

Global mechanical engineering

# Robust despite headwind

CETOP Meeting

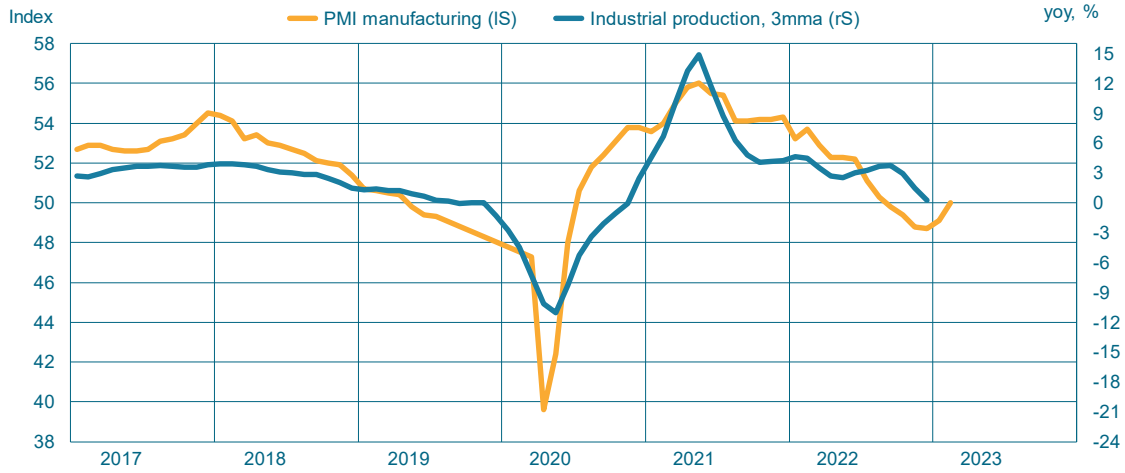
online, March 9th 2023

[www.vdma.org](http://www.vdma.org)

## Part 1

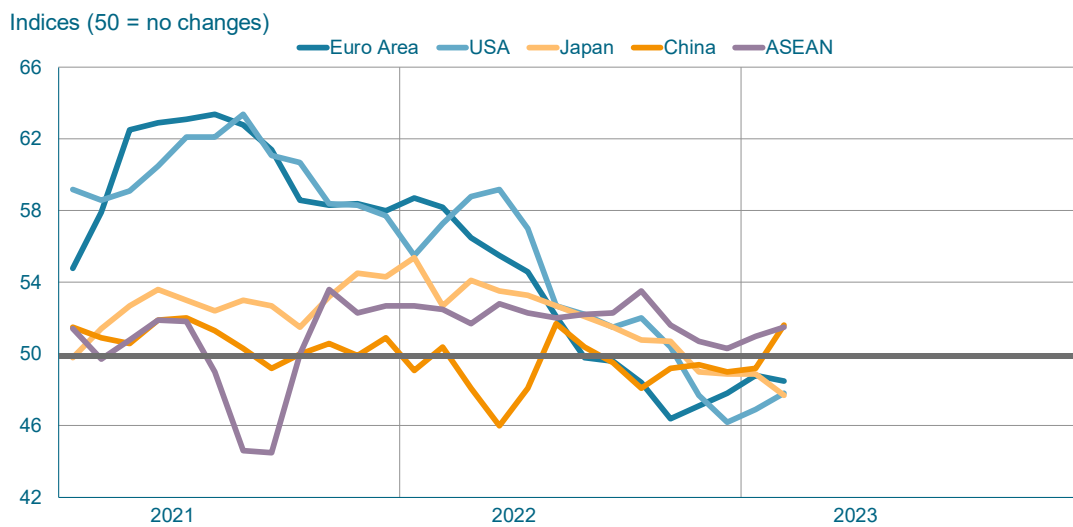
Current business situation

# World: Industrial production and Purchasing Managers' Index manufacturing (PMI)



Source: cpb, J.P.Morgan, S&P Global, Macrobond, VDMA

# PMI Manufacturing

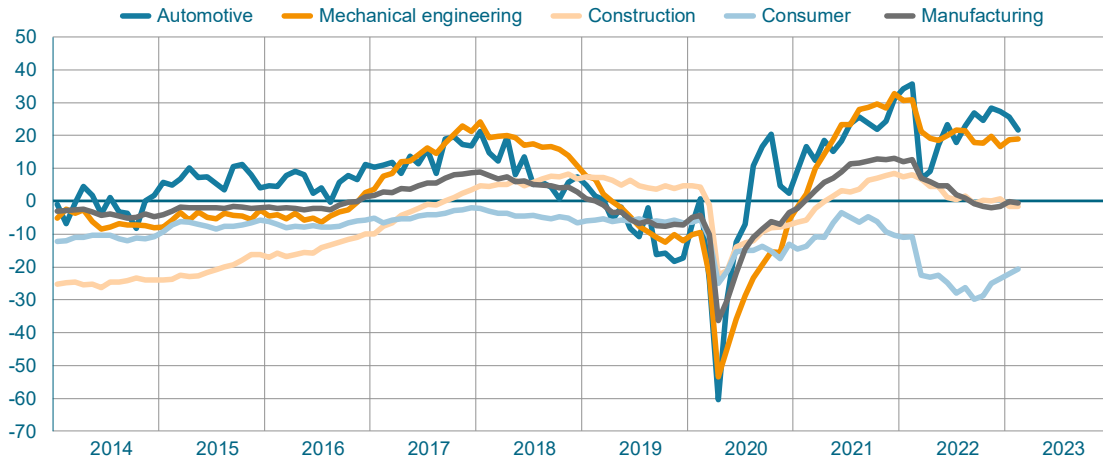


Source: S&P Global, Macrobond, VDMA

## EU-27: Business climate in selected sectors



Balance of positive and negative answers, seasonally adjusted

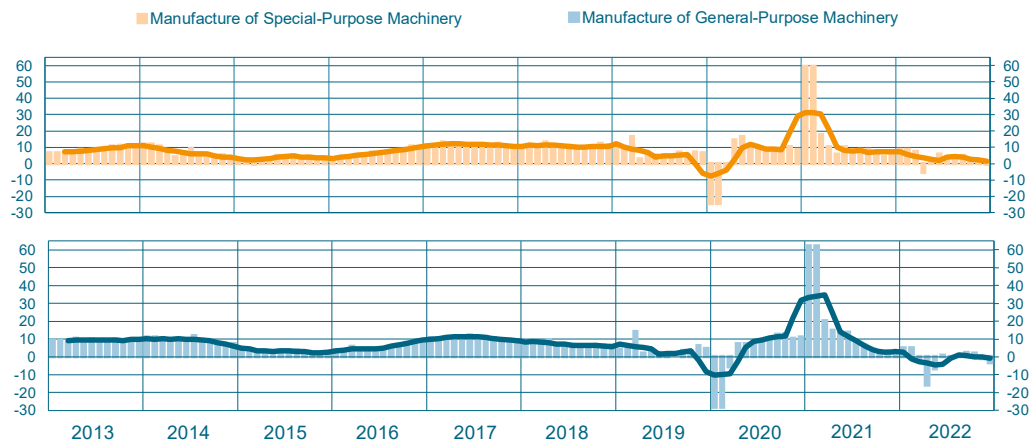


Source: EU Commission, Macrobond, VDMA

## China: Industrial production by sectors



Real, yoy, %



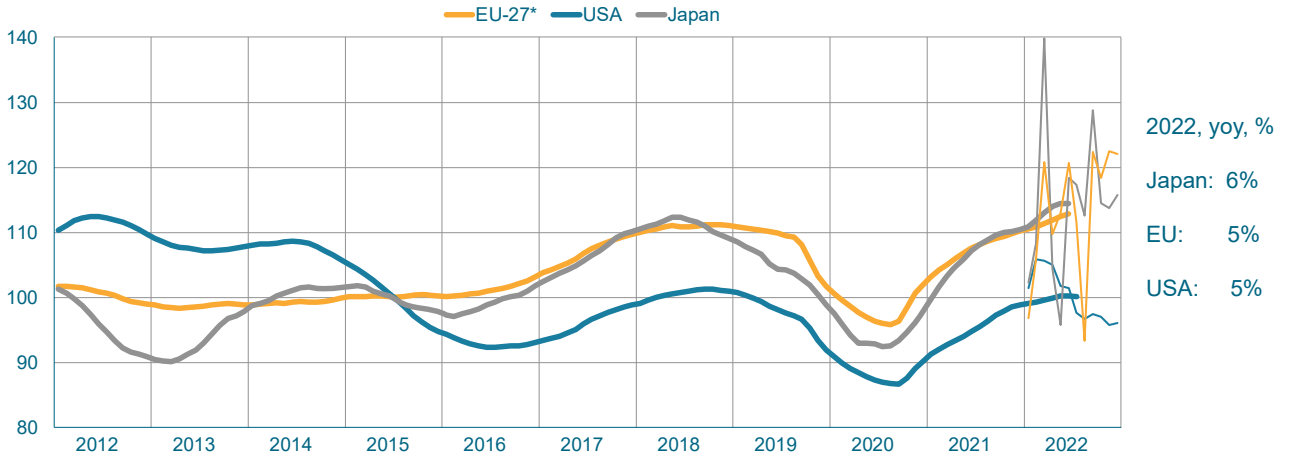
Source: NBS, Macrobond, VDMA

5-month moving average

# EU / USA / JP: Machinery production



Volume index, 2015 = 100 and 12-months moving average



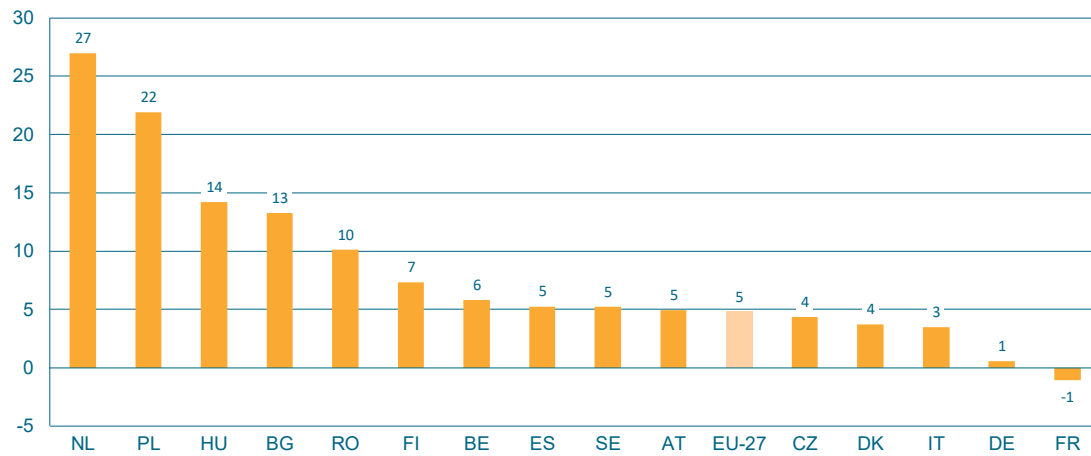
Source: Eurostat, Federal Reserve, METI, Macrobond, VDMA

\*) NACE rev. 2 code 28.

# EU-27: Production in Mechanical Engineering\*



January - December 2022/2021, %, real, calendar adjusted



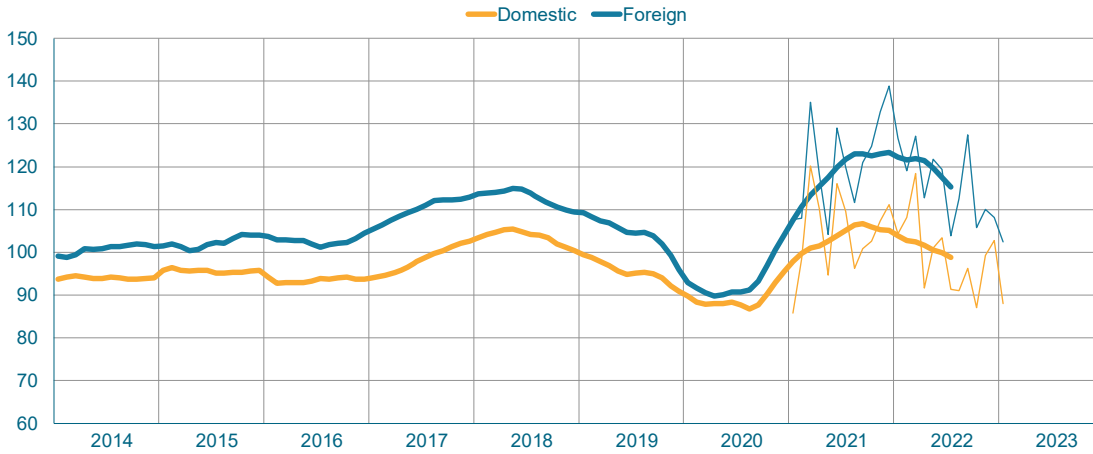
Source: Eurostat, Macrobond, VDMA

\*) NACE rev. 2 code 28.

# Germany: Incoming orders in mechanical engineering



Volume index 2015 = 100



2022/21: - 4 %  
Jan. 2023/2022 - 19 %

2022/21 - 5 %  
Jan. 2023/2022 - 16 %

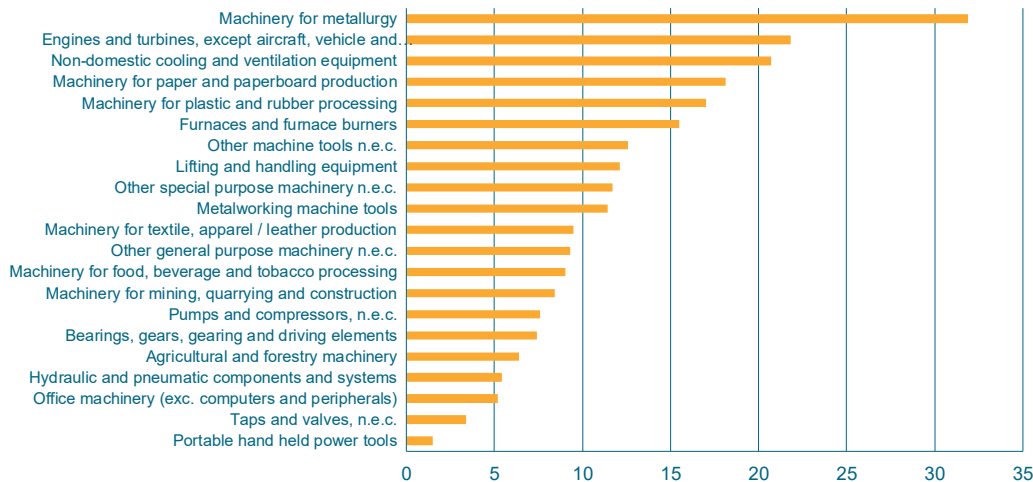
Source: VDMA

12-months moving average —  
Non-adjusted indices —

# Germany: Mechanical engineering sectors (WZ 28) Range of orders on hand



Months, December 2022

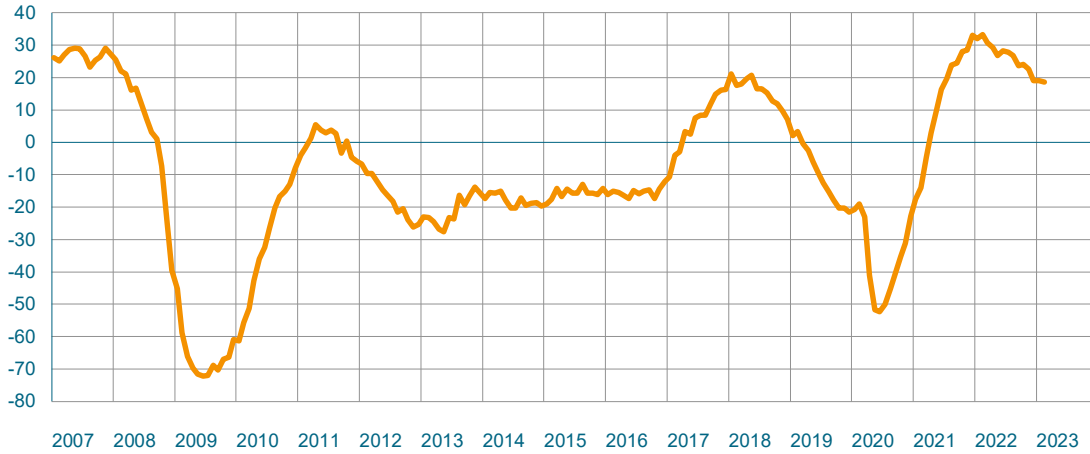


Source: Fed. Statistical Office Germany, VDMA

# EU-27: Assessment of order book levels in mechanical engineering

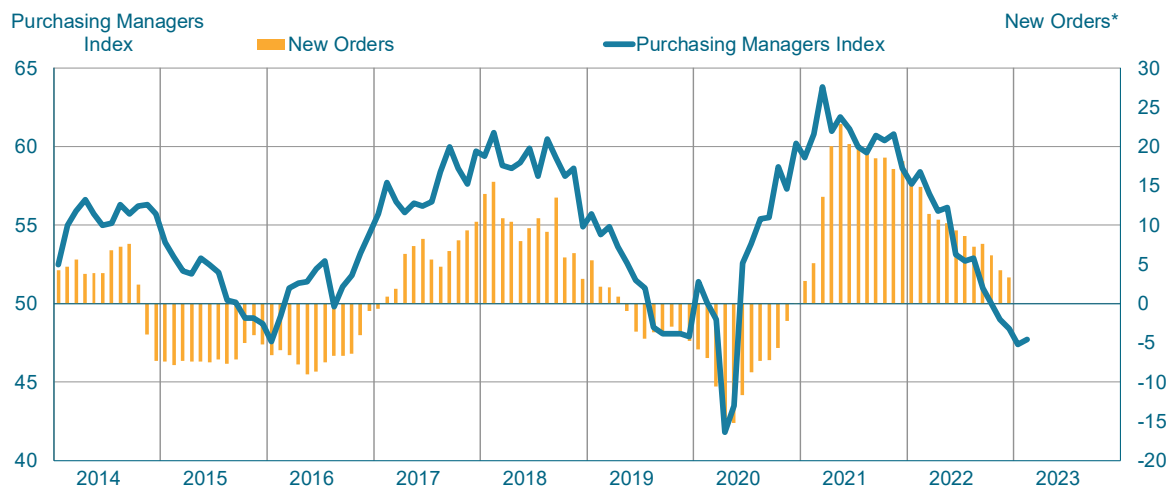


Balance of positive and negative answers, seasonally adjusted



Source: EU Commission, Macrobond, VDMA

# USA: Purchasing Managers Index (Manufacturing) and New Orders of US mechanical engineering



Source: Institute for Supply Management®, Census Bureau, VDMA

\* %-change against previous year of 3-mm average.

## USA: Inflation Reduction Act



- 369 billion dollars to fight climate change
  - \$270 billion through 27 tax credits -this is an estimate from CBO / JCT
- Most of the programs take effect on January 1, 2023, and last for 10 years
- No application process
- U.S. taxpayers benefit directly, European machinery manufacturers indirectly
- Domestic Content “Made in USA”
  - Iron and Steel: 100%
  - Investment goods: 40% increasing over the next years
    - (Offshore Wind Park: 20% at the beginning)

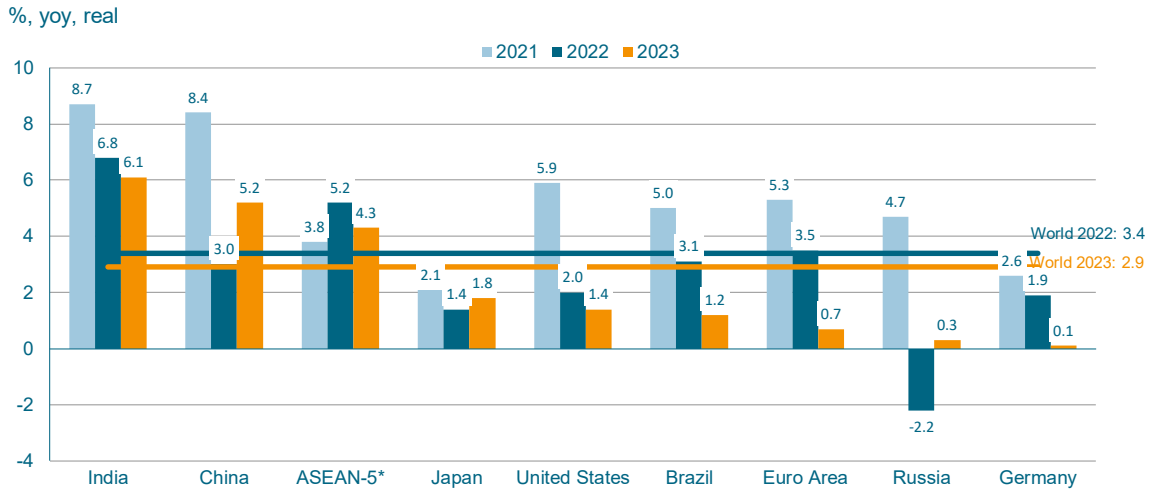


Shutterstock



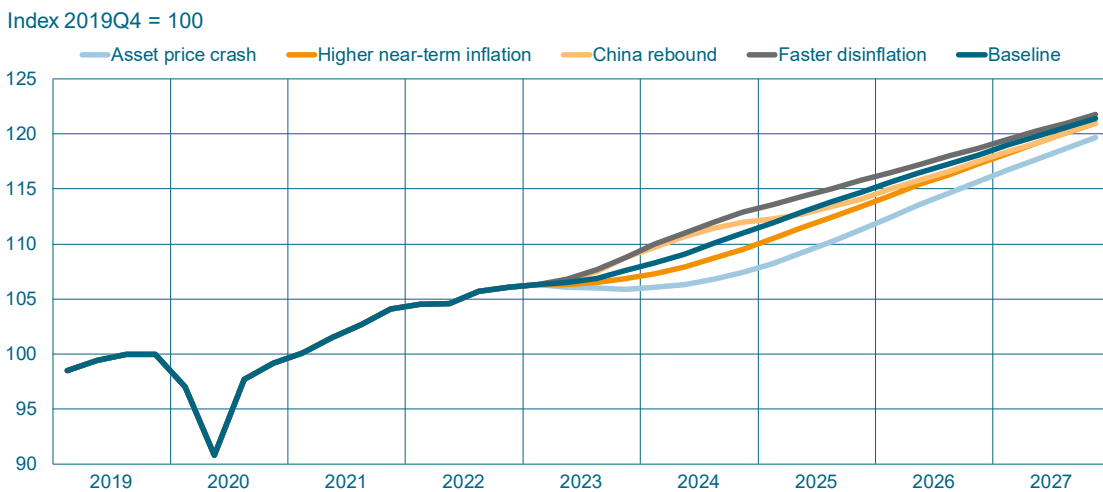
## Part 2 Predictions

# GDP



Source: IMF WEO Update January 2023, Macrobond, VDMA \*Indonesia, Malaysia, Philippines, Thailand and Vietnam.

# World: GDP Forecasts by Oxford Economics scenarios

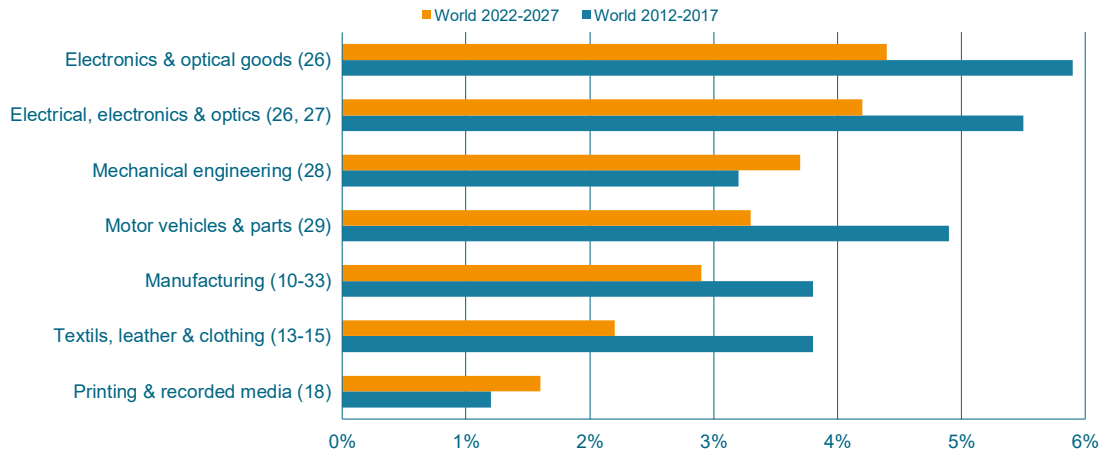


Source: Oxford Economics Ltd.



## World: Growth outlook

CAGR in %



Source: Oxford Economics Ltd, (December 2022); sectors according to NACE rev.2

## Risks and Chances

- Geopolitical tensions are elevated
- Covid-19 still present
- Rising energy prices and high inflation in general
- Supply chain and logistic bottlenecks waning
- High order backlog
- Business cycle programs
- Automation
- Decarbonization
- Digitalization
- Decoupling: from globalization to self-reliance (building resilient supply chains)
- Demography (Shortage of *skilled* workers, diminishing working capital)

**Your contact.**



**Anke Uhlig**

**VDMA Economics and Statistics  
Lyoner Str. 18  
60528 Frankfurt, Germany**

**Phone +49 69 6603-1388  
Email [anke.uhlig@vdma.org](mailto:anke.uhlig@vdma.org)**