



# China's potential output growth – past and future

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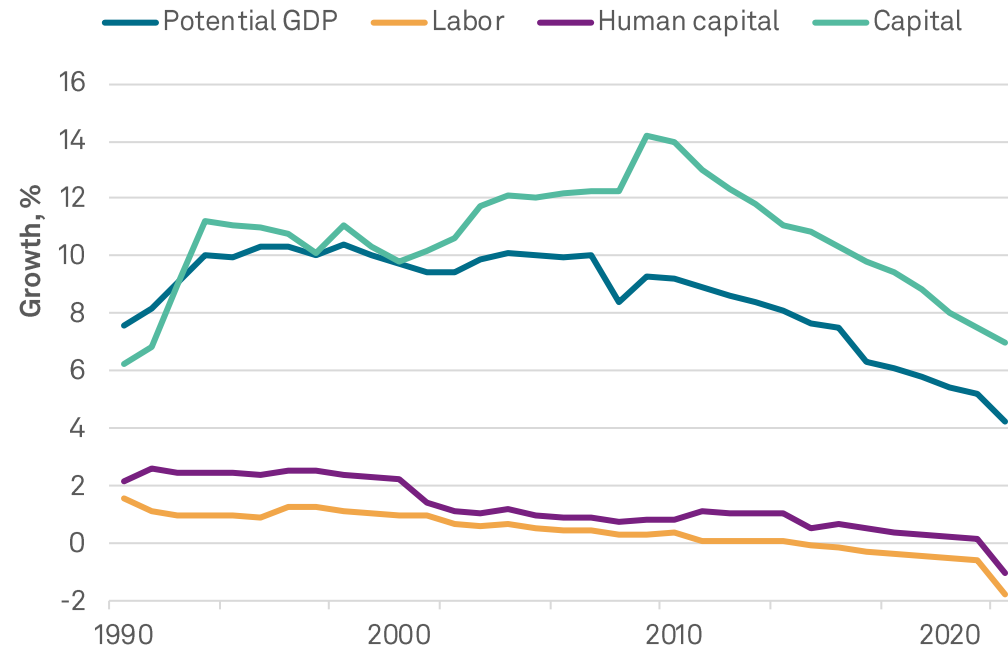
**S&P Global**  
Ratings

*This report does not constitute a rating action*

# China's potential output growth | **Outline**

- Past trends | **Assumptions, results and interpretation**
- Outlook | **Baseline forecast, scenarios, interpretation and benchmarking**

# Basics | Key data, assumptions and parameters



- Cobb-Douglas production function
- $Y = f ( K, H(L, \text{education}), \text{TFP})$
- Elasticity of output w.r.t H = 0.55
- Capital-output ratio in 1978 was 2.4
- Depreciation = 0.05
- Return on schooling = 0.1

## China | Growth accounting (1978 – 2022)

(%)	1978-1994	1994-2007	2007-2016	2016-2022
Potential GDP growth	9.9	10.0	8.5	5.5
Employment growth	2.4	0.9	0.1	-0.6
Labor productivity growth	7.3	9.1	8.3	6.2
From TFP growth	3.5	3.9	2.5	1.7
From more education	0.8	0.5	0.4	0.4
From higher capital-labor ratio	2.8	4.4	5.2	4.0
End period ratios:				
Capital-output (2010 prices)	211	240	326	383
Investment to GDP	34.4	37.9	41.6	42.0
Employment to population	56.3	57.0	54.8	52.0
GDP pc, share of U.S., PPP	5.1	12.1	22.7	28.0

Note: \* Forecast. Sources: CEIC. S&P Global Ratings.

## China | Another perspective on productivity growth

	1978-1994	1994-2007	2007-2016	2016-2022
Labor productivity growth (%) */	7.4	9.1	8.3	6.2
From shifts b/t sectors (ppt)	1.5	1.3	1.6	0.5
From w/in-sector prod. Growth (ppt)	5.8	7.6	6.6	5.8
Agriculture	1.2	0.8	0.8	0.5
industry	3.2	4.1	3.3	2.5
Services	1.3	2.8	2.4	2.7
Labor productivity growth (%)				
Agriculture	4.4	5.2	8.7	7.2
industry	7.5	8.9	7.6	6.2
Services	4.6	7.0	5.4	5.2

Note: \* The components do not exactly add up to the total as the estimation involves approximations.

Sources: CEIC. S&P Global Ratings.

## China | Growth accounting (2007 – 2030)

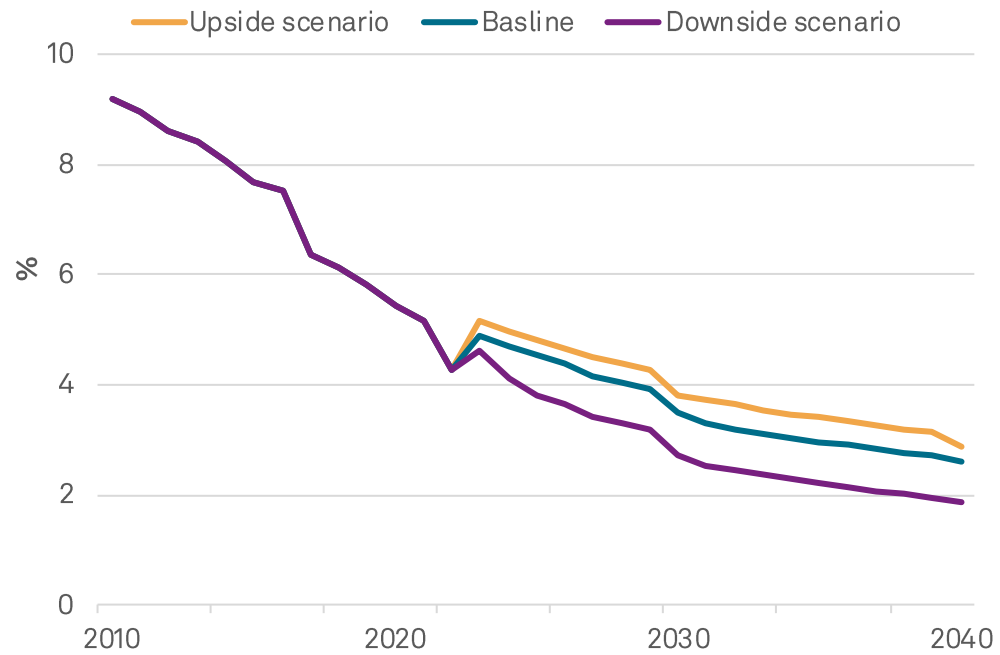
(%)	2007-2016	2016-2022	2022-2026*	2026-2030*
Potential GDP growth	8.5	5.5	4.6	3.9
Employment growth	0.1	-0.6	-0.2	-0.3
Labor productivity growth	8.3	6.2	4.8	4.2
From TFP growth	2.5	1.7	1.6	1.5
From more education	0.4	0.4	0.4	0.4
From higher capital-labor ratio	5.2	4.0	2.7	2.3
End period ratios:				
Capital-output (2010 prices)	326	383	404	418
Investment to GDP	41.6	42.0	39.2	36.8
Employment to population	54.8	52.0	51.8	51.3
GDP pc, share of U.S., PPP	22.7	28.0	32.2	35.9

Note: \* Forecast. Sources: CEIC. S&P Global Ratings.

# China | Trend growth outlook

## Trend growth to continue to slow

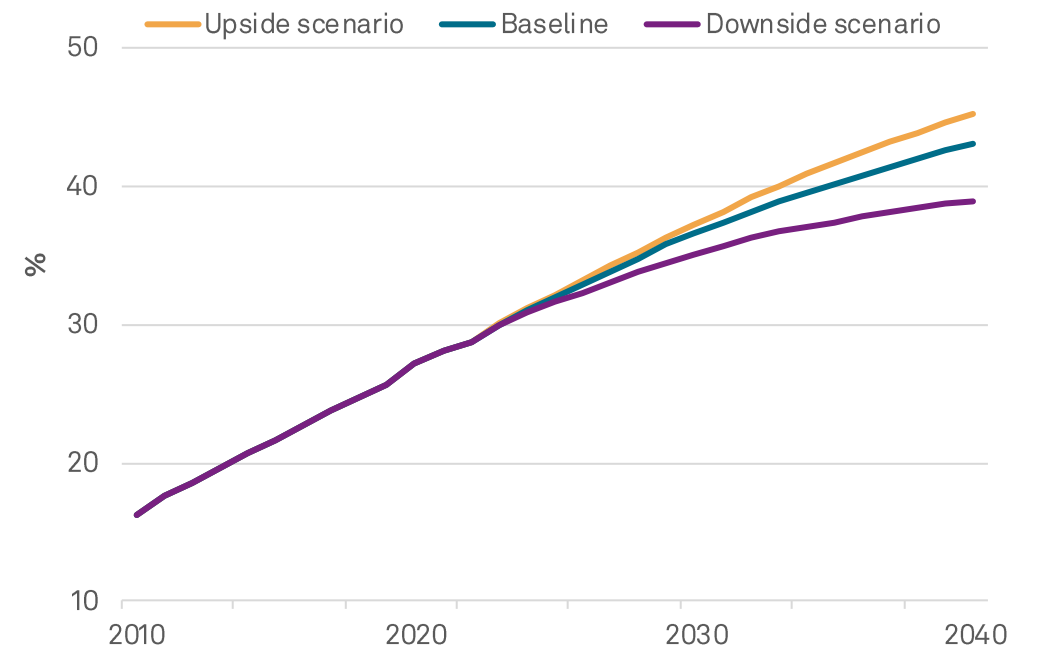
Potential GDP growth



Sources: CEIC, S&P Global Ratings.

## Catch up with the U.S. should persist

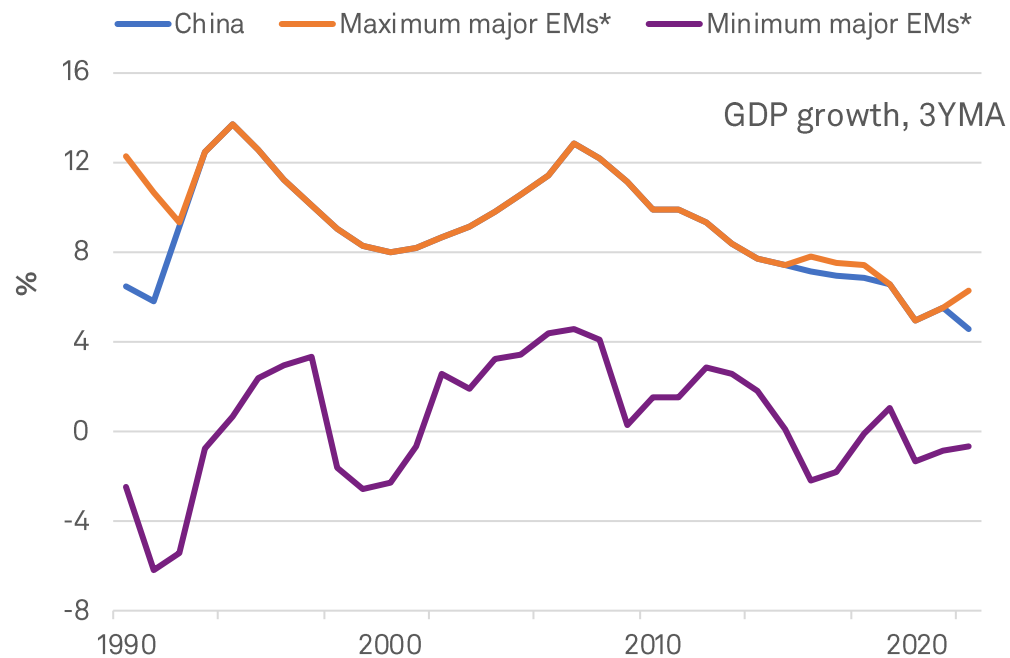
GDP pc, share of U.S., PPP



Sources: CEIC, S&P Global Ratings.

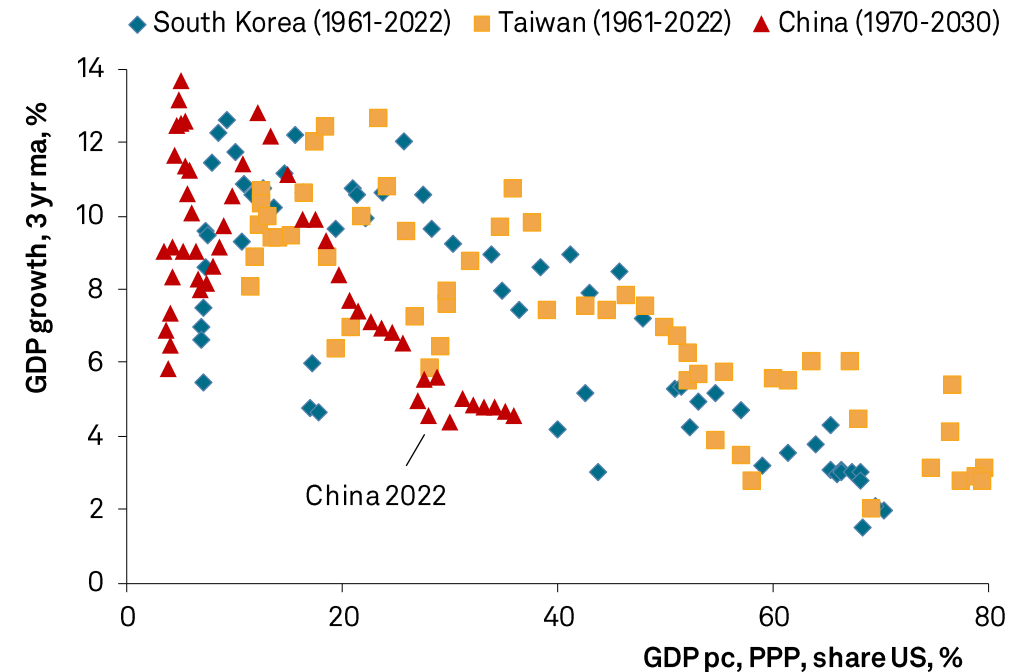
# Benchmarking | China's trend growth in context

China's growth compares well in an EM context



Note: \* All major Asian EMs, Brazil, South Africa, Poland, Turkey. Sources: CEIC, S&P Global Ratings.

South Korea and Taiwan grew faster at similar stage



Sources: CEIC, S&P Global Ratings.



## Growth accounting for China | **Key takeaways**

- Experience so far | **Potential growth has slowed substantially, yet remains significant**
- Outlook | **While trend growth is likely to slow further, catch up with the U.S. should continue**
- Benchmarking | **China's growth is solid in EM context but North-East Asian neighbors grew faster**