

Macroeconomic scenarios for London's economy post COVID-19

Scenarios approach, storylines and projections to 2030

13 December 2021



Disclaimer

- This ninth output of the macroeconomic scenarios project updates the eighth output which was published on 26th August 2021. 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.
 - do **not** capture the full range of uncertainty about the future, which is likely to lie outside the range of the scenarios.
- We will continue to track actual data in order to review our assessment of the likelihood of alternative scenario outcomes.

Executive Summary (1)

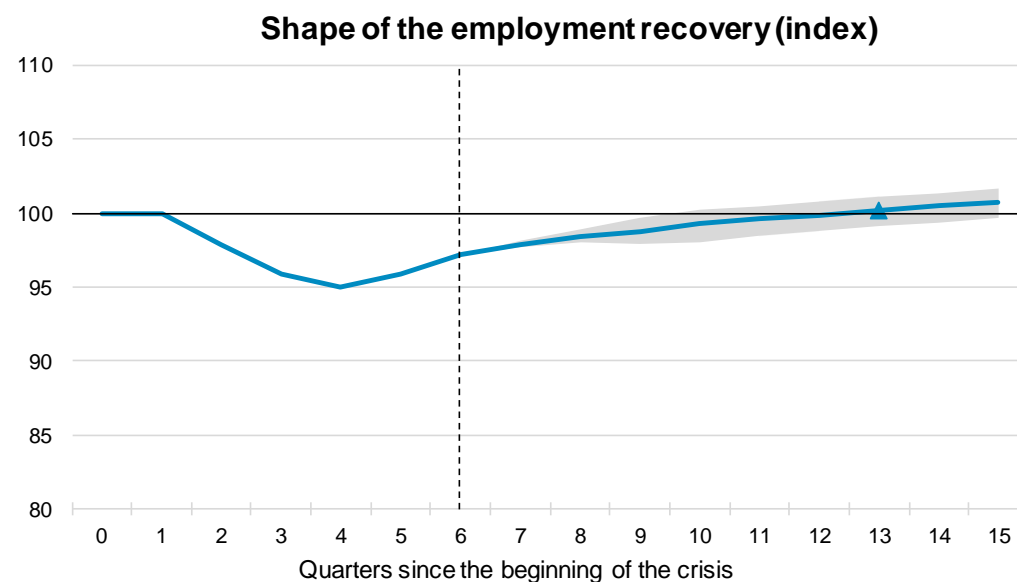
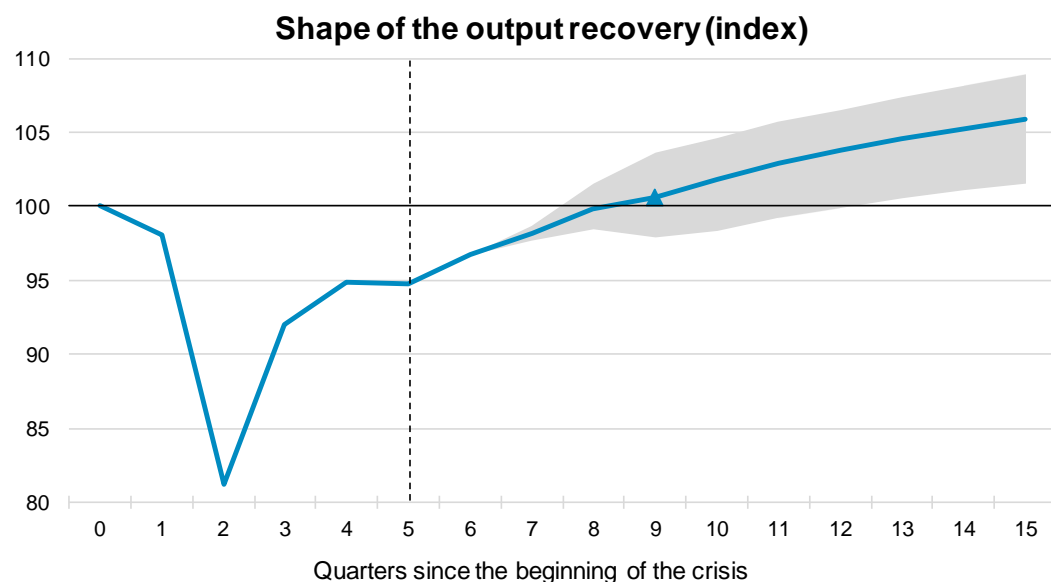
- This pack is the ninth output of the GLA Economics-led project developing scenarios for London's economy post COVID-19. It includes new medium-term projections and GVA projections to 2030.
- These scenarios incorporate the latest intelligence from the OBR forecast for the UK economy of 27th October 2021 and the Bank of England forecast for the UK economy of 4th November 2021.
- The scenarios also include the most recent data on output and jobs, which point to limited damage from the third lockdown, a steadily improving jobs market and few job losses at the end of furlough.
- In addition, the scenarios include the impact of 'Plan B' measures to combat the Omicron variant. While the total impact is modest, a combination of new restrictions and reduced social contact will likely have adverse impacts on sectors relying on close customer contact or in-person work.
- The main aim of the project was to develop a set of high-level macroeconomic scenarios to inform London's recovery strategies, reflecting unprecedented uncertainty in the economic outlook.
- The scenarios are intended as a common framework/set of assumptions to inform further analyses.
- More information on project aims, an overview of the scenarios approach, and underlying scenario assumptions are available in earlier versions of the [macroeconomic scenarios](#).

Executive Summary (2)

- The primary scenario dimensions include Effectiveness/nature of public health response and Effectiveness/impact of economic support measures.
- Supplementary assumptions are made around the intensity and duration of supply chain challenges and labour mismatches, as well as the persistence of high inflation.
- Risks are tilted to the downside, especially with the arrival of the heavily-mutated Omicron variant of COVID-19. While there remains uncertainty around the variant's epidemiological impact, concerns have already been sufficient to prompt new restrictions, though these are comparatively light-touch.
- The new measures are likely to have a negative impact on customer-facing service sectors, like Accommodation and food services, and sectors that rely on in-person work, like Construction. Other sectors should see a relatively limited impact, in line with the narrow scope of new restrictions.
- Other scenario dimensions include: Brexit & migration; International economic context; Technology & innovation; Financial climate; Political economy; Economic Geography and GHG emissions.
- Three core scenarios have been developed: Scenario 1 - Fast economic recovery; Scenario 2 - Gradual economic recovery and Scenario 3 - Slow economic recovery.

Executive Summary (3)

- In all scenarios, London's economy is expected to recover to the pre-crisis level of output across the course of the next year. Under the Gradual return to economic growth scenario, London's GVA reaches pre-crisis levels in Q1 2022.
- The employment recovery is projected to be slower than the output recovery, with job numbers reaching pre-crisis levels only in early 2023 in the Gradual return to economic growth scenario. The jobs recovery is not complete in the Slower economic recovery scenario until late 2023.
- The trajectories in the figures is for the Gradual economic recovery scenario, with the shaded areas marking the scenario range.



Outline

1. Scenario assumptions
2. Medium-term scenario projections
3. Long-term scenario projections
4. Methodology and back series

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Effectiveness/nature of public health response

Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
<p>Vaccine booster programme for all adults rolls out at pace and prevents strain on the health system, despite new variants.</p> <p>There is widespread public trust in the vaccine, and inoculation against the virus, across all groups.</p> <p>There is quick identification of variants of concern, and while cases may rise due to Omicron or any future highly transmissible variants, measures to avoid a fresh wave of hospitalisations are effective.</p> <p>Effective domestic measures mean major new restrictions at the national border to slow the spread of virus variants are not needed.</p>	<p>Vaccine booster programme for all adults rolls out. It is effective in preventing an increase in severe virus cases.</p> <p>There is widespread public trust in the vaccine, and inoculation against the virus, across most groups. Coverage lags in some urban areas.</p> <p>There is fairly quick identification of variants of concern, and while they may prompt a rise in new cases, efforts to prevent them becoming a wave of severe cases are effective.</p> <p>Reasonably effective domestic measures mean restrictions at the national border to combat variants remain moderate.</p>	<p>Vaccine programme continues to roll out, but mutated variants reduce efficacy and require creation of new vaccines, which takes time.</p> <p>There is public trust in the vaccine, and inoculation against the virus, across most groups. Coverage is patchy in some urban areas.</p> <p>Not all variants are identified quickly, so efforts to slow their spread have limited effectiveness. Current vaccines have limited effectiveness against these variants and there are further stringent activity restrictions in Winter 2021/22.</p> <p>Less effective domestic measures mean significant new restrictions are needed at the national border to combat variants.</p>

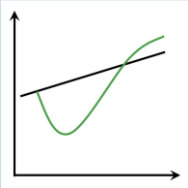
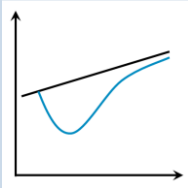
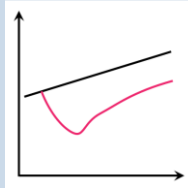
Impact of private and government response to the pandemic

Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
<p>Successful control of the Omicron variant means business and consumer confidence swing significantly higher in the months ahead, boosting investment and consumer spending. Consumers draw down on the large stock of excess savings accrued during the pandemic. Subsidies for investment in March 2021 Budget have a significant effect.</p> <p>International visitors start returning, and less stringent health checks prove effective in encouraging a return in significant numbers.</p> <p>Government and Bank of England continue to unwind unprecedented fiscal and monetary stimulus. Strong labour demand means few job losses at the end of furlough. The wider recovery remains strong into 2022. Little medium- or long-term economic scarring, though employment lags GVA.</p>	<p>Business confidence remains firm and consumer confidence begins to improve, though inflation and the Omicron variant has some impact. Only a modest amount of excess consumer savings are spent due to moderate confidence and the skew in savings towards high-income groups. Subsidies for investment have some effect.</p> <p>International visitors start returning, but public health checks and persistent virus cases slow any return in significant numbers.</p> <p>Government and Bank of England unwind fiscal and monetary stimulus. Strong labour demand means that job losses are limited at the end of furlough. The wider recovery slows amid higher inflation and supply chain challenges. Economic scarring limited to the medium term but employment lags GVA.</p>	<p>Business and consumer confidence weaken, and this trend worsens with the introduction of much more stringent activity restrictions over the Winter as the virus takes hold again. Savings remain unusually high as consumers take precautions against uncertain conditions. Subsidies for investment have limited effect.</p> <p>International visitors are hesitant to return to London amid rising virus cases and travel restrictions. This impacts arts and hospitality.</p> <p>Some resumption of fiscal and monetary stimulus cannot prevent a new wave of restrictions dragging on the recovery. A fresh downturn and slow medium-term growth mean there is widespread economic scarring as firms close down and workers lose their jobs, some of which persists in the long term.</p>

Updated key assumptions for other drivers

Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
<p>UK and EU are reluctant to escalate issues further, with some disagreements constructively resolved. This mitigates the effects of UK exit from the Single Market.</p> <p>Travel restrictions for visitors to the UK ease again early in 2022, and international students increasingly return across the year.</p> <p>The CAZ remains a hub of economic activity, and London remains an important business centre reaping agglomeration economies.</p> <p>Mismatches between supply and demand are transitory, both at global and domestic levels. The recovery of the CAZ and resumed inward migration prevent medium-term skill or geographic labour mismatches.</p>	<p>UK and EU relations are not fully effective in managing tensions, dampening trade flows. Loss of access to the Single Market requires some restructuring of London's economy.</p> <p>Travel restrictions for visitors to the UK remain moderate, and there is a limited return of international students in 2022.</p> <p>There is a loss of jobs in arts, hospitality, and tourism in the CAZ, but the area remains attractive to business and continues to reap agglomeration economies.</p> <p>Global supply chain challenges raise prices in the near term, but ease in the medium term. Economic restructuring means skill and geographic mismatches in the labour market slightly slow the potential pace of recovery.</p>	<p>UK-EU relations cannot prevent disputes, raising barriers to trade and cutting trade flows. This hits potential growth and requires heavy restructuring of London's economy.</p> <p>Travel restrictions for visitors to the UK tighten significantly, with no significant return of international students in 2022.</p> <p>There is a loss of jobs in many sectors in the CAZ. The cumulative effect means that the area becomes less attractive to business and reaps fewer agglomeration economies.</p> <p>Mismatches in supply and demand increase price pressures, which become entrenched in inflation expectations, prompting restrictive monetary policy. Labour market mismatches drag on medium-term growth.</p>

Long-term GVA convergence assumptions

Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
<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 near to pre-COVID trends 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 and London's output never returns to pre-pandemic trend levels.</p> 

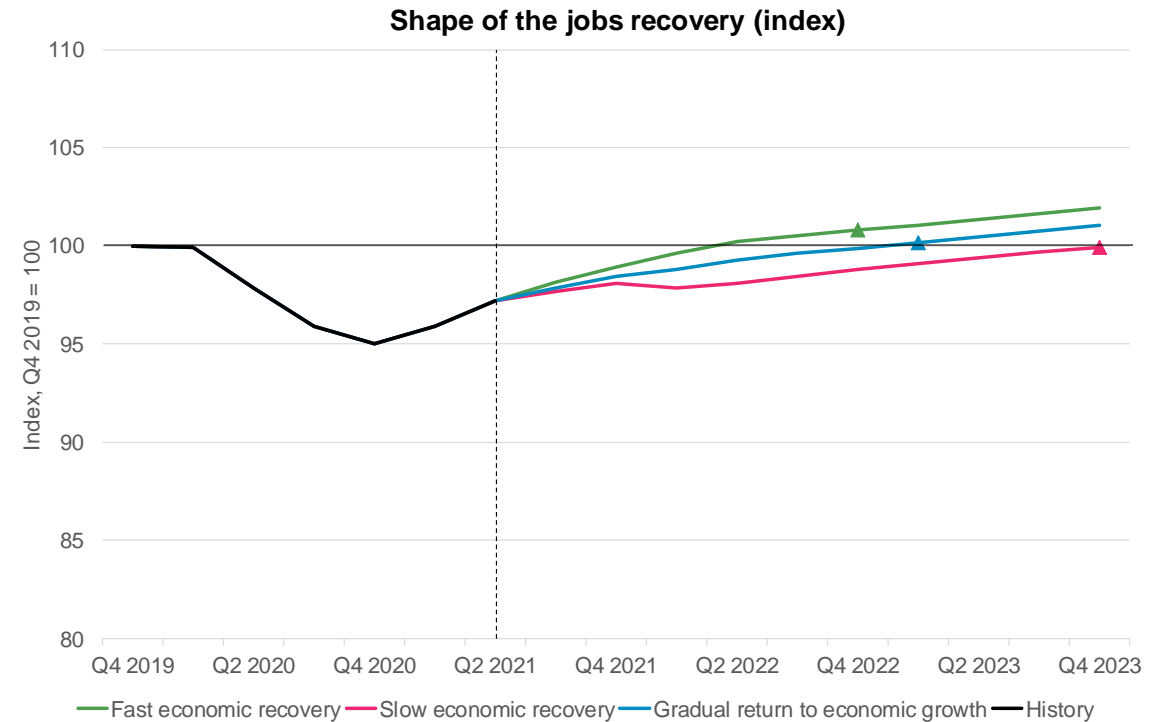
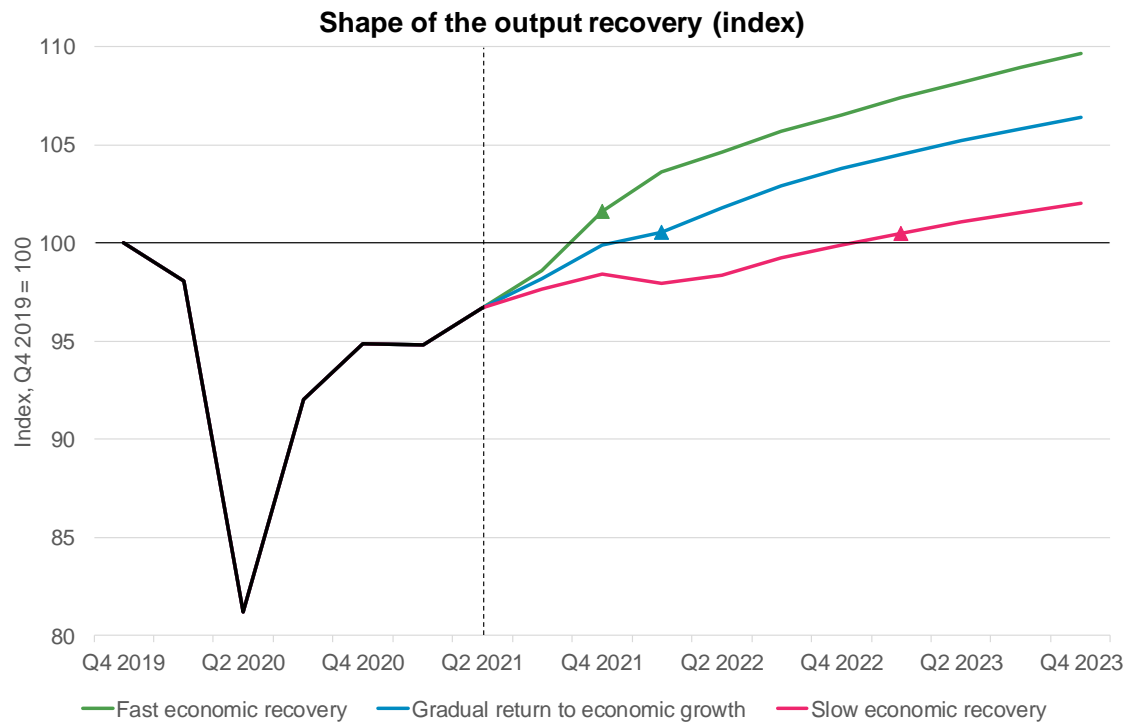
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The overall storyline behind the Gradual recovery scenario

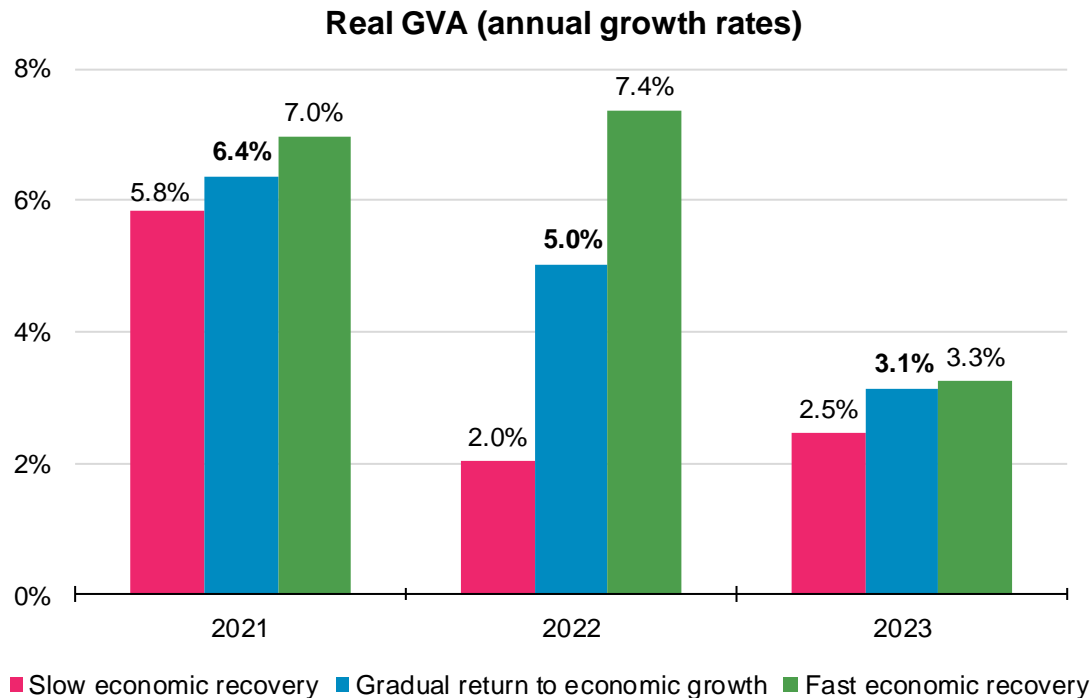
Q4 2021 (Economic Recovery)	Q1 2022 (Economic Turbulence)	Q2 2022 and beyond (Reconstruction)
<ul style="list-style-type: none"> • The pace of recovery is steady as while some Q3 headwinds ease, consumer concerns grow around inflation and the Omicron variant. • High global oil and gas prices and supply chain challenges prompt rising inflation. This cuts real spending power for consumers. • Business and consumer confidence is broadly steady. Consumption growth is moderate, while business investment improves. • Use of public transport remains muted – a transition to hybrid working begins. • Attendance at large scale cultural and sporting events continues, though the Omicron variant prompts social distancing again late in Q4. • Economic restructuring continues due to the pandemic and the ongoing effects of Brexit. • Job losses are modest as furlough ends. • Visitors start to return, but the tourism recovery is curtailed by the Omicron COVID variant and the reintroduction of some travel controls. 	<ul style="list-style-type: none"> • A mix of new restrictions and reduced social contact due to the Omicron variant slow down growth, but do not throw it into reverse. • Rising inflation, virus concerns and supply chain challenges all combine to result in a bumpy path for activity in early 2022. • A slow return of visitors and tourists dents the recovery in customer-facing services further. • Despite these headwinds, output recovers to pre-crisis levels in Q1 2022. • While employment remains below pre-crisis levels, job growth eases to a 'normal' pace. • Following the withdrawal of fiscal support there is some shake-out of unviable businesses. • The CAZ begins to undergo structural changes as firms adjust to post-pandemic trends like widespread hybrid working. • Some industries in the knowledge sector benefit from opportunities for greater use of digital technology. 	<ul style="list-style-type: none"> • The success of the expansion will depend on 1) the ability to control virus variant outbreaks with light-touch measures, 2) London's capacity to attract investment, 3) the pace of fiscal consolidation, 4) the international context and 5) transport constraints. • More rapid return of visitors and tourists in the second half of 2022. • Investment (and recapitalisations) key to supporting companies which survived the pandemic but remain weak. • Fiscal consolidation continues. • Jobs recovery continues to advance but there is disproportionate medium-term damage from the pandemic for disadvantaged groups such as young people, ethnic minorities etc

Medium-term scenario projections for London

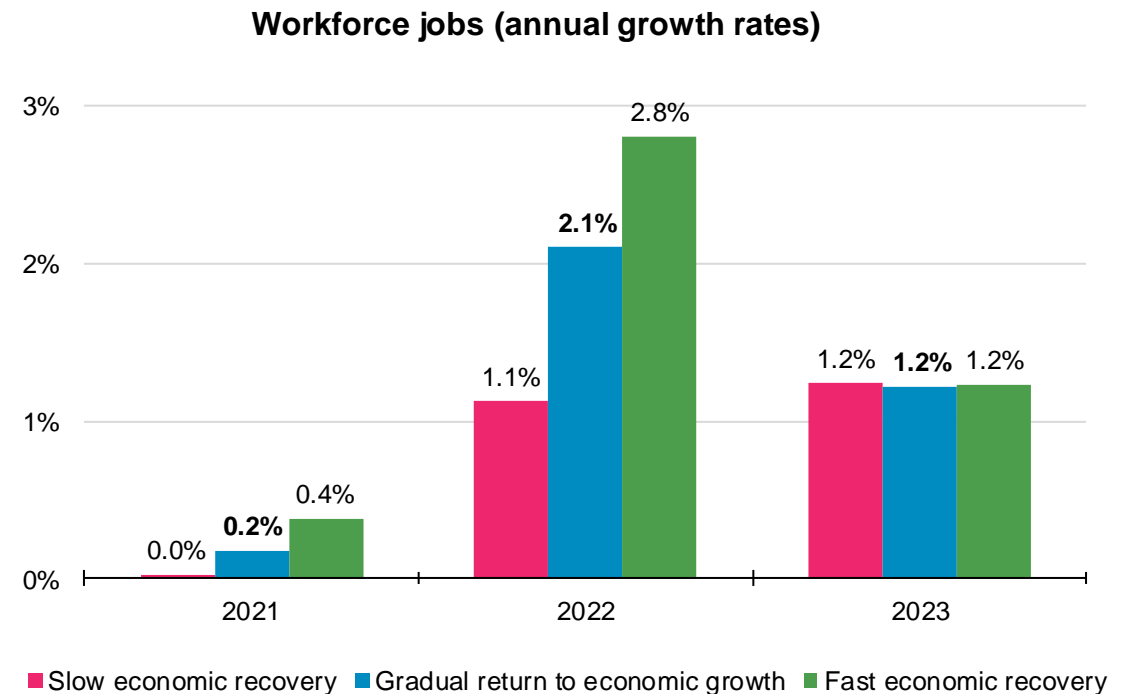


Source: GLA Economics; Note: Index of 100 = pre-crisis level. The 'triangle' indicates the quarter when the corresponding series reaches its pre-crisis level (sometimes the triangle is above 100, meaning that pre-crisis levels were not only reached but also surpassed in the same quarter).

Medium-term scenario projections: annual growth rates

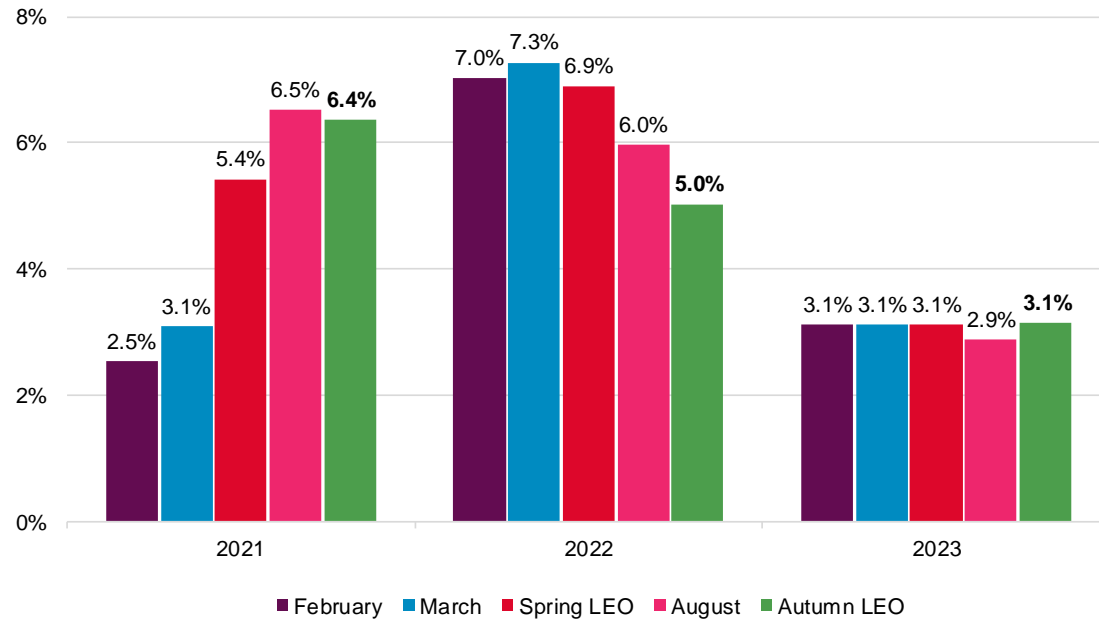


Source: GLA Economics

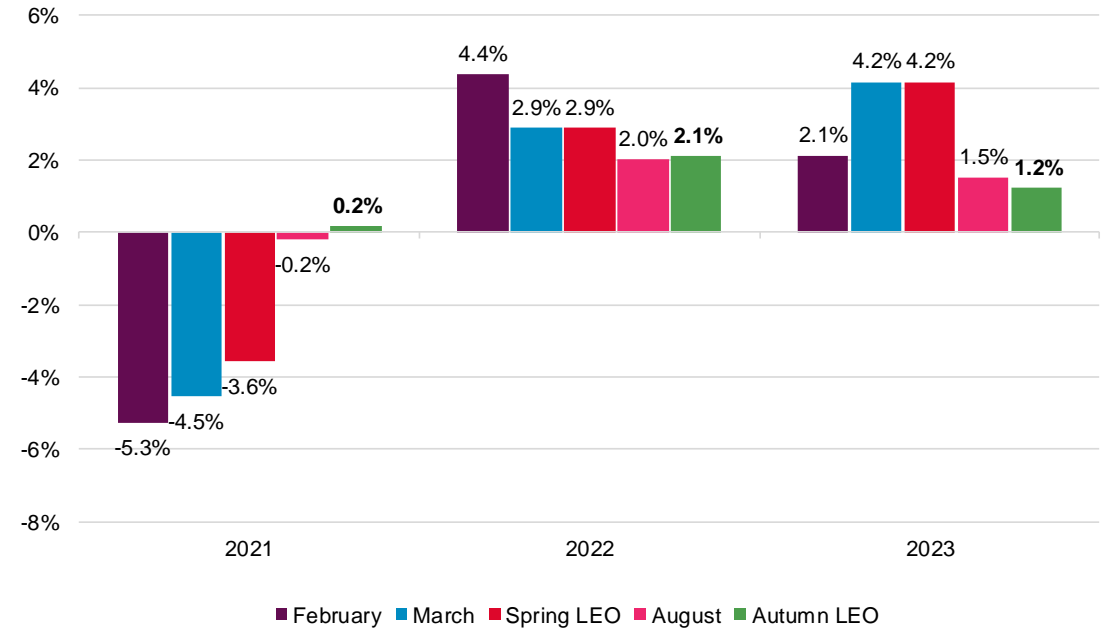


Comparison of successive Gradual recovery scenarios across outputs (1)

Real GVA annual growth rates - Central scenario for London

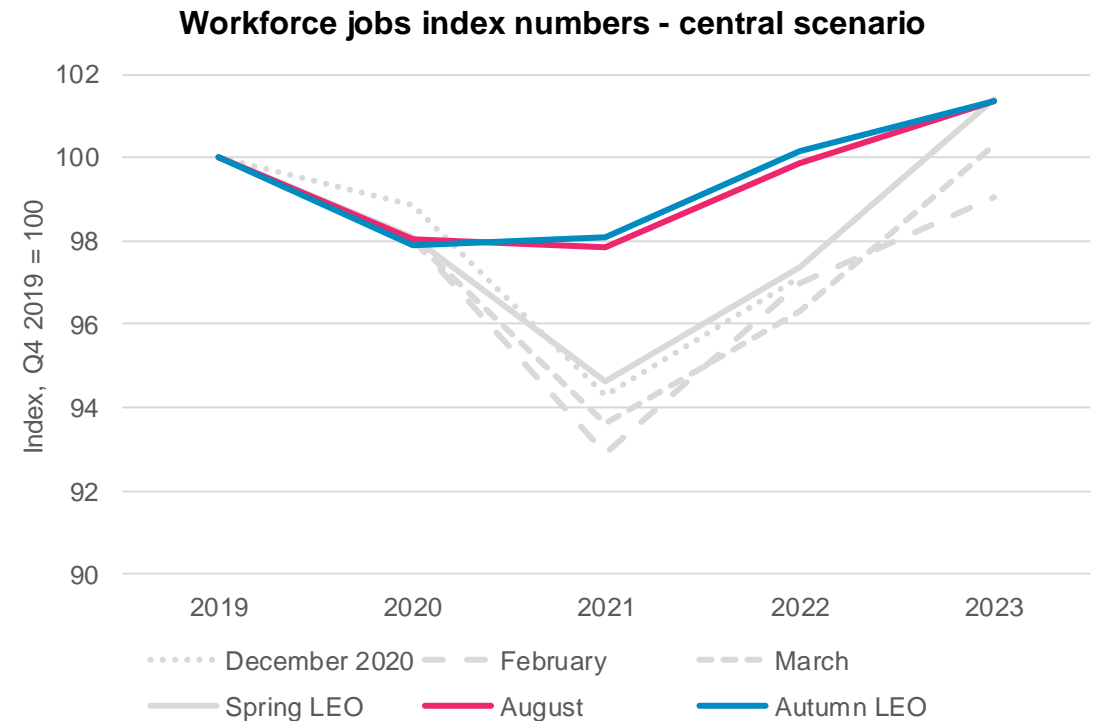
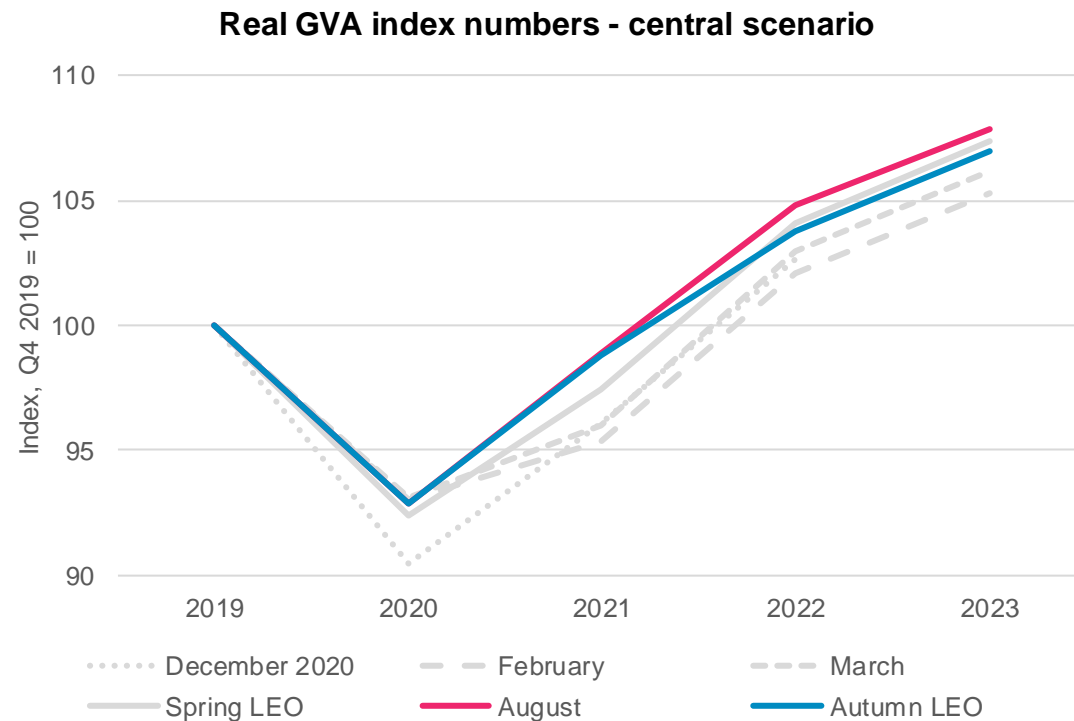


Workforce jobs annual growth rate - Central scenario for London



Source: GLA Economics

Comparison of successive Gradual recovery scenarios across outputs (2)



Source: GLA Economics estimates

London sectors: GVA and jobs growth projections in 2021 and 2022

Real GVA annual growth rate	2021	2022
Sector	%	%
Agriculture, forestry and fishing	0.4	2.6
Mining and quarrying	-0.4	0.2
Manufacturing	8.7	4.5
Electricity, gas, steam and air-conditioning supply	10.9	5.6
Water supply; sewerage and waste management	-3.4	5.4
Construction	13.8	4.4
Wholesale and retail trade; repair of motor vehicles	12.6	1.1
Transportation and storage	5.3	14.2
Accommodation and food service activities	-9.9	33.6
Information and communication	9.0	3.8
Financial and insurance activities	2.2	6.4
Real estate activities	1.8	2.9
Professional, scientific and technical activities	7.8	3.8
Administrative and support service activities	17.1	0.9
Public administration and defence	3.2	2.9
Education	3.4	4.4
Human health and social work activities	6.8	6.1
Arts, entertainment and recreation	6.2	26.2
Other service activities	6.0	13.4
Activities of households	5.4	9.1

Workforce jobs annual growth rate	2021	2022
Sector	%	%
Agriculture, forestry and fishing	-26.9	2.2
Mining and quarrying	2.2	-7.7
Manufacturing	-3.7	4.4
Electricity, gas, steam and air-conditioning supply	-14.5	-7.5
Water supply; sewerage and waste management	-3.7	-4.1
Construction	4.5	0.6
Wholesale and retail trade; repair of motor vehicles	-1.1	-0.3
Transportation and storage	-2.4	3.0
Accommodation and food service activities	-2.2	4.9
Information and communication	-4.5	2.5
Financial and insurance activities	4.1	2.5
Real estate activities	-2.6	2.5
Professional, scientific and technical activities	0.7	3.0
Administrative and support service activities	0.8	2.3
Public administration and defence	3.6	1.2
Education	-1.7	1.8
Human health and social work activities	5.4	0.8
Arts, entertainment and recreation	-3.8	5.3
Other service activities	1.9	1.2
Activities of households	-0.9	-9.6

Source: GLA Economics estimates – 'Gradual return to economic growth' scenario

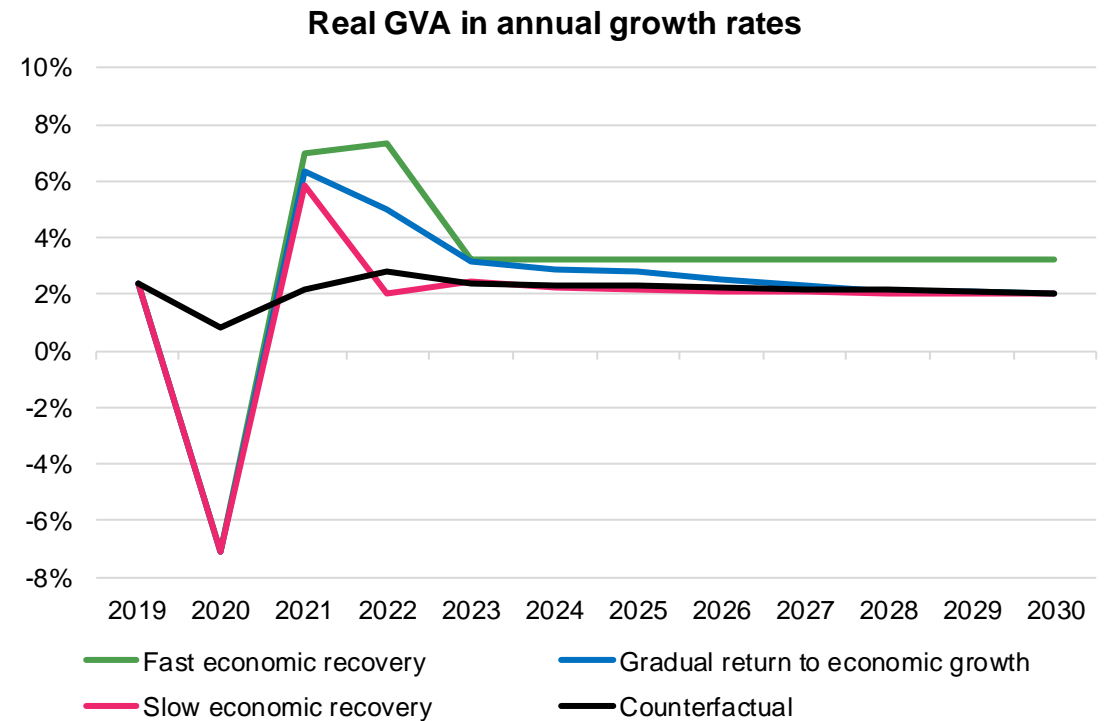
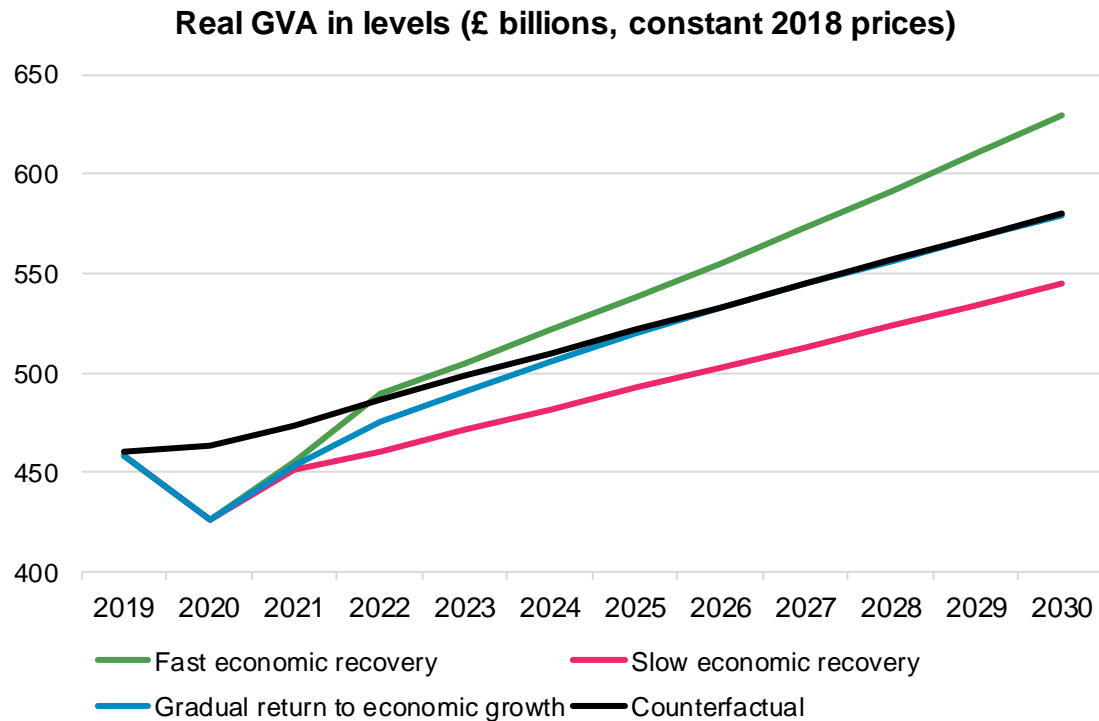
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Key assumptions behind the long-term projections

	NO-COVID / Counterfactual	Scenario 1: Fast economic recovery	Scenario 2: Gradual return to growth	Scenario 3: Slow economic recovery
GVA level in 2023	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
Time counterfactual GVA level is reached	NA	2022	2027 (6 years after crisis)	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%)	As in counterfactual (2%)
GVA level in 2030	Projected in line with the above assumptions	Higher than the counterfactual	Approaches the counterfactual by 2030	Counterfactual - nearly 8% (reflecting combination of microeconomic and macroeconomic scarring from COVID, plus Brexit)
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

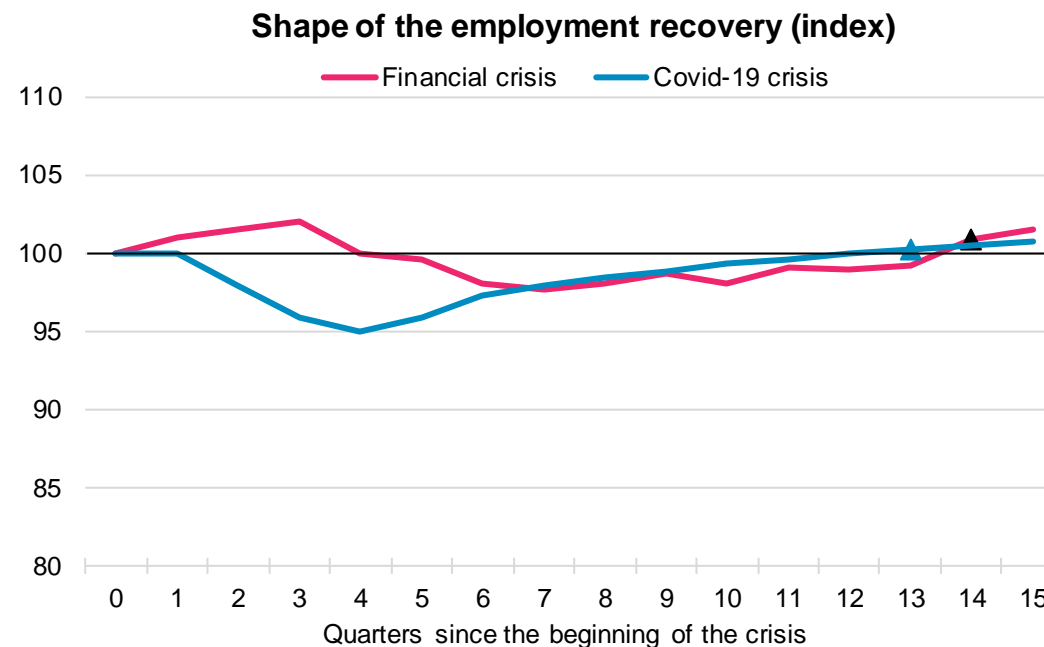
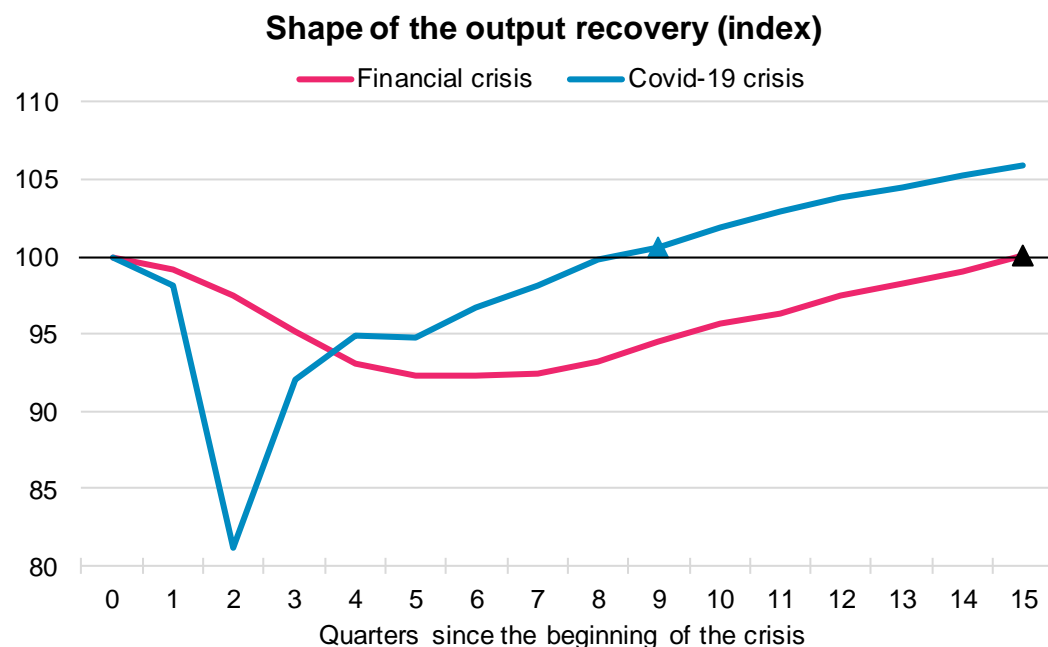
Long-term scenario projections for London



Source: GLA Economics

Comparison with the financial crisis

- Despite a deeper and more rapid output fall London's output is bouncing back more quickly from this crisis than from the financial crisis.
- Employment has also shrunk more rapidly this time. While the time to recover may be similar to that taken after the financial crisis, the greater loss of jobs in a weak labour market may increase scarring, where individuals lose contact with the labour market and become inactive.



Source: GLA Economics

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
2020	-7.1%	-7.1%	-7.1%
2021	7.0%	6.4%	5.8%
2022	7.4%	5.0%	2.0%
2023	3.3%	3.1%	2.5%
2025	3.2%	2.8%	2.1%
2030	3.2%	2.0%	2.0%

Source: GLA Economics

Summary of GVA in levels in selected years

Real GVA – £m 2018 prices (selected years)

Year	Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
	GVA	GVA	GVA
2020	426,163	426,163	426,163
2021	455,805	453,286	451,021
2022	489,354	476,071	460,167
2023	505,259	491,057	471,485
2025	538,113	519,491	492,404
2030	629,900	579,310	545,142

Source: GLA Economics

Real GVA quarterly levels over the forecasting period – Gradual recovery scenario

Real GVA – levels, £m 2018 prices

Q1 2021	Q2 2021	Q3 2021	Q4 2021
110,297	112,521	114,248	116,219
Q1 2022	Q2 2022	Q3 2022	Q4 2022
117,022	118,483	119,764	120,802
Q1 2023	Q2 2023	Q3 2023	Q4 2023
121,639	122,425	123,158	123,834

Source: GLA Economics

Workforce jobs quarterly levels over the forecasting period – Gradual recovery scenario

Workforce jobs – levels, thousands

Q1 2021	Q2 2021	Q3 2021	Q4 2021
5,831	5,910	5,951	5,988
Q1 2022	Q2 2022	Q3 2022	Q4 2022
6,008	6,039	6,057	6,074
Q1 2023	Q2 2023	Q3 2023	Q4 2023
6,091	6,109	6,127	6,144

Source: GLA Economics

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Summary of methodology

- Quarterly ONS UK output data is available to Q3 2021 for the UK and to Q1 2021 for London by sector.
- Q2 2021 and Q3 2021 output for London tracks UK output trends.
- Quarterly jobs data by sector available for London and the UK to Q2 2021.
- Payrolled employee jobs estimates for Q3 2021 for London and the UK inform jobs forecast.
- Development of scenarios considers modelling of published and non-published external forecasts. For this iteration, it pays particular attention to modelling of the latest estimates by the Office for Budget Responsibility (OBR) and the Bank of England (BoE). The modelling also builds on previous versions of GLAE scenarios.
- Sector level modelling reflects the disproportionate sectoral effects of the crisis. It expects rapid growth in the sectors most affected, such as arts and hospitality, but which may still not be enough to reach pre-pandemic levels until 2023 or later. The impact of Brexit will dampen medium-term growth in export-oriented finance and professional service sectors.
- The subsequent recovery glides towards the longer-term paths (explained in earlier slides) expected for each London scenario. Specifically, for the Gradual return to economic growth scenario there is an assumption that output returns near to the counterfactual scenario.

Back series

- Some of this data has been estimated by GLA Economics
- For output, ONS GVA data to 2019 is spliced with GDP data to Q1 2021
- In the absence of other data, GVA and GDP data are taken as equivalent, and so the effects of taxes and subsidies are ignored ($GVA = GDP + \text{subsidies} - \text{taxes}$)
- ONS Workforce Jobs data is available to Q2 2021
- An ONS nowcasting GVA series for London is available to Q3 2021, but this has not been used as established data as it remains an experimental series.

Real GVA – levels, £m 2018 prices

Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021
116,362	114,151	94,517	107,088	110,408	110,297

Workforce jobs – levels, thousands

Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021
6,081	6,077	5,951	5,832	5,777	5,831	5,910

Source: ONS, GLA Economics