



Is Germany's "business model" at risk?

Bundesbank President Dr Joachim Nagel

Talk at the institut für kredit- und finanzwirtschaft e.V.

of Ruhr University Bochum

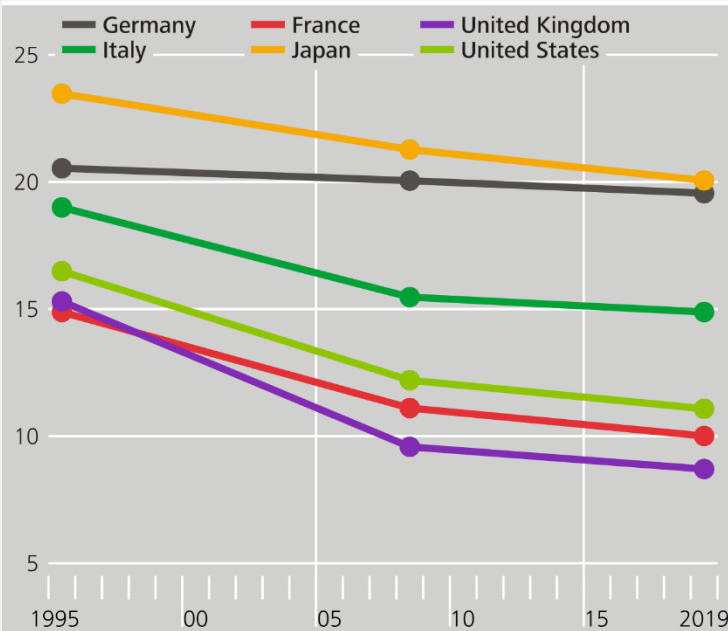
5 June 2023

Gross value added share of manufacturing sector is consistently high in Germany



Share of manufacturing gross value added in GDP

In %, annual data



Sources: World Bank and Bureau of Economic Analysis.

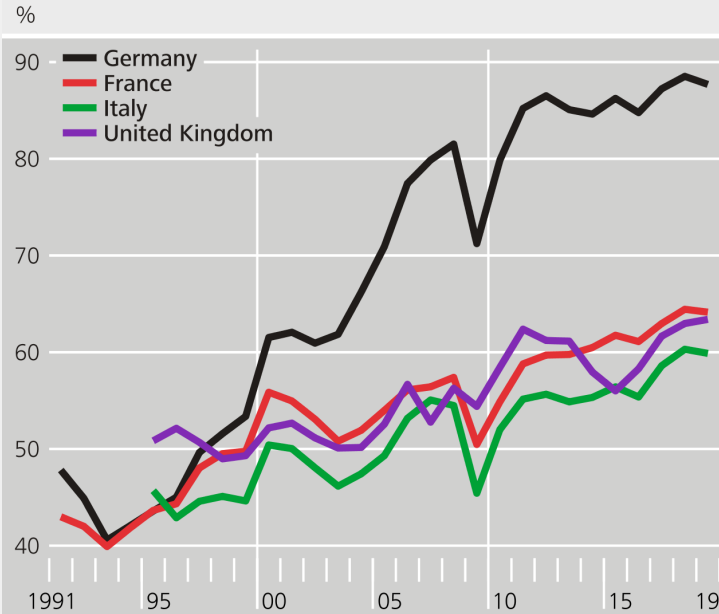
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Vo5PR1502.Chart

German economy's foreign trade ratio continues on upward trend



German economy with high foreign trade ratio*



Source: Federal Statistical Office, Eurostat and calculations of the Bundesbank on this basis. * Sum of nominal exports and imports (goods and services) in relation to gross domestic product.

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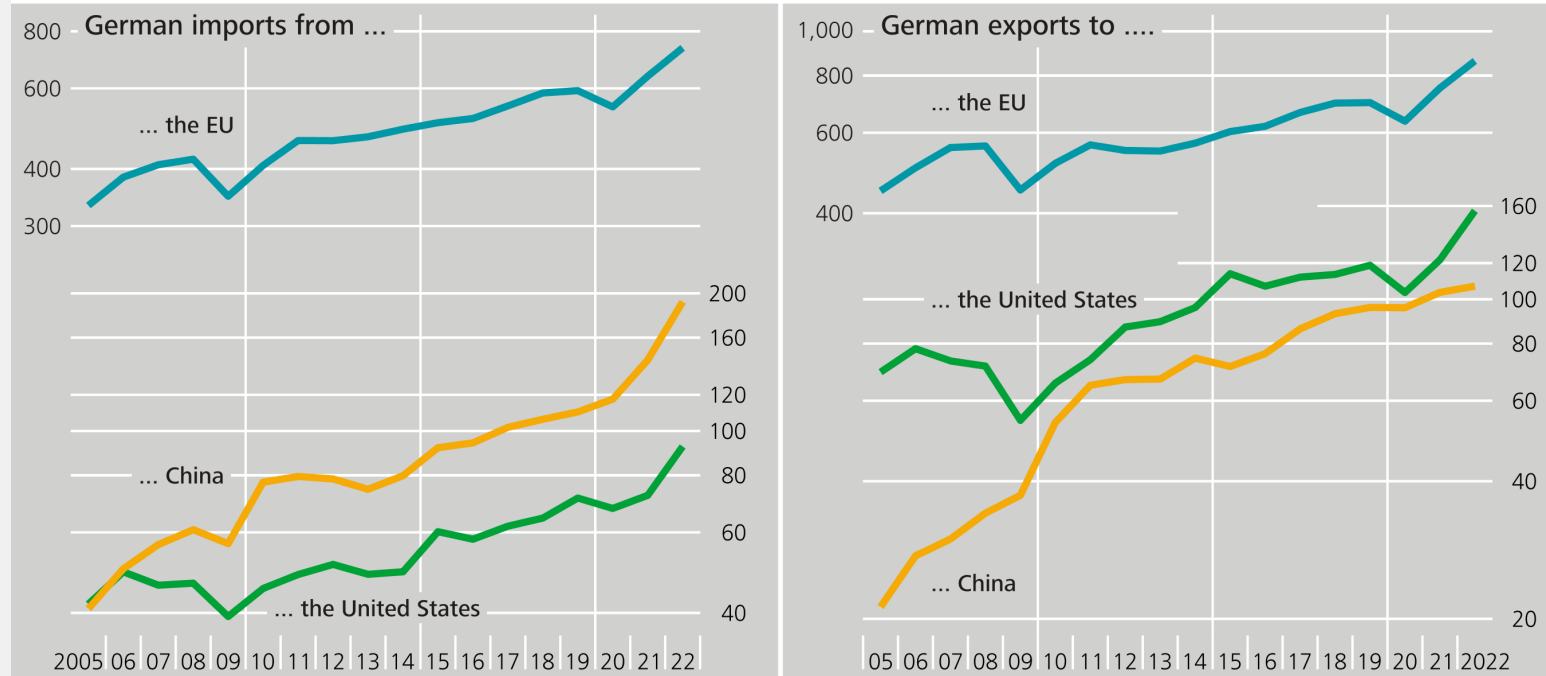
1. Jun. 2023, 15:04:06, Vo3PR0829E.Chart

China has steadily become more important to Germany as a foreign trade partner over recent years



German imports and exports

€billion, yearly total, log scale



Source of unadjusted figures: Federal Statistical Office.
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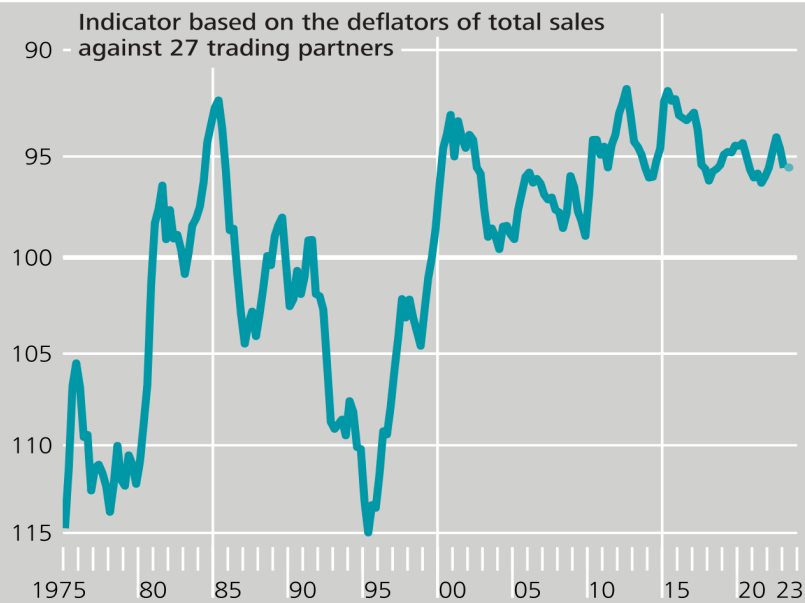
Vo0PR0025.Chart

Price competitiveness of the German economy remains favourable by historical standards



Price competitiveness of the German economy

Average since 1975 = 100, quarterly, log scale¹



¹ Inverted scale: rise in curve (fall in values) denotes an increase in competitiveness. • = Estimated as of: 31 May 2023.

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1. Jun. 2023, 14:29:26, Vo4PR0015B.Chart

Profitability of German enterprises has recovered quickly after crises



Profitability of German enterprises*

Gross profit margin¹ %



* Extrapolated results from corporate financial statement statistics.

¹ Annual result before taxes on income as a percentage of sales.

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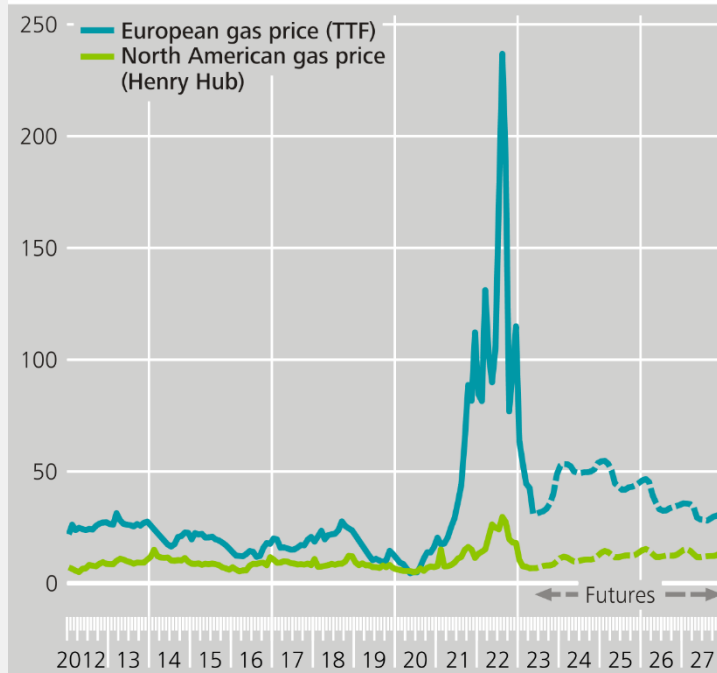
1. Jun. 2023, 14:45:06, Vo3PR0830.Chart

European gas price higher than North American gas price



International gas prices (TTF and Henry Hub)

Euro per MWh, monthly



Sources: EEX, ICE, CME, S&P Global and Bundesbank calculations.

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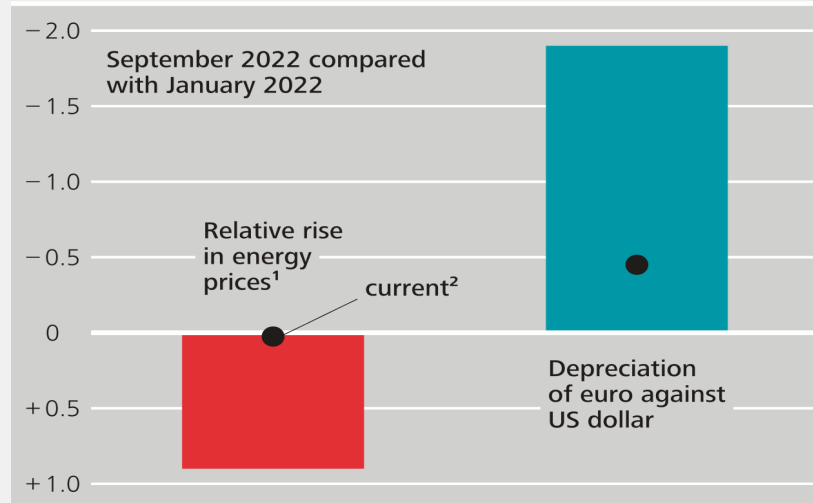
2. Jun. 2023, 07:58:42, Vo5PR1514A.Chart

Relative energy price rise hurting, euro depreciation supporting price competitiveness



Components of Germany's price competitiveness*

%, inverted scale



* Estimated relative to that of selected industrial countries. A positive value indicates a decrease in competitiveness. **1** Estimated on the basis of input-output tables and energy-specific producer price indices published by the OECD for industrial countries. **2** Energy prices: February 2023; depreciation of euro: April 2023; composite indicator: 27.03.2023

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15. Mai. 2023, 07:23:14, Vo4PR0334B.Chart



Industry important for Germany's "business model"



Recalibration of global value chains



Price competitiveness and profitability
of the German economy



Impact of energy costs and demographic change
on the potential output of the German economy



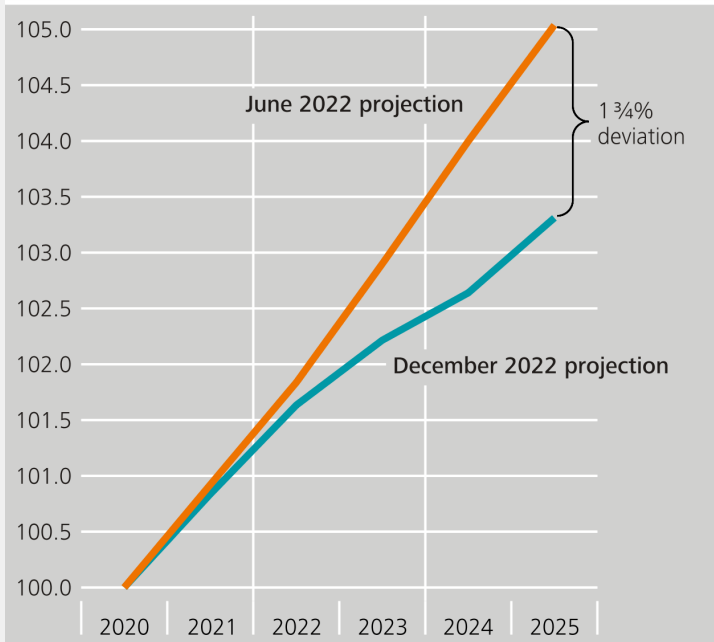
Summary

Lower potential output of the German economy, mainly due to higher energy costs



Potential output of the German economy

2020 = 100



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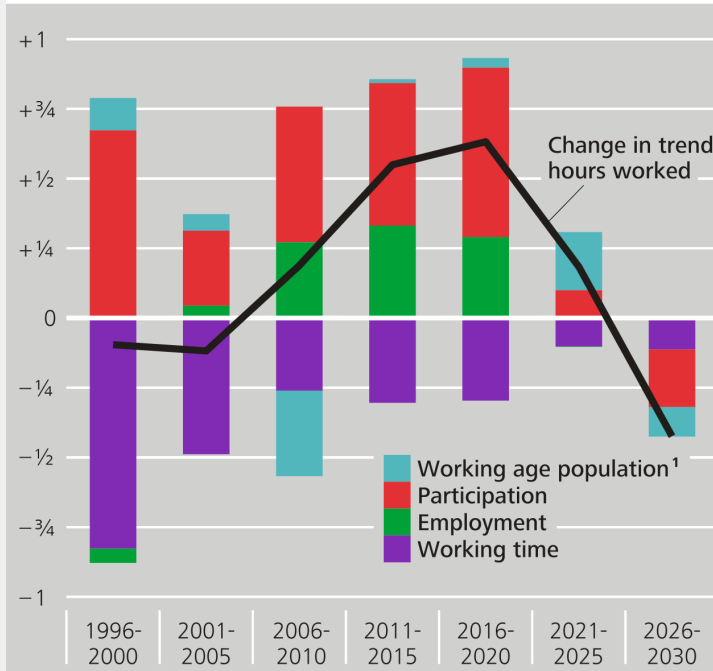
1. Jun. 2023, 14:14:10, Vo3PR0866.Chart

Labour supply declining in Germany



Medium-term projection of labour input

Percent or percentage points per year



¹ Including migration.

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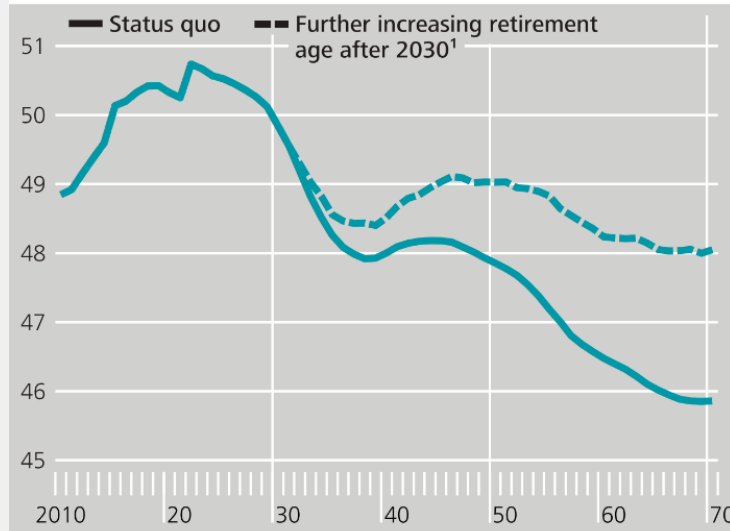
2. Jun. 2023, Vo3PR0096D.Chart

Higher retirement age would increase labour supply in Germany



Individuals between the age of 20 and the statutory retirement age

Million



Sources: Federal Statistical Office (2022), 15th coordinated population projection, variant G2L2W2 and Bundesbank calculations. ¹ The retirement age could, for example, be raised in such a way that the ratio of years drawing a pension to years making pension contributions remains broadly stable. It is currently just over 40%.

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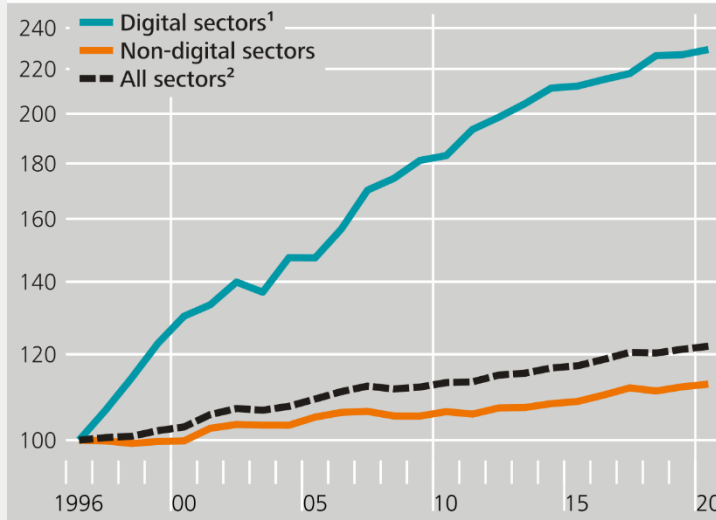
2. Jun. 2023, 10:34:51, Vo2PR0085A.Chart

Productivity increase in Germany's digital sector far above average



Total factor productivity in Germany*)

1996 = 100, log scale



Sources: EU KLEMS, European Commission and Bundesbank calculations. * Calculated using a prototypical Solow decomposition and adjusted to account for changes in the degree of capacity utilisation. **1** Information and communication, manufacture of computer, electronic and optical products as well as electrical equipment. **2** Private sector excluding agriculture, forestry and fishing, mining and quarrying and real estate activities.

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1. Jun. 2023, 14:03:33, Vo5PR1528.Chart



Industry important for Germany's "business model"



Recalibration of global value chains



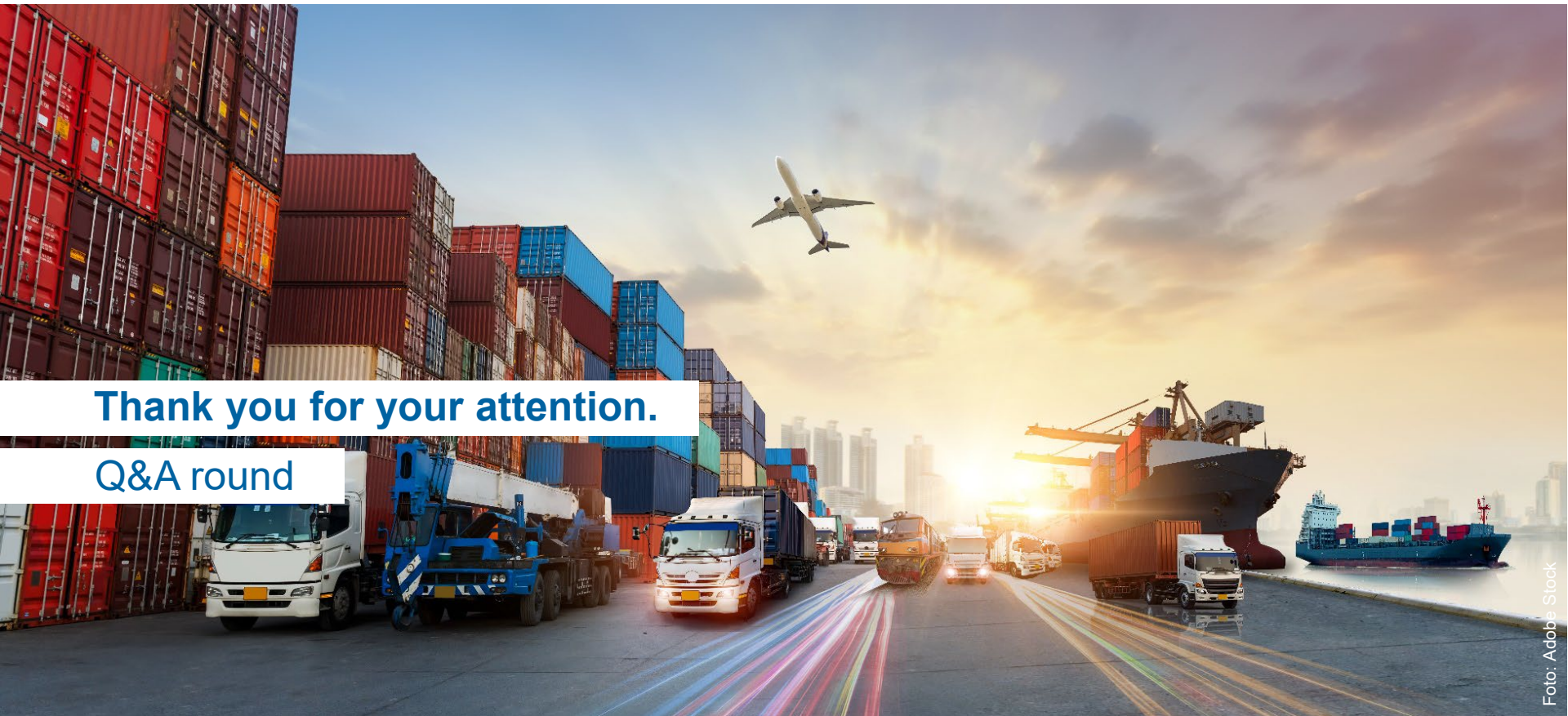
Price competitiveness and profitability
of the German economy



Impact of energy costs and demographic change
on the potential output of the German economy



Summary



Thank you for your attention.

Q&A round