Macroeconomic scenarios for London's economy post COVID-19

Scenarios approach, storylines and projections to 2032

21 June 2022

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Disclaimer

- This eleventh output of the macroeconomic scenarios project updates the tenth output which was published on 28th February 2022. 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.
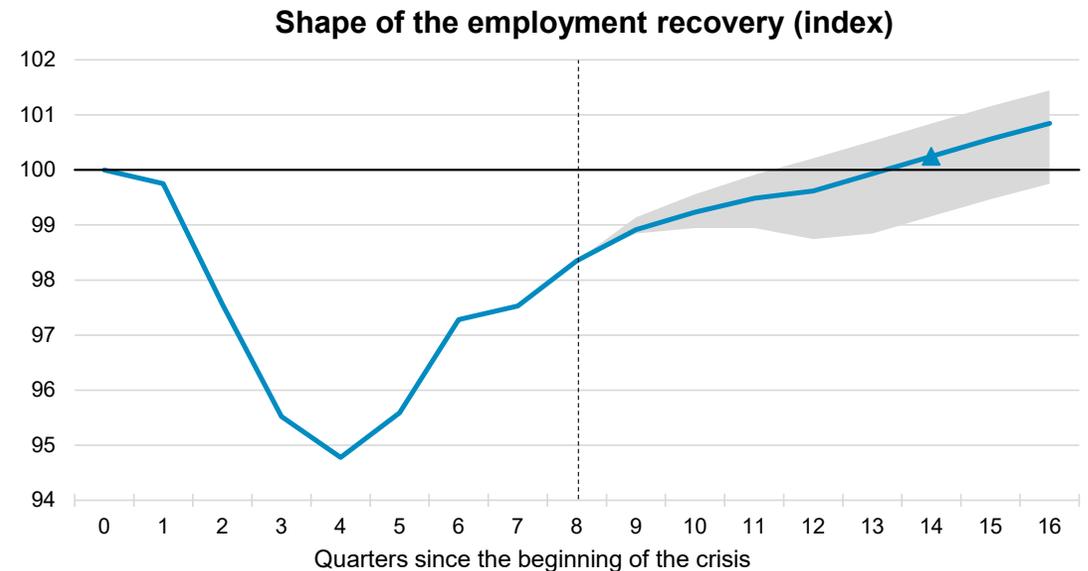
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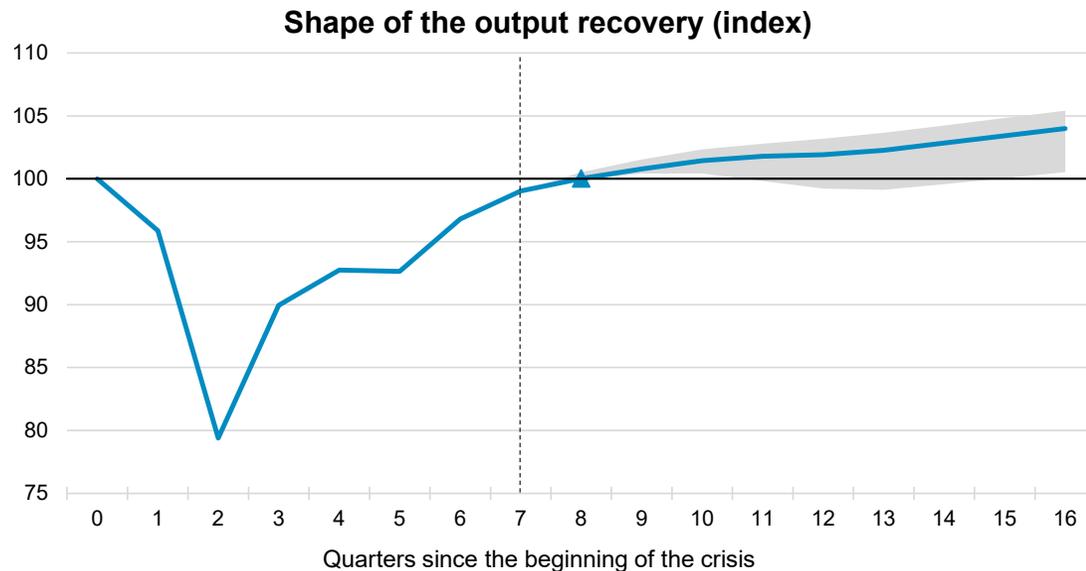
Executive Summary (1)

- This pack is an update 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 2032.

- These scenarios incorporate the latest intelligence from the Bank of England forecast for the UK economy of 5th May 2022 and the OBR forecast for the UK economy of 23rd March 2022.

- The scenarios also include data on output up to Q3 2021 and jobs up to Q4 2021, which point to a strong output recovery last year and a steadily improving jobs market.

- The key source of economic risk has now shifted from measures to curb the spread of COVID-19 to the rapid rise in inflation. While virus outbreaks in key production and shipping locations globally are creating disruptions, this is mainly feeding through in higher costs. The main economic impact for London of the war in Ukraine has also been higher inflation via surging energy and food prices.

- The main aim of this project is 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](#).

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Executive Summary (2)

- While previous scenario updates have focused on the public health and economic support response to COVID-19, focus is now shifting to broader questions on resilience to shocks and policy support.

- Within these dimensions of variation, we make assumptions around the persistence of high inflation, household savings and incomes and the intensity and duration of supply-demand mismatches.

- Risks remain clearly tilted to the downside. Despite the rapid economic recovery from the pandemic shown in 2021 data, high inflation and risks to household incomes are now set to drag on aggregate demand. Perhaps the key question for scenario planning is how well households absorb this shock. The persistence of inflation, the path for wages and monetary policy responses are other key risks.

- ONS has revised down its 2020 GVA figures for London, and the path of London's economy over the pandemic is now similar to the wider UK. The outlook has also worsened, with growth momentum weakening in the second half of 2022 and only picking up from the second half of 2023.

- Three core scenarios have been developed: Scenario 1 - Fast economic recovery; Scenario 2 - Gradual economic recovery and Scenario 3 - Slow economic recovery.

- Other scenario dimensions include: Brexit & migration; International economic context; Technology & innovation; Financial climate; Political economy; Economic Geography and GHG emissions.

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Executive Summary (3)

- In all scenarios, London's economy is expected to have recovered to the pre-crisis level of output by the end of last year. Under the Gradual economic recovery scenario, London's GVA exceeds pre-crisis levels in Q4 2021, while under the Slow economic recovery scenario, output then dips back below pre-pandemic levels due to a fresh recession in the second half of 2022.

- Employment is expected to recover slower than output, with job numbers reaching pre-crisis levels only in mid-2023 in the Gradual economic recovery scenario. In the Slow economic recovery scenario, reaching this milestone takes until early 2024.

- The trajectories in the figures are for the Gradual economic recovery scenario, with shaded areas marking the scenario range.

Shape of the output recovery (index)

Shape of the employment recovery (index)

Quarters since the beginning of the crisis

Quarters since the beginning of the crisis

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Outline

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

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Outline

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Ability to absorb shocks for households, businesses and government

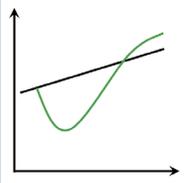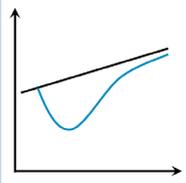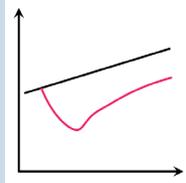| Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
London's stronger aggregate incomes compared to the rest of the UK offer a buffer against inflation as richer households release more of their pandemic savings.	High average incomes and less pessimistic consumers mean London can handle high inflation better than other regions, but this is partly offset by an already-high cost of living.	London's prices rise faster than the rest of the UK. The drag on real incomes is hardest for low-income Londoners, who also have the highest propensity to consume.
With business confidence high, firms deal with rising costs and fluctuating demand without cutting back on jobs or investment.	Rising costs and weakening demand prompt businesses to slow their investment and hiring plans, but not cut them entirely.	Receiving no relief from rising costs, businesses facing a demand recession sharply cut back on investment and hiring.
Inflation expectations ease and the sterling exchange rate stabilises in response to tighter monetary policy. Energy and food prices ease across 2022.	Inflation expectations take time to come back down, and a weaker pound raises imported prices despite rising interest rates. Energy and food prices stay high until 2023.	Monetary policy struggles to lower inflation expectations, and sterling weakens as global interest rates rise faster than in the UK. Energy and food prices rise across 2022.
UK energy markets diversify rapidly, easing cost pressures and avoiding disruption.	Any disruption in energy markets due to the war in Ukraine is mitigated, but incompletely.	Russian retaliation against sanctions creates major disruptions, raising energy costs.
Widespread vaccination, effective anti-viral treatments and rapid identification of variants of concern mean COVID recedes as a risk.	While vaccination is widespread, coverage lags in some urban areas, and local outbreaks may disrupt local labour markets.	Vaccine protection is patchy in some areas and periodic COVID outbreaks create labour disruptions and worsen health inequalities.

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The policy environment and its impact on households and businesses

Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
Current fiscal support to households for the cost of living effectively protects incomes and keeps consumption firm. Further targeted support shields those on the lowest incomes as and when this is required.	Current fiscal support offsets part of the shock to real incomes from the cost of living, but high energy and food prices still exert pressure on household budgets. There is limited additional fiscal support.	Current fiscal support cannot meaningfully offset the shock to household budgets as global prices continue to rise and inflation expectations remain high. High uncertainty prompts continued precautionary saving.
The Bank of England is able to effectively combat inflation in the medium term with interest rate hikes, though the impact on prices does not show until later this year.	Still-high global cost pressures dominate the Bank of England's efforts to control inflation with interest rate hikes for the rest of 2022, but tighter policy helps ease inflation in 2023.	The Bank of England is forced to hike interest rates aggressively to combat still-rising global cost pressures, and the impact is hardly felt until late into 2023.
Still-firm labour demand means monetary tightening has a mild effect on employment.	A rapid tightening of macro policy slows the wider recovery despite still-firm labour demand.	As the hit to incomes combines with sharply tighter borrowing conditions, the demand recovery goes into reverse later this year.
The wider recovery only decelerates a little in 2022. Minimal medium- or long-term economic scarring, though jobs lag output.	While economic scarring is mostly limited to the medium term, it still takes around a decade for output to return to its pre-pandemic trend path.	A fresh recession, a lingering inflation overshoot and slow medium-term growth mean there is significant economic scarring, some of which persists in the long term, as firms close and workers lose their jobs.

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Updated key assumptions for other drivers

Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
Mismatches between supply and demand are transitory. The CAZ's recovery and resumed net inward migration avoid long-term skill or geographic labour mismatches.	Global supply chain challenges and geo-political tensions raise imported prices into next year, but inflation eases gradually and international sanctions have few direct effects on London. Economic restructuring means skill and geographic mismatches in the job market slightly slow the recovery.	Mismatches in supply and demand increase price pressures, which embed in inflation expectations, and monetary policy must stay restrictive for longer. Geopolitical tensions keep energy prices high and international sanctions hit supply chains. Job market mismatches drag on long-term growth.
UK and EU constructively resolve a number of key outstanding issues. This mitigates the effects of UK exit from the Single Market.	UK and EU partially manage tensions, still dampening trade. Single Market exit requires some restructuring of London's economy.	UK-EU disputes persist, raising barriers to trade and cutting trade flows. This hits long-run growth, amid significant restructuring.
With travel restrictions gone, tourists and international students increasingly return.	Tourists and international students return, but only gradually.	Tourists and international students do not fully return amid permanent behaviour shifts.
The CAZ remains a hub of economic activity, and London remains an important business centre reaping agglomeration economies.	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.	There are job losses in many sectors in the CAZ. The cumulative effect means that the area becomes less attractive to business and reaps fewer agglomeration economies.

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Long-term GVA convergence assumptions

| Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
London's economy returns to its pre-COVID trend growth (rate and level) in the medium term (within two or three years). There is minimal economic scarring in the medium term and none in the long term.	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.	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.

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Outline

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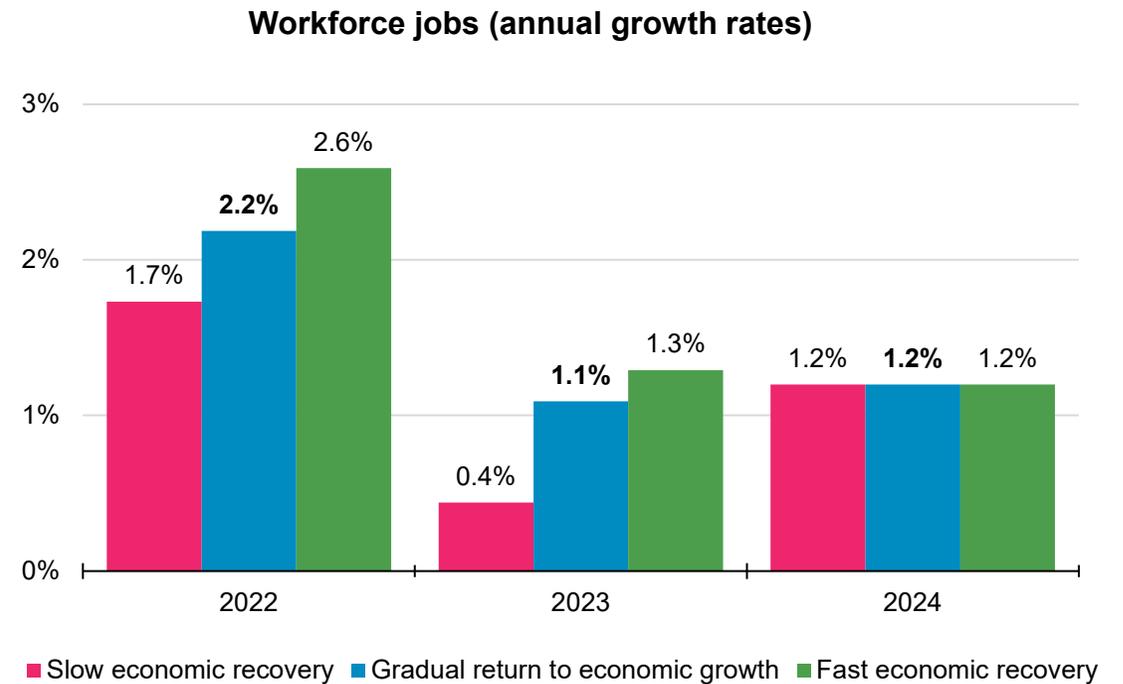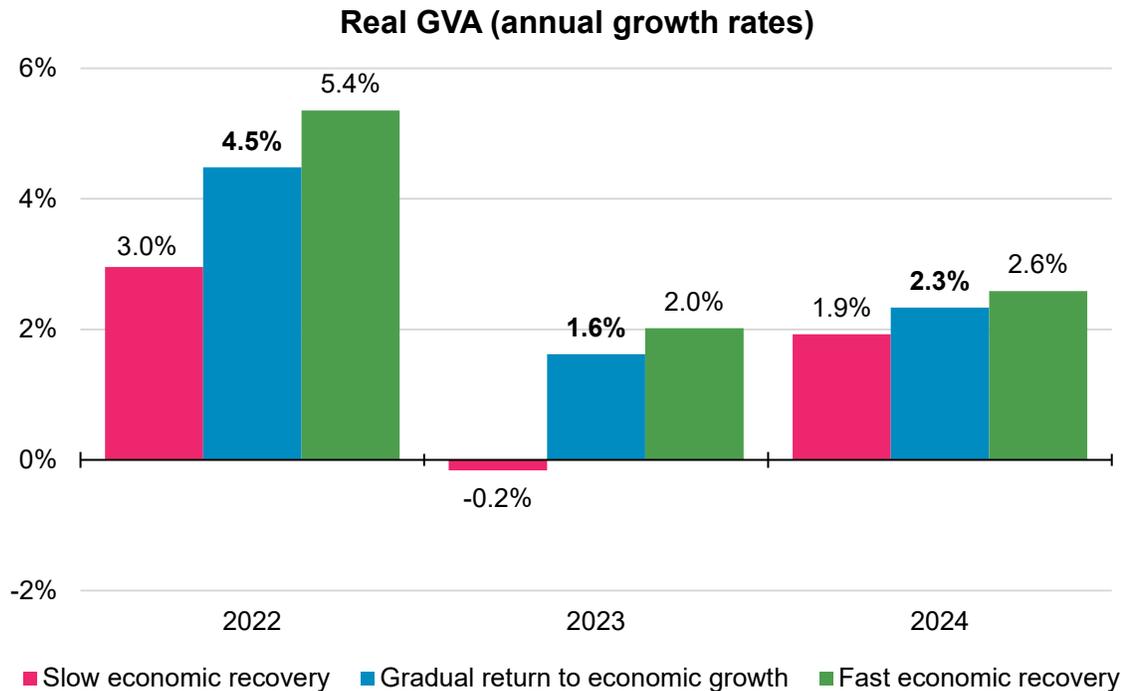# The overall storyline behind the Gradual recovery scenario

Q1 & Q2 2022 (Ongoing Recovery)	Q3 2022 to Q1 2023 (Economic Turbulence)	Q2 2023 and beyond (A new normal)
• The pace of recovery is steady as the final COVID restrictions end in early 2022. • However, rising inflation and tax changes hit household incomes and increasingly restrain the consumer recovery. This begins to restrain sectors involved in retail, entertainment and hospitality. • Businesses remain confident, despite rising inflation and worsening consumer confidence. Consumption growth is moderate, while investment improves. • Use of public transport remains muted amid a transition to hybrid working begins. • Following the withdrawal of fiscal support there is some shake-out of unviable businesses. • A slow return of visitors and tourists dents the recovery in customer-facing services further. • The CAZ begins to undergo structural changes as firms adjust to post-pandemic trends like widespread hybrid working.	• Inflation remains high well into 2023 and the drag on household incomes begins to drag on consumer spending. • Consumer-facing sectors like Wholesale and retail and Accommodation and food services face a contraction in activity as lower consumer demand brings growth in London's economy near to zero. • Even though employment remains below pre-crisis levels, job growth also eases. • Following the withdrawal of fiscal support there is some shake-out of unviable businesses. • Some industries in the knowledge sector benefit from opportunities for greater use of digital technology.	• The success of the expansion will depend on 1) control of inflation without scarring demand, 2) London's capacity to attract investment, 3) the pace of fiscal consolidation, 4), the global context and 5) transport constraints. • A stronger return of visitors and tourists in the medium term. • Investment (and recapitalisations) key to supporting companies which survived the pandemic but remain weak. • 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 • The fact that key inflation pressures have come from essential goods and service prices also tends to widen existing inequalities.

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Medium-term scenario projections for London

Shape of the output recovery (index)

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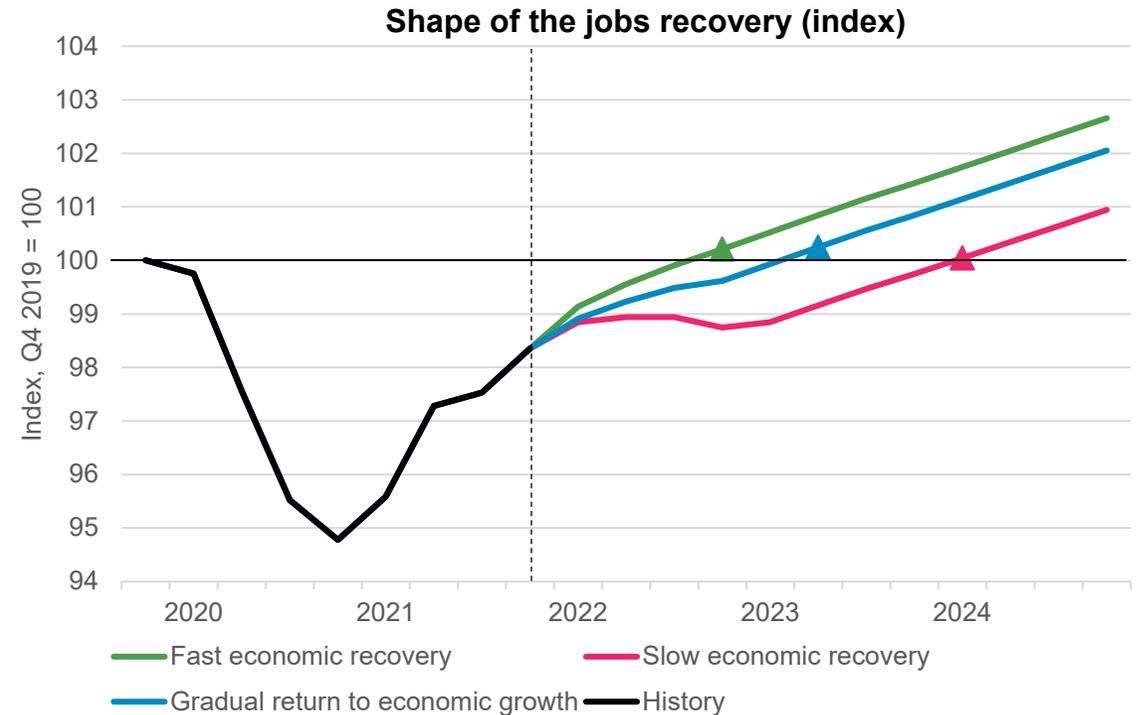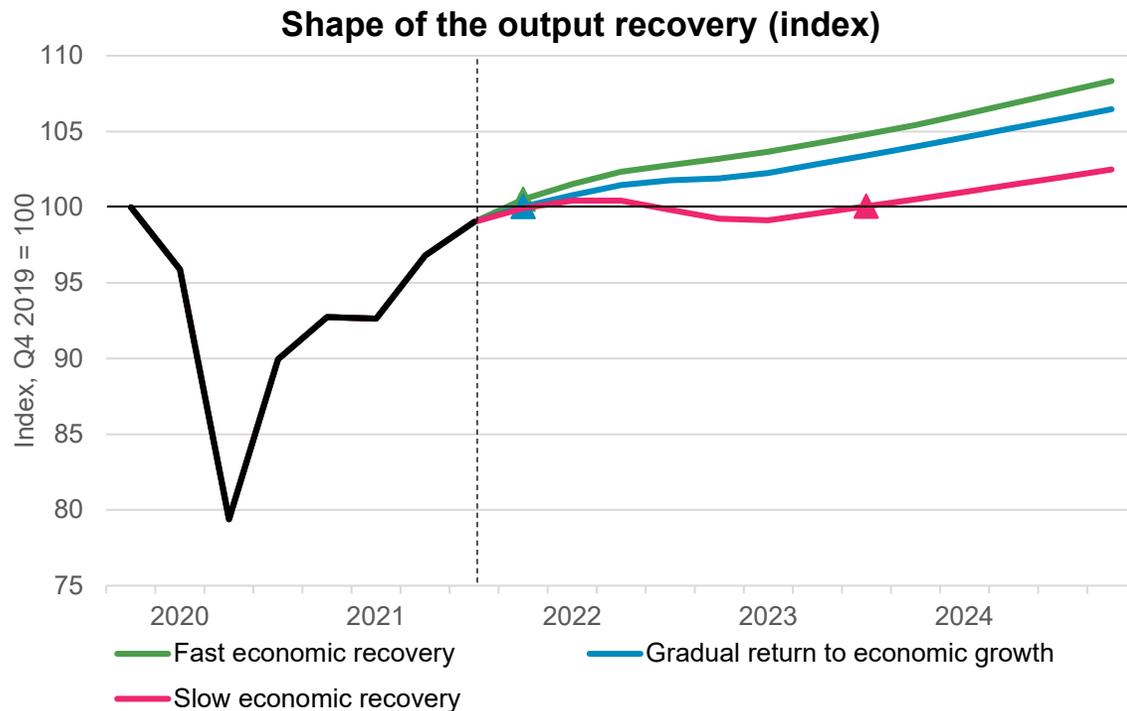
Source: GLA Economics; Note: Index of 100 = pre-crisis level. The 'triangle' indicates the quarter when the corresponding series reaches its pre-crisis level (sometimes the triangle is above 100, meaning that pre-crisis levels were not only reached but also surpassed in the same quarter).

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Medium-term scenario projections: annual growth rates

Real GVA (annual growth rates)

- Slow economic recovery
- Gradual return to economic growth
- Fast economic recovery

2022: 3.0%, **4.5%**, 5.4%
2023: -0.2%, **1.6%**, 2.0%
2024: 1.9%, **2.3%**, 2.6%

Workforce jobs (annual growth rates)

- Slow economic recovery
- Gradual return to economic growth
- Fast economic recovery

2022: 1.7%, **2.2%**, 2.6%
2023: 0.4%, **1.1%**, 1.3%
2024: 1.2%, **1.2%**, 1.2%

Source: GLA Economics

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Comparison of successive Gradual recovery scenarios across outputs (1)

Real GVA annual growth rates - Central scenario for London

Legend: Spring LEO 2021 ■ Aug. 2021 ■ Autumn LEO 2021 ■ Feb. 2022 ■ Spring LEO 2022

2021:
- 5.4%
- 6.5%
- 6.4%
- 7.8%
- **8.5%**

2022:
- 6.9%
- 6.0%
- 5.0%
- 4.1%
- **4.5%**

2023:
- 3.1%
- 2.9%
- 3.1%
- 3.1%
- **1.6%**
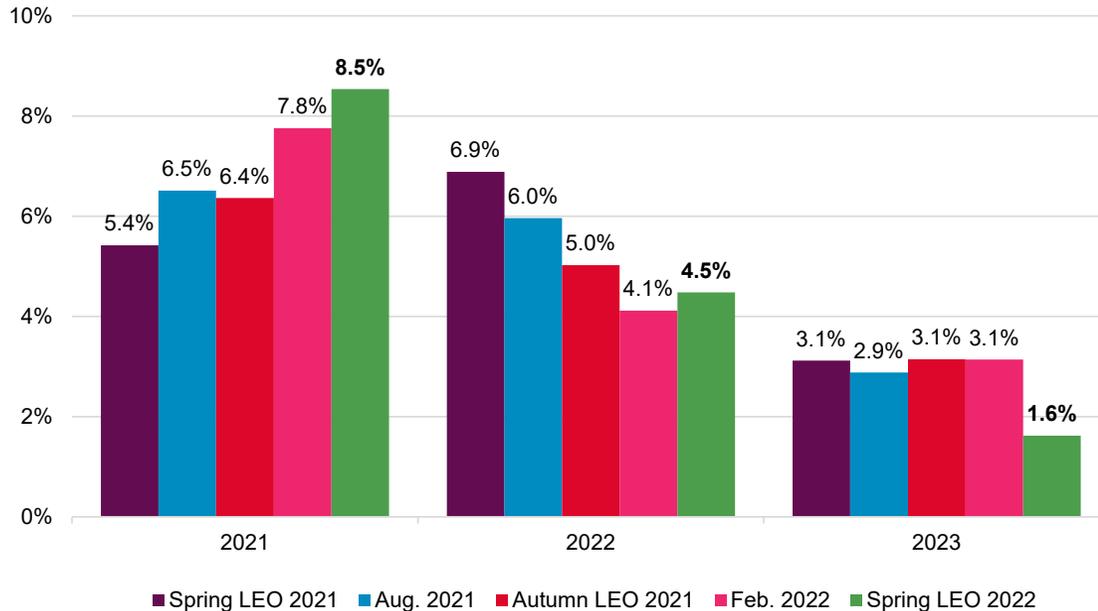
Workforce jobs annual growth - Central scenario for London
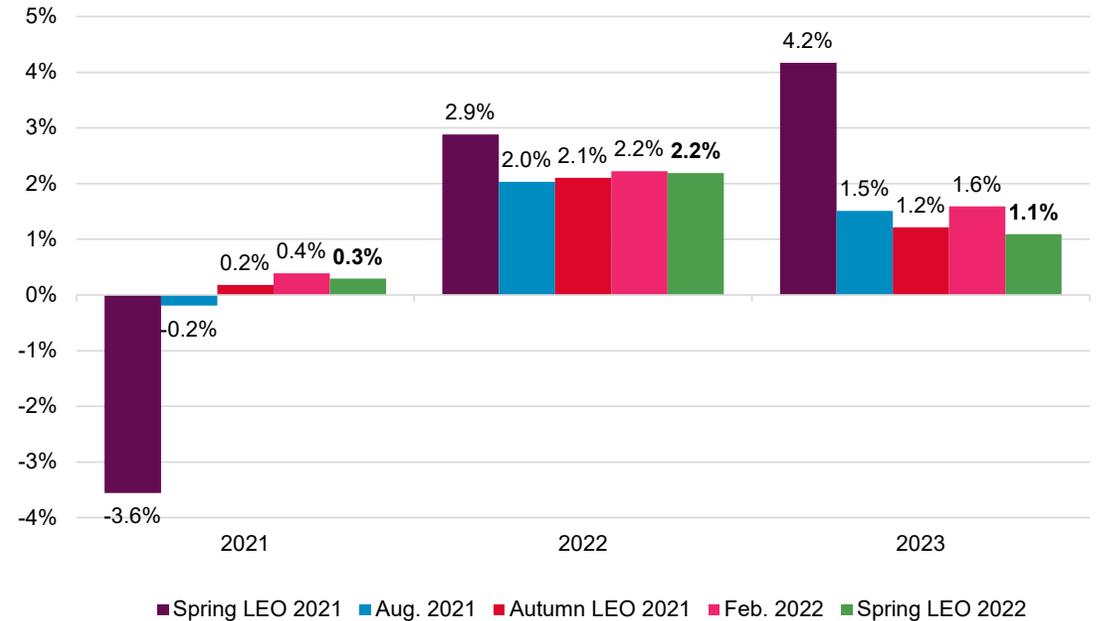
Legend: Spring LEO 2021 ■ Aug. 2021 ■ Autumn LEO 2021 ■ Feb. 2022 ■ Spring LEO 2022

2021:
- -3.6%
- -0.2%
- 0.2%
- 0.4%
- **0.3%**

2022:
- 2.9%
- 2.0%
- 2.1%
- 2.2%
- **2.2%**

2023:
- 4.2%
- 1.5%
- 1.2%
- 1.6%
- **1.1%**

Source: GLA Economics

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Comparison of successive Gradual recovery scenarios across outputs (2)

Real GVA index numbers - central scenario

Workforce jobs index numbers - central scenario
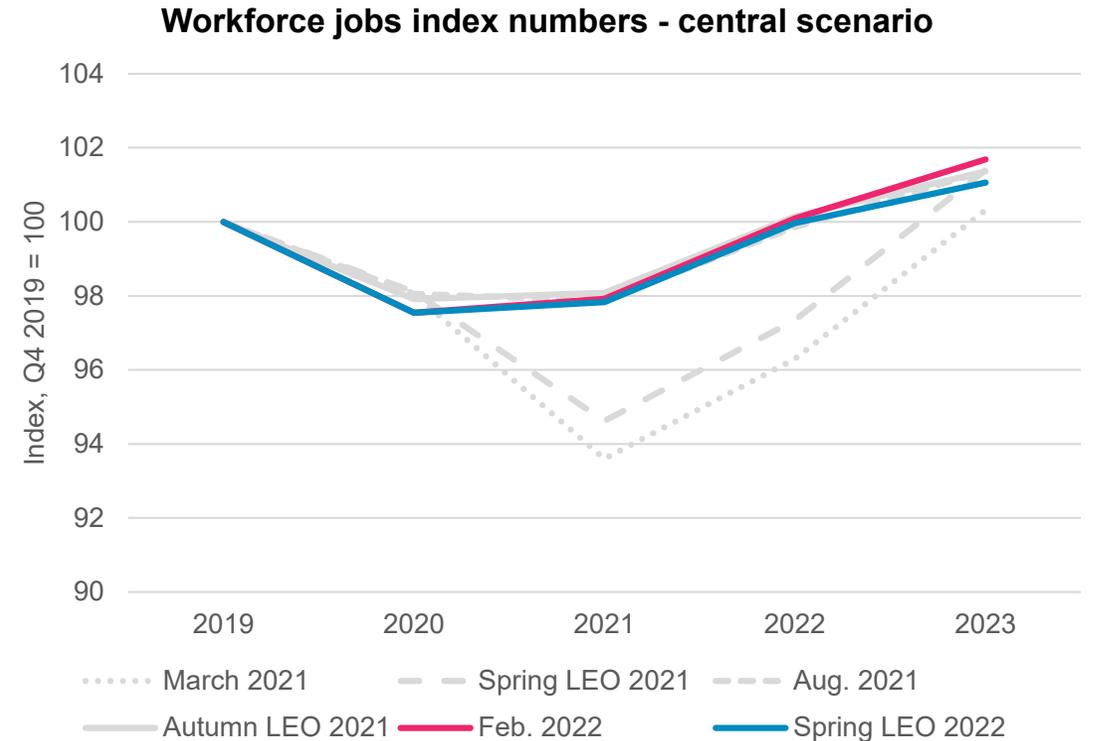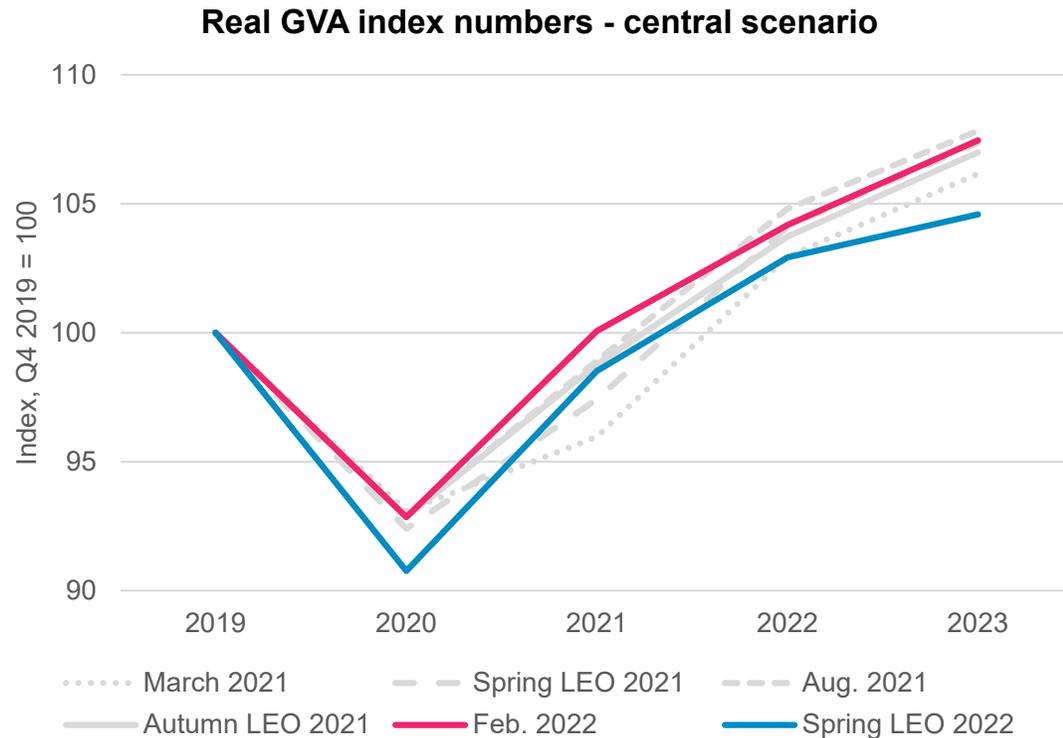
Source: GLA Economics estimates

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London sectors: GVA and jobs growth projections in 2022 and 2023

Real GVA annual growth rate	2022	2023
Sector	%	%
Agriculture, forestry and fishing	5.8	1.3
Mining and quarrying	-0.9	-0.4
Manufacturing	2.8	1.6
Electricity, gas, steam and air-conditioning supply	2.9	3.1
Water supply; sewerage and waste management	6.2	3.2
Construction	4.2	0.9
Wholesale and retail trade; repair of motor vehicles	1.1	0.4
Transportation and storage	18.1	3.9
Accommodation and food service activities	22.1	2.1
Information and communication	7.2	1.2
Financial and insurance activities	5.8	2.1
Real estate activities	0.8	1.4
Professional, scientific and technical activities	3.9	1.4
Administrative and support service activities	0.0	1.2
Public administration and defence	-0.5	0.6
Education	6.7	2.4
Human health and social work activities	2.5	2.1
Arts, entertainment and recreation	8.0	6.1
Other service activities	11.7	1.8
Activities of households	7.1	2.2

Workforce jobs annual growth rate	2022	2023
Sector	%	%
Agriculture, forestry and fishing	100.9	1.2
Mining and quarrying	10.2	2.8
Manufacturing	6.9	2.4
Electricity, gas, steam and air-conditioning supply	7.1	1.6
Water supply; sewerage and waste management	6.7	1.2
Construction	4.4	2.2
Wholesale and retail trade; repair of motor vehicles	-0.3	-0.1
Transportation and storage	2.3	1.2
Accommodation and food service activities	3.4	1.8
Information and communication	6.2	1.4
Financial and insurance activities	-2.0	1.0
Real estate activities	0.5	2.8
Professional, scientific and technical activities	2.2	0.2
Administrative and support service activities	4.6	2.1
Public administration and defence	2.9	0.4
Education	2.6	1.2
Human health and social work activities	-0.2	0.8
Arts, entertainment and recreation	3.4	1.8
Other service activities	-1.1	1.2
Activities of households	-3.4	-3.9

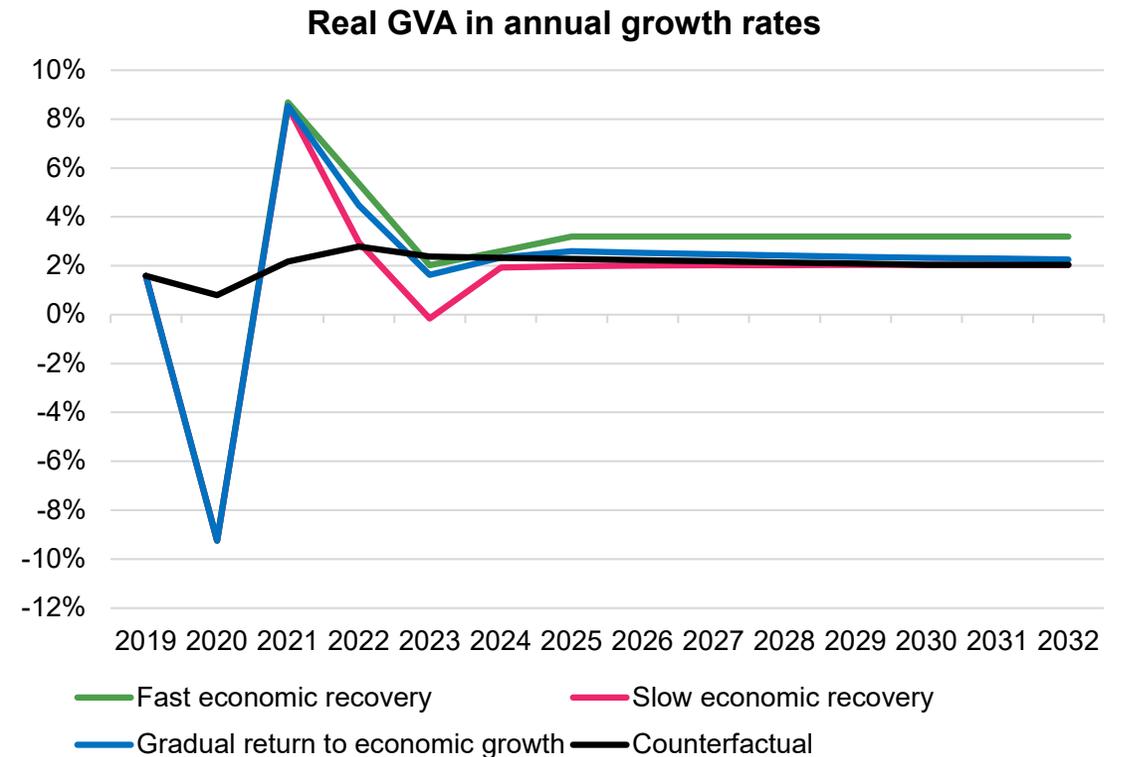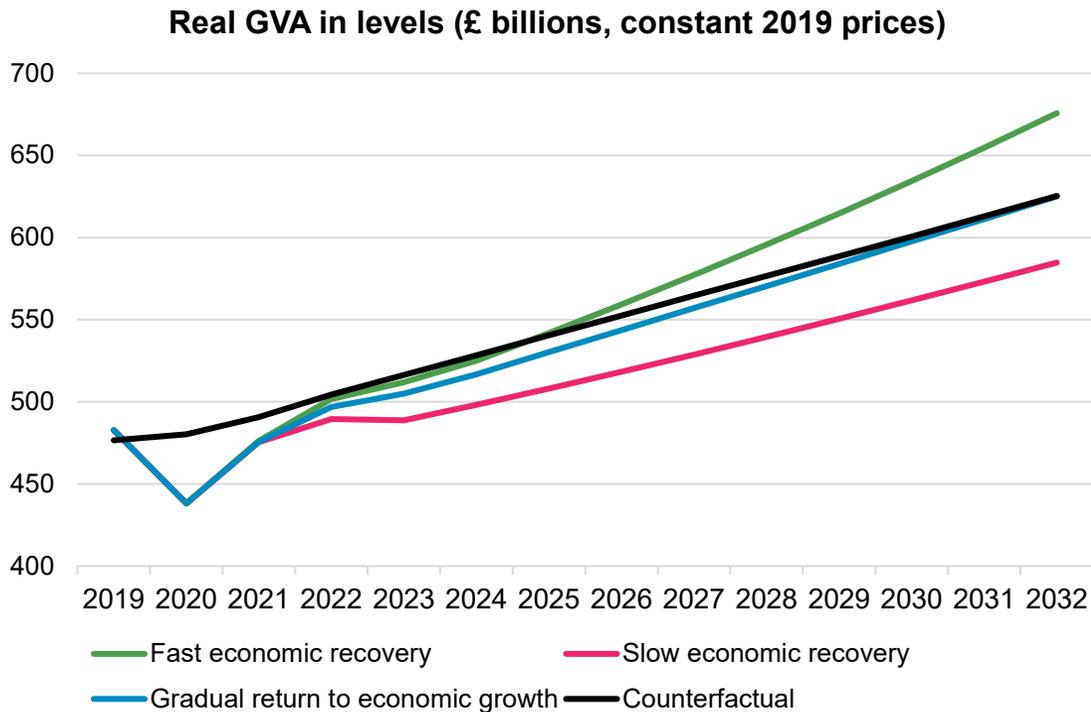*Source: GLA Economics estimates – 'Gradual return to economic growth' scenario*

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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 growth	Scenario 3: Slow economic recovery
GVA level in 2024	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	2025	2031-32 (11 years after crisis)	Never (over the relevant time horizon)
GVA Growth rate in 2032	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 (converging towards 2% from above)	As in counterfactual (converging towards 2% from below)
GVA level in 2032	Projected in line with the above assumptions	Higher than the counterfactual	Approaches the counterfactual by 2032	Counterfactual - over 6% (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

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Long-term scenario projections for London

Real GVA in levels (£ billions, constant 2019 prices)

Fast economic recovery — Slow economic recovery — Gradual return to economic growth — Counterfactual

Real GVA in annual growth rates

Fast economic recovery — Slow economic recovery — Gradual return to economic growth — Counterfactual

Source: GLA Economics

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Comparison with the financial crisis

- Despite a deeper and more rapid 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 create economic scarring, as workers lose contact with the labour market and become inactive.

Shape of the output recovery (index)

Financial crisis — Covid-19 crisis

Quarters since the beginning of the crisis

Shape of the employment recovery (index)

Financial crisis — Covid-19 crisis

Quarters since the beginning of the crisis
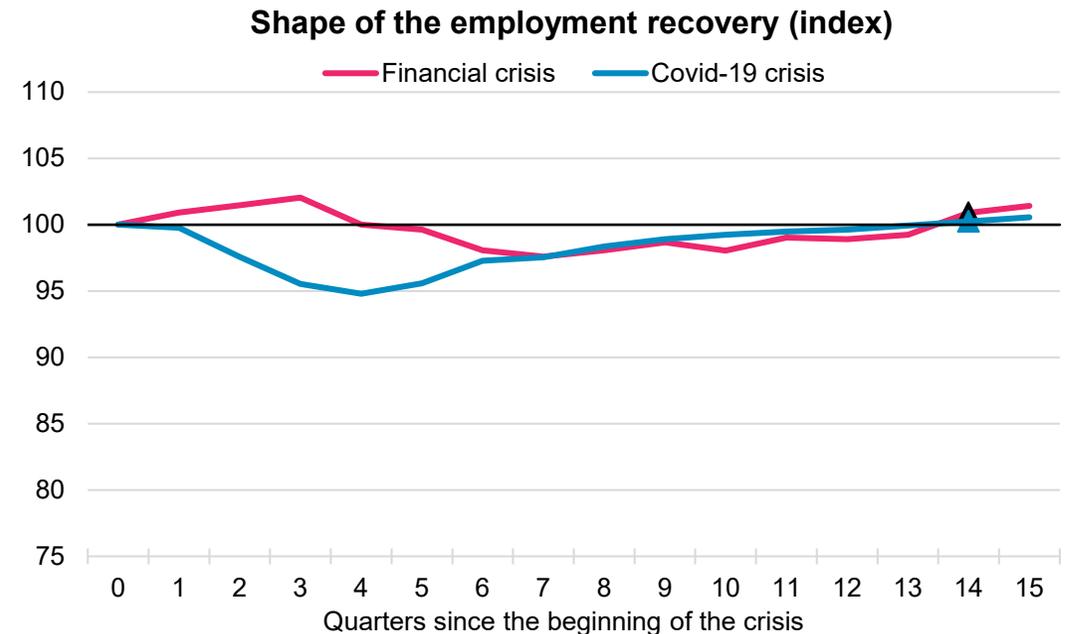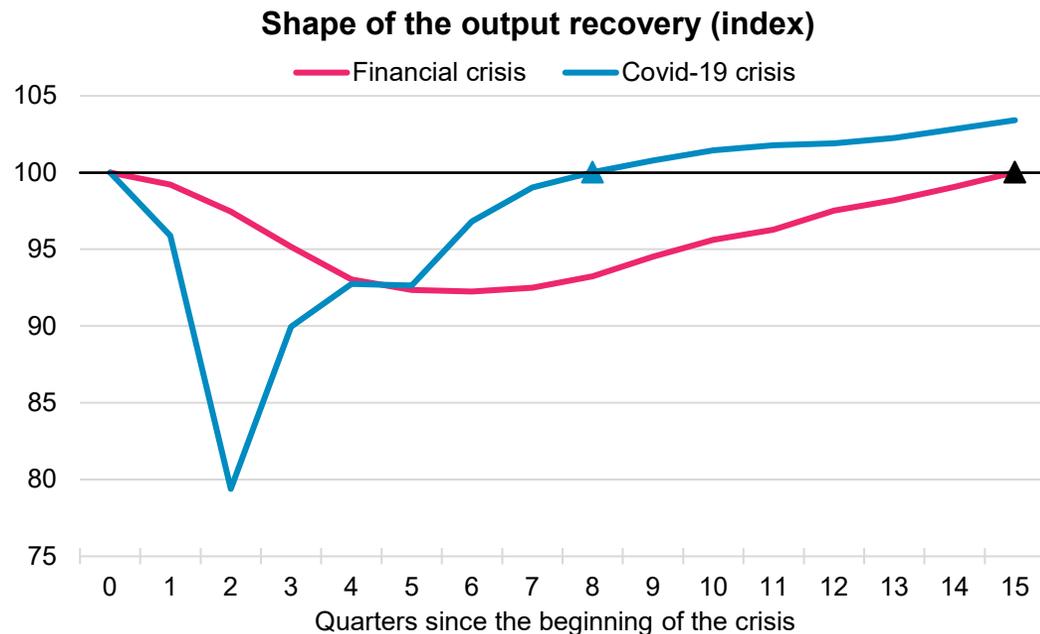
Source: GLA Economics

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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
2022	5.4%	4.5%	3.0%
2023	2.0%	1.6%	-0.2%
2025	3.2%	2.6%	2.0%
2030	3.2%	2.3%	2.0%

Source: GLA Economics

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Summary of GVA in levels in selected years

Real GVA – £m 2019 prices (selected years)

Year	Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
	GVA	GVA	GVA
2022	501,760	496,972	489,604
2023	511,891	505,029	488,825
2025	541,952	530,255	508,122
2030	634,394	597,607	561,690

Source: GLA Economics

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

Real GVA – levels, £m 2019 prices

Q1 2021	Q2 2021	Q3 2021	Q4 2021
113,420	118,524	121,250	122,463
Q1 2022	**Q2 2022**	**Q3 2022**	**Q4 2022**
123,395	124,201	124,610	124,766
Q1 2023	**Q2 2023**	**Q3 2023**	**Q4 2023**
125,196	125,895	126,609	127,328
Q1 2024	**Q2 2024**	**Q3 2024**	**Q4 2024**
128,074	128,824	129,579	130,340

Source: GLA Economics

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

Workforce jobs – levels, thousands

Q1 2021	Q2 2021	Q3 2021	Q4 2021
5,804	5,907	5,922	5,972

Q1 2022	Q2 2022	Q3 2022	Q4 2022
6,006	6,025	6,041	6,049

Q1 2023	Q2 2023	Q3 2023	Q4 2023
6,068	6,087	6,106	6,123

Q1 2024	Q2 2024	Q3 2024	Q4 2024
6,142	6,160	6,178	6,197

Source: GLA Economics

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Summary of methodology

- Quarterly ONS UK output data is available to Q1 2022 for the UK and to Q3 2021 for London by sector. Q4 2021 and Q1 2022 London output tracks UK trends.

- Quarterly jobs data by sector available for London and the UK to Q4 2021. Payrolled employee jobs estimates for Q1 2022 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 the latest estimates by the Bank of England (BoE) and the Office for Budget Responsibility (OBR). The modelling also builds on previous versions of GLAE scenarios.

- Sector level modelling reflects the disproportionate sectoral effects of the current crises. It expects rapid growth in the sectors most affected by the pandemic, such as arts and hospitality, but which may still not be enough to reach pre-pandemic levels until 2024 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.

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Back series

- Some of this data has been estimated by GLA Economics. For output, ONS GVA data to 2020 is spliced with ONS quarterly GDP data to Q3 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 + subsidies – taxes)

- ONS Workforce Jobs data is available to Q4 2021.

- An ONS nowcasting GVA series for London is available to Q1 2022, but this has not been used as established data as it remains an experimental series.

Real GVA – levels, £m 2019 prices

Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021
122,425	117,383	97,193	110,120	113,534	113,420	118,524	121,250

Workforce jobs – levels, thousands

Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021
6,072	6,057	5,924	5,800	5,755	5,804	5,907	5,922	5,972

Source: ONS, GLA Economics

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