday is the best date for delivery to the borough of Southwark in London, a positive incentive is a reward for picking that date. If Thursday is the second best date, there could be a smaller reward. Grading rewards in such a way could ensure more volume is sent to a certain postcode in one go by each major delivery provider. We are aware that sometimes the last mile is done by city carriers, but the system we envision has all parties involved. A negative incentive could be charging

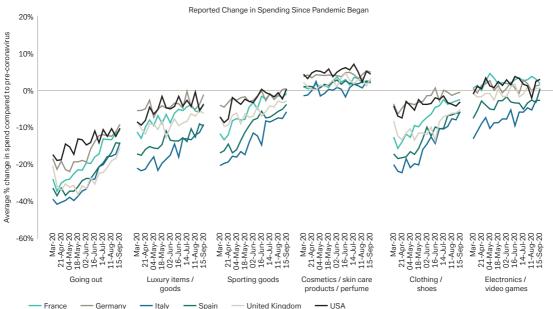
more for dates where the environmental impact is more detrimental, or there are lower volumes travelling to a particular postcode.

There could be a virtuous cycle in the making

This system makes economic, as well as environmental, sense. If logistics providers can optimise their deliveries (for example with fuller trucks travelling to a certain destination fewer times), it means lower costs which they can pass on to their e-commerce customers who, in turn, can pass it on to their end customers. Ideally, there is a virtuous cycle waiting to be unlocked.

This is by no means a perfect system, and there are certain items that are essential or required urgently which may mean bypassing this system. However, if the objective is to think of how the world could be structured given the new realities we face, we must deal with the inevitable step up in deliveries. We have learnt this year that our behaviour can be changed if the pros and cons are outlined well enough. The move away from instant gratification with our online purchases to a more rational delivery system for the benefit of the environment could be one change in behaviour that could be beneficial for all players involved.

Consumers have started to pick up spending again



Source: dbDIG Primary Research

How big companies must respond to localisation

Luke Templeman

It is easy to debate whether the most important trend that covid has thrust upon corporates is the shift towards online shopping, or the increased focus on ESG principles. But in years to come, we may look back on the pandemic and realise that the biggest effect it had on corporates was to force the shift to localisation.

The push back against globalisation is already happening. The supply chain chaos witnessed at the onset of the pandemic in March and April

Localisation is a hot topic in the US...



The trend towards localisation (and away from globalisation) will be particularly rough for large companies. That is because globalisation has gifted large companies benefits that have not accrued to smaller firms. They had the means to invest in facilities and relationships in countries with low cost labour. They also used their scale to establish international supply chains that reduced their costs of inputs and manufacturing.

The five forces working against large companies

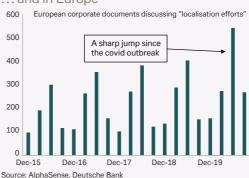
The pandemic turbocharged five deglobalisation forces that are now all working against large companies and in favour of small ones.

First, falling foreign investment. The drop in FDI this year will be brutal. The UN's World Investment Report predicts global FDI will fall

has caused companies to talk about reshoring operations to either their home countries or to the countries where they generate their sales.

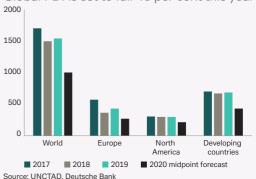
The effect has been the most acute in the US. The amplification of geopolitical tensions with China has sent companies scrambling to figure out how to manufacture at home. Indeed, the number of US corporate documents that discuss "localization efforts" has doubled this year. In Europe there is a similar but more muted effect.

... and in Europe



40 per cent to 2005 levels of below \$1tn. The following table shows that the damage will be wrought across the globe.

Global FDI is set to fall 40 per cent this year



That is a worry for large companies as they have depended upon foreign investment to boost their margins compared with small companies. To calculate by how much, we looked at companies in the five sectors that commonly have international supply chains with China. We then examined the difference in operating margins between the largest half of those companies and the smallest half. The following chart shows how, in periods of rising foreign investment, the margins of large companies tend to rise, and vice versa.

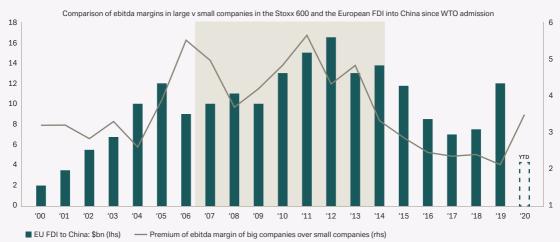
Large US companies rely on FDI to China to outperform smaller companies



Source: Factset, Haver Analytics, Deutsche Bank

In Europe, large companies appear to be similarly dependent on FDI into China. While these charts show how important investment into China has been for large companies there is a bigger point. In this specific analysis, China can be thought of as a proxy for globalisation itself.

Large European companies have been similarly dependent on FDI to China to drive their profits relative to small companies



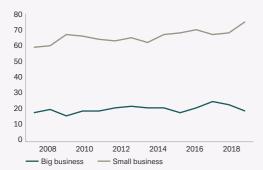
Source: Factset, Haver Analytics, Deutsche Bank

¹ Consumer discretionary, consumer staples, industrials, technology, communications

The second factor working against big companies is the rise in Chinese wages. Indeed, this is related to the growth in FDI in that the significant investment, combined with changing demographics in China, mean the labour force is highly utilised. Indeed, manufacturing wages in China are now almost \$1,000 per month, higher than rates in Malaysia and Thailand. As Chinese demography continues to decrease the working-age population, corporates should expect wage growth to continue.

The third deglobalisation factor is the sudden escalation in ESG investors. These issues disproportionately affect large companies and these are the ones that are generally the focus of attention by large investors with the clout to demand change. Large companies are also far more likely to find

Proportion of Americans who have a "great deal" or "quite a lot of confidence in big and small business"



Source: AlphaSense, Deutsche Bank

The steps large companies must consider

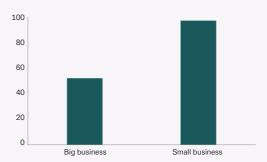
The holy grail for large companies is to localise an appropriate level of their operations without losing the benefits of a globalised brand and the scale the gives them an advantage on costs. As they consider the long and expensive process of doing this, small companies have a natural advantage. They are already more likely to use local sources for their goods and labour. They are also nimble enough, and order and hire in small enough quantities, that they can find alternative suppliers more easily than can large corporates. Compounding these 'reverse scale' advantages is that they come right at the time that customer sentiment has turned against big companies.

themselves in the media for ESG-related reasons.

The fourth force is politics. Across many countries, both rich and poor, leaders are being elected on promises to reinvigorate domestic economies. During the campaign for the US presidency this year, both candidates talked a big game on stopping US companies from "shipping American jobs overseas". Corporate tax is also in the crosshairs of politics and supranational organisations, most notably, the OECD.

The fifth force pushing back against large companies is customers themselves. Indeed, before the pandemic, customers were already rebelling against large companies. That trend has only accelerated since the pandemic outbreak.

Proportion of people who have a positive image of large and small business



Source: AlphaSense, Deutsche Bank

Large companies must therefore adjust their businesses or risk conceding market share to small firms. Yet, only 35 per cent of companies have begun to implement plans to localise their business². That is because the costs of localisation are significant. Committing to them will take courage and incentives may have to change as recouping the costs may take longer than the tenure of many chief executives.

To start, localisation does not necessarily mean bringing all manufacturing back to a firm's home country. For European companies it may mean moving production from outside to inside the EU. Regardless, localisation invariably means that the average company will have to assume more responsibility for its manufacturing and labour, rather than relying on outsourcing as it takes a long time for countries to develop local companies capable of handling large outsourced requirements.

As large companies localise production, they have access to some benefits that smaller companies do not. First and foremost, there are growing political benefits and tax incentives for insourcing production. Just one example is South Korea, which offers incentives to domestic companies that restore operations. Many other cities, states, and countries will agree bespoke deals with companies to incentivise them.

The next step large companies must take is to leverage their advantage in technology. Big firms are far better placed to provide ESG-conscious customers with transparency information about their products. Blockchains are beginning to be used to prove the provenance of inputs. Just one example is JBS, the world's largest meatpack which will now use blockchain throughout its supply chain to prove the provenance of its cattle. Furthermore, large companies are harnessing big data in ways that smaller companies cannot.

Acquisition strategies are another potential response of large companies. This has been used to good effect in the beverage sector. Consider that Diageo owns over two dozen Scotch whisky labels. Many of these maintain a level of independence over their operations and have different styles, branding, target demographics, and fans. While this strategy can be successful, there is a fine line to walk as some customers actively seek out brands that are truly independent.

Some companies, therefore, will have no choice but to compete with the idea of independence. That involves giving customers the 'feeling' that they experience when they purchase from an independent or small company. This feeling comes in several forms and can be that they have benefited the local community, that they have done business with 'ordinary' people, or that by consuming a certain product, they have had an experience that is unusual and different from those in their peer group.

In the search for the unusual, large companies are better placed to deliver customisation. The last mass attempt at this strategy occurred in the 1990s (just one example being customised jeans). The experiment failed in part due to customers being unwilling to wait for their products to be manufactured.

Today that has changed. Customers are more willing to wait for certain types of products to be delivered. The rise of internet retail has proved that customers are now willing to wait to receive their products. In the case of fashion, they are now willing to buy items without trying them on. That opens up the opportunity for companies to experiment with widespread customisation once more. This is something that large companies may be better placed to do relative to smaller firms as they can afford the significant additional inventory costs which allows a reduced manufacturing time relative to small companies that may have to order components.

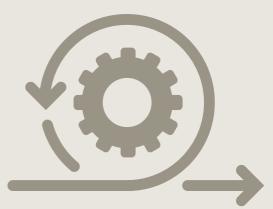
Finally, how local is local?

The most difficult question for corporates is "What is localisation?" Does it mean a company basing its operations in a nearby country, in its home country, or in its home state/county/département etc? Or will the trend of multi-localism take off with companies establishing 'bases' in various places and sourcing their inputs as such?

The answers to these questions depend, in large part, on customers and shareholders. Although it can be difficult to predict how the thoughts of these two groups will evolve, what seems certain is that the forces driving localisation will continue to gather momentum. That is because those forces come from both angles: top-down politics, and bottom-up customer preferences. Given these trends are only at the beginning of unwinding decades of globalisation, it appears this process has a long way to go. That means that although the cost of localisation may be great, particularly for large companies, the cost of not doing may be greater still.



As labour markets adapt, so too should fiscal policy



Brett Ryan, Justin Weidner

Much of the credit for the US economic recovery this year should go to the two main pillars of the fiscal policy response, namely, the Payroll Protection Program (PPP) and a sizeable expansion of federal unemployment insurance (UI) that supplemented existing state income support mechanisms. Combined with massive monetary support, these innovations were critical.

The next round of policy should be somewhat different. As the continued spread of covid precludes a swift return to pre-virus patterns of economic activity, and potentially accelerates structural changes toward greater automation, the optimal policy mix should shift away from payroll subsidies and towards more income support and job retraining. Longer term, policymakers should consider automating such income support measures, allowing for a quicker response to future exogenous shocks.

To understand why fiscal policy must change, consider the original purpose of the PPP. It was implemented at the beginning of the pandemic and was a novel, appropriate policy response to a short-lived and sharp downturn caused by an exogenous shock. It aimed to prevent small business closures and preserve worker-firm matches so that when labour demand rebounded, a swifter recovery would follow. The program harnessed the ability of the banking system to swiftly distribute about 5.2m fully-forgivable loans totalling \$525bn to small businesses. Loan forgiveness was then tied to firms' willingness to maintain pre-covid payroll levels. The SBA says the program has supported 51m jobs to date.

Just as the PPP was designed to "preserve the status quo", so too were federal income support measures. These have totalled a little over \$550bn, with the majority of that (\$460bn) allocated to UI through three separate programs that supplemented existing state benefit schemes. This included the \$600 per week supplement that went to those receiving regular state UI benefits that typically average around \$360 per week. Some of these programs have expired; others will cease at year end.

As Congress considers the next phase of fiscal support, there is a greater need to subsidise demand relative to maintaining pre-virus levels and patterns of supply. Indeed, a New York Federal Reserve report noted that the introduction of payroll subsidies alone is preferred over a cost-equivalent UI expansion as it preserves highly-productive matches during containment, thus enabling a faster recovery of productivity and output following the lifting of containment measures.¹ When considered jointly, however, a cost-equivalent optimal mix allocates only 20 percent of the budget to payroll subsidies and 80 percent to UI expansion.

Early evidence seems to support the New York Fed report. Since late April, the Census Bureau has conducted a weekly survey of small businesses to measure the impact of the covid pandemic on activity.² Going back to early August, the survey has consistently indicated that about two-fifths of businesses have not rehired any paid employees who had been furloughed or laid off after March 13. That may be because under

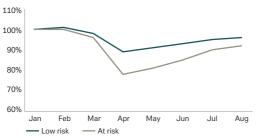
¹ Birinci, Karahan, Mercan, See "Labor Market Policies during an Epidemic", Federal Reserve Bank of New York Staff Reports, no. 943, October 2020.

² https://portal.census.gov/pulse/data/

ten per cent of firms view the ability to rehire employees as a factor affecting their operating capacity. In short, as the economy has reopened, businesses have adapted and rescaled their operations.

With this in mind, the continuation of PPP in its current form risks misallocating future fiscal capital by exacerbating labour mismatches, especially in an environment where market forces

Monthly US employment by automation risk level in 2020



Source: Philadelphia Federal Reserve

So as the pandemic drags on, it will be more effective to provide income support to those who may not be rehired than to try to preserve employee-employer relationships that could become obsolete because of structural changes in the economy.

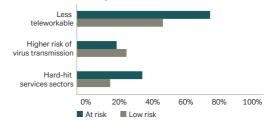
To be sure, the PPP has shown some evidence of success and there is still a roll for subsidising small business employers who will inevitably continue to face virus-related financial distress. However, a more flexible and targeted policy designed to ease the transition to a "new normal" operating environment makes more sense as various industries are being affected by the pandemic in very different ways. Consider that a Chicago Fed survey in May indicated that almost nine out of ten restaurants would face financial distress after three months of "moderate" social distancing and party size limits of 50. That compares with just four in ten manufacturing businesses.4

Thus, a policy of tying 60 per cent of loan forgiveness to payroll expenses makes no sense. It is a "one-size-fits-all" approach that will fail to prevent business closures in some industries, while simultaneously stymying a needed reallocation of labour resources to different sectors.

may be accelerating the underlying structural shifts in labour demand.

Automation has played a role in the shift in labour demand. Recent research from the Philadelphia Federal Reserve suggests the pandemic has likely accelerated the process of automation by putting staff in automatable jobs out of work, although it is too early to conclude whether the shift is permanent.³

Shares of jobs with high virus transmission risk, low teleworkability, or in hard-hit sectors. January 2020



Source: Philadelphia Federal Reserve

Many of the rapid innovations and adaptations to the ways in which we live and work could be permanent. The design of fiscal policy must therefore also adapt. Maybe the broadest lesson of the current crisis is the necessity of automating income support measures. These should be pre-defined and automatically triggered by sharp rises in the unemployment rate. Such as system will be a useful innovation to combat future exogenous shocks.

At the same-time, the withdrawal of fiscal support should also be based on labour market outcomes rather than arbitrary dates. This approach may hold several advantages. First, it would avoid protracted political disputes that can impede a swift and efficient fiscal response to an economic shock. Second, designing outcome-based formulas to the withdrawal of income support based on labour market benchmarks would avoid arbitrary "fiscal cliffs" that have hampered economic recoveries in the past.

With these recommendations in place, automation will go a long way to reducing the uncertainty of future fiscal reactions. That will truncate the risk that an exogenous shock might turn into a more protracted economic downturn.

³ Ding, Molina "Forced automation by COVID-19? Early trends from Current Population Survey Data", Federal Reserve Bank of Philadelphia, September 2020.
⁴ Lavelle, Walstrum "Results from a Special Chicago Fed Survey of Business Conditions on the Impact of Covid-19", May 26, 2020.



For years, big organisations have struggled with a quest for 'agility' and a 'growth mindset'. The challenges of covid have shown that there are tangible ways to achieve these.

Yesterday's big businesses were built for scale and inertia. They overwhelmed their target markets with innate momentum and monolithic product solutions. They had a command-and-control hierarchy (like industrial machines). Covid has shown that the organisations of tomorrow must be far more malleable. They must be more like complex living organisms.¹

This year, we have seen the most forward-thinking companies look beyond the initial hurdle of covid-19 to view 2020 as an opportunity to codify positive leaps forward that were too difficult beforehand. In other words, the current crisis can serve as a catalyst for sustained (not just momentary) improvement in business performance, that is if companies embrace the necessary change.

How have the best companies responded in 2020? The top ten identifiable traits

 An obvious adoption and embracing of technology – This should be evident to everyone who had to pivot to work-fromhome, communicate via phone or video, and strategise about how to replace in-person gatherings with digital interactions. But companies have also accelerated salesforce, procurement, and supply chain automation (in part to achieve social distancing), invested in e-commerce (to follow the customer/consumer), and enhanced their use of big data (in an attempt to maximise their understanding of a rapidly changing landscape). The potential capabilities to be unleashed by such investments are just beginning to be discovered.

- A rapid flattening of culture and eradication of pretense – Alongside leaps in communication and information flow enabled by technology, companies have dropped their historical guards in terms of entitled hierarchies and dress-codes. Gone are platitudes elevating theoretical respect for "work-life balance" and into their place has seeped an implicit acceptance of a kind of "work-life integration" before not envisioned. The aim is to complete the job. How it is done is less relevant.
- 3. A prioritisation of networked teams over top-down/siloed functions As cultural hierarchies have broken down, so too have implicit organisational hierarchies. In responding to the crisis, many organisations (whether formally or informally) assembled crossfunctional, rapid-response teams, accountable for managing a key aspect of the crisis, or indeed for coordinating crisis management across all such teams. Often, such responses took shape outside of, or in parallel to, the traditional organisational structure. Effectively,

¹ See https://www.mckinsey.com/business-functions/organization/our-insights/the-five-trademarks-of-agile-organizations

this became a network of focused, functional teams that replaced traditional departmental functions and lines of command.²

- 4. An embracing of openness and a diversity of perspective in problem-solving As such teams have come together, the value of open dialogue and a vibrant marketplace of diverse ideas has been revealed and encouraged within top-performing organisations.³ Teams are more consistently effective and team output more robust when it is the product of vigorous debate that is well-coordinated by a team leader.
- 5. A blurring/expansion of traditional roles and responsibilities – With new teams created and employees newly empowered to contribute to solutions, many organisations have rejuvenated morale. A spirit of shared purpose has blurred traditional role definitions and provided many employees with expanded responsibilities not easily achieved under normal conditions.
- 6. A speeding-up of decision-making, with increased delegation Given newly empowered employees and high-functioning teams, there has been a natural tendency for decisions to be made more quickly, and closer to the question at hand rather than via traditional deference to approval from the top. With speed critical, management teams have welcomed if not actively empowered such decision-making.
- 7. A greater willingness to accept mistakes (assuming they are learned from quickly) – Out of the same need for speed has come an implicit increase in the tolerance for teams and individuals to take intelligent, calculated risks, even if they result in error. Mistakes made in such endeavours (assuming that their size and cost are limited, and that they are identified quickly) become viewed as learning experiences, rather than something to avoid at all costs.
- A desire for local versus global solutions The move to team-based solution structures has also migrated the centre of decision-making

- closer to the actual problem. Even when such individual team outputs are aggregated into larger solutions, the resulting output often contains built-in flexibility compared with what might have been the case in a monolithic, more homogenised top-down solution.
- 9. A willingness also to "look outside" and partner strategically In seeking the answers to difficult questions, many organisations have recognised the need to look externally for new strategic partners. This may be for supplemental productions and distribution, technology and data insight, marketing, research, or otherwise. This willingness to shun historical "build-it-here" biases facilitates quicker solutions and, in many cases, unlocks solutions that might not be available through internal company needs alone.
- 10. A focus on executional excellence against what really drives value (consumer/customer/ supplier needs), and an implicit eradication of "waste" - Implicit in all of the above is a laser-like focus on what truly matters, with impatience for distraction and wasted effort. Mistakes will be made, but they will also be learned from and reversed quickly. As a result, the organisation can take a bottom-up approach to idea generation and iterative learning, rather than be hostage to a top-down mandate. This may appear "uncontrolled" but such organisational execution is inherently innovative and likely to emerge more productive and profitable without the traditional bureaucratic layers.

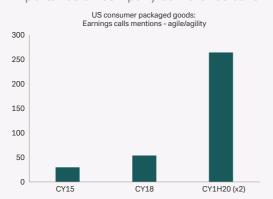
The result of all this is that, this year, many companies have unintentionally discovered the value of "agility". They have become flatter, faster organisations made up of networked teams and empowered individuals. Even though they are working remotely, the best companies are now working together better than they were before. Now that they are empowered and closer to the problems and solutions, they now have a "growth mindset" a concept consultants and academics have been preaching (and many organisations chasing) for years.⁴

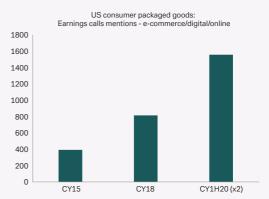
² See also https://www.mckinsey.com/business-functions/organization/our-insights/to-weather-a-crisis-build-a-network-of-teams

³ Increased appreciation for deep-rooted societal injustices and systematic racism (and business leaders'/employees' desire and determination to be part of the solution) has likely only put a further spotlight on this imperative.

See also https://www.mckinsey.com/business-functions/organization/our-insights/the-organization-blog/unleashing-sustainable-speed-in-a-post-covid-world-rethink-ways-of-working, https://www.mckinsey.com/business-functions/organization/our-insights/the-organization-blog/unleashing-sustainable-speed-in-a-post-covid-world-reimagine-structure, https://www.mckinsey.com/business-functions/organization/our-insights/the-organization-blog/unleashing-sustainable-speed-in-a-post-covid-world-reshape-talent

Over the last several years (and especially in 2020 YTD), we have seen themes of speed and agility (as well as, relatedly, digital commerce and technology) rapidly increase in importance on company conference calls





Note: Includes CHD, CL, CLX, CPB, EL, ENR, GIS, HSY, K, KHC, KMB, KO, MDLZ, MKC, NWL, PEP, PG, SJM, SPB Source: Deutsche Bank analysis

There are other factors that have contributed to the need for speed and agility. These include a more efficient flow of capital to new, disruptive entrepreneurs. All place newfound demands on speed, and view an organisation as a complex adaptive system (rather than a fixed machine).

In my specialist sector of US Consumer Packaged Goods, we have already seen certain companies take great strides with their responsiveness this year. Perhaps the best example is Procter & Gamble (P&G), a company with roots dating back nearly 180 years. Within P&G, the change that many have only realised during the pandemic, was already underway before. In fact over the past decade, it has taken steps to simplify its organisation, deploy resources closer to its customers, and improve overall efficiency and effectiveness. It has also increased its presence in digital and e-commerce and incorporated real-time data. Perhaps most importantly, the company began to place higher value on localised "autonomy, accountability, agility and speed."

In 2018, for example, P&G changed its evaluation metrics to focus more on the performance of local teams. It also put more compensation at risk by widening the payout range to deliver greater upside or downside associated with over

or underperformance. At the same time, the company began making a more concerted effort to supplement internal talent and capabilities with external hiring and outside partnerships. The goal was to create an organisation and culture that offered employees "bigger jobs" and a greater impact on the rewards that can come with it.

The results in subsequent years have been remarkable. Over the last nine quarters, P&G's organic growth has averaged around six per cent and the company has consistently gained market share. That compares with organic growth of around two per cent and net market share losses over the preceding five years. Meanwhile, gross and operating margins have each improved over 150 basis points.

This performance does not guarantee future success but we remain encouraged by the company's mantra that it must lead "constructive disruption." In other words, rather than becoming victimised by the rapid change taking place, P&G has embraced, if not led, such change into the future. The classic line of change being an opportunity not a threat has been realised. To us, there is no clearer articulation of a "growth mindset" within the Consumer Packaged Goods market.⁵

In arriving at its current structure and organisational priorities, P&G spent time studying the cultural imperatives of many Silicon Valley companies—understanding their more iterative R&D processes, their ability to rapidly scale new ideas across the organisation, and their willingness to elevate behaviours and ideas, arguably so as to overcome "The Innovator's Dilemma," as originally identified by Clayton Christensen in 1997.

Notably, P&G's experiences have also directly informed recent organisational and cultural changes at another large consumer company: Coca-Cola. This company's vocabulary is somewhat different than P&G's, yet its purpose and priorities are similar. As with P&G, Coca-Cola had been taking steps coming into 2020 to transition itself from a geographically-centric firm, one with a "20th century" siloed hierarchy. It aimed to adopt a flatter, "networked" and team-based model empowered by technology, data, and evolving consumer insights.

Over the last two years, undercurrents of change were evident. For example, the company revamped its corporate dress code (ties no longer required). It decreased its reliance on tried and true products and adopted a greater willingness to experiment. This meant learning how to "fail fast, fail cheap" and eliminate non-productive "zombie" offerings in the portfolio.

Covid acted as a full catalyst. This year, the company has accelerated its move to what it has called a "faster future" which culminated in a full restructuring. Ultimately, while there are risks in any restructuring reorganisation, Coca Cola has a strong ability to exit the current pandemic as a stronger company.

Cementing the muscle memory

The experience of Coca Cola is not unique this year. In large part on the back of the ten strategic imperatives outlined above, covid has forced many organisations to accelerate the process of knocking down historical boundaries. These boundaries might be cultural, organisational, or geographic and by breaking through traditional silos they have streamlined internal decision-making and improved information-flow and business processes.

The key lesson has been the importance of enduring flexibility – the need to continually adjust. There is no one finite "structure" or endstate in this "agile" paradigm. However, only those organisations that institutionalise recent learnings and experiences will truly realise lasting benefits.

The change experienced this year may well have been spurred by outsized forces but they prove what is possible. The fact that some companies have been able to undergo such fundamental change out of necessity should embolden others to follow suit. There is no better time than now for businesses to embrace this challenge, and see it through.

For years, big organisations have struggled with a quest for 'agility' and a 'growth mindset'. The challenges of covid have shown that there are tangible ways to achieve these.



Climate neutrality: Are we ready for an honest discussion?

Eric Heymanr

If you asked me which issue European Commission President Ursula von der Leyen has pushed most since her taking office in summer 2019, my answer would be clear: a climate-neutral EU by 2050. Other topics, such as international trade conflicts, the unresolved refugee crisis, high government indebtedness in many EU countries, the fact that extremist parties are gaining ground or Brexit, have somehow been pushed aside. Even the pandemic seems to fall behind, despite the fact that the EU member states have agreed for the first time ever to issue common bonds to deal with the crisis. Remember that a significant share of the capital is to go to climate-friendly projects.

The climate neutrality goal is set out in the European Green Deal of December 2019 which says it will "transform the EU" with tools to ensure "nobody is left behind". Sounds excellent. And I, for one, am in favour of policymakers setting ambitious goals. However, there is a difference between "ambitious" and "realistic". With regards to the Green Deal, it is impossible to make the EU completely climate neutral in only 30 years if we rely only on the technologies that are both available and politically acceptable today (see our piece "The tough choice to create a hydrogen economy"). Claiming that climate neutrality is or can become a growth strategy is an instance of wishful thinking. Perhaps I have been analysing the typical patterns of national and international climate policy for too long by now; after all, it is a common occurrence that ambitious climate protection goals are widely missed.

The next one to three years will be decisive. We will see whether we, as a society, are ready for an honest democratic discussion about climate neutrality. We will have to deal with inconvenient questions and inconvenient truths. But if this discussion does not take place, climate neutrality will remain a topic for fine speeches and promises – and nothing will be said, much less done, that could hurt anybody.

Inconvenient truths – inconvenient questions

Let's face an inconvenient truth. Global energy demand is likely to rise further in the coming years, driven mainly by population growth (the world's population grows by 80m people each year) and the desire for prosperity. Fossil fuels will remain the most important source of energy for now. Even according to the latest Sustainable Development Scenario of the International Energy Agency, which includes considerably more climate protection measures than those foreseen in the Paris Agreement, the share of fossil fuels in primary energy demand will still amount to 56 per cent in 2040. This is already a massive reduction from today's 80 per cent. The SDS expects renewable energy sources to have a share of 35 per cent in total energy consumption; the biggest increases are expected in wind and solar power. In short, even in this optimistic scenario, renewable energies are far away from being the main pillar of global energy supply.

Being serious about openness to (new) technologies

One important question for the coming years is: Are we serious about being open to different (new) technological solutions? In the first place, we will have to recognise that all sources of energy come with specific risks and specific advantages and disadvantages in terms of economic efficiency, reliability, capability, and climate and environmental sustainability. These are the traditional corners of the energy policy triangle. There is also the question of whether certain technologies are politically acceptable.

Turning to economics, we will need to talk honestly about the costs of specific sources of energy. Fossil fuels are highly reliable and powerful, but their external costs are not adequately internalised yet. Carbon prices will need to be significantly higher than the political consensus currently allows. In the case of wind power and photovoltaics, pure electricity

generation costs (which are declining) are only part of the picture. As weather-dependent sources of energy gain importance, investments in networks and power storage capacities will need to be increased. Cost-intensive network interventions will take place more frequently. Moreover, other suppliers (for example gas-fired power plants) will see their capacity utilisation decline if more electricity from wind and solar farms is fed into the grid. These system-wide costs of an increased reliance on renewable energies are often neglected.

Nuclear energy is a good example for difficulties in terms of political acceptance. Countries such as Germany are aiming to exit from nuclear energy, which comes with very low specific carbon emissions, simply because people/politics do not accept it as a source of power. In contrast, nuclear energy remains an (important) pillar of the electricity sector in France, the US, China or Japan. These countries are also actively researching next-generation nuclear power options. The different stance on nuclear energy in Germany and France is probably one reason why the Green Deal does not mention nuclear energy at all.

Carbon capture storage and usage systems are quite unpopular in the EU, too. According to the IEA, however, we will need them for decarbonisation. The Green Deal also supports investments in this technology, even though CCS, at least, meets with considerable political resistance in countries such as Germany.

I would like to point out that these statements should not be taken as support for or rejection of any of these technologies. If, however, people are actually afraid that large parts of the planet may become uninhabitable due to climate change and if they really want to achieve climate neutrality, they should not reject technologies right away that may help to reach this goal, even if they involve certain risks. An honest debate about climate neutrality will need to include non-ideological risk assessments of different sources of energy and also an analysis of potential measures to adapt to climate change.

A certain degree of eco-dictatorship will be necessary

The impact of the current climate policy on people's everyday lives is still quite abstract and acceptable for many households. Climate policy

comes in the form of higher taxes and fees on energy, which make heating and mobility more expensive. Some countries have set minimum energy efficiency standards for buildings or similar rules in other areas. However, climate policy does not determine our lives. We take key consumption decisions, for example whether we travel at all, how much we travel and which means of transport we use, whether we live in a large house or a small apartment and how we heat our homes, how many electronic devices we have and how intensely we use them or how much meat and exotic fruit we eat. These decisions tend to be made on the basis of our income, not on climate considerations.

If we really want to achieve climate neutrality, we need to change our behaviour in all these areas of life. This is simply because there are no adequate cost-effective technologies yet to allow us to maintain our living standards in a carbon-neutral way. That means that carbon prices will have to rise considerably in order to nudge people to change their behaviour. Another (or perhaps supplementary) option is to tighten regulatory law considerably. I know that "ecodictatorship" is a nasty word. But we may have to ask ourselves the question whether and to what extent we may be willing to accept some kind of eco-dictatorship (in the form of regulatory law) in order to move towards climate neutrality. Here is an example: What should we do if property owners do not want to turn their houses into zero-emission buildings; if they do not have the financial means to do so; if doing so is not possible for technical reasons or if the related investments do not pay off?

Loss of competitiveness or restrictions to free trade

If the EU moves considerably more quickly towards climate neutrality than the rest of the world, carbon prices in the EU will rise more rapidly, too. This will reduce the competitiveness of energy-intensive companies in the EU. Are we willing to pay that price? Probably not – remember, nobody is to be left behind. So will we subsidise these companies to enable them to use expensive, but climate-friendly technology? This option will be difficult to implement in the long run due to budget constraints. An honest discussion will have to deal with the truth that each euro spent on climate protection is no longer available for expenses on education, research, public health, digital infrastructure,

domestic and external security, tax cuts or higher pensions. The EU commission plans to introduce a carbon border adjustment system to address the competition problem. Do we really believe that doing so will not make the affected countries introduce countermeasures? Are we really willing to give up the advantages of free trade in favour of climate protection?

Massive political resistance ahead

Nobody is to be left behind on the path towards climate neutrality. This statement from the Green Deal probably amounts to trying to square the circle. A major turnaround in climate policy will certainly produce losers among both households and corporates. In addition, prosperity and employment are likely to suffer considerably. If

this was not the case, climate protection would be an easy undertaking. These developments will obviously have an impact on the political landscape, both at the national and EU level. Some parties will find arguments against strict climate protection policies if the latter lead to a significant increase in energy prices or to restrictions of personal freedom or ownership rights. And let us not fool ourselves: these parties will find voter support. At the EU level, there will be major conflicts about distribution, which may contribute to (further) divisions within the bloc. Are we ready to deal with this polarisation? Or will we adjust our climate policy ambitions if we find that (overly) ambitious climate policies are not acceptable to a majority of the people?

We will have to deal with inconvenient questions and inconvenient truths. But if this discussion does not take place, climate neutrality will remain a topic for fine speeches and promises – and nothing will be said, much less done, that could hurt anybody. >

The case for post-covid rural investment

Karthik Nagalingam



In the early days of the pandemic cities were viewed in some ways as incubators to the virus. This is similar to many global pandemics of the past, from the Plague of Athens to the Bubonic to the more recent SARS epidemic. Those with the ability, fled to more suburban and rural areas. While much has been written regarding the decline of cities, this is very likely overdone, however there is a degree of urban flight and the pandemic could offer governments the ability to invest in rural communities in a way that many have not in quite some time.

The flight to rural areas can already be seen this year. Indeed, in the four week period ending 20 September, suburban home sales were up 13.6 per cent annually, 13 per cent in rural areas, and 8.8 per cent in urban areas . The momentum appears to be with US consumers seeking out more spacious living arrangements.

A mass exodus, though, is not likely to happen in the wake of the pandemic, but one trend that may reverse is the drop in prime-age workers in rural communities, specifically those aged 25 to 54. The trend has been in place for some years. In the US, the number of employed residents in that key age group has risen in urban communities as well as in suburban ones

and smaller urban areas since 2000, but overall employment declined in rural counties across all age groups in that same time frame. Therefore, rural areas now have a smaller share of the nation's prime working age cohort, which is also the prime consumption cohort, at the expense of urban and suburban regions.

A trend towards cities has also been simply assumed in other developed economies. A European Parliament study showed that a third of regions in Europe were expected to experience a decline in population in the 2008 to 2030 period.¹

The declining number of rural residents is one thing, but the imperative for governments to invest in rural areas comes from the relative state of disadvantage that those in the country experience. A European study found that rural regions did not just have fewer residents, but that GDP per capita was also lower than it was in the city. In addition, the 2016 State of European Cities report² found that the highest GDP and employment growth were generated by higher income cities. This is an effect of cities experiencing a larger influx of relatively young citizens as well as more migrants looking for opportunities – both educational and vocational.

Median household income in the US by county type: 2013-2017



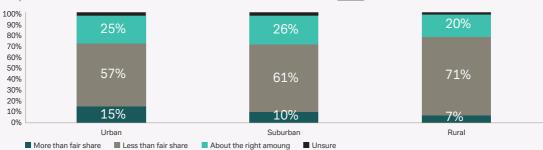
Source: US Census Bureau, Deutsche Bank

This stronger population growth in urban regions leads directly into elemental economic theory which proffers that an increasing labour force can be a driving factor in economic growth. This is before even accounting for the possible benefits of human capital investment (education), which is usually higher in cities as there is more opportunity for training. These factors combine to create a gap in average

incomes between urban and rural areas.

Across the board, a majority of Americans think there should be more investment in rural areas. A Pew Research study in the US during 2018 found that 71 per cent of rural residents, 61 per cent of suburban and 57 per cent of those in urban communities believed that rural areas received less than their fair share of federal funding.

¹ Redfin.com



Proportion of US residents that think rural areas receive of federal dollars

Source: Pew Research Center, Deutsche Bank

The pandemic and the ensuing technological and societal shifts presents the opportunity to jumpstart investment and economic opportunity in rural areas and possibly even reverse the trend of young workers moving away.

What can governments do to close the development and economic gaps between rural and suburban areas?

1. Invest, particularly in novel industries.

Some industries that used to operate in rural areas have either been transferred to other regions or aged out entirely. Post-covid, governments have the opportunity to assess their ability to subsidise and award tax credits to foster new industries of these regions.

Clean technology can be key to this endeavour and, here, there are two perspectives. First, it can offset jobs loses in the fossil fuel industry that are receiving less investment. Second, it can offer a new avenue of energy access to rural communities. While this has already started in some regions of the US, there is scope to do more. In November 2017, the Department of Agriculture announced \$2.5bn of investment in rural electric infrastructure improvements. Those funds were aimed at helping communities in Minnesota, Missouri, North Dakota, and elsewhere in the northern Midwest improve distribution systems, create new renewable energy projects, and develop smart grids³.

Government subsidies will be particularly helpful as companies look to reshore operations postpandemic. As they do, policymakers should consider using federal grants and offer tax

credits to encourage companies to prioritise rural communities, possibly even those where those industries originally operated. Many companies are already considering reshoring options. Early in the pandemic, many developed countries saw the pain that came from global supply chains breaking down, especially those which handled vital medical equipment such as masks, protective equipment, and even parts to ventilators. In the years ahead, governments will need to mandate or incentivise companies, who had outsourced those manufacturing jobs for cheaper labour, to keep those jobs on domestic soil. Placing those jobs in rural areas will not only help current residents but could also encourage flows of new workers into those communities.

2. Leverage the new remote learning capabilities of the pandemic to service rural areas.

For any demographic shift to rural areas to be sustainable, educational infrastructure is key. While, eventually, a population shift toward rural communities will necessitate large investment in physical schools and vocational training centres, in the short term governments can leverage the massive step forward that has been made in remote services to offer upskilling to an underserved rural community. If governments invest in the human capital of these regions and companies are more open to remote working setups, then there is the potential for rural output to rise even if there is no large shift in demographics in to these communities.

Some initial discussion on this topic has taken place this year. During the most recent stimulus talks in the US, members of both parties were in agreement on adding a tax credit to parents

whose children were set up in remote learning systems as a way to offset family expenses. This could be a model for driving future incentives in rural areas. The government could offer companies tax credits to tailor e-learning and other training programs to more rural regions. This could be doubly advantageous as it will allow those in rural areas to upskill as well as possibly opening up newly-trained labour, potentially at lower wages, compared with an urban/suburban alternative.

3. Telemedicine must be leveraged into rural communities

Governments and private institutions must expand telemedical coverage throughout rural communities. By doing so, it will help close the service gap between rural and urban communities which will help close the health and wealth gaps. Indeed, the Center for Disease Control says that rural residents are more likely than their urban counterparts to die prematurely from the five leading causes of death in the US – heart disease, cancer, unintentional injury, chronic lower respiratory disease, and strokes. While telehealth was given high marks when surveyed in the past⁴ there was less uptake until the pandemic itself when users and providers both grew more comfortable out of necessity.

We must seize the opportunity granted by the pandemic. Telehealth services can help eliminate challenges such as distance to providers for specialised care, which is a large hindrance to those with chronic conditions. Of course, if there is a sustained demographic shift into rural communities over the long term, there will need to be a significant investment in healthcare infrastructure. But in the short to medium term, the practices that have been developed and deployed in remote medical services since the outbreak of covid can go a long way.

To achieve this, the US, and other countries without a federal healthcare system, will have to incentivise companies through grants and again likely tax breaks to build on service in these ways. Countries with a nationalised healthcare service must invest more at a government level to provide outreach into more rural regions.

4. Rebuild or enhance infrastructure, including vital digital connectivity

Digital connectivity is among the biggest differentiators between urban and rural areas and governments must invest in national broadband services. Indeed, they should think about running parts of the industry like the utilities that they are in the 21st century. A dbDIG survey found that the percentage of the rural population in the US with expertise on key technology skills – such as web-design and programming – is only a quarter of their urban counterparts (36 per cent urban versus 9 per cent rural averaged between two skills).

Even on more basic skills of computer applications rural people have half the skill base of those in urban areas (44 per cent versus 23 per cent). Without investment, the lack of access to quality broadband, and therefore the ability to hone digital skills, will continue to drive a meaningful gap in economic productivity for rural areas.

While governments may be opposed to rolling out large broadband project to rural community without understanding what the pickup rate will be, there is also the more general option of Low Earth Orbit broadband service (see our piece "The fundamental right to connectivity"). These are at a nascent stage commercially, but they have the potential to provide more affordable high speed internet to rural areas and can possible be repurposed or adjusted slightly if it is found that the use is not there.

If these initiatives work in terms of raising rural wages and economic output as well as driving population flow back to these areas, governments on all levels will have new problems. In particular, they will have to work out how to properly invest in the massive amount of new infrastructure, including essentials such as schools, hospitals and highways. But this will be a good problem to have as it will indicate a growing rural economy. Furthermore, if the investment is done properly, it will create a feedback loop effect that will cause further investment, more jobs, and a rejuvenation of rural areas.

http://www.europarl.europa.eu/RegData/etudes/IDAN/2017/614646/EPRS_IDA(201 7)614646_EN.pdf

https://ec.europa.eu/eurostat/statisticsexplained/index.php/Statistics_on_rural_areas_in_the_EU

https://www.nrdc.org/sites/default/files/rural-clean-energy-report.pdf

https://pubmed.ncbi.nlm.nih.gov/30112737/

How to avoid zombie cities

Luke Templeman



Pity the city planner. Post-covid, they have to make cities less dense to stop to spread of disease, but more dense to reduce carbon emissions. They must provide socially-distanced travel, yet funnel people onto public transport to reduce traffic. And that must all be planned around people who will have staggered work schedules, but more flexibility to work from home.

In short, the pandemic has thrown down an impossible challenge for those charged with rebuilding our cities. But rebuild we must. The pandemic has caused permanent change to our urban habits: shops are closing, offices are downsizing, people are leaving for the country.

Of course, the world's great cities have survived many disease outbreaks over the millennia, but this one is different. It is the first in which internet technology has allowed many people to live and work while disconnecting themselves from face-to-face society. Support for the unemployed is also far more generous than it was during previous pandemics. In short, many people do not need cities.

Hence, the serious risk of zombie cities, where large urban areas lead a lifeless or one-dimensional existence. It is no coincidence that during the height of the lockdowns in March and April, many city centres were described as "post-apocalyptic".

There are some early signs of how cities will reinvigorate themselves post-covid. In London, there are plans for start-up hubs, affordable workplaces, and more spaces for community. Initial estimates are that a fifth of office tenants will be new ones by 2025, and that there will be a 50 per cent increase in weekend and evening visitors.

Plans like this are nowhere near enough. Radical solutions are needed and they require channelling the past.

Consider the most interesting parts of the world's most interesting cities. They are frequently not the great planned spaces. Rather, they are the areas with small laneways inside which nestle a random assortment of shops, apartments, and local restaurants. These are the intriguing, quirky places where many different people have lived, shopped, worked, and died. These are areas that tell personal stories of life and love. They are the settings of great novels. They create a mythology around great cities. And they attract generation after generation of those

who wish to add their own fingerprint to the millions of others.

These areas are the product of 'bottom up' city building. In other words, they are places that the inhabitants have designed and built themselves, largely free of the planning constraints of local councils or central government. They are the basis of almost all great historical cities and this is exactly what our cities need in a post-covid age.

Here is how it can work today. First, we have to accept that many city retail stores and offices will be vacated. The government should, sadly, let these tenants leave. As they do, all these premises should be zoned residential with very few rules attached. But here is the catch. In these areas, the government should remove the exclusion on people running businesses from their homes. In essence, we should let people loose on our urban areas.

Cue an influx of people. Cue the artists, craftspeople, and anyone who wants to live where they work on their passion. Indeed, the City of London has already said that unused office space may be used as artists' residencies or galleries. Old office and retail stores will never be the same. We know that people are very good at redesigning random spaces into homes and, with these reforms in place, vacated city centres will quickly become magnets for the sort of people who ignite urban culture. To assist further, local councils can pedestrianise many city centre streets to facilitate community. This will not be hard – the pedestrianisation movement is already in full swing across many European cities.

As people move in, their entrepreneurial spirit will take hold. In turn, the necessary cultural and economic infrastructure will organically pop up to support the new usage patterns. Voila! City centre jobs reappear, just in a different form. As they do, city centres will begin to rediscover the vibrancy that made them so popular to begin with. Tourists will finally return.

Some call this radical urbanism, others call it mixed-use urbanism, still others may call it a 'Wild West' occupation of cities. Regardless, there are many benefits to 'bottom up' planning. First, it is honest and admits that we simply do not know how our cities will be used post-covid. Rather than try to predict the impossible, we should allow people to create their own spaces in small iterations as they respond to the evolution

of the post-covid world.

This style of 'bottom up' planning is a dramatic reversal of post-war city planning norms. This period has been dominated by legacy-seeking politicians who have obsessed over massive projects built by developers with no cultural or economic stake in the final result. These have not worked as intended. Even in the mid-1980s, renowned British architect Norman Foster argued that mass housing was simply "about political statistics" and had been naively promoted as "a stereotype into which everyone fits".

To illustrate, consider the large public, or formerly public, housing estates in London, Paris, Berlin, and many others. Built post-war, many are today foreboding and run down. It is clear the occupiers (whether owners or renters) feel little responsibility for them. This is not their fault. Rather, responsibility lies with the politicians and architects who prioritised their 'grand vision' over the many varied desires and lifestyles of the end users. Too much planned beauty has led to a loss of spontaneity and freedom. What is left is a desolate feeling of anonymity and monotony.

Beyond removing the 'enforced culture' aspect of 'top-down' planning, there are other benefits to allowing individuals to create their own 'bottom up' post-covid cities. For starters, it will cushion the boom-bust cycles of real estate and finance. That is because society will reduce its reliance on the large property developers who can be financially dependent on a single large project. In addition, the burden on government will also be reduced. 'Bottom up' city building reduces bureaucracy, requires fewer feasibility studies and multi-year master plans, and shrinks urban planning departments. Negotiations with the necessary developers will also be shortened and simplified in line with the smaller projects on which they will work.

'Bottom up' planning will also help reduce inequality. Consider the way residential areas currently operate where people are forbidden from running face-to-face businesses from their homes. Yet, the rise of the service and internet economy means that people can start many other types of businesses from their homes. This is not a dynamic that was envisioned when the original no-business rules were introduced and it gives a massive advantage to knowledge workers (who tend to be better off) at the

expense of people who want to run a face-toface business. Empowering the latter group to be entrepreneurial will open up a new realm of economic possibilities.

Some may argue that face-to-face businesses can never exist in converted office buildings without ground-floor frontage. But consider Japan, where spatial necessity drove people to establish bars, shops, and more within plain, multi-level buildings. At first, the concept seems bizarre to foreigners but they quickly adapt.

The biggest obstacle to 'bottom up' planning will be residents worried about change (otherwise known as nimbys). But change has been needed for some time and the pandemic is the perfect opportunity for central government to take charge and overhaul our approach to city building. In any case, as most of these reforms are most relevant to city centres, the impact on existing residents will be lower than it would be in suburban areas. And as city centres are already developed, these new rules will not dissuade developers from building appropriate high rise accommodation in cities, nor deny industry of necessary space.

Of course, there should be common sense rules. You would not allow, for example, a mortuary or heavy industry in a mixed-use area. Also, these ideas are best suited to city centres and similar areas that are already urbanised to avoid replicating the poverty stricken areas of cities, such as Johannesburg and Rio de Janeiro. But the rules should be refreshingly light compared with those that exist today.

We must avoid the mistakes made after we rebuilt from the Second World War. People should not be told how to live in a space thumped down upon them by politicians with a re-election agenda. Rather, they should be empowered to determine the future of their urban area. They should be allowed to create homes, start businesses, and fashion their environment in their own individual style.

The price is homogeneity – some will detest the development of a 'hodgepodge city'. But iterative, individualised improvements have created the most interesting parts of the world's most interesting cities. The things some deem 'ugly' today are frequently those that people realise over time have agglomerated into a city of immense cultural value.

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Konzept discusses the thematic issues that affect the world from a financial, social, and environmental point of view. In this edition, we present our ideas for how the world should rebuild from the covid-19 pandemic. In particular, we discuss potential solutions to the intergenerational gap, and other macro-economic policies to rebuild inclusive economies. We also look at the various options available to ensure green investment is a post-covid priority. Furthermore, we seek to address how companies should adapt to ensure they improve on various ESG measures. Together with our other articles, we hope this issue of Konzept will help address the enormous challenges currently faced by our society.