Macroeconomic scenarios for London's economy post COVID-19

Scenarios approach, storylines and projections to 2032

14 December 2022

GLAECONOMICS

Disclaimer

- This thirteenth output of the macroeconomic scenarios project updates the twelfth output, published on 25th August 2022. It is an interim output, which the Greater London Authority is making available for the benefit of external stakeholders tackling the ongoing challenges facing London's economy.

- 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)

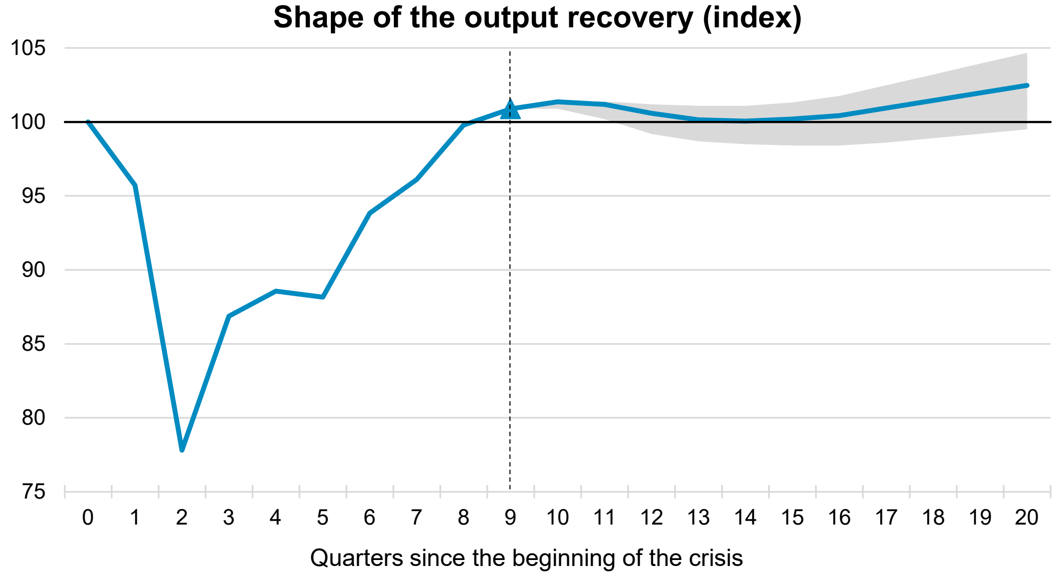
- This pack is an update of the GLA Economics-led project developing scenarios for London's economy post COVID-19. It includes new medium-term projections and GVA projections to 2032.
- These scenarios incorporate the latest intelligence from the Bank of England forecast for the UK economy of 3rd November 2022 and the OBR forecast for the UK economy of 17th November 2022.
- The scenarios also include data on output up to Q1 2022 and jobs up to Q2 2022, which point to a strong output recovery into the beginning of this year and a fully recovered jobs market.
- The key source of economic risk remains the rapid rise in inflation. We now expect the cost of living crisis to prompt a recession in London's economy. As a result, this is now the recovery that forms the focus for these scenarios. COVID-19 is now a less important factor in the outlook.
- The main aim of this project is to develop a set of high-level macroeconomic scenarios to inform London's recovery strategies, reflecting unusually high 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.

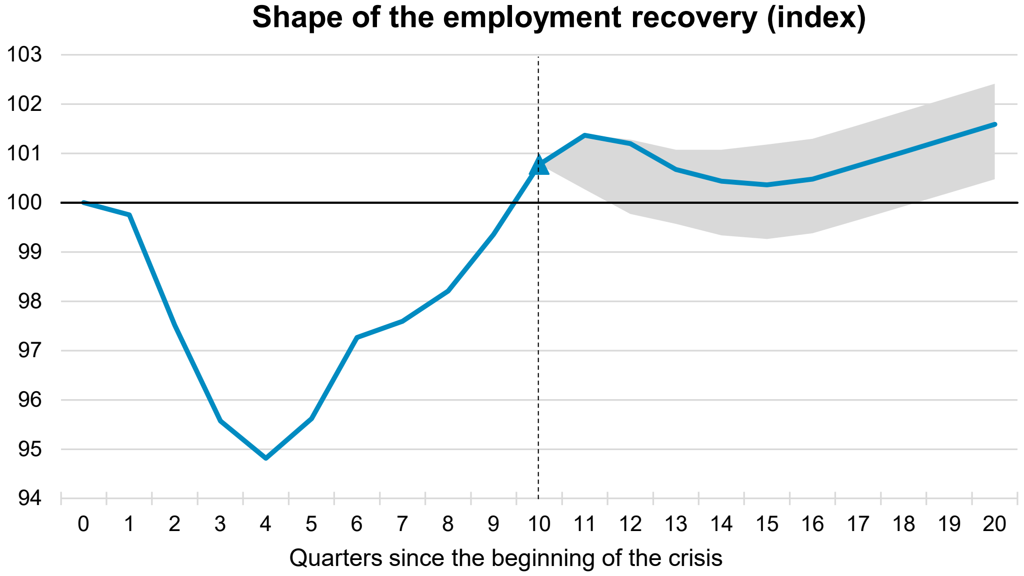
Executive Summary (2)

- 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.
- The baseline outlook has worsened substantially, with most major projections anticipating an extended recession at the UK level starting in Q3 2022. OBR projections see output taking until late 2023 to begin rising. London's households and businesses also show growing signs of pessimism.
- Despite the downgrade, risks remain tilted to the downside. While the recovery from the pandemic in 2021 was rapid, high inflation is increasingly dragging on real incomes and aggregate demand. Perhaps the key question for scenario planning is how households absorb this shock. How persistent inflation proves, whether the energy market settles, how businesses respond and the path of fiscal and monetary policy are other key risks.
- Three core scenarios have been developed: Scenario 1 - Mild downturn, rapid recovery; Scenario 2 - Recession and gradual recovery; and Scenario 3 - Deep recession, slow recovery.
- Other scenario dimensions include: Brexit & migration; International context; Technology & innovation; Financial climate; Political economy; Economic geography and climate change impacts.

Executive Summary (3)

- Historical data shows that London’s economy recovered to pre-pandemic levels of output by early this year. Under the Recession and gradual recovery scenario, London’s GVA will fall back in the coming recession, but not slip below late 2019 levels. London’s output is set to return to mid-2022 levels by mid-2024.
- Under the Deep recession, slow recovery scenario, output falls back below pre-pandemic levels throughout the forecast period.
- Employment is expected to follow a slightly shallower path of decline compared to output, but job numbers will take a little longer to recover to mid-2022 levels in the Recession and gradual recovery scenario.
- The trajectories in the figures are for the Recession and gradual recovery scenario, with shaded areas for the scenario range.





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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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Ability to absorb shocks for households, businesses and government

Scenario 1: Mild downturn, rapid recovery	Scenario 2: Recession and gradual recovery	Scenario 3: Deep recession, slow recovery
London's stronger aggregate incomes compared to the rest of the UK offer a buffer against inflation as richer households spend more of their pandemic savings.	High average incomes and less pessimistic households help London do better than other regions, but a fall in consumption 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.
Better trends in London business confidence than UK averages see firms make modest cuts to hiring and investment.	Rising costs and stagnant demand prompt businesses to cut back hiring and investment plans, but job growth resumes by end-2023.	With no relief from rising costs after April 2023, firms facing a lack of demand make nearly no investment or hiring plans to 2024.
Inflation expectations never de-anchor and the sterling exchange rate holds up in response to tighter monetary policy. Energy and food prices 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 ease slowly in 2023.	Monetary policy struggles to lower inflation expectations, and sterling weakens as UK economic prospects lag other countries. Energy and food prices rise well into 2023.
UK energy markets diversify rapidly and the winter proves mild on average, softening the disruption from further gas supply crunches.	The UK partly mitigates disruption from gas supply cuts due to the war in Ukraine, but domestic energy bills are high for some time.	Russia cuts gas supply sharply amid a harsh winter, creating major disruptions and prompting managed blackouts in early 2023.
The impact of house price falls is moderated by the improvement in affordability.	Falling house prices dent housing wealth, further dampening spending slightly.	House prices drop, offsetting high-income households' gains from a savings cushion.

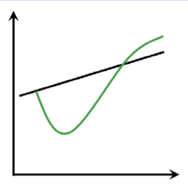
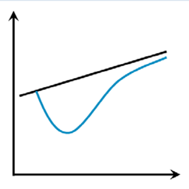
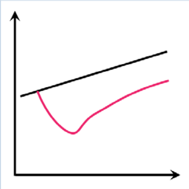
The policy environment and its impact on households and businesses

Scenario 1: Mild downturn, rapid recovery	Scenario 2: Recession and gradual recovery	Scenario 3: Deep recession, slow 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 cutbacks.	Fiscal support offers dwindling support as costs remain high and many households fall into financial precariousness. Consumers all the way up to middle incomes cut spending sharply, especially on non-essentials.	Fiscal support fails to transmit into income improvements for the worst-hit households as global prices rise and real wages fall rapidly. The majority of consumers face harsh spending cuts, even on essentials.
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 mid-2023.	Still-high global cost pressures dominate the Bank of England's efforts to control inflation despite rate hikes well into 2023, but tighter policy helps slow inflation late next year.	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 2023 or early 2024.
Starting from a tight labour market means monetary tightening has a mild jobs impact.	A rapid tightening of macro policy sends job numbers into reverse, but the dip is shallow.	Recession and tight borrowing conditions keep labour demand low for some time.
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.
A relatively mild recession means 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 several years for output to return to its pre-pandemic trend path.	Deep recession, persistent inflation and slow recovery mean major economic scarring, as firms close and workers lose jobs.

Updated key assumptions for other drivers

Scenario 1: Mild downturn, rapid recovery	Scenario 2: Recession and gradual recovery	Scenario 3: Deep recession, slow 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.
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 retail 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: Mild downturn, rapid recovery	Scenario 2: Recession and gradual recovery	Scenario 3: Deep recession, slow recovery
London’s economy returns to its pre-COVID trend growth (rate and level) in the medium to long term (within around seven years). There is limited economic scarring in the medium term and none in the long term. 	London’s economy continues to converge towards pre-COVID trends, but will not reach those levels until well into the long term (after 10+ 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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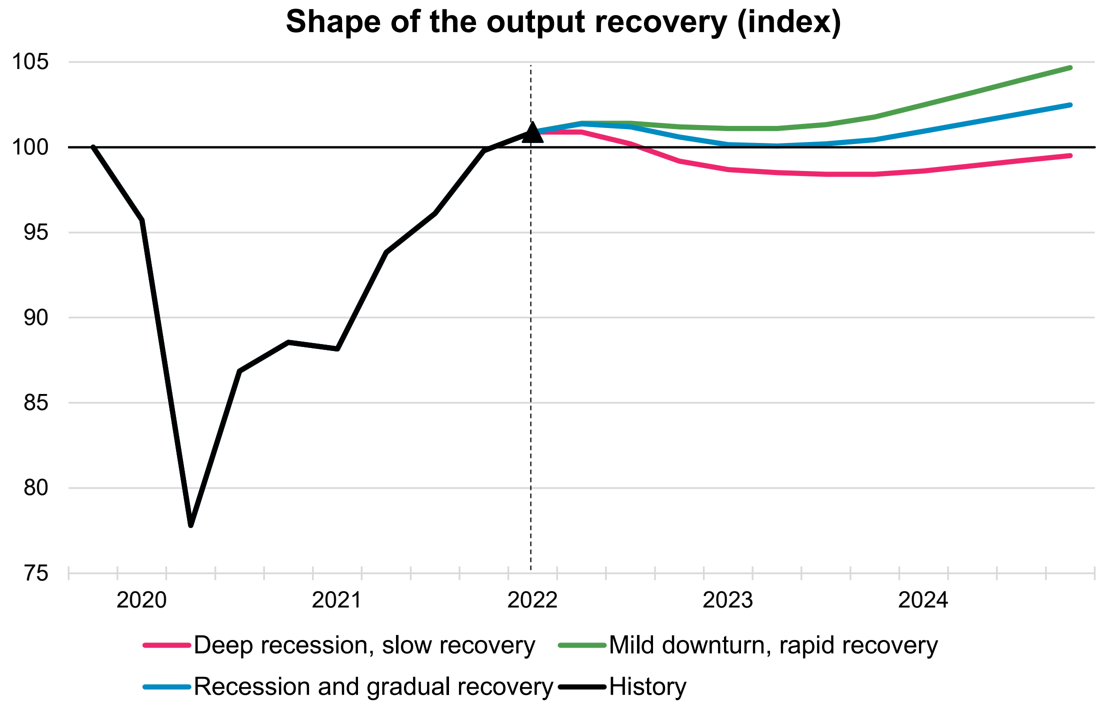
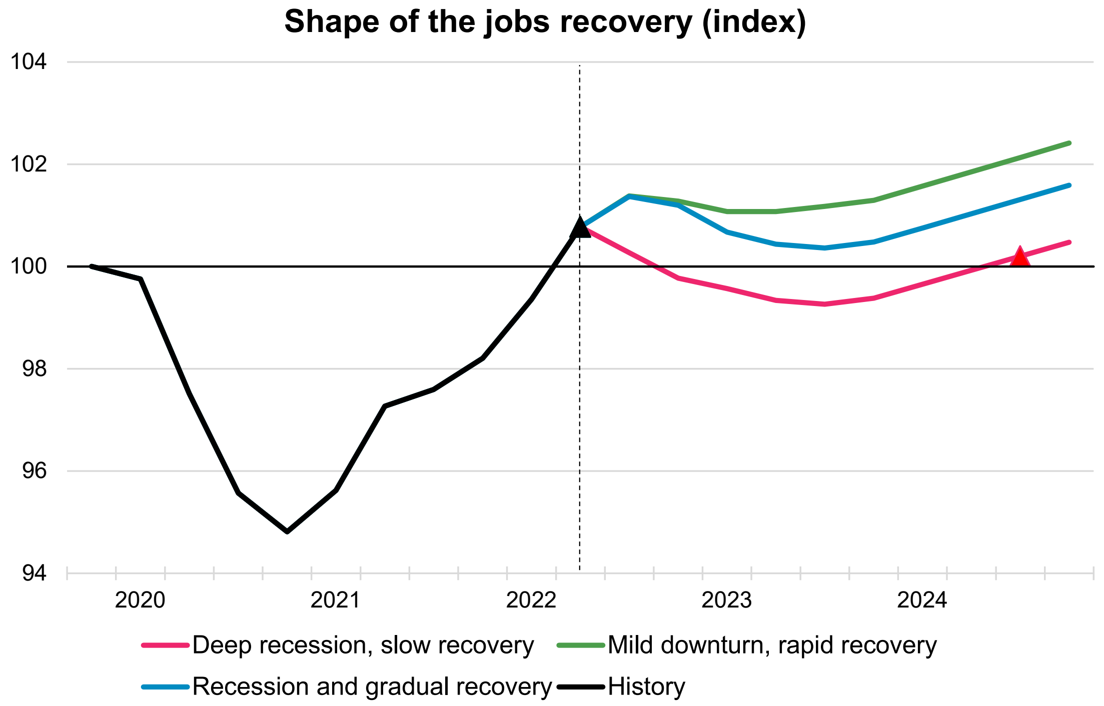
Outline

The overall storyline behind Recession and gradual recovery scenario

Q2 2022 (Slowing momentum)	Q3 2022 to Q2 2023 (Recession)	Q3 2023 and beyond (Recovery)
• The pace of recovery from the pandemic eases as the momentum of early 2022 gives way to slowing demand due to rising prices. • Falling household incomes increasingly restrain the consumer recovery. This begins to restrain sectors involved in retail, entertainment and hospitality. • While businesses remain confident, the investment recovery remains limited as uncertainty is persistently high. • Employment reaches pre-pandemic levels. • Use of public transport remains below pre-pandemic levels as a transition to hybrid working begins. • The return of visitors and tourists remains incomplete, denting 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 pushes to its highest levels in 40 years in late 2022 and holds near hear for the first half of 2023. The drag on household incomes pulls back consumer spending. Combined with tighter monetary policy, this drags overall output growth into a recession, with four quarters of contraction. • 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, Real estate also struggles. • As firms grow pessimistic about future growth, hiring falls back and jobs growth goes into reverse. Employment starts to fall in late 2022 and continues 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 economy begins to grow again as inflation slows and the pressure on incomes eases. • The pace of recovery depends on 1) control of inflation without scarring demand, 2) the resilience of London's households, 3) London's capacity to attract investment, 4) the pace of fiscal consolidation and 5) global context. • Following the withdrawal of fiscal support there is some shake-out of unviable businesses. • Investment (and recapitalisations) will be key to supporting companies which survived the pandemic but remain weak. • Jobs recovery will continue to advance but there is disproportionate medium-term damage from the pandemic for disadvantaged groups such as young people and ethnic minorities. • The fact that key inflation pressures have come from essential goods and service prices also tends to widen existing inequalities.

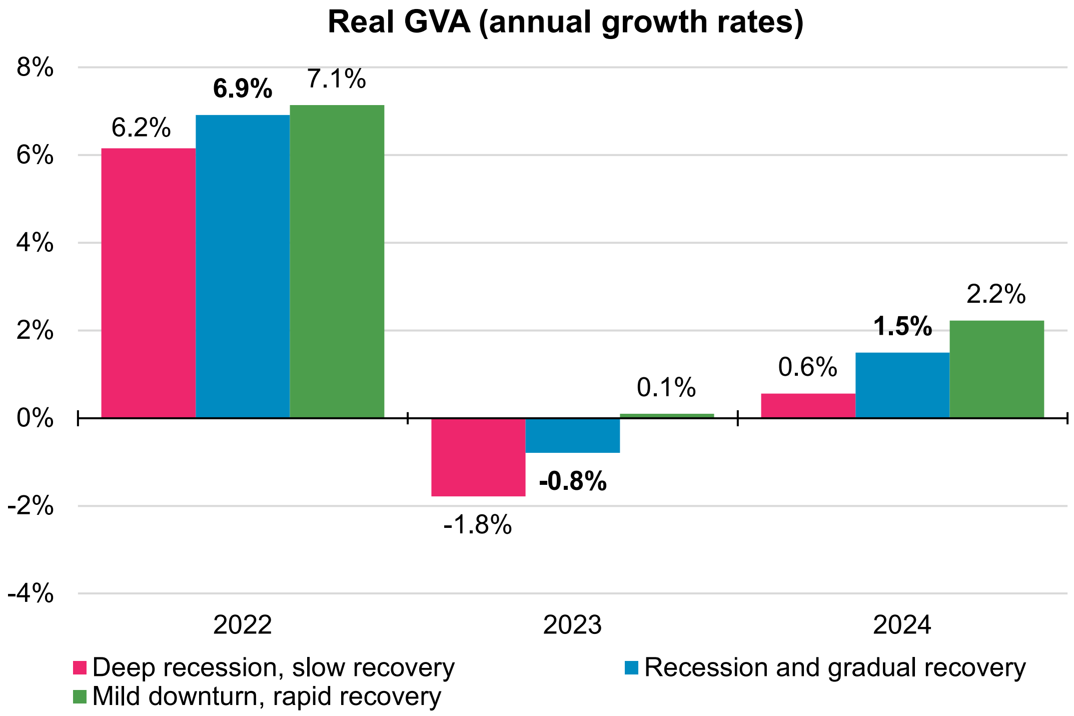
Medium-term scenario projections for London

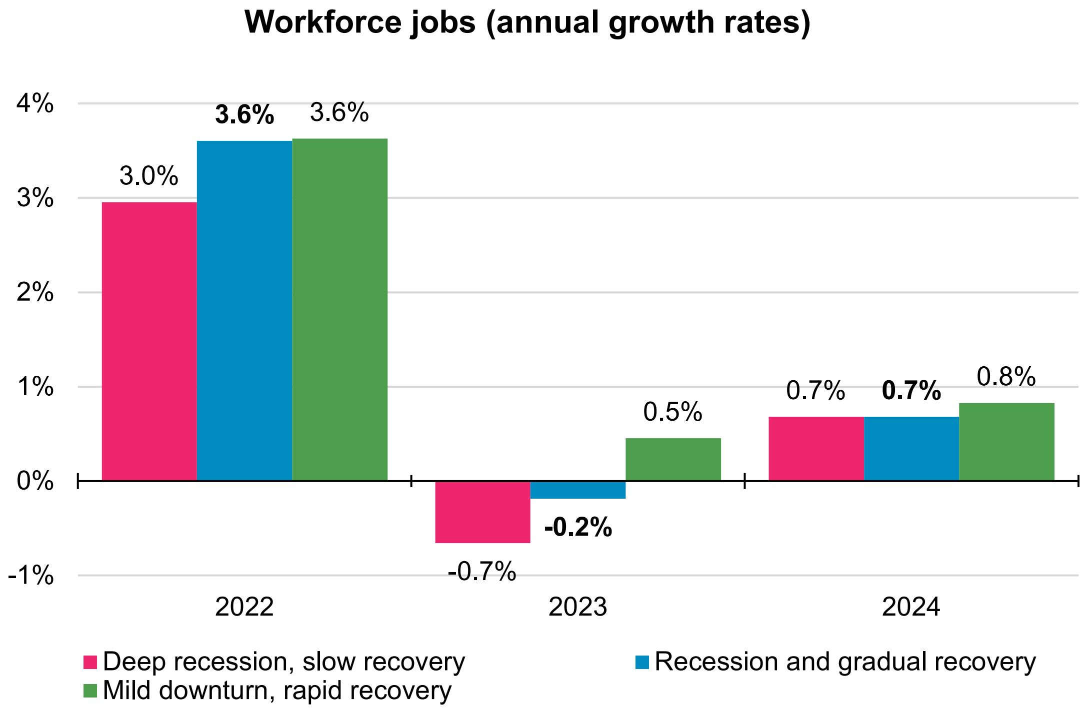




Source: GLA Economics; Note: Index of 100 = pre-pandemic level. The 'triangle' indicates the quarter when the corresponding series reaches its pre-pandemic level (sometimes the triangle is above 100, meaning that pre-crisis levels were not only reached but also surpassed in the same quarter).

Medium-term scenario projections: annual growth rates





Source: GLA Economics

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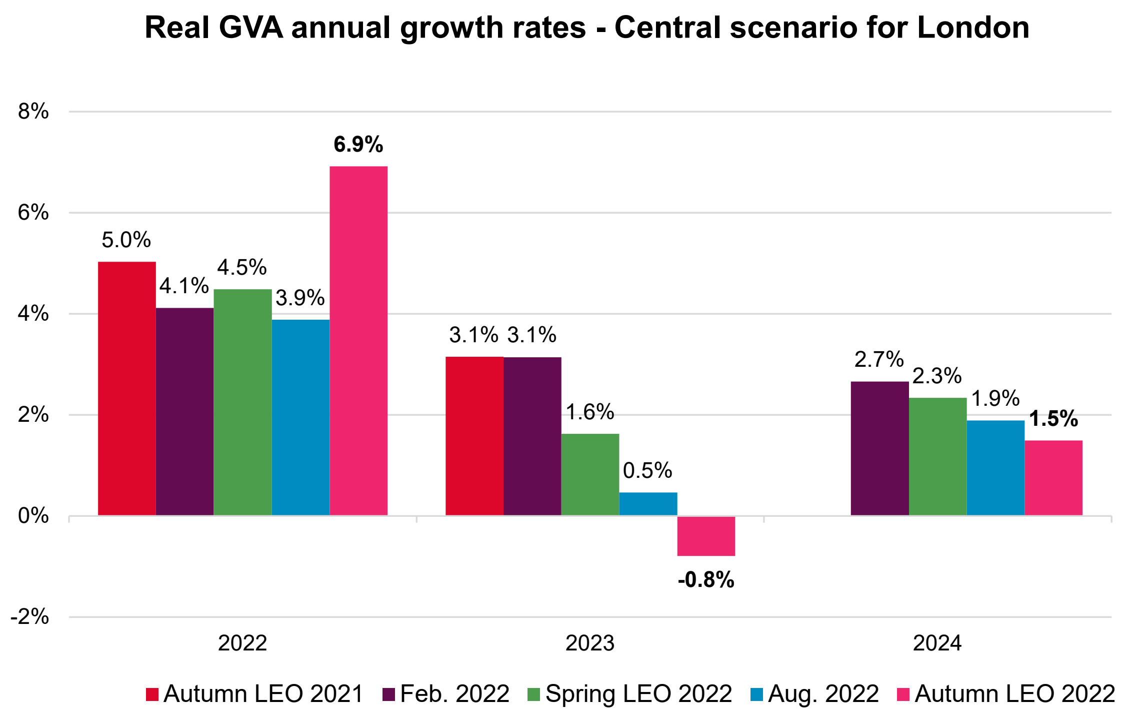
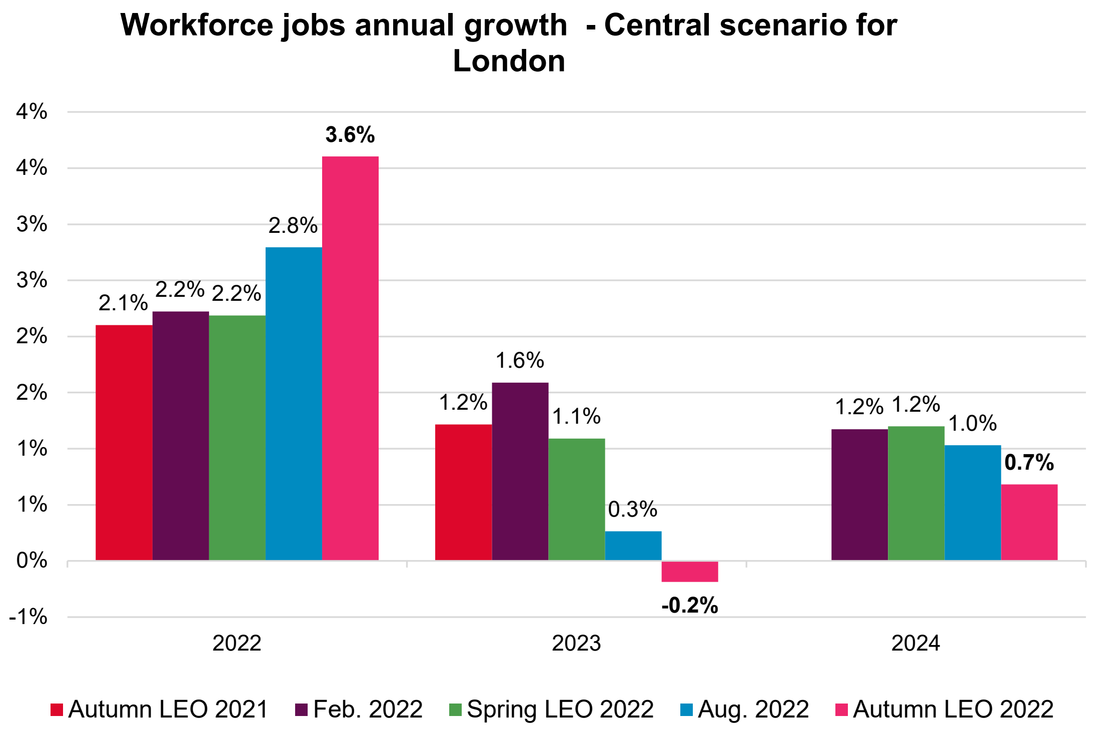
Comparison of successive Gradual recovery scenarios across outputs (1)





Source: GLA Economics

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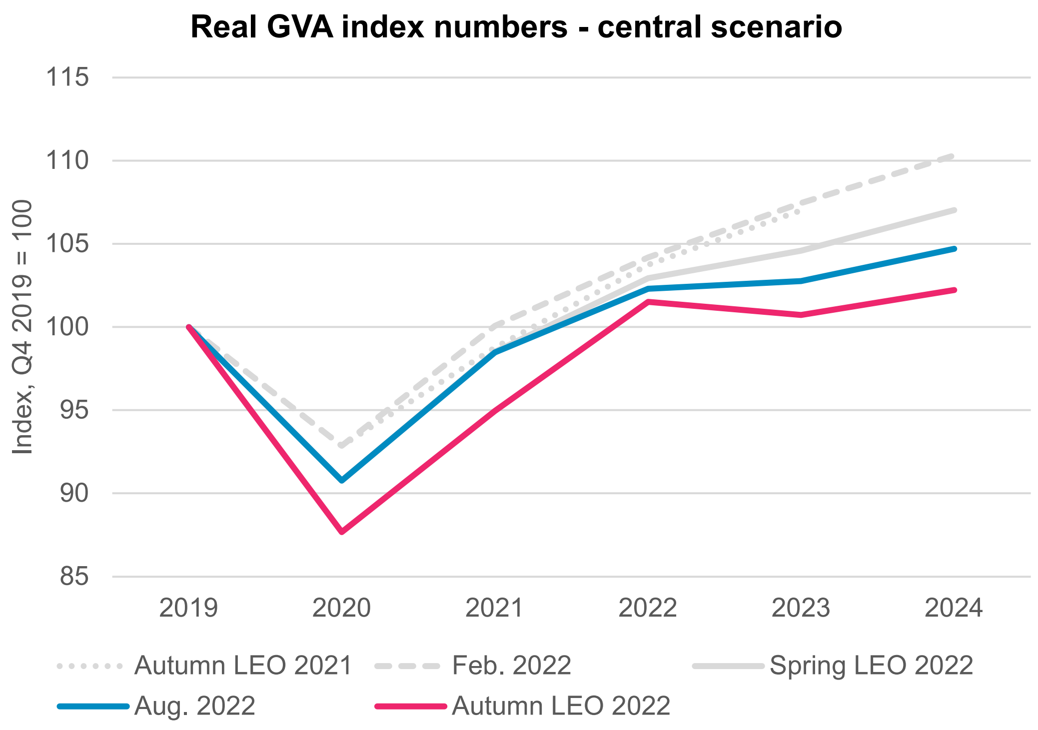
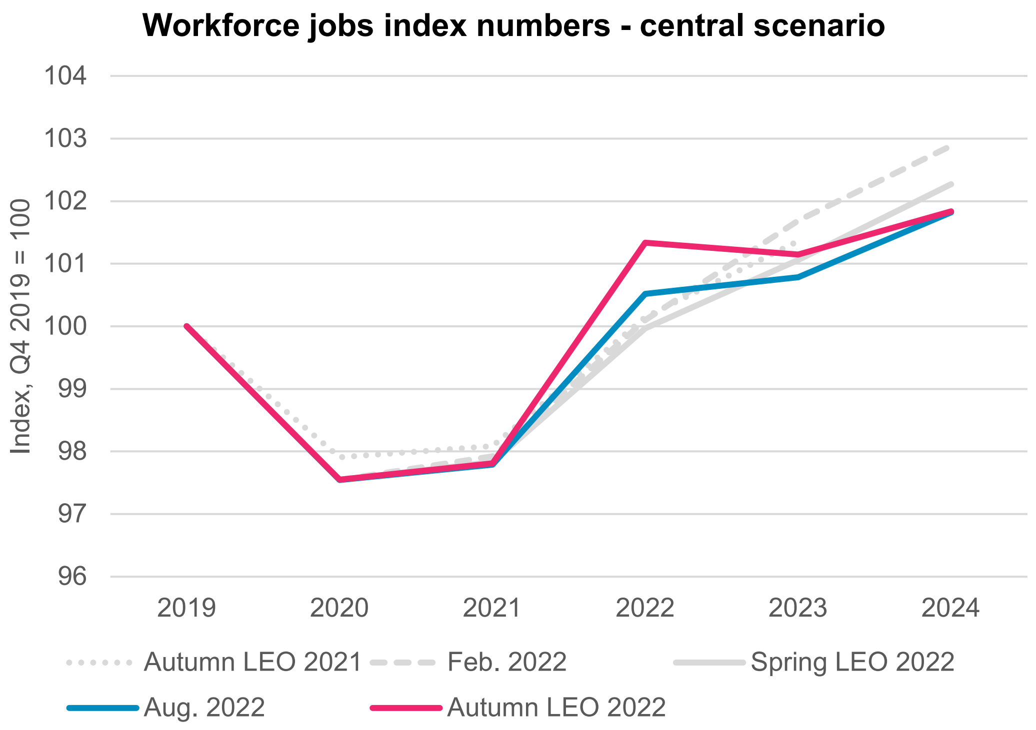
Comparison of successive Gradual recovery scenarios across outputs (2)





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	**12.1**	**-0.6**
Mining and quarrying	**16.1**	**3.3**
Manufacturing	**-1.5**	**-2.2**
Electricity, gas, steam and air-conditioning supply	**-5.5**	**5.2**
Water supply; sewerage and waste management	**-3.9**	**1.9**
Construction	**8.2**	**-1.3**
Wholesale and retail trade; repair of motor vehicles	**14.1**	**-4.1**
Transportation and storage	**0.1**	**-0.3**
Accommodation and food service activities	**33.2**	**-3.6**
Information and communication	**9.3**	**-0.4**
Financial and insurance activities	**2.8**	**0.0**
Real estate activities	**-3.0**	**-1.8**
Professional, scientific and technical activities	**7.8**	**0.0**
Administrative and support service activities	**12.9**	**-0.4**
Public administration and defence	**1.1**	**1.5**
Education	**4.2**	**1.7**
Human health and social work activities	**13.9**	**0.0**
Arts, entertainment and recreation	**32.2**	**-4.0**
Other service activities	**-0.8**	**-0.2**
Activities of households	**-4.0**	**-0.5**

Workforce jobs annual growth rate	2022	2023
Sector	**%**	**%**
Agriculture, forestry and fishing	**100.0**	**0.0**
Mining and quarrying	**9.1**	**0.0**
Manufacturing	**1.6**	**-1.3**
Electricity, gas, steam and air-conditioning supply	**0.9**	**6.2**
Water supply; sewerage and waste management	**5.1**	**-3.4**
Construction	**14.7**	**0.4**
Wholesale and retail trade; repair of motor vehicles	**0.9**	**-2.2**
Transportation and storage	**-4.5**	**0.1**
Accommodation and food service activities	**0.2**	**-2.5**
Information and communication	**13.2**	**1.9**
Financial and insurance activities	**-1.6**	**-0.2**
Real estate activities	**7.5**	**-1.4**
Professional, scientific and technical activities	**9.6**	**0.2**
Administrative and support service activities	**3.4**	**-0.5**
Public administration and defence	**-0.6**	**0.3**
Education	**6.5**	**1.4**
Human health and social work activities	**-4.0**	**-0.2**
Arts, entertainment and recreation	**7.4**	**-0.8**
Other service activities	**-2.2**	**1.2**
Activities of households	**25.4**	**6.3**

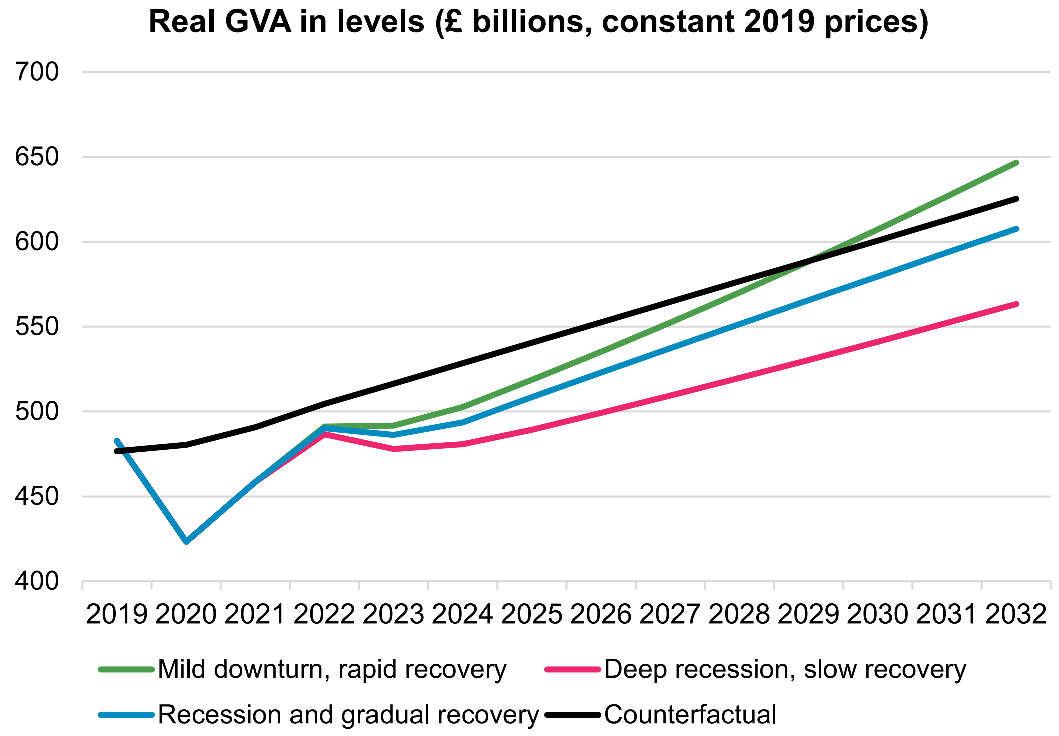
Source: GLA Economics estimates – 'Recession and gradual recovery' scenario

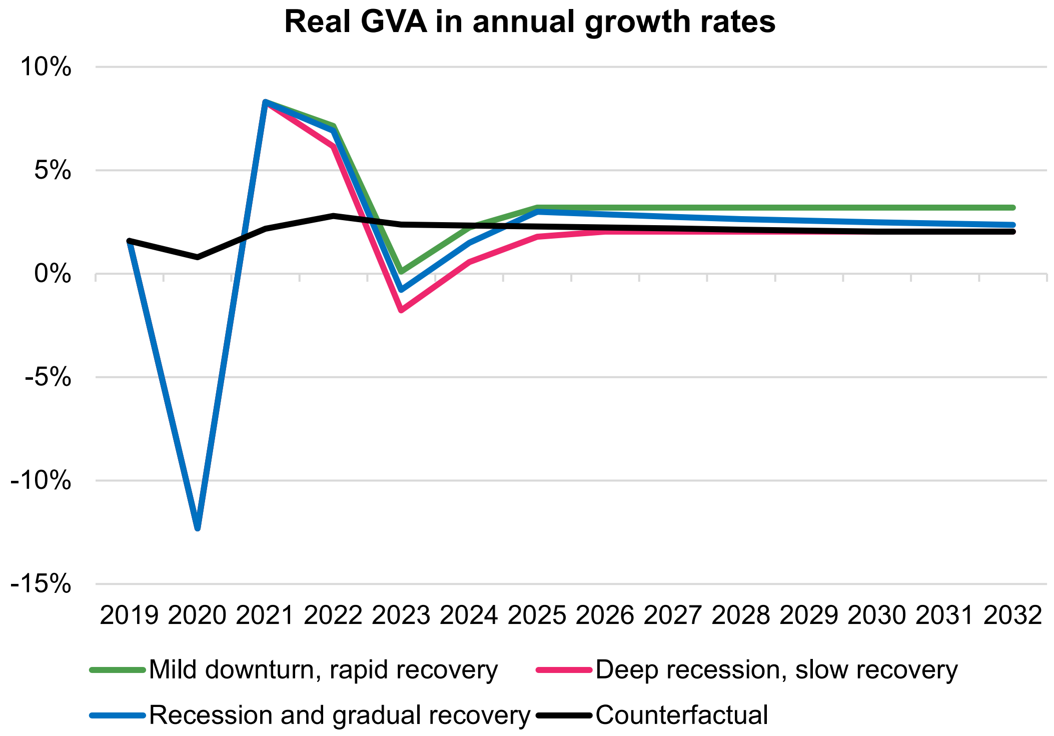
Outline

Key assumptions behind the long-term projections

	NO-COVID / Counterfactual	Scenario 1: Mild downturn, rapid recovery	Scenario 2: Recession and gradual recovery	Scenario 3: Deep recession, slow 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	2029	Not within the ten-year horizon	Not within the ten-year 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	Converging to counterfactual level, but still below it by just under 3% (reflecting macroeconomic scarring from two recessions in succession)	Counterfactual level less nearly 10% (reflecting combination of microeconomic and macroeconomic scarring from crises, plus Brexit)
GVA growth rate in 2041 (steady state)	1.5% per year (based on OBR long-term / steady-state projection)	NA	1.5% per year	1.5% per year

Long-term scenario projections for London





Source: GLA Economics

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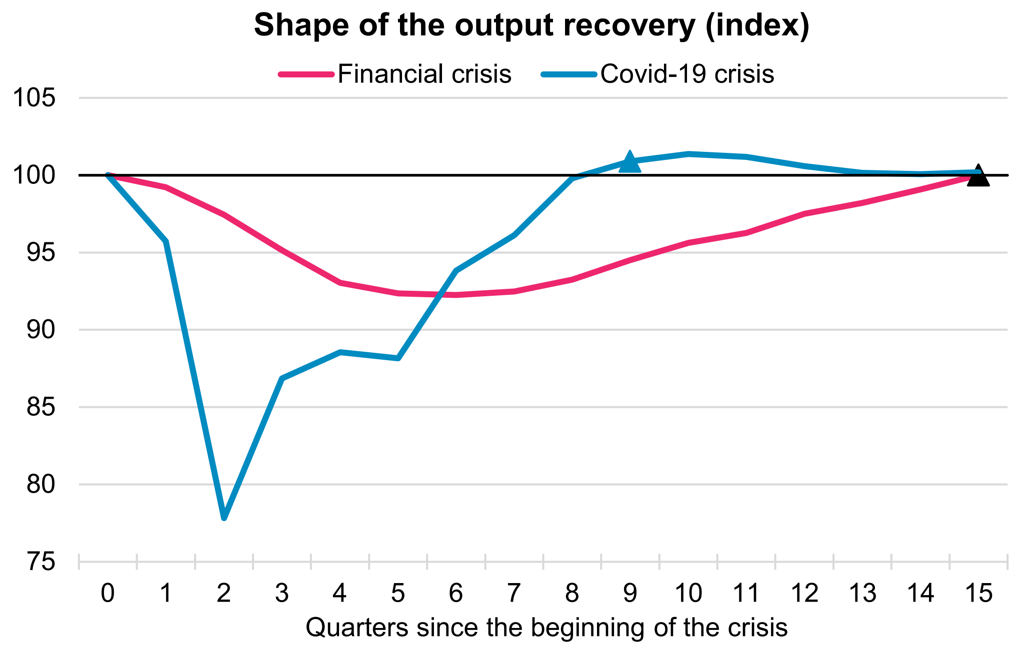
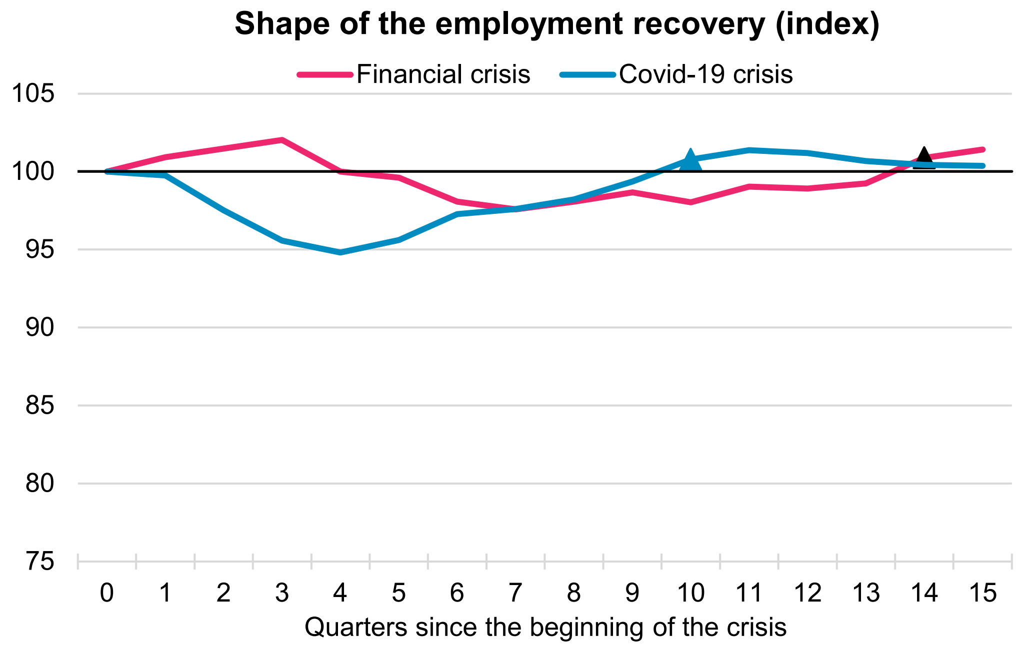
Comparison with the financial crisis

- Despite a deeper and more rapid fall, London's output rebounded more quickly from the pandemic than from the financial crisis.
- Employment also shrank more rapidly this time. While the time to recover was somewhat faster than 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: Mild downturn, rapid recovery	Scenario 2: Recession and gradual recovery	Scenario 3: Deep recession, slow recovery
	GVA	GVA	GVA
2022	7.1%	6.9%	6.2%
2023	0.1%	-0.8%	-1.8%
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: Mild downturn, rapid recovery	Scenario 2: Recession and gradual recovery	Scenario 3: Deep recession, slow recovery
	GVA	GVA	GVA
2022	491,212	490,188	486,693
2023	491,692	486,313	478,013
2025	518,728	508,387	489,308
2030	607,209	579,618	541,169

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
106,954	113,835	116,611	121,078
Q1 2022	**Q2 2022**	**Q3 2022**	**Q4 2022**
122,406	122,976	122,766	122,040
Q1 2023	**Q2 2023**	**Q3 2023**	**Q4 2023**
121,508	121,402	121,557	121,846
Q1 2024	**Q2 2024**	**Q3 2024**	**Q4 2024**
122,462	123,082	123,705	124,331

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
5,806	5,906	5,926	5,963
Q1 2022	**Q2 2022**	**Q3 2022**	**Q4 2022**
6,033	6,119	6,155	6,145
Q1 2023	**Q2 2023**	**Q3 2023**	**Q4 2023**
6,113	6,098	6,094	6,101
Q1 2024	**Q2 2024**	**Q3 2024**	**Q4 2024**
6,118	6,135	6,151	6,168

Source: GLA Economics

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Summary of methodology

- Quarterly ONS UK output data is available to Q3 2022 for the UK and to Q1 2022 for London by sector. Q2 2022 and Q3 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 Q2 2022. Payrolled employee jobs estimates for Q3 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 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. 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 Recession and gradual recovery scenario there is an assumption that output returns near to the counterfactual scenario.

Back series

- Some of this data has been estimated by GLA Economics. For output, ONS GVA data to 2019 is spliced with ONS quarterly GDP data to Q1 2022
- 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 Q2 2022.
- An ONS nowcasting GVA series for London was previously published, but this experimental series is currently suspended.

Real GVA – levels, £m 2019 prices

Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022
121,319	116,128	94,400	105,385	107,437	106,954	113,835	116,611	121,078	122,406

Workforce jobs – levels, thousands

Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022
6,072	6,057	5,921	5,803	5,757	5,806	5,906	5,926	5,963	6,033	6,119

Source: ONS, GLA Economics