# Artificial Intelligence in Economic and Financial Policy Making

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AGI

# Progress in AI Capabilities

### Test scores of AI systems on various capabilities relative to human performance



Within each domain, the initial performance of the AI is set to -100. Human performance is used as a baseline, set to zero. When the AI's performance crosses the zero line, it scored more points than humans.



Data source: Kiela et al. (2023) OurWorldinData.org/artificial-intelligence | CC BY Note: For each capability, the first year always shows a baseline of -100, even if better performance was recorded later that year.

Risks 0000 Solutions

### AGI Could Be Coming

"Honestly, it could be a few years, like Dario [Amodei] and Sam [Altman] are saying, or it could be decades. We need to plan for all of these [scenarios] because nobody has a real crystal ball."

- Yoshua Bengio

# AGI Poses Systemic Risks

- When AI approaches or achieves AGI, the implications for labor markets and inequality could be particularly stark.
- Al systems matching or exceeding human capabilities across virtually all cognitive and physical tasks could fundamentally alter the role of human labor in the economy.
- This could lead to widespread displacement of workers across skill levels, as machines become perfect substitutes for human labor.

## More than the Labor or Financial Market

- Loss of control
- CBRN
- Harmful manipulation
- Risk to critical infrastructure
- Fundamental rights violations
- Risk to the environment
- Risk to non-human welfare
- Risk to democratic processes

## Systemic Risks from Automation

- 1. **Premise 1:** Widespread AI adoption into critical systems (financial, healthcare, infrastructure)
- 2. **Premise 2:** Human-managed society has already increased large risks (nuclear war, climate, pandemics)
- 3. Premise 3: Al-managed society may have higher risks due to:
  - Autonomous decision errors
  - Vulnerabilities and unintended consequences
  - High centralization and connectivity
- 4. Premise 4: Combined AI failures can amplify to systemic risk level

### Conclusion

Al could pose systemic risks through integration into critical systems where consequences could be severe

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### Some Hints

#### 2010 flash crash

United States trillion-dollar stock market crash that lasted for 36 minutes



The May 6, 2010, flash crash, also known as the crash of 2:45 or simply the flash crash, was a United States trillion-dollar flash crash (a type of stock market crash) which ... Wikipedia

# 2024 CrowdStrike-related IT outages

Global computer systems outage



On 19 July 2024, American cybersecurity company CrowdStrike distributed a faulty update to its Falcon Sensor security software that caused widespread problems with Microsoft Windows computers running the software. As a result, ... Wikipedia

## AGI Isn't Inevitable

- We don't need to be technological determinists.
- AGI isn't gravity; a few people in a few companies are creating and leading the race.
- There are historical examples of societies prohibiting or restricting certain technologies and economic activities: nuclear weapons, human cloning, global Covid-19 lockdowns, CRISPR.

### Many Alternative Pathways

# 20 March 2025 to 19 April 2025 (News API) 0 250 750 500 1000 Total mentions

Frequency of Al-related terms in news articles

agentic artificial intelligence (AI) artificial general intelligence (AGI) powerful artificial intelligence (AI) artificial superintelligence (ASI) ethical artificial intelligence (AI) explainable artificial intelligence (AI) strong artificial intelligence (AI) trustworthy artificial intelligence (AI) human-centered artificial intelligence (AI) tool artificial intelligence (AI) transformative artificial intelligence (AI) human-level artificial intelligence (AI) neuromorphic computing broad artificial intelligence (AI) weak artificial intelligence (AI) narrow artificial intelligence (AI) beneficial artificial intelligence (AI) aligned artificial intelligence (AI) human-like artificial intelligence (AI) value-aligned artificial intelligence (AI) human-compatible artificial intelligence (AI)

Al-related term

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### Tool AI vs AGI





## So What Should We Do?

#### AI Continent Action Plan

In line with the Draghi report, the aim is to **target the key European industrial sectors where the EU has a strong leadership**. These sectors hold the largest untapped potential regarding AI adoption and include, amongst others, advanced manufacturing; aerospace; security and defence; agri-food; energy and fusion research; environment and climate; mobility and automotive; pharmaceutical; biotechnology; advanced materials design; robotics; electronic communications; cultural and creative industries and science.

# Promising AI Innovation in the EU

- Teton: Danish AI company offering an AI-powered nurse assistant system that aims to **reduce patient falls**.
- Salv: Estonian company aiming to beat financial crime with a SaaS platform that helps **detect money laundering**.
- Aidence: Dutch company which provides AI radiology solutions for the lung cancer pathway, **empowering physicians to deliver better patient care**.
- ICEYE: Finnish company enabling objective, **data-driven decisions for customers** in sectors such as natural catastrophe response and recovery.
- Aignostics: German company that turns biomedical data into insights for biopharma companies through development of Al-powered precision medicine.
- Mitiga: Spanish company providing an Al-powered climate risk intelligence platform to **predict natural hazards**.



# The EU AI Act Newsletter

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