



Macroeconomic scenarios for London's economy post COVID-19

Scenarios approach, storylines and projections to 2030

25 May 2021



Disclaimer

- This seventh output of the macroeconomic scenarios project updates the sixth output which was published on 11th March 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 slide pack is the seventh output of the GLA Economics-led project on developing economic scenarios for London's economy post COVID-19.
- It updates the sixth output published on 11th March 2021 by including new medium-term projections and a set of projections to 2030 for GVA only.
- These scenarios incorporate the latest intelligence of the Bank of England forecast for the UK economy of 6th May 2021.
- The main aim of the project was to develop a set of high-level macro-economic scenarios in order to inform the development of recovery strategies in London, reflecting unprecedented uncertainty in the economic outlook.
- The scenarios are envisaged as a common framework/set of assumptions to inform more detailed GLA 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.
- Other scenario dimensions (not provided here) include: Brexit and migration; International economic context; Technology and innovation; Financial climate; Political economy; Economic Geography and Greenhouse gas emissions.
- Three core scenarios have been developed: Scenario 1 - Fast economic recovery (an optimistic but plausible scenario); Scenario 2 - Gradual economic recovery and Scenario 3 - Slow economic recovery.

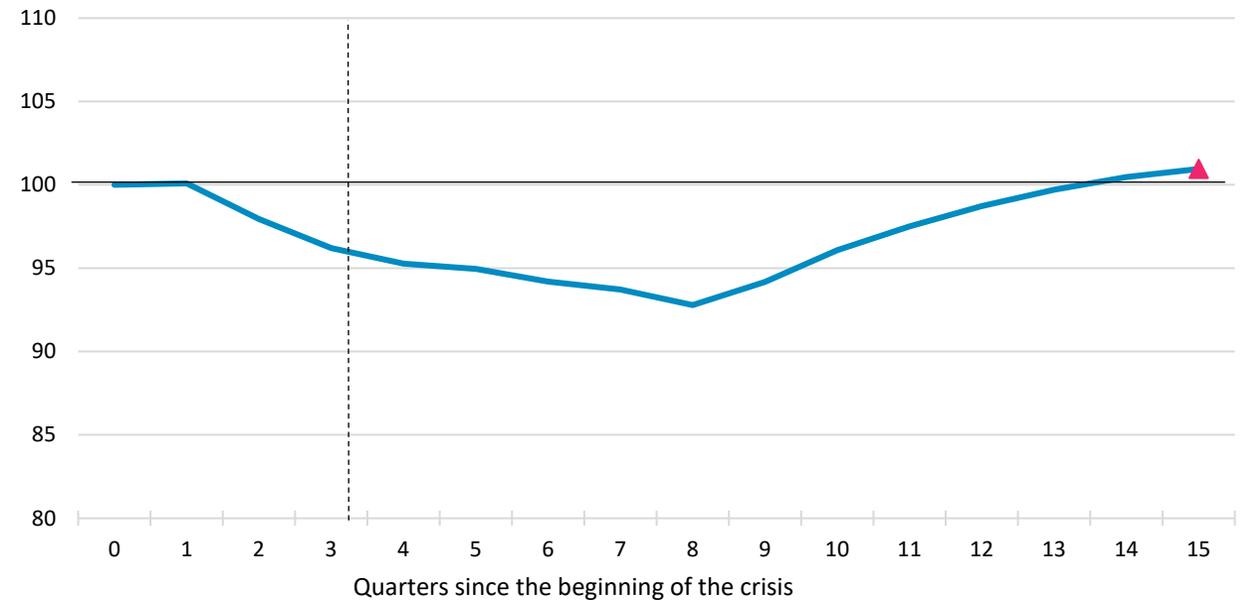
Executive Summary (3)

- In all scenarios, the economy is expected to recover. Under the Gradual return to economic growth scenario, London's economy reaches pre-crisis levels in Q1 2022.
- Employment recovery is projected to be significantly slower than output recovery, so that pre-crisis employment levels are not reached until Q2 2023 in the Gradual economic recovery scenario.

Shape of the output recovery (index)



Shape of the employment recovery (index)



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 programme continues to roll-out successfully and at pace. It is effective in reducing the spread of the virus, and restrictions on movement ease rapidly.</p> <p>There is widespread public trust in the vaccine, and inoculation against the virus, across all groups.</p> <p>Restrictions at the national border are effective in limiting the spread of virus variants.</p> <p>There is quick identification of variants, and efforts to limit their spread are effective.</p>	<p>Vaccine programme continues to roll-out successfully. It is effective in reducing the spread of the virus, and restrictions on movement ease steadily.</p> <p>There is widespread public trust in the vaccine, and inoculation against the virus, across most groups. Coverage is patchy in some urban areas.</p> <p>Restrictions at the national border are mostly effective in limiting the spread of virus variants.</p> <p>There is fairly quick identification of variants, and efforts to limit their spread are mostly effective.</p>	<p>Vaccine programme continues to roll-out successfully, but supply problems slow the pace. It is effective in reducing the spread of the virus, and restrictions on movement ease steadily.</p> <p>There is public trust in the vaccine, and inoculation against the virus, across most groups. Coverage is very patchy in some urban areas.</p> <p>Restrictions at the national border are patchy in their effectiveness in limiting the spread of virus variants.</p> <p>Not all variants are identified quickly, and so efforts to limit their spread have limited effectiveness. Vaccines have limited effectiveness against these variants. There are further restrictions in Winter 2021.</p>

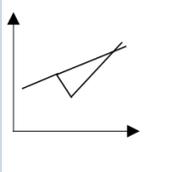
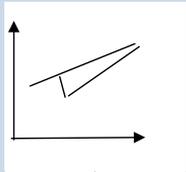
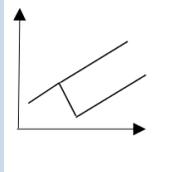
Effectiveness/impact of economic support measures

Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
<p>Business and consumer confidence return markedly and quickly in Q2 2021 with noticeable increases in investment and consumption spending. Subsidies for investment in Budget 2021 have a marked effect.</p> <p>Unprecedented fiscal and monetary policies, including the furlough scheme, end after Q3 2021. Little medium or long-term economic scarring, although employment recovery lags GVA.</p>	<p>Business and consumer confidence return in Q2 2021. Subsidies for investment in Budget 2021 have some effect.</p> <p>Unprecedented fiscal and monetary policies, including the furlough scheme, end after Q3 2021. Economic scarring limited to the medium term as employment recovers less quickly than GVA.</p>	<p>Business and consumer confidence remain muted. This is further dampened with the introduction of restrictions in Q4 2021 and Q1 2022 as the virus takes hold again. Subsidies for investment in Budget 2021 have marginal effect.</p> <p>Unprecedented fiscal and monetary policies, including the furlough scheme, end after Q3 2021. There is widespread economic scarring after businesses 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 relationship proves effective in handling tensions, and is constructive in resolving issues, mitigating the effects of UK exit from the Single Market.</p> <p>Travel restrictions for visitors to the UK ease in Q2 2021, and some international students return in Q3 2021.</p> <p>The CAZ remains a hub of economic activity, and London remains an important business centre reaping agglomeration economies.</p>	<p>UK and EU relations are not fully effective in managing tensions, reducing confidence in trading relationships, and affecting trade flows. Re-structuring of London's economy with loss of access to the Single Market takes effect.</p> <p>Travel restrictions for visitors to the UK remain tight, and there is a limited return of international students in Q3 2021.</p> <p>There is a loss of jobs in arts, hospitality, and tourism in the CAZ, but despite some scarring in the medium term the area remains attractive to business and continues to reap agglomeration economies.</p>	<p>UK and EU relations descend into disputes, there are new restrictions on trade, and adverse effects on trade flows. Re-structuring of London's economy begins in earnest.</p> <p>Travel restrictions for visitors to the UK remain tight, and there is no return of international students in Q3 2021.</p> <p>There is a loss of jobs in arts, tourism, hospitality, tourism, and other businesses in the CAZ, and the cumulative effect is such that the area becomes less attractive to business and reaps fewer agglomeration economies.</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 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> 

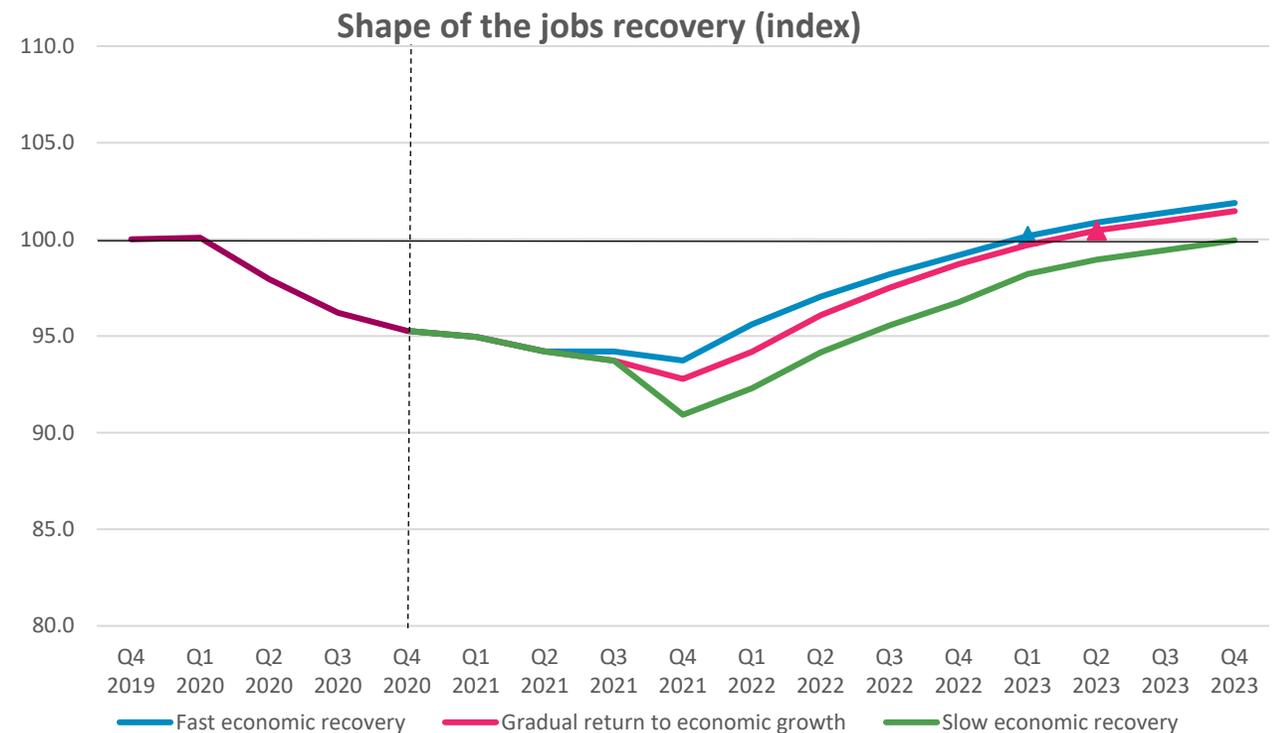
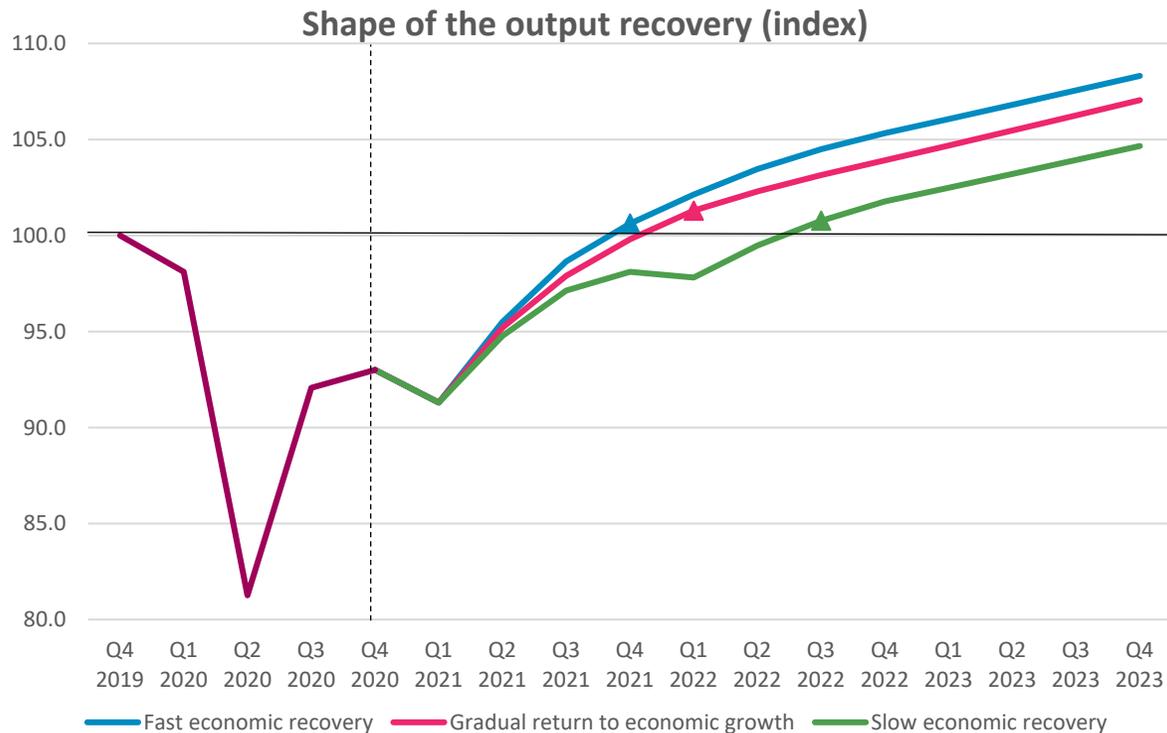
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The overall storyline behind the Gradual recovery scenario

Q1 2021 (Third Economic Shock)	Q2 2021 (Economic Reactivation)	Q3 2021 (Economic Transition)	Rest of 2021 and 2022 (Reconstruction)
<ul style="list-style-type: none"> • Economic activity remains subdued by a third lockdown, continued delays in business investment decisions, the emergence of trading problems with the EU, and the running down of stockpiles built due to uncertainty around the future trading relationship with the EU. • Businesses continue to adapt to new ways of working. Re-structuring of the economy continues • The CJRS slows the pace of job losses • Business confidence improves as the vaccination programme goes well and some clarity emerges around UK-EU trading relationships • There is some long-term damage to the sectors most exposed to social interaction (e.g. culture, hospitality, construction) • Overall net job losses continue • Public sector spending and debt keep increasing. 	<ul style="list-style-type: none"> • There is a clearer path to the 'new normality' and few social distancing measures remain after the third lockdown. • The economy starts to recover as consumer spending and investment picks up • Lagged recovery for sectors most exposed to social interaction • Significant restrictions remain on international tourism • Businesses and sectors restructure to adapt to a 'new normality' • Employment keeps decreasing although at a slow pace because of the CJRS which is extended to beyond the end of expected lockdown restrictions. • Public sector spending and debt continue to increase • The degree of the recovery will mainly depend on 1) the new social distancing rules, and the use of public transport 2) the potential for an outbreak of a virus variant 3) the impact of the end of the CJRS 4) the speed of return of tourists to London and 5) how much of and how quickly hoarded savings are spent 	<ul style="list-style-type: none"> • The economy continues to recover, if at a slower rate • Business and consumer confidence improve. The growth in consumer spending slows, although business investment picks up • Use of public transport remains muted • Attendance at large scale cultural and sporting events face some, if reduced, constraints • Employment in cultural sectors falls as support from furlough scheme comes to an end • Economic restructuring continues across other parts of the economy – the ongoing effects of Brexit contribute • Visitors start to return - falls in COVID numbers in Europe and the US leads to fewer travel restrictions, and less need for tests before and after travel 	<ul style="list-style-type: none"> • Mass-vaccination starts of a second vaccine which is effective in addressing variants • Output remains below pre-crisis levels until Q1 2022. • More rapid return of visitors and tourists in 2022. • Net employment creation starts by the end of 2021 and is solid but does not recover pre-crisis levels yet. • Investment (and recapitalisations) key to support companies which survived but remain weak. • A degree of fiscal consolidation begins. • The success of the expansion will depend on 1) light-touch control of outbreaks of virus variants, 2) London's capacity to attract investment, 3) the kind of fiscal consolidation which actually happens, including the phasing out of the CJRS 4) the international context and 5) transport constraints • Jobs recovery remains slow and there continue to be disproportionate impacts on disadvantaged groups such as young people, ethnic minorities etc

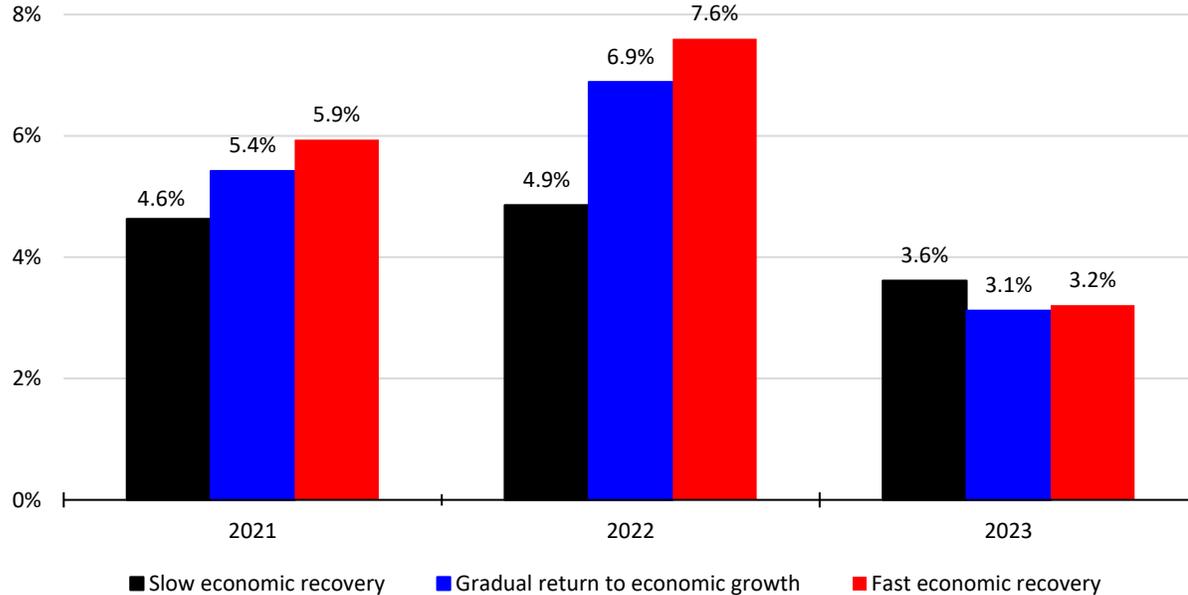
Medium-term scenario projections for London



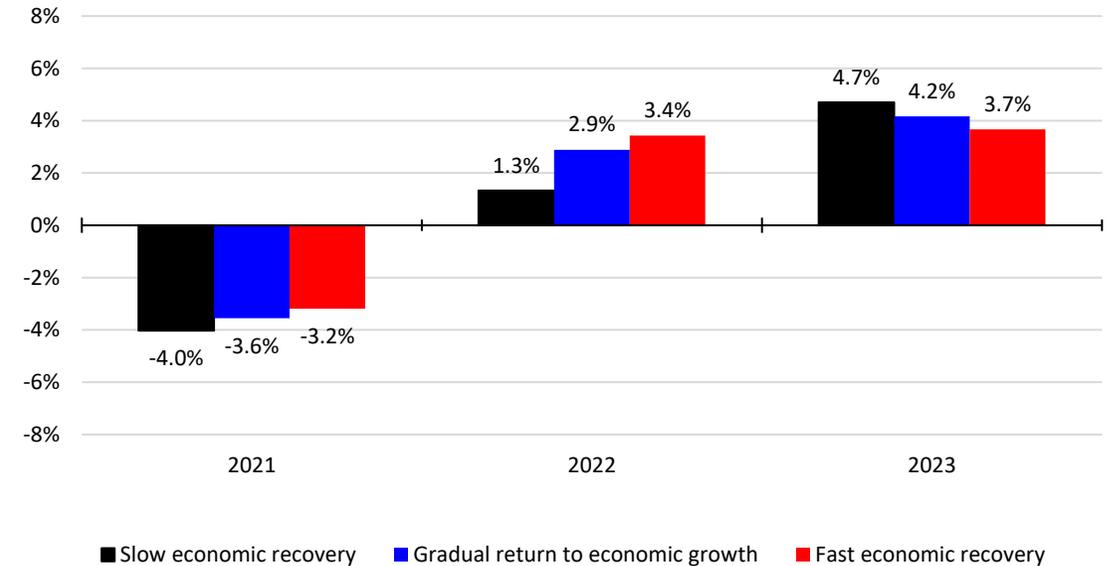
Source: GLA Economics. Index of 100 = pre-crisis level. The 'triangle' indicates the quarter when the corresponding series reaches its pre-crisis level (sometimes the triangle is above 100, meaning that pre-crisis levels were not only reached but also surpassed in the same quarter).

Medium-term scenario projections: annual growth rates

Real GVA (annual growth rates)

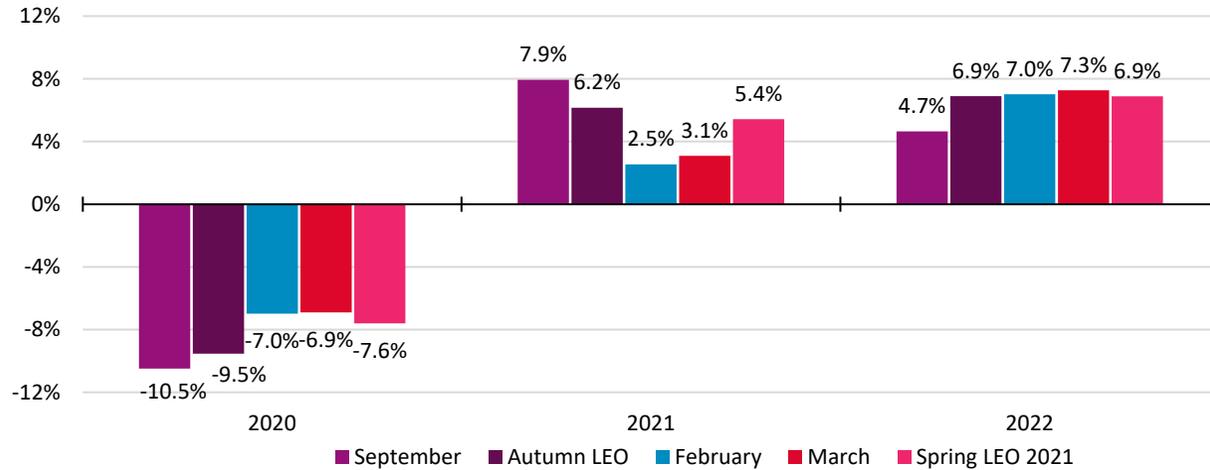


Workforce jobs (annual growth rates)

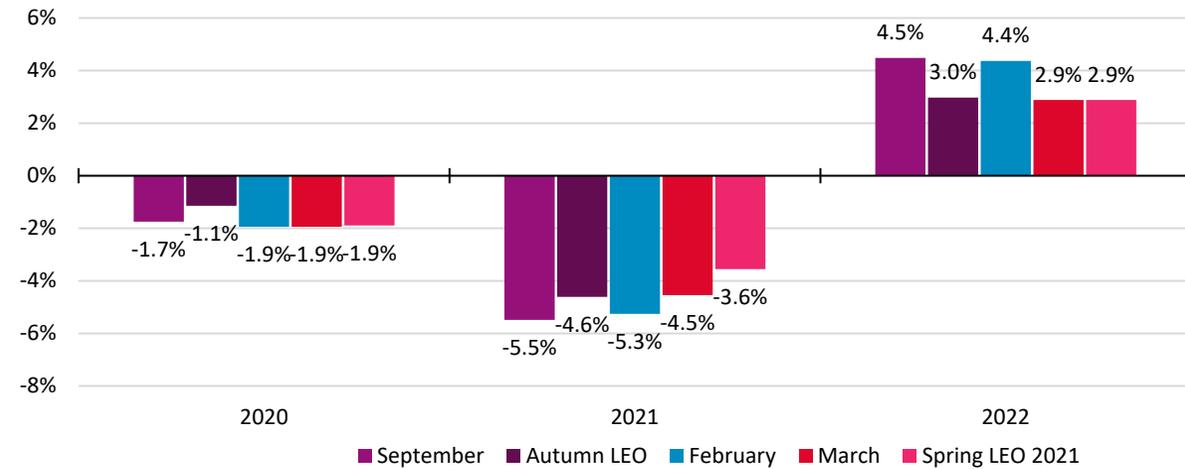


Comparison of successive Gradual recovery scenarios across outputs (1)

Real GVA annual growth rates - Central scenario for London



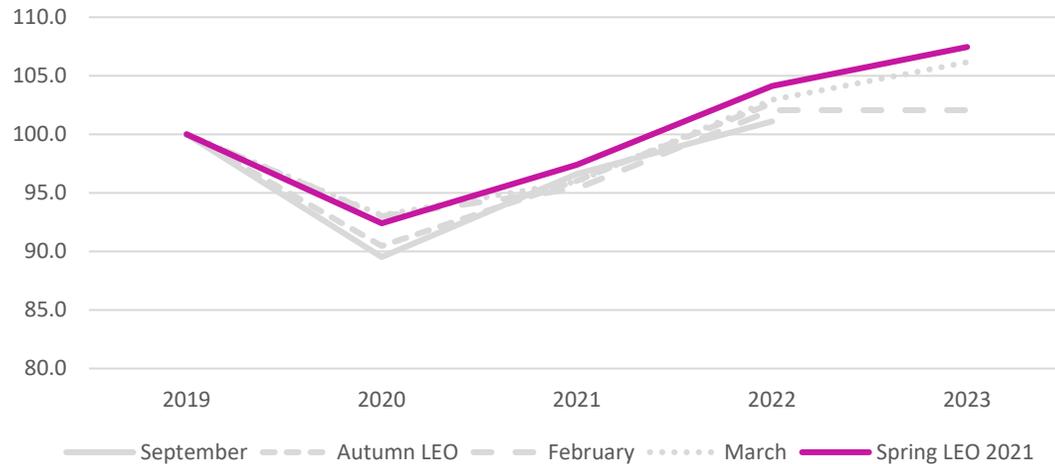
Workforce jobs annual growth rate - Central scenario for London



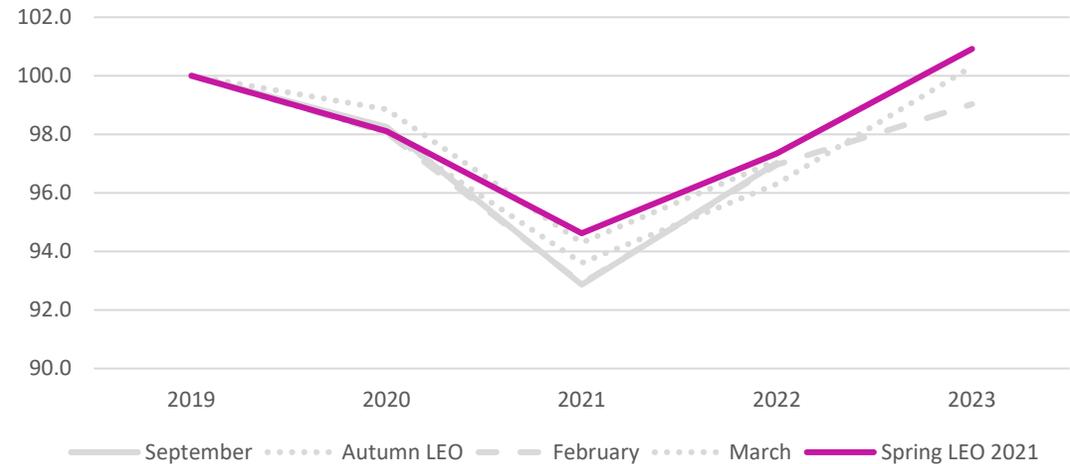
Source: GLA Economics

Comparison of successive Gradual recovery scenarios across outputs (2)

Real GVA index numbers - central scenario



Workforce jobs index numbers - central scenario



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	5.6	-6.0
Mining and quarrying	0.0	-3.5
Manufacturing	10.7	4.9
Electricity, gas, steam and air-conditioning supply	10.9	11.5
Water supply; sewerage and waste management	-4.0	11.6
Construction	10.5	3.5
Wholesale and retail trade; repair of motor vehicles	6.0	2.1
Transportation and storage	3.1	9.4
Accommodation and food service activities	5.7	34.1
Information and communication	5.9	8.4
Financial and insurance activities	2.8	3.8
Real estate activities	2.4	3.3
Professional, scientific and technical activities	7.7	7.1
Administrative and support service activities	3.0	11.0
Public administration and defence; compulsory social security	9.8	3.6
Education	7.8	2.2
Human health and social work activities	7.4	12.3
Arts, entertainment and recreation	4.9	39.3
Other service activities	8.8	12.7
Activities of households	7.9	8.7

Workforce jobs annual growth rate	2021	2022
Sector	%	%
Agriculture, forestry and fishing	-48.5	-6.4
Mining and quarrying	-11.9	-8.9
Manufacturing	-7.3	-4.6
Electricity, gas, steam and air-conditioning supply	-25.3	-3.5
Water supply; sewerage and waste management	-12.1	-2.3
Construction	-7.6	11.2
Wholesale and retail trade; repair of motor vehicles	-3.8	-5.3
Transportation and storage	-6.4	0.5
Accommodation and food service activities	-10.9	8.6
Information and communication	-6.2	4.6
Financial and insurance activities	2.0	2.6
Real estate activities	2.5	4.8
Professional, scientific and technical activities	0.8	5.0
Administrative and support service activities	-5.6	1.8
Public administration and defence; compulsory social security	4.6	1.3
Education	-3.9	2.0
Human health and social work activities	-1.3	2.0
Arts, entertainment and recreation	-8.5	12.8
Other service activities	1.3	2.2
Activities of households	-63.4	0.4

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

Outline

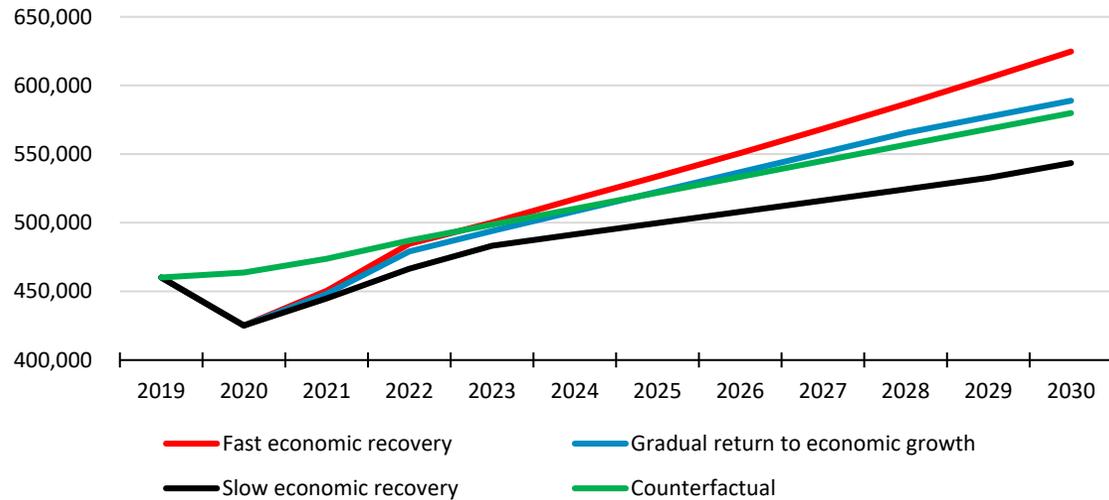
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Key assumptions behind the long-term projections

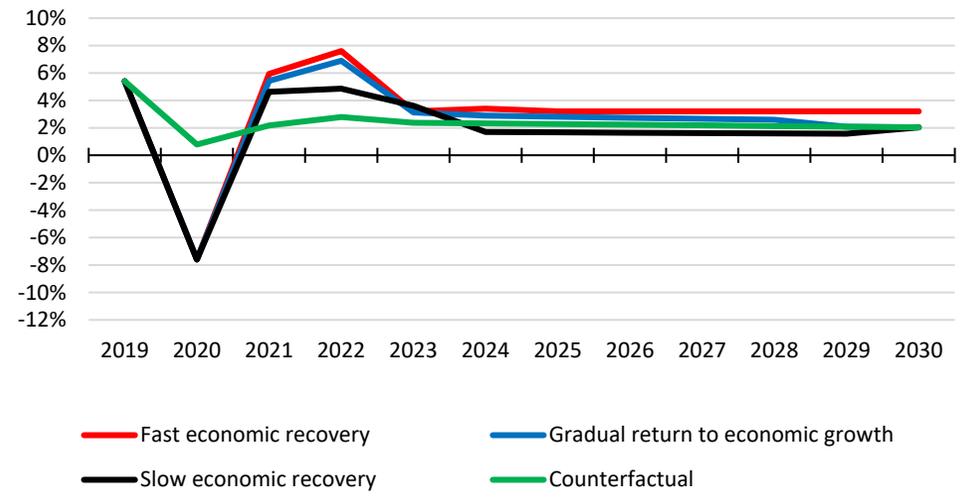
	NO-COVID / Counterfactual	Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
GVA level in 2022	As estimated by GLAE in April 2020 forecasts	As projected in medium-term scenario 1	As projected in medium-term scenario 2	As projected in medium-term scenario 3
Time counterfactual GVA level is reached	NA	2023	2026 (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 (2.1%)	As in counterfactual (2.1%)
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 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

Real GVA in levels (£million)



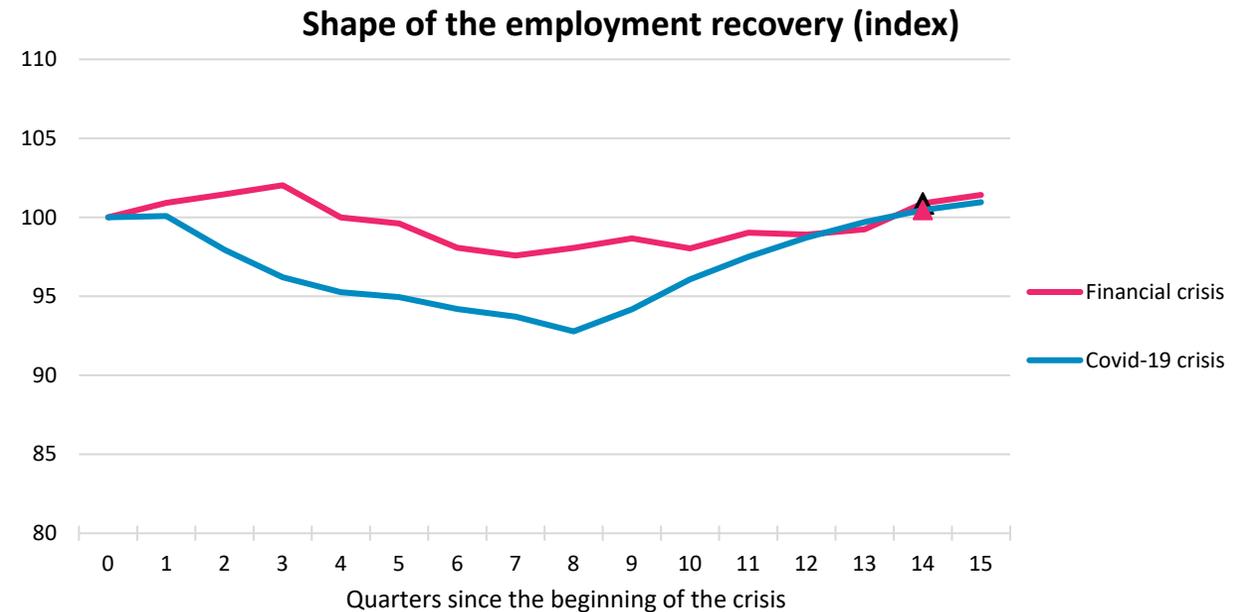
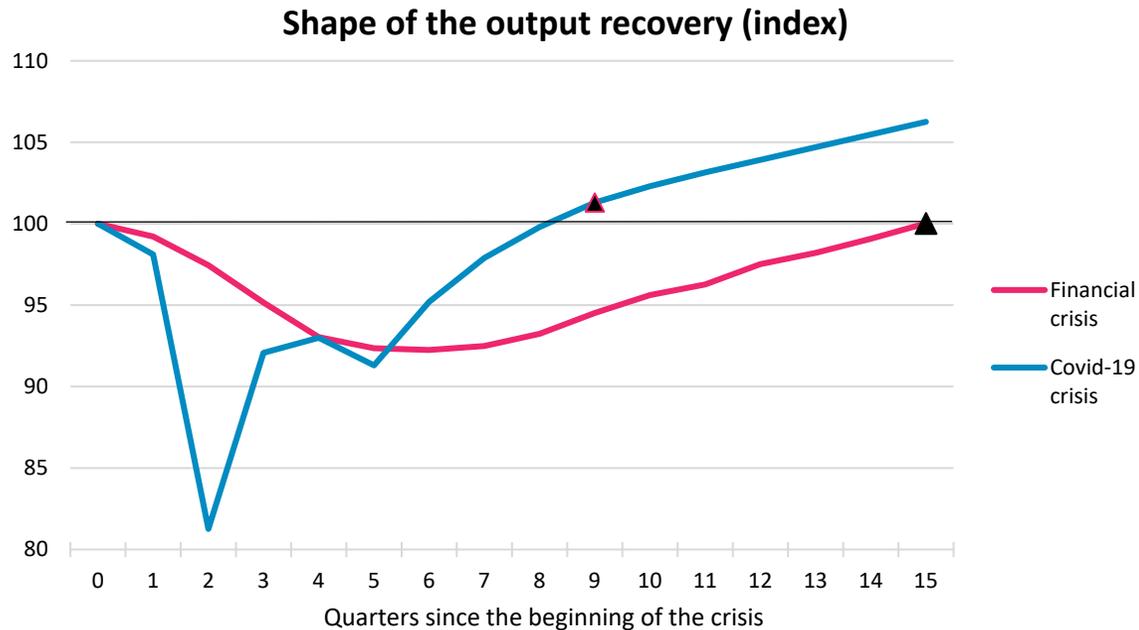
Real GVA in annual growth rates



Source: GLA Economics

Comparison with the financial crisis

- Despite a deeper and more rapid output fall it is likely that London's output will bounce 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 jobs market is likely to increase scarring, where individuals lose contact with the labour market and become inactive.



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	-7.6%	-7.6%	-7.6%
2021	5.9%	5.4%	4.6%
2022	7.6%	6.9%	4.9%
2023	3.2%	3.1%	3.6%
2025	3.2%	2.8%	1.7%
2030	3.2%	2.0%	2.0%

Source: GLA Economics

Summary of GVA in levels in selected years

Real GVA – £m 2016 prices (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
2020	425,124	425,124	425,124
2021	450,361	448,173	444,812
2022	484,596	479,040	466,424
2023	500,145	493,978	483,277
2025	533,699	522,533	499,733
2030	624,733	588,893	543,486

Source: GLA Economics

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

Real GVA – levels, £m 2016 prices

Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022
106,502	111,052	114,201	116,417	118,163	119,333
Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023
120,323	121,220	122,123	123,033	123,949	124,873

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	Q1 2022	Q2 2022
5,774	5,728	5,699	5,642	5,727	5,842
Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023
5,929	6,003	6,063	6,109	6,139	6,170

Source: GLA Economics

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Summary of methodology

- Quarterly ONS UK output data is available to Q1 2021 for the UK and to Q3 2020 for London by sector.
- Q4 2020 and Q1 2021 output for London tracks UK output trends.
- Quarterly jobs data by sector available for London and the UK to Q4 2020.
- Development of scenarios takes into account modelling of published and non-published external forecasts. For this iteration it pays particular attention to modelling of latest estimates by the Office for Budget Responsibility (OBR) and the Bank of England (BoE) which took account of the March 2021 Budget. 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 while still not recovering to former levels until 2023 or later. The impact of Brexit will dampen 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.

Back series

- Some of this data has been estimated by GLA Economics
- For output ONS GVA data to 2018 is spliced with GDP data to Q3 2020. Q4 2020 output data is estimated
- 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 Q4 2020

Real GVA – levels, £m 2016 prices

Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020
116,651	114,444	94,792	107,403	108,485

Workforce jobs – levels, thousands

Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020
6,081	6,086	5,956	5,850	5,793

Source: GLA Economics