

Macroeconomic scenarios for London's economy post COVID-19

Scenarios approach, storylines and projections to 2030

11 March 2021



Disclaimer

- This sixth output of the macroeconomic scenarios project updates the fifth output which was published on 18th February 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.
- 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 sixth output of the GLA Economics-led project on developing economic scenarios for London's economy post COVID-19.
- It updates the fifth output published on 18th February 2021 by including new medium-term projections and a set of projections to 2030 for GVA only.
- These scenarios model the effects of the Budget on 3rd March 2021 which provided fiscal stimulus in the near term through, for example: further business rates relief for the hard hit sectors of retail and hospitality; and extended the furlough scheme to delay and ameliorate job losses when it ends.
- 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](#).

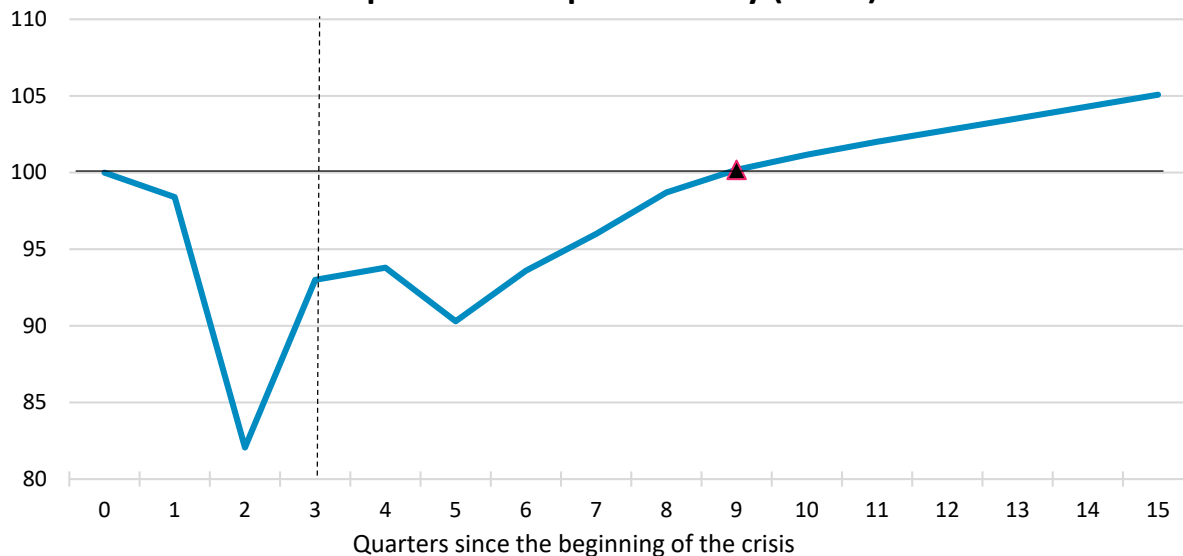
Executive Summary (2)

- 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.

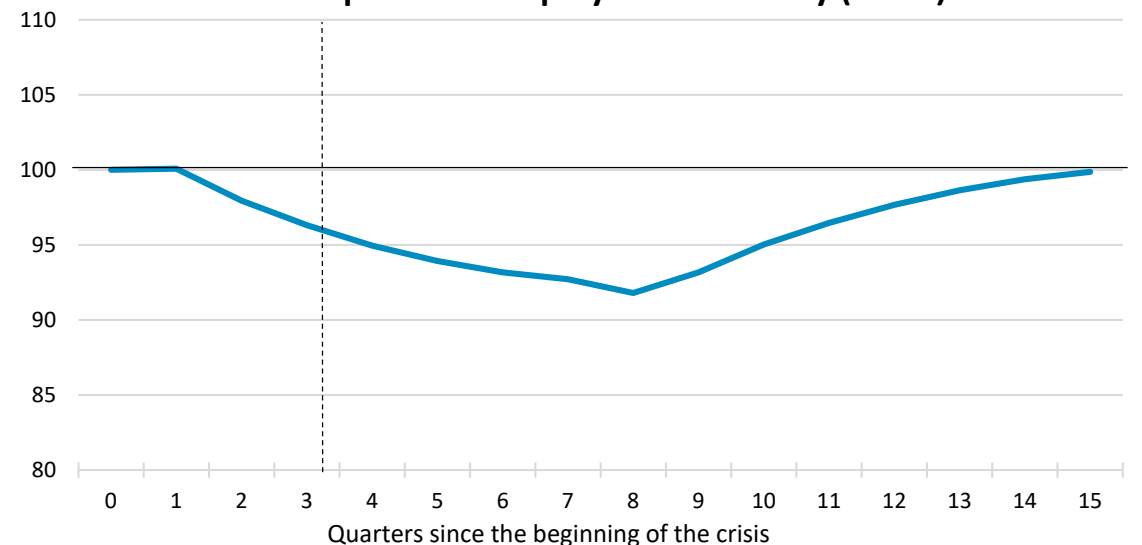
Executive Summary (3)

- In all scenarios, the pace of the output recovery (W-shaped) is markedly slower than the pace of the initial fall. 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 before Q4 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, 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 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 reasonably effective 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. There are further restrictions in Winter 2021.</p>

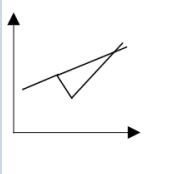
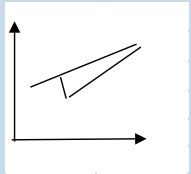
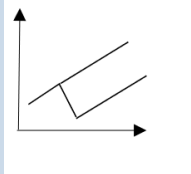
Effectiveness/impact of economic support measures

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 gradually in Q2 2021. Concerns about the future dampen increases in investment and consumption spending. 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 relations are harmonious, and 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 slightly fractious 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, 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> 

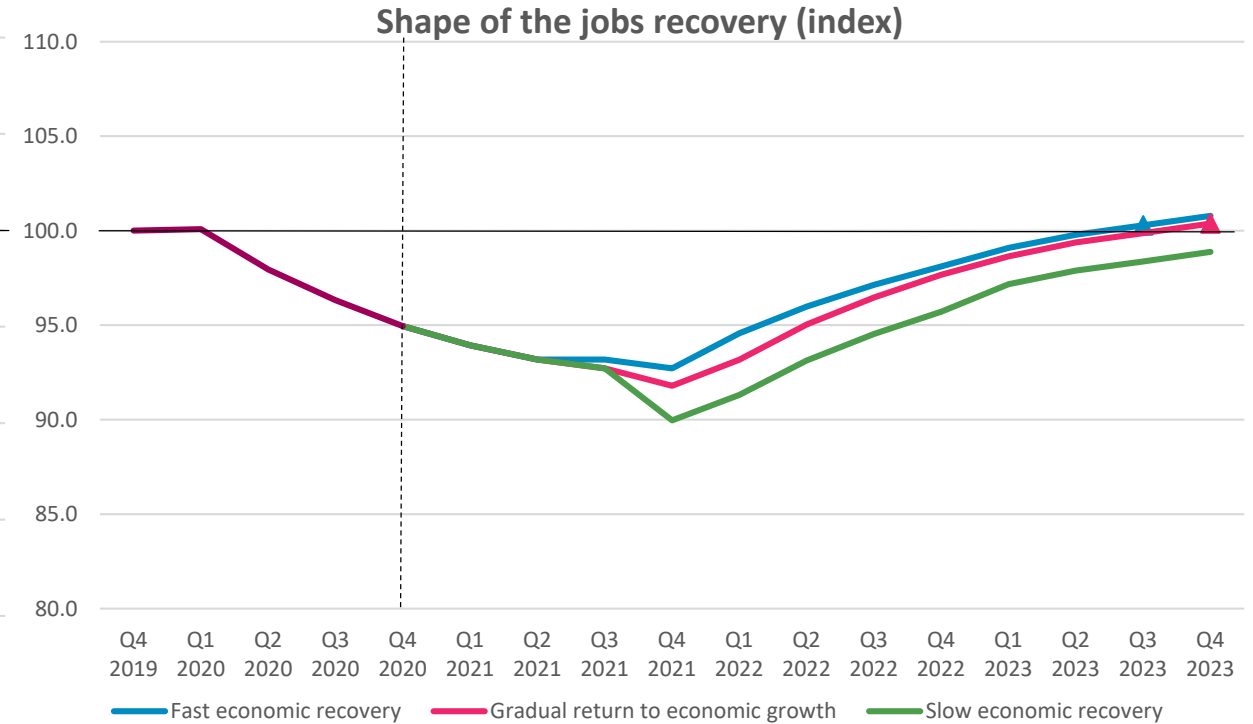
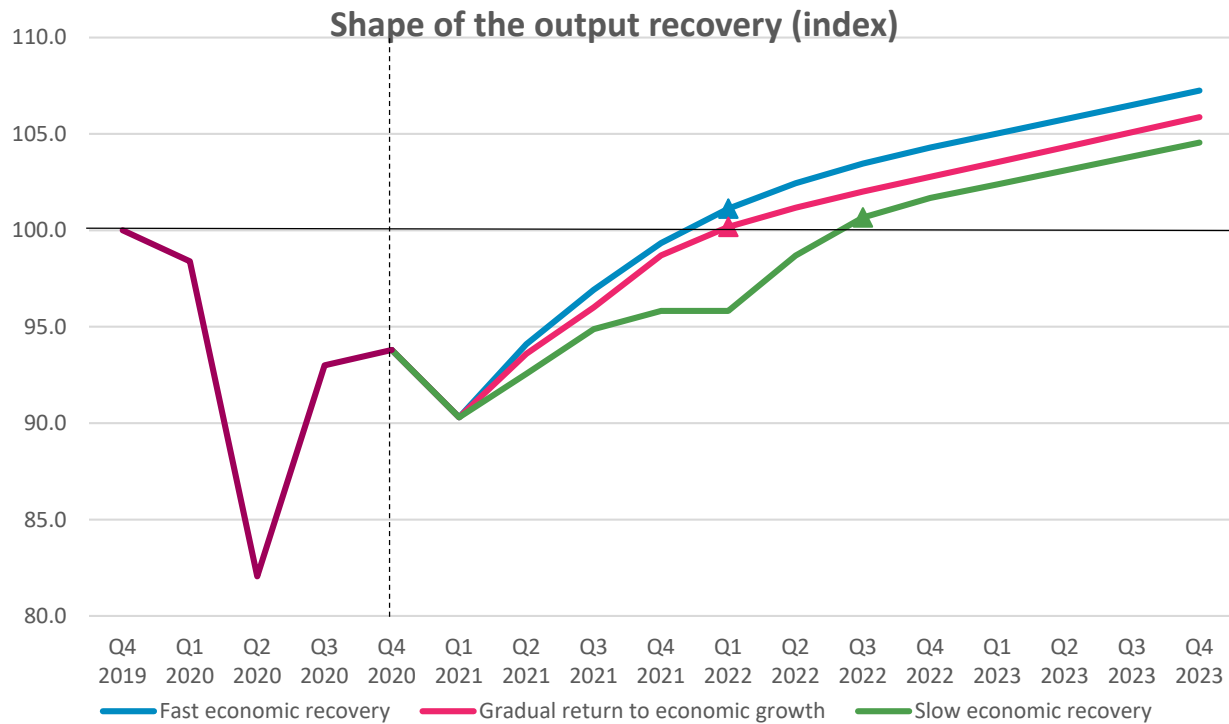
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The overall storyline behind the Gradual recovery scenario

Q4 2020 (Second Economic Shock)	Q1 2021 (Third Economic Shock)	Q2 2021 (Economic Reactivation)	Rest of 2021 and 2022 (Transition and Reconstruction)
<ul style="list-style-type: none"> • The recovery slows, especially in November because of the second lockdown in England. • The return to the 'old normality' seems closer but social distancing measures remain after the second lockdown. • Lagged recovery for sectors most exposed to social interaction. • Businesses and sectors restructure to adapt to a 'new normality'. • Employment keeps decreasing although at a slow pace because of the CJRS. • Public sector spending and debt continue increasing. • Uncertainty remains high and Brexit-related uncertainty plays a greater role as agreement is not reached until last minute. • 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. 	<ul style="list-style-type: none"> • Economic activity remains depressed 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 destruction continues. • Public sector spending and debt keep increasing. 	<ul style="list-style-type: none"> • There is a clearer path to the 'new normality' but some social distancing measures remain after the third lockdown. • The economy starts to recover. • Lagged recovery for sectors most exposed to social interaction. • 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 increasing. • The degree of the recovery will mainly depend on 1) the new social distancing rules 2) the potential for an outbreak of a virus variant and 3) the impact of the end of the CJRS. 	<ul style="list-style-type: none"> • Transition to a 'new normality' - and a situation similar to 'pre-lockdown'. • The actual economic expansion starts in the second half of 2021 when restrictions reduce and mass-vaccination is a fact. • Output remains below pre-crisis levels until Q1 2022. • Gradual return of visitors and tourists from late 2021. • 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.

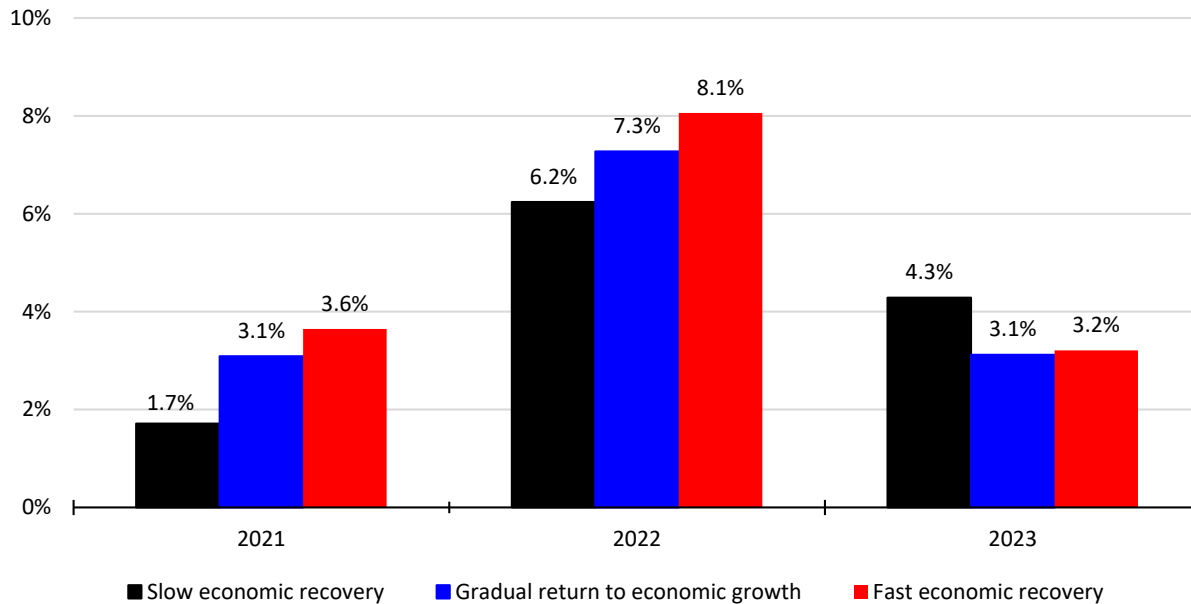
Medium-term scenario projections for London



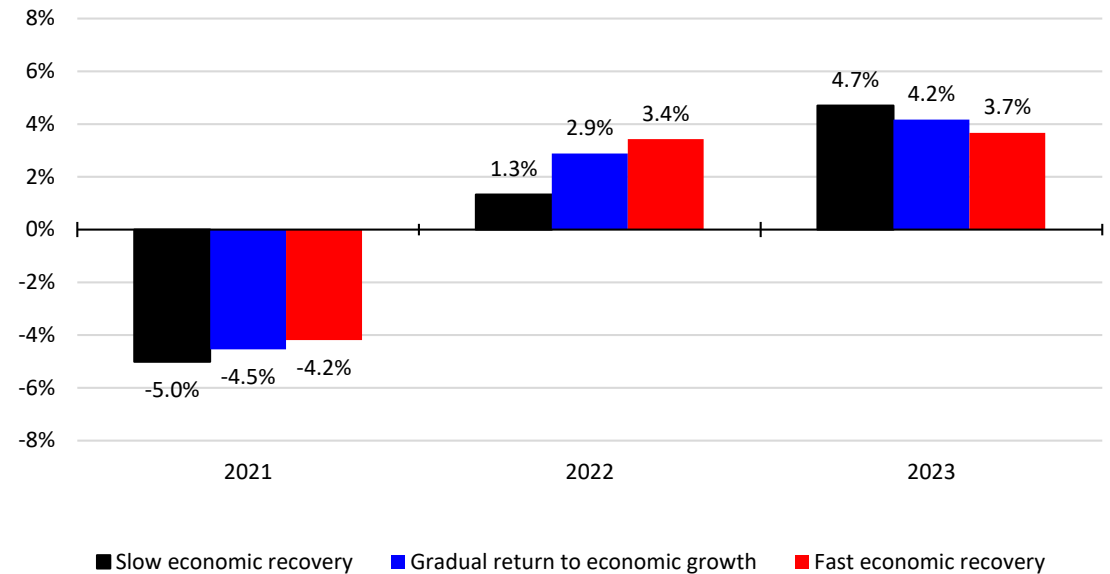
Source: GLA Economics. Index of 100 = pre-crisis level. The 'triangle' indicates the quarter when the corresponding series reaches its pre-crisis level (sometimes the triangle is above 100, meaning that pre-crisis levels were not only reached but also surpassed in the same quarter).

Medium-term scenario projections: annual growth rates

Real GVA (annual growth rates)

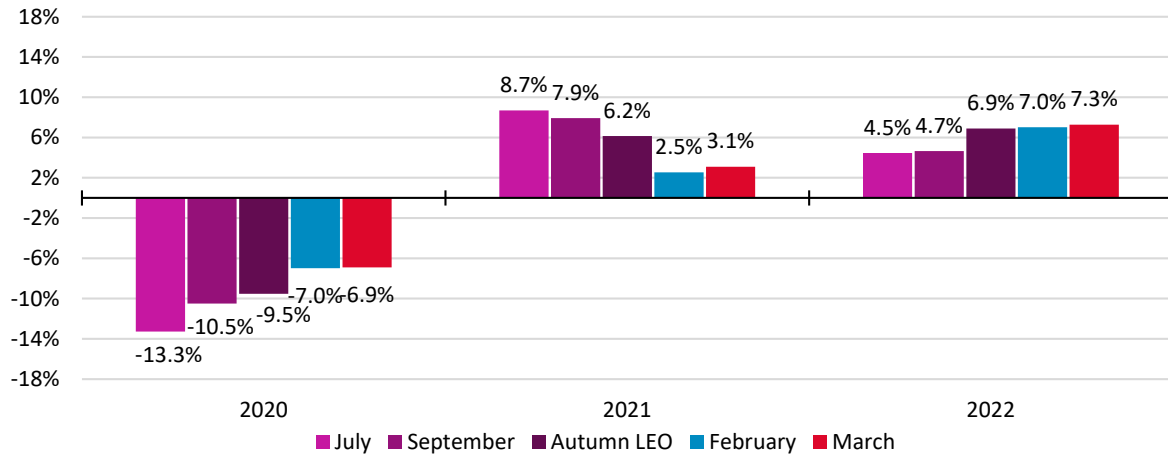


Workforce jobs (annual growth rates)

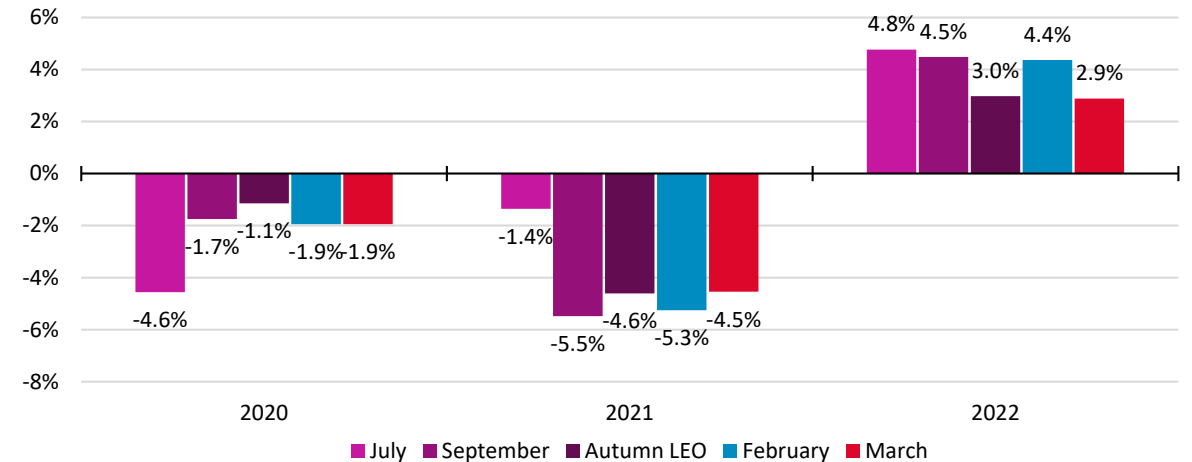


Comparison of successive Gradual recovery scenarios across outputs (1)

Real GVA annual growth rates - Central scenario for London



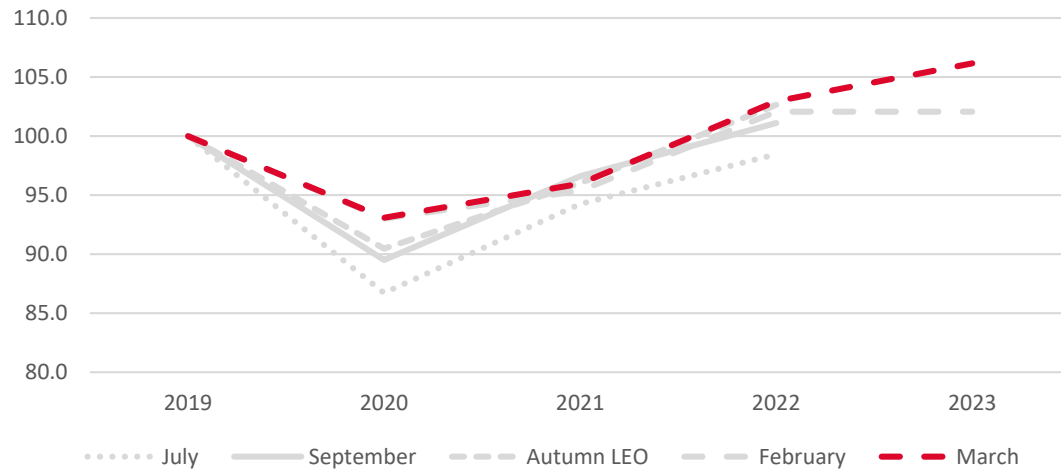
Workforce jobs annual growth rate - Central scenario for London



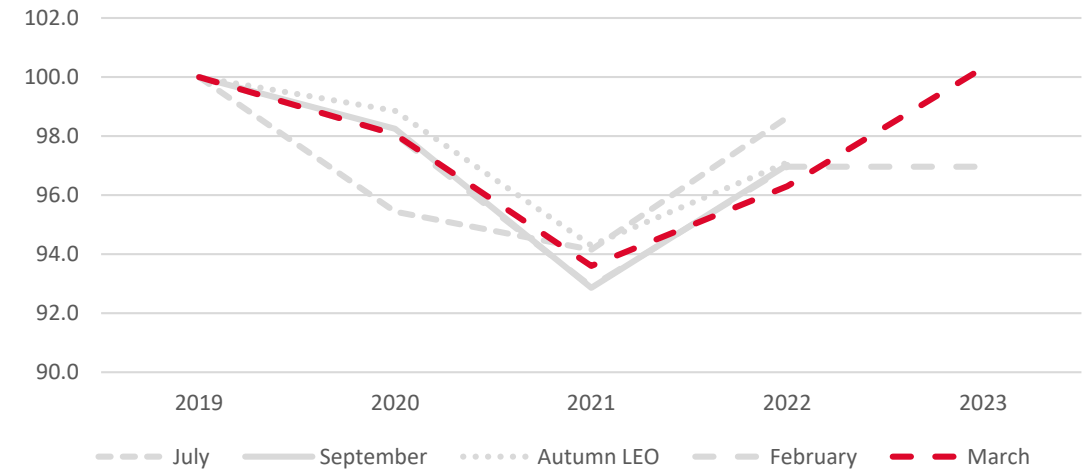
Source: GLA Economics

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	3.3	-6.0
Mining and quarrying	-9.4	-5.1
Manufacturing	8.6	4.8
Electricity, gas, steam and air-conditioning supply	-4.6	6.8
Water supply; sewerage and waste management	-4.1	11.6
Construction	6.5	9.0
Wholesale and retail trade; repair of motor vehicles	9.7	2.8
Transportation and storage	-0.7	7.6
Accommodation and food service activities	8.5	40.1
Information and communication	4.2	8.8
Financial and insurance activities	-1.5	2.0
Real estate activities	1.6	3.2
Professional, scientific and technical activities	4.9	7.9
Administrative and support service activities	-1.1	10.4
Public administration and defence; compulsory social security	10.4	3.6
Education	-1.6	4.1
Human health and social work activities	4.9	18.5
Arts, entertainment and recreation	-1.3	38.7
Other service activities	10.3	11.5
Activities of households	-2.5	8.4

Workforce jobs annual growth rate	2021	2022
Sector	%	%
Agriculture, forestry and fishing	-13.2	-6.4
Mining and quarrying	5.9	-8.9
Manufacturing	-9.3	-4.6
Electricity, gas, steam and air-conditioning supply	-14.0	-3.5
Water supply; sewerage and waste management	-12.3	-2.3
Construction	-7.1	11.2
Wholesale and retail trade; repair of motor vehicles	-6.4	-5.3
Transportation and storage	-2.4	0.5
Accommodation and food service activities	-12.3	8.6
Information and communication	-4.8	4.9
Financial and insurance activities	-0.3	2.6
Real estate activities	-2.9	4.8
Professional, scientific and technical activities	-5.3	5.1
Administrative and support service activities	-3.5	1.8
Public administration and defence; compulsory social security	3.5	1.3
Education	1.2	2.0
Human health and social work activities	-1.6	2.0
Arts, entertainment and recreation	-14.9	12.8
Other service activities	-7.8	2.2
Activities of households	-14.9	0.4

Source: GLA Economics estimates – 'Gradual return to economic growth' scenario (March 2021)

Outline

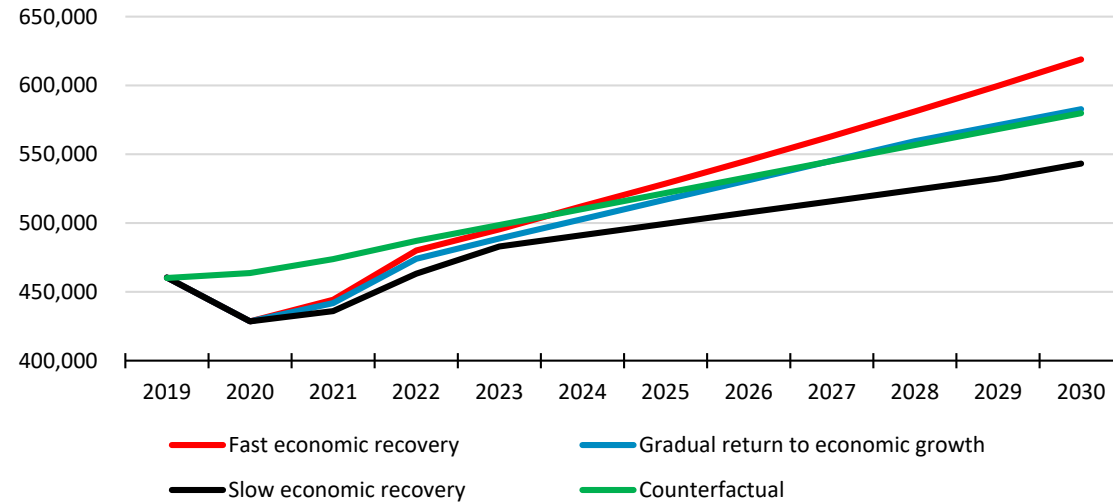
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Key assumptions behind the long-term projections

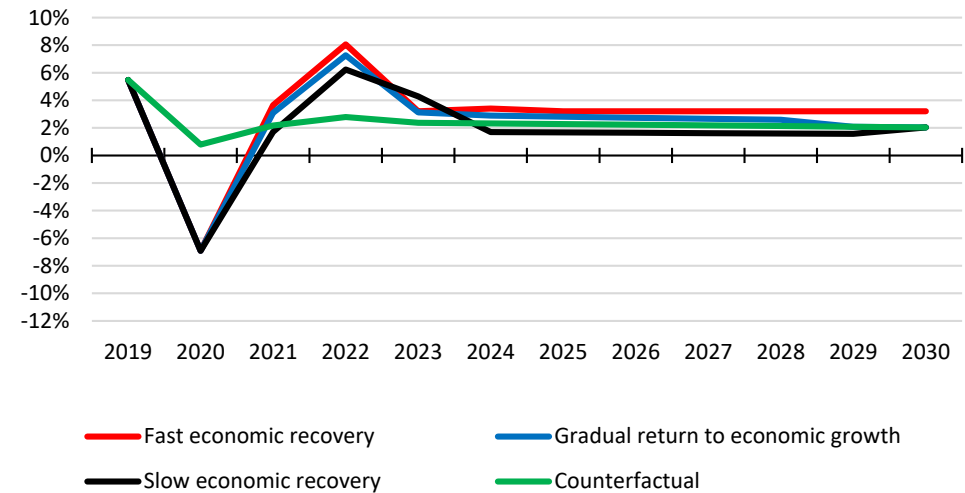
	No-COVID / Counterfactual	Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
GVA level in 2022	As estimated by GLAE in April 2020 forecasts	As projected in medium-term scenario 1	As projected in medium-term scenario 2	As projected in medium-term scenario 3
Time counterfactual GVA level is reached	NA	2023	2027 (7 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

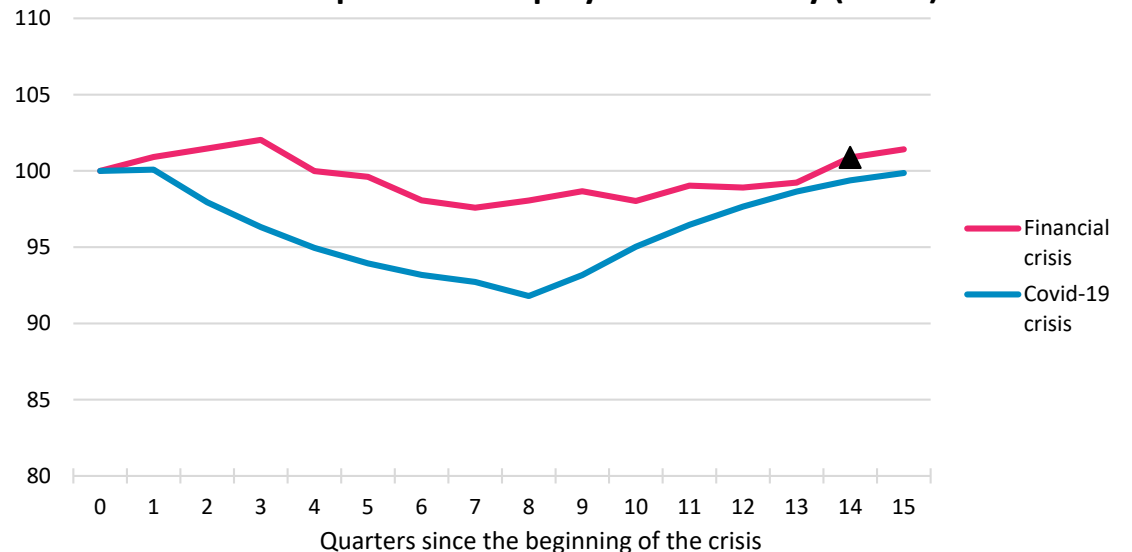
Comparison with the financial crisis

- 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 and is expected to recover more slowly due to scarring, that is there will be people who lose their jobs and drift away from the labour market.

Shape of the output recovery (index)



Shape of the employment recovery (index)



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	-6.9%	-6.9%	-6.9%
2021	3.6%	3.1%	1.7%
2022	8.1%	7.3%	6.2%
2023	3.2%	3.1%	4.3%
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	460,426	460,426	460,426
2020	428,622	428,622	428,622
2021	444,252	441,862	435,969
2022	480,058	473,998	463,173
2023	495,462	488,783	483,025
2025	528,701	517,037	499,473
2030	618,883	582,699	543,203

Source: GLA Economics

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

Real GVA – levels, £m 2016 prices

Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022
109,474	105,389	109,240	112,041	115,192	116,920	118,077
Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	
119,057	119,944	120,838	121,739	122,646	123,560	

Source: GLA Economics

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

Workforce jobs – levels, thousands

Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022
5,774	5,712	5,666	5,638	5,582	5,666	5,779
Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	
5,866	5,939	5,998	6,043	6,073	6,104	

Source: GLA Economics

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Summary of methodology

- Quarterly ONS UK output data is available to Q4 2020 for the UK and to Q2 2020 for London by sector.
- Q3 and Q4 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) 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.
- Q1 2021 output and jobs level for London tracks OBR estimated change for the UK.
- 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 Q2 2020. Q3 and Q4 2020 output data are 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 Q3 2020, and is spliced with change in employee jobs to Q4 2020 from HMRC Real Time Information data system.

Real GVA – levels, £m 2016 prices

Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020
116,710	114,838	95,769	108,540	109,474

Workforce jobs – levels, thousands

Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020
6,081	6,086	5,956	5,857	5,774

Source: GLA Economics