KONFERENCJA BRANŻY ELEKTROTECHNICZNEJ

23.04.2026 ▪ Józefów k/Warszawy

KONFERENCJA BRANŻY ELEKTROTECHNICZNEJ

Obyś żył w ciekawych czasach
Zarządzanie firmą a niepewność

Kamil Sobolewski
Główny Ekonomista, PracodawcyRP

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KONFERENCJA BRANŻY ELEKTROTECHNICZNEJ

23.04.2026 ▪ Józefów k/Warszawy

Kamil Sobolewski, CFA, FRM

- Główny ekonomista Pracodawców RP, prezes zarządu Cogito ergo sum sp. z o.o., wiceprzewodniczący RN PFR TFI SA.
- Obecny lub były członek m.in. zespołów Rady Dialogu Społecznego, KM KPO, rady rynku pracy, zespołu ds. prezydencji w EU.
- Współautor raportów:
  „Imigracja – ratunek dla gospodarki i korzyści społeczne.”
  „Jak zaspokoić potrzeby mieszkaniowe Polaków? Raport o polityce mieszkaniowej państwa.”
  „Jak obudzić inwestycje w Polsce?”
- Profesjonalny inwestor. Przez 20 lat zarządzał aktywami funduszy i banków w kwotach do 40 mld zł w klasach dług, surowce, waluty, akcje publiczne i prywatne, dla DG Bank, Citi, PKO BP, SG, ING Nationale Nederlanden i kilku TFI.
- Ekspert od finansowania, rozwoju, ekspansji międzynarodowej. Realizuje projekty doradcze, sprawował nadzór właścicielski w ramach grupy kapitałowej. Jest członkiem SNCRN.
- Absolwent m.in. programu Advanced Investment Program QHA w Stanford, studiów dla wyższych kadr menedżerskich QHA i IMD w Lozannie, studiów doktoranckich w dziedzinie ekonomii w INE PAN, studiów magisterskich na SGH oraz Polsko-Niemieckiego Forum Akademickiego.
- Współautor książki „Sztuka wojny. Filozofia i praktyka oddziaływania na bieg zdarzeń.”

Agenda

1. Kontekst
2. Interpretacja i wnioski

1. Kontekst

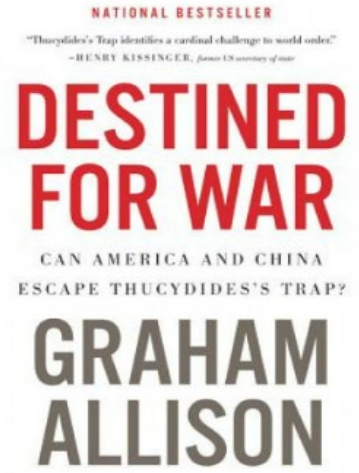
A plume of smoke rises after a strike on the Iranian capital of Tehran on March 3, 2026. (Getty/AFP/Atta Kenare)

SUERF
THE EUROPEAN MONEY AND FINANCE FORUM

SUERF Policy Note
Issue No 197, October 2020

The Great Demographic Reversal:
Ageing Societies, Waning Inequality, and an Inflation Revival


By C.A.E. Goodhart[1] and Manoj Pradhan[2]

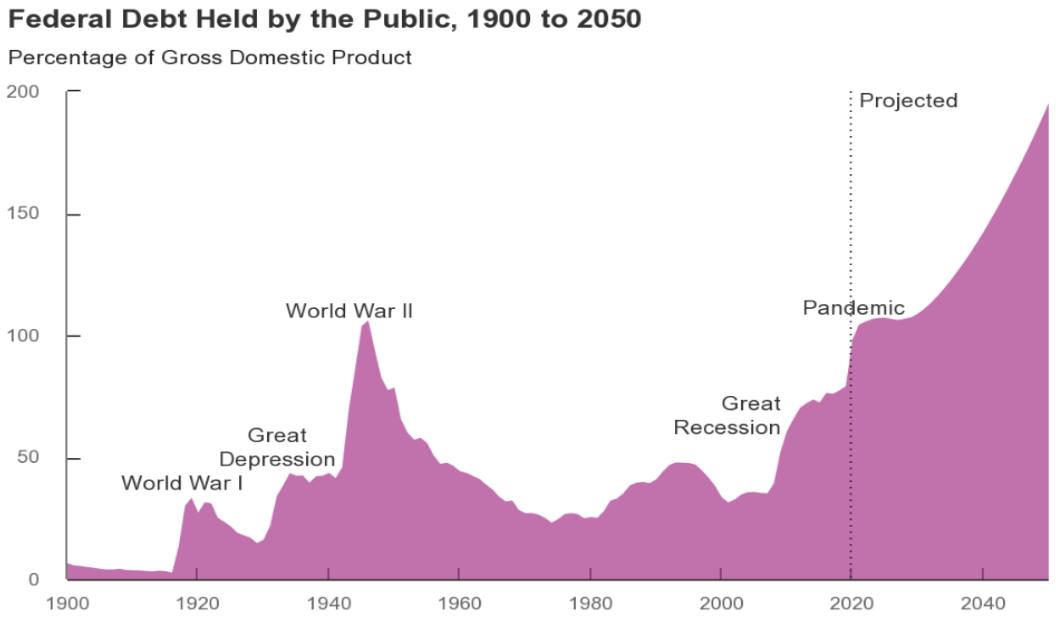


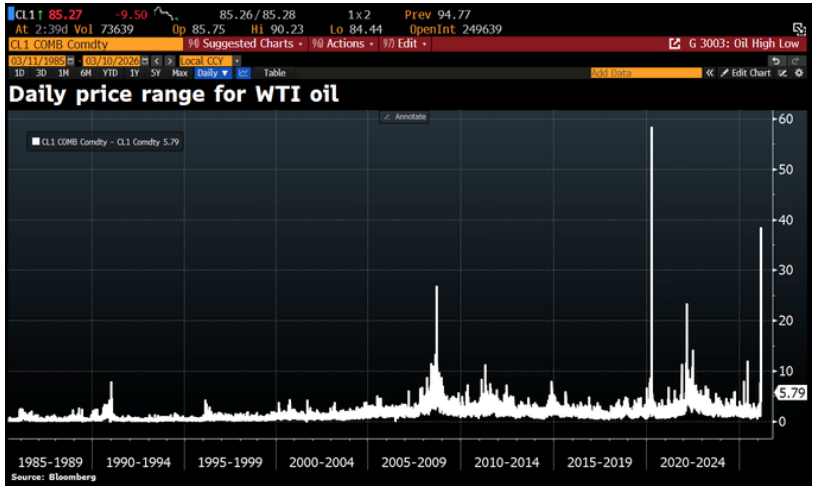
Reciprocal Tariffs

Country	Tariffs Charged to the U.S.A. Including Currency Manipulation and Trade Barriers	U.S.A. Discounted Reciprocal Tariffs
China	67%	34%
European Union	39%	20%
Vietnam	90%	46%
Taiwan	64%	32%
Japan	46%	24%
India	52%	26%
South Korea	50%	25%
Thailand	72%	36%
Switzerland	61%	31%
Indonesia	64%	32%
Malaysia	47%	24%
Cambodia	97%	49%
United Kingdom	10%	10%
South Africa	60%	30%
Brazil	10%	10%
Bangladesh	74%	37%
Singapore	10%	10%
Israel	33%	17%
Philippines	34%	17%
Chile	10%	10%
Australia	10%	10%
Pakistan	58%	29%
Turkey	10%	10%
Sri Lanka	88%	44%
Colombia	10%	10%

Reciprocal Tariffs

Country	Tariffs Charged to the U.S.A. Including Currency Manipulation and Trade Barriers	U.S.A. Discounted Reciprocal Tariffs
Peru	10%	10%
Nicaragua	36%	18%
Norway	30%	15%
Costa Rica	17%	10%
Jordan	40%	20%
Dominican Republic	10%	10%
United Arab Emirates	10%	10%
New Zealand	20%	10%
Argentina	10%	10%
Ecuador	12%	10%
Guatemala	10%	10%
Honduras	10%	10%
Madagascar	93%	47%
Myanmar (Burma)	88%	44%
Tunisia	55%	28%
Kazakhstan	54%	27%
Serbia	74%	37%
Egypt	10%	10%
Saudi Arabia	10%	10%
El Salvador	10%	10%
Côte d`Ivoire	41%	21%
Laos	95%	48%
Botswana	74%	37%
Trinidad and Tobago	12%	10%
Morocco	10%	10%





Kontrakty terminowe na ropę Brent **94,32** +3,94 (+4,36%)

Kup Sprzedaj

Analizuj wykres

1 dzień	1 tydzień	1 miesiąc	3 miesiące	6 miesięcy	1 rok	5 lat	Max.
+4,36%	-4,99%	-11,29%	+47,06%	+55,06%	+38,91%	+41,81%	+503,58%

ICE Dutch TTF Natural Gas Futures **39,750** +0,981 (+2,53%)

Kup Sprzedaj

Analizuj wykres

1 dzień	1 tydzień	1 miesiąc	3 miesiące	6 miesięcy	1 rok	5 lat	Max.
+2,43%	-14,30%	-32,87%	+10,83%	+25,32%	+11,55%	+88,81%	+218,20%

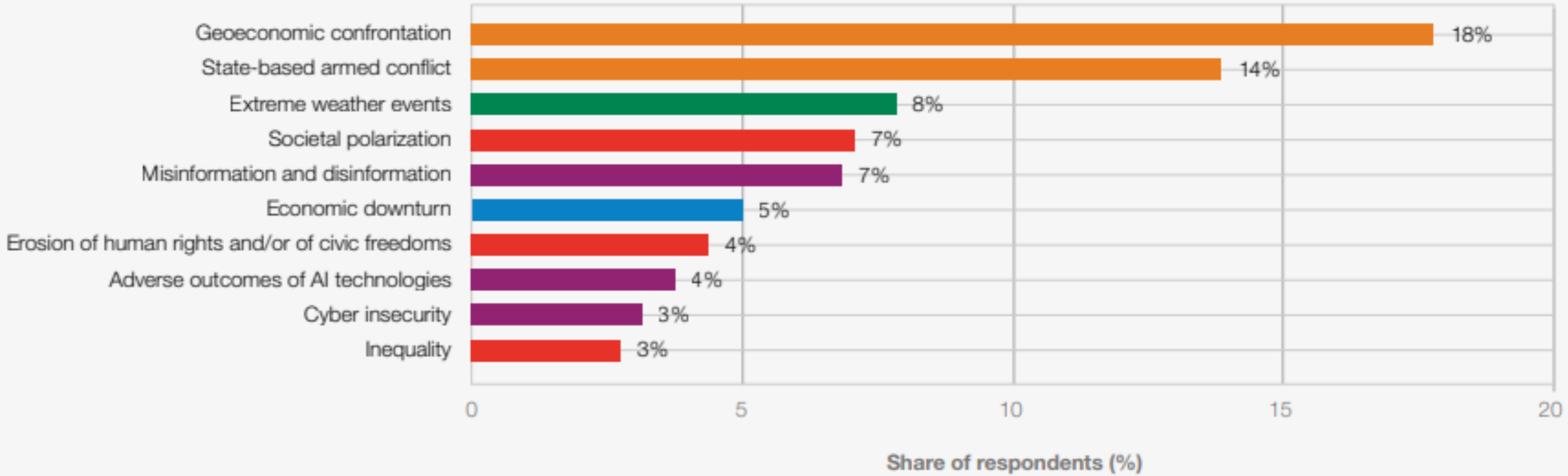

Klimat
Technologia
Demografia
Polityka i geopolityka

1 A. Geopolityka

FIGURE 11

Current Global Risk Landscape

"Please select one risk that you believe is most likely to present a material crisis on a global scale in 2026." (top 10 risks selected by respondents)



Source

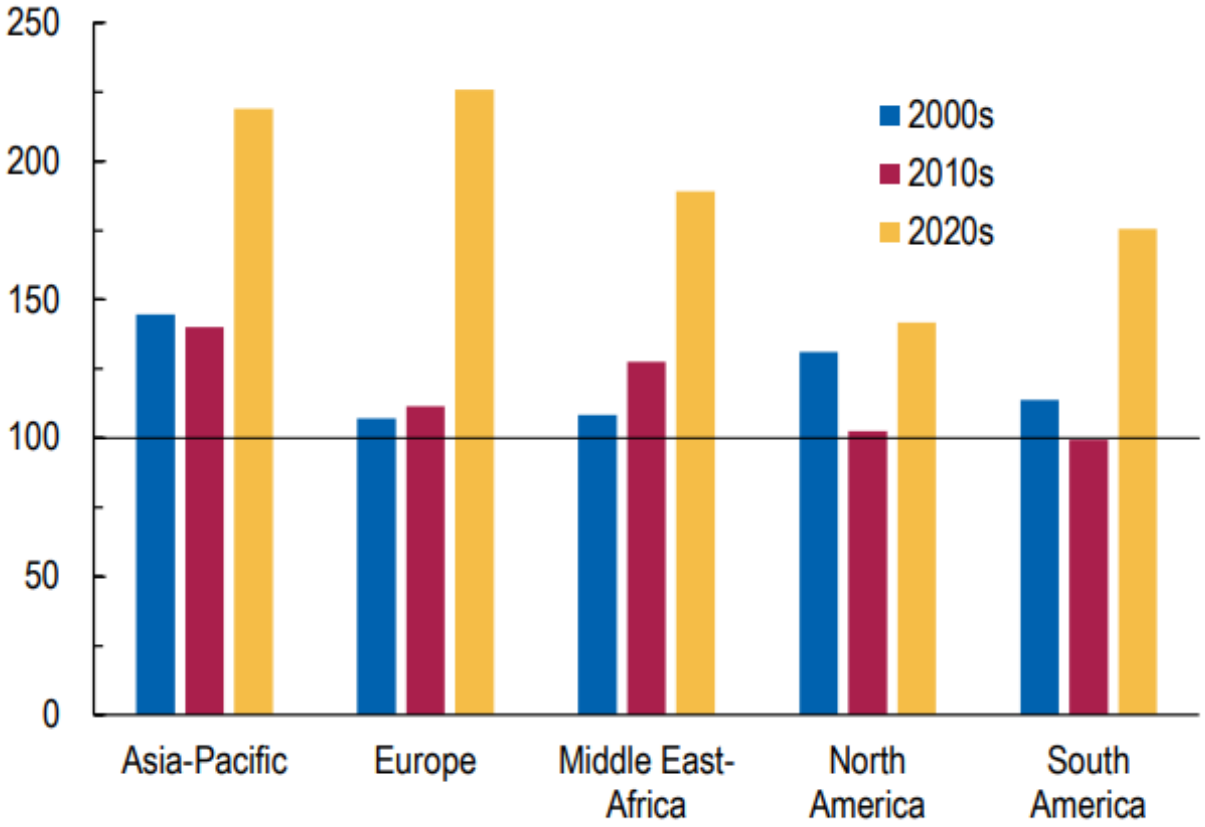
World Economic Forum Global Risks Perception Survey 2025-2026

Risk categories

Economic | Environmental | Geopolitical | Societal | Technological

Figure 1.1. Regional Geopolitical Risk

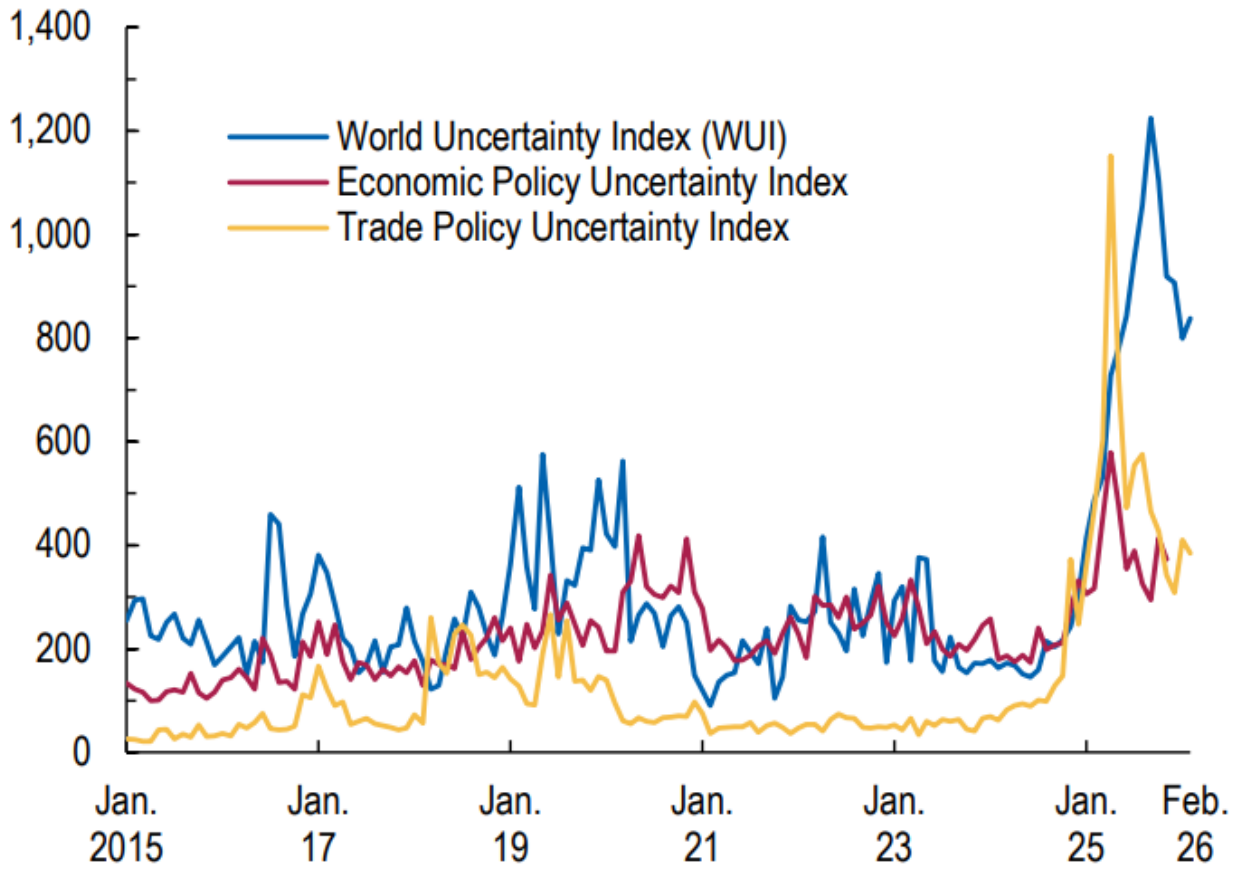
(Index, 1990s = 100)



Sources: Caldara and Iacoviello 2026; and IMF staff calculations.
Note: This figure presents the country-specific geopolitical risk index of Caldara and Iacoviello (2026), a news-based measure of adverse geopolitical events that covers 10 major newspapers in Canada, the United Kingdom, and the United States. The country-level data were downloaded from https://www.matteoiacoviello.com/gpr.htm and averaged at the regional and decadal levels and normalized to 100 for the 1990s.

Figure 1.3. Global Uncertainty

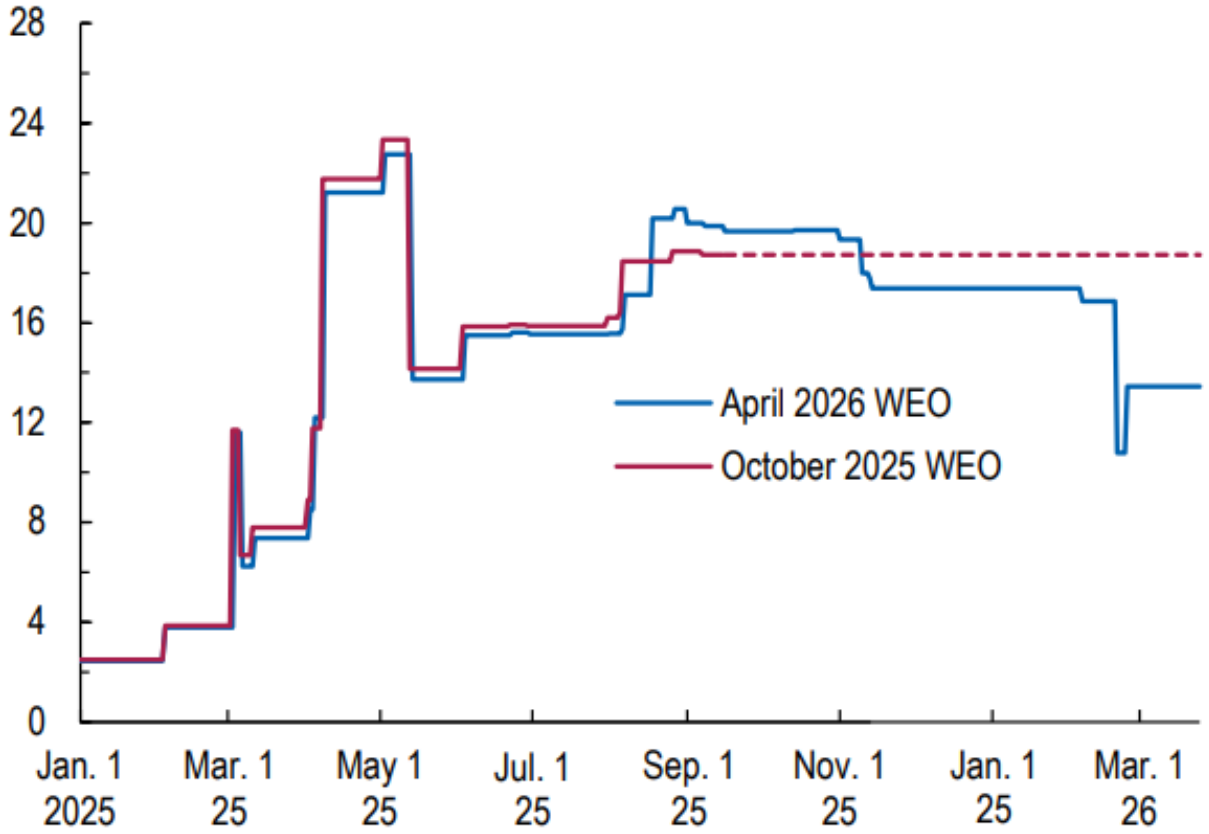
(Index)



Sources: Ahir, Bloom, and Furceri 2022 (worlduncertaintyindex.com); Baker, Bloom, and Davis 2016 (policyuncertainty.com); and Caldara and others 2020 (matteoiacoviello.com/tpu.htm).
Note: The uncertainty measures are news- and media-outlets-based indices that quantify media attention to global news related to overall uncertainty (WUI), economic policy uncertainty, and trade policy uncertainty. WUI is divided by 100.

Figure 1.2. US Effective Statutory Tariff Rate

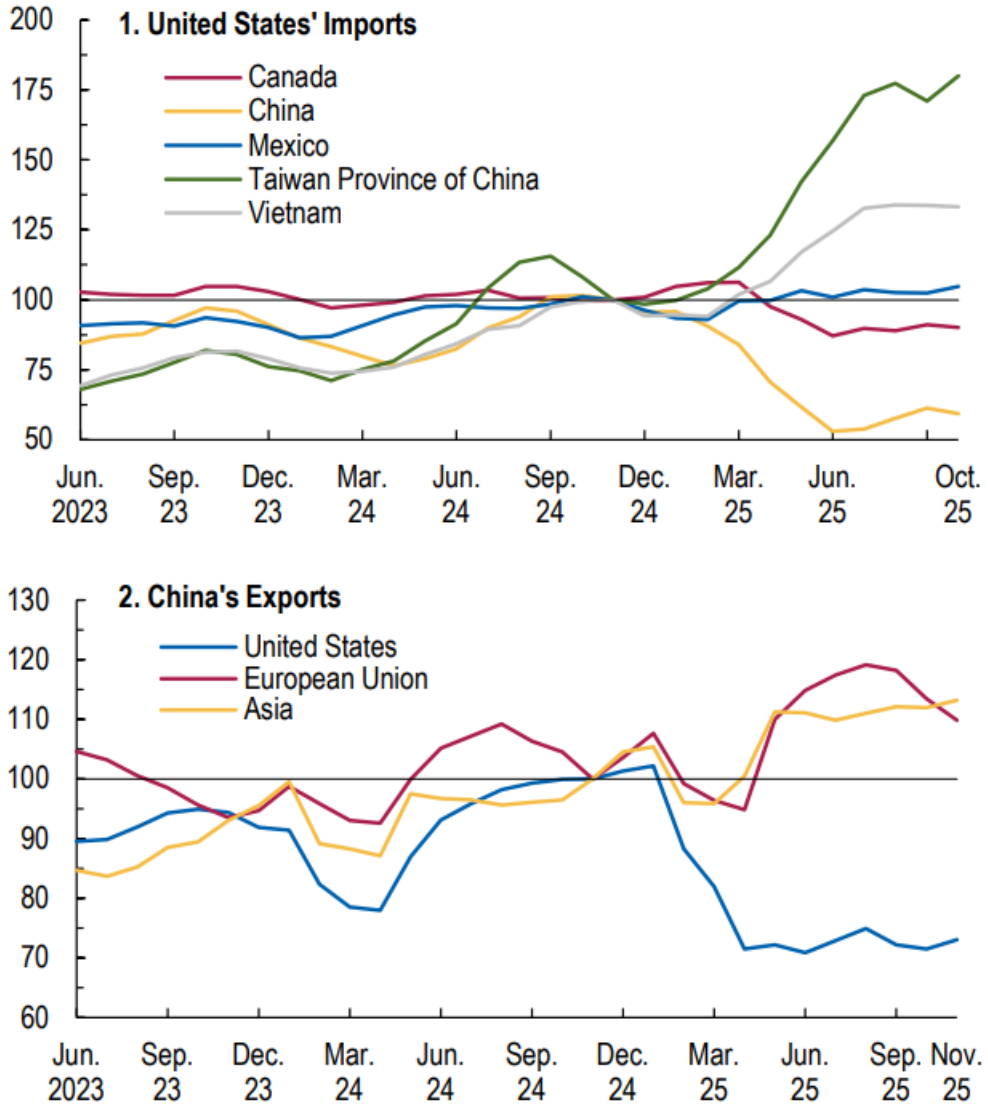
(Percent)



Sources: WTO-IMF Tariff Tracker; and IMF staff calculations.
Note: "Effective statutory tariff rate" is a weighted average of announced statutory rates using pretariff (hence, presubstitution) import weights. Calculations include only tariffs that are in effect at the time noted on the *x*-axis; measures that are not specified and implemented are not included. WEO = *World Economic Outlook*.

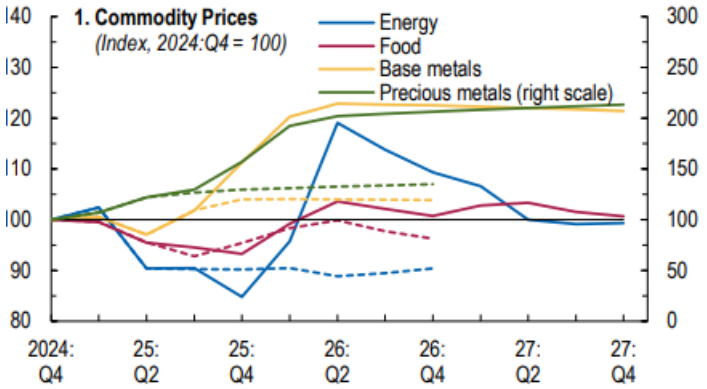
Figure 1.5. Reorientation of Global Trade

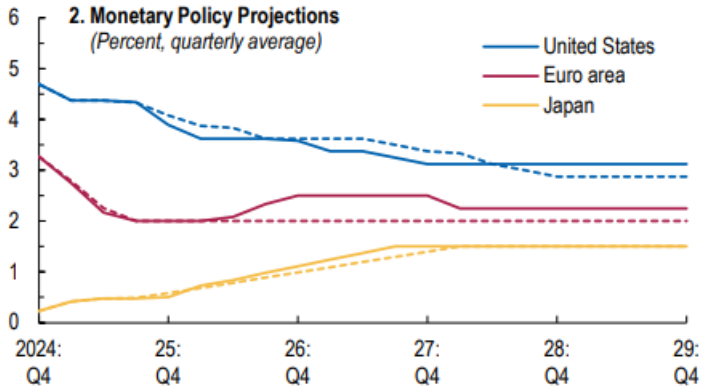
(Index, 2024 = 100)

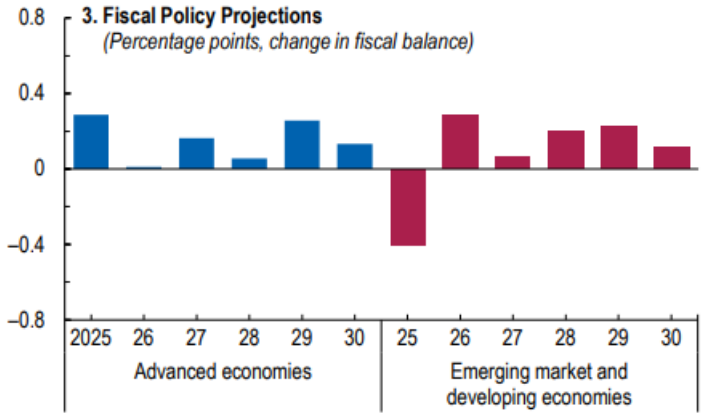


Sources: Antràs and Presbitero 2026; Trade Data Monitor; and IMF staff calculations.
Note: Three-month moving average of non–seasonally adjusted US dollar values, based on cross-border shipments data sourced from Trade Data Monitor. These data can differ from balance of payments data.

Figure 1.7. Global Assumptions







Source: IMF staff calculations.

Figure 1.9. GDP Growth Revisions in the Reference Forecast

(Percentage points)

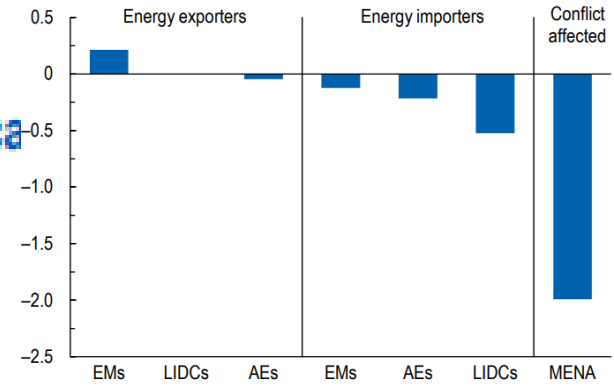
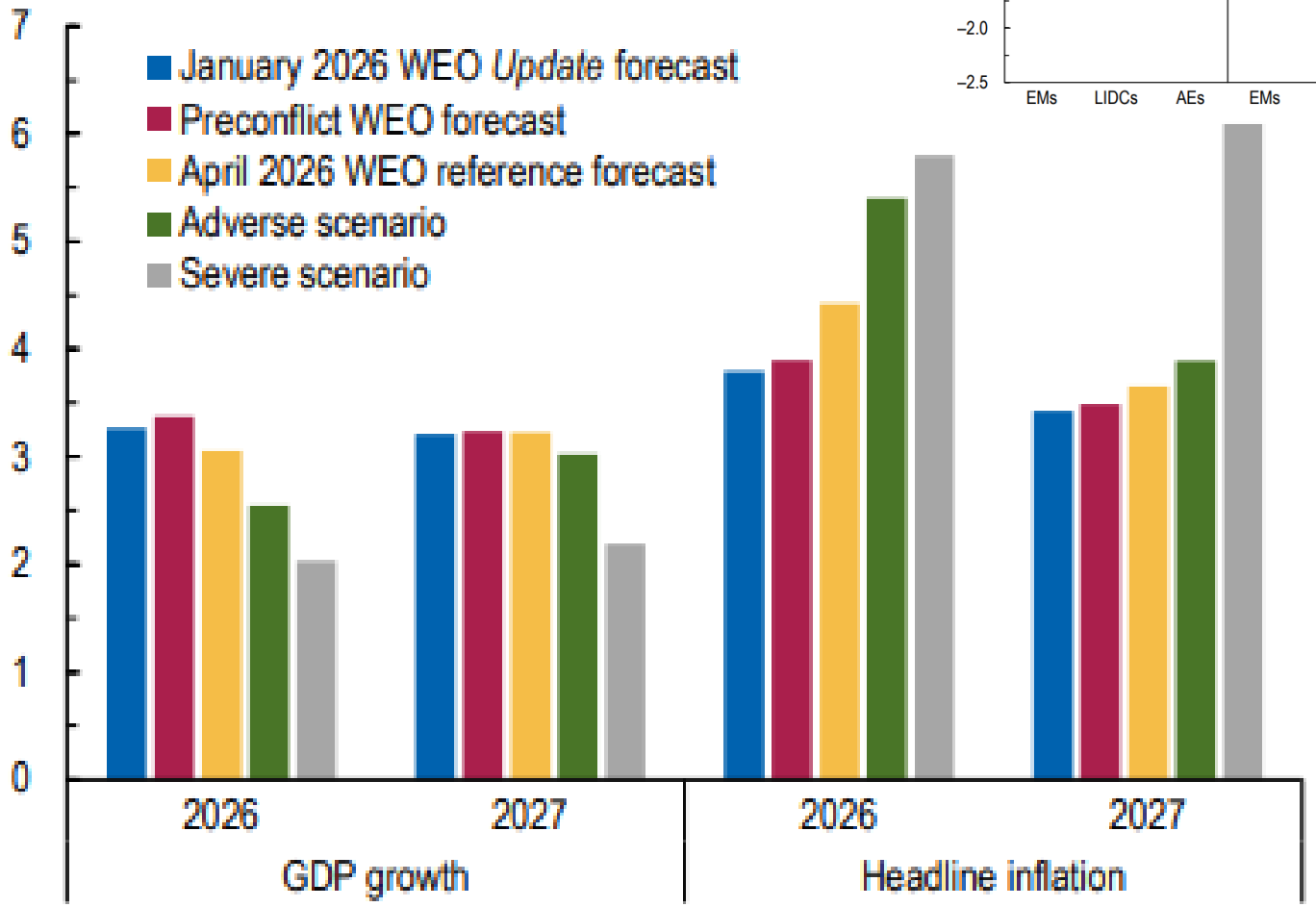


Figure 1.8. Global Growth and Inflation Foreca

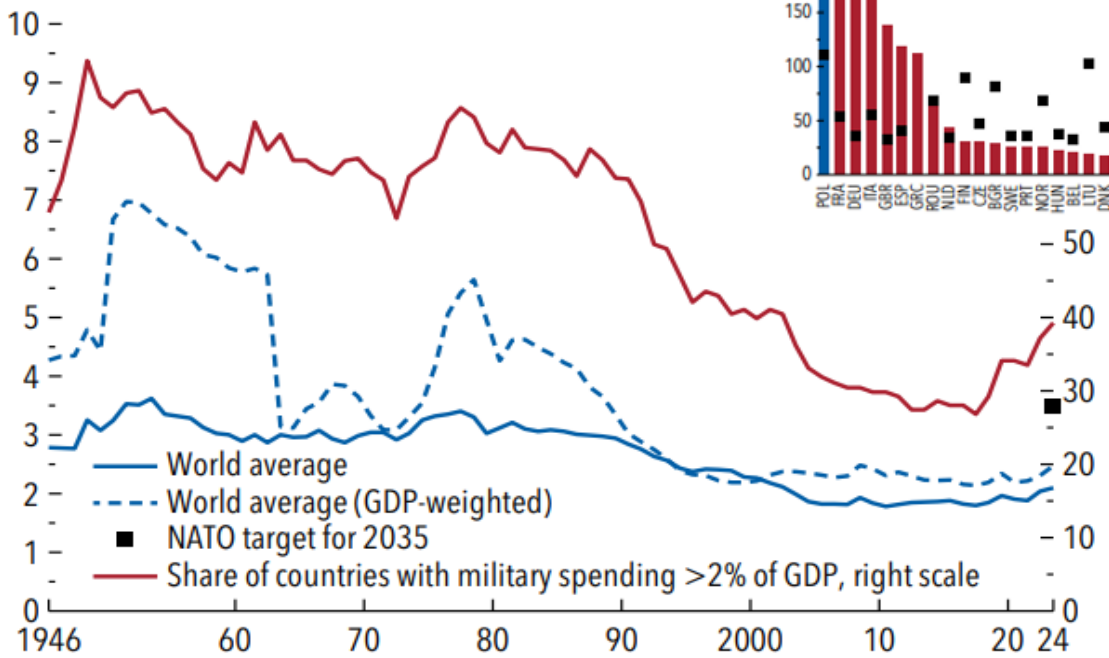
(Percent)



Source: IMF staff estimates.

Figure 2.1. Defense Spending on the Rise

(Percent of GDP, left scale; percent, right scale)



Sources: Gethin 2024; Stockholm International Peace Research Institute Military Expenditure Database; World Human Capital Expenditure Database; and IMF staff calculations.

Note: NATO = North Atlantic Treaty Organization.

Figure 2.1.1. Scaling Up Defense Spending: The Case of Poland

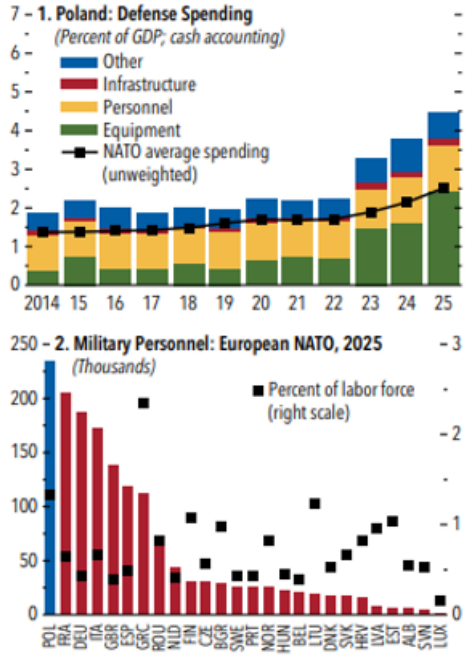


Figure 2.3. Defense Spending Booms

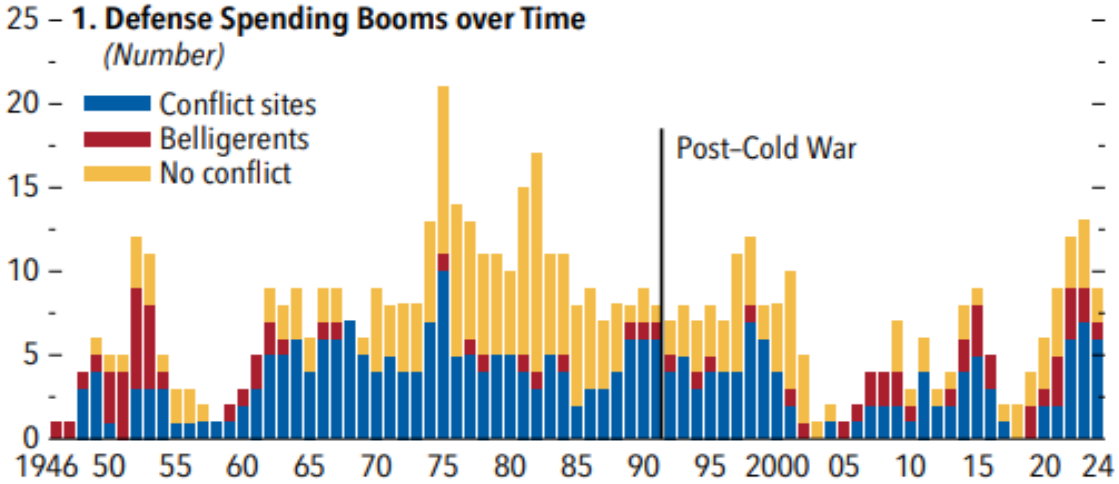
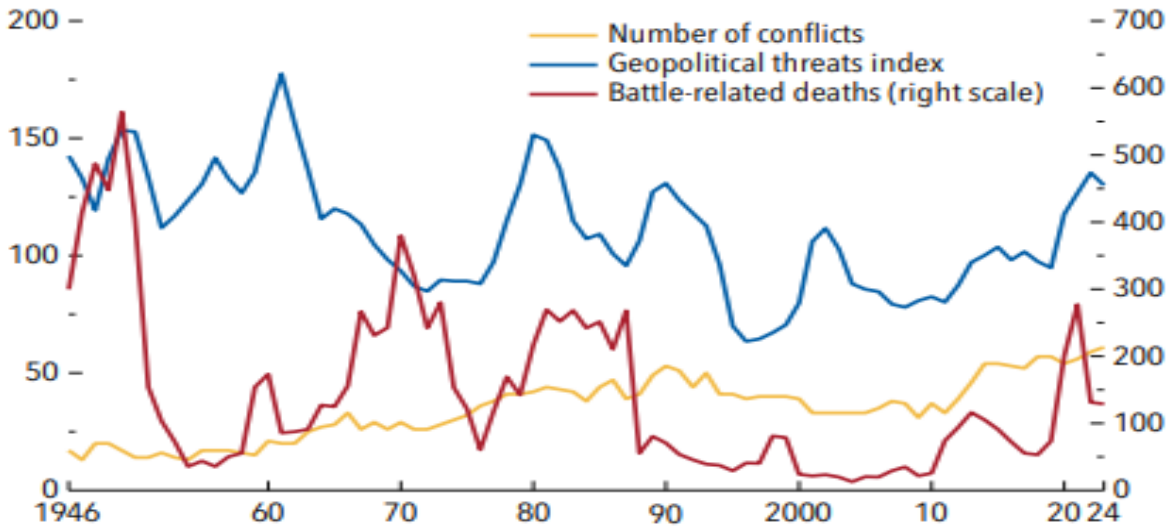


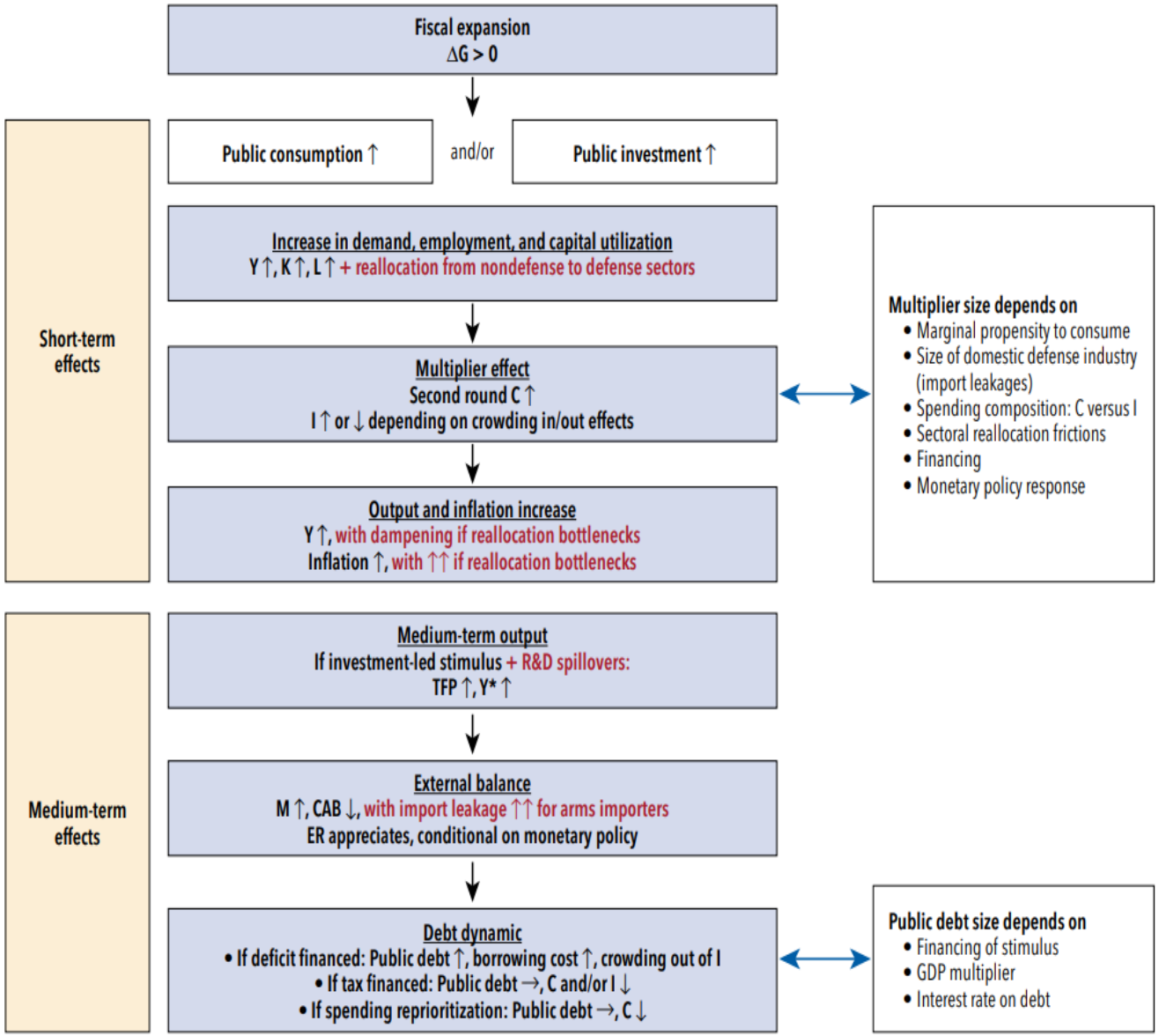
Figure 3.1. Conflicts and Geopolitical Threats

(Number; index, 2019 = 100, left scale; thousands of deaths, right scale)



Sources: Caldara and Iacoviello 2022; PRIO Battle Deaths Dataset version 3.1; UCDP Georeferenced Event Dataset (GED) version 25.1; UCDP/PRIO Armed Conflict Dataset version 25.1; and IMF staff calculations.

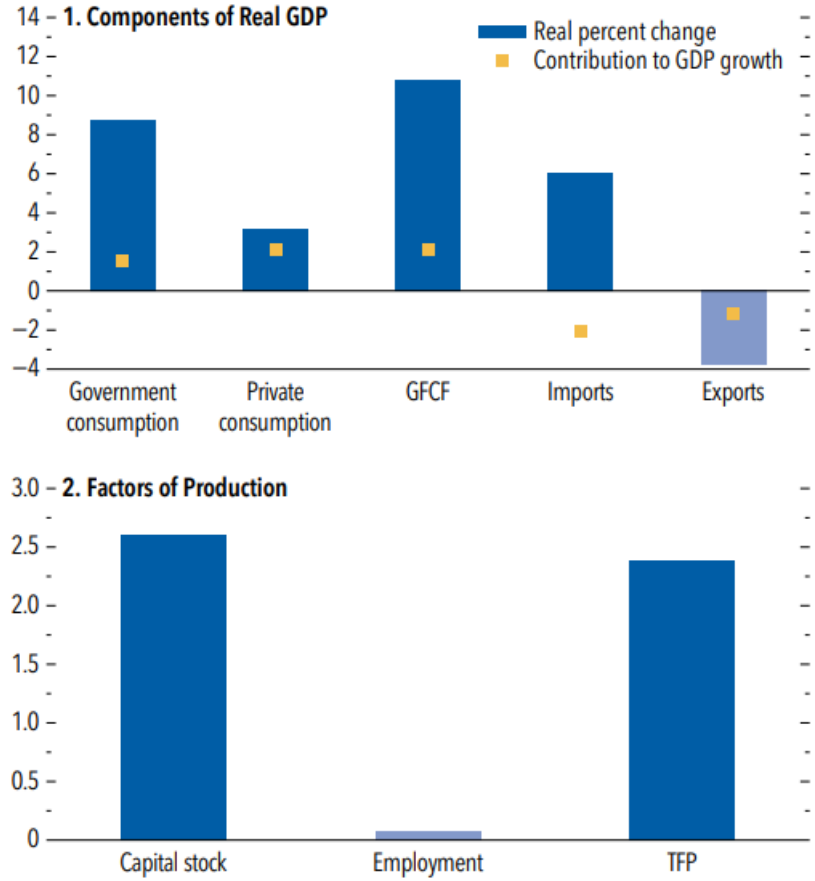
Figure 2.2. Defense Spending: Transmission Channels



Source: IMF staff compilation.

Figure 2.7. Transmission Channels of Defense Spending Booms

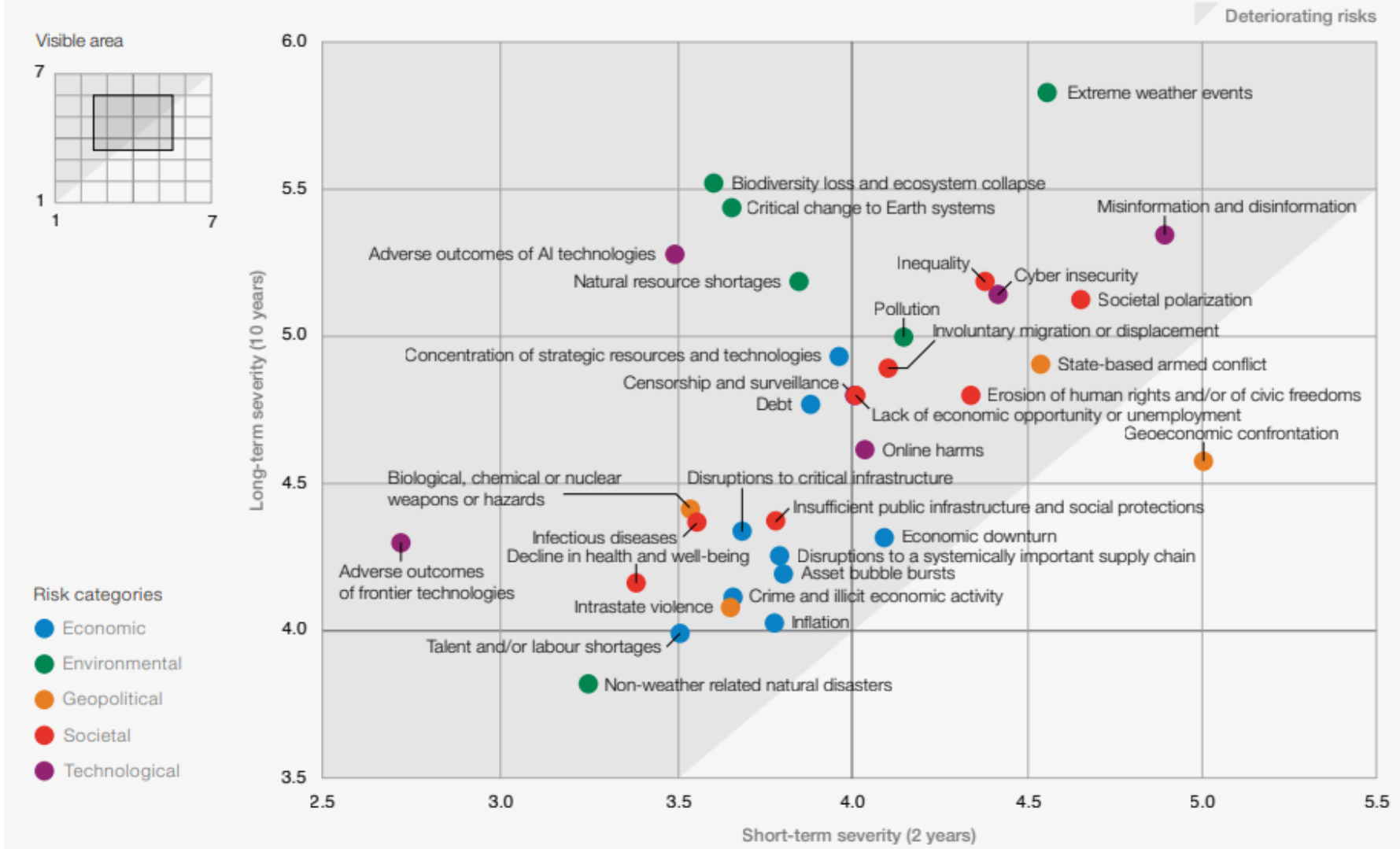
(Percent, three years ahead)



Source: IMF staff calculations.

Note: The panels plot the three-year-ahead coefficients from local projection estimates of cumulative responses to peacetime defense spending booms. Fragile and conflict-affected states, as well as commodity-exporting emerging market and developing economies, are excluded from the sample. The sample period spans 1946–2024. Darker-colored bars denote coefficients that are statistically significant at the 10 percent level. GFCF = gross fixed capital formation; TFP = total factor productivity.

FIGURE 17 | **Relative severity of global risks, short term (2 years) and long term (10 years)**



Source

World Economic Forum Global Risks Perception Survey 2025-2026

Note

Severity was assessed on a 1-7 Likert scale [1 = Low severity, 7 = High severity].

1 B. Demografia

Figure 2: Working age populations falling globally

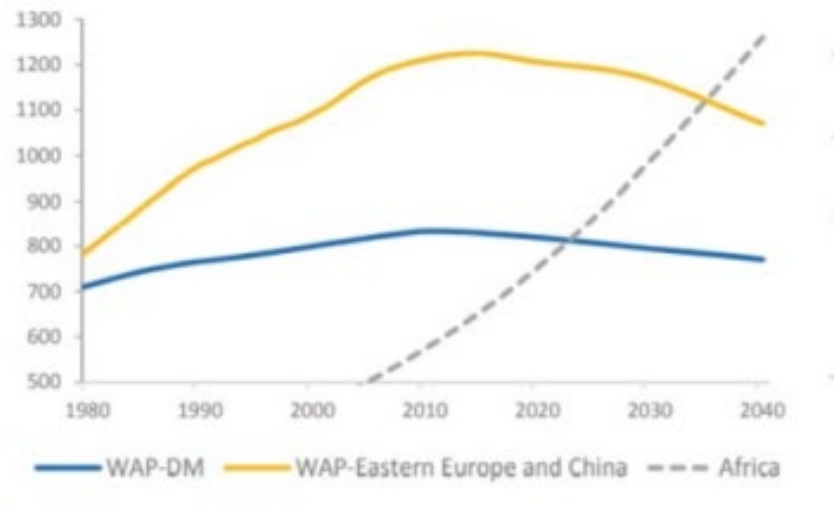
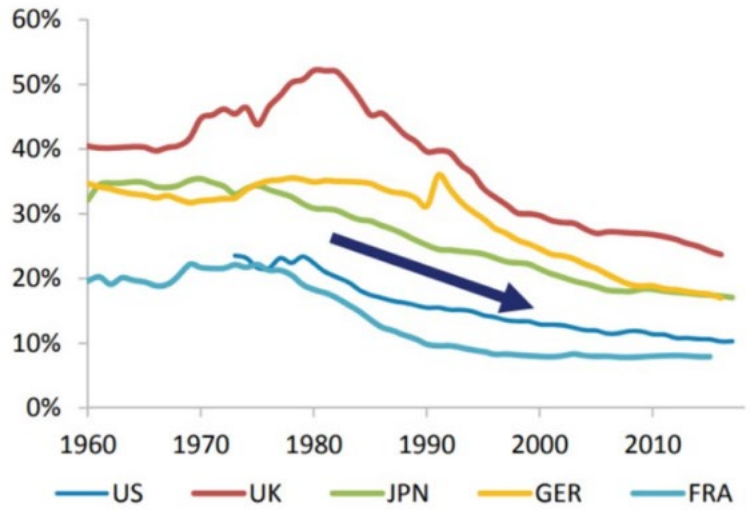
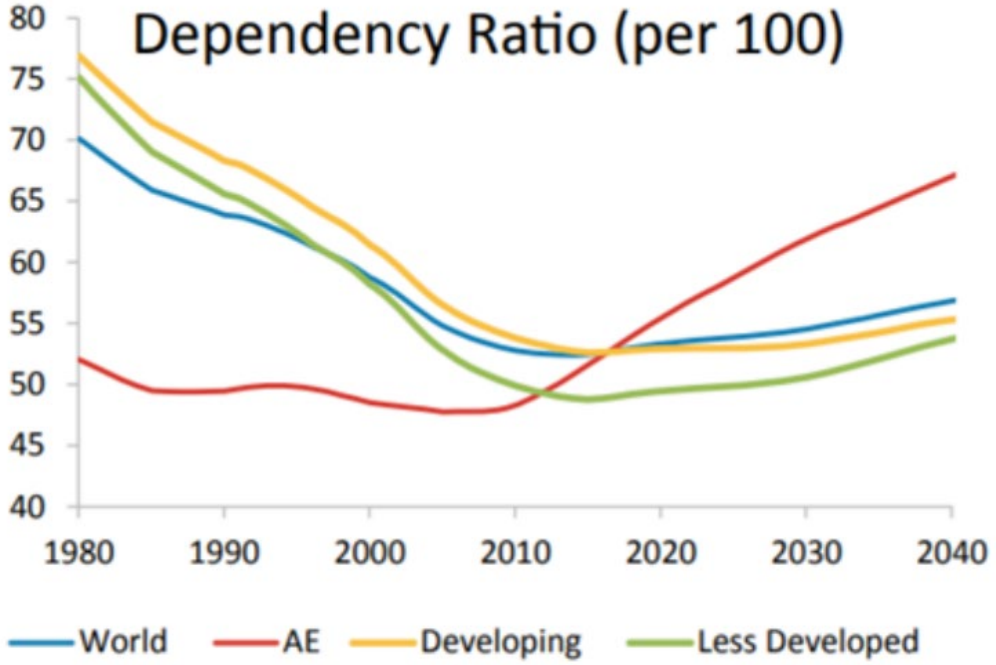


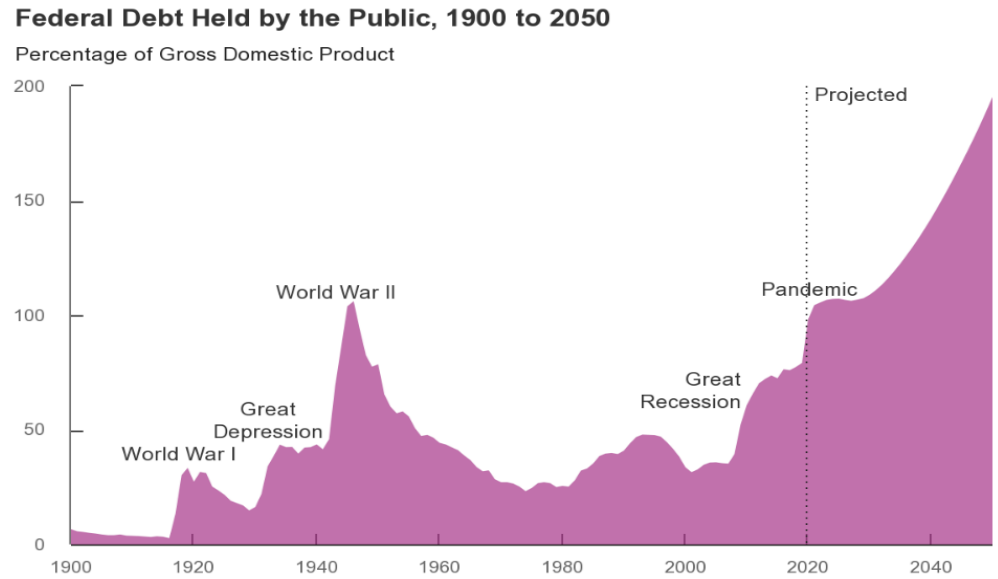
Figure 4: The bargaining power of labour in the AEs has fallen due to the global shock to labour supply



Source: OECD



inflacja



Źródło: https://www.suerf.org/policynotes/17385/the-great-demographic-reversal-ageing-societies-waning-inequality-and-an-inflation-revival

Dostępność towarów i usług zależy od produkcji

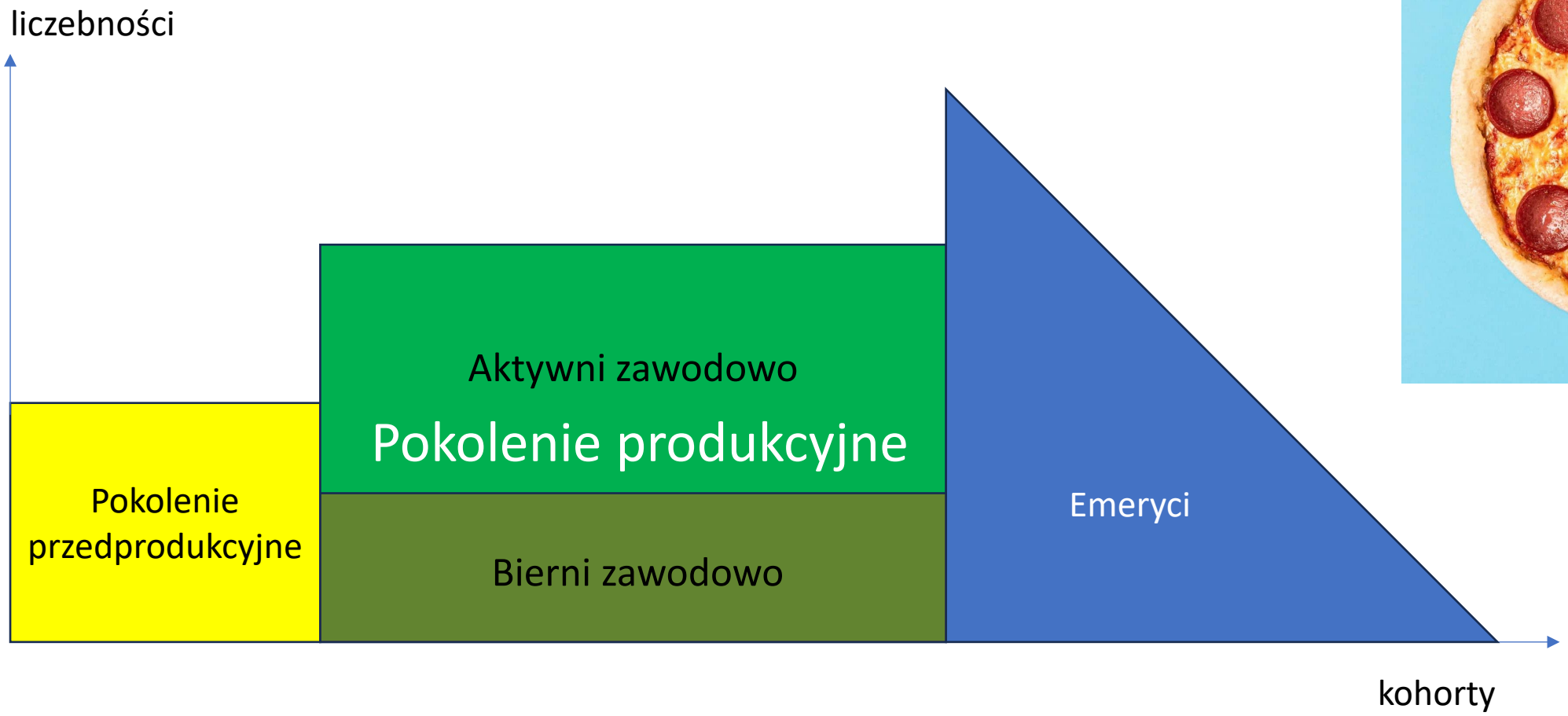
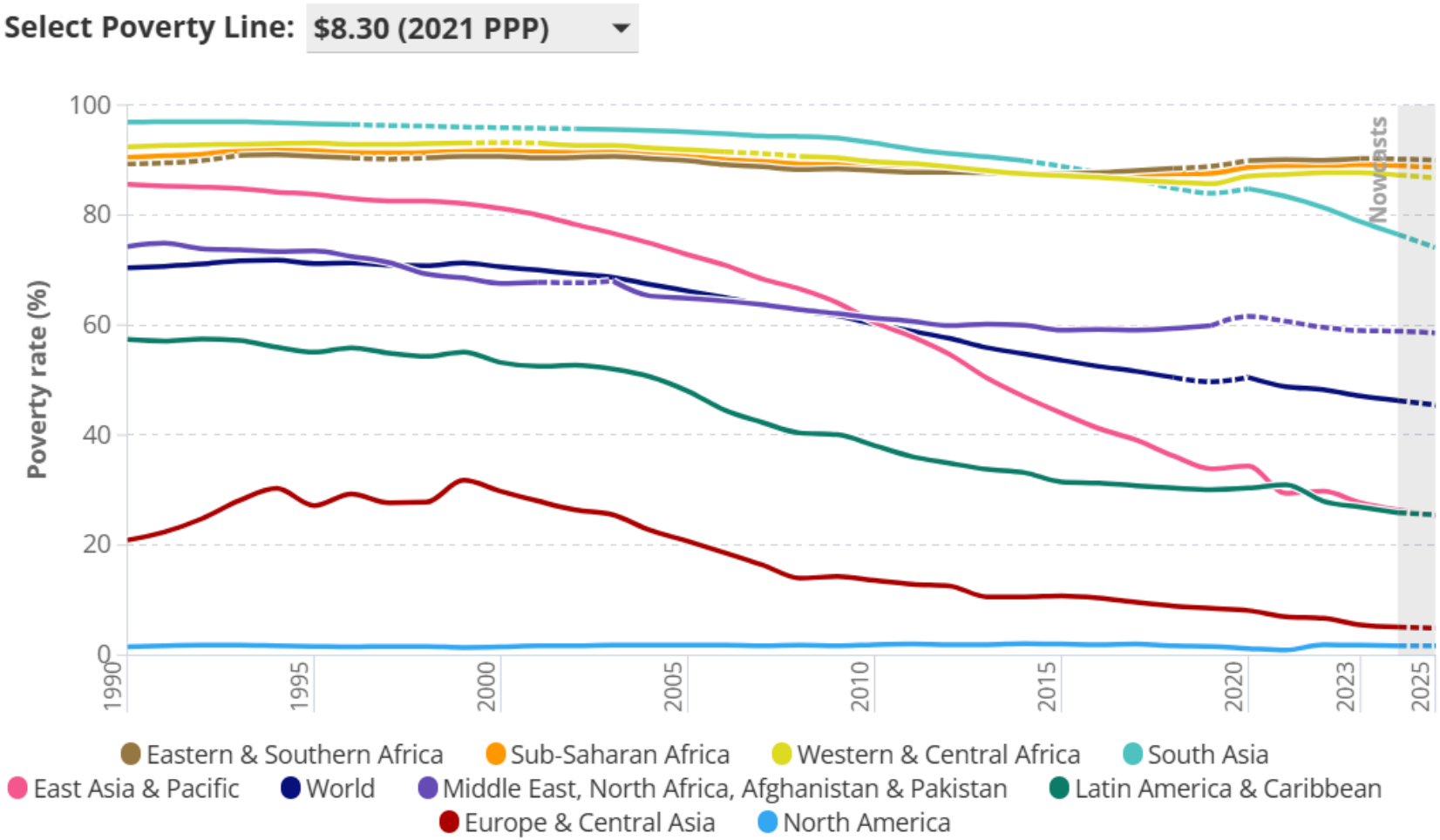


Figure 1: Global and regional poverty trends, 1990 – 2025

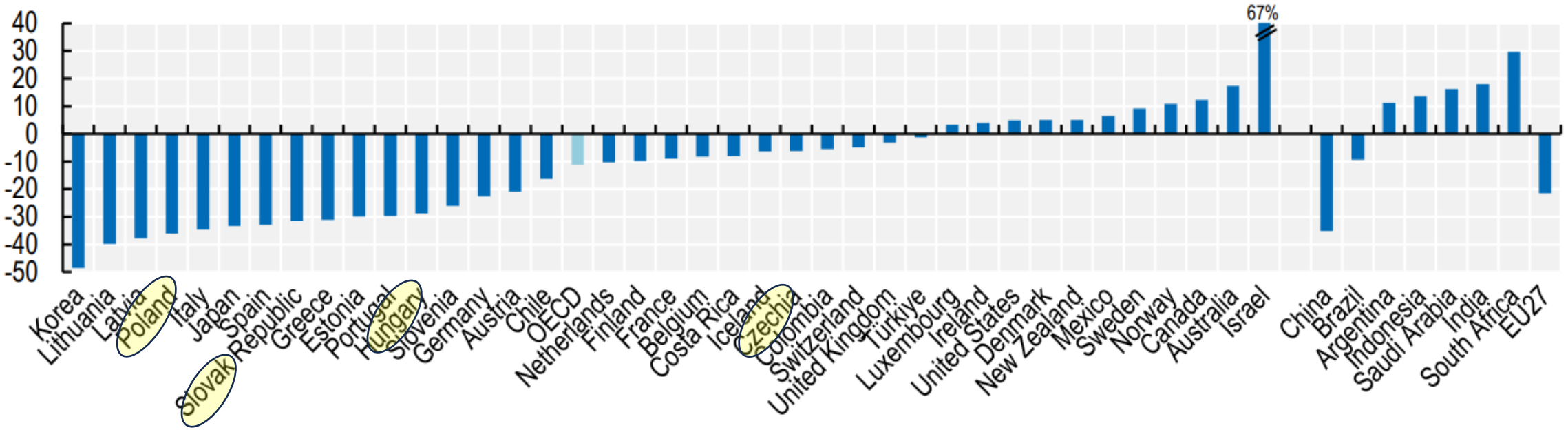


Source: World Bank Group, Poverty and Inequality Platform (PIP) • All observed and projected data are shown with solid and dashed lines, respectively, where dashed data points are cases with insufficient data coverage (i.e., less than 50% of the population have survey data). All 2024-2025 data points are poverty nowcasts.

WORLD BANK GROUP

Figure 6.5. The working-age population will decline in a large number of OECD countries

Change in the working age population (20-64), 2022-62, percentage

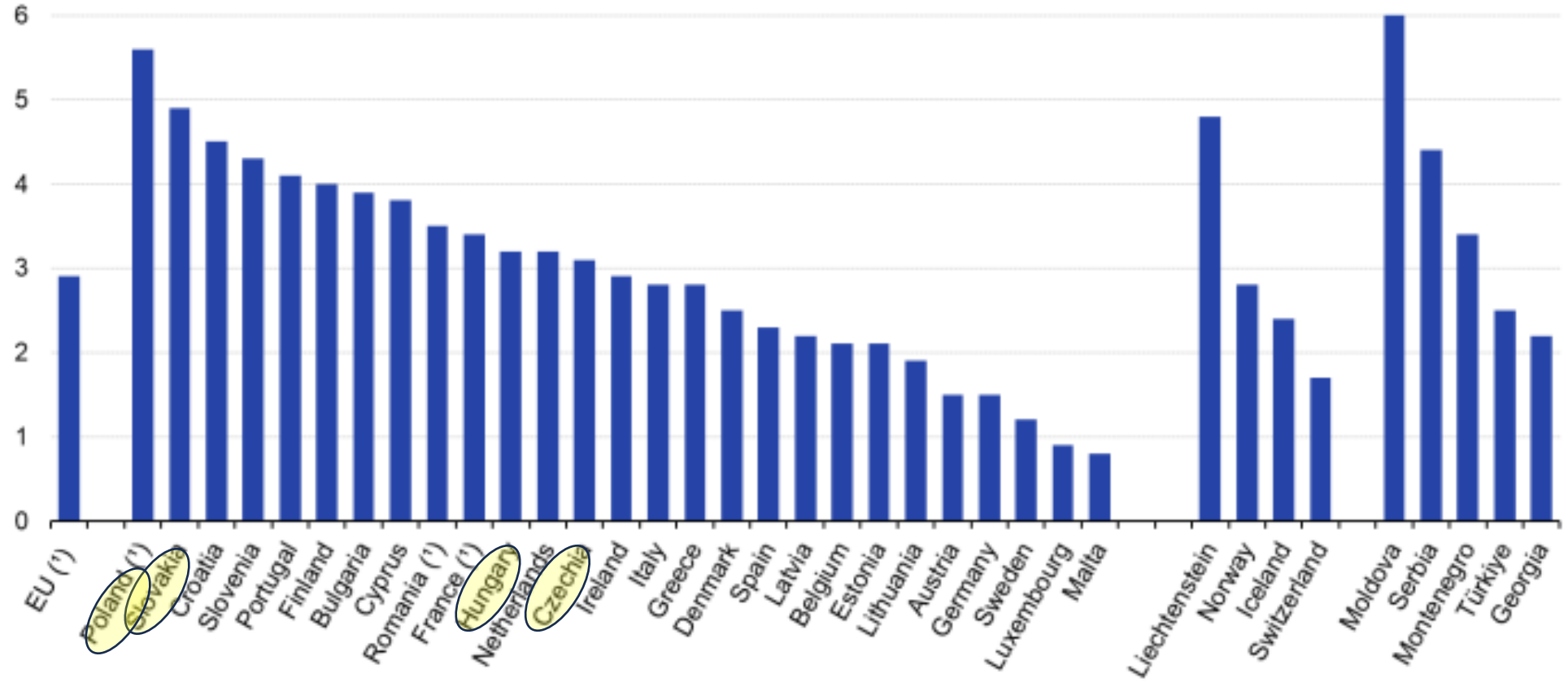


Source: United Nations World Population Prospects: The 2022 Revision.

StatLink https://stat.link/0i8b9n

Źródło: https://www.oecd-ilibrary.org/docserver/1a0697c9-en.pdf?expires=1732137288&id=id&accname=guest&checksum=0D8F7632451A6F1EE69025BBEE92C3D5

Increase in the share of the population aged 65 years or over between 2014 and 2024
(percentage points)



(¹) 2024 provisional/estimated.
Source: Eurostat (online data code: demo_pjanind)

eurostat

Table 6.2. Demographic old-age to working-age ratio: Historical and projected values, 1952-2082

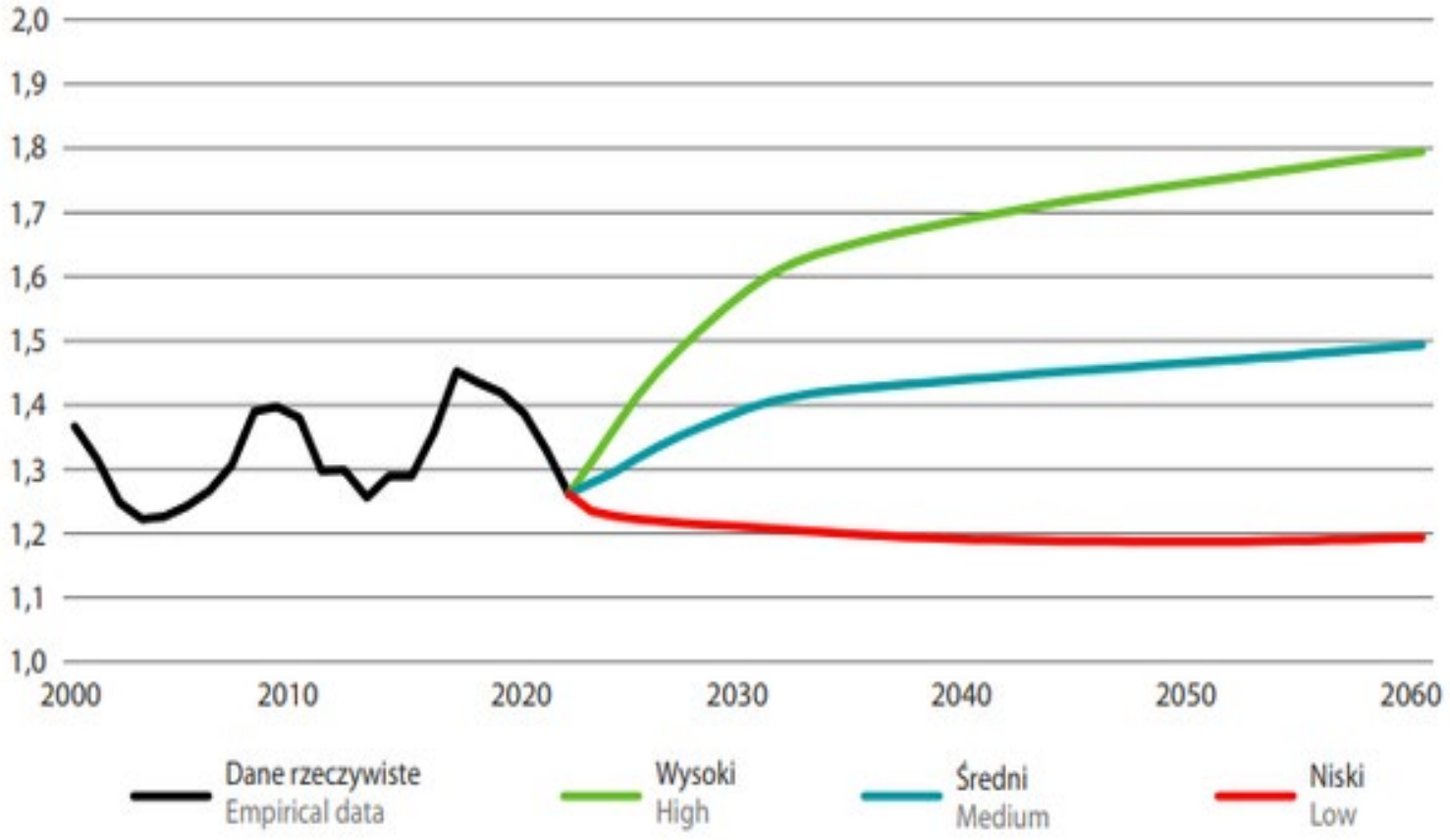
	1952	1962	1992	2022	2052	2082		1952	1962	1992	2022	2052	2082
Australia	14.2	16.2	19.3	28.6	43.7	59.1	Mexico	7.0	7.2	9.1	14.2	34.0	63.1
Austria	18.1	21.8	24.4	32.5	59.0	66.0	Netherlands	14.7	17.6	20.9	34.7	51.0	63.0
Belgium	18.5	21.5	25.5	34.0	52.2	63.9	New Zealand	17.0	17.0	19.6	27.7	44.9	62.0
Canada	14.5	15.3	18.9	31.7	46.3	59.5	Norway	16.6	20.8	28.1	31.3	46.5	61.0
Chile	6.4	7.3	11.6	20.9	48.6	73.0	Poland	9.5	11.5	18.2	30.3	59.9	68.7
Colombia	7.5	7.7	8.0	14.5	37.7	64.2	Portugal	13.3	15.1	24.6	39.0	69.7	74.7
Costa Rica	6.9	7.4	9.9	17.5	43.7	74.8	Slovak Republic	12.0	13.5	18.4	27.3	56.8	62.4
Czechia	14.1	17.2	21.9	35.3	49.0	46.3	Slovenia	13.5	14.0	18.3	35.3	65.7	66.9
Denmark	16.3	19.7	25.7	35.6	44.3	55.9	Spain	13.0	15.2	24.3	33.4	77.2	84.7
Estonia	18.4	17.9	20.7	35.6	57.9	64.7	Sweden	17.4	20.9	30.8	35.9	46.0	60.4
Finland	12.2	13.9	22.5	41.5	52.4	69.6	Switzerland	16.1	18.0	23.4	31.8	56.4	62.0
France	19.7	21.5	24.9	39.3	57.1	68.4	Türkiye	8.4	9.7	9.7	14.2	39.3	60.9
Germany	16.9	19.8	23.7	38.0	59.1	64.8	United Kingdom	18.3	20.7	26.9	33.2	49.1	63.8
Greece	12.9	14.9	24.1	39.3	70.7	79.4	United States	14.9	18.1	21.0	29.4	43.4	57.7
Hungary	13.6	16.3	23.3	33.2	51.8	57.5	**OECD**	**13.8**	**15.7**	**20.4**	**31.3**	**53.8**	**66.1**
Iceland	14.4	17.2	19.2	25.5	45.7	64.9							
Ireland	20.7	23.1	21.7	25.8	51.2	61.4	Argentina	7.6	9.9	17.3	20.8	34.4	57.4
Israel	7.8	10.9	19.3	23.1	31.1	40.9	Brazil	5.5	6.3	9.1	15.8	40.1	62.3
Italy	14.6	16.9	25.4	41.0	78.1	83.4	China	9.6	8.0	9.7	21.6	58.8	92.9
Japan	9.9	10.8	21.6	55.4	80.0	85.7	India	6.5	7.3	8.6	11.7	26.2	50.4
Korea	6.3	7.5	8.6	26.3	82.3	117.0	Indonesia	4.0	5.4	8.3	11.5	26.2	39.4
Latvia	17.9	17.7	21.2	38.0	56.4	60.8	Saudi Arabia	7.7	8.4	5.5	4.4	39.5	49.6
Lithuania	14.8	15.1	19.4	35.1	56.8	60.9	South Africa	8.3	7.6	8.0	10.3	19.7	29.6
Luxembourg	16.0	18.0	21.2	23.5	48.2	59.4	EU27	14.8	16.6	22.3	34.6	58.2	66.7

Note: The demographic old-age to working-age ratio is defined as the number of individuals aged 65 and over per 100 people aged between 20 and 64.
Source: United Nations, Department of Economic and Social Affairs (2022), World Population Prospects 2022, Online Edition (for future periods: medium-variant forecast).

StatLink https://stat.link/yo742p

Źródło: https://www.oecd-ilibrary.org/docserver/1a0697c9-en.pdf?expires=1732137288&id=id&accname=guest&checksum=0D8F7632451A6F1EE69025BBEE92C3D5

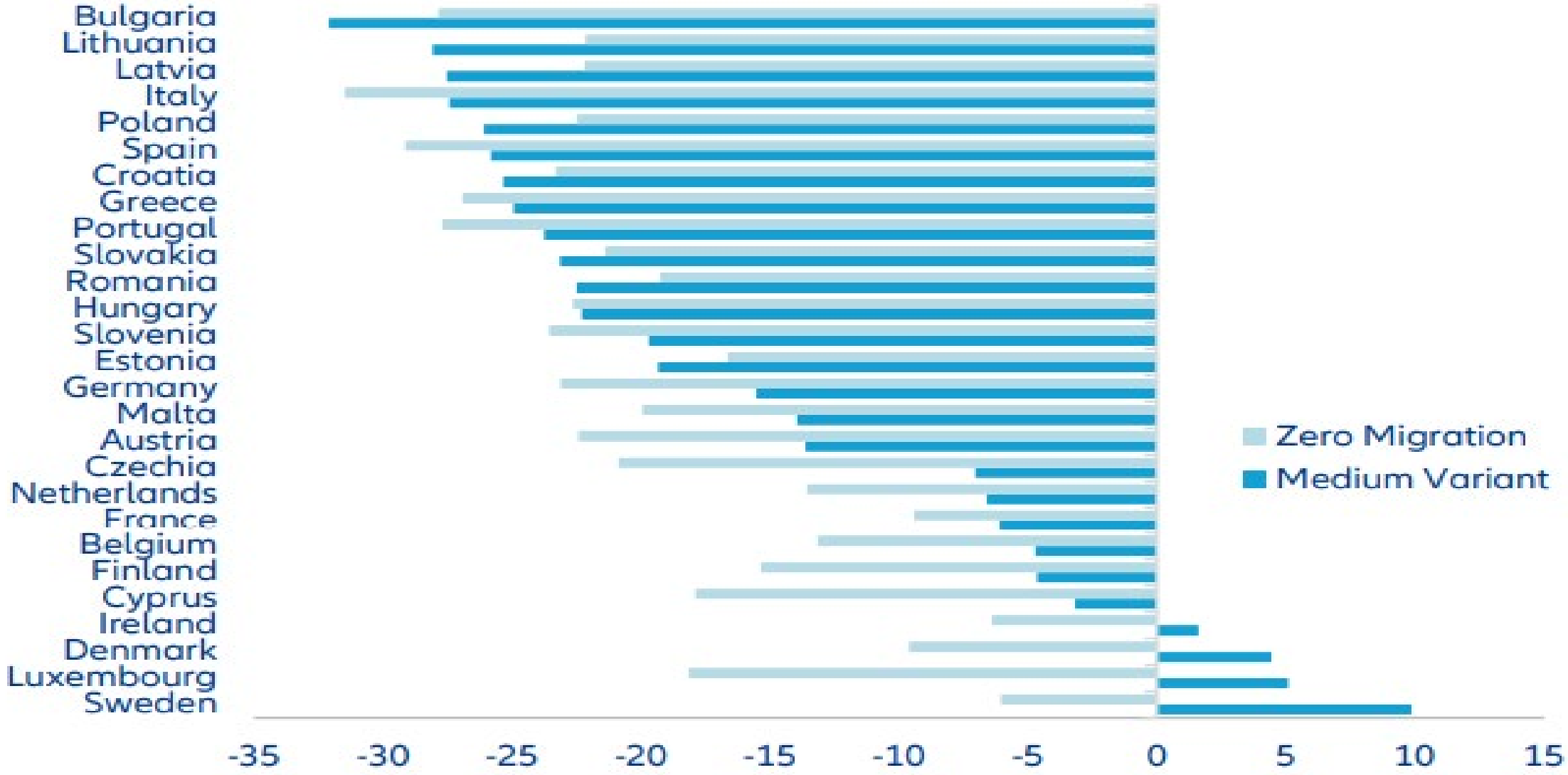
Wykres 1. Współczynnik dzietności w latach 2000–2060
Chart 1. Total fertility rate 2000–2060



Prognoza 2060	W mln osób
Dzieci	3
Produkcyjni	13
Emeryci	11
Old age dependency	85%

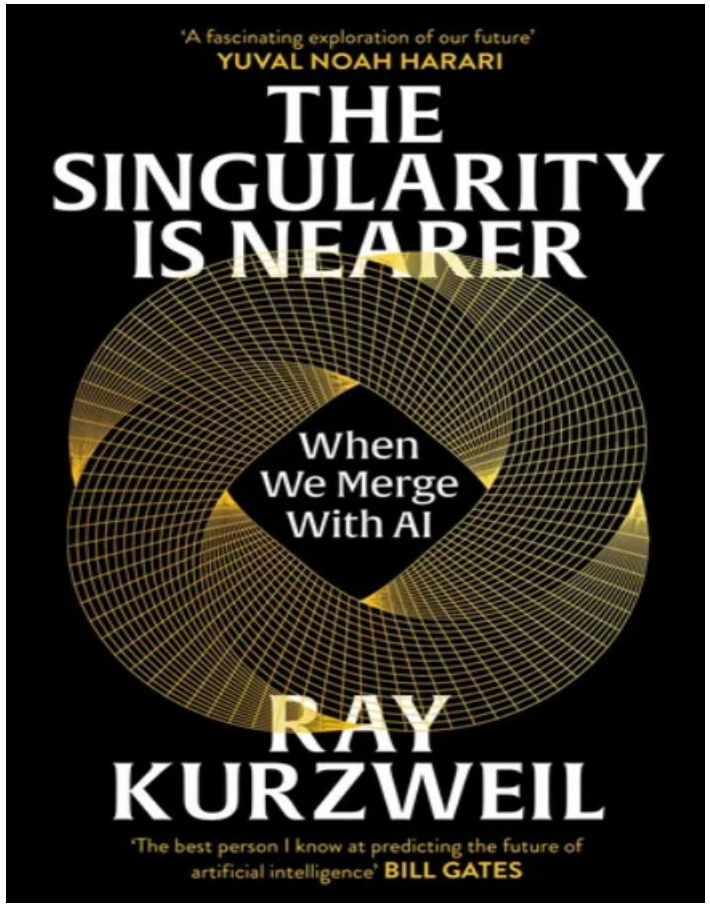
Źródło: prognoza demograficzna GUS z 2023 r. Czerwone kropki pokazują dzietność zrealizowaną w latach 2024 i 2025.
Tabela pokazuje realistyczny scenariusz demograficzny oparty o dzietność 1,1, coraz dłuższe trwanie życia i niską imigrację.

Figure 5: Change in working-age population until 2050, scenarios (in percent)

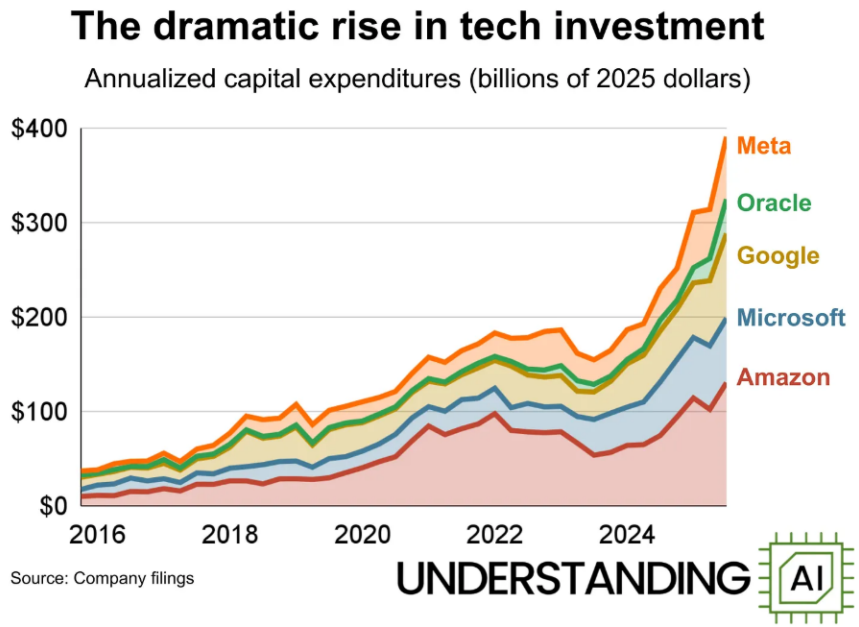


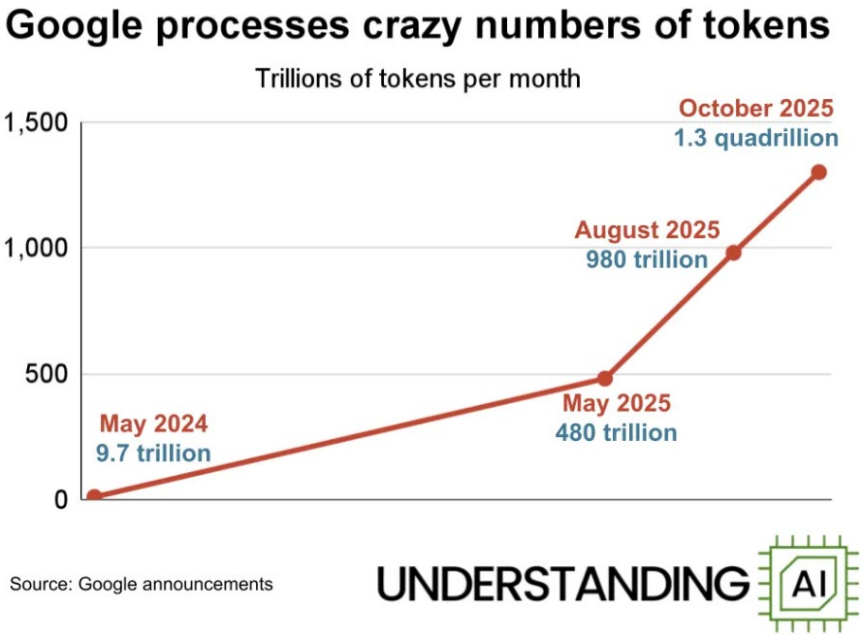
Source: UN Population Division (2022)

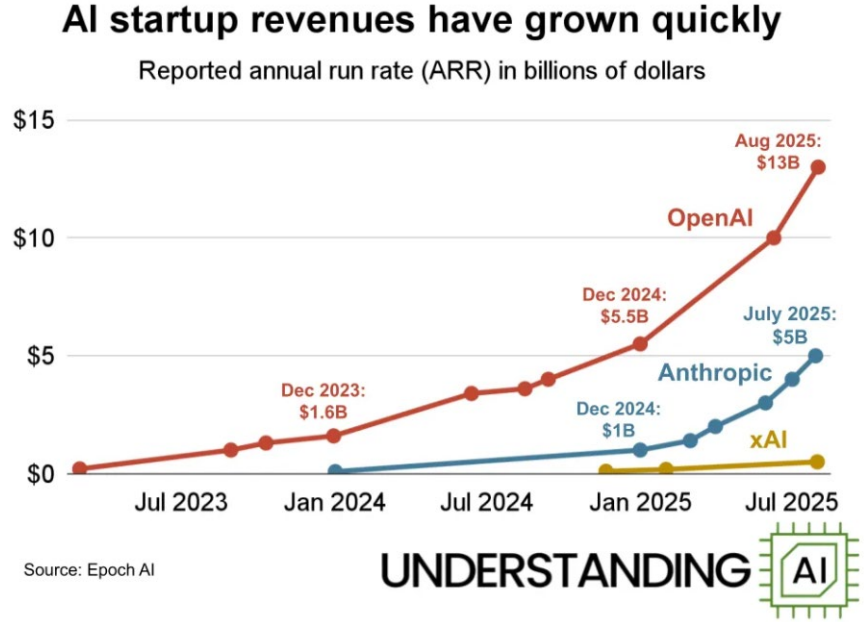
1 C. Technologia

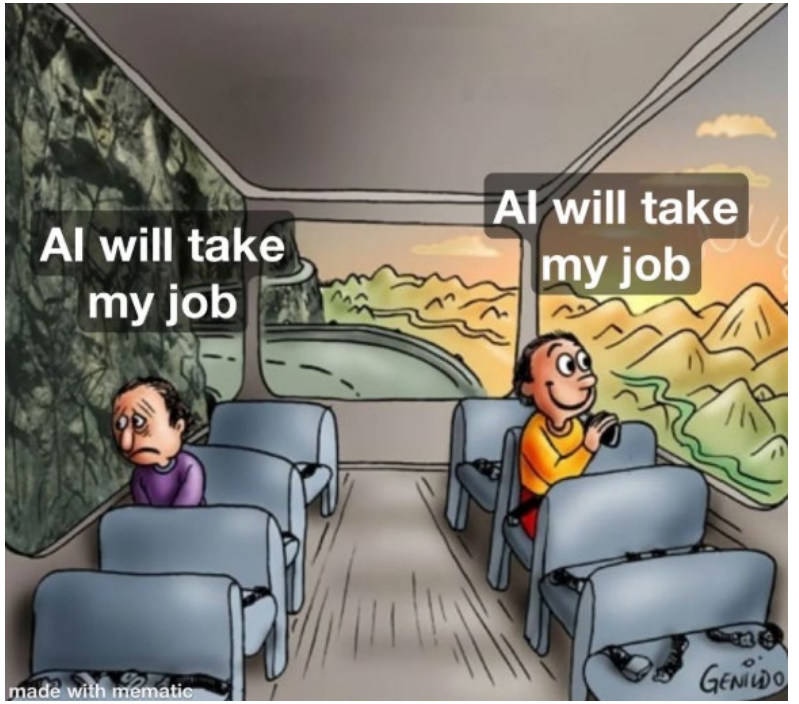

'A fascinating exploration of our future'
YUVAL NOAH HARARI
THE SINGULARITY IS NEARER
When We Merge With AI
RAY KURZWEIL
'The best person I know at predicting the future of artificial intelligence' BILL GATES


KONIEC
LUDZKOŚCI
JAKĄ ZNAMY

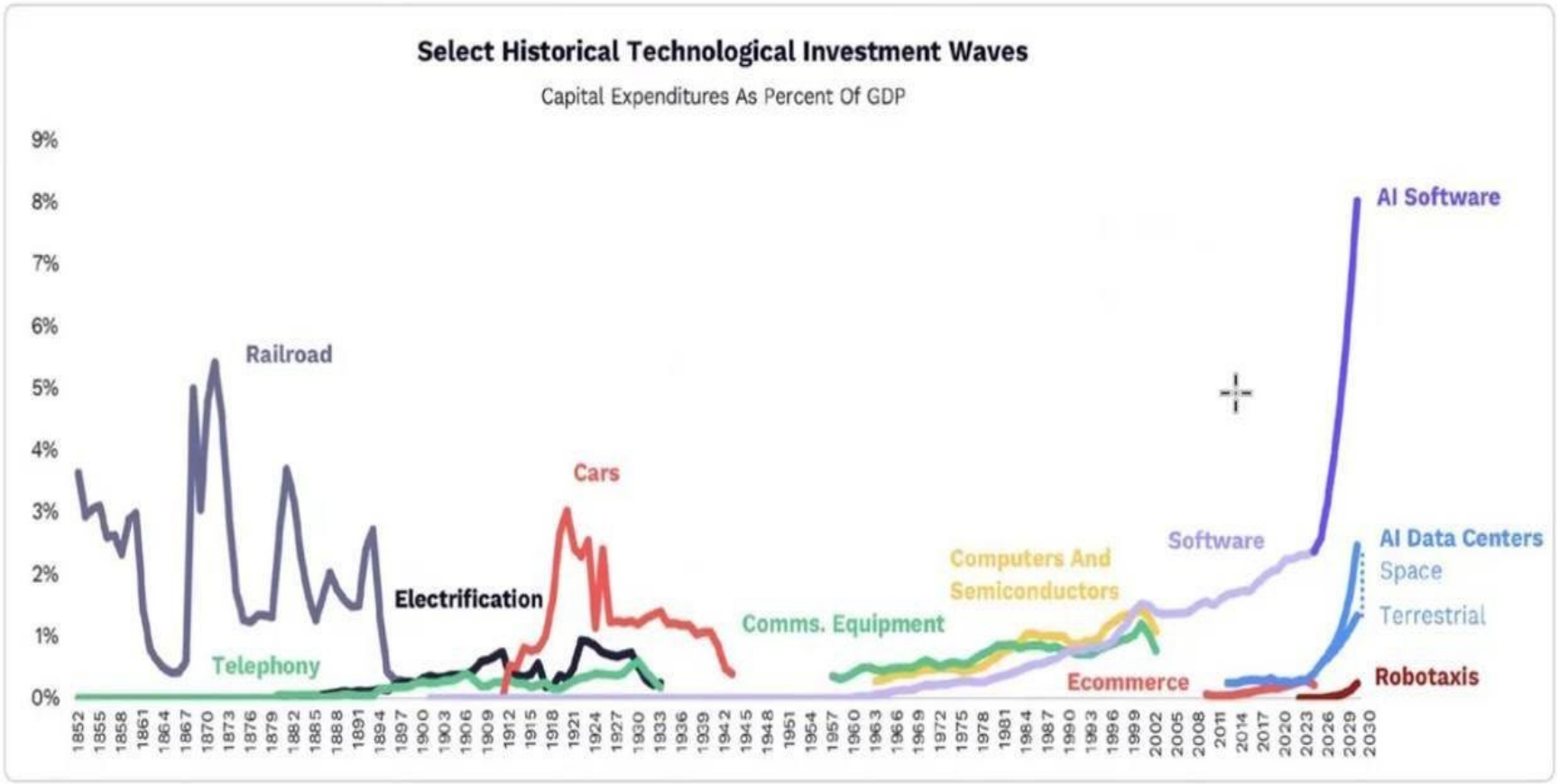

The dramatic rise in tech investment
Annualized capital expenditures (billions of 2025 dollars)
$400
$300
$200
$100
$0
2016
2018
2020
2022
2024
Meta
Oracle
Google
Microsoft
Amazon
Source: Company filings
UNDERSTANDING AI


Google processes crazy numbers of tokens
Trillions of tokens per month
1,500
1,000
500
0
May 2024
9.7 trillion
May 2025
480 trillion
August 2025
980 trillion
October 2025
1.3 quadrillion
Source: Google announcements
UNDERSTANDING AI


AI startup revenues have grown quickly
Reported annual run rate (ARR) in billions of dollars
$15
$10
$5
$0
Jul 2023
Jan 2024
Jul 2024
Jan 2025
Jul 2025
Aug 2025:
$13B
OpenAI
Dec 2024:
$5.5B
July 2025:
$5B
Anthropic
Dec 2023:
$1.6B
Dec 2024:
$1B
xAI
Source: Epoch AI
UNDERSTANDING AI


AI will take my job
AI will take my job
made with mematic

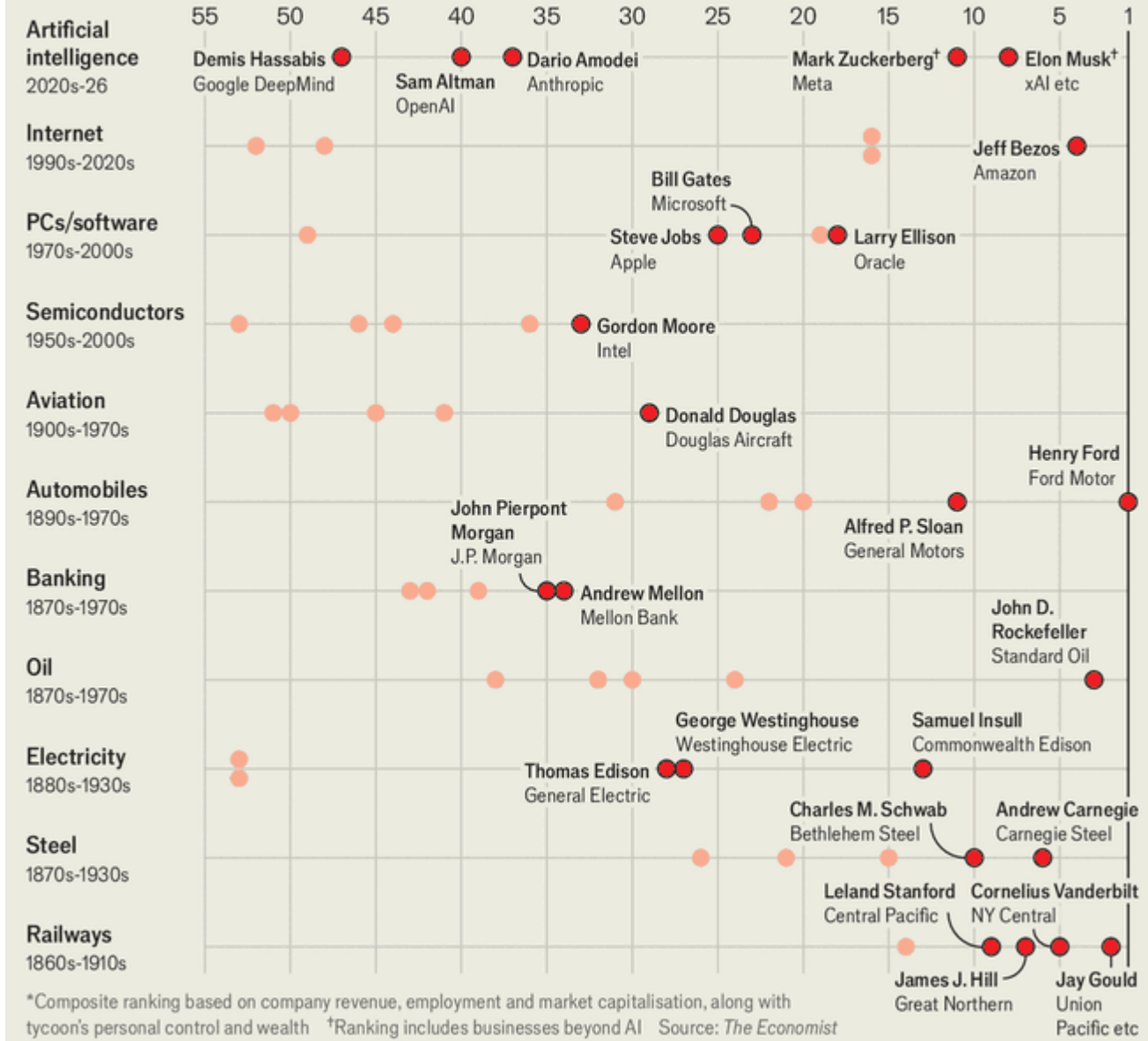
The World Is Entering An Unprecedented Technology Investment Cycle



Note: All Historical lines are US fixed asset annual gross investment as percent of US GDP and derived from the NIPA tables. "Ecommerce" signifies warehouse investments. Data center and Robotaxi are percent of global consensus global GDP derived from the IMF as of 12/31/2025. Space data center opportunity derived from SpaceX public statements. Historical investment cycle investment dollars are sourced from ARK Investment Management LLC, 2026, based on data from Ulmer 1960, International Monetary Fund 2025, and National Bureau of Economic Research 1958. In addition to those sources, certain information presented may be the result of ARK's internal analyses, which draw on various additional sources of information. For informational purposes only and should not be considered investment advice or a recommendation to buy, sell, or hold any particular security. Past performance is not indicative of future results. Forecasts are inherently limited and cannot be relied upon.

Monopoly men

United States, business tycoons ranked* by peak power

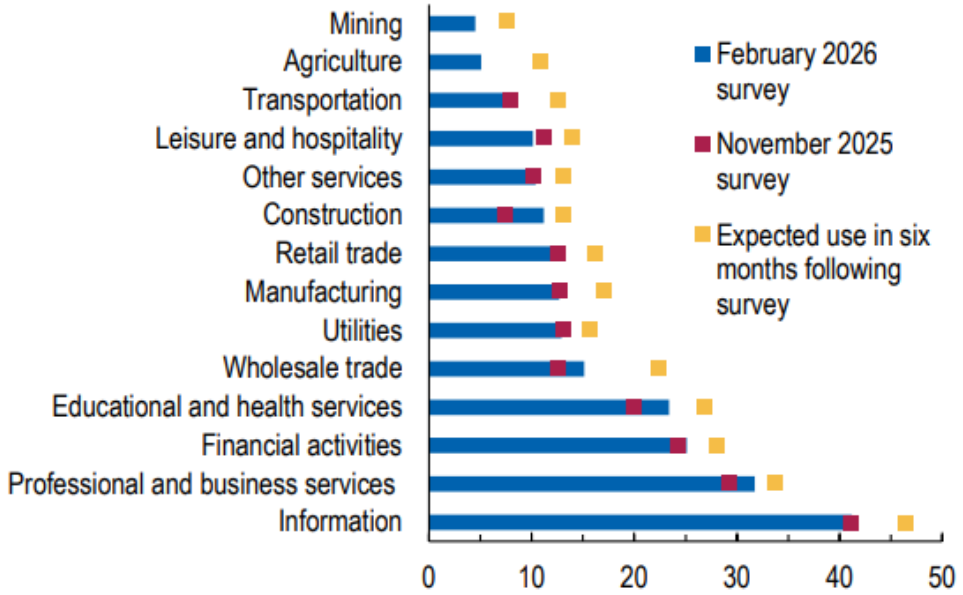


*Composite ranking based on company revenue, employment and market capitalisation, along with tycoon's personal control and wealth †Ranking includes businesses beyond AI Source: *The Economist*

The Economist

Figure 1.14. Use of Artificial Intelligence by US firms by Sector

(Percent)



Sources: US Census Bureau, Business Trends and Outlook Survey; and IMF staff calculations.

Note: Sectors are aggregated using gross-value-added shares. Blue bars and red markers show responses to the survey question: "In the last six months, did this business use Artificial Intelligence (AI) in any of the following business functions?" The yellow markers show responses from the February 2026 survey to the question: "During the next six months, do you think this business will be using AI in any of its business functions?" Survey responses for Construction and Mining sectors were not available from the November 2025 survey.

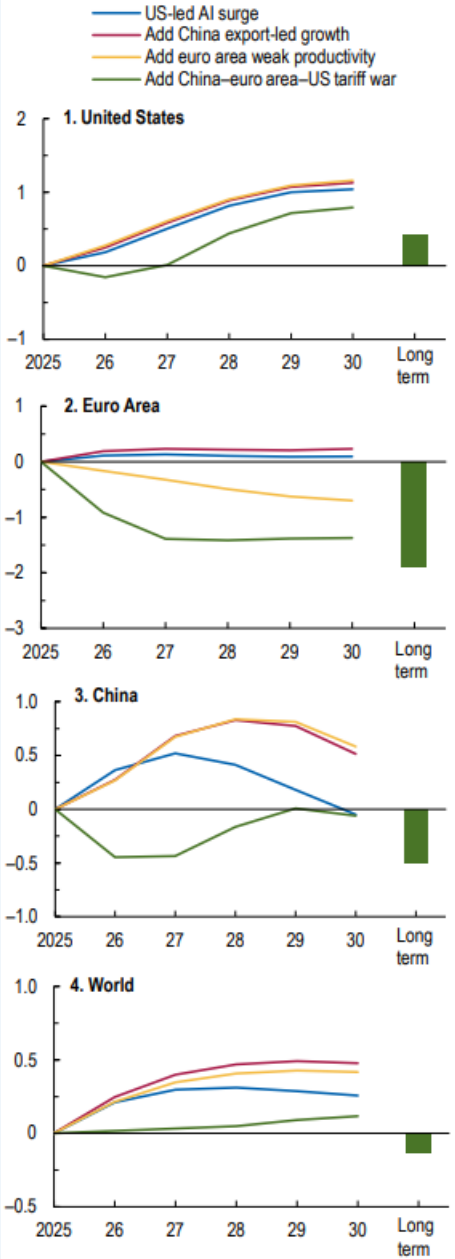
Scenario A: The Divide Widens

Scenario B: AI Disappoints, Risk Off Ensues

Scenario C: Reforms Reset Economies

Figure 1.3.2. Impact of Scenario A on GDP

(Percent deviation from reference forecast)

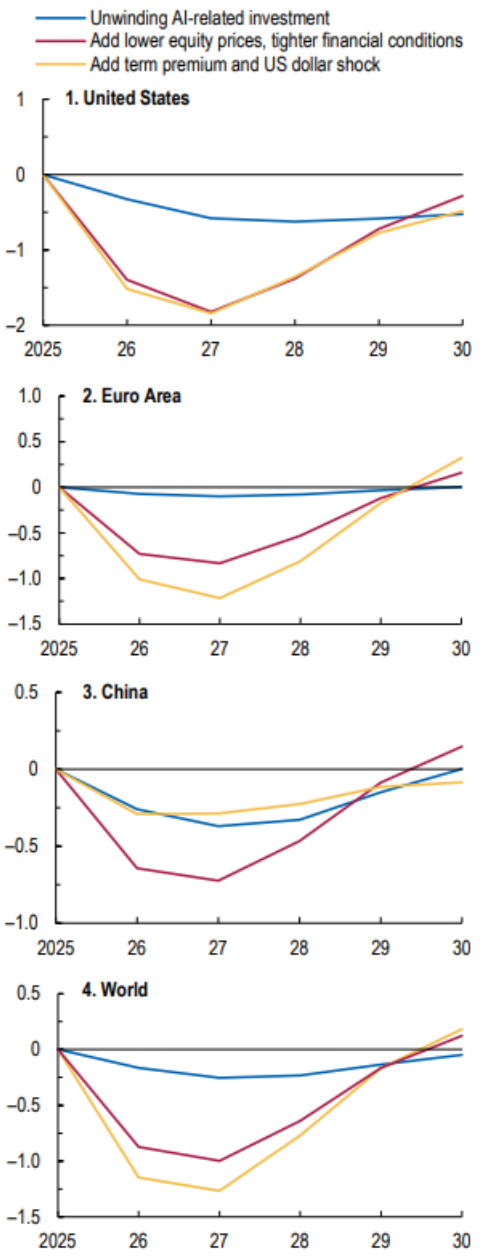


Source: IMF staff estimates.

Note: "Long term" is at least 50 years ahead. AI = artificial intelligence.

Figure 1.3.3. Impact of Scenario B on GDP

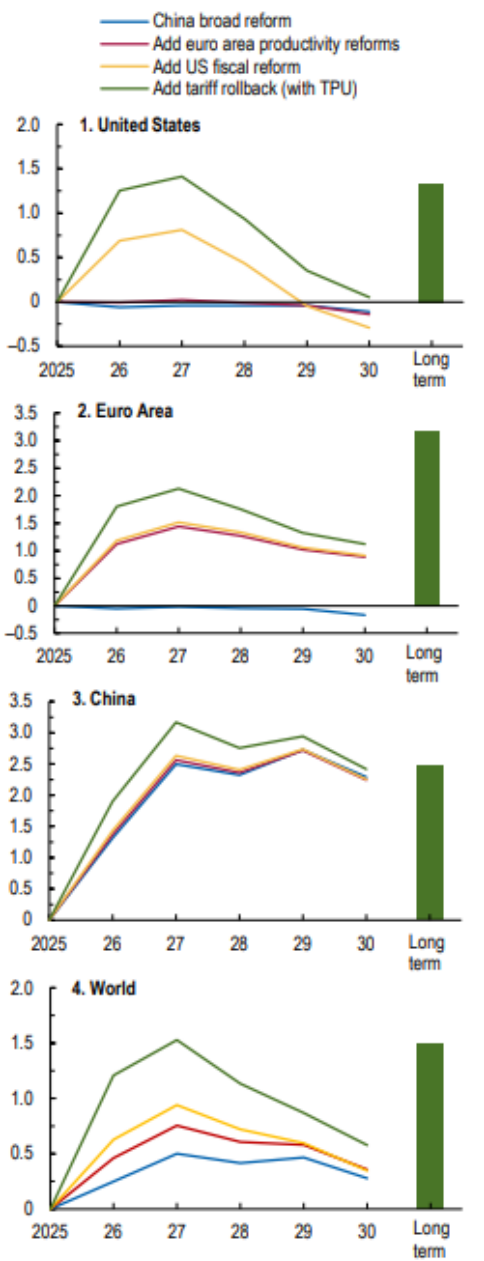
(Percent deviation from reference forecast)



Source: IMF staff estimates.

Figure 1.3.4. Impact of Scenario C on GDP

(Percent deviation from reference forecast)



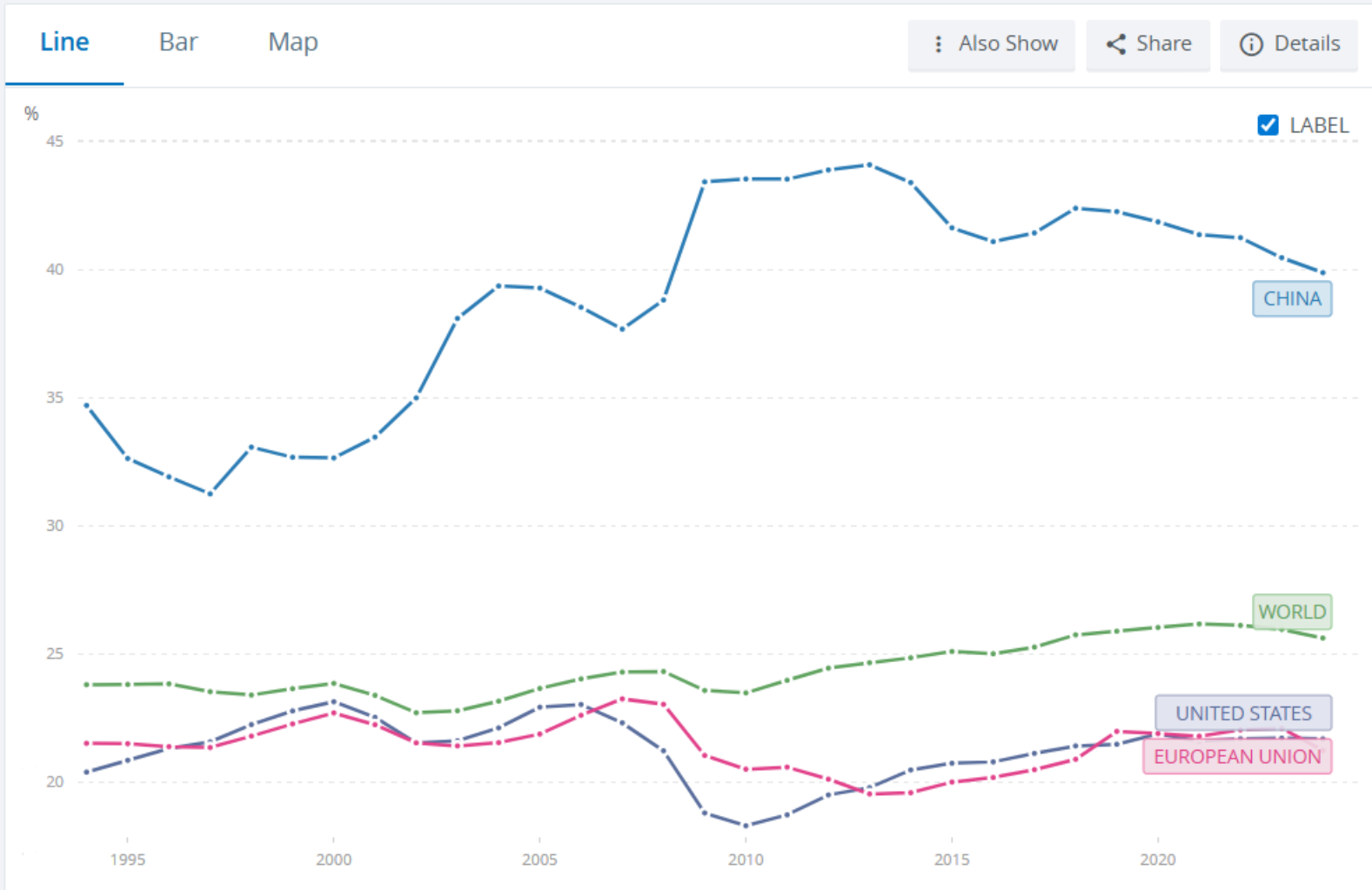
Source: IMF staff estimates.

Note: "Long term" is at least 50 years ahead. TPU = trade policy uncertainty.

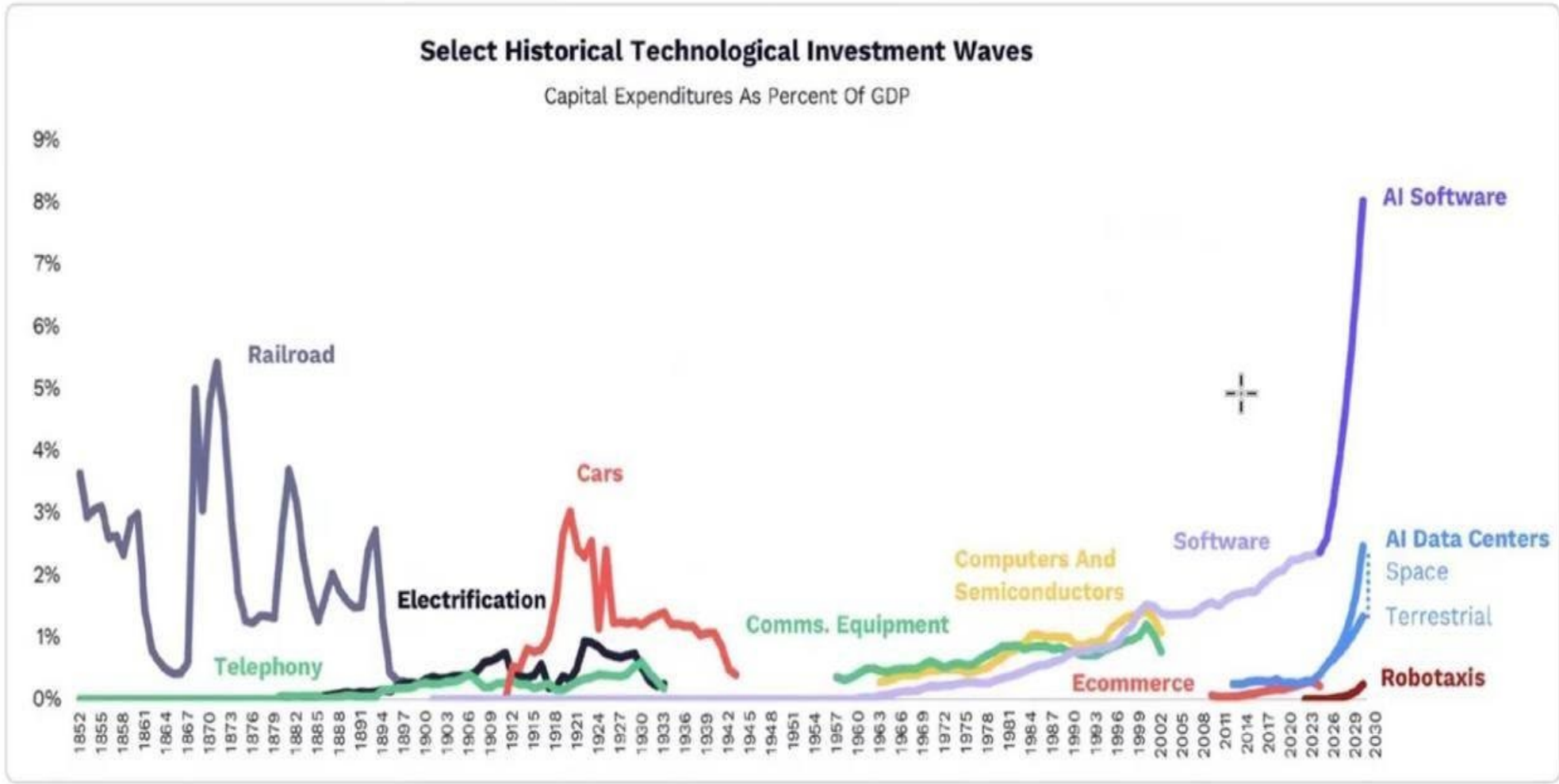
2. Interpretacja

Gross fixed capital formation (% of GDP) - China, World, United States, European Union

Country official statistics, National Statistical Organizations and/or Central Banks; National Accounts data files, Organisation for Economic Co-operation and Development (OECD); Staff estimates, World Bank (WB)



The World Is Entering An Unprecedented Technology Investment Cycle



Note: All Historical lines are US fixed asset annual gross investment as percent of US GDP and derived from the NIPA tables. "Ecommerce" signifies warehouse investments. Data center and Robotaxi are percent of global consensus global GDP derived from the IMF as of 12/31/2025. Space data center opportunity derived from SpaceX public statements. Historical investment cycle investment dollars are sourced from ARK Investment Management LLC, 2026, based on data from Ulmer 1960, International Monetary Fund 2025, and National Bureau of Economic Research 1958. In addition to those sources, certain information presented may be the result of ARK's internal analyses, which draw on various additional sources of information. For informational purposes only and should not be considered investment advice or a recommendation to buy, sell, or hold any particular security. Past performance is not indicative of future results. Forecasts are inherently limited and cannot be relied upon.

Niepewność
narzędzie w wyścigu o owoce postępu

- Stres, choroby
- Niska dzietność
- Niskie inwestycje
- Skrócenie horyzontu
- Znaczenie „zwinności”

- Własność środków produkcji
- Perspektywa podatków
- Jakość życia, przyszły dobrobyt
- Rywalizacja USA – Chiny
- Dostęp do rynków

Gross capital formation (% of GDP) - Czechia, China, Poland

Country official statistics, National Statistical Organizations and/or Central Banks; National Accounts data files, Organisation for Economic Co-operation and Development (OECD); Staff estimates, World Bank (WB)

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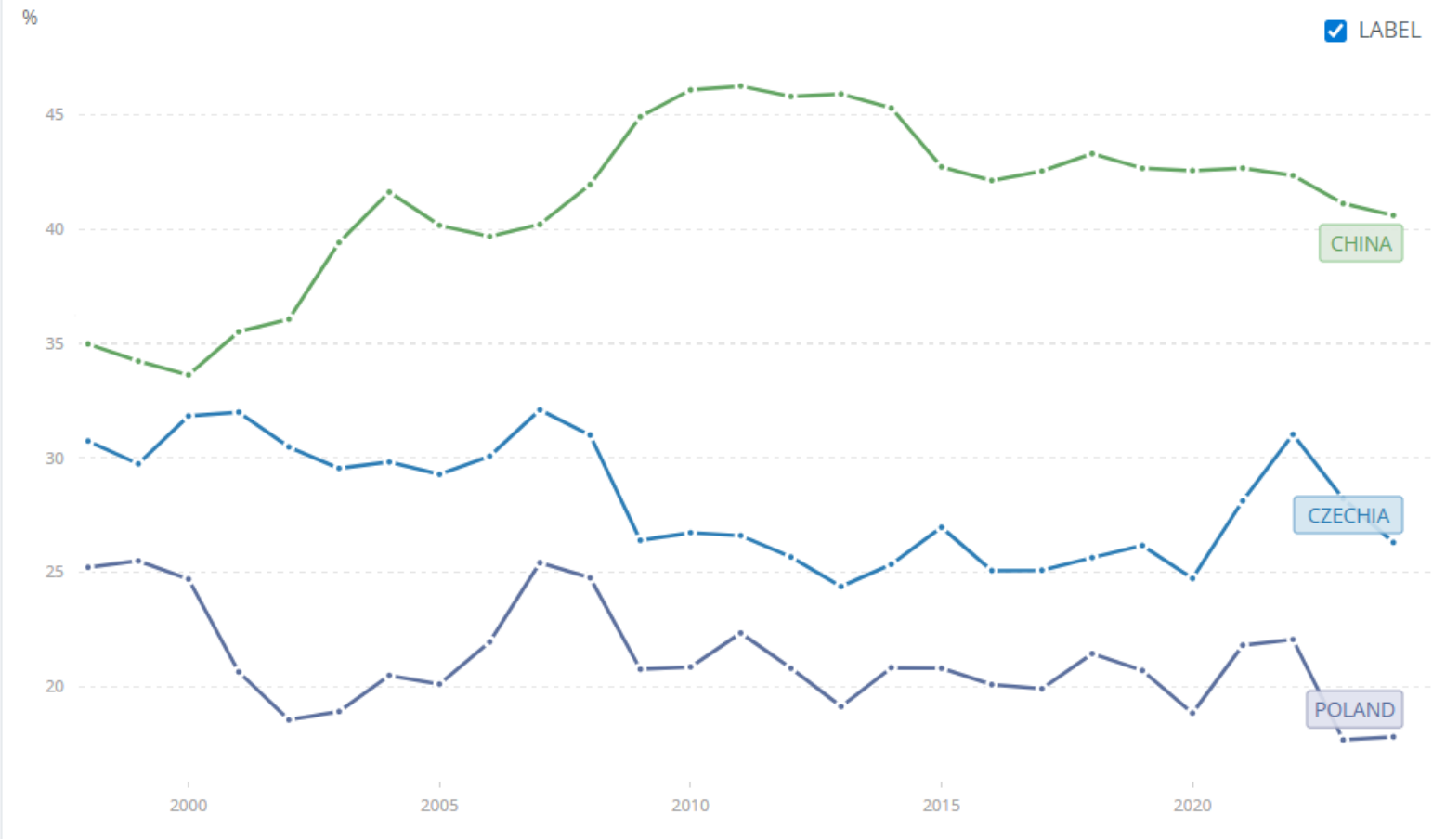
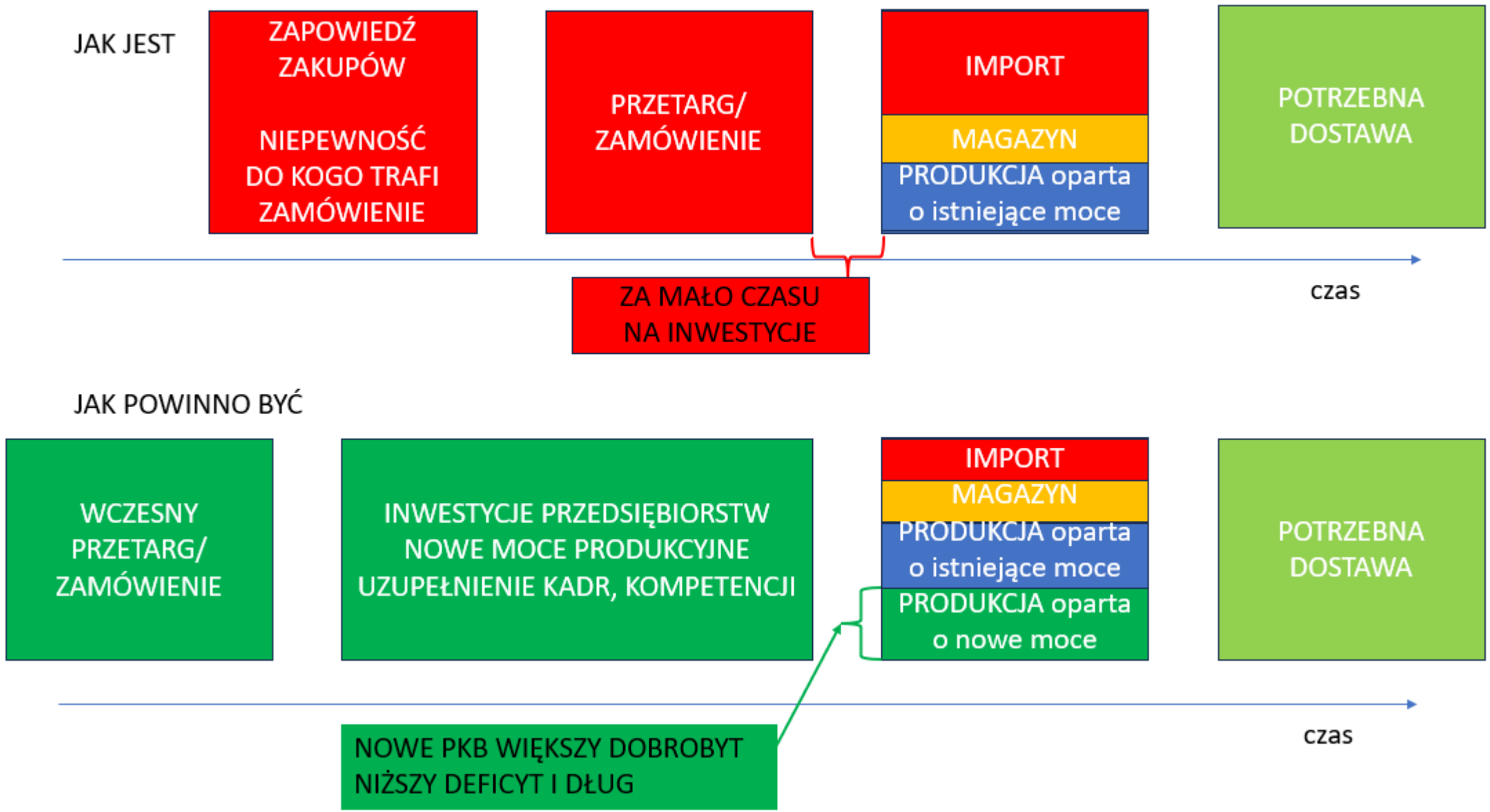




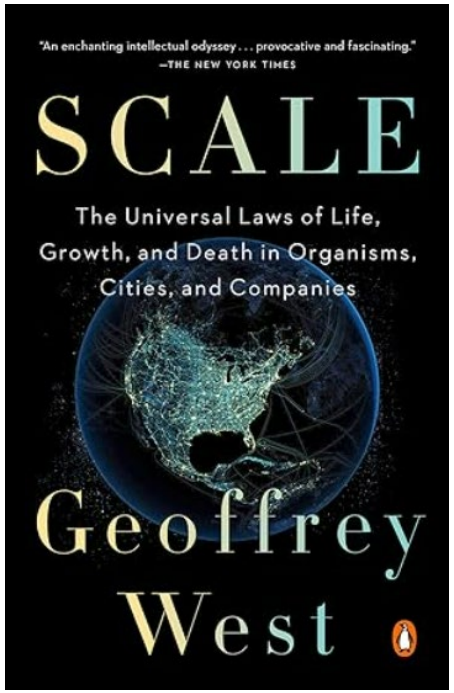
https://x.com/KamSobolewski

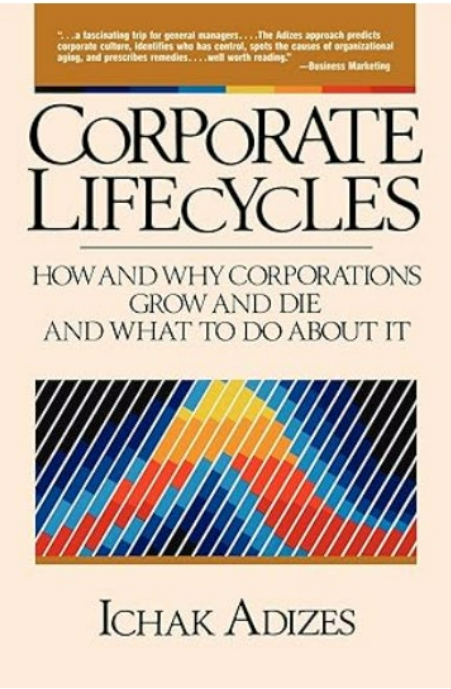
Rola jakości inwestycji, innowacje jako inwestycja+

Z terenu wstrzymanej budowy znikają dwa, wysokie na ponad sto metrów betonowe pylony. Ich wyburzenie ma być pierwszym krokiem do budowy elektrowni gazowej w Ostrołęce. | Foto: Andrzej Iwanczuk/REPORTER / East News

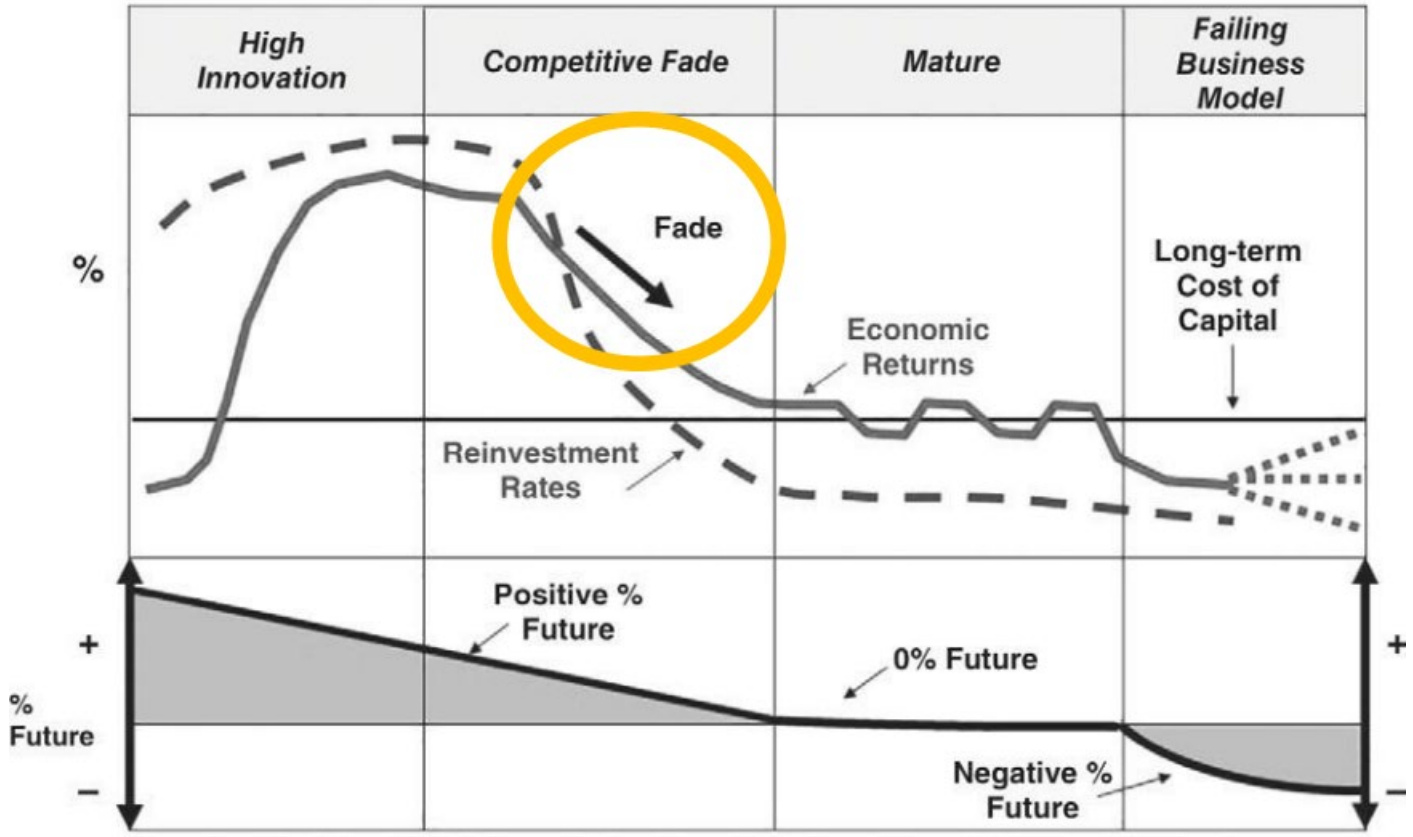
Cykl życia produktu a cykl życia firmy

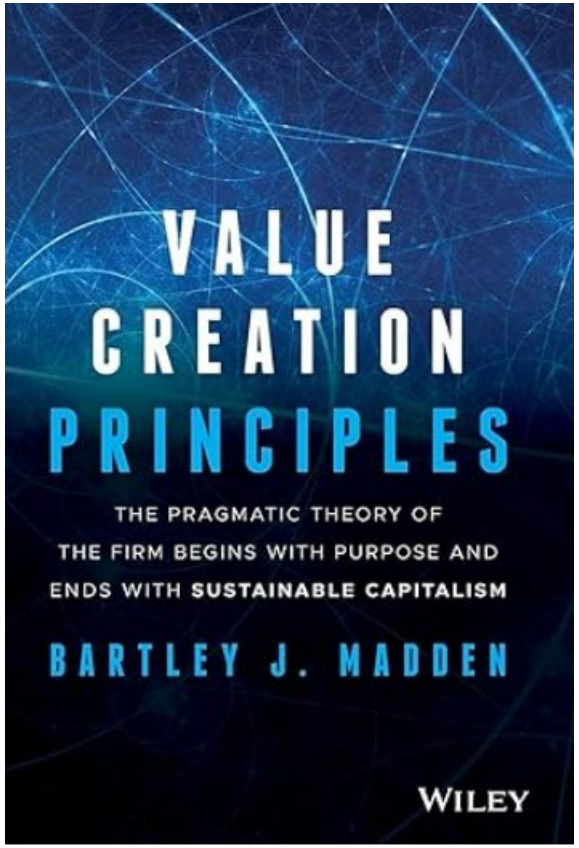
- Jak ssaki czy jak miasta?
- Podejmowanie ryzyka jest oczywiste na początku, z czasem powstaje pokusa „odcinania kuponów”
- Wyjście ze strefy komfortu i mądre podjęcie ryzyka na akceptowalnym poziomie „uwiecznia” firmę
- Transformacja w kierunku *„adaptive systems”*



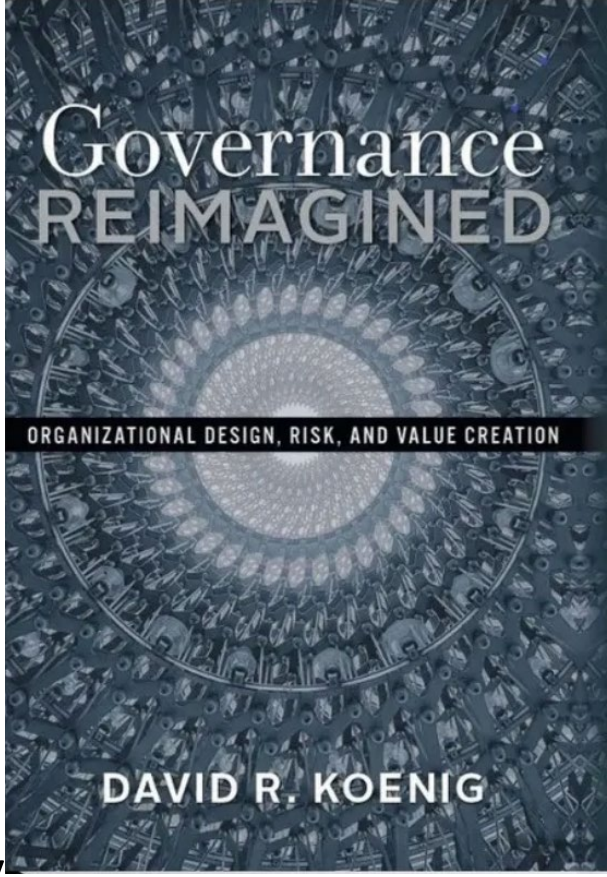


Konieczność podejmowania ryzyka





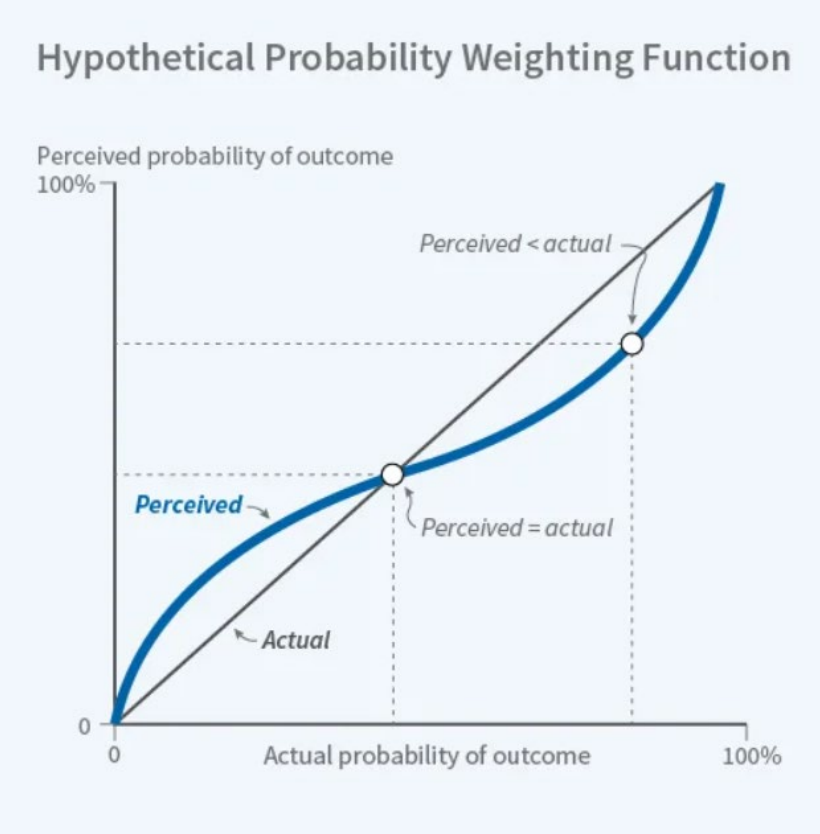
Kultura zaufania a rozwój i zwinność

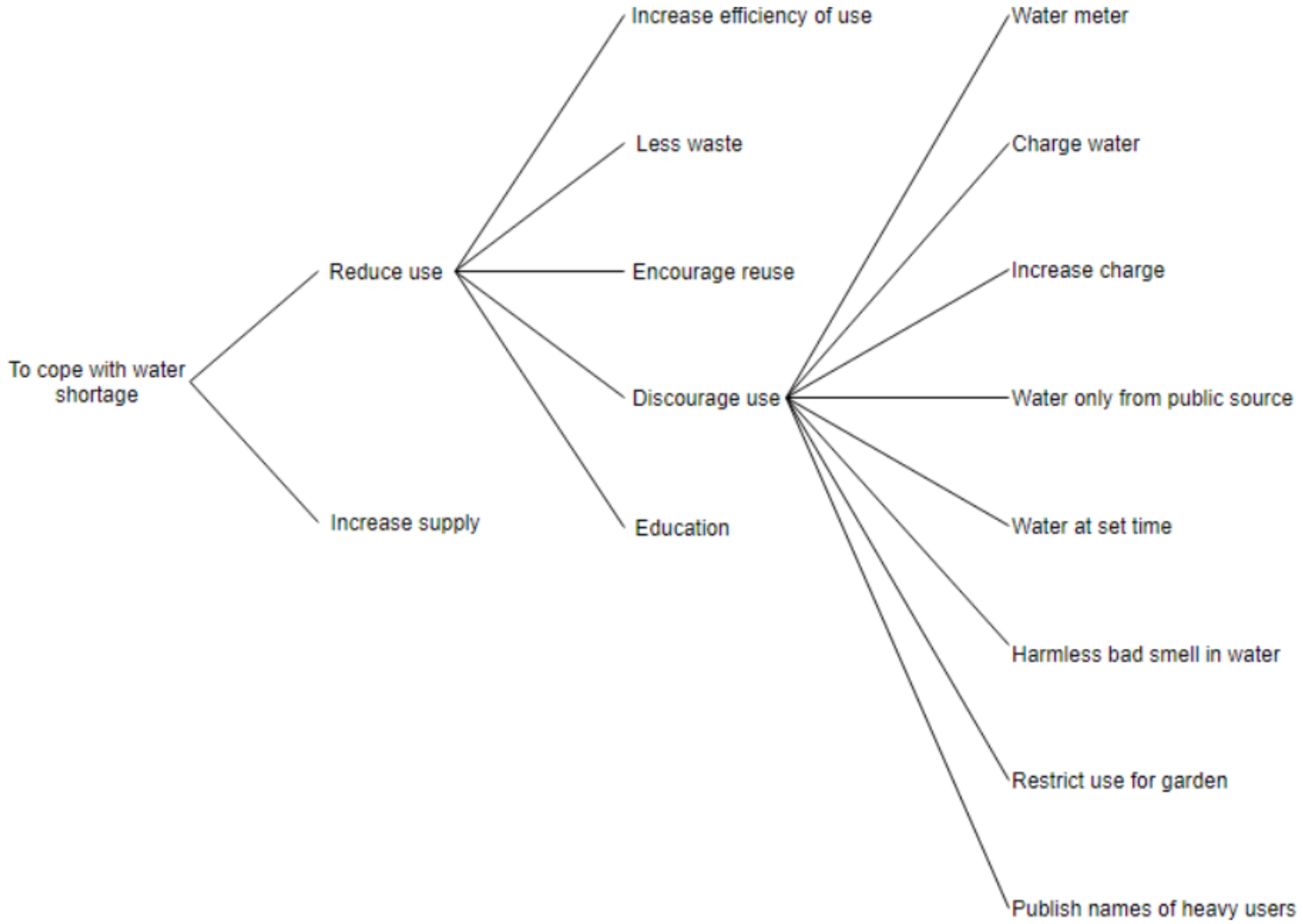


- Wspólnota celów
- Co mogę zrobić? Czy mogę coś zrobić? → Jak to zrobić?
- Osiąganie celów ze świadomością, co może pójść nie tak
- Doświadczenie
- Kultura informacji zwrotnej zamiast kultury poszukiwania win i winnych
- Przejrzystość do wewnątrz i wobec interesariuszy
- Merytokracja
- Możliwość polegania na sobie
- Ciągła innowacja, swoboda twórcza, przyzwolenie na eksperymenty, błędy
- Ciągłe uczenie się
- Sprawna odpowiedź na zaskoczenia
- Komunikacja 360 stopni, słuchanie, różne perspektywy
- Ścieżki eskalacji

O myśleniu wachlarzowym

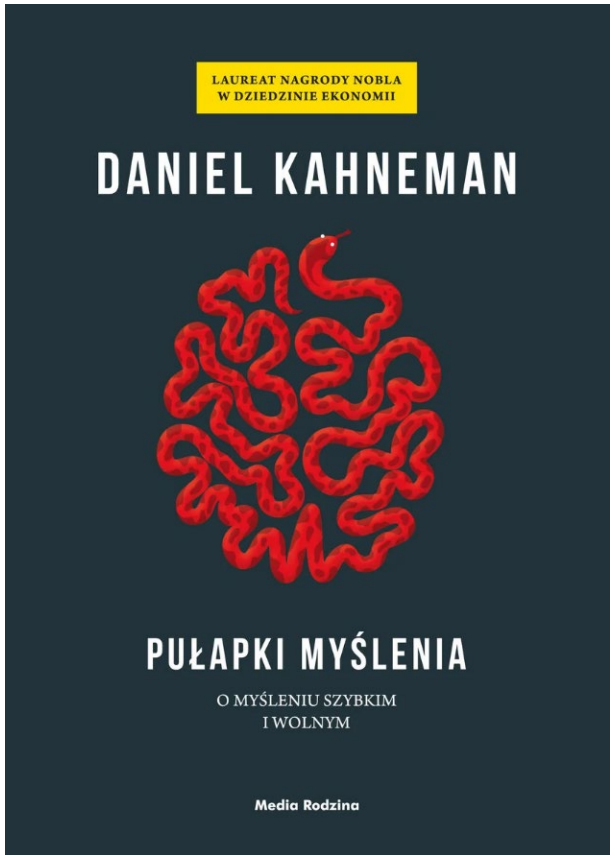
$$\text{Expected Value} = \sum(\text{Outcome}_n \times \text{Probability}_n).$$



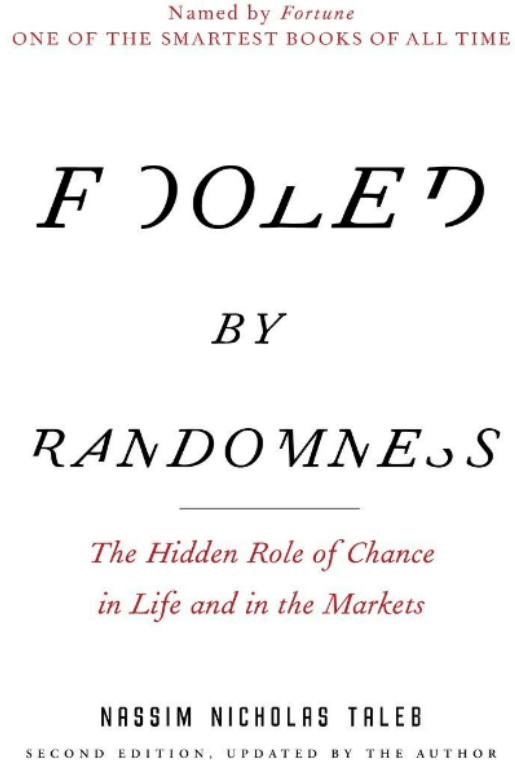


(*Source: Edward de Bono, 1992)

Nasze głowy



Percepcja
Zaufanie



Rola przypadku
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