Navigating the new macroeconomic and financial complex system(s)

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Agenda

1. A new macro-fin complex system
2. Enterning into a new World: the 2024 ahead
3. A long-run view: the demographic transition

1. A new macro-fin complex system

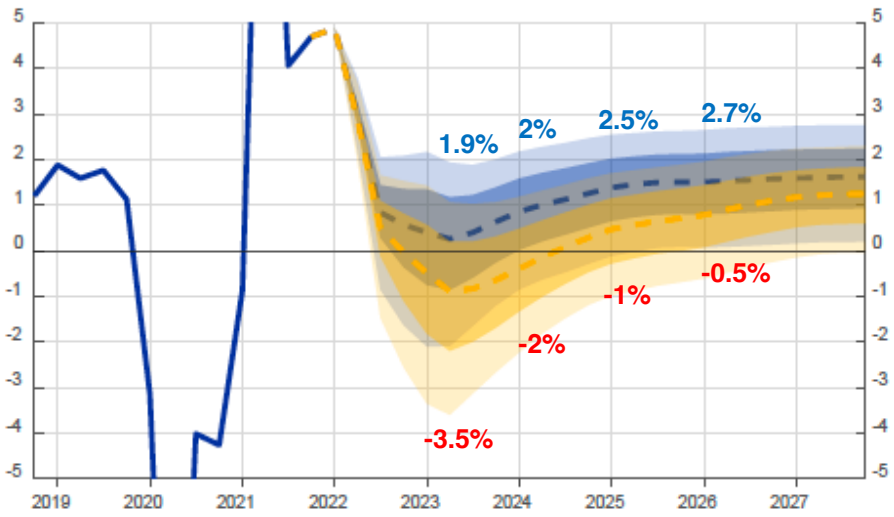
Period 2008-2021

- **Financial crisis** 2008: **under-estimation** of financial risks.
- **Pandemic crisis** 2020: **over-estimation** of propagation risks**; complex worldwide production chains** and commercial trades
  - ⇢ A new fragility, **"critical inputs":** 1 single input can block entire production chains
  - ⇢ Projections on April 2020 overestimated and short-term impacts on global growth**. Fast economic and financial recovery**

- **February 2022: Russia invasion**
- **June 2022: realignment of composite risks**
  1. supply of raw materials
  2. energy price pressures
  3. inflation
  4. misaligned policymakers' objectives: restrictive monetary policy by the Fed, announced by the ECB - focused on controlling government spreads - and the Bank of Japan committed to maintaining monetary stimulus despite the growing concern over the yen collapse

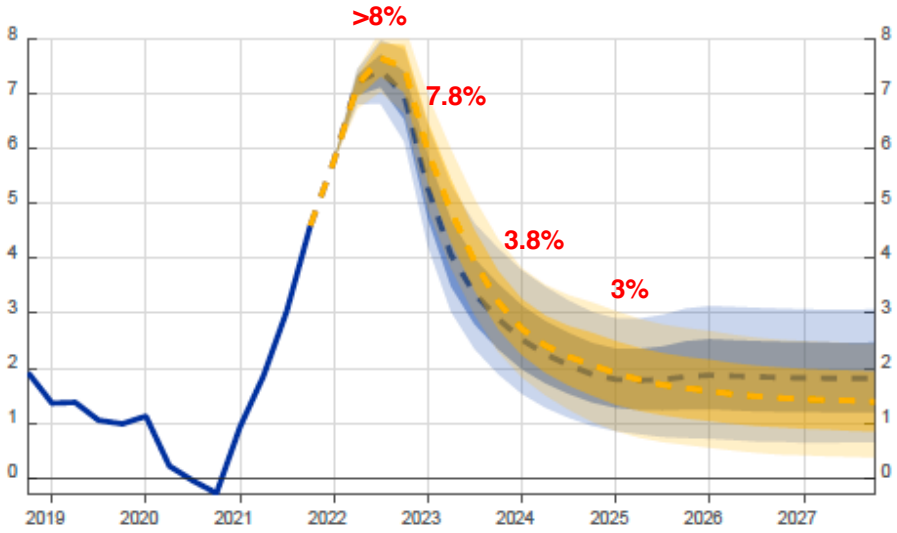
- **November 2022:**
  1. **Slow economic recovery** due to Russian invasion
  2. **Geopolitical risks**: China-Taiwan-USA
  3. **World Debt: near 2.4 times the GDP**
  4. **Chinese economy at risk:** excessive corporate debt and lockdown policy
  5. **Inflation, official interest rates raised, global financial market volatility**

Euro GDP predictions: 06/2022-2027



Sources: ECB (SMA, BMPE) and ECB calculations.

Euro Inflation prediction: 06/2022-2027



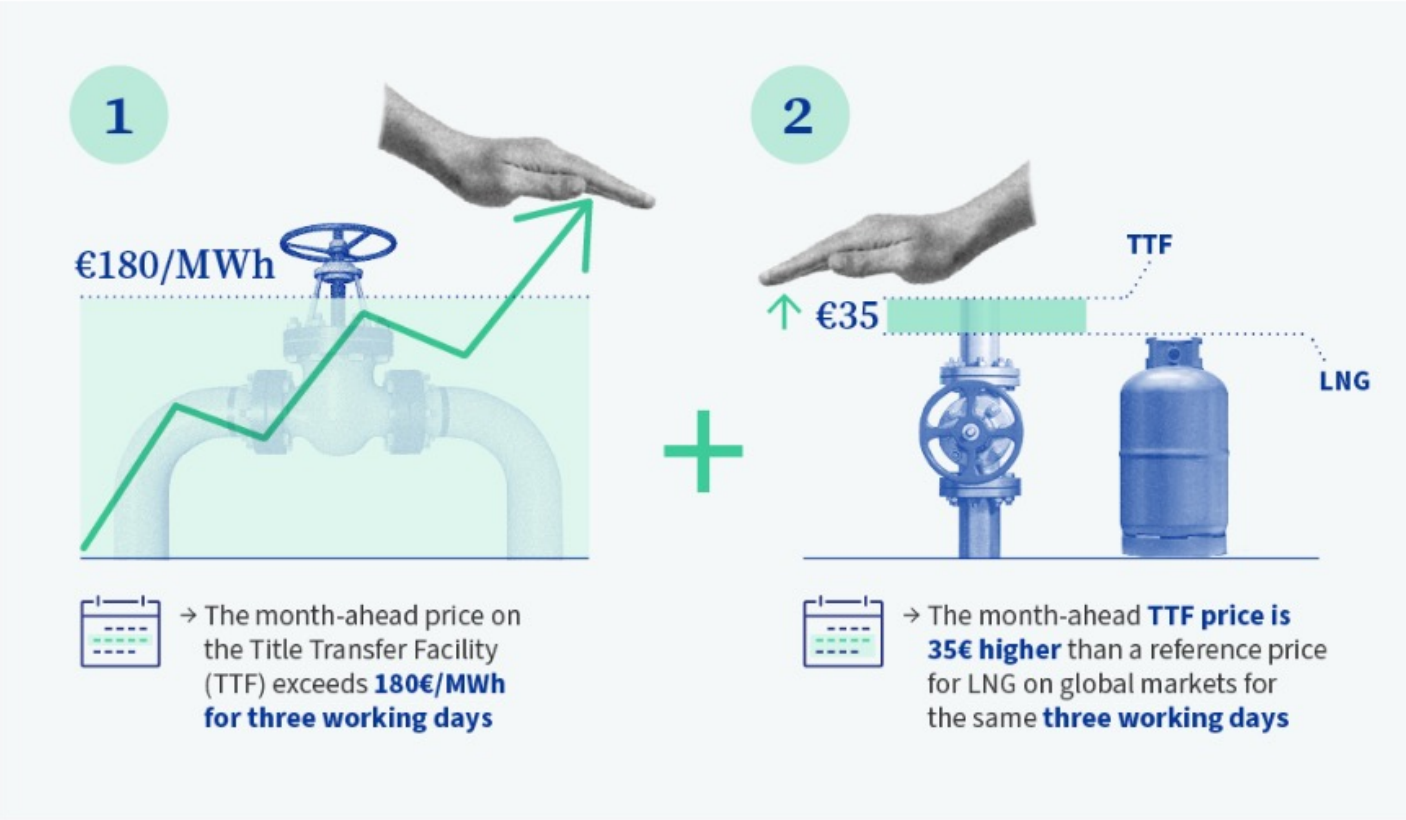
Sources: ECB (SMA, BMPE) and ECB calculations.

Energy and Gas Price: the Price-Cap

- When Russia decided to cut gas deliveries to Europe, amid its invasion of Ukraine, **gas prices soared to unprecedented levels**
- **October 18th, 2022**: EC proposal for a temporary «maximum dynamic price» for the Title Transfer Facility Dutch gas hub
- **February 15th, 2023**: price-cap **in force for 1 year**
- **December 19th, 2023**: the European Council agreed to extend emergency measures until January 31st, 2025

The Price-Cap Rule

- **Exceeding a Fixed Threshold**: The month-ahead price on the TTF surpasses **180 EUR**/MWh for **three consecutive working days**
- **Divergence from LNG Benchmark**: The month-ahead price on the Title Transfer Facility exceeds the reference price for Liquefied Natural Gas (LNG) on global markets by **35 EUR** for the same **three working days**

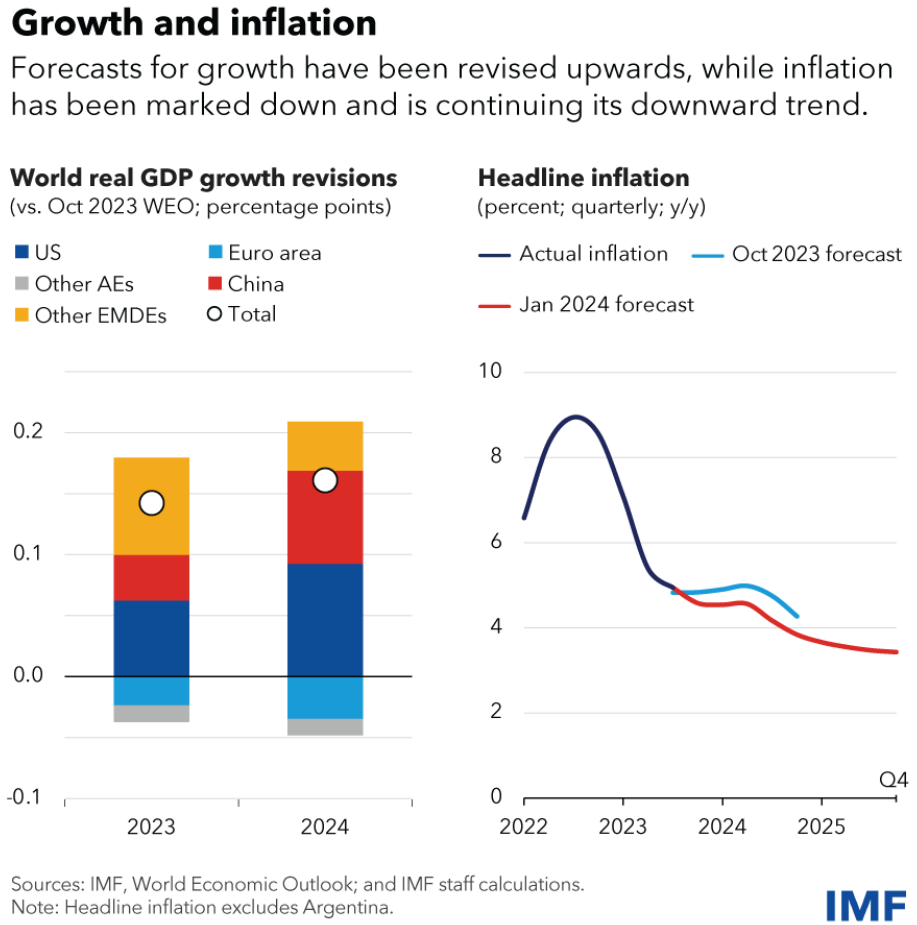


Effectiveness of the Gas Price Cap

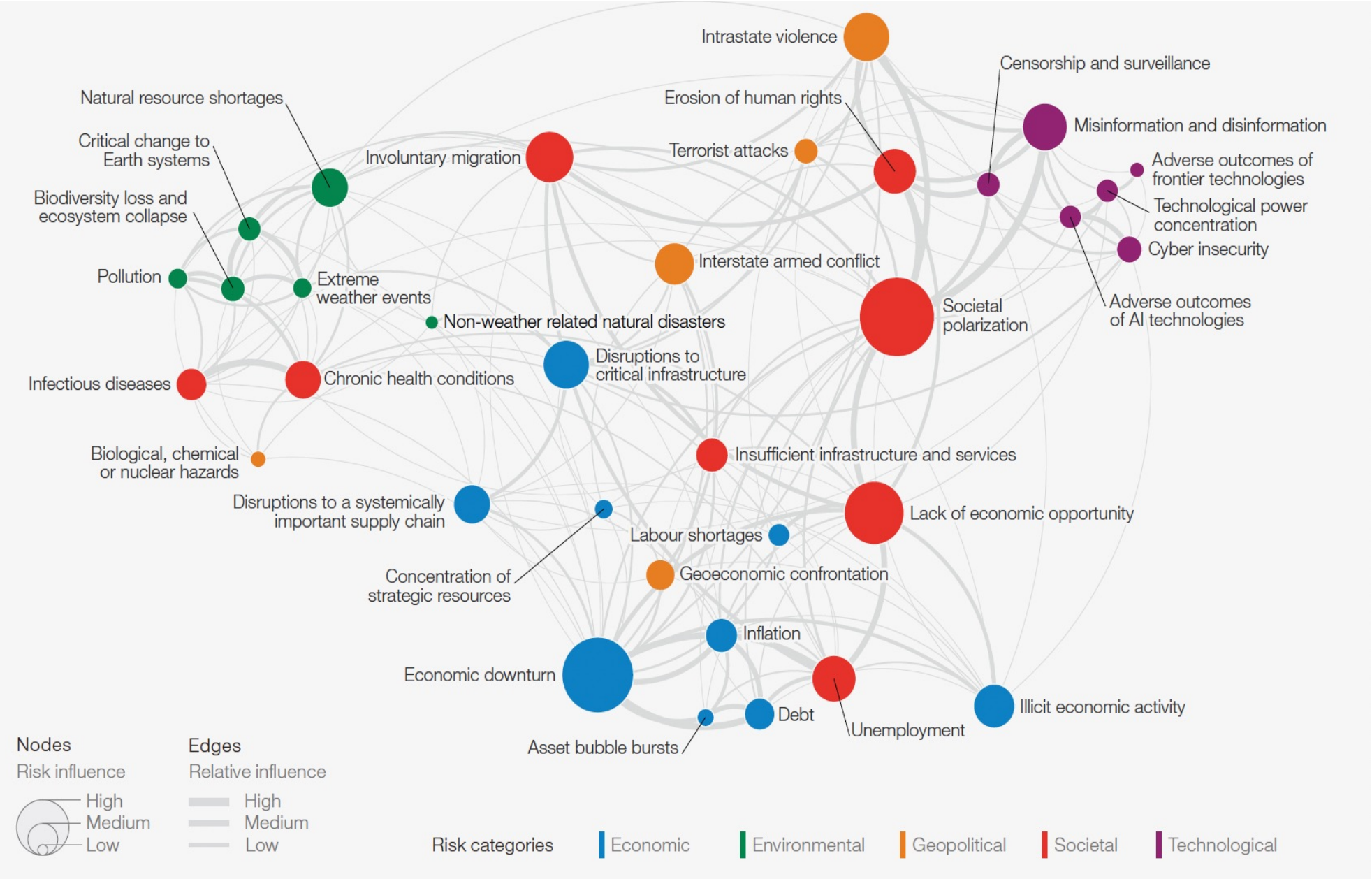
- Our findings suggest that the current cap in force seems to play a **minor role in containing potential price spikes** also having virtually **no impact in mitigating volatility**
- A price cap **focused on volatility dynamics** may help reduce market turbulence and potentially reduce stock market volatility

Price Cap	Description	Effect on commodity market price	Effect on commodity market volatility
Fixed price cap	TTF Price must be below 106 EUR/mwh	Strong Decrease	No effect
Institutional price cap	1. TTF Price must be below 180 EUR/mwh; 2. TTF Price must not be 35 EUR higher than LNG benchmark	Mild Decrease	No effect
Dynamic price cap	TTF daily volatility must be consistent with its long-run volatility[3]	Decrease	Decrease

- **2023:**
  1. The **global economic recovery** from the COVID-19 pandemic, Russia's invasion of Ukraine, and the cost-of-living crisis **is proving surprisingly resilient**
  2. The **economic growth** is estimated to have been **stronger than expected** in the second half of 2023 in the **United States,** and several **major emerging market** and **developing economies**
  3. The **inflation** is **falling faster** than expected from its 2022 peak
  4. To reduce inflation, major central banks **raised policy interest** rates to restrictive levels in 2023, resulting in **high financing costs**
  5. Global Debt $307 trillion vs. $105 trillion Global GDP: **3 times GDP**



World Economic Forum: Global Risks Report 2024



The world is undergoing **multiple long-term structural transformations**:

1. the rise of **AI**
2. **climate change**
3. shift in the **geopolitical distribution of power**
4. **demographic transitions**

2. Enterning into a new World: the 2024 ahead

1. **Geopolitical risks**: persistent trade tensions with China, the Russia-Ukraine conflict and ongoing turmoil in the Middle East (Hamas-Israel)
2. **Democracy resilience test**: there will be more than 70 elections in 2024 in countries – for the first time, *more than half of the global population*
3. **America's election** amidst the **transition from unipolar to multipolar** power distribution
4. **Economic uncertainty**: even if inflation declines, **interest rates will likely remain higher for the next decade** than they were in the decade following the 2008 financial crisis:
   - soaring **debt levels**,
   - **deglobalization**,
   - increased **defense spending**, the **green transition**, **populist demands for income redistribution**, and
   - **persistent inflation**?

3. A long-run view: the demographic transition

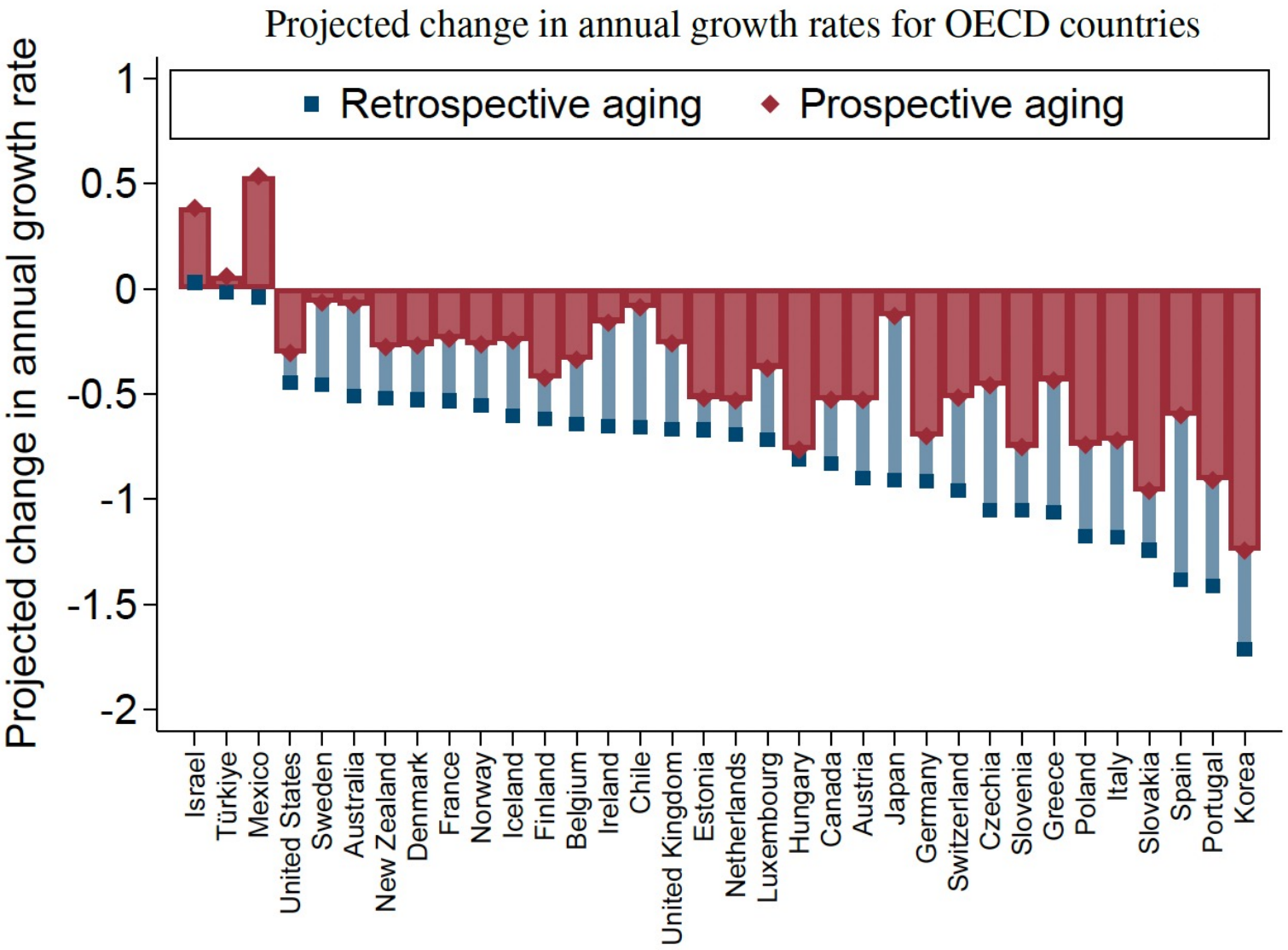
- **Population growth** and **age structure** changed and are expected to change dramatically
- Transition **from high to low rates** of **mortality-fertility**
- **World Population**:
  - today: 8 bln
  - 2064: 9.7 bln (peak for UW)
  - **2100:**
    - **a) 10.7 bln (peak for UN)**
    - **b) 6.3-8.8 bln (UW)**
- **Europe**
  - today: 447 mln
  - 2050: 448 mln
  - **2100: 419 mln**

3. A long-run view: the demographic transition

R. Kotschy & D. Bloom (2023):

"Expansions of labor supply due to improvements in functional capacity among older people can cushion much of this demographic drag"

- **Whether countries can harness these gains will depend on:**
  1. **labor markets**
  2. **health and social policy**
  3. **Acemoglu (2022): "good" automation compensates for the lack of skills related to the demographic transition**



Fonte: Kotschy & D. Bloom (2023)

Conclusion

- From «**lower forever**» camp to new current market realities: «**higher for longer?**»

- Kenneth Rogoff: «While it is feasible to expand social programs or boost military capabilities **without running large deficits, doing so without raising taxes is not costless**»

- Adapting to the **biggest demographic transition and incentivize good automation**