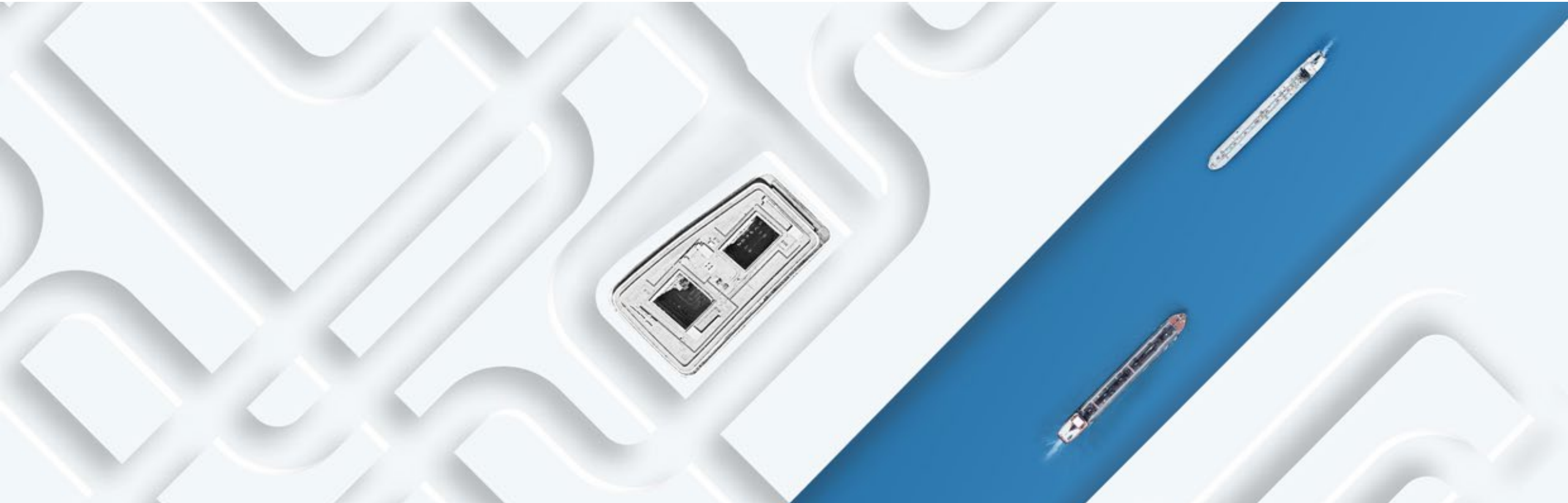
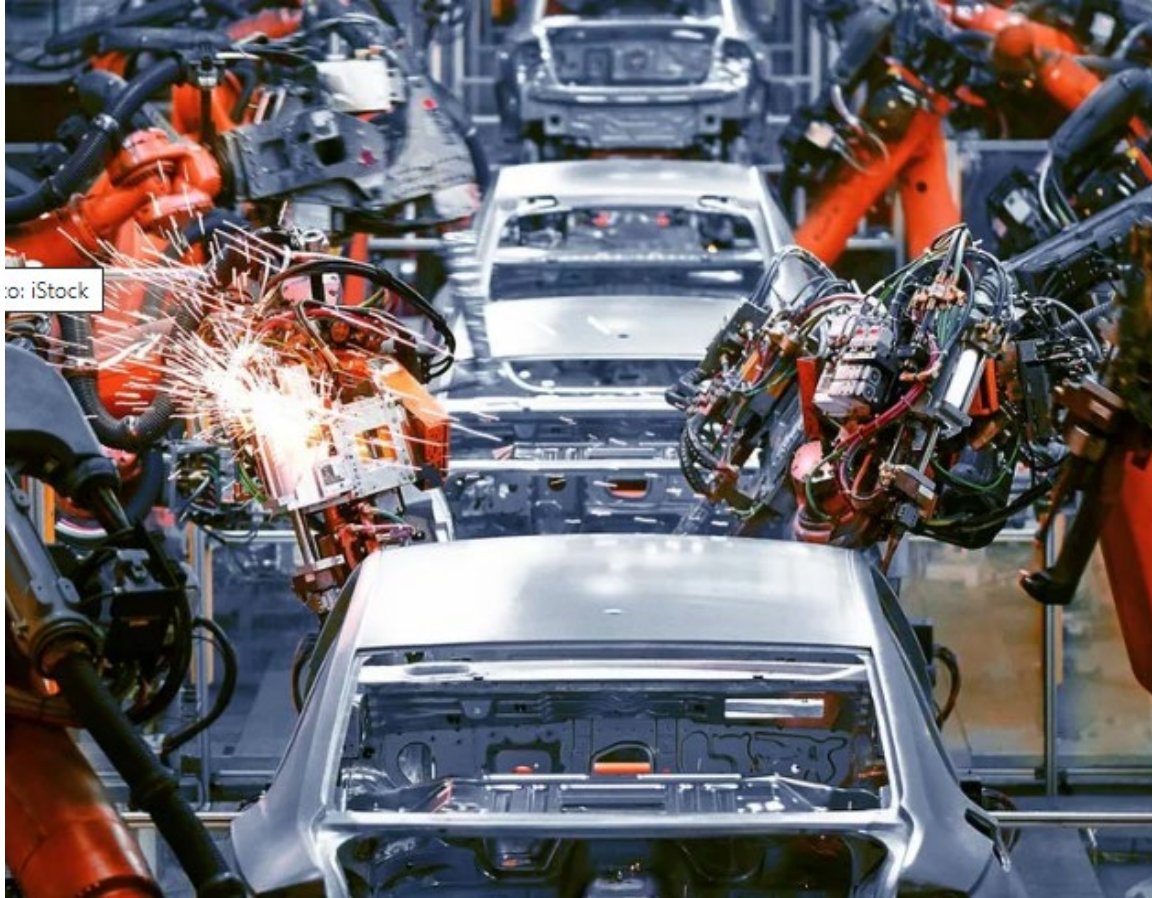


# Deindustrialization – an European assessment



# Threat to prosperity from deindustrialization?



1. What's the problem?

2. Who has a problem?

3. How severe is the problem?

1

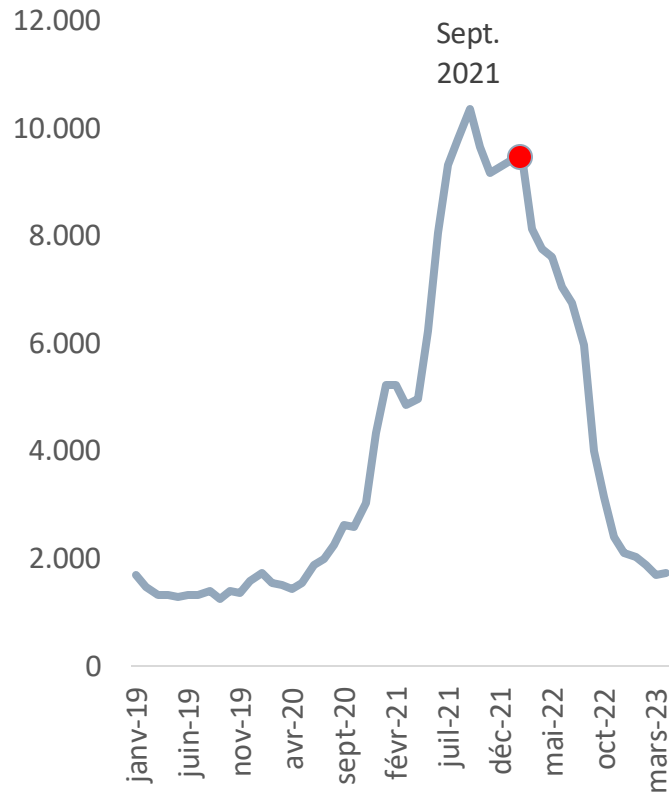
What's the problem?

# Multiple disruptions of globale value added chains



# Disruptions in global supply chains

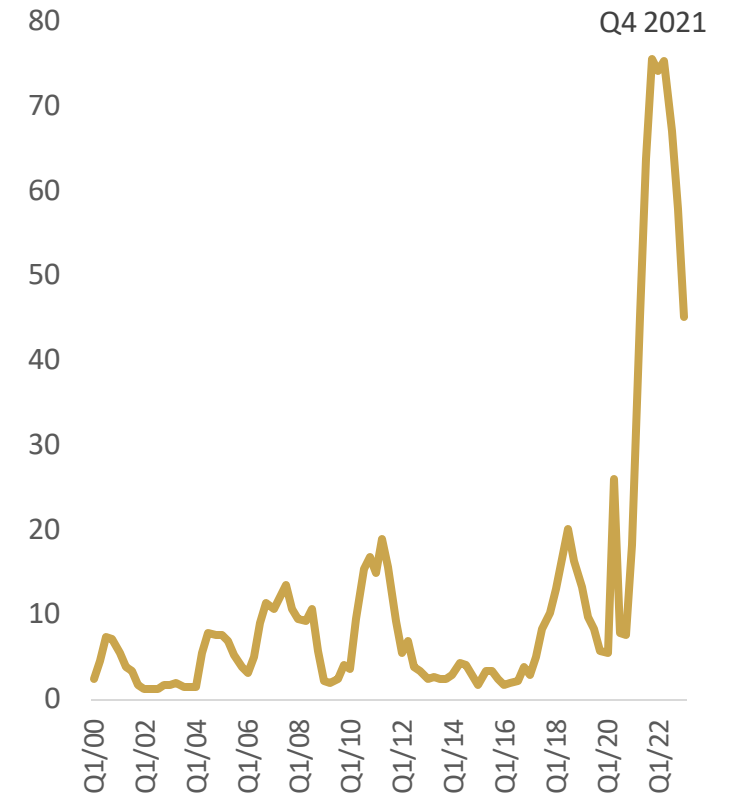
Global Container Freight Rate Index



Global Supply Chain Pressure Index



Material shortages German manufacturing



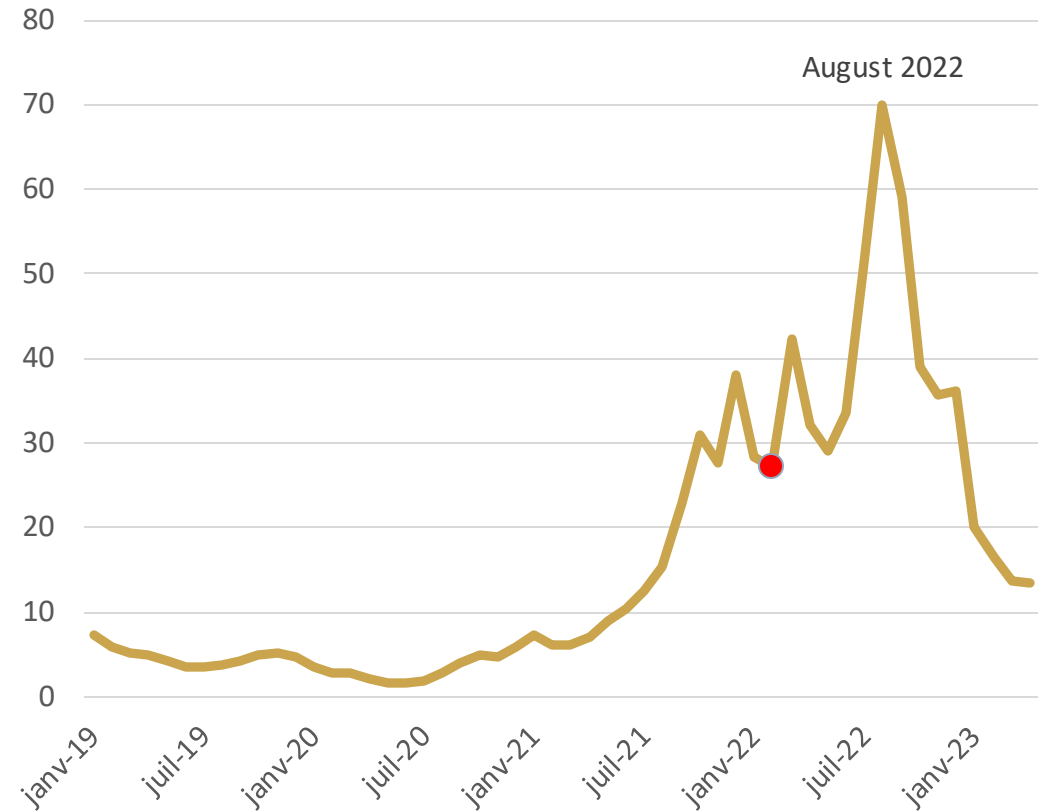
Material shortages: Number of companies (selected branches) with material shortages in percent, quarterly values  
Sources: Statista; Federal Reserve Bank New York; ifo Institut; Institut der deutschen Wirtschaft

# Development of oil prices and gas prices

Oil price (US-Dollar Brent Crude je Barrel)



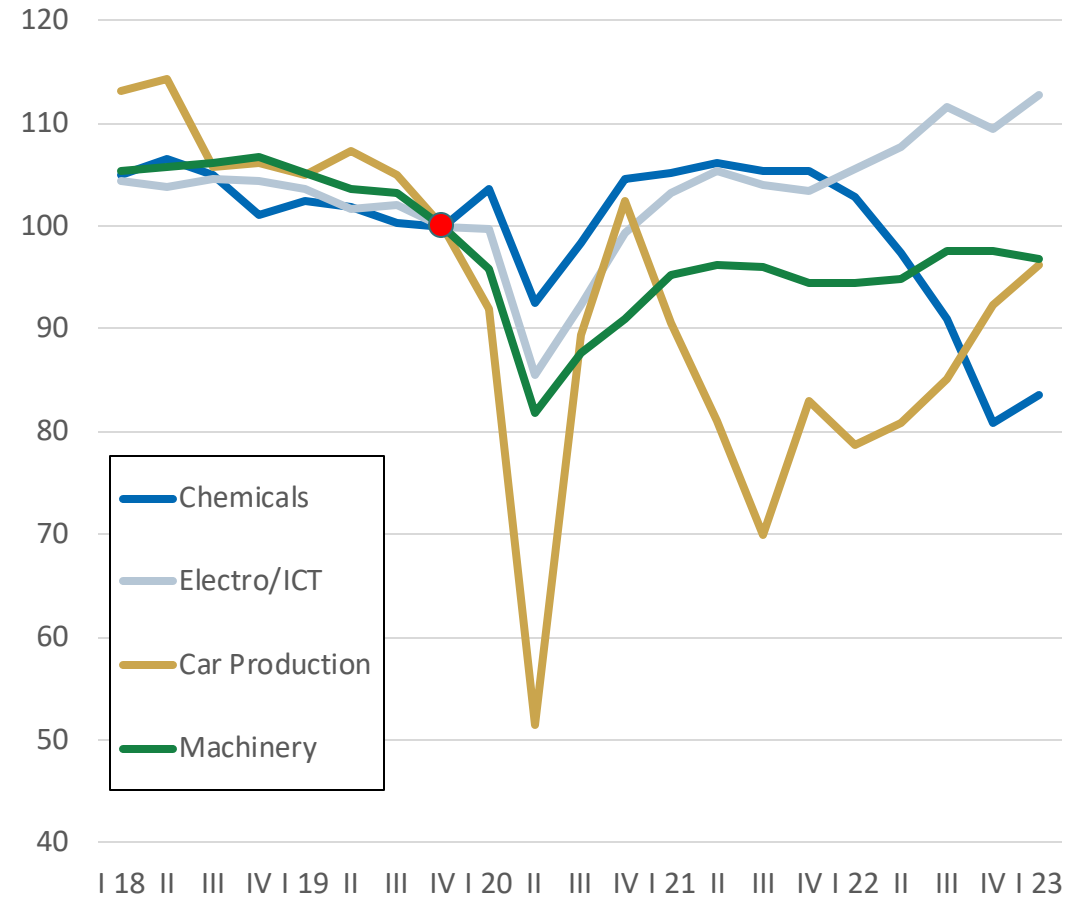
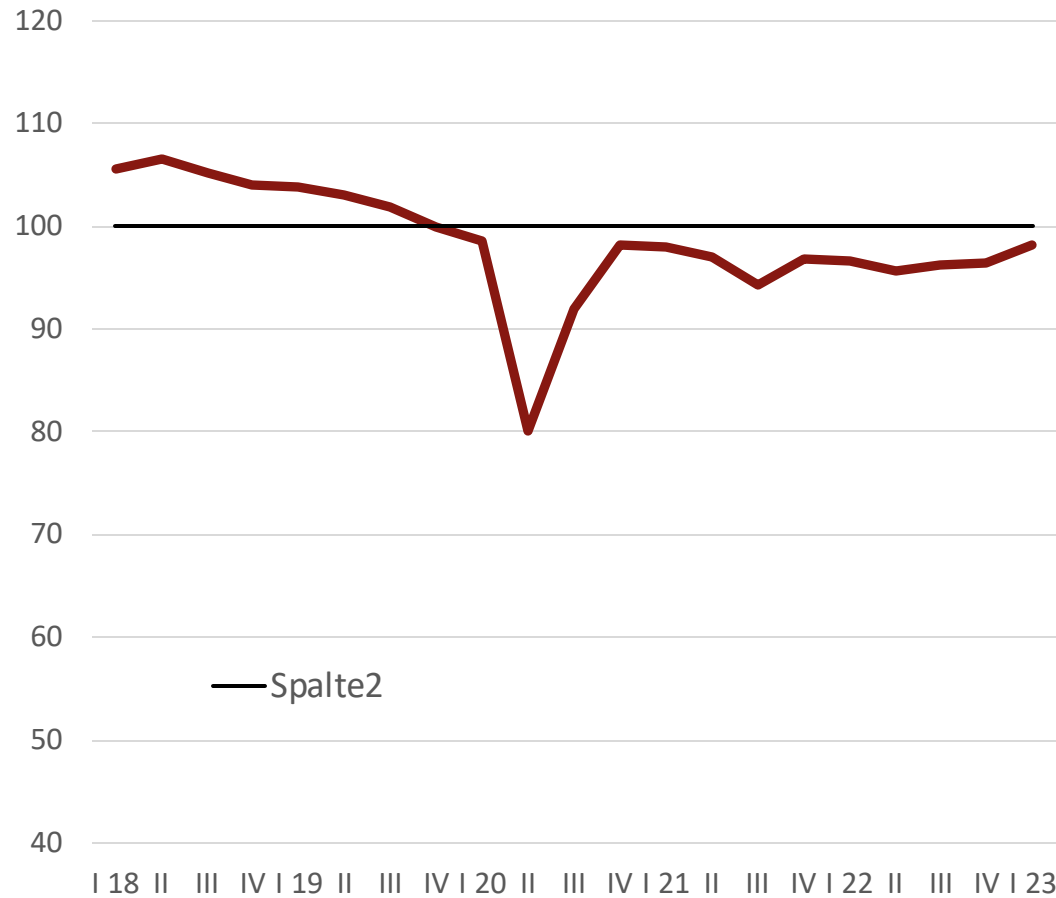
Gas prices in Europe (US-Dollar/million BTU)



Sources: World Bank; Institut der deutschen Wirtschaft

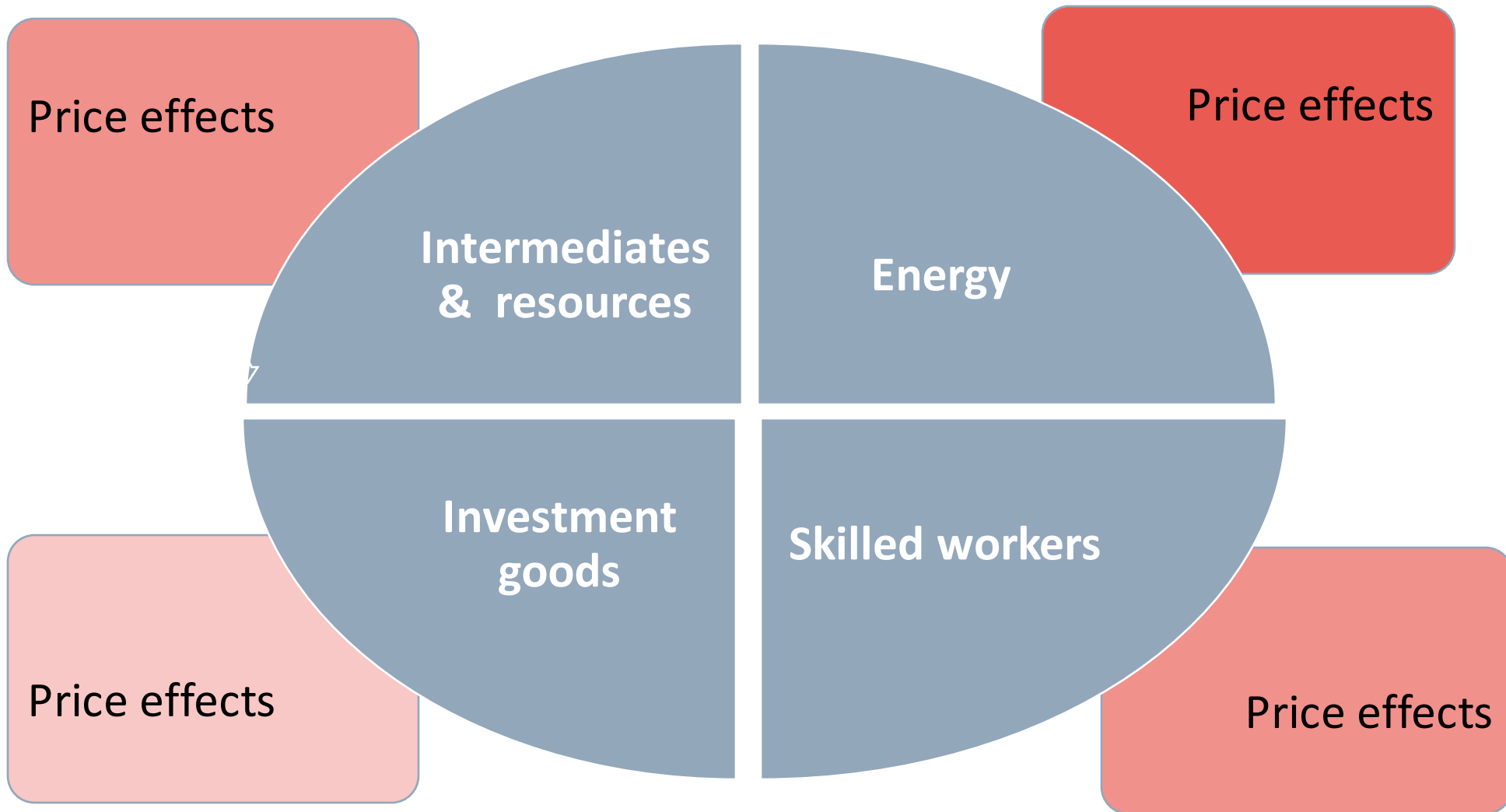
# Diverse picture in German manufacturing

Seasonal adjusted production, index 4th quarter 2019 = 100



Source : Deutsche Bundesbank; Institut der deutschen Wirtschaft

# Dimensions of a shortage economy



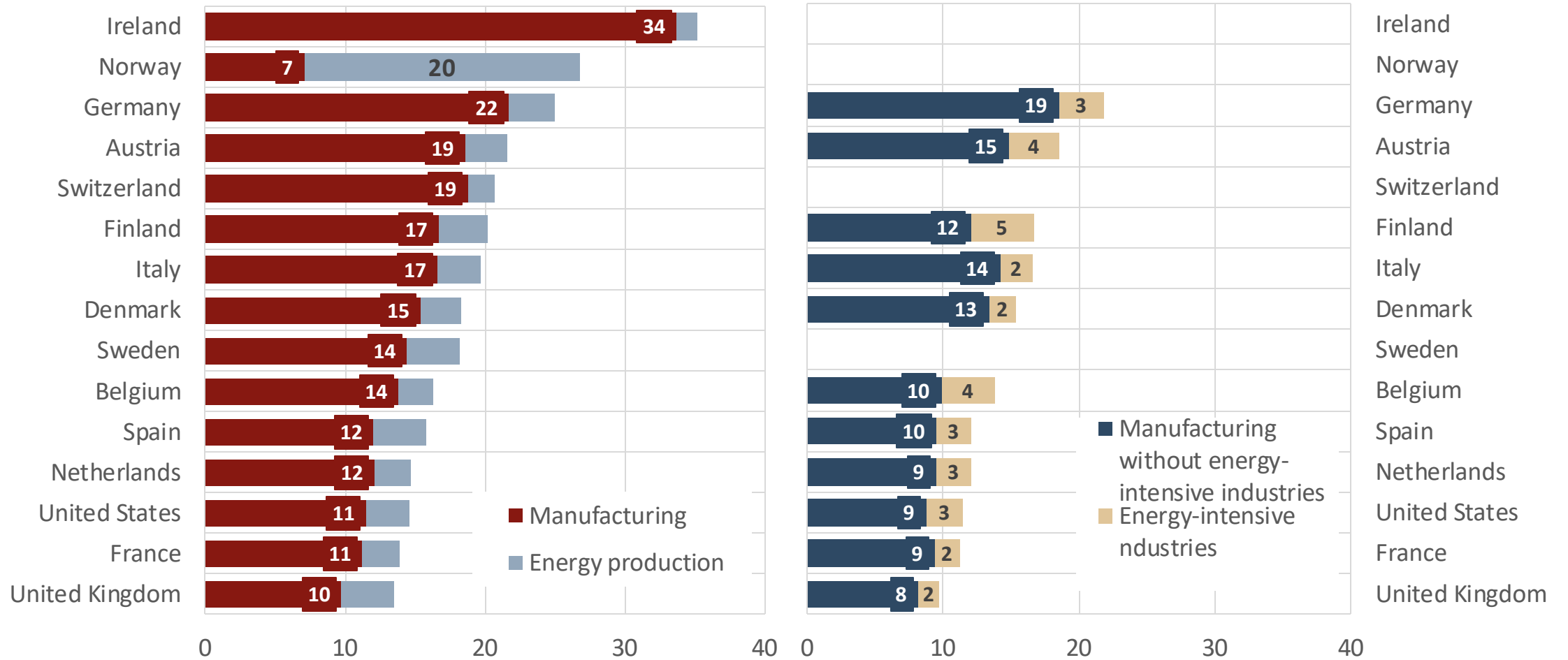


2

Who has a problem?

# Manufacturing shares in an international comparison

Value added as a percentage of total economy; 2019

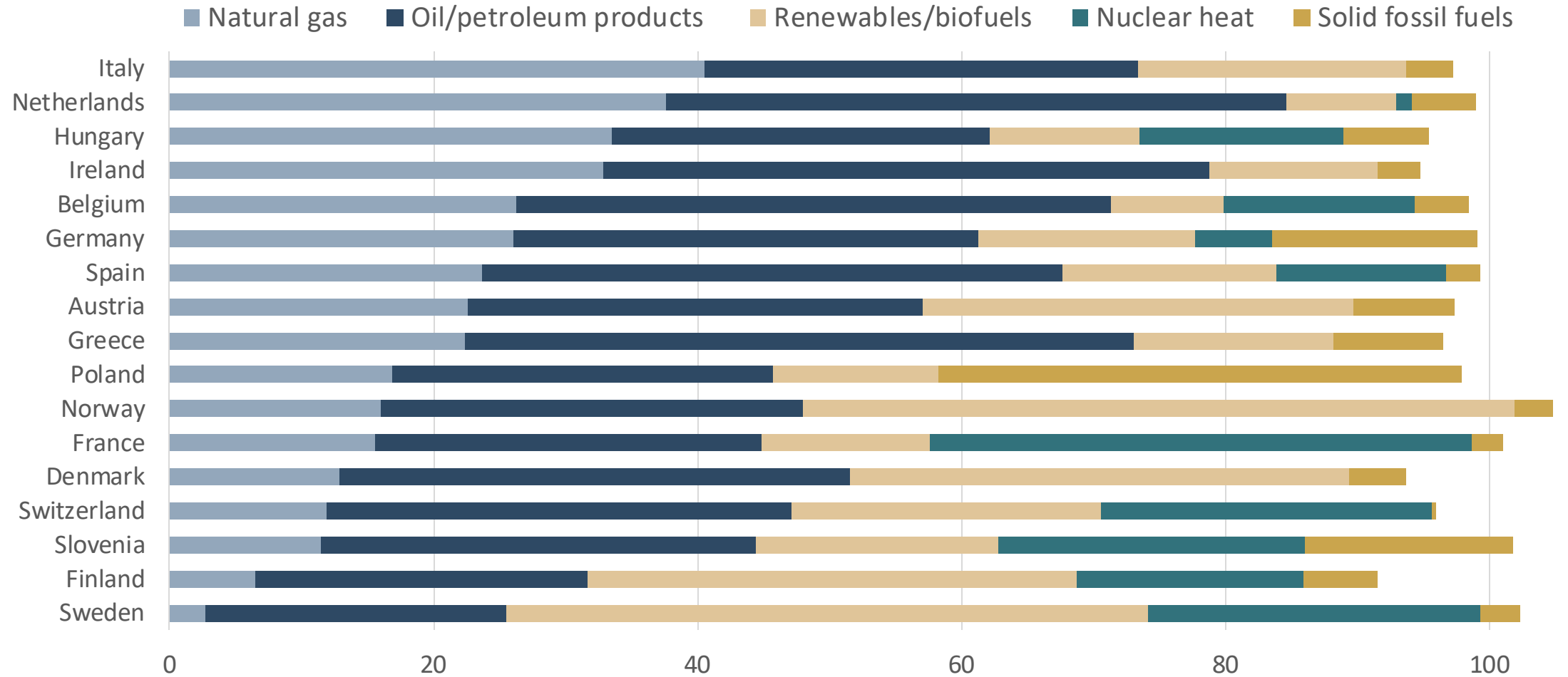


Energy-intensive Industries: Chemical industry (C 20), basic metal industry (C 24), coke/refined petroleum products (C 19), non-metallic mineral products (C 23), paper/paper products (C 17).

Sources: OECD; Institut der deutschen Wirtschaft

# Energy mix in an international comparison

Share of energy sources as a percentage of gross available energy; 2020



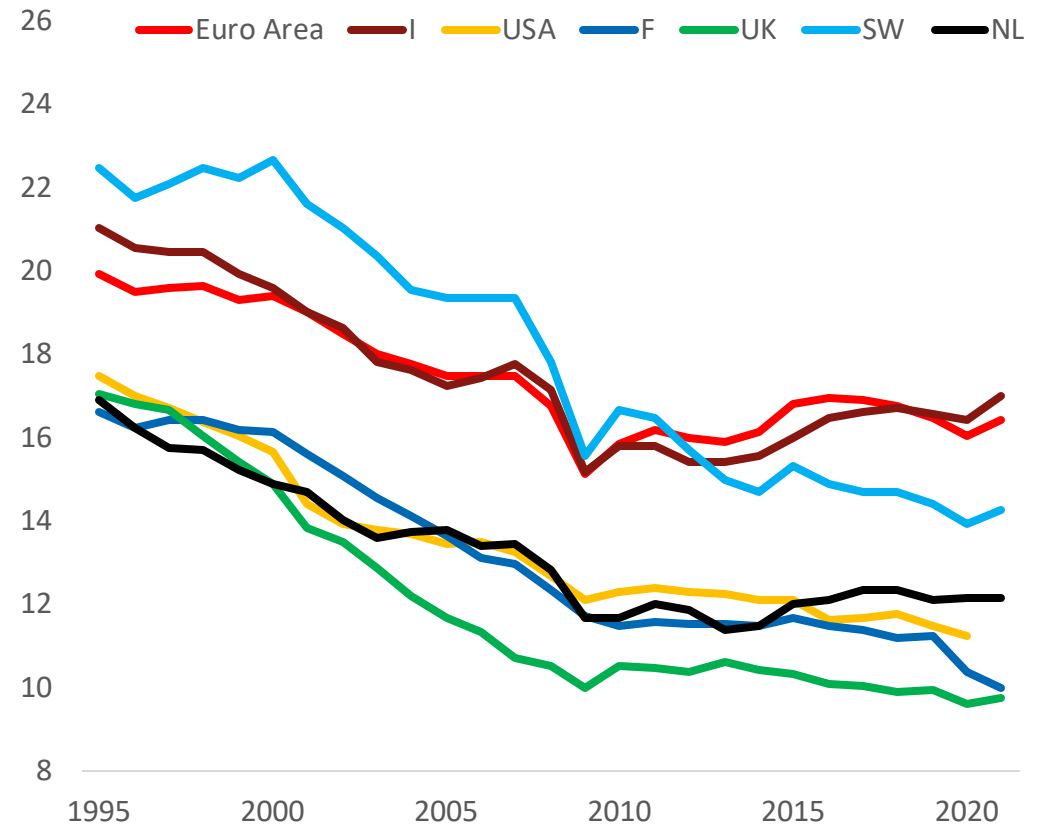
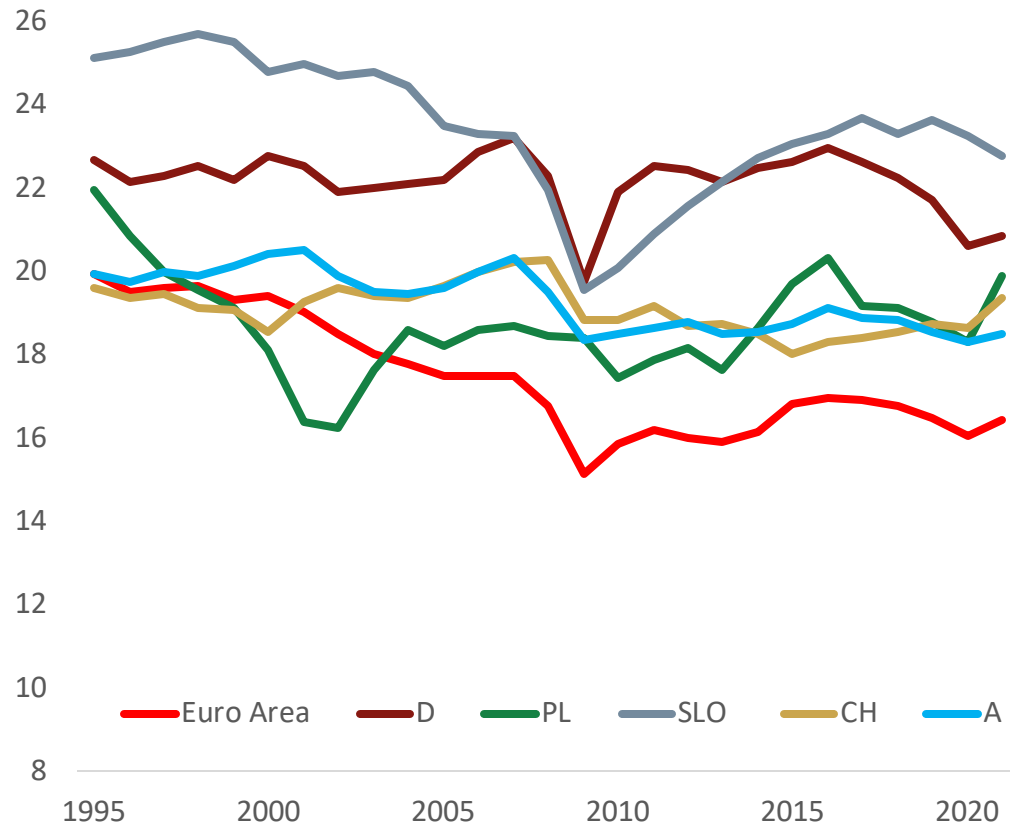
Difference to 100: Non-renewable waste, net exports of electricity. Sources: Eurostat; Institut der deutschen Wirtschaft

3

How severe is the problem?

# Structural change in an international comparison

Manufacturing (without energy) value added as a percentage of total economy



Sources: OECD; Institut der deutschen Wirtschaft

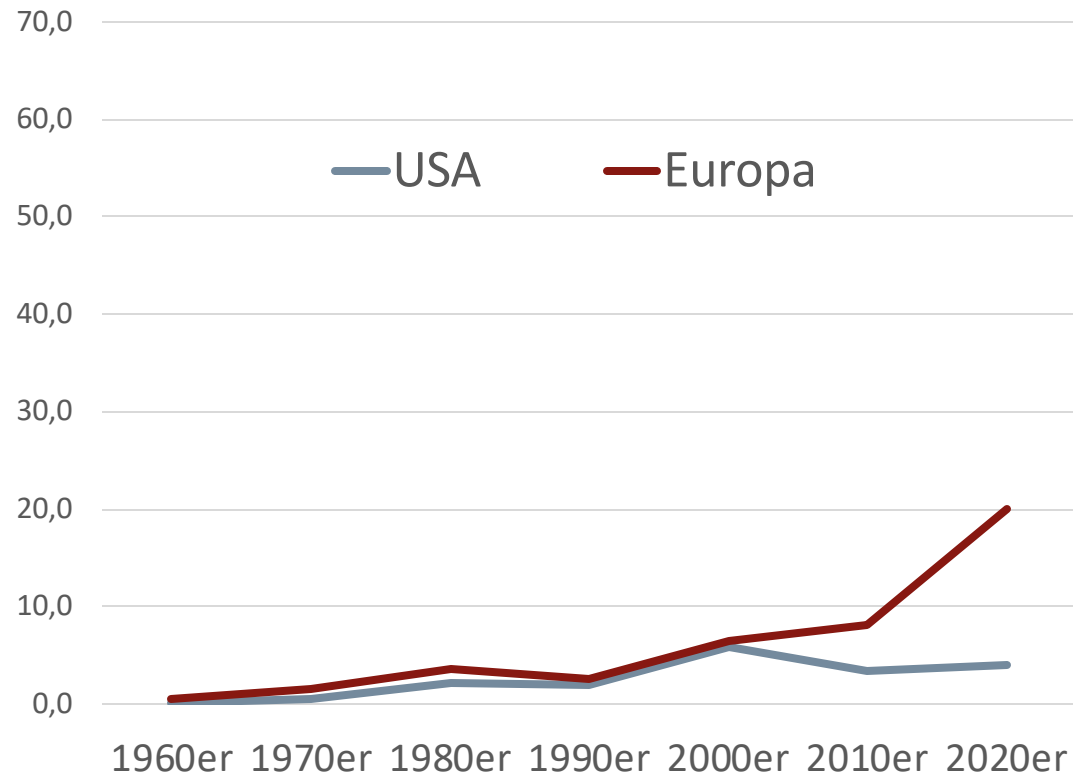
# Macroeconomic ruptures due to pandemic and war?

<b>Recession Adjustment time 2023/2024</b>	<b>Struktural breaks / tipping effcts Adjustment time 2020´s</b>
<ul style="list-style-type: none"> <li>• Normalization of supply chain problems and production disruptions</li> </ul>	<ul style="list-style-type: none"> <li>• Persistent shortages of materials and energy</li> </ul>
<ul style="list-style-type: none"> <li>• Inflation rates decline significantly in 2023</li> </ul>	<ul style="list-style-type: none"> <li>• Inflation rates remain high</li> </ul>
<ul style="list-style-type: none"> <li>• Stabilization of consumption and investment</li> </ul>	<ul style="list-style-type: none"> <li>• Permanent attentism in consumption/investment</li> </ul>
<ul style="list-style-type: none"> <li>• Stabilization of companies</li> </ul>	<ul style="list-style-type: none"> <li>• Wave of insolvencies/permanent capital stock losses</li> </ul>
<ul style="list-style-type: none"> <li>• No financial market crisis</li> </ul>	<ul style="list-style-type: none"> <li>• Risk of financial market crisis</li> </ul>
<ul style="list-style-type: none"> <li>• No de-industrialization / no permanent deterioration of competitiveness</li> </ul>	<ul style="list-style-type: none"> <li>• De-industrialization / permanent deterioration of competitiveness</li> </ul>
<ul style="list-style-type: none"> <li>• Robust labour market</li> </ul>	<ul style="list-style-type: none"> <li>• Persistent structural unemployment</li> </ul>
<ul style="list-style-type: none"> <li>• Re-start for an active transformation</li> </ul>	<ul style="list-style-type: none"> <li>• Passive transformation</li> </ul>

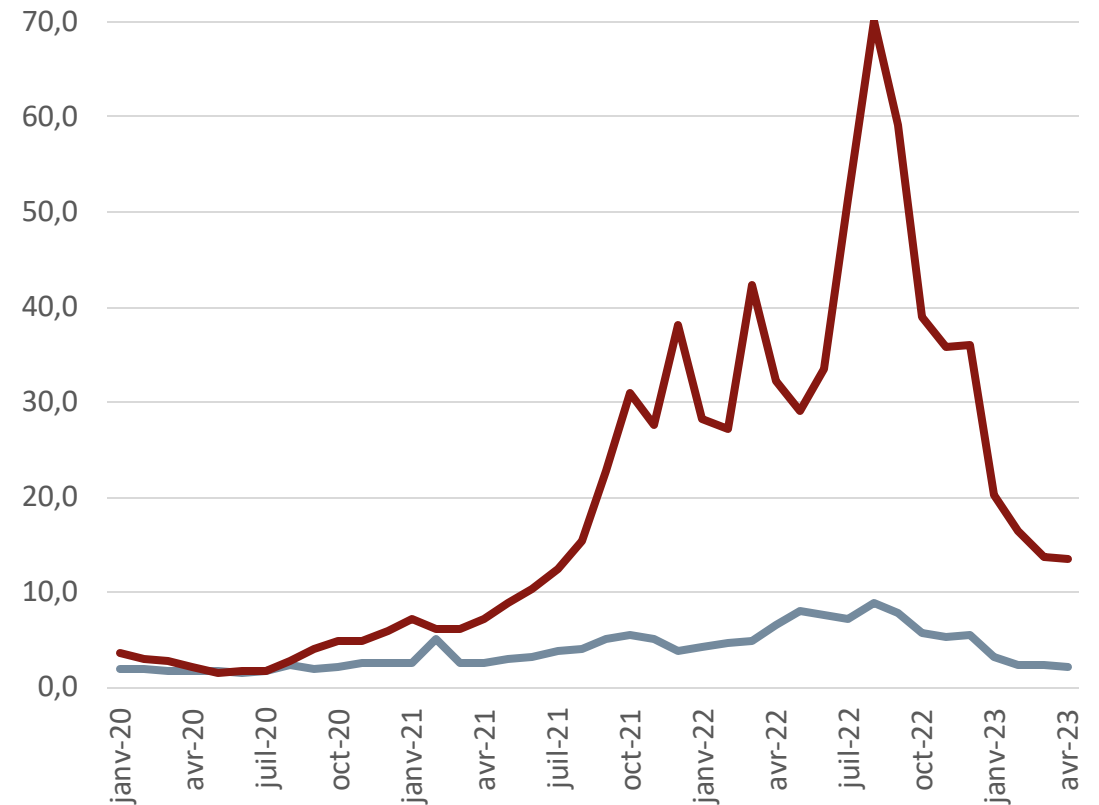
# Gas prices in Europe and USA in comparison

Gas prices in US-Dollar/million BTU

## Long-term development



## Divergence since 2021



Source: Weltbank; Institut der deutschen Wirtschaft

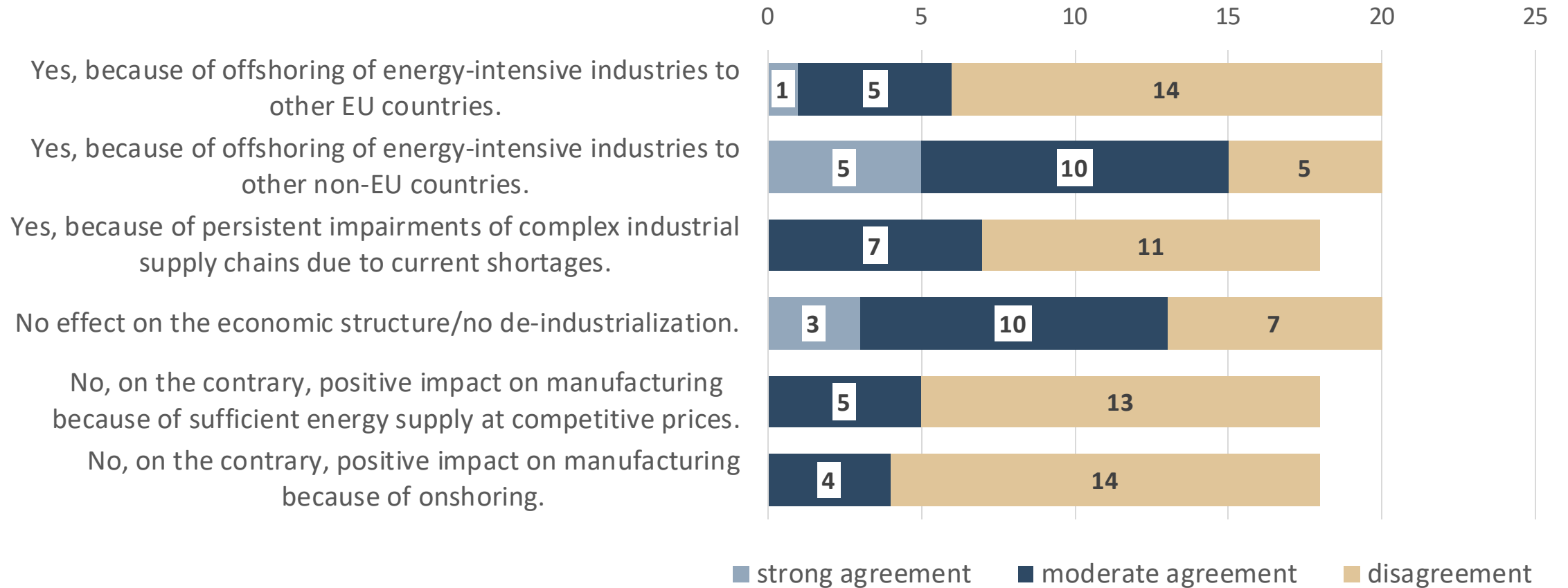
# Data: AIECE survey Autumn 2022

- AIECE (Association d'instituts européens de conjuncture économique) is an association of European economic research institutes. Founded in 1957, the association includes around 40 institutes from 20 countries and international organisations such as EU, OECD, IMF, ECB.
- Survey period from October 25th to November 10th
- 25 participating AIECE institutes
- Representating 17 countries



# Risk of deindustrialization

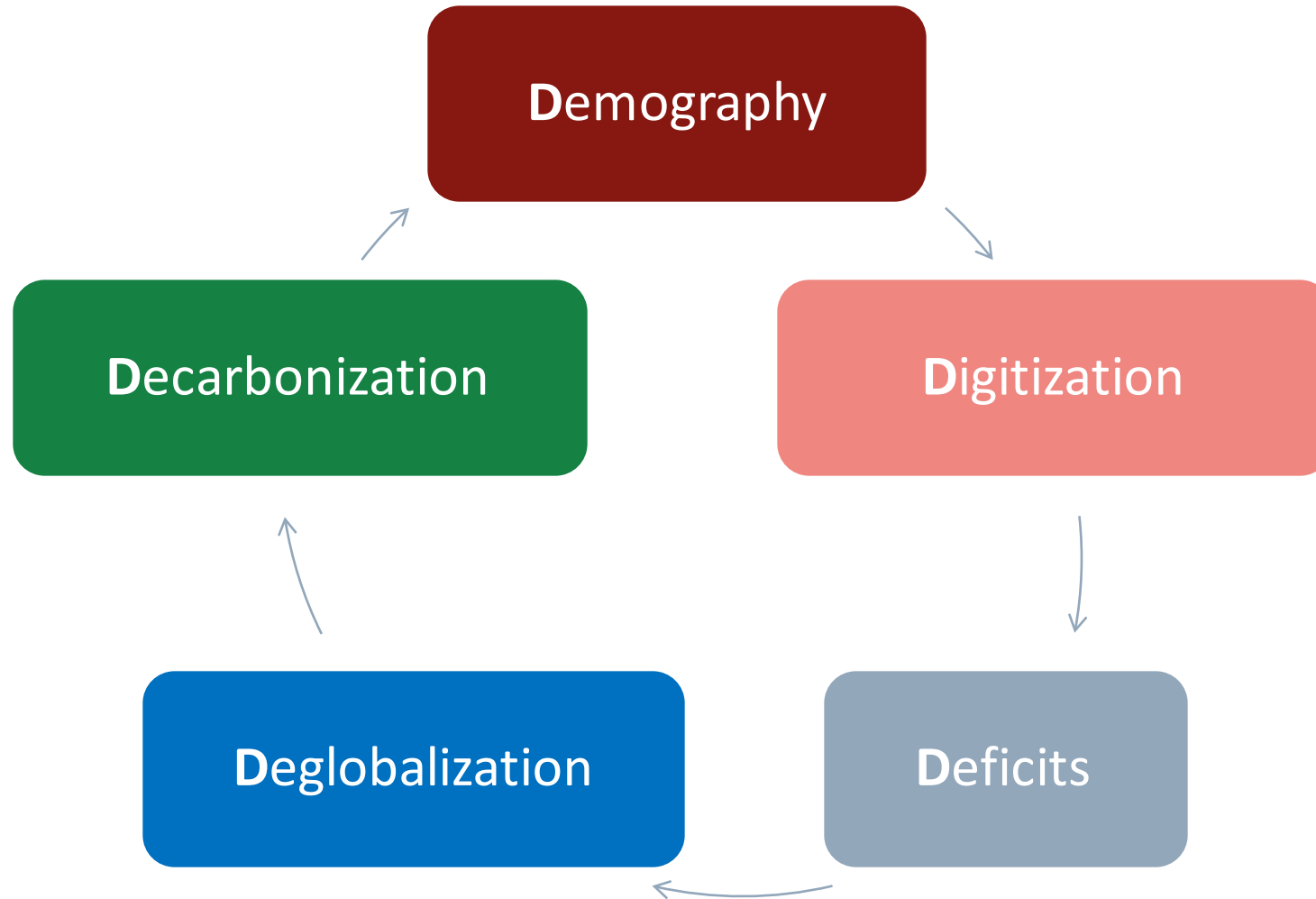
Do you expect a sustained de-industrialization in your country as a result of the current energy supply shortages and high energy prices? Please indicate your level of agreement using the defined categories. Number of AIECE members (rest to 25 institutes: no answer)



Sources: AIECE Institutes; Institut der deutschen Wirtschaft

# Economic and political challenges of our decade

5-D



Quelle: Institut der deutschen Wirtschaft



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