Macroeconomic scenarios for London's economy post COVID-19

Scenarios approach, storylines and projections to 2032

25 August 2022

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Disclaimer

- This twelfth output of the macroeconomic scenarios project updates the eleventh output which was published on 21st June 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.

Executive Summary (1)

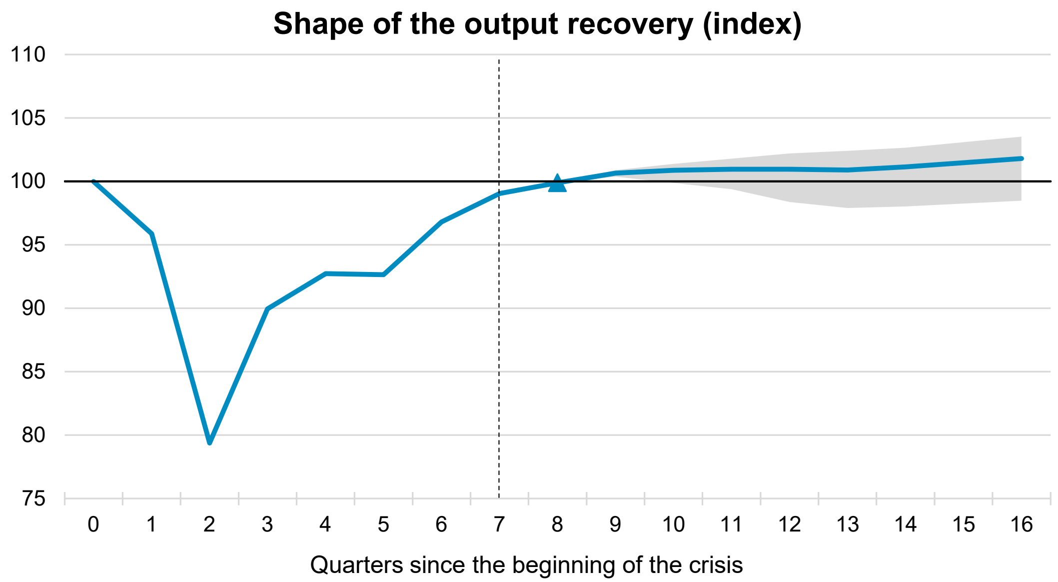
- This pack is an update of the GLA Economics-led project developing scenarios for London's economy post COVID-19. It includes new medium-term projections and GVA projections to 2032.
- These scenarios incorporate the latest intelligence from the Bank of England forecast for the UK economy of 4th August 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 Q1 2022, which point to a strong output recovery last year and a largely recovered jobs market.
- The key source of economic risk remains the rapid rise in inflation. While COVID-19 is still a factor in the outlook, with outbreaks in key production and shipping locations globally 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.

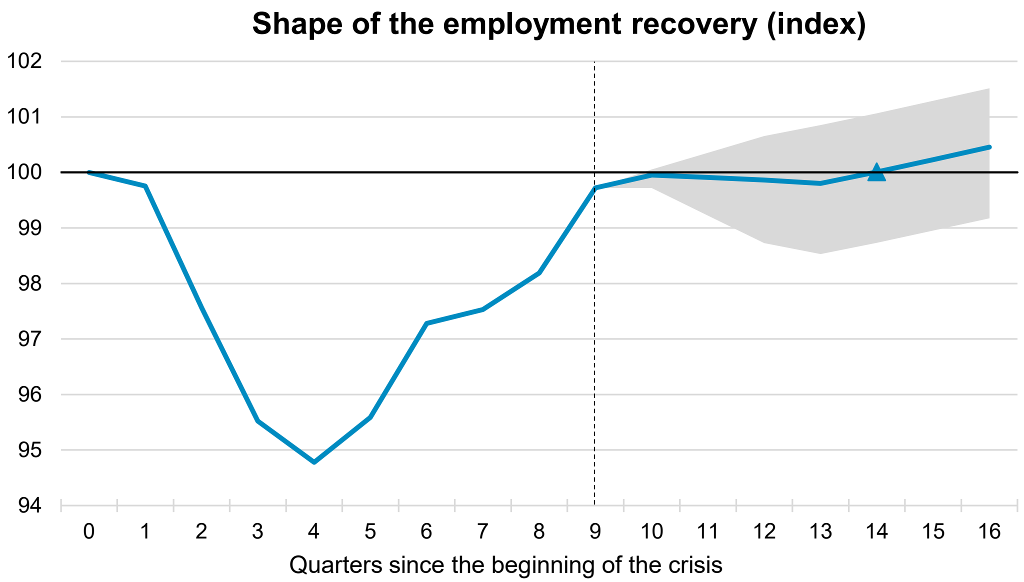
Executive Summary (2)

- Under the broad headings of resilience to shocks and policy support, we make assumptions around the persistence of high inflation, household savings and incomes, consumer and investor confidence and the intensity and duration of supply-demand mismatches.
- Risks are firmly tilted to the downside. Despite the rapid economic recovery from the pandemic shown in 2021 data, high inflation will increasingly drag on real incomes and aggregate demand. Perhaps the key question for scenario planning is how well households absorb this shock. Inflation's persistence, the path for wages and fiscal and monetary policy responses are other key risks.
- The baseline outlook has also worsened, with UK growth momentum already going into reverse and set to weaken further in the second half of 2022, 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 context; Technology & innovation; Financial climate; Political economy; Economic geography and climate change impacts.

Executive Summary (3)

- In all scenarios, we estimate that London's economy recovered to the pre-crisis level of output by the end of last year. Yet under the Gradual economic recovery scenario, London's GVA remains within 1% of pre-crisis levels until halfway through 2023, and under the Slow economic recovery scenario, output falls back below pre-pandemic levels, only recovering in late 2024.
- Employment is expected to recover slightly slower than output, with job numbers reaching pre-crisis levels in the middle of this year in the Gradual economic recovery scenario, though they then stagnate at this level until mid-2023.
- The trajectories in the figures are for the Gradual economic recovery scenario, with shaded areas marking the scenario range.





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

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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 help London withstand high inflation, but some consumer retrenchment is unavoidable and precautionary savings rise.	Staple prices rise faster in London 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.
Still-positive business confidence sees firms moderate hiring and investment as costs rise and demand flags, rather than making cuts.	Rising costs and stagnant demand prompt businesses to slow hiring and investment plans sharply, but not cut them entirely.	Receiving no relief from rising costs, businesses facing a demand recession cut investment and hiring near to zero.
Inflation expectations fall back in line and the sterling exchange rate stabilises in response to tighter monetary policy. Energy and food prices stabilise in 2022 and ease in 2023.	Inflation expectations take time to come back down, and a weaker pound raises imported prices further despite rising interest rates. Energy and food prices climb 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 well into 2023.
UK energy markets diversify rapidly and the winter is mild, softening the disruption from any further gas supply crunches.	The UK partially mitigates the disruption from gas supply cuts due to the war in Ukraine, but this still raises domestic energy bills.	Russia cuts gas supply sharply amid a harsh winter, creating major disruptions and prompting managed blackouts in early 2023.
Broad vaccination and effective treatments minimise economic risk from COVID.	Despite local gaps in COVID vaccination rates, outbreaks create minimal disruption.	Vaccine protection is patchy in some areas, creating local labour market disruptions.

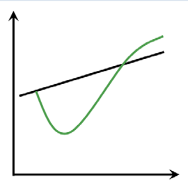
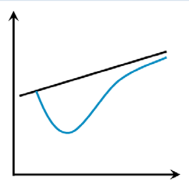
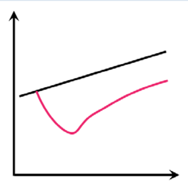
The policy environment and its impact on households and businesses

Scenario 1: Fast economic recovery	Scenario 2: Gradual return to economic growth	Scenario 3: Slow economic recovery
Fiscal support offsets part of the shock to real incomes from the cost of living, but high energy and food prices still squeeze household budgets. Most consumers stay afloat with savings or manageable credit.	Fiscal support only partly transmits into improvements for household budgets and many fall into financial precariousness. This prompts many consumers with lower incomes to cut spending as far as possible.	Fiscal support mostly fails to transmit into income improvements for the worst-hit households as global prices rise and inflation expectations remain high. The majority of consumers face prohibitively tight budgets.
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 slow inflation in 2023.	The Bank of England is forced to hike interest rates aggressively to combat still-rising global cost pressures, but the impact is still 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 brings the jobs recovery temporarily to a halt. Labour demand cools as the wider economy slows.	Falling output and sharply tighter borrowing conditions mean labour demand dissipates and jobs fall, only recovering again in 2024.
The wider recovery decelerates in 2022 and 2023, but does not come to a halt or go into reverse. Limited medium-term and no long-term economic scarring, but jobs lag output.	While economic scarring is limited in the long run, 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, persisting into the long term, as firms close and workers lose their jobs.

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. Over the long term, the CAZ's recovery and resumed net inward migration avoid skill or geographic labour mismatches.	Global supply chain challenges and geo-political tensions raise imported prices into next year, but inflation eases gradually. Economic restructuring means skill and geographic mismatches in the job market slightly slow the recovery.	Mismatches in global supply and demand raise price pressures, which embed in inflation expectations, and monetary policy must stay restrictive for longer. Geopolitical tensions keep energy prices high. Job market mismatches lower 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.
London's relative specialisation in emerging industries leaves it in a good position to capitalise on future growth and the CAZ remains a hub of economic activity. London continues to reap 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.

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 five 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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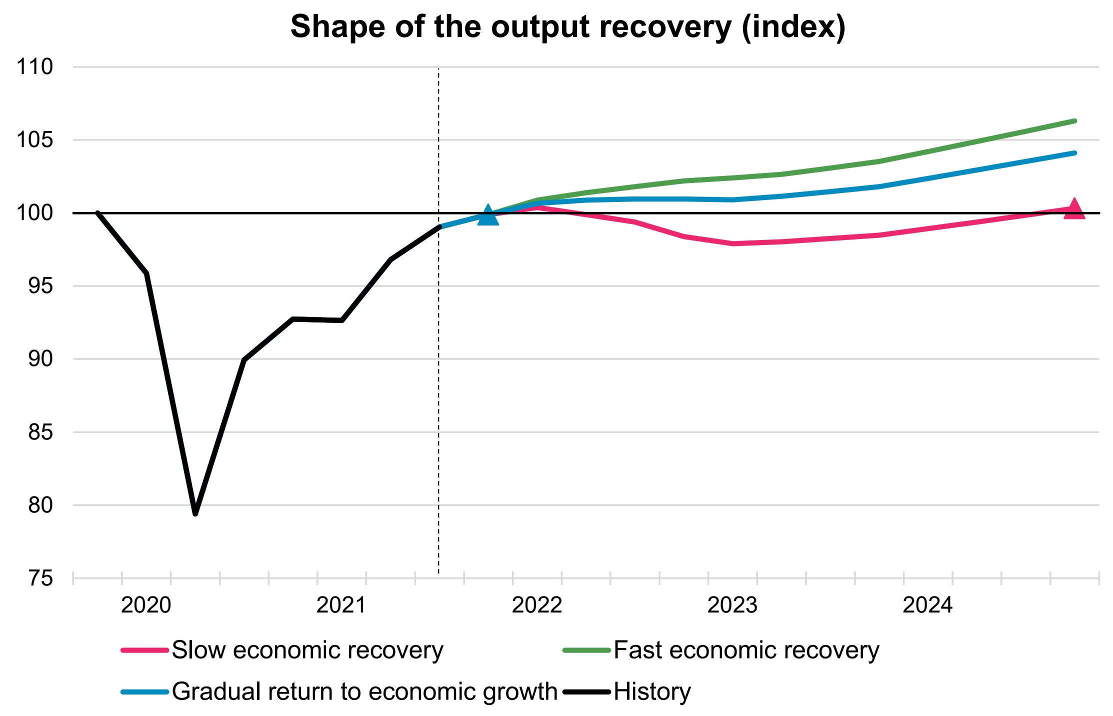
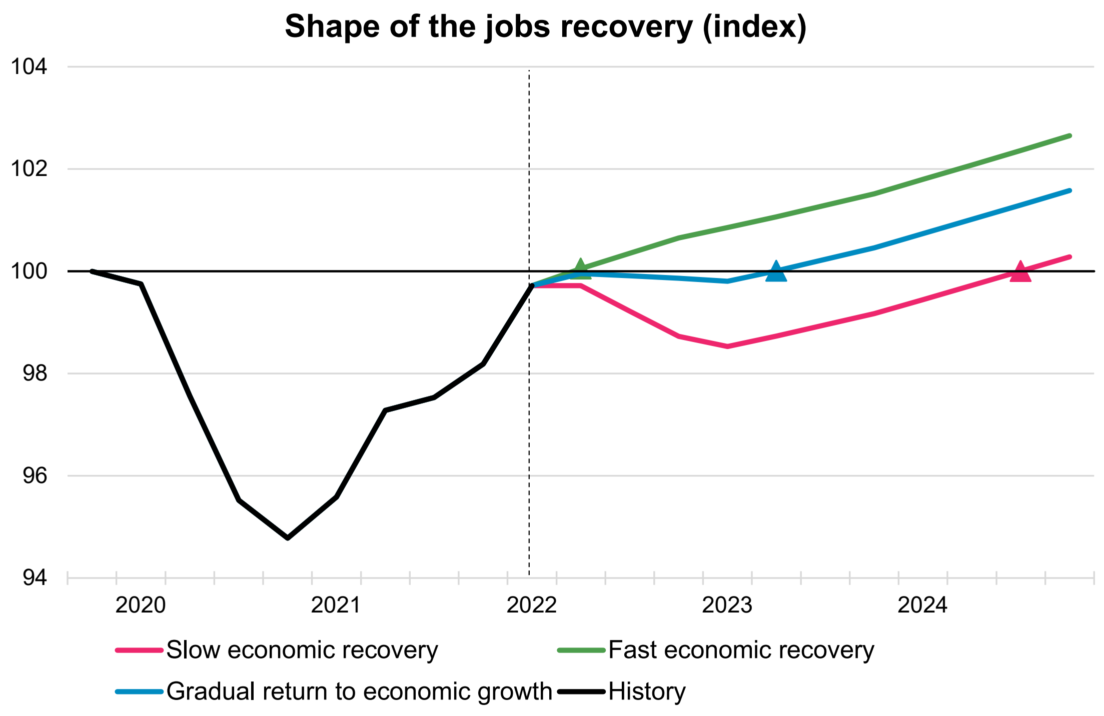
The overall storyline behind the Gradual recovery scenario

Q1 & Q2 2022 (Ongoing Recovery)	Q3 2022 to Q1 2023 (Economic Standstill)	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 recovers some lost ground. • Employment roughly reaches pre-pandemic levels. • Use of public transport remains muted as a transition to hybrid working begins. • A rapid, but partial, 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 increasingly drags on consumer spending. Combined with tighter monetary policy, this drags overall output growth to a standstill, with an outright contraction across the winter of 2022-23. • Consumer-facing sectors like Wholesale and retail and Accommodation and food services face a pronounced contraction in activity. With interest rates up and affordability down, housing-related sectors also struggle. • As firms grow less optimistic about future growth, hiring eases and job growth grinds to a halt. This leaves employment fluctuating around pre-pandemic levels well into 2023. • A worse demand outlook also prompts investment to fall back again. • 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. • Following the withdrawal of fiscal support there is some shake-out of unviable businesses. • 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.

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).

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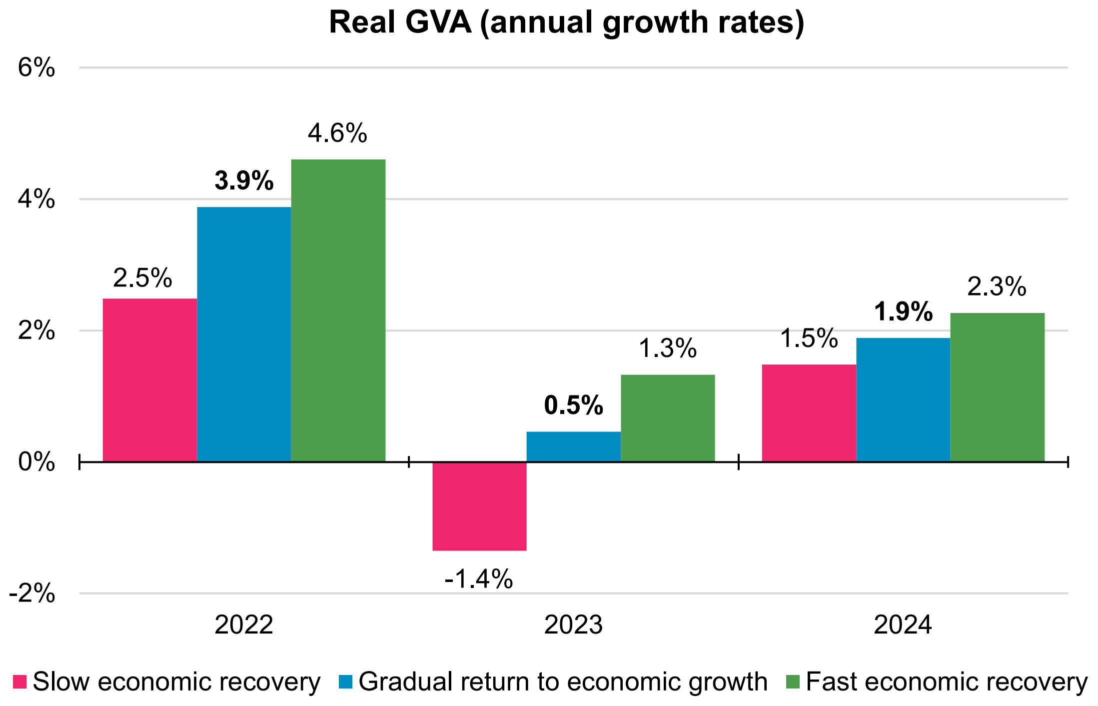
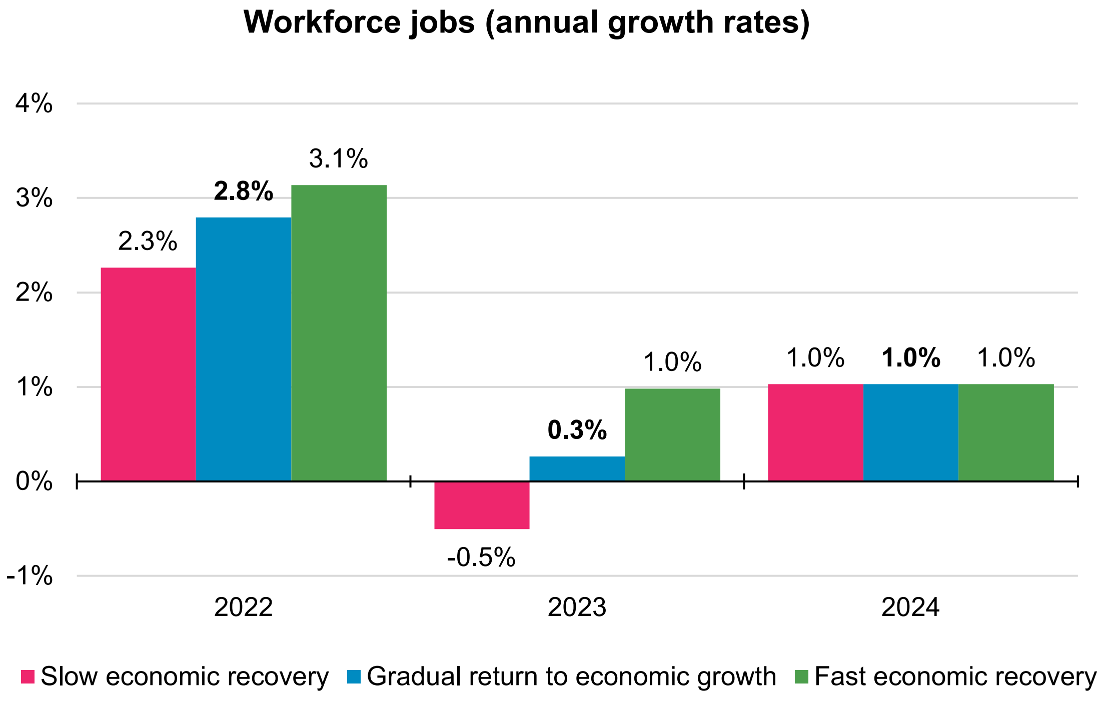
Medium-term scenario projections: annual growth rates





Source: GLA Economics

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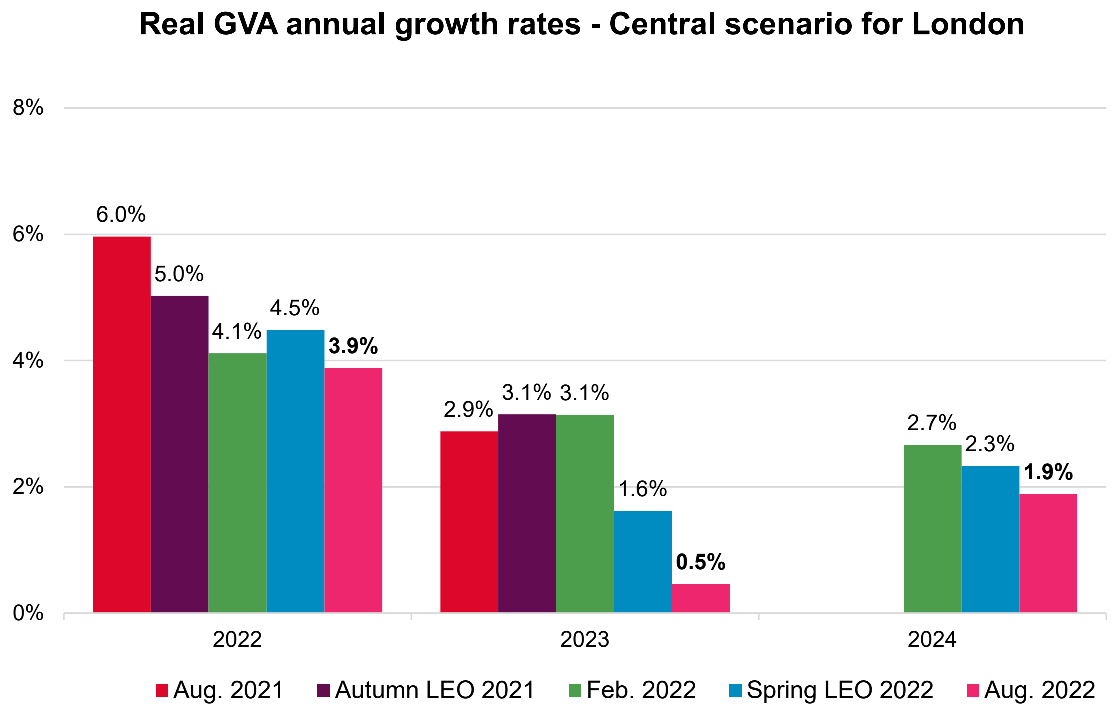
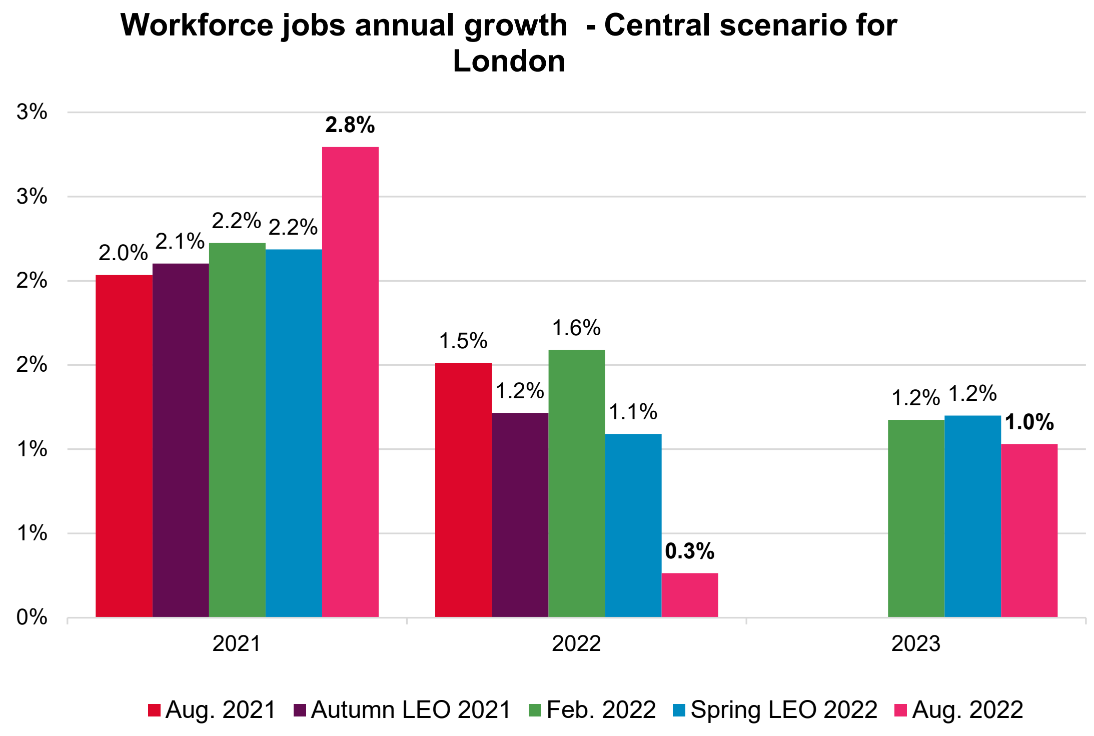
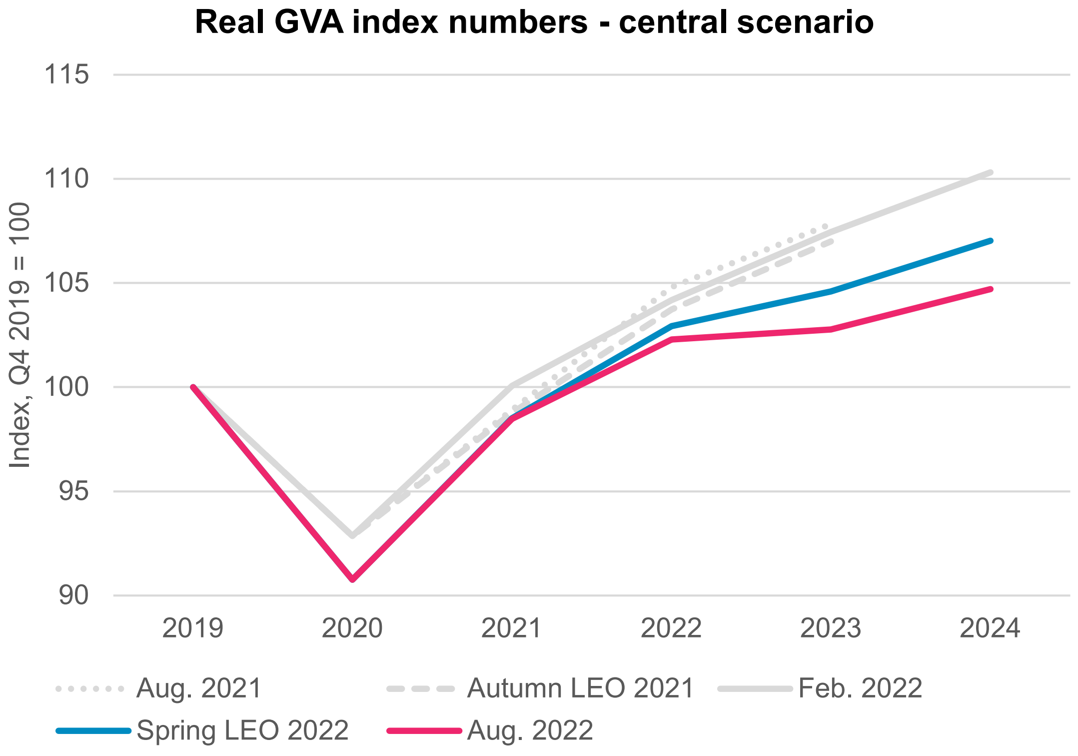
Comparison of successive Gradual recovery scenarios across outputs (1)

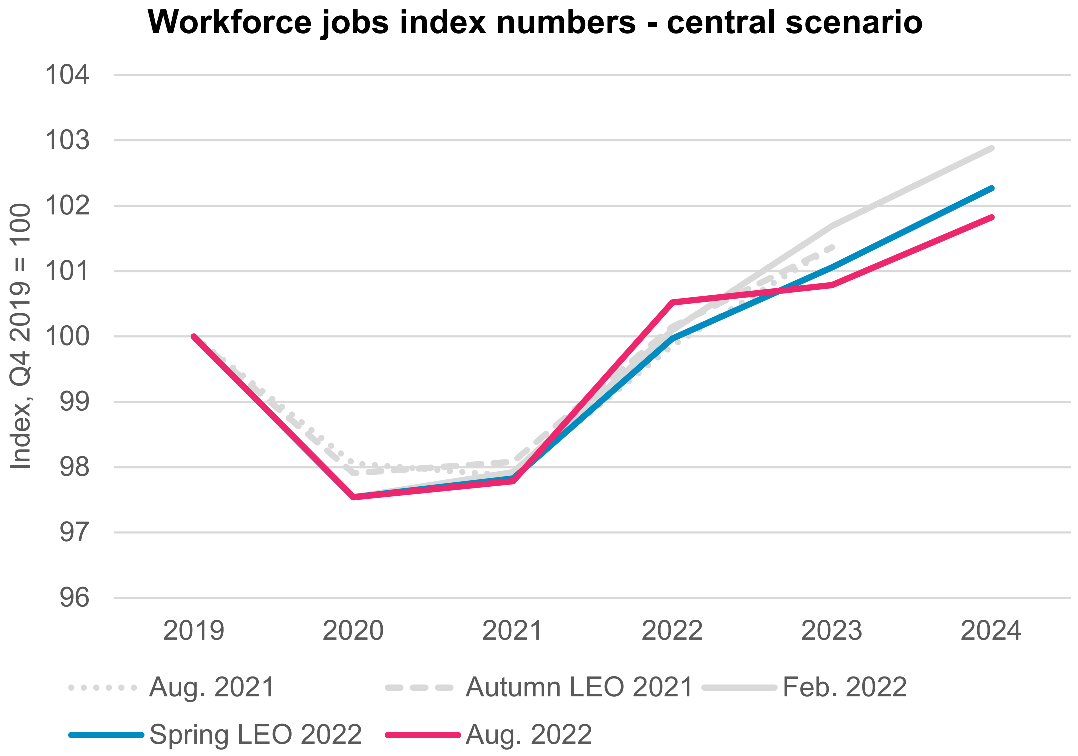




Source: GLA Economics

Comparison of successive Gradual recovery scenarios across outputs (2)





Source: GLA Economics estimates

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	2.3	-0.4
Electricity, gas, steam and air-conditioning supply	2.4	2.0
Water supply; sewerage and waste management	5.8	2.3
Construction	4.5	-0.1
Wholesale and retail trade; repair of motor vehicles	0.4	-1.7
Transportation and storage	17.7	2.8
Accommodation and food service activities	21.8	-1.5
Information and communication	6.1	0.9
Financial and insurance activities	5.4	1.4
Real estate activities	0.2	-0.3
Professional, scientific and technical activities	3.6	0.6
Administrative and support service activities	-0.1	0.7
Public administration and defence	-1.2	0.5
Education	5.3	1.3
Human health and social work activities	0.5	0.8
Arts, entertainment and recreation	7.7	-1.5
Other service activities	11.5	1.3
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	6.1	2.6
Electricity, gas, steam and air-conditioning supply	0.6	4.2
Water supply; sewerage and waste management	11.9	-1.5
Construction	9.4	0.2
Wholesale and retail trade; repair of motor vehicles	0.8	-1.2
Transportation and storage	0.2	2.1
Accommodation and food service activities	3.1	-0.2
Information and communication	7.6	0.8
Financial and insurance activities	-0.5	0.6
Real estate activities	5.7	-1.5
Professional, scientific and technical activities	4.9	-0.3
Administrative and support service activities	2.5	0.6
Public administration and defence	0.1	-0.6
Education	4.6	0.8
Human health and social work activities	-1.1	1.0
Arts, entertainment and recreation	4.9	-0.7
Other service activities	-4.1	1.1
Activities of households	1.7	-3.9

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 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	2027	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 level less over 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

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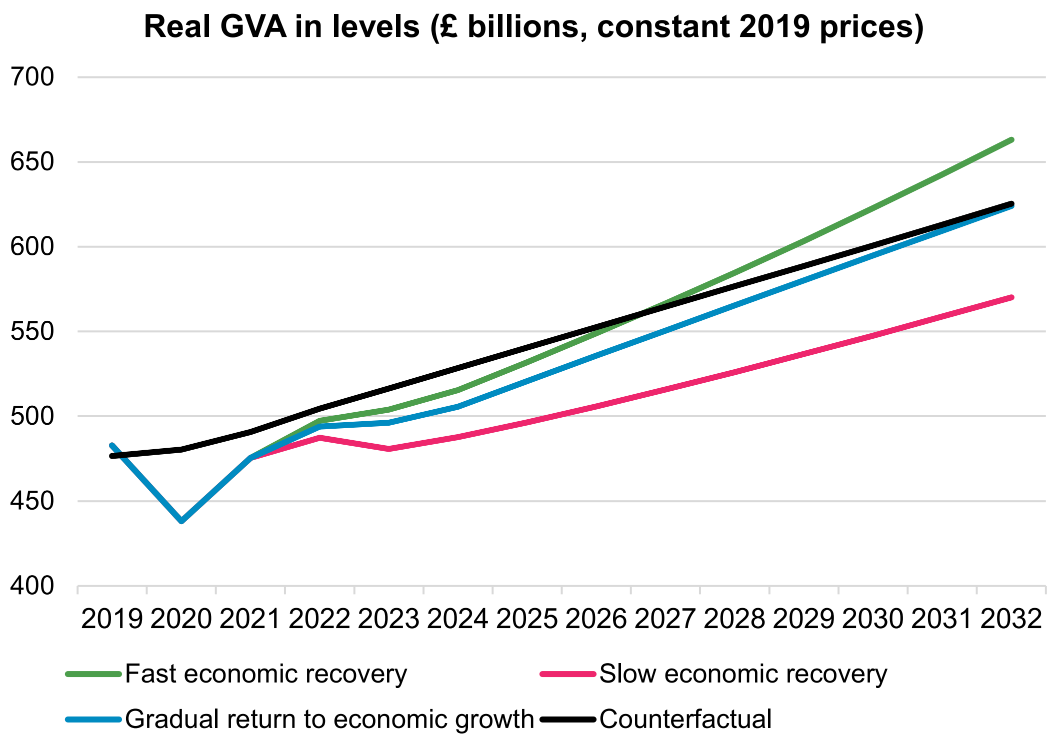
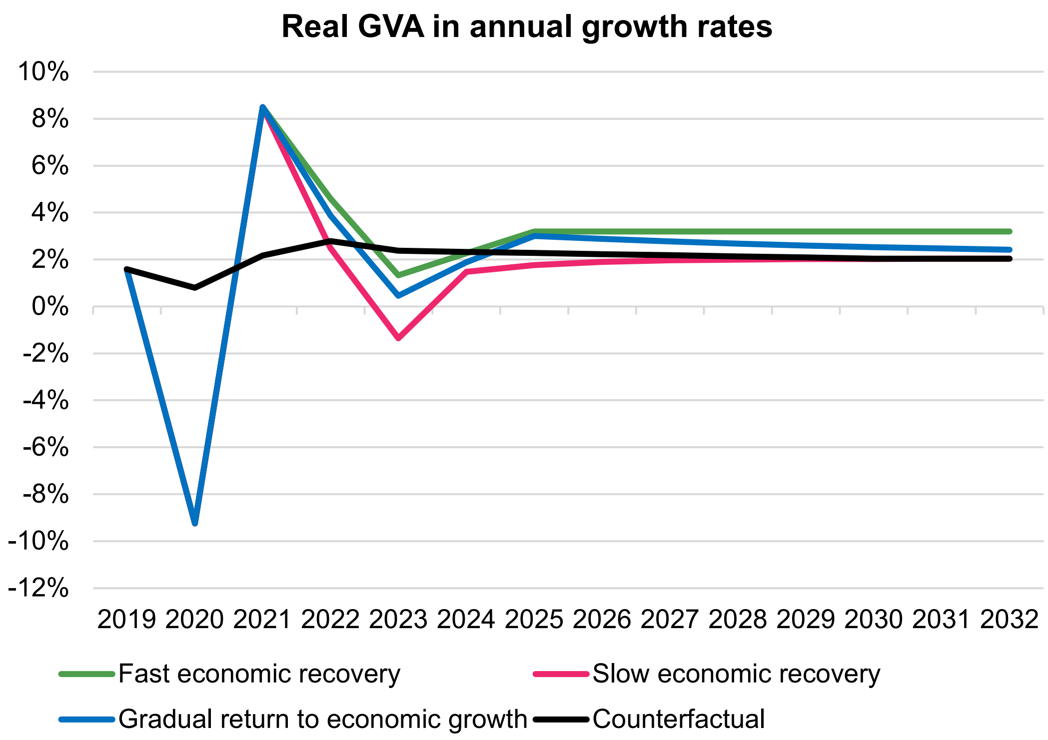
Long-term scenario projections for London





Source: GLA Economics

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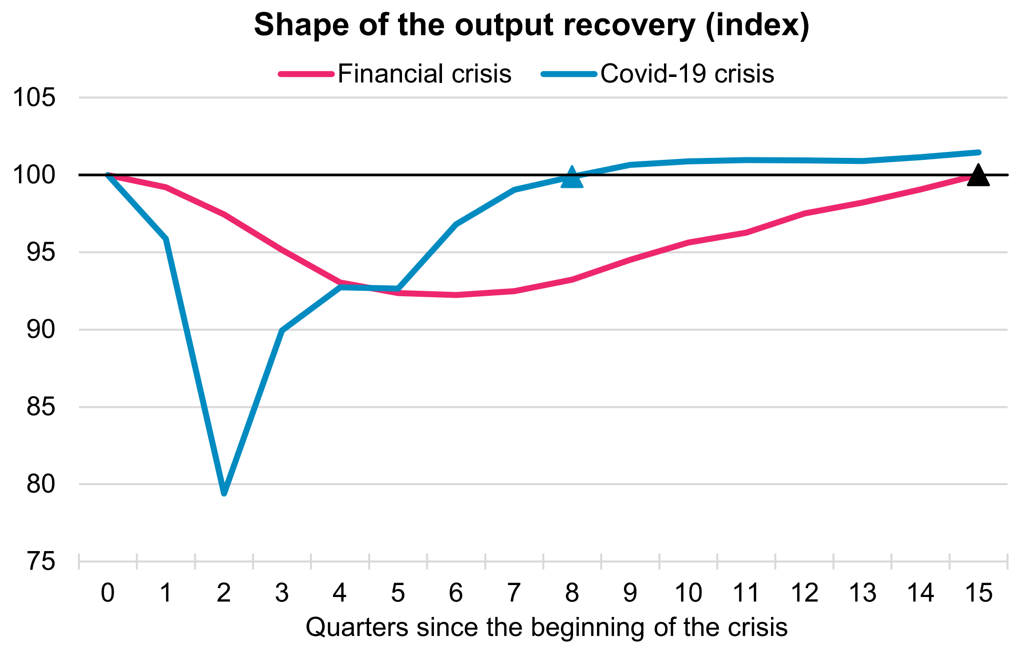
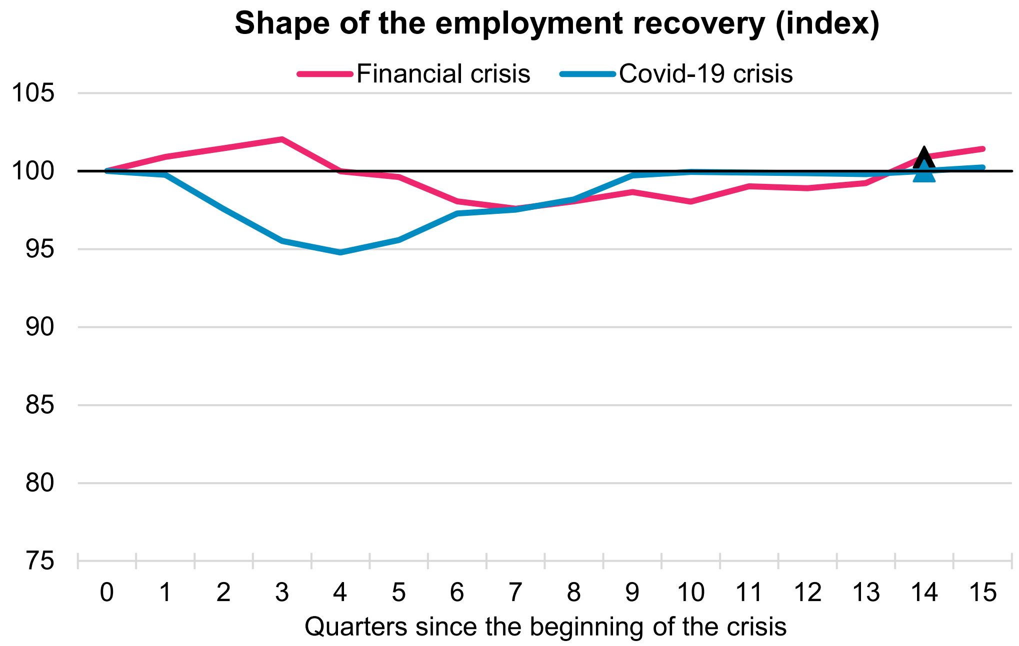
Comparison with the financial crisis

- Despite a deeper and more rapid fall, London's output has rebounded 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.





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
2022	4.6%	3.9%	2.5%
2023	1.3%	0.5%	-1.4%
2025	3.2%	3.0%	1.8%
2030	3.2%	2.5%	2.0%

Source: GLA Economics

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	497,367	493,923	487,294
2023	503,979	496,203	480,710
2025	531,903	520,732	496,410
2030	622,631	594,730	547,582

Source: GLA Economics

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	122,283
Q1 2022	**Q2 2022**	**Q3 2022**	**Q4 2022**
123,226	123,504	123,603	123,591
Q1 2023	**Q2 2023**	**Q3 2023**	**Q4 2023**
123,527	123,829	124,220	124,627
Q1 2024	**Q2 2024**	**Q3 2024**	**Q4 2024**
125,328	126,034	126,744	127,459

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
5,804	5,907	5,922	5,962
Q1 2022	**Q2 2022**	**Q3 2022**	**Q4 2022**
6,055	6,069	6,067	6,064
Q1 2023	**Q2 2023**	**Q3 2023**	**Q4 2023**
6,060	6,073	6,086	6,100
Q1 2024	**Q2 2024**	**Q3 2024**	**Q4 2024**
6,117	6,134	6,151	6,168

Source: GLA Economics

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Summary of methodology

- Quarterly ONS UK output data is available to Q2 2022 for the UK and to Q3 2021 for London by sector. Q4 2021 and Q1 2022 London output tracks UK trends with modifications in line with London-specific indicators like business and consumer confidence.
- Quarterly jobs data by sector available for London and the UK to Q1 2022. Payrolled employee jobs estimates for Q2 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). The modelling also builds on previous versions of GLAE scenarios.
- Sector level modelling reflects the disproportionate sectoral effects of the current crises. Profiles for sectors such as arts and hospitality will balance a catch-up effect from the disproportionate impact of the pandemic with the fresh impact of dampened consumer demand. 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 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 Q1 2022.
- 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	Q1 2022
6,072	6,057	5,924	5,800	5,755	5,804	5,907	5,922	5,962	6,055

Source: ONS, GLA Economics