#### **Camila Infanger**

# DIGITAL METAMORPHOSIS AND ECONOMIC CHANGE

ZIA QURESHI AND CHEONSIK WOO(2022)

"Technological change unleashes creative destruction."

Schumpeter

Policies have a crucial role to play to improve the enabling environment for firms and workers to broaden access to the new opportunities that come from technological change and to enhance capabilities to adjust to the new challenges.

#### **Camila Infanger**

## Article main discussion

how today's technological change is transforming growth and distributional dynamics and reshaping public policy agendas

## Policy making

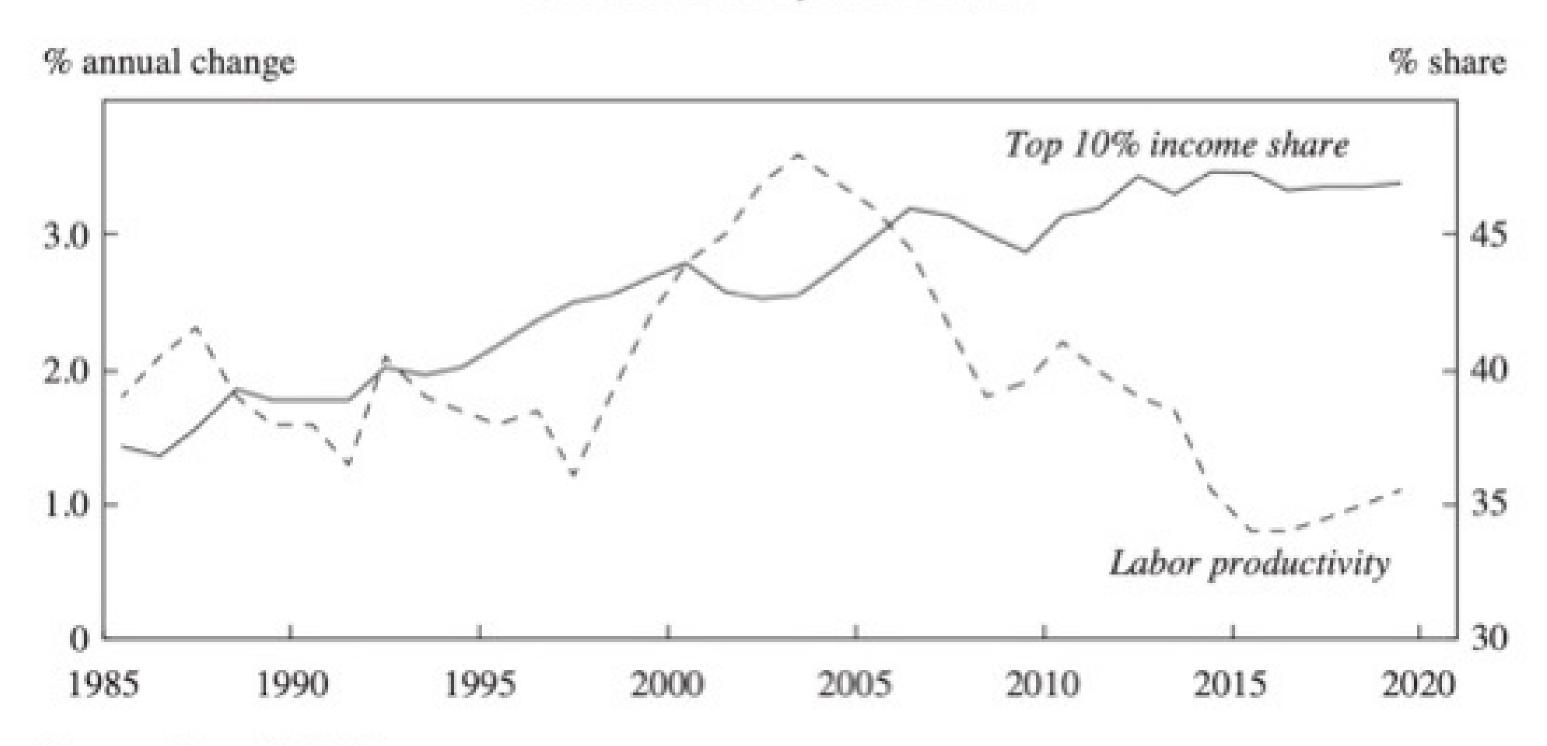
The new technologies hold immense potential to boost productivity and economic growth, create new and better jobs to replace old ones, and raise human welfare.

!! The challenge for policymakers is to better harness this potential !!

## **Income Inequality**

- Income inequality within countries has been rising:
- Inequality has risen in all major advanced economies since the 1980s, and quite appreciably in several of them. There has been a particularly sharp increase in income concentration at the top end of the distribution.
  - Inequality between countries has been falling,
- thanks to the rise of faster-growing emerging economies that are narrowing the income gap with advanced economies.
- !! But technological change poses new challenges for this economic convergence

FIGURE 1-1. Slowing Productivity Growth and Rising Inequality:
United States, 1985-2019



Source: Qureshi (2020).

### Inequalities effects

Job insecurity has increased, with mounting fears of a "robocalypse": large job/wage losses from automation

intergenerational economic mobility has declined.

Rising inequality and related disparities and anxieties are stoking social discontent. They are a major driver of the increased popular disaffection and political polarization—and the rise of nationalist populism

The outcomes of slowing productivity growth and rising inequality are interconnected, and are closely linked to the way new technologies have interacted with the prevailing policy and institutional environment

#### Shifts in labour market

• While **product markets** have seen rising inequality between firms, **labor markets** have seen rising inequality between workers.

- Technology is transforming the nature and future of work: Automation and digital advances have shifted labor demand toward higher-level skills.
- Education and training have been losing the race with technology.

#### **Effects**labour market

- Wage inequality
- skills mismatches
- diminished job prospects (for less-skilled workers)
- "convexification" of returns (to education and training)

#### While employer market power has strengthened, worker bargaining power has weakened with a decline in unionization and erosion of minimum wage laws.

- Telework: beenficiaries primarily being higher-educated workers, while lowskilled workers have fewer options
- The current private technological paradigm is geared toward "excessive automation," producing technologies that displace labor without much gain in productivity.

## Main areas deserving of attention from national policymakers

- 1. international cooperation needs to play its part: as technology transforms the world of business, policies and institutions governing markets must keep pace.
- 2. **Promoting Technology Diffusion:** diffusion through the innovation ecosystem should be improved
- 3. Harnessing Digital Transformation in Finance: the foundation of digital infrastructure must be strengthened to broaden access to new opportunities in the digital economy
- 4. Revamping Workforce Development: investment in skills must be boosted to emphasize skills that complement the new technologies
- 5. Addressing Rising Inequality: labor market policies and social protection systems should be reformed to realign them with the changing economy and the nature of work

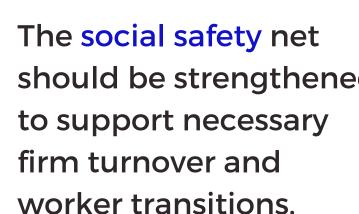
#### Main conclusions

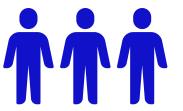


**Gender dimensions** 

:The rising wage disparity has been pushing overall household income inequality higher







Digital technologies are should be strengthened a defining feature of our time as they drive transformative change.

The current era promotes both an ever-expanding array of **smart machines** while demanding smarter policies

Policies will need to be more responsive to change to capture potential gains in productivity and economic growth and to address rising inequality

#### **Camila Infanger**

#### MUITO OBRIGADA!

CINFANGER@USP.BR