Youth Unemployment Under Pressure: Lessons from Two Crises

To what extent do economic shocks disproportionately affect youth unemployment, and how did responses differ between the 2008 Financial Crisis and COVID-19?

Anthony Kihwele
Institute of Computing Research

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Outline

Why This Matters

- In 2020, nearly **1 in 4 young Americans** were jobless.
- Youth unemployment causes **lasting scarring**:
  - Lower lifetime earnings
  - Mental health challenges
  - Delayed adulthood transitions
- These effects **ripple through families and economies**.
- U.S. labor shocks **reverberate globally**—via remittances, aid, and trade.
- Understanding youth labor responses isn't academic—it's about **global resilience**.

Sources: Bell & Blanchflower (2011), ILO (2021), BLS, OECD Youth Outlook

Why Youth Bear the Brunt

- Youth are overrepresented in:
  - Retail, hospitality, and gig work
  - Sectors vulnerable to sudden shocks
- During COVID peak (April 2020):
  - **Youth unemployment:** 24.4%
  - **Adult unemployment:** 11.3%
- Similar or worse patterns in Global South economies.
- This isn't a fluke—it's a **recurring structural issue**.
- Solving it requires **structural policy solutions**.

Sources: BLS, ILO Global Employment Trends for Youth (2020)

Economic Theories That Shape My Analysis

Youth unemployment doesn't just spike during crises — it leaves a lasting mark. Three economic frameworks explain how:

Hysteresis: When young people lose jobs in a crisis, they often disengage from the labor force altogether. Over time, this "temporary" loss becomes permanent detachment.

Scarring: Entering the job market during a downturn leads to lower lifetime earnings. Studies show wage penalties lasting a decade or more for crisis-era graduates.

Insider–Outsider Theory: Employers protect "insiders" — existing workers — and avoid hiring "outsiders." Young workers, with limited experience, sit permanently on the fringe.

These theories help explain the mechanisms behind my Difference-in-Differences results.

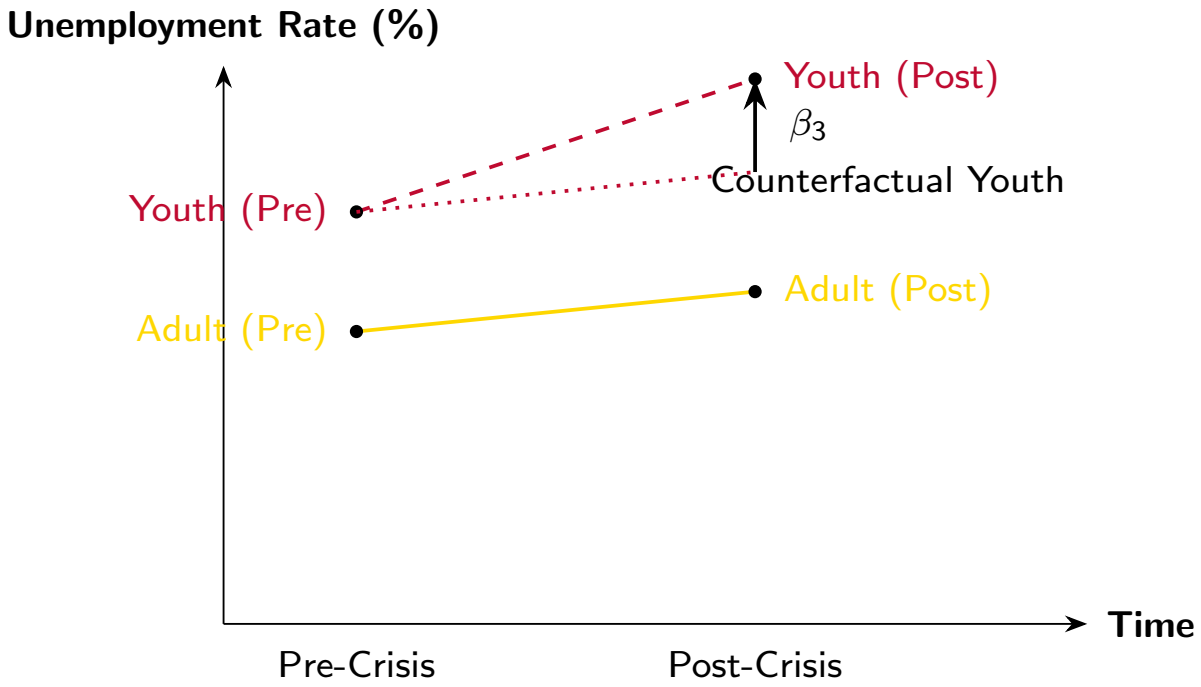
What the Literature Says

- **Bell & Blanchflower (2011):**
  - Youth unemployment **more than doubled** after the 2008 crisis.
  - Recovery was slow and uneven across OECD countries.
- **Kluve et al. (2019):**
  - Active labor market programs (ALMPs) — such as training and apprenticeships — **reduced long-term harm**.
  - Youth-focused interventions had the **highest cost-effectiveness**.
- **Gap this study fills:**
  - **Direct comparison** of youth vs. adult outcomes across **two crises**.
  - Uses a **causal Difference-in-Differences framework**.

Data Sources and Scope

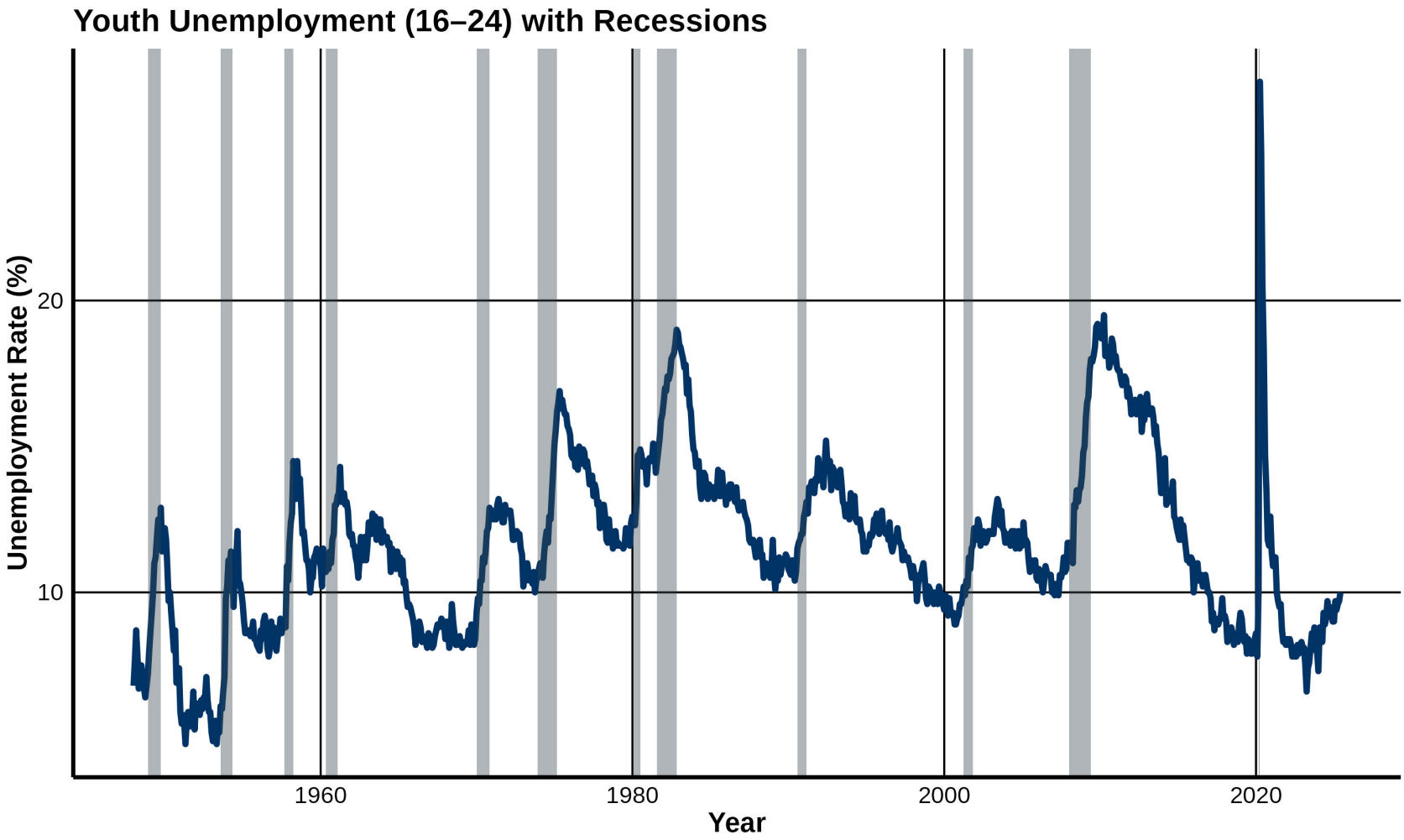
- **U.S. Bureau of Labor Statistics (BLS):**
  - Unemployment rates and labor force participation by age group (16–24 vs. 25+)
  - Monthly frequency, nationally representative
- **Federal Reserve Economic Data (FRED):**
  - Macroeconomic indicators: GDP growth, recession periods
  - NEET rates — youth not in education, employment, or training
- **Time Coverage:**
  - 2000–2023: Includes pre-crisis baselines, shock periods, and recoveries
  - Cleanly segments 2008 and COVID-19 periods for DiD analysis

Difference-in-Differences: Visual Explanation



Interpretation: β_3 captures the crisis-specific burden on youth — the vertical gap between observed and expected outcomes if youth had followed adult trends.

Unemployment Trends (2000–2023)

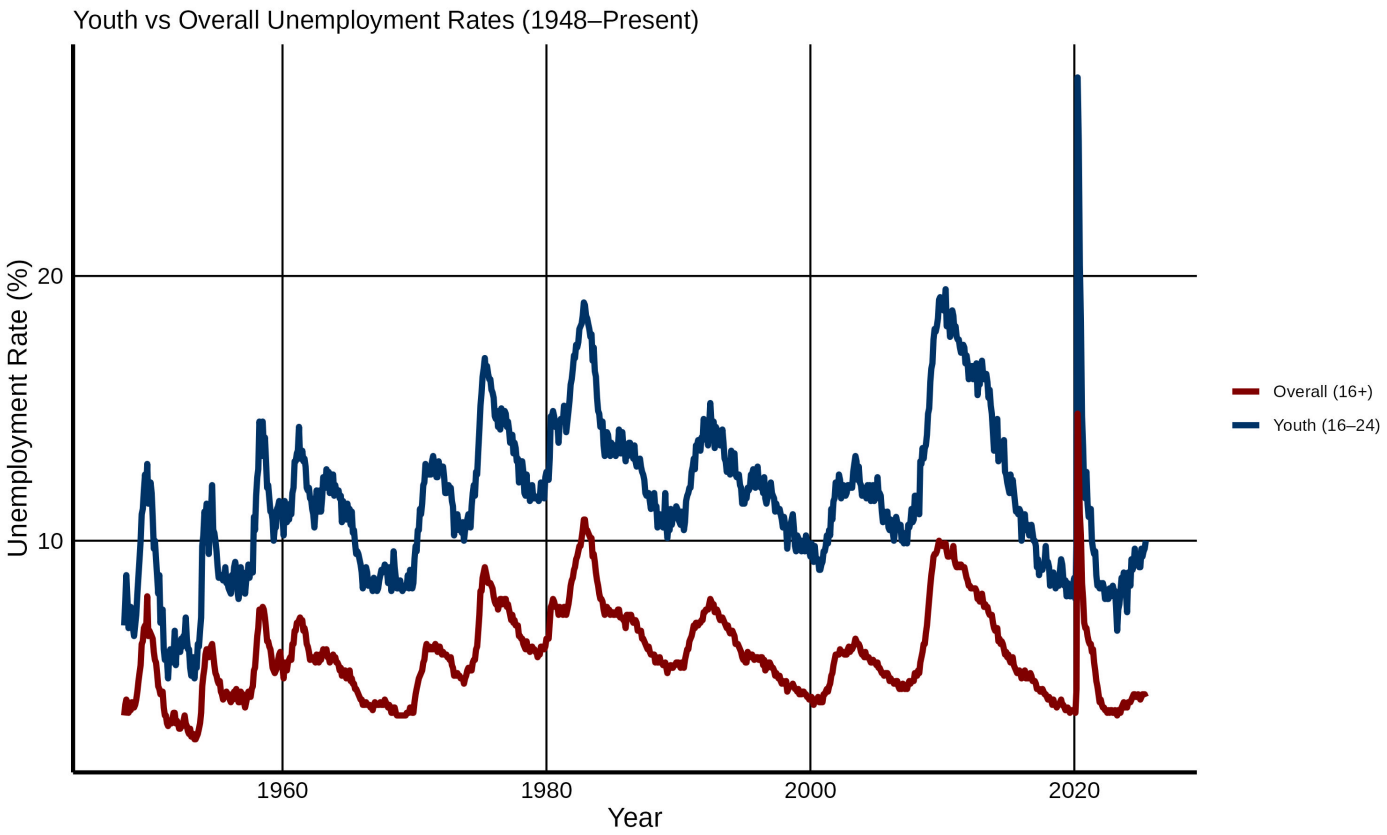


Peak

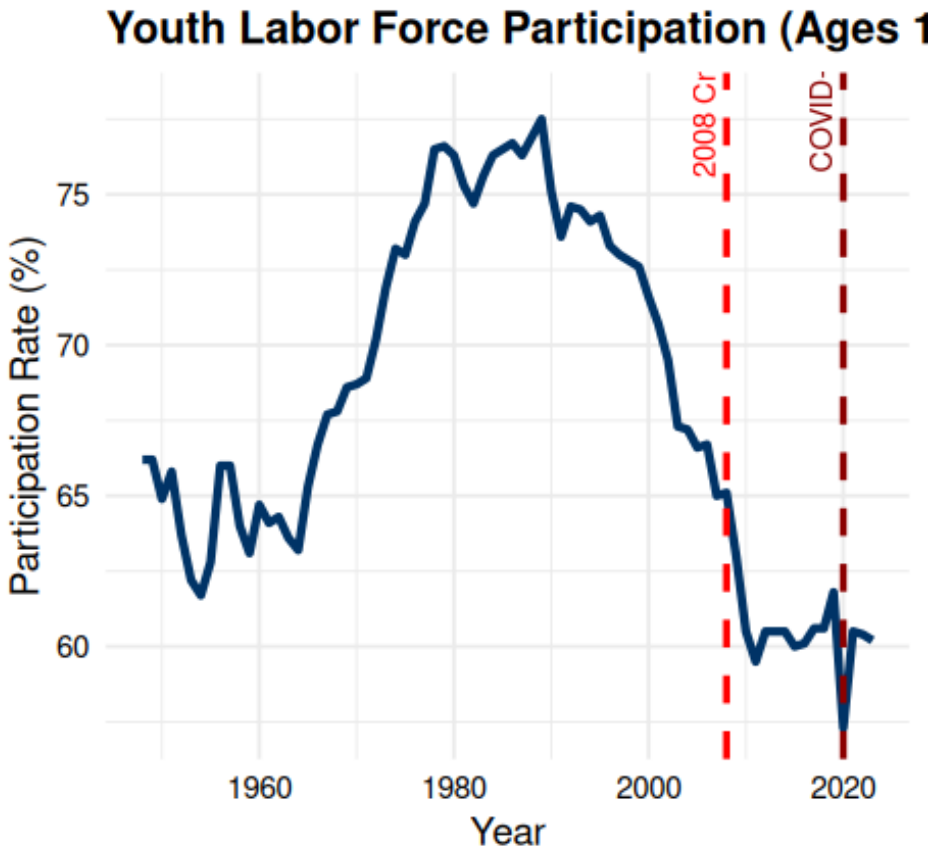
youth unemployment: 19.6% in 2010 vs. 9.6% for adults.

Observation: Gap persisted for 5+ years post-Great Recession.

Youth Disadvantage Ratio



Labor Force Participation (LFPR)



DiD Regression Results Summary

Variable	Estimate	SE	t	p
2008 Financial Crisis				
Treatment (Youth)	6.14	0.28	21.67	¡ 0.001
Post-2008	2.63	0.49	5.36	¡ 0.001
Youth × Post-2008	**1.92**	0.69	2.77	**0.0058**
COVID-19 Pandemic				
Treatment (Youth)	6.69	0.31	21.24	¡ 0.001
Post-COVID	-0.41	0.55	-0.75	0.456
Youth × Post-COVID	**-1.38**	0.77	-1.79	**0.073**

Interpretation: Youth bore excess burden in 2008, but not in 2020 — suggesting better policy shielding.

Why COVID Was Different

- **ARRA (2008):** Delayed rollout, infrastructure-heavy, missed informal/gig workers.
- **CARES (2020):** Immediate, inclusive, targeted service + gig sectors.
- **Result:** Lower β_3 coefficient for youth; recovery within 3 years.

Wider Social Consequences

- **Crime:** DOJ reported 13% rise in youth arrests post-2008.
- **Mental Health:** NEET youth had 2× depression rates (ILO, 2021).
- **Equity:** Persistent unemployment worsens lifetime earnings + social mobility.

Limitations and Validity Risks

- **Parallel trends:** Mostly visual; subgroups (race, region) may violate assumptions.
- **Controls:** Some educational and local labor variables excluded due to FRED limits.
- **Policy noise:** Variation in state-level relief may bias national-level DiD.

Policy Matrix: ARRA vs CARES

Dimension	ARRA (2008)	CARES (2020)
Speed	Delayed rollout	Immediate execution
Coverage	Infrastructure + tax credits	Direct payments + UI boost
Gig/informal sector	Largely excluded	Explicitly included via PUA
Youth targeting	Indirect only	Covered service + gig sector
Spending scale	$787B	$2.2T
Youth labor impact	+1.92 pp burden	-1.38 pp relief

Building Youth Labor Resilience

- **Automatic triggers:** Targeted UI + wage support that activates by age/sector.
- **Labor market entry programs:** Apprenticeships, job guarantees, hiring credits.
- **Education–work pipelines:** Embed employers in technical/vocational tracks.

Key Takeaways

- Youth are structurally vulnerable — especially during crises.
- 2008's slow policy = deep scars; 2020's fast policy = soft landing.
- DiD shows reversed penalty in 2020: evidence for responsive design.
- Global takeaway: rapid-response labor systems are essential.

Thank You

Thank you!

This study shows that recovery design can either entrench inequality or dissolve it.

Special thanks to my mentor **Andrea Bruno**.

Slides and data: