



# **Food Supply** Issues in Germany 2022

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*4 facts and 1 take-away*

- 1 **Partial loss of grain, oilseeds, fertilizer exports** due to war in Ukraine
- 2 **Increase in food prices** in 2022
- 3 **Protective measures by government**
- 4 **Hoarding purchases and sticker shocks**
- 5 **Food self-sufficiency** as a universal remedy? or: What does management science say about this?





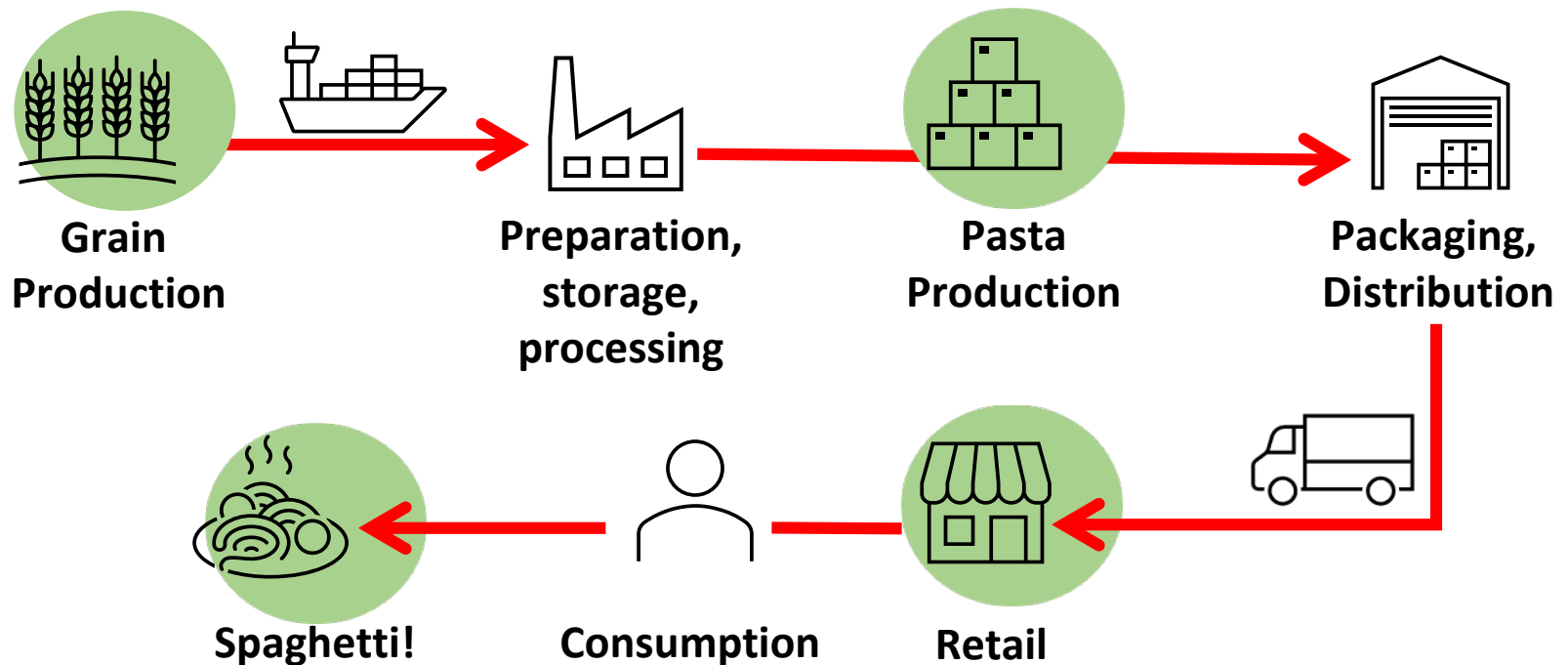
# 1

War in Ukraine means **partial loss of grain, oilseeds and fertilizer exports**



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*Food supply chains extend across national borders and are subject to interruption*





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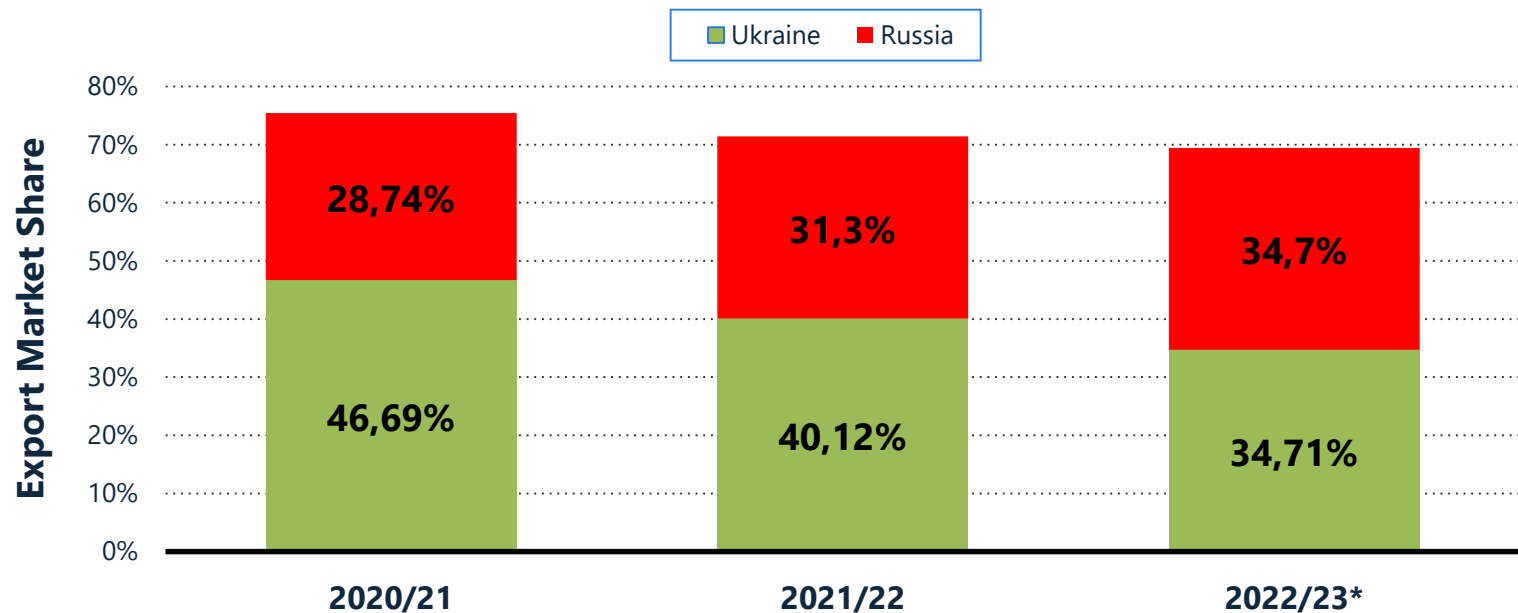


<https://www.mdr.de>



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*Market share of the leading exporting countries of sunflower oil worldwide in 2022/23*



statista

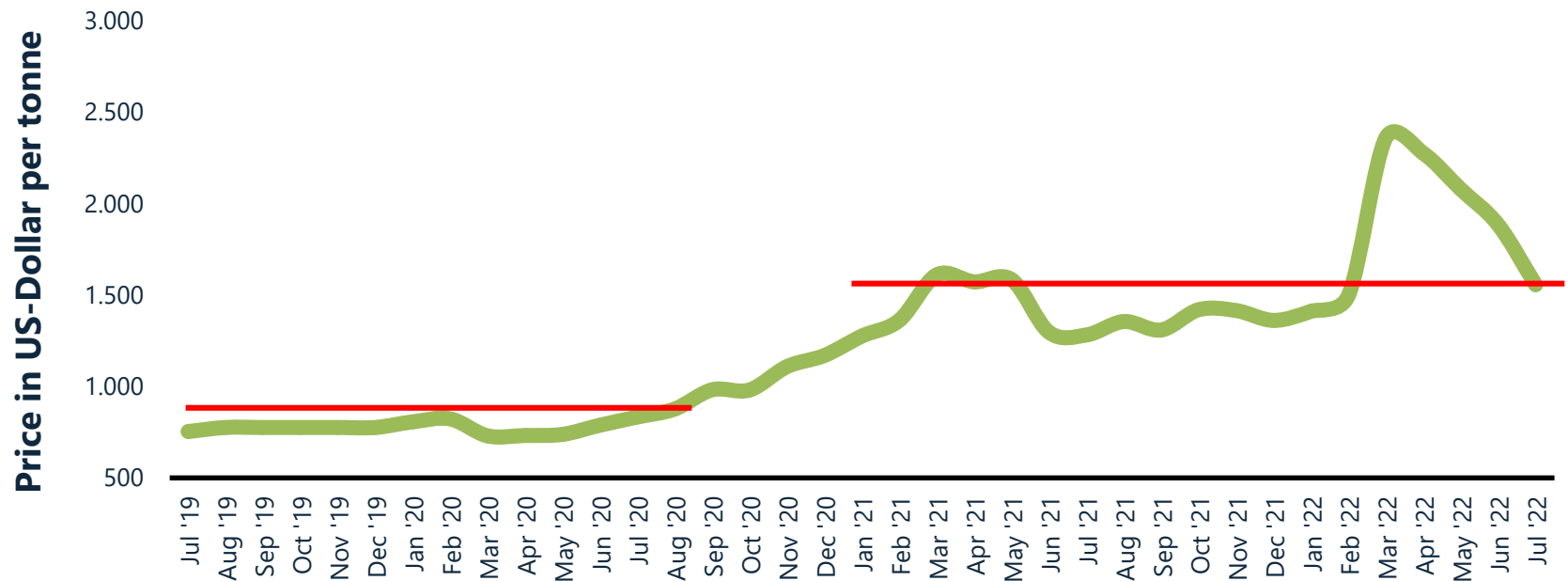
Hinweis(e): Weltweit

Quelle(n): USDA Foreign Agricultural Service; [ID 443178](#)



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*Monthly price for sunflower oil in global trade from July 2019 to July 2022  
(in US dollars per tonne)*



statista

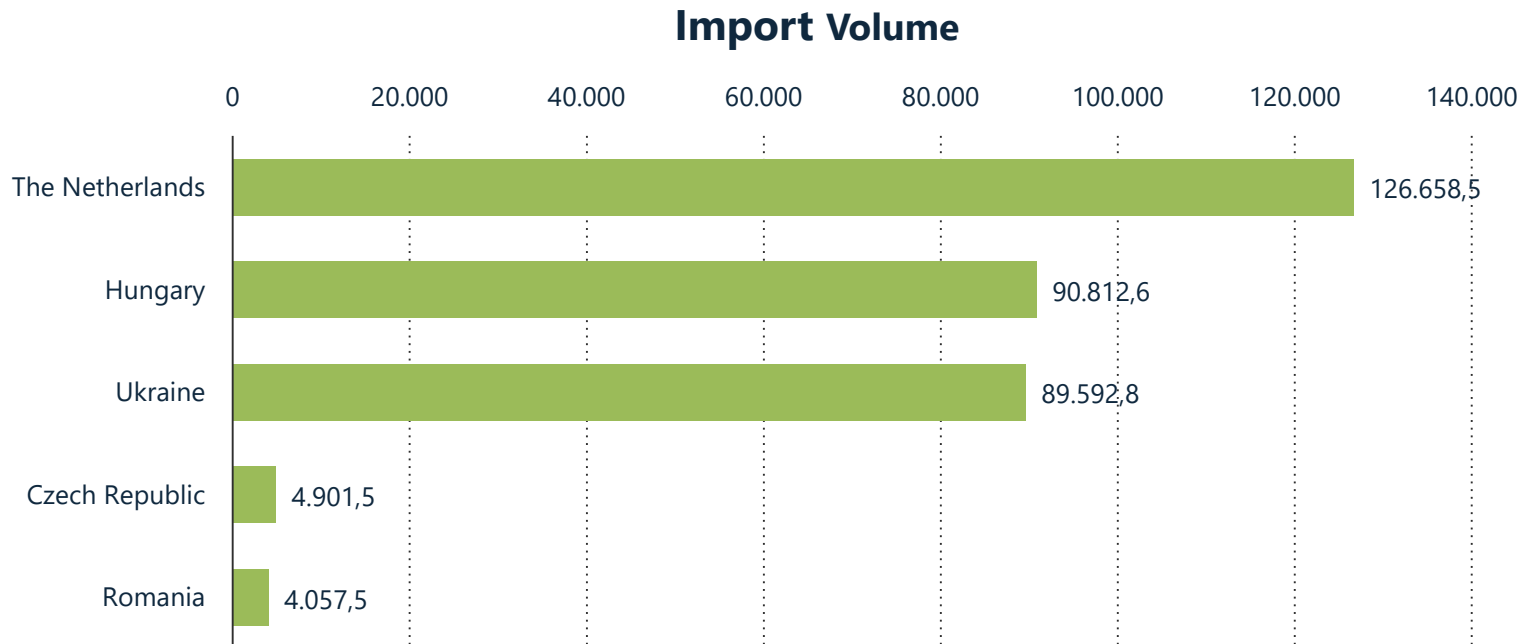
Hinweis(e): Weltweit

Quelle(n): World Bank; Bloomberg; USDA Foreign Agricultural Service; [ID 1296737](#)



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*Most important supplier countries of crude sunflower oil to Germany by import volume in 2021 (in tonnes)*



statista

**Hinweis(e):** Deutschland; rohes Sonnenblumenöl zu Lebensmittelzwecken; vorläufige Werte  
**Quelle(n):** Statistisches Bundesamt; [ID 1296588](#)







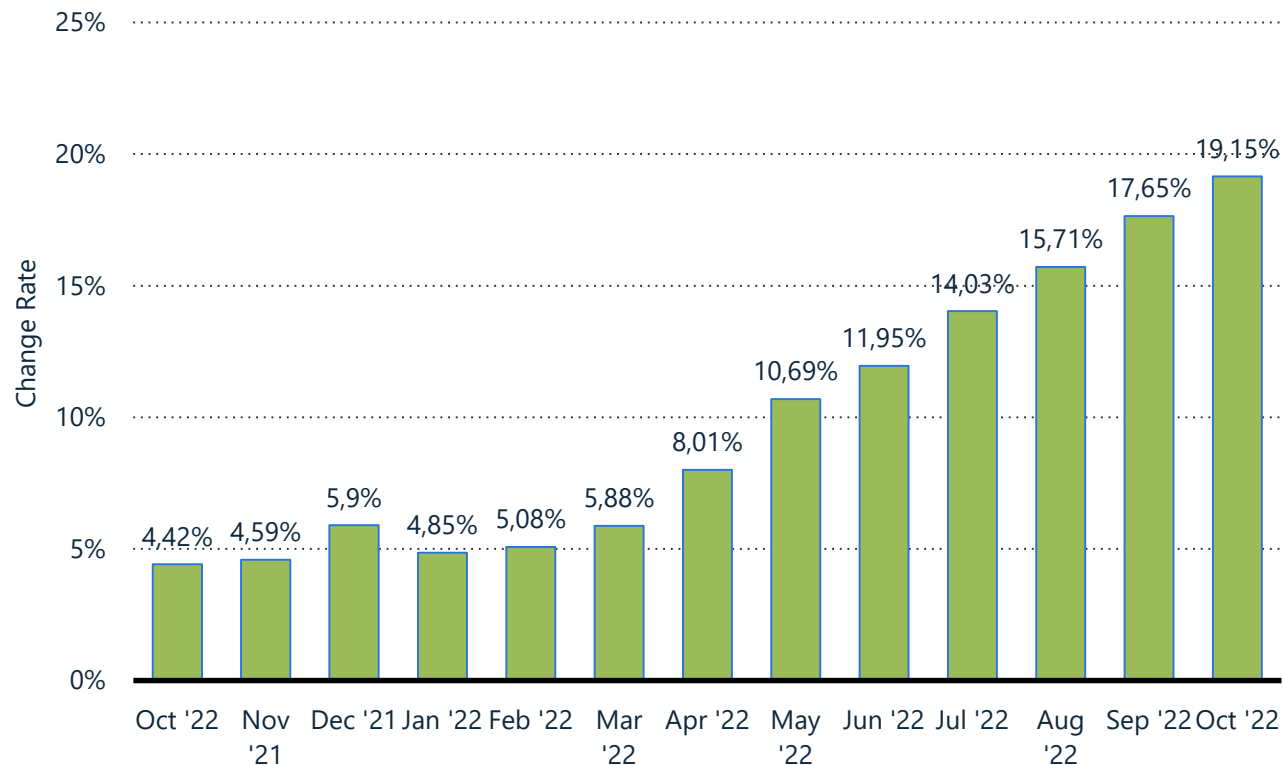
# 2

## Increase in food prices 2022



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*Monthly development of consumer prices for food and non-alcoholic beverages in Germany from October 2021 to October 2022 (compared to same month of previous year)*



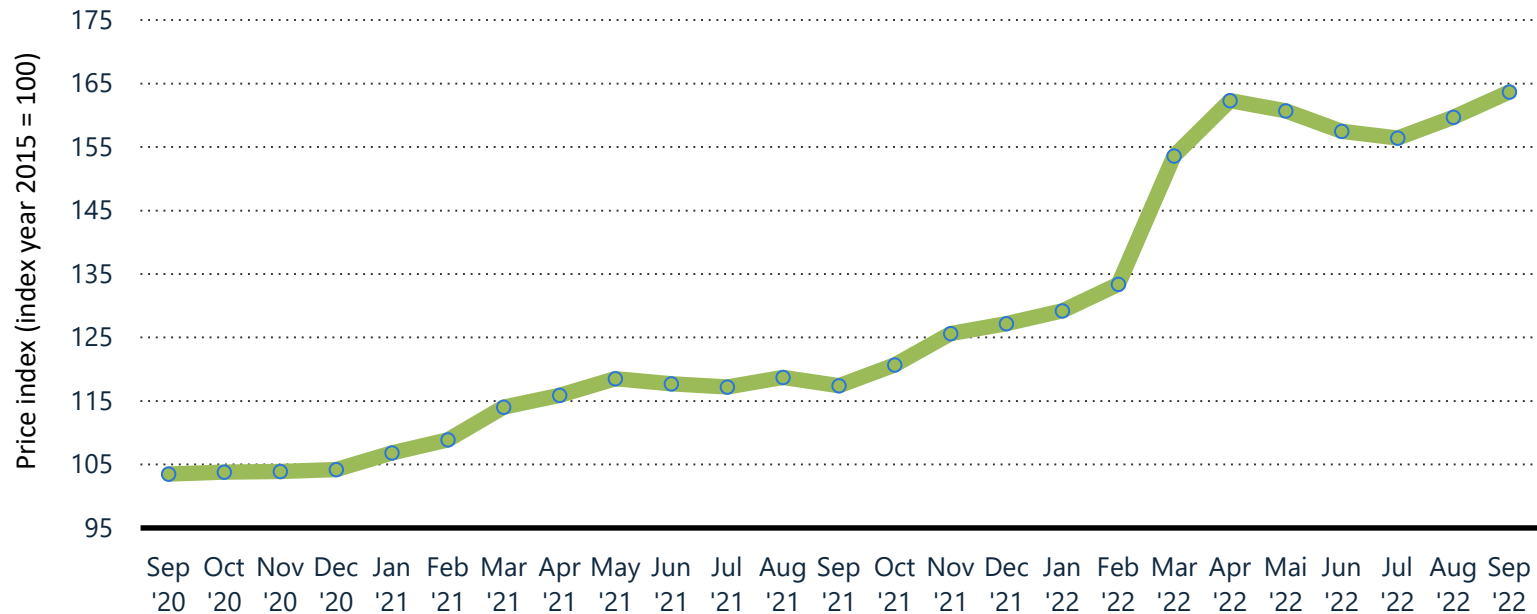
Hinweis(e): Deutschland

Quelle(n): Statistisches Bundesamt; ID 210542

statista

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## Monthly producer price index of agricultural products in Germany until September 2022



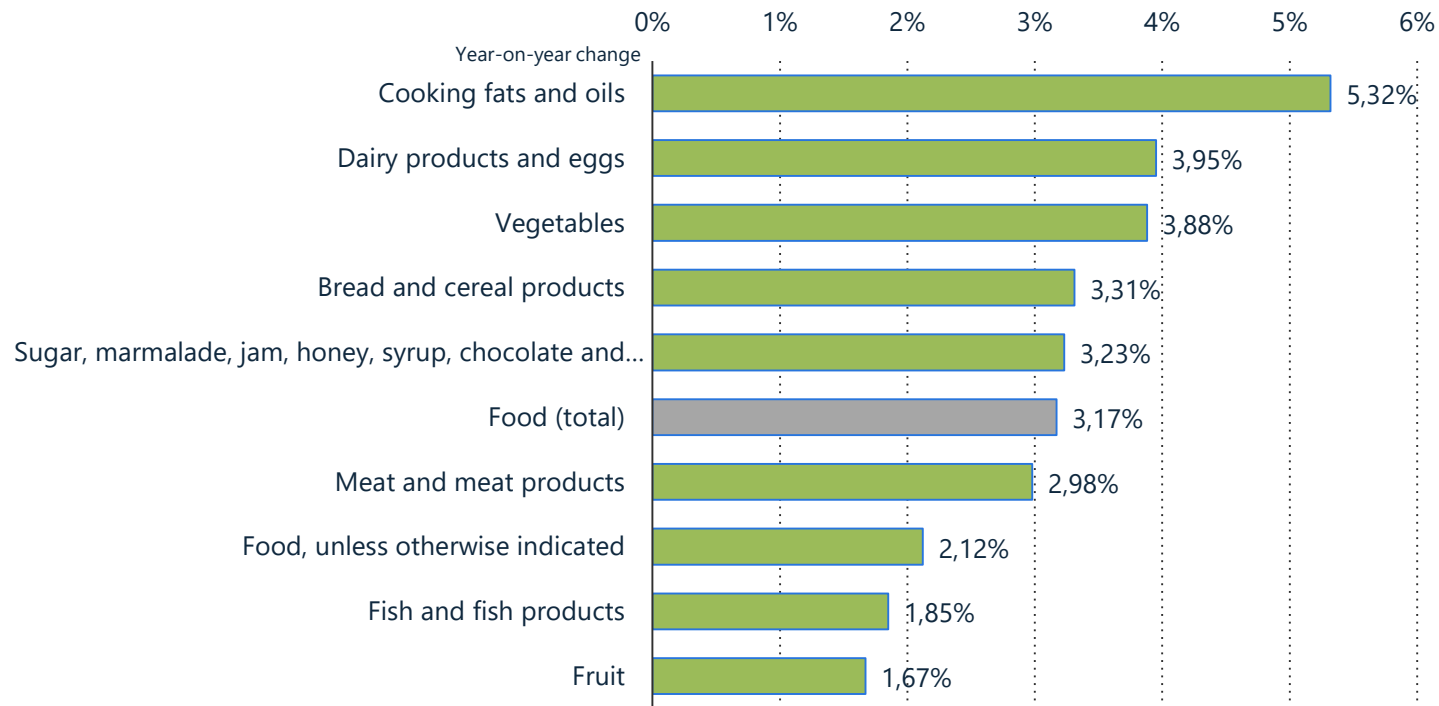
Hinweis(e): Deutschland

Quelle(n): Statistisches Bundesamt; ID 496154

statista

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## Consumer price development for food in Germany 2021, by product group



Note(s): Germany; 2021

Source(s): Statistisches Bundesamt; ID 517595

statista

# 3

## **Protective measures by government**



*Activation of protective measures in Germany*



# Bundesministerium für Ernährung und Landwirtschaft

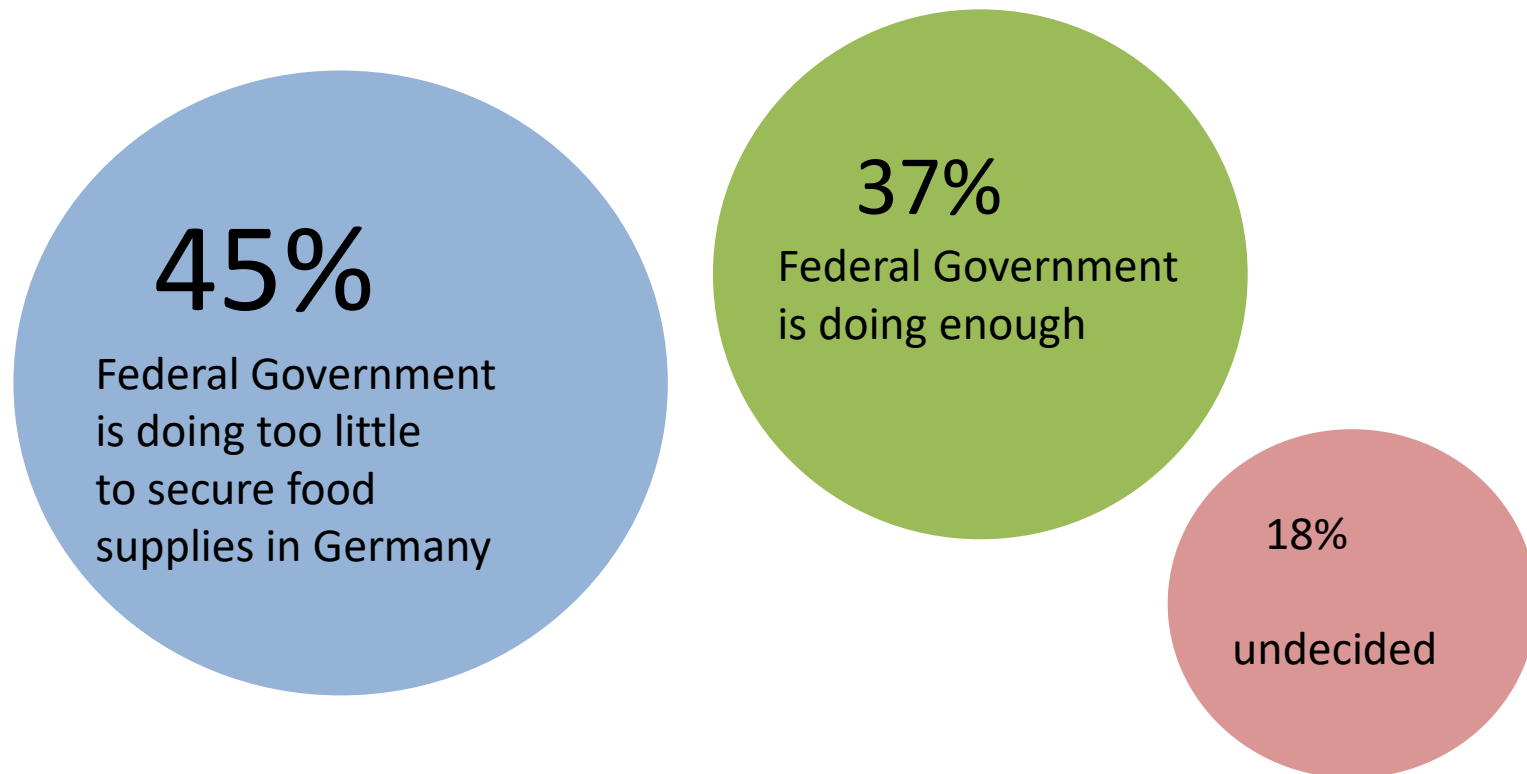
If the federal government determines that a supply crisis has occurred, various government guidance measures can be enacted to avert the consequences of the crisis. The German Food Security and Preparedness Act (ESVG) is intended to create uniform regulations for (...) crises and to coordinate supply planning and food stockpiling accordingly. To this end, regulations can be issued in particular on the production, purchase or allocation of foodstuffs, i.e. the introduction of national food management (Bundesanstalt für Landwirtschaft und Ernährung, <https://www.ble.de> ).





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*Survey: 45% of Germans think the federal government does too little for supply security*



Civey, 2,500 people surveyed online in May 2022 on behalf of the Federation of German Food and Drink Industries, results are representative of the German population aged 18 and over.





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*Statement of the German Food Industry Association BVE  
(Bundesverband der Ernährungsindustrie BVE)*

" We can see that consumers are extremely sensitive and follow the capacity of politics to act with great interest.

It is important now to avoid anything that leads to further unnecessary price increases in this state of crisis."

(BVE Chief Executive Christoph Minhoff)







# 4

## Hoarding purchases and sticker shocks



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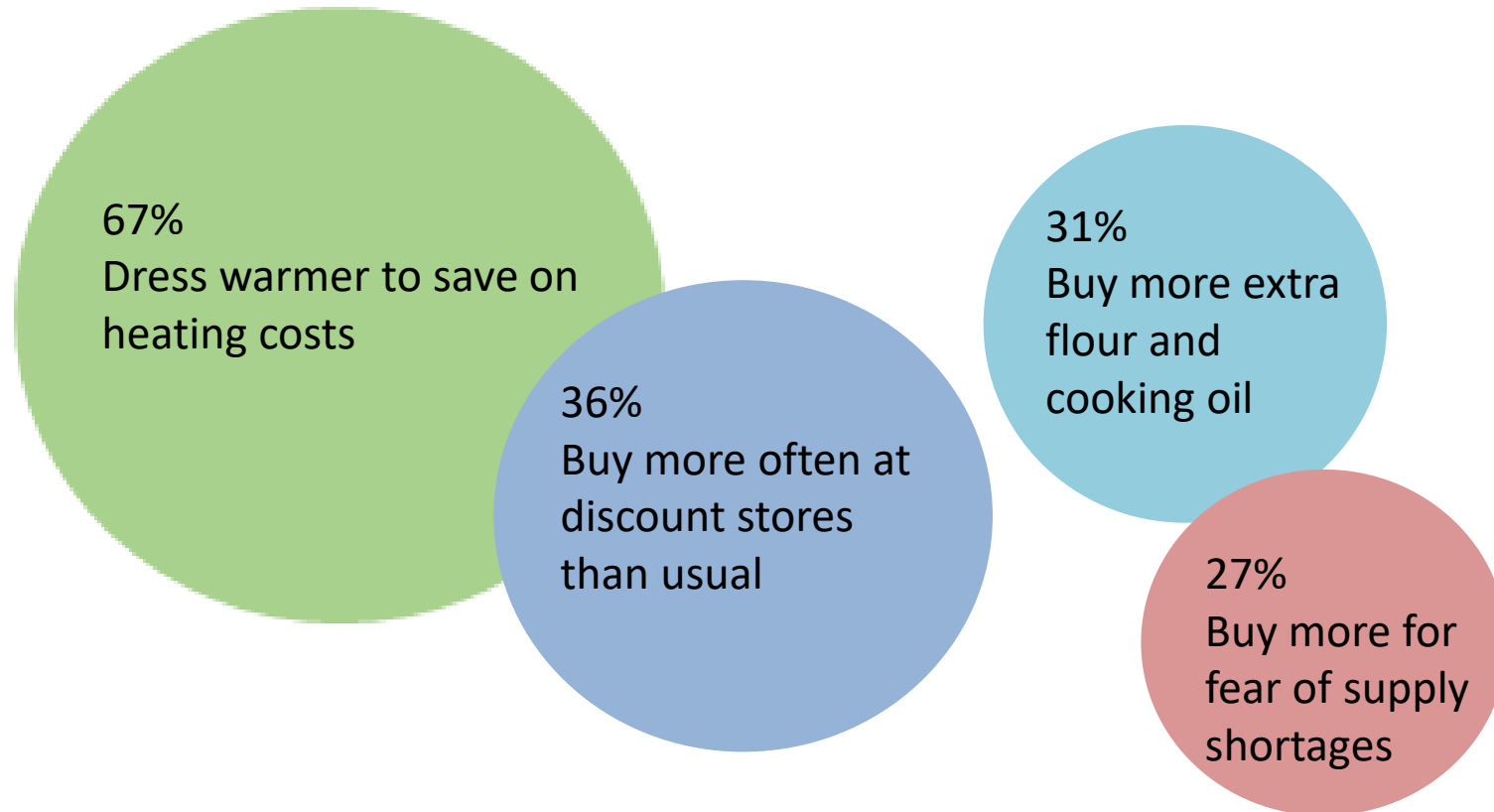


[www.badische-zeitung.de](http://www.badische-zeitung.de) 2022



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*Survey: Does the war in Ukraine influence your consumer behaviour?*



statista

**Hinweis(e):** Deutschland; 25. März 2022; 16-75 Jahre; 1.000 Befragte

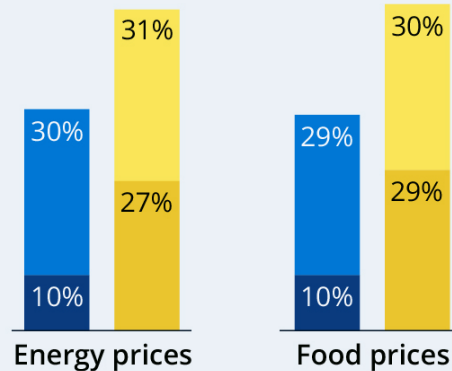
**Quelle(n):** Ipsos; [ID 1302903](#)



## Paying the Price to Defend EU Values?

Share of EU respondents (un)ready to accept rising prices as a consequence of sanctions against Russia

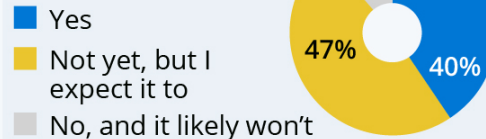
Fairly ready    Not very ready  
Very ready    Not at all ready



Should the defence of European values be prioritized over rising costs of living?



Has the war in Ukraine reduced your standard of living?



Based on a survey of 26,578 EU citizens across its 27 member states; Apr 19 - May 16, 2022

Source: Eurobarometer by the European Parliament



## *The “Psychology of Hoarding”*

### **Perception of empty shelves**



Food item in short supply

// Subjective revaluation

- increased importance of owning the food item
- food purchase provides feeling of being in command of one's own affairs

// Imitation of buying behavior of others

- feeling of competing against others
- increased purchase of the food item





# Sticker Shock



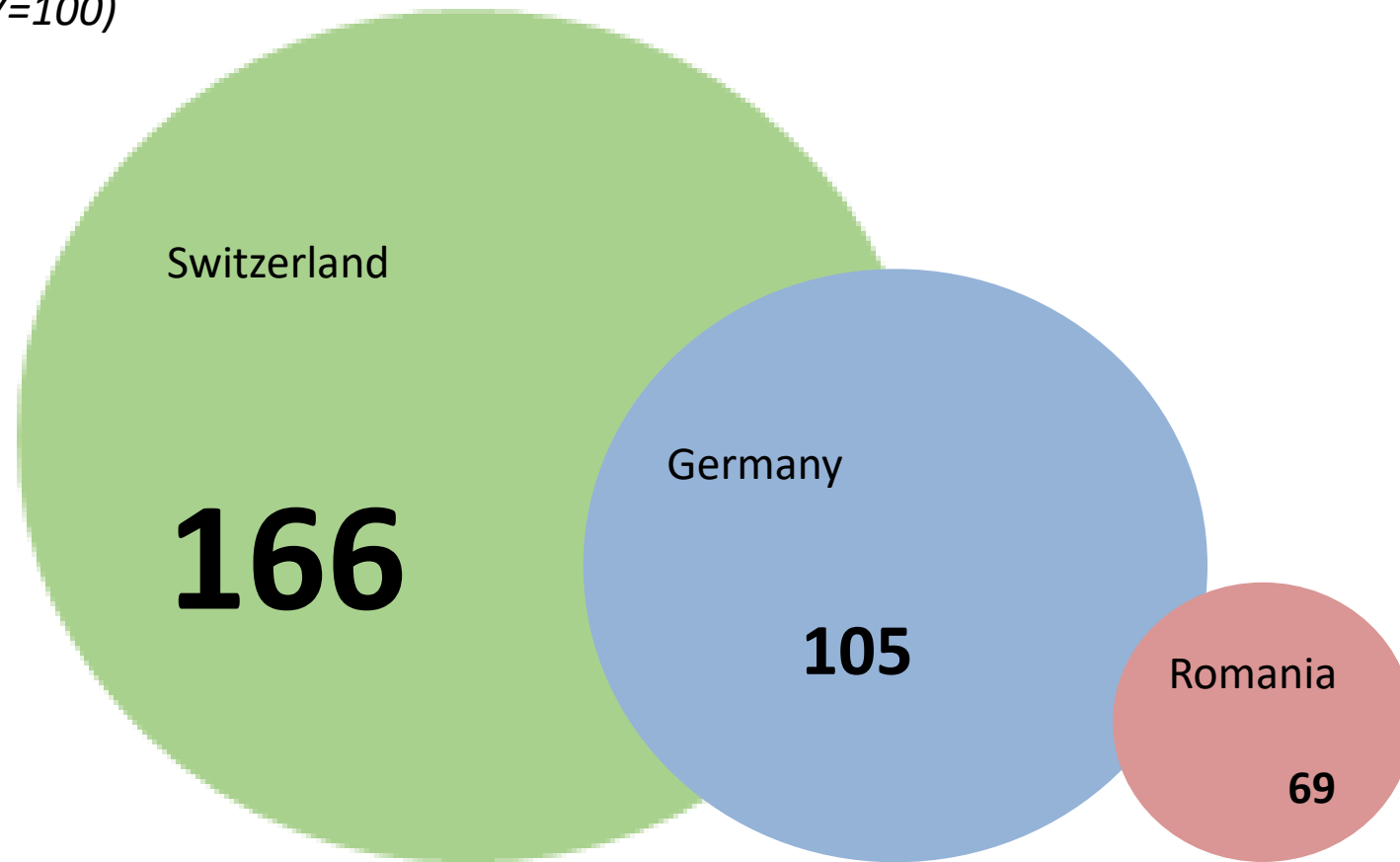
<https://www.istockphoto.com/de/search/2/image?phrase=price+shock>





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*Price level index for food and non-alcoholic beverages in Europe by country in 2021  
(EU-27=100)*



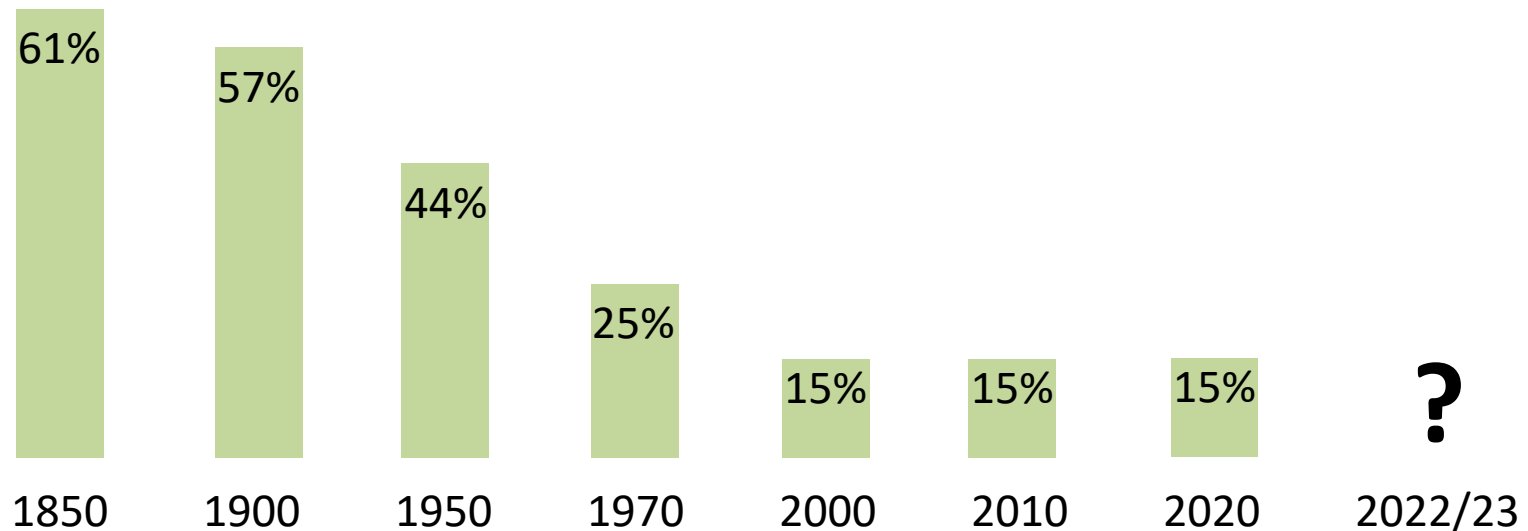
statista

Quelle(n): Eurostat; [ID 36336](#)



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*Share of private household expenditure in Germany on food, beverages and tobacco products in consumer spending in the years 1850 to 2021*



Hinweis(e): Deutschland; in jeweiligen Preisen

Quelle(n): Statistisches Bundesamt; [ID\\_75719](#)

statista







# 5

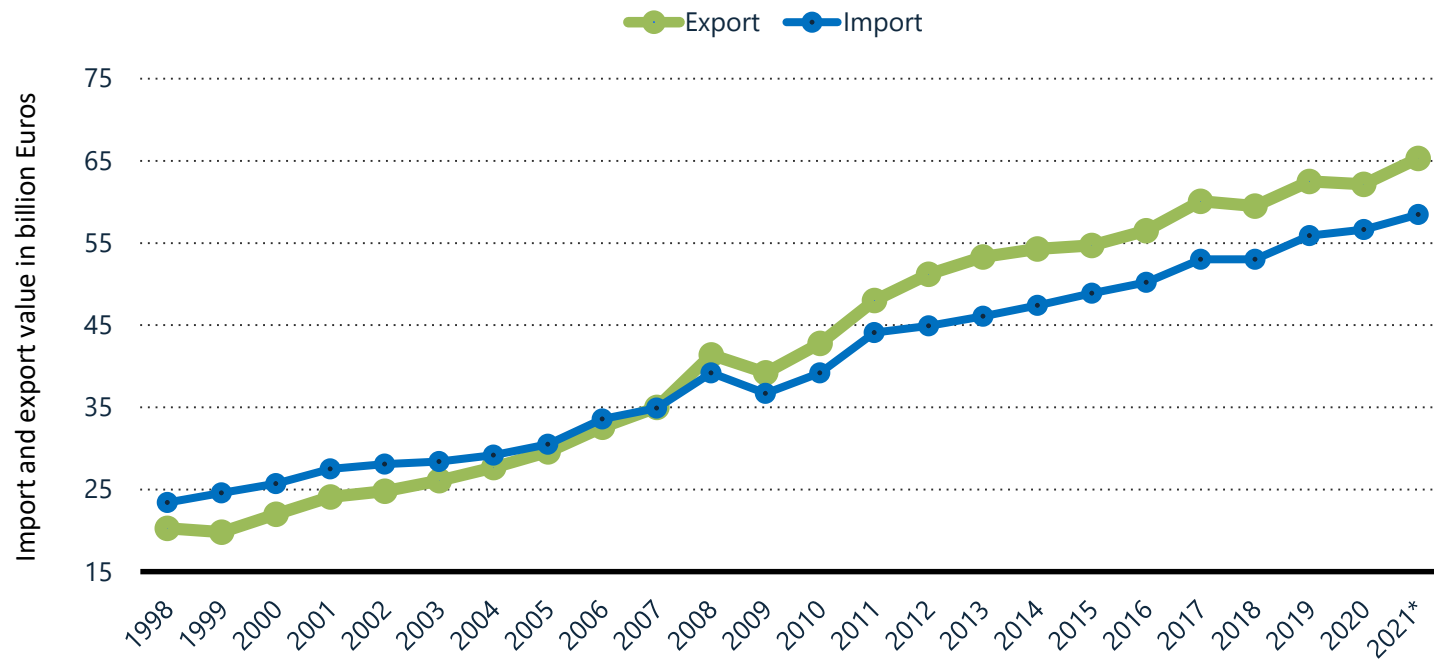
**Self-sufficiency** as a universal  
remedy? or:

What does management science  
say about this?



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## Import and export of the food industry in Germany until 2021



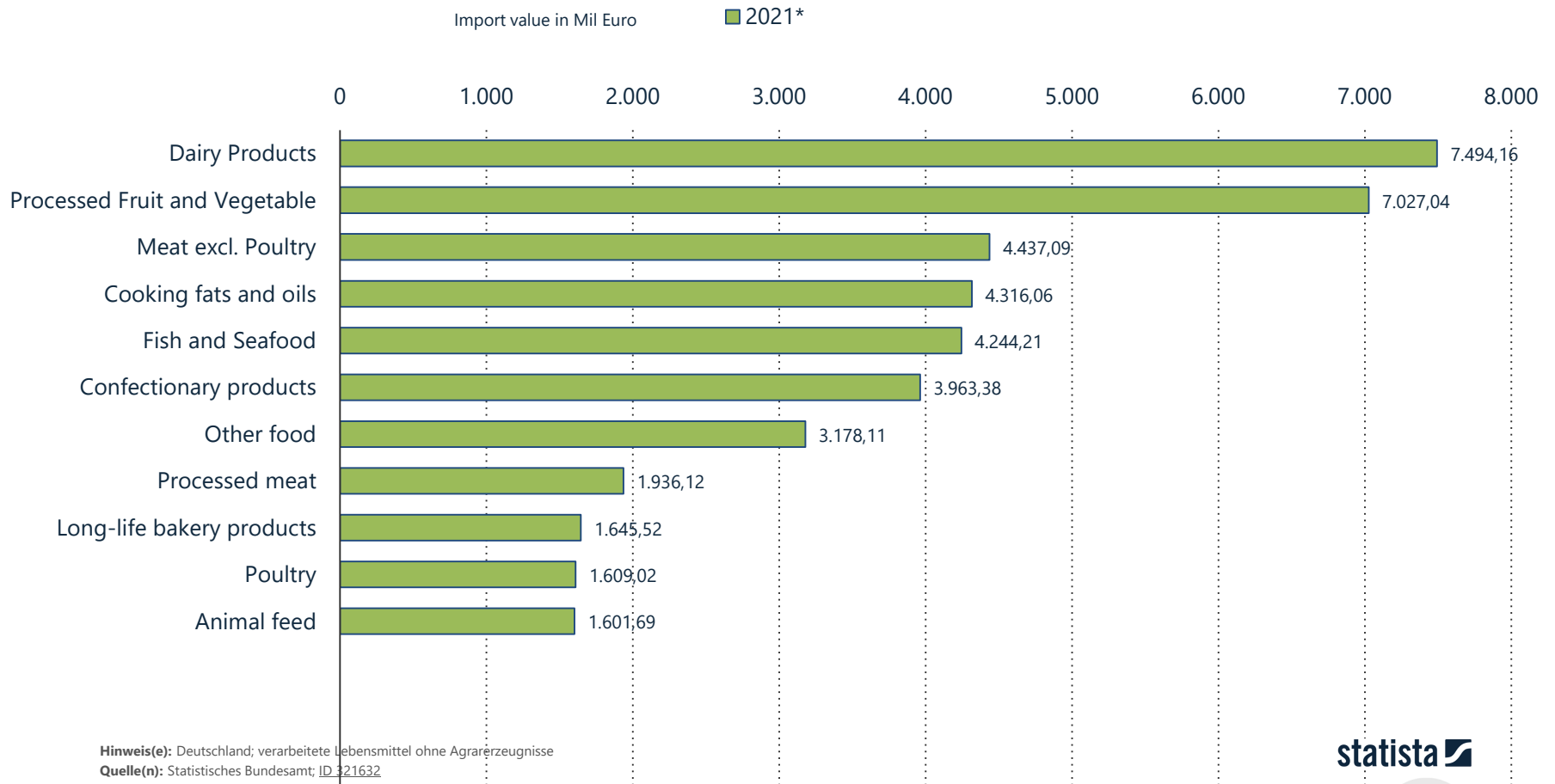
Hinweis(e): Deutschland

Quelle(n): Statistisches Bundesamt; BVE; ID 256397

statista

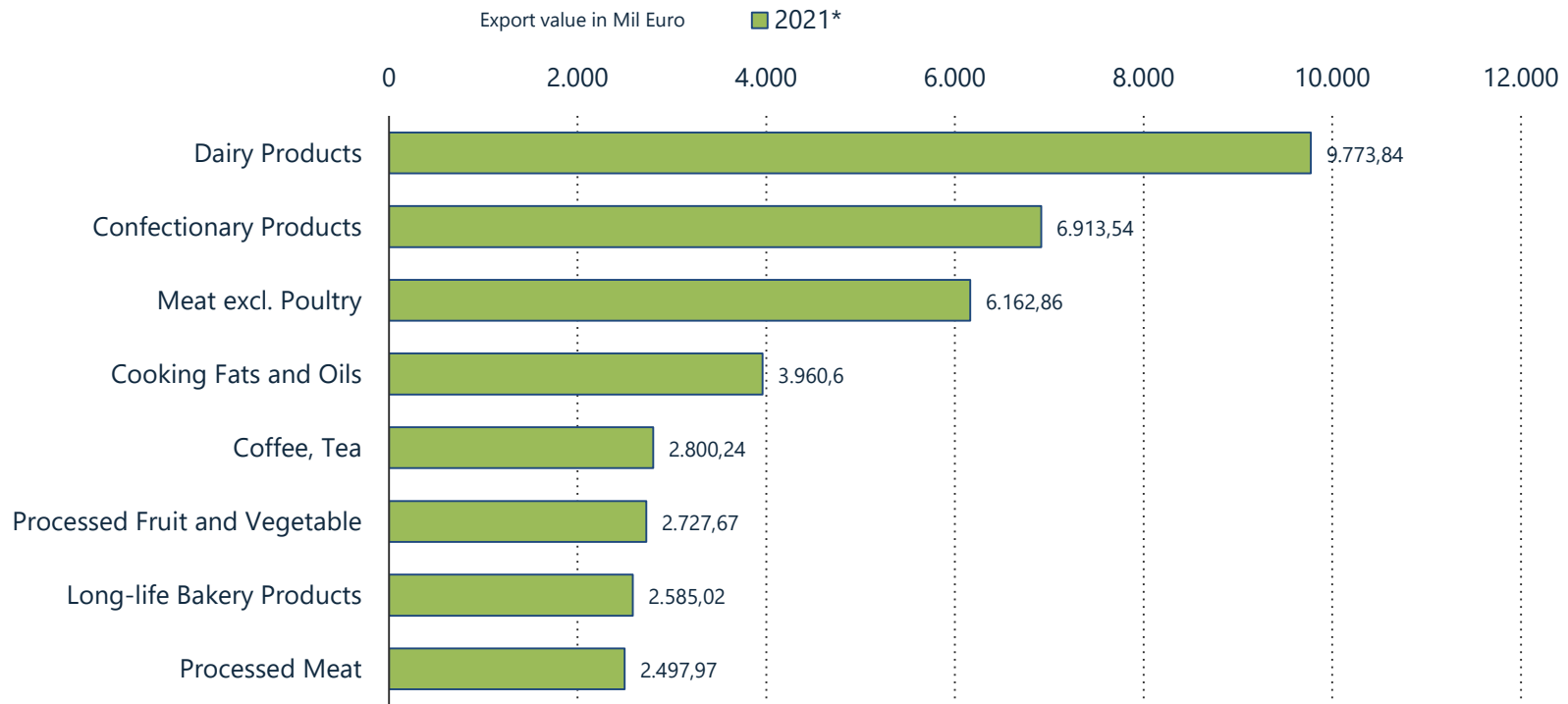
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## Import of food to Germany by commodity group 2021



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## Export of food from Germany by commodity group 2021



**Hinweis(e):** Deutschland; Verarbeitete Lebensmittel ohne Agrarerzeugnisse

**Quelle(n):** Statistisches Bundesamt; [ID 321633](#)

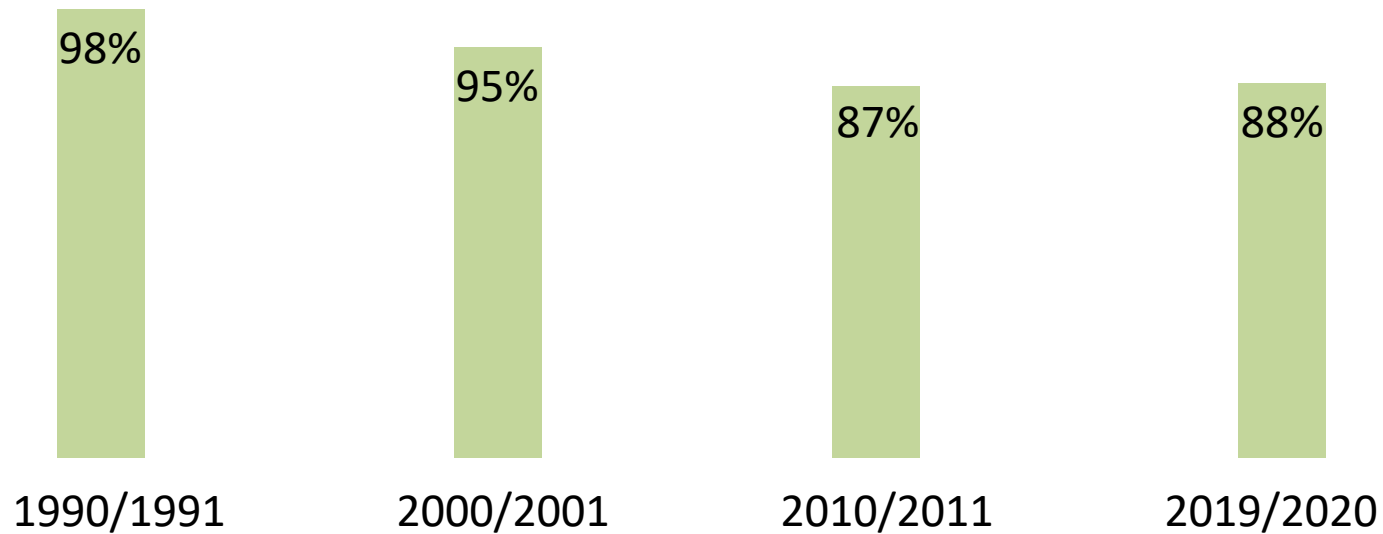
statista





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*Self-sufficiency rate for food in Germany by 2019/20*



**Hinweis(e):** Deutschland; Selbstversorgungsgrad: Nahrungsmittelproduktion in Prozent des Nahrungsmittelverbrauchs

**Quelle(n):** BLE; ID [659012](#)

statista 



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*Self sufficiency vs. global integrated food supply networks –  
The key management question of balancing autonomy and integration*

- // Dependence on imported food making countries captive to geopolitical events
  
- // Imbalances in food supply and demand emerging through geopolitical dynamics
  
- Need of balancing a domestic base of food supply (creating a certain degree of autonomy) with international trade relationships (providing economic benefits of internationally integrated supply networks)





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## *Approaches to risk mitigation through food self sufficiency*

- // Increased **robustness** (monitoring national food supply, modular and distributed responsibilities on national and local levels, adaptive decision making procedures)
  
- // Increased **resourcefulness** (capacity for self-organization, creativity and innovation)
  
- Avoiding too tight systemic coupling, i.e. no cross-system crisis/risk transfer between international food players
  
- Resulting in reduced responsiveness to external dynamics but increased internal complexity



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## *Approaches to Risk Mitigation through Global Integrated Food Supply Networks*

- // Increased **redundancy** (diversification of critical supply sources, food processing and logistics infrastructure, diversity of solutions and strategy)
  - // Increased **responsiveness** (signalling of changes in the global food industry, joint solutions, participation in expert knowledge and resources)
  - // Increased **recovery** after crisis (pooling resources, responsive feedback mechanisms, establishing the ability to act in a system network)
- 
- Avoidance of suboptimal national go-it-alone approaches
  - Utilization of economies of scale and scope





...and the take-away?

Don't put all your eggs (or cooking oil bottles) in one basket!

**Thank you!**

