

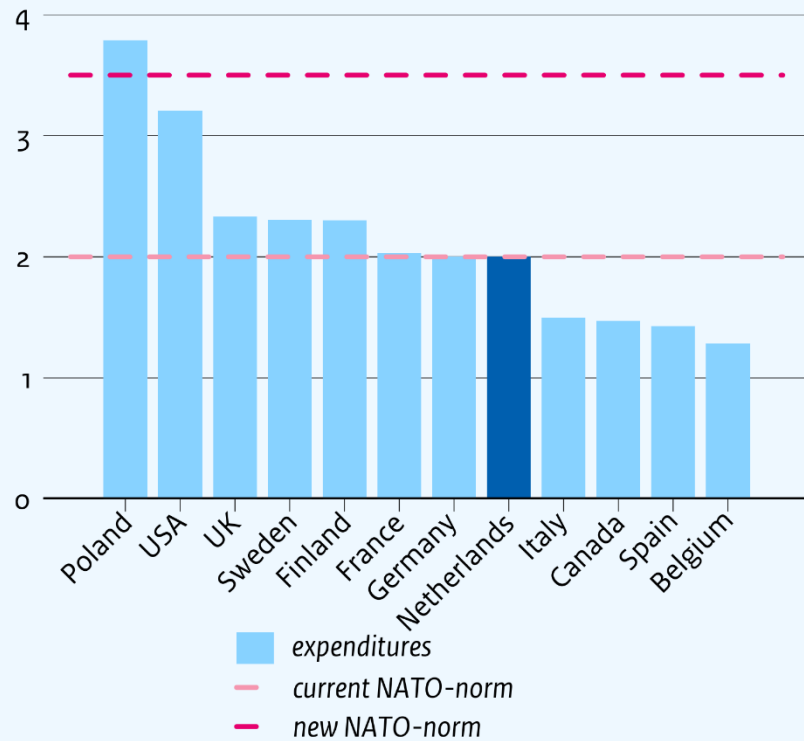
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Motivation

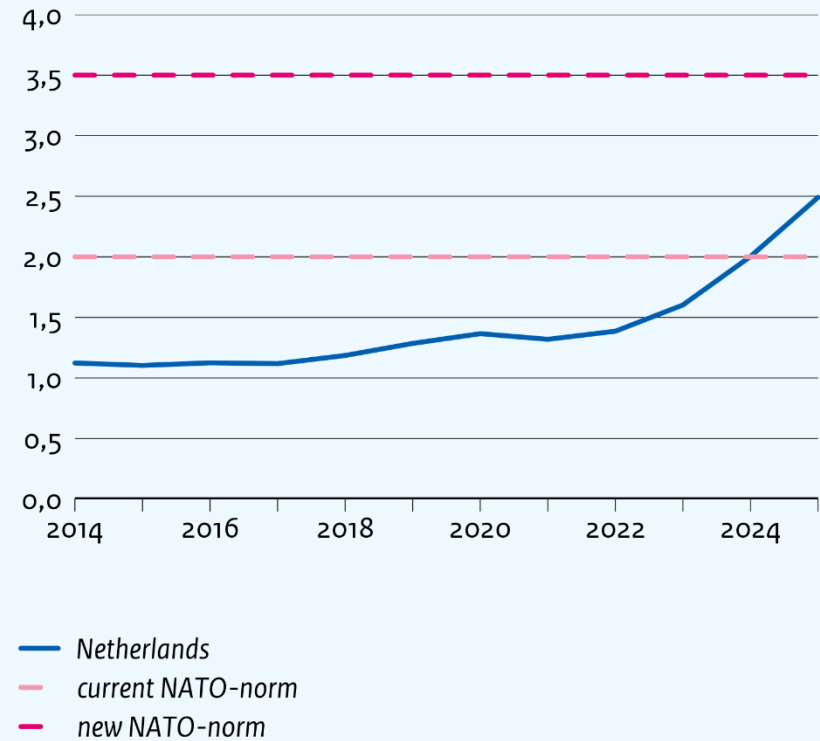
Defence expenditures 2024

% bbp



Defence expenditure NATO-norm

% gdp



Our project

- Focus on defence-spending (3.5% NATO-target), not on defence-related spending (5% NATO-target)
- Literature review applied to the Netherlands
- Focus on effect on economic growth (multiplier)

Multiplier of defence spending

Study	Countries	Method	Multiplier
Auerbach & Gorodnichenko (2012)	US	SVAR	1 (short term) tot -1 (long term)
Antolin-Diaz & Surico (2025)	US	BVAR	1,35 tot 2
García et al. (2025)	EU	LP	1,6 (total); 1,1 (personnel); 0,1 (material); 2,4 (investment)
Nakamura & Steinsson (2014)	US (states)	IV-OLS	1,5
Ramey & Zubairy (2018)	US	LP	0,6 tot 0,7
Sheremirov & Spirovska (2022)	Panel	LP	0,3 (all countries); 1,5 (developed countries); 1,2 (countries with fixed exch. rate)

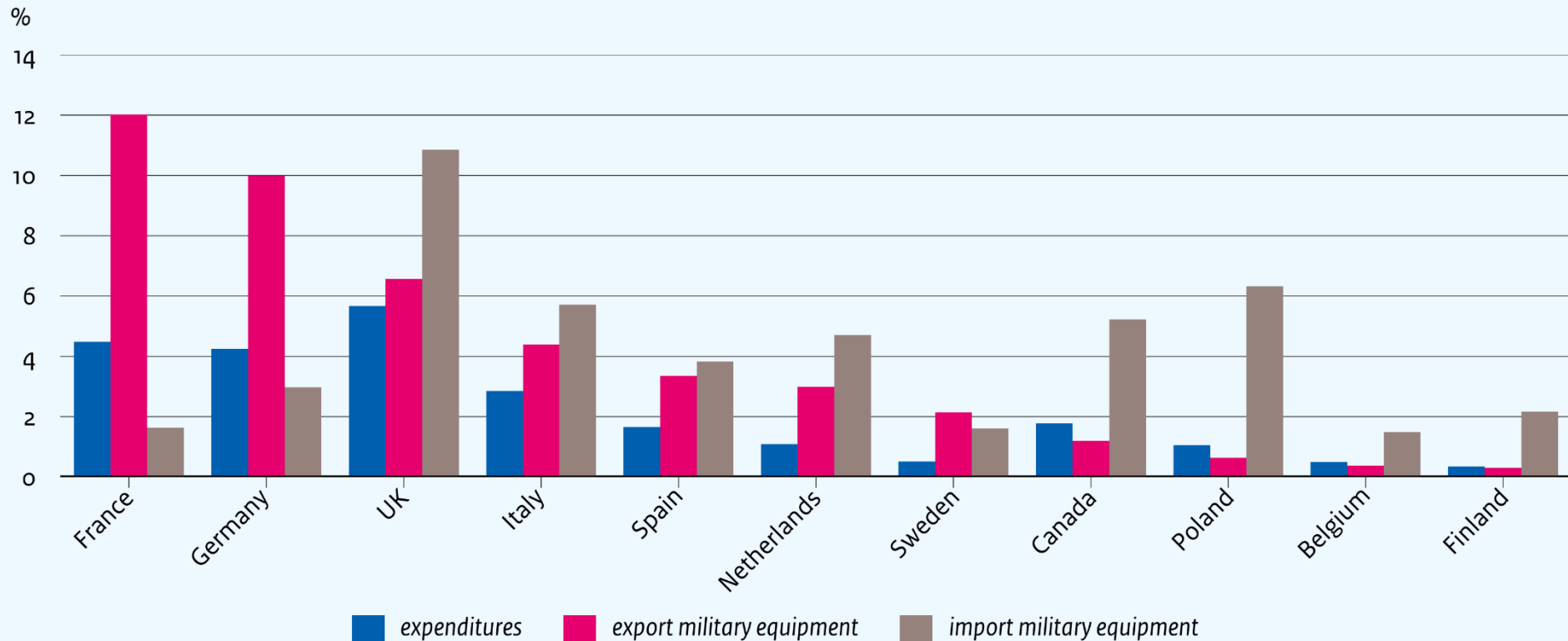
- Range in academic literature: 0,3 - 2

Important factors for size of the multiplier

Factor	Impact on multiplier
Business cycle	Economic boom lowers multiplier
Availability of supply	More supply constraints lowers multiplier
Import share	More imports lowers multiplier
Exchange rate	Fixed exchange rate increases multiplier
Public finances	Lower national debt increases multiplier
Scale of R&D	Smaller scale lowers multiplier, broader project parameters increase multiplier

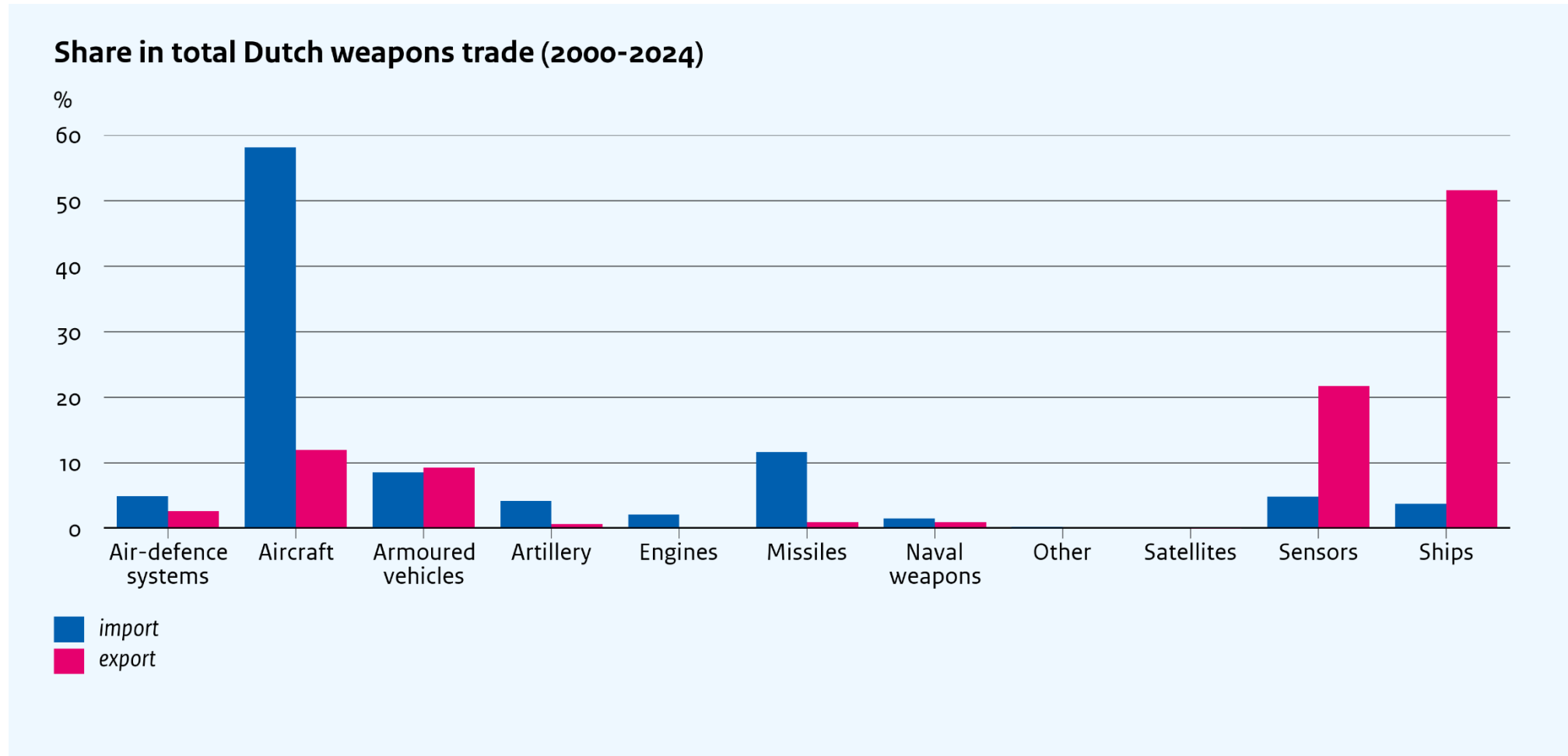
Import and export

Share in total expenditure, imports, exports of NATO-members (2000-2024)



Source: SIPRI

Dutch weapons trade



Source: SIPRI

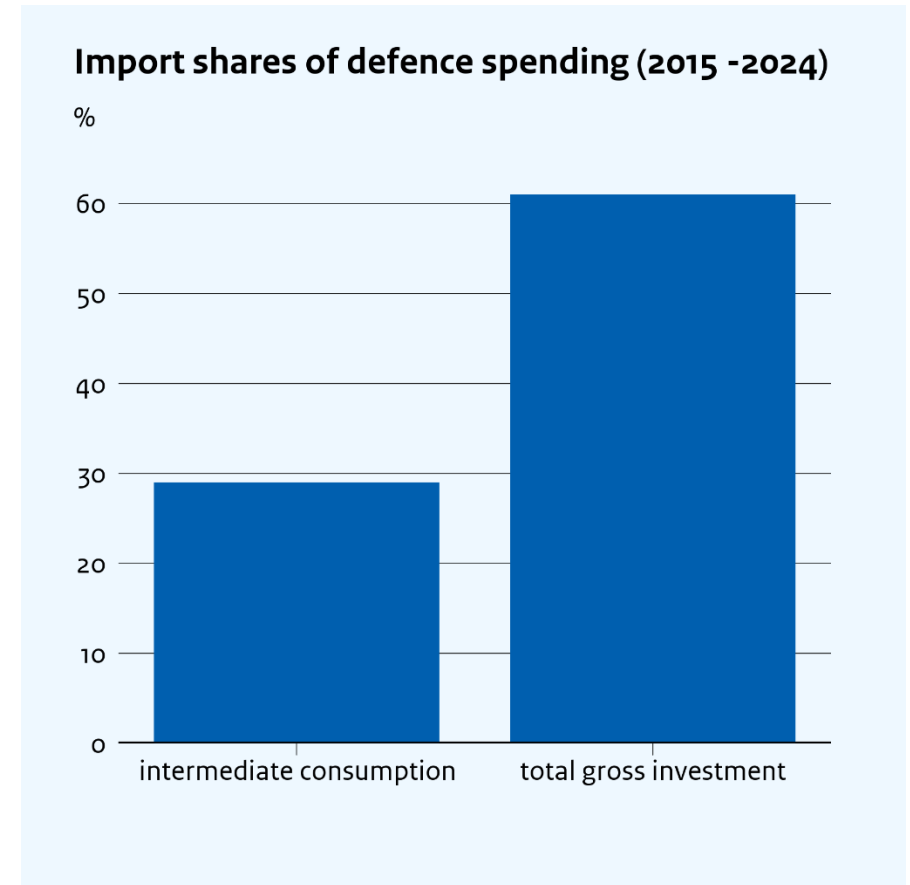
Application to the Netherlands

Factor	The Netherlands...	Multiplier Netherlands
Business cycle	Tight labour market	↓
Availability of supply	Supply constraints, demand rising quickly	↓
Import share	High import share	↓
Exchange rate	Fixed exchange rate to most trading partners, but not to all	↔
Public finances	Public debt is not a relevant problem	↑
Scale of R&D	Small scale	↓
Total		↓

- Conclusion: multiplier of defence spending in the Netherlands at the lower end of the range

Different expenditure categories

- Composition of defence spending in the Netherlands:
 - Personnel ($\pm 47\%$)
 - Intermediate consumption ($\pm 34\%$)
 - Investment ($\pm 17\%$)
 - R&D 1,3%

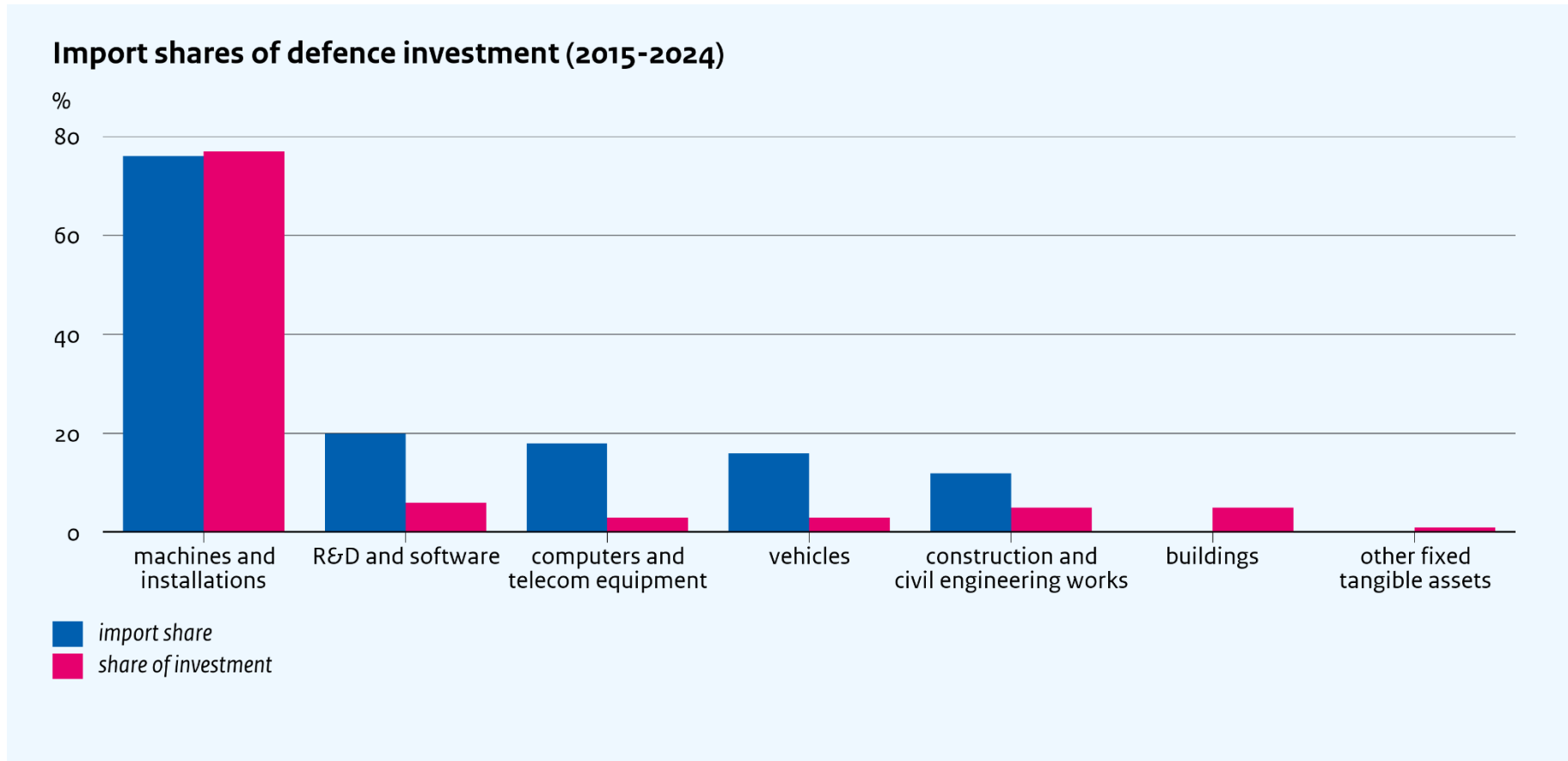


Source: CBS

Defence investment

- Mostly military equipment
- Highest import share
- Unlike other types of government investment, lower productivity spillovers

Investment categories import shares



Source: CBS



Personnel and intermediate consumption

- Lower import shares
- More activities contracted through the private sector

R&D

- A few famous examples of breakthroughs that originated in US Defence industry
- Some estimations of supermultipliers in the literature
- Questions about internal and external validity of results
 - Causation?
 - Scale-effects
 - Country-specific effects, interchangeability of results
 - Omitted variable bias

Main messages

- Multiplier of defence spending for the Netherlands could be close to zero
- There is not one category with a significant higher one
 - Defence investment is uncomparable to other types of public investment
 - R&D could generate positive spillover effects, but uncertain how large
- Stimulating economic growth is not the goal of defence spending; discussion should not focus too much on multipliers



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