

# Macroeconomic scenarios for London's economy post COVID-19

## Scenarios approach, storylines and first projections to 2030

GLA Economics

15 September 2020

# Disclaimer

- This second output of the macroeconomic scenarios project updates the first output which was published on 31<sup>st</sup> July 2020. It is an interim output, which the Greater London Authority is making available for the benefit of external stakeholders in tackling the COVID-19 crisis.
- The scenarios:
  - are not meant to represent optimal policy responses, but different futures against which policy responses could be tested.
  - are not forecasts – they do not represent what we think will happen but what could plausibly happen under alternative assumptions about the future.
  - are inevitably subjective, although they have been informed by discussions with internal and external analysts and economists.
- We will continue to track actual data in order to review our assessment of the likelihood of alternative scenario outcomes.

# Executive Summary (1)

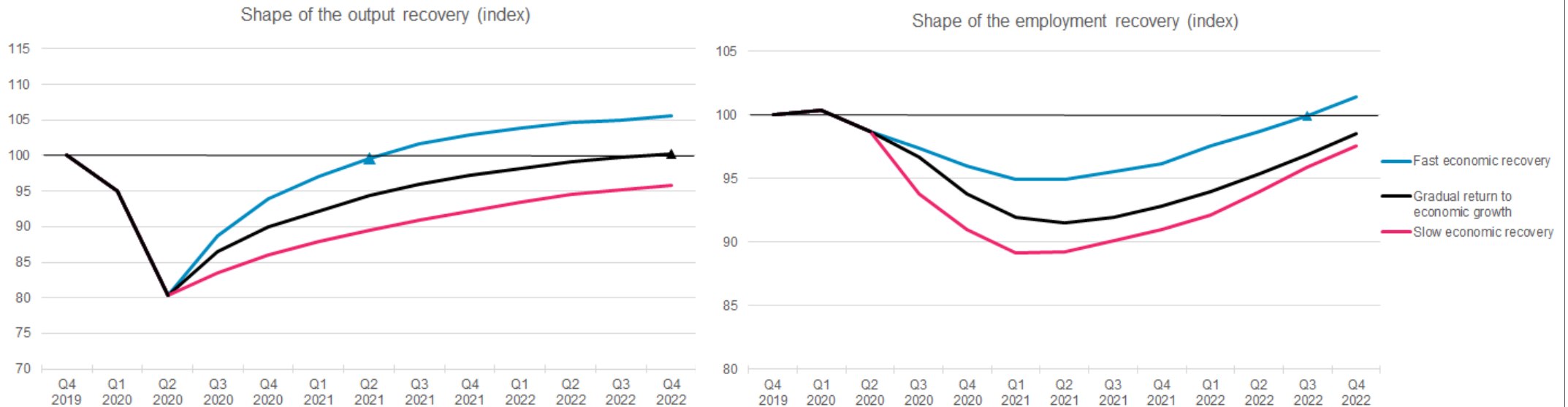
- This slide pack is the second output of the GLA Economics-led project on developing economic scenarios for London's economy post COVID-19.
- It updates the first output published on 31<sup>st</sup> August by including new medium-term projections and a first set of projections to 2030 for GVA only.
- The main aim of the project was to develop a set of high-level macroeconomic scenarios in order to inform the development of recovery strategies in London, reflecting unprecedented uncertainty on the economic outlook.
- The scenarios are envisaged as a common framework/set of assumptions to inform more detailed GLA analyses.

# Executive Summary (2)

- The primary scenario dimensions include Effectiveness/nature of public health response and Effectiveness/impact of economic support measures.
- Other scenario dimensions include: Brexit and migration; International economic context; Technology and innovation; Financial climate; Political economy; Economic Geography and GHG emissions.
- Three core scenarios have been developed: Scenario 1 - Fast economic recovery (an optimistic but plausible scenario); Scenario 2 - Gradual return to economic and Scenario 3 - Slow economic recovery. A fourth, stress-test scenario is also been developed as a variant of Scenario 3, where post 2022 the economy converges to a lower rate of growth.
- In terms of Brexit, Scenarios 1 and 2 assume that a Canada-style FTA with the EU enters into force in January 2021.
- Scenario enumeration in the long-term currently relies on top-down convergence assumptions. It is envisaged that these will also be complemented by modelling based on the London input-output tool.

# Executive Summary (3)

- In the Gradual return to economic growth scenario, the recovery follows a trajectory where the pace of the output recovery is markedly slower than the pace of the initial fall and the economy takes around three years to reach pre-crisis levels.
- Employment recovery is projected to be significantly slower, so that pre-crisis employment levels in the same scenario are not reached before 2023.



# Outline

1. [Project aims and background](#)
2. [Overview of scenarios approach](#)
3. [Scenarios assumptions](#)
4. [Medium-term scenario projections](#)
5. [Long-term scenario projections](#)

# Outline

1. Project aims and background
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# Project aims

- to develop a set of high-level macroeconomic scenarios that reflect unprecedented uncertainty in order to inform the development of recovery strategies in London
- to help ensure that different analyses undertaken by the GLA on COVID-19 impacts and recovery can be informed by a common framework
- to identify key parameters/scenario markers to track outturn vs. scenario assumptions and adjust our views on the relative likelihood of alternative futures

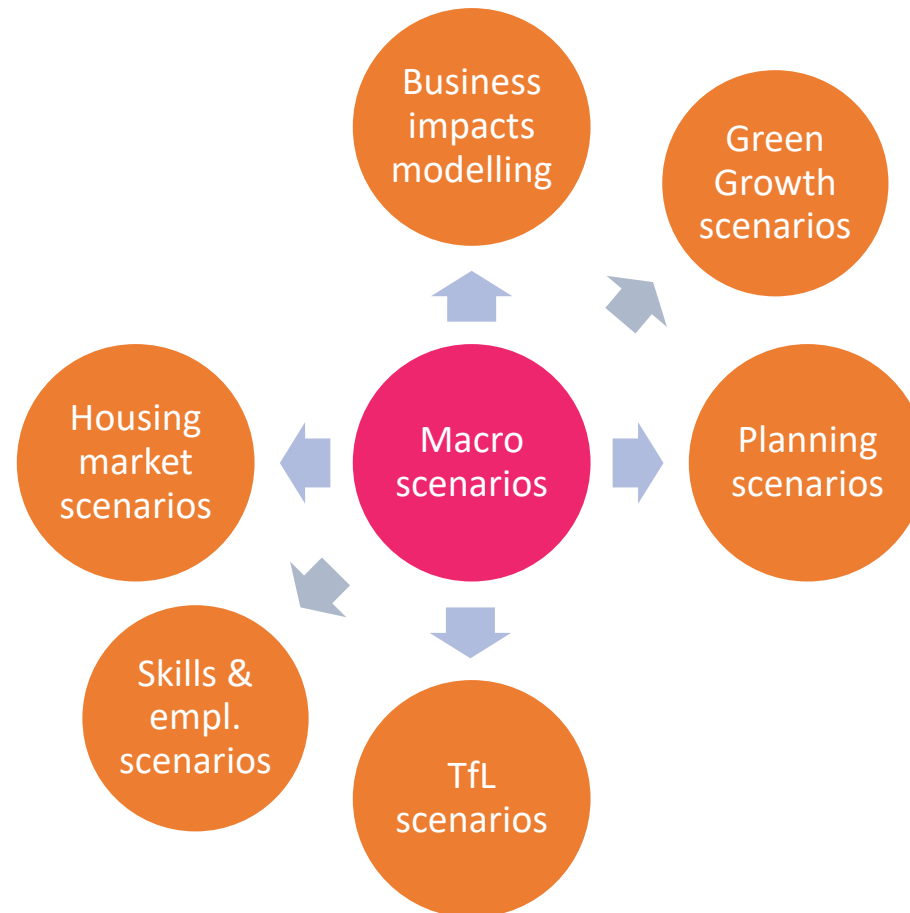




# What do we mean by scenarios?

***Possible alternative futures for London's economy (all the way to 2030) reflecting self-consistent assumptions about public health and economic impacts of COVID-19 as well as other long-term economic and policy drivers***

# A common framework can help ensure consistency and read-across between different GLA analyses



# Outline

1. Introduction to macroeconomic scenarios
- 2. Overview of scenarios approach**
3. Scenarios assumptions
4. Medium-term scenario projections
5. Long-term scenario projections

# Overview of scenario dimensions (1)

## Primary dimensions

- Effectiveness/nature of public health response
- Effectiveness/impact of economic support measures

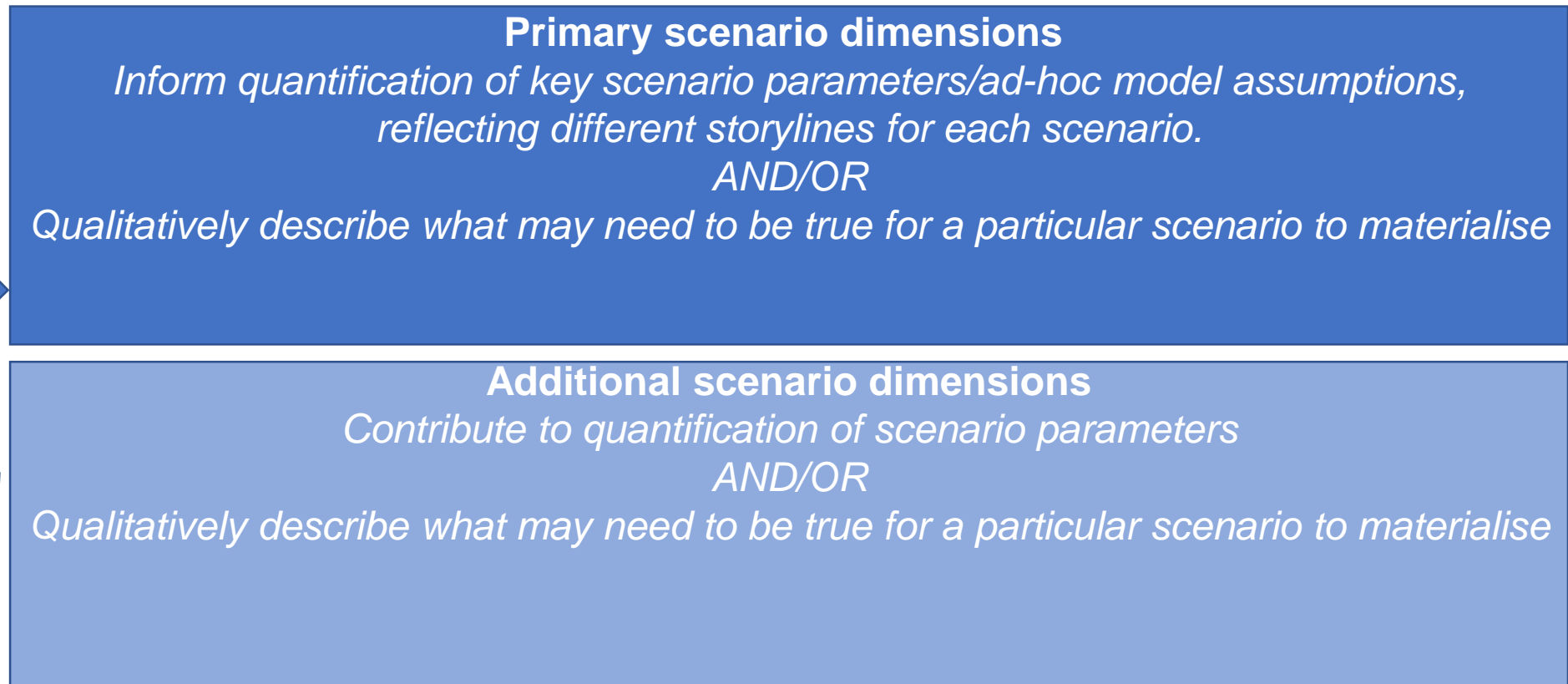


## Secondary dimensions

- Brexit and migration
- International economic context
- Technology and innovation
- Financial climate
- Political economy
- Economic Geography
- GHG emissions



# Overview of scenario dimensions (2)



Integrate/  
compound

Affect

# Macroeconomic scenarios definitions

2020

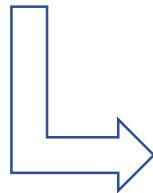
2022

2030

Scenario 1:  
**Fast economic recovery**  
(i.e., an optimistic but plausible scenario)

Scenario 2:  
**Gradual return to economic growth**

Scenario 3:  
**Slow economic recovery**



Stress-test Scenario:  
**Stagnating London**  
(i.e., a reasonable worst case scenario)

# Scenario modelling overview (1) – Medium term vs. Long-term

## Medium-term (to 2022)

- Use of GLA Economics forecasting model – top-down approach to look at sectoral impacts (20 industries).
- Has the ability to reflect ad-hoc adjustment to simulate economics shocks.
- Focus on real GVA, workforce jobs, household income and household expenditure.
- Assumptions required on length of lock-down, speed and features of emergence phase, plus other macroeconomic assumptions

## Long-term (to 2030)

- Top-down assumptions about levels and speed of GVA convergence/productivity, etc.
- Bottom-up (I/O) simulation of:
  - Changes in final consumption (by sector), including exports to RUK/world.
  - Changes in output of individual sectors, which bears on both intermediate consumption by other sectors, and final consumption.
  - Effects of changes to compensation of employees by sector
  - Effect on labour supply of changes in population



# Scenario modelling overview (2) – Top-Down vs. Bottom-up

The **top-down** approach will use as a first step established GLAE methodologies to combine medium-term forecasts, and long-term employment projections. This will provide a first cut of the economy's path for each scenario.

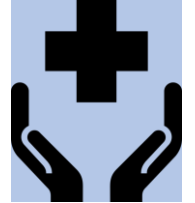
The **bottom-up** approach will use [Input-output tables for London](#) that GLAE published in 2019. This will model the economic effects of each of the dimensions to the scenarios. It could also incorporate multiplier effects across years. There will be iteration of assumptions so that the modelling is internally consistent, and outputs align.



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# Effectiveness/nature of public health response



<b>Scenario 1: Fast economic recovery</b>	<b>Scenario 2: Gradual return to economic growth</b>	<b>Scenario 3: Slow economic recovery</b>
<p>A successful easing of lock down restrictions takes place from June 2020 as health situation improves. End to all social distancing restrictions at the end Q3 2020.</p> <p>A vaccine is found and made widely accessible by early 2021 so "normality" returns in the short-term.</p>	<p>Current lockdown is gradually lifted from June 2020 as health situation improves.</p> <p>Social distancing and other small restrictions remain until later in 2021 when a vaccine is found and widely accessible.</p>	<p>Current lockdown is gradually lifted from June 2020 but a strong second wave of the pandemic leads to reintroduction of some lockdown measures towards the start of Q4 2020.</p> <p>No vaccine is available so forms of social distancing and movement restrictions remain in the long-term.</p>

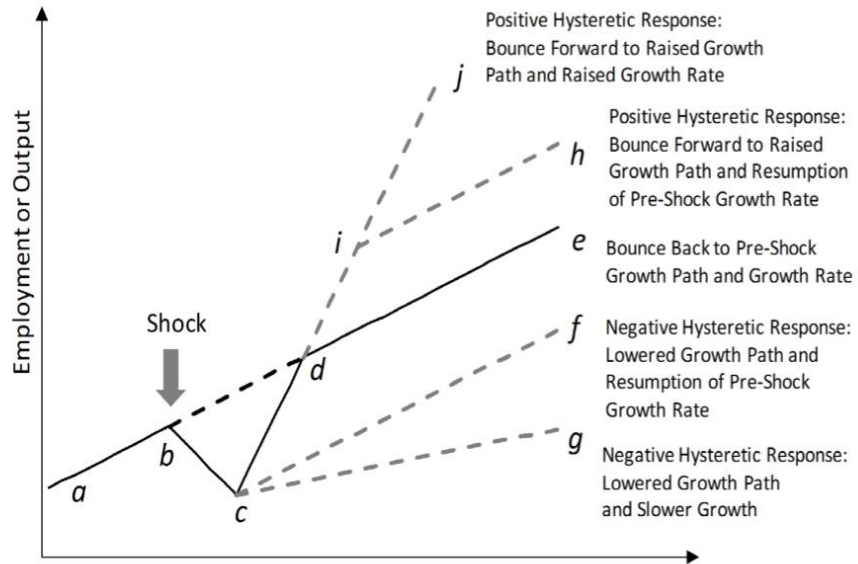
# Effectiveness/impact of economic support measures



<b>Scenario 1: Fast economic recovery</b>	<b>Scenario 2: Gradual return to economic growth</b>	<b>Scenario 3: Slow economic recovery</b>
<p>The UK performs better than its main trade partners in economic terms.</p> <p>Aggregate consumption and investment start to recover in the second half of 2020. Confidence recovers and uncertainty vanishes in the second half of the year.</p> <p>Unprecedented fiscal and monetary policies absorb quickly most of the negative impact of the shock. No medium or long-term economic scarring.</p>	<p>The UK performs similarly to its main trade partners in economic terms.</p> <p>Aggregate consumption and investment start to recover in the second half of 2020. Lower confidence and higher uncertainty persist for more than one year, as external demand recovers less rapidly than internal demand.</p> <p>Fiscal and monetary policies will help substantially mitigate the negative impact of the shock. Economic scarring limited to the medium term as employment recovers less quickly than GVA</p>	<p>The UK performs similarly to/worse than its main trade partners in economic terms but global growth as a whole falters in the medium and long-term.</p> <p>Aggregate consumption and investment remain weak in the medium-term, while global trade decreases significantly in the medium-term.</p> <p>Notwithstanding the fiscal and monetary policies introduced by the Government, the prolonged recession leaves widespread economic scarring, some of which persists in the long-term.</p>

# Top down approach: requires hypothesis about long-term scarring (or hysteresis)

## Stylised possible reactions of a city economy to a shock



Source: ESRC (2019) The Economic Performance of British Cities

## Potential scarring mechanisms as a result of the current crisis

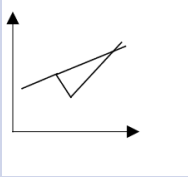
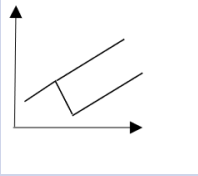
1. **Microeconomic** (see table below, Source: Jonathan Portes, The lasting scars of the Covid-19 crisis: Channels and impacts, Vox CEPR Policy Portal, 1<sup>st</sup> June 2020 ):

	Short to medium term	Longer term
Unemployment	3-4%	2-3%
Job separation	5%	zero
Organisational capital	2%	zero
Education	zero	2-2.5%
Business investment	1%	1%
Total GDP "at risk"	12%	5-6.5%

2. **Macroeconomic** (e.g. weak aggregate-demand, debt drag on growth, etc.)

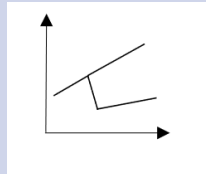
3. Additionally: interaction with **Brexit/migration/trade-related impacts** on long-term economic performance

# Long-term GVA convergence assumptions

<b>Scenario 1: Fast economic recovery</b>	<b>Scenario 2: Gradual return to economic growth</b>	<b>Scenario 3: Slow economic recovery</b>
<p>London's economy returns to its pre-COVID trend growth (rate and level) by 2023. No Medium-term or long-term economic scarring.</p> 	<p>London's economy returns to its pre-COVID trend growth rate eventually, but only in the long-term (after 5+ years) as there is a degree of economic scarring in the medium term.</p>	<p>Persistent economic scarring means that in the long-term the economy will see a slow recovery to a diminished trend growth trajectory by 2030.</p> 

## Stress test scenario

Persistent economic scarring means that in the long-term the economy will see a slow recovery to a diminished trend growth trajectory and lower growth rate



# Brexit and migration



<b>Scenario 1: Fast economic recovery</b>	<b>Scenario 2: Gradual return to economic growth</b>	<b>Scenario 3: Slow economic recovery</b>
<p>Canada-style FTA with the EU enters into force in January 2021. Notwithstanding increased levels of corporate debt, London businesses are successful in continuing to export to the EU while re-orientating part of their exports to other countries with which the UK has FTAs in place.</p> <p>Post-Brexit migration regime softened to allow more socially valuable workers (e.g. carers). Little impact of pandemic on inter-UK migration.</p>	<p>Canada-style FTA with the EU enters into force in January 2021. Notwithstanding increased levels of corporate debt, London businesses are successful in continuing to export to the EU while re-orientating part of their exports to other countries with which the UK has FTAs in place.</p> <p>Post-Brexit migration regime introduced as planned. Little impact of pandemic on inter-UK migration.</p>	<p>No FTA with the EU at the end of 2020, WTO trade with the EU thereafter. High level of indebtedness among London firm hampers their efforts to re-orientate their exports to other countries with which the UK has FTAs in place.</p> <p>Post-Brexit migration regime combined with lower labour mobility leads to zero net migration, leading to skills and labour shortages. This is due to a fall in EU migration and zero uptick in high skilled migration from the rest of the world.</p> <p>Decline in inward migration from the rest of the UK due to slower long-term growth in the capital and a change in attitude to the safety of living and working in a large city.</p>

# International economic context



Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
<p>Trade tensions persist in the short-term and some supply chains shift from global to regional, but there isn't a wholesale acceleration of deglobalisation trends. Longer term there is increased global co-operation on trade and health which leads to a pick-up in global trade.</p> <p>Greater resilience in the global financial system compared to 2008 helps prevent widespread financial crises.</p> <p>As they quickly re-emerge from the COVID-19 crisis, global cities retain their comparative advantage as sticky behaviours and technologies (e.g. remote working) help them improve liveability while retaining agglomeration economies.</p>	<p>Acceleration of trade-disputes and de-globalisation trends but these do not result in all-out trade wars or to a general escalation of geopolitical tensions. Some import substitution occurs but this is mainly in goods not services. International business travel declines with more remote working.</p> <p>COVID-19 triggers knock-on financial crisis in several countries, but greater resilience in the global financial system compared to 2008 avoids these turning into major crises.</p> <p>After a slow re-emergence global cities retain their comparative advantage as sticky behaviours and technologies (e.g. remote working) help them improve liveability while retaining agglomeration economies.</p>	<p>Significant acceleration of trade-disputes and de-globalisation trends leading to multiple trade-wars. Geopolitical tensions also increase. Long term global growth slows and there is a move to more self-sufficiency in countries which reduces exports further. COVID-19 continues to spread in Africa, and restrictions continue to be in place on international travel movements.</p> <p>COVID-19 triggers knock-on financial crisis in several countries, some of which become major events.</p> <p>Global cities see a reduction in their comparative advantage as new technologies and behaviour drive a reduction in agglomeration economies. Virtual networks become more important than physical proximity.</p>

# Technology adoption/innovation



<b>Scenario 1: Fast economic recovery</b>	<b>Scenario 2: Gradual return to economic growth</b>	<b>Scenario 3: Slow economic recovery</b>
<p>The COVID-19 recession accelerates change in business models (e.g. shift to online retail, remote working, etc.) as well as adoption and diffusion of existing technologies (e.g. 5G, Cloud) and this leads to a significant medium-term productivity bonus.</p> <p>In the medium to long-term COVID-19 prompts a rapid change in business models towards greater automation/AI to minimise risks and increase resilience. This leads to significant productivity benefits (and possibly other societal benefits).</p> <p>While in the long-term the transition has a net job-creating effects (especially in London and in a benign economic environment), there remains a challenge in terms of re-training/redeployment in the medium-term, with some sectors and occupation seeing job losses.</p>	<p>The COVID-19 recession accelerates change in business models as well as adoption and diffusion of existing technologies. This leads to a moderate productivity bonus in the medium-term.</p> <p>Investment in AI/automation is initially slowed down as organisations find it difficult to introduce major change processes while working in remote. In the long-term it proceeds at a quick pace, prompted by the resilience agenda. This leads to some productivity (and possibly societal) benefits.</p> <p>While overall the transition has net job-creating effects in the long-term, the gradual nature of the return to growth reduces the pace of creation of new jobs for low-skilled workers.</p>	<p>The COVID-19 recession accelerates change in business models as well as adoption and diffusion of existing technologies. This leads to a moderate productivity bonus in the medium term.</p> <p>Investment in AI/automation is initially slowed down in the medium to long-term as organisations find it difficult to introduce major change processes while working in remote. Sustained reduction in investment and high level of unemployment/low wages also delay and reduce potential productivity and social benefits.</p> <p>A slower transition allows more time for workers retraining and redeployment and reduces the extent of specific sectors and occupations seeing job losses. On the other hand a persistent lack of demand constraints the generation of new jobs for low-skilled workers.</p>



# Financial climate



<b>Scenario 1: Fast economic recovery</b>	<b>Scenario 2: Gradual return to economic growth</b>	<b>Scenario 3: Slow economic recovery</b>
<p>The banking sector is essentially not hit by the crisis or they manage to cover their capital extra needs internally and without an impact on bank credit.</p> <p>Financial markets recover their size, liquidity, returns, and volatility pre-crisis levels rapidly.</p> <p>The impact on household finances lasts less than a year. No long-term impacts on consumption/saving decisions.</p>	<p>The banking sector will experience some temporary losses and might need specific recapitalisations but the impact on bank credit is small overall. This is because buffers of capital built up by banks are more than sufficient to absorb the losses.</p> <p>Financial markets remain temporary unstable but most buyers and sellers manage to trade in a similar way as in normal times.</p> <p>Some households see an important reduction in income and higher indebtedness in the short-term, this resulting in an increase of the savings ratio in that period. But aggregate consumption returns to normal gradually.</p>	<p>The banking sector experiences large losses due to high non-performing loans and an extremely expansionary monetary policy. This ends up in large recapitalisation needs by those banks and a potential contraction of the bank credit with negative effects on aggregate consumption and aggregate investment.</p> <p>A long-lasting high volatility, fragmentation, and a permanent change of the preferences by investors (generally towards more liquid assets and private bonds) result in underperformance of the financial markets in supporting the real economy.</p> <p>Most households see a permanent reduction in income and a higher indebtedness resulting in a permanent negative shock on aggregate consumption.</p>

# Political economy



Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
<p>Government spending is reined in gradually, with planned investment in infrastructure maintained. Rapid fiscal tightening is generally avoided although there is some public spending restraint.</p> <p>The Government's rebalancing agenda is maintained and reframed but not in a way that directly disadvantages London.</p> <p>Sterling depreciates gradually due to the ongoing impact of Brexit, while the Bank of England gradually raises interest rates over the course of the decade.</p> <p>TfL is able to maintain capital investments at current levels in the long-term. Further investment in public transport is seen as key for the recovery with additional transport stimulus to unlock housing growth and electrify transport.</p> <p>Government support to firms is rowed back gradually. relatively few businesses go under and there is little long-term economic scarring.</p>	<p>Government spending is reined in gradually, with planned investment in infrastructure maintained. A mild form of fiscal tightening is followed.</p> <p>The Government's rebalancing agenda is maintained but not in a way that directly disadvantages London.</p> <p>Sterling depreciates gradually due to the ongoing impact of Brexit, while the Bank of England gradually raises interest rates over the course of the decade.</p> <p>TfL is able to maintain a level of investment close to current levels in the long-term.</p> <p>Government support to firms is rowed back gradually. relatively few businesses go under and long-term economic scarring tends to be confined to specific sectors.</p>	<p>High Government debt leads to a rapid shift of policy towards fiscal tightening, undercutting growth and investment. High debt further leads to a UK financial crisis.</p> <p>An intensification of anti-London feeling leads to falling UK government investment within the capital.</p> <p>Inflationary pressures and pressures on sterling mount leading to the Bank of England raising interest rates markedly.</p> <p>Financial constraints on TfL and UK Government decisions lead to a decline in transport infrastructure investment in the capital in the long-term.</p> <p>Government support for firms is withdrawn too hastily leading to permanent economic scarring.</p>

# A new scenario dimension: London's economic geography (1)



Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
<p>A relaxation of social distancing rules from the current 2m rule increase capacity available on the TfL network in the short-term and business passengers are relaxed about returning.</p> <p>In the medium to long-term is a return of large scale commuting into the CAZ notwithstanding that some of the lifestyle adjustment that people have made during the pandemic are sticky, e.g. an increase in people who work remotely at least 1 or 2 days a week.</p> <p>London quickly returns to being a large international attractor of talent, business &amp; leisure visitors, and international students.</p> <p>Agglomeration economies in the CAZ are maintained and in some respect enhanced, as life-style changes help to manage externalities such as congestion and help mitigate the costs of doing business in central London.</p>	<p>A relaxation of social distancing rules from the current 2m rule increase capacity available on the TfL network in the short to medium term. Business passengers return gradually.</p> <p>In the long-term there is a return of large scale commuting into the CAZ in the main, although a share of former commuters shifts to new working patterns whereby they only travel to central London occasionally.</p> <p>In the long-term, London returns to being a large international attractor of talent, business &amp; leisure visitors and international students.</p> <p>Overall, agglomeration economies in the CAZ are maintained, but the reduction in number of people travelling to the CAZ reduces activities and employment in a number of services that support CAZ workers (e.g. catering, retail).</p>	<p>A relaxation of social distancing rules from the current 2m rule increase capacity available on the TfL network in the medium-term. However, business passengers do not return to the network in large numbers.</p> <p>Commuting to the CAZ remains a fraction of what it used to be pre-COVID as a large share of workers continue to work predominantly from home.</p> <p>A decline of London's cultural industries and night-time economy translates into London losing a significant amount of its attractiveness as a destination for work, leisure and study.</p> <p>There is a weakening of place-based agglomeration economies in the CAZ, which are replaced by more virtual forms of agglomeration. A significant share of economic activity shift outwards from London to the Wider South East and to some extent from inner to outer London.</p>

# A new scenario dimension: London's economic geography (2)



Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
<p>Town centre and high street economies recover quickly with few business failures induced by COVID-19 (while longer-term structural changes continue).</p> <p>Social distancing restrictions relaxed to the extent that high street footfall and the retail, leisure, culture and hospitality sectors can return relatively quickly towards pre-Covid operating arrangements.</p> <p>In the long-term, town centres and high streets see some benefits from an increase in the time that people spend living and working locally, boosting local footfall and spend.</p>	<p>Town centre and high street economies and footfall recover gradually, with social distancing and consumer confidence limiting the ability of retail, leisure, culture and hospitality to return to pre-Covid operating arrangements in the medium-term.</p> <p>Reduced employment and consumer spend leads to a degree of business failures. High street vacancy rates rise initially but gradually reduce as new business start-ups occupy vacated space.</p> <p>In the long-term, town centres and high streets see some benefits from an increase in the time that people spend living and working locally, boosting local footfall and spend.</p>	<p>Town centres and high street economies are severely impacted by the pandemic in the short to medium-term, with significant numbers of business failures.</p> <p>Persistently low growth, weakened consumer confidence and unemployment lead to longer lasting impact on commercial property vacancies and town centre attractiveness for investment.</p> <p>In the long-term (but limited to certain high-streets/town centres/sectors) there is a degree of resurgence in economic activity due to a more permanent shift of economic activity towards outer London.</p>

# GHG emissions

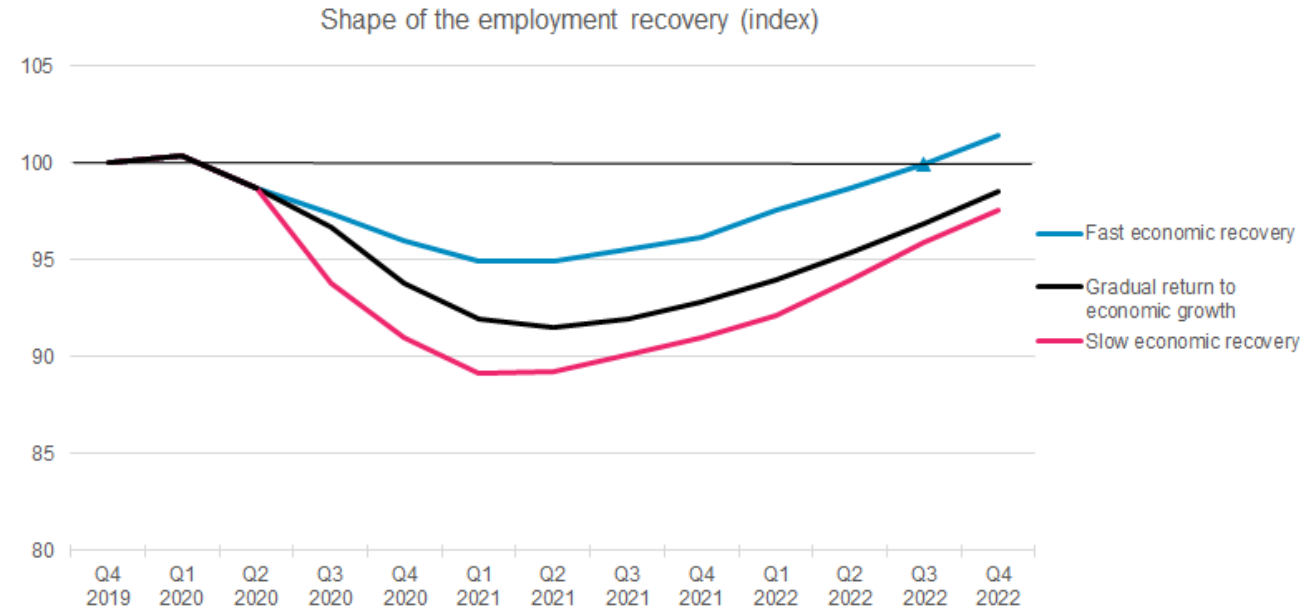
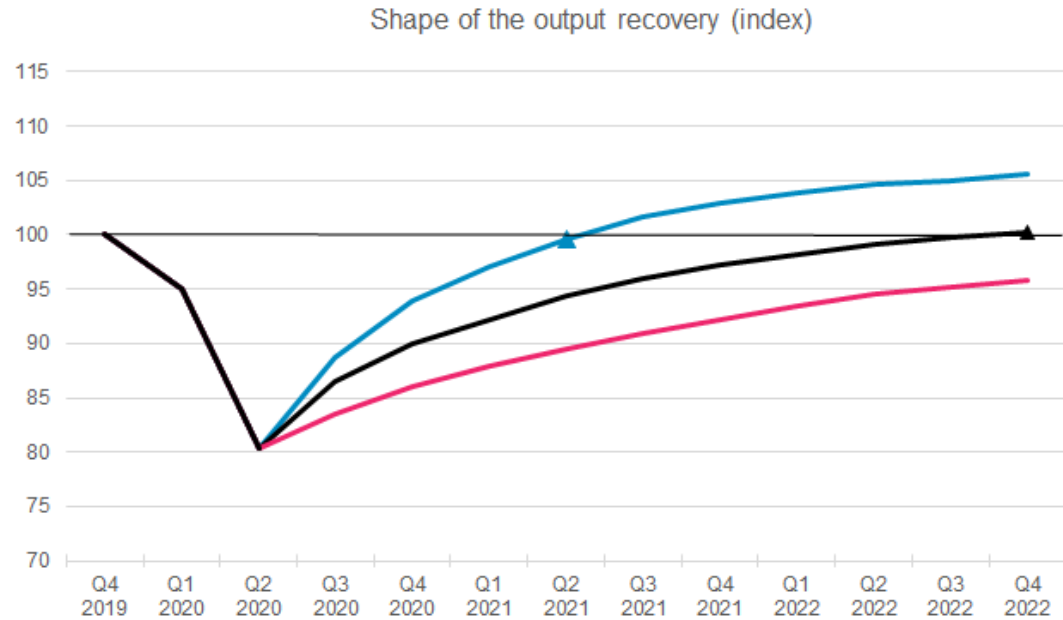


<b>Scenario 1: Fast economic recovery</b>	<b>Scenario 2: Gradual return to economic growth</b>	<b>Scenario 3: Slow economic recovery</b>
<p>The recession leads to a short-lived reduction in investment and in emissions, while there is a relatively quick recovery of carbon and fossil fuel prices.</p> <p>Investment in low-carbon infrastructure in London quickly returns to its pre-COVID BAU trend. Businesses low-zero carbon transformation programmes as staff physically return to the office.</p> <p>Decarbonisation of UK power generation continues in line with HMT Green Book assumptions.</p>	<p>After a major slow-down in investment (and in emissions) policy and investment drive towards net zero carbon resumes. Carbon prices and fossil fuel prices recover in the long-term, although the latter remain significantly lower than in the past as we enter the fossil fuels 'endgame'.</p> <p>Investment in low-carbon infrastructure in London and low-carbon transformations by businesses are subject to some short-term delay but then resumes its BAU pathway as the economy resumes a healthy growth-trends after a few years.</p> <p>Decarbonisation of UK power generation continues in line with HMT Green Book assumptions.</p>	<p>Lower growth depresses emissions in the short-term (led by business and transport emissions decreases). However, with a prolonged recession focus shifts away from decarbonisation, and investment in green technologies, helped by persistently low fossil fuel prices not compensated for by higher carbon taxes and tighter regulation.</p> <p>Investment in low-carbon infrastructure in London by the public sector, businesses and households (e.g., EV charging, new processes, energy efficiency and domestic fuel switch) is significantly delayed, with possible "lock-in" effects. Businesses put low-carbon transformation on hold as a large part of their workforce continues to work remotely in the medium-term.</p> <p>Decarbonisation of UK power generation continues (more or less) in line with HMT Green Book assumptions.</p>

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# Medium-term scenarios projections



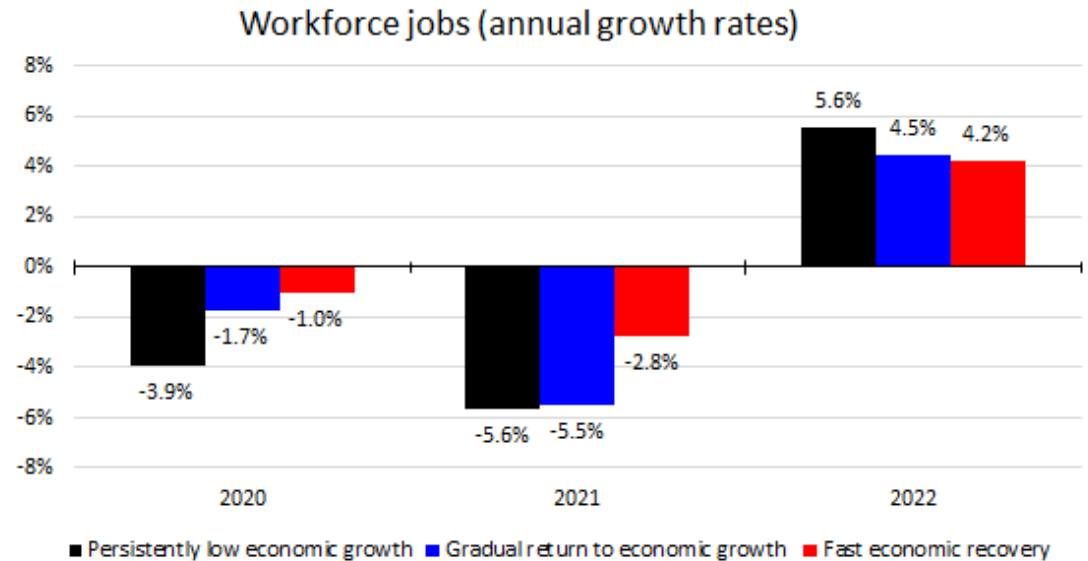
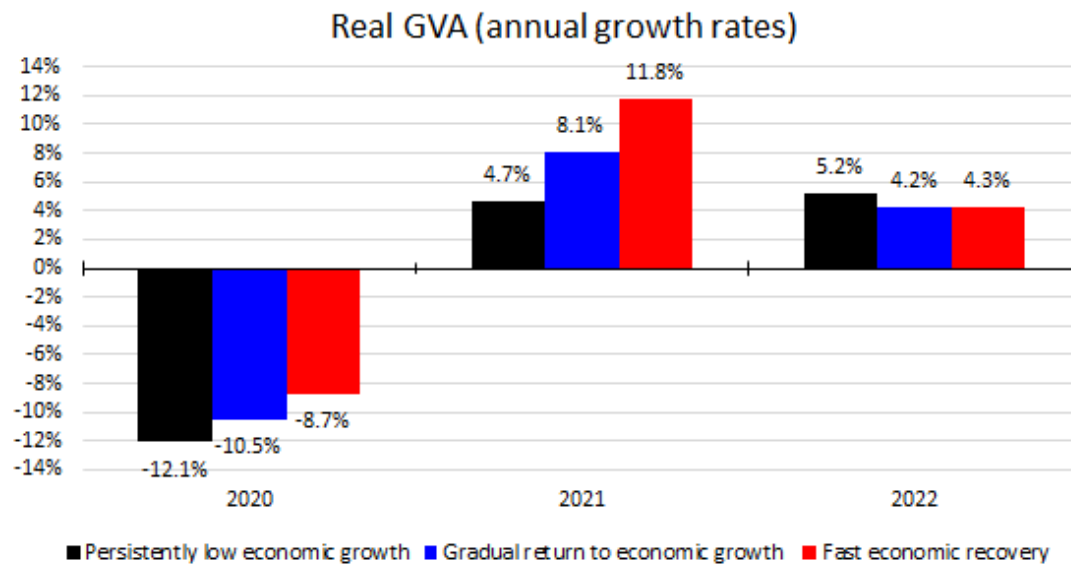
Source: GLA Economics

# The overall storyline behind the Gradual return to economic growth scenario

Q2 2020 (Economic Shock)	Q3 2020 (Economic Reactivation)	Q4 2020 (Economic Reactivation)	2021 and 2022 (Transition and Reconstruction)
<ul style="list-style-type: none"> <li>• Lockdown leads to unprecedented contraction of economic activity.</li> <li>• Consumption and trade fall historically large.</li> <li>• Investment freezes.</li> <li>• Public sector spending and debt increases importantly.</li> <li>• Business failures and unemployment soar, although mitigated by Gov. support</li> <li>• Household income reduces but to a lower extent than output.</li> <li>• Uncertainty and lack of consumer confidence rise to historic highs.</li> <li>• Easing of lockdown at the end of the quarter leads to a resumption of growth.</li> </ul>	<ul style="list-style-type: none"> <li>• As lockdown eases, so does the economic activity recovery which continues.</li> <li>• Consumption and trade bounce back notably compared to Q2 but remain quite subdued still in annual terms.</li> <li>• Businesses which survived Q2 2020 resume their activities slowly. Restructuring of some businesses and sectors which survived starts.</li> <li>• Some persistent damage in the sectors most exposed to social interaction (e.g. culture, hospitality)</li> <li>• Job destruction ceases.</li> <li>• Public sector spending and debt keep increasing.</li> <li>• Uncertainty remains very high.</li> <li>• The degree of this initial recovery will depend on 1) the speed of the lockdown easing 2) a potential second virus outbreak, and 3) the impact of the end of JRS.</li> </ul>	<ul style="list-style-type: none"> <li>• The recovery continues at a good growth rate.</li> <li>• The return to the 'old normality' seems closer but social distancing measures remain.</li> <li>• Lagged recovery for sectors most exposed to social interaction.</li> <li>• Businesses and sectors restructure to adapt to a 'new normality'.</li> <li>• Employment keeps increasing but at a slower pace than output.</li> <li>• Public sector spending and debt remain high.</li> <li>• Uncertainty remains high and Brexit-related uncertainty plays a greater role.</li> <li>• The degree of the recovery will mainly depend on 1) the new social distancing rules 2) the availability of a vaccine and 3) transport constraints</li> </ul>	<ul style="list-style-type: none"> <li>• Transition between 'new normality' - and a situation similar to 'pre-lockdown' takes place in these years.</li> <li>• The economic expansion continues but at a slower pace than initially anticipated. Output remains marginally below pre-crisis levels in late 2022.</li> <li>• Gradual return of visitors and tourists.</li> <li>• Employment creation is solid but does not recover pre-crisis levels yet.</li> <li>• Investment (and recapitalisations) key to support companies which survived but remain weak.</li> <li>• A degree of fiscal consolidation begins.</li> <li>• The success of the expansion will depend on 1) the availability of a potential vaccine, 2) the EU trade deal 3) London's capacity to attract investment, 4) the kind of fiscal consolidation chosen 5) the international context and 6) transport constraints</li> </ul>

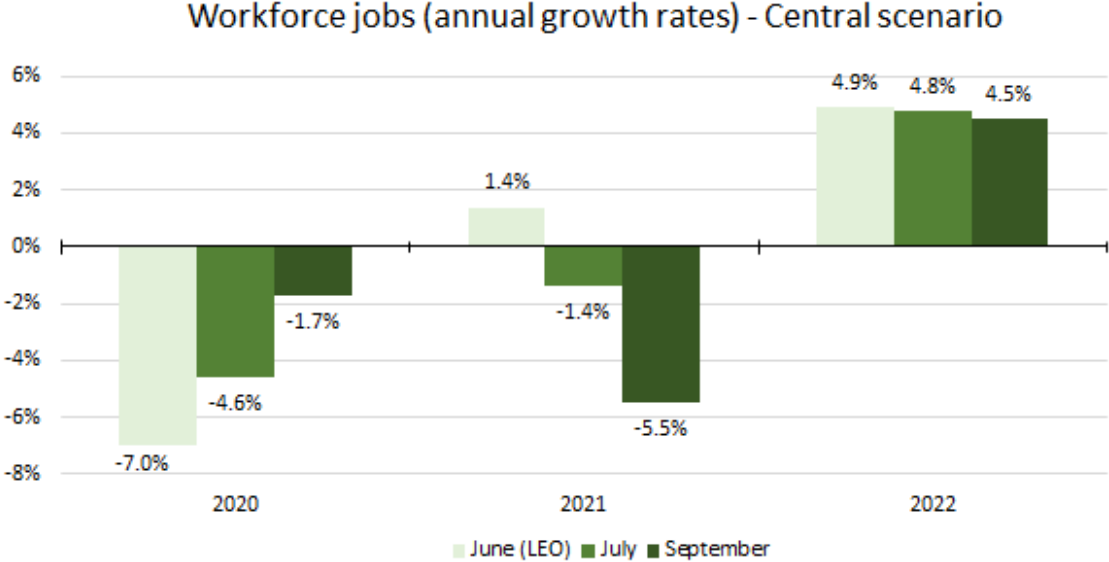
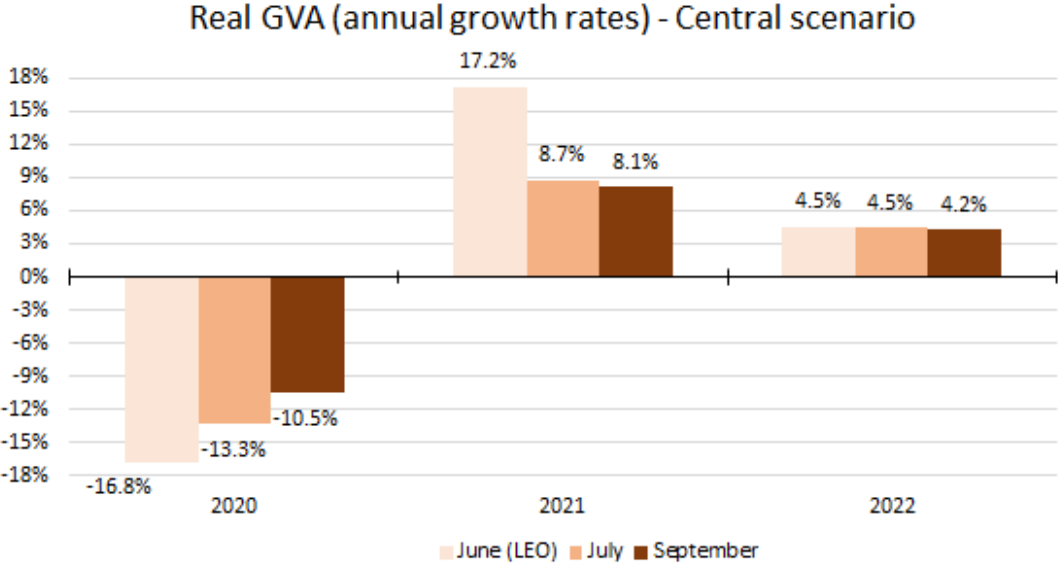


# Medium-term scenario projections: annual growth rates



Source: GLA Economics estimates

# Comparison of successive central scenarios – LEO forecasts (June 2020), Gradual return (July 2020), Gradual return (September 2020)



Source: GLA Economics estimates

# Sectoral projections for GVA in 2020 and jobs in 2021

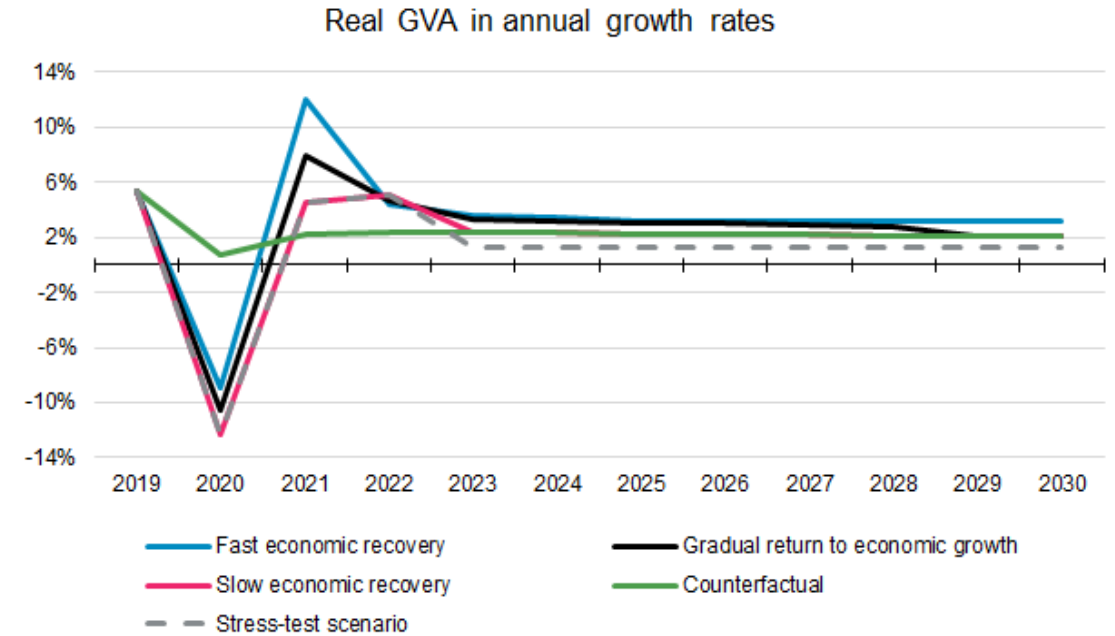
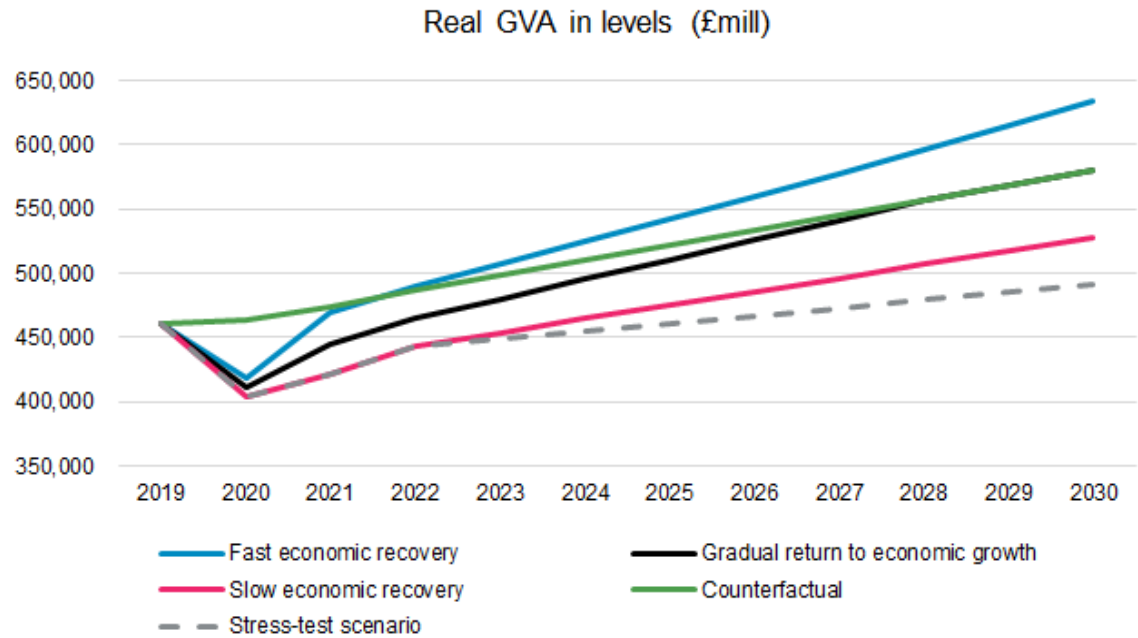
Real GVA annual growth rate in 2020		Workforce jobs annual growth rate in 2021	
Sector	%	Sector	%
Agriculture, forestry and fishing	-2.8%	Agriculture, forestry and fishing	-3.5%
Mining and quarrying	-2.9%	Mining and quarrying	-4.3%
Manufacturing	-16.6%	Manufacturing	-7.5%
Electricity, gas, steam and air-conditioning supply	-2.4%	Electricity, gas, steam and air-conditioning supply	-4.9%
Water supply; sewerage and waste management	-0.5%	Water supply; sewerage and waste management	-5.4%
Construction	-19.0%	Construction	-6.8%
Wholesale and retail trade; repair of motor vehicles	-14.0%	Wholesale and retail trade; repair of motor vehicles	-7.8%
Transportation and storage	-14.2%	Transportation and storage	-7.5%
Accommodation and food service activities	-30.1%	Accommodation and food service activities	-10.5%
Information and communication	-7.8%	Information and communication	-5.3%
Financial and insurance activities	-6.6%	Financial and insurance activities	-2.0%
Real estate activities	-8.5%	Real estate activities	-4.8%
Professional, scientific and technical activities	-10.5%	Professional, scientific and technical activities	-4.1%
Administrative and support service activities	-9.6%	Administrative and support service activities	-5.8%
Public administration and defence; compulsory social security	-10.1%	Public administration and defence; compulsory social security	-3.0%
Education	-24.7%	Education	-8.5%
Human health and social work activities	13.2%	Human health and social work activities	0.5%
Arts, entertainment and recreation	-25.3%	Arts, entertainment and recreation	-9.3%
Other service activities	-7.5%	Other service activities	-4.3%
Activities of households	-9.1%	Activities of households	-3.8%

Source: GLA Economics estimates – 'Gradual return to economic growth' Scenario (September 2020)

# Outline

1. Project aims and background
2. Overview of scenarios approach
3. Scenarios assumptions
4. Medium-term scenario projections
- 5. Long-term scenario projections**

# Long-term scenarios projections



Source: GLA Economics

# The story behind the long-term projections

	NO-COVID / Counterfactual	Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery	Stress-test scenario
GVA level in 2022	As estimated by GLAE in April 2020 forecasts	As projected in medium-term scenario 1	As projected in medium-term scenario 2	As projected in medium-term scenario 3	As projected in medium-term scenario 3
Time counterfactual level is reached	NA	2023	2028 (8 years after crisis, as in 1990s recession)	Never (over the relevant time horizon)	Never (over the relevant time horizon)
GVA Growth rate in 2030	Estimated by assuming convergence (linear or exp) from 2022 growth rate to steady state by 2041	3.2% (long-term London trend growth rate, convergence towards UK steady state does not start in the 2020s).	As in counterfactual (2.1%)	As in counterfactual (2.1%)	1.3% for the whole period 2023-2030 (the 1980s pre-recession average)
GVA level in 2030	Projected in line with the above assumptions	Higher than the counterfactual	As in counterfactual in 2030	Counterfactual - 10% (reflecting combination of microeconomic and macroeconomic scarring from COVID, plus WTO Brexit)	Resulting from the assumption on growth rates between 2023 and 2030 (see above)
GVA growth rate in 2041 (steady state)	1.5% per year (based on OBR long-term/steady state projection)	NA	1.5% per year	1.5% per year	1.3% per year

# Summary of GVA annual growth rates in selected years

## Real GVA – annual growth rates (selected years)

Year	Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
	GVA	GVA	GVA
2019	5.4%	5.4%	5.4%
2021	11.8%	8.1%	4.7%
2025	3.2%	3.1%	2.3%
2030	3.2%	2.0%	2.0%

Source: GLA Economics

# Summary of GVA in levels in selected years

## Real GVA – levels, £m (selected years)

Year	Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
	GVA	GVA	GVA
2019	460,088	460,088	460,088
2021	469,492	444,511	422,037
2025	541,922	510,937	475,182
2030	634,359	579,855	527,668

Source: GLA Economics