

Interest: Scarring phenomenon as mentioned in the ***Global Employment Trends for Youth 2020 by International Labor Organization***

“All these forms of labour underutilization in the early stages of a young person’s career can lead to a number of scarring effects, including lower employment and earnings prospects decades later.”

Instruction: look up studies about the scarring phenomenon that was brought about by the pandemic

1. Fiaschi, D. and Tealdi, C. 2022. Scarring effects of the COVID-19 pandemic on the Italian labour market. Cornell University. <https://doi.org/10.48550/arXiv.2202.13317>

Significance

- This paper analyzes the asymmetric effects of the pandemic on different categories of individuals by studying how the shares and transition probabilities of individuals between labour market states have changed after the country entered a full lockdown on March 10, 2020.
- It adds to the literature that shows the impact of the shock has been disproportional high among vulnerable workers
- There is quite a large consensus regarding the fact that younger low income workers were more likely to lose their jobs, findings are more controversial regarding other demographic dimensions, such as gender.

Research Questions

- What is the short-term impact of the COVID-19 pandemic on the Italian labour market?

Methodology

- This paper investigates on labour market dynamics in Italy in the period 2013-2020, i.e., before and during the pandemic, with a focus on gender, age and geographical differences.
- Used Italian quarterly longitudinal labour force data as provided by the Italian Institute of Statistics (ISTAT) for the period 2013 (quarter I) to 2020 (quarter IV).

Main findings

- There are asymmetric effects across gender, age and geographical location, which we attribute to the very different state of the labour market different categories of individuals faced at the outburst of the pandemic.

- There is an increased number of discouraged workers who exited the unemployment state and joined the NLFET state across gender, age groups and geographical location, but mostly among individuals in the South.
- There are substantial outflows of females in the North and Center of Italy in their 30s with small children leaving employment, either permanent or temporary, and becoming inactive.
 - in quarter III of 2020 females aged 30-39 (40-49) had a quarterly transition probability from temporary employment to NLFET of about 25% (19%) compared to the forecasted 10% (12%) in absence of the pandemic shock
- There are no strong outflows of women in the South from employment to inactivity.

2. Jurzyk, E. et al. 2020. COVID-19 and Inequality in Asia: Breaking the Vicious Cycle. International Monetary Fund Working Paper No. 2020/217. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3744684

Significance

- Labor surveys show that the pandemic is having particularly adverse effects on younger workers, women and people that are more vulnerable. Pandemics have been shown to increase inequalities. As a result, income inequality, which was already high and rising in Asia before the pandemic, is likely to rise further over the medium term, unless policies succeed in breaking this historical pattern.

Research Questions

- What is the likely effect of the COVID-19 on inequality in Asia?
- What policies could protect the most vulnerable while helping the recovery?

Methodology

- The paper documents the long-term trends in inequality and uses the 2020 high-frequency labor survey data to identify the impact of the COVID-19 shock on the workers and sectors most affected and provides preliminary evidence on the varied employment effects of the pandemic.
- Used information from the IMF Policy Tracker to analyze the policy responses of Asian governments since the start of the pandemic to protect the most vulnerable.
- The paper uses a novel and extended version of Susceptible-Infected-Recovered (SIR)-macro model by Engler, Pouokam, Rodriguez, and Yakadina (forthcoming)—with different types of agents and a fiscal policy block—to assess how various fiscal measures could help soften the crisis impact on widening inequality

Main findings

- High-frequency labor market indicators have sharply deteriorated, and substantially more than during the Global Financial Crisis (GFC).
- Aggregate hours worked have declined both at the extensive (employment rate) and intensive margins (hours worked per employee).
- Unemployment has surged while labor force participation has plunged—an early sign of scarring effects.
- The pandemic has adversely affected the already vulnerable: younger workers and women.
- Income inequality is likely to keep rising over the medium term, damaging economic growth and social cohesion
 - One channel through which pandemics may increase inequality is the acceleration in automation and robotization – while automation may raise productivity, it also increases inequality by displacing lower paid workers in routine manual occupations.
 - Higher levels of inequality could undermine social cohesion and jeopardize future growth, increasing the risks of a vicious cycle.
- The model-based analysis shows that policies targeted to where needs are greatest are effective in mitigating adverse distributional consequences and underpinning overall economic activity and virus containment.
 - Fiscal support measures when governments have access to external financing not only help diminish the economic cost of the pandemic but can significantly reduce the number of infections
 - Allowing governments to borrow externally helps support the economy throughout the pandemic recession but may require more progressive fiscal measures to avoid excessive pandemic debt accumulation and preserve medium-term debt sustainability

Main recommendations

- The model-based analysis suggests that it is economically and socially beneficial to provide targeted support to the unskilled.
- Countries that had a lower share of workers in the informal sector could extend support through formal channels
 - This includes wage subsidies for firms to keep workers employed, and enhanced unemployment benefits.
- Focus the recovery on digitalization and green energy
 - The jobs available in the recovery phase are likely to require different skills from those lost during the crisis (skill mismatches).
- Policies should also address challenges from automation to minimize longer-term damage.

- Revamp education curriculums to achieve more flexible skill sets and lifelong learning, as well as new training for adversely affected workers.

3. **OECD. 2020. Youth and COVID-19: Response, Recovery and Resilience. Retrieved from: https://read.oecd-ilibrary.org/view/?ref=134_134356-ud5kox3g26&title=Youth-and-COVID-19-Response-Recovery-and-Resilience**

Significance

- To avoid exacerbating intergenerational inequalities and to involve young people in building societal resilience, governments need to anticipate the impact of mitigation and recovery measures across different age groups, by applying effective governance mechanisms.

Research Questions

Methodology

- Online survey run by the OECD between 7-20 April 2020 with the participation of 90 youth-led organisations from 48 countries.
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Main Findings

- Significant psychological impacts of social distancing and quarantine measures on young people causing stress, anxiety and loneliness. This is also affirmed by the findings of studies conducted in the UK (Etheridge B., Spanting L., 2020[23]) and the US (McGinty EE et al., 2020[24]) showing that young adults (aged 18 to 29) experience higher level of distress compared to other age groups since the onset of the pandemic.
- Exposure to domestic violence increases during lockdown measures, leaving adolescents, children and women vulnerable to violence by family members and intimate partners with long-lasting psychological impacts (OECD, 2020[1])
 - For instance, 55 percent of children interviewed reported increased violence during the Ebola epidemic in West Africa in 2014 (UN, 2020[18])
- The closure of schools affects students' mental well-being as teachers and classmates can provide social and emotional support. Education professionals also play an important role in helping detect and report abuse against children (Campbell, 2020[25]). In addition, the postponement or cancellation of exams in around 70 countries, including high-stake final school exams, exposes youth and children to uncertainty, anxiety and stress (UN, 2020[18])
- The impact of the crisis on the psycho-social and subjective well-being of young people also depends on the household they live in and individual circumstances such as prospects of job and income losses; housing quality; the illness or loss of loved ones; and the

presence of existing medical conditions and vulnerable persons in the household (OECD, 2020[3])

Recommendation

- Recommended the following the government should consider in order to build back better for all generations:
 - Applying youth and intergenerational lens in crisis response and recovery measures across the public administration.
 - Updating national youth strategies in collaboration with youth stakeholders to translate political commitment into actionable programmes.
 - Partnering with national statistical offices and research institutes to gather disaggregated evidence on the impact of the crisis by age group to track inequalities and inform decision-making (in addition to other identity factors such as sex, educational and socio-economical background, and employment status).
 - Anticipating the distributional effects of rulemaking and the allocation of public resources across different age cohorts by using impact assessments and creating or strengthening institutions to monitor the consequences on today's young and future generations.
 - Promoting age diversity in public consultations and state institutions to reflect the needs and concerns of different age cohorts in decision-making.
 - Leveraging young people's current mobilisation in mitigating the crisis through existing mechanisms, tools and platforms (e.g. the use of digital tools and data) to build resilience in societies against future shocks and disasters.
 - Aligning short-term emergency responses with investments into long-term economic, social and environmental objectives to ensure the well-being of future generations.
 - Providing targeted policies and services for the most vulnerable youth populations, including young people not in employment, education or training (NEETs); young migrants; homeless youth; and young women, adolescents and children facing increased risks of domestic violence.

4. **Rieso, K. 2011. Scarring Effects of Unemployment. IZA Discussion Paper No. 6198.** <https://docs.iza.org/dp6198.pdf>

Significance

- “Scarring” is defined as the negative long-term effect that unemployment has on future labour market possibilities in itself. Thus, an individual who has been unemployed will be more likely to suffer from negative labour market experiences in the future, compared to an otherwise identical individual who has not been unemployed.

- Several studies indicate that an unemployment period deteriorates future labour market possibilities and thus has severe long-term consequences as well.

5. Cerra, V., A. Fatas, and S.C. Saxena. 2021. *Fighting the scarring effects of COVID-19. Industrial and Corporate Change 30 (2): 459-466. doi: 10.1093/icc/dtab030*

Significance

- The large fall in global output and massive job losses during the current pandemic is creating a socioeconomic upheaval that is likely to persist over time. From previous crises, it is known that some of their effects are likely to leave permanent scars through what is known as hysteresis.

Research Questions

- The article discusses the following:
 - 1) How the concept of scarring or hysteresis is relevant for the current pandemic-induced economic crisis;
 - 2) Channels through which these effects can become persistent; and
 - 3) How fiscal and monetary policies can minimize their consequences and work to create a global economy that is more resilient, more equal and greener.

Main Findings

- **Cohorts that enter the labor market during a recession suffer significant scars in terms of persistent declines in earnings lasting at least 10 years, as well as worse health and higher mortality rates (Schwandt and von Wachter, 2020).** Job losses can translate into human capital decay over time, while long-term unemployment can translate into an increasing number of discouraged workers.
- **Another source of hysteresis is the slowdown of investment in capital, technology or R&D by firms.** Recessions reduce incentives to invest and to undertake R&D because of firms' expectations of low current or future demand. Consequently, a prolonged period of low investment can permanently reduce productivity.
- **Many young workers, especially women, could be "permanently scarred" to find a decent job.** A higher share of female workers than male have been employed in the service sector and informality, have been affected greatly affected by the crisis. Moreover, women have disproportionately borne the brunt of family care due to COVID health vulnerabilities and school shutdowns.
- **The pandemic shock will likely reduce the pace of human capital accumulation, adversely impacting the growth rate of the economy's supply potential.** School closures deprive all children and youth opportunities for growth and development, but this is especially true for the under-privileged learners who tend to have fewer educational opportunities beyond school.

Recommendation

- **Policies can speed up the recovery process and reduce scarring effects.** When it comes to aggregate demand policies, fiscal or monetary, if used aggressively, they can make the recession shallower and shorter.
- **To prevent future outbreaks, we must address the threats to ecosystems and wildlife,** including habitat loss, illegal trade, pollution, and climate change. Additionally, natural disasters linked to climate change also disproportionately affect poor people and poor countries.
- **Massive investments are required in building resilience of people (health, education, nutrition) and planet (climate change mitigation, biodiversity).** UNCTAD (2020) estimates an annual investment gap in developing countries of \$2.5 trillion to achieve the 2030 Agenda for Sustainable Development. Such public investment can have strong multiplier effects, especially during recessions and periods of high uncertainty (IMF, 2020b).
- **Investing in digital connectivity can also increase private sector productivity.** Technology can help governments provide social support. For instance, government cash transfers to households have been aided by the rise in mobile money service providers over time.

6. Forsythe, E. 2022. Youth Hiring and Labor Market Tightness. American Economic Association Papers and Proceedings 112: 117-120. DOI: [10.1257/pandp.20221032](https://doi.org/10.1257/pandp.20221032)

Significance

- Various literature has observed how recessions can lead to long-term scarring for young workers. In relation to this, the paper observed the following practices: 1) employers hire fewer young workers when there are few job openings per unemployed job seeker; and 2) hiring rates for workers with more than 10 years of potential experience are much less cyclically volatile.

Methodology

- The study uses Current Population Survey data from December 2000 through November 2021 for which the Job Openings and Turnover Survey (JOLTS) is available. Tightness is measured using aggregated data from JOLTS and the Local Area Unemployment Statistics (LAUS). Both series model state-level statistics using national and subnational data as well as other predictors.
- Tightness was defined as the **stock of vacancies divided by the stock of unemployed, measured at the state by month by year level.** In addition, an adjusted national tightness measure was constructed using nation-wide estimates and the national unemployment rate excluding individuals who were on temporary layoff and not searching for work.
- The study focused on two potential experience groups: individuals with less than ten years of potential experience and individuals with more than 10 years of potential experience.

Main Findings

- **For the 2001 recession and the Great Recession, youth unemployment rates exhibit disproportionately large increases during recessions with new labor market entrants suffering long-term earnings losses.** A previous study by Forsythe (2022) shows that firms significantly reduce hiring of young workers (less than 10 yrs of experience) as compared to older workers during times of high unemployment.
- **During the COVID-19 pandemic, labor outcomes varied from previous recessions with growth in youth hiring.** According to Forsythe (2022), it is observed that hiring rates respond to labor market tightness rather than the unemployment rate. This is also due to the different labor scenario wherein instead of having a tandem of unemployment rate and labor market tightness¹ as observed in past recessions, the COVID-19 pandemic exhibited exceptionally tight labor markets where individuals did not contribute to congestion in the labor market.
- **Hiring rates are larger for workers with less than 10 years of potential experience compared with more experienced workers.** For each additional unit of tightness (e.g. one additional job opening per unemployed worker), young workers are hired at a higher rate, while for experienced workers, there is no cyclical change in the hiring rate.
- **The unique characteristics of the COVID-19 recession have resulted in robust hiring for young workers, with employment rebounding more swiftly for workers under 25 compared with older workers.** This can suggest that historic patterns of employment and wage scarring due to entering during a recession may be less severe.

7. Borland, J. 2020. Scarring effects: A review of Australian and international literature. *Australian Journal of Labour Economics* 23 (2): 173-187. <https://ideas.repec.org/a/ozl/journl/v23y2020i2p173-187.html>

Significance

- **Scarring occurs when an adverse experience for a worker** – associated with macroeconomic conditions - has negative long-term impacts on their labor market outcomes. The impact of macroeconomic conditions could come: 1) At the time when a young person is seeking to enter the labor market (making a transition from education); or 2) at a later stage of work career after having already spent time in employment.
- **Recent studies find that scarring effects are substantial:** the main Australian study on scarring finds that graduates entering the labor market at a time when the youth rate of unemployment

¹ The ratio between the stock of job openings and the stock of job seekers, typically measured using the number of unemployed (Forsythe 2022)

rate is 5 ppts above average lowers annual earnings of graduates by about 8 percent at the time of entry and by 3.5 percent after five years.

Methodology

- The study presents descriptive evidence on how the employment/population (EMP/POP) rate of young people has varied with macroeconomic conditions at their time of entry to the labour market using data from the HILDA survey for young people in Australia who left full-time (FT) education from 2005 to 2015 (aged 15 to 24 years at the time they left education). In addition, the study reviews Andrews et al.'s (2020) study of how entry conditions affect long-term labour market outcomes.

Main Findings

- **Studies find large negative effects on earnings and employment over the years immediately after entry for workers who join the labour market in a downturn.** The studies differ, however, in their estimates of the speeds at which those negative effects fade. Hence, estimates of the total long-run magnitude of scarring vary between studies.
- **Most studies find larger scarring effects for entrants with low education than high education – usually by quite a large magnitude.** For example, Schwandt and van Wachter (2019) find effects that are four times larger for workers who have not completed high school than for college graduates.
- **All studies of college graduates find negative effects of graduating in a downturn.** Within this group, there is also evidence of an ordering of earnings losses by skill level – with larger average earnings losses for college graduates with lower expected earnings. Most of the studies assess the roles of decreased job quality and worker/job match quality as mechanisms through which scarring occurs.
- **The magnitude of scarring may depend on both the size and duration of macroeconomic downturn; however, the COVID-19 posed a special circumstance.** On the one hand, the scale of decrease in employment thus far in the COVID-19 recession would indicate potentially substantial scarring effects. On the other hand, that a large fraction of the decrease in employment may be fairly rapidly reversed as health-related restrictions on business activity are removed suggests that scarring effects may be less than the initial decrease in employment might suggest.

Recommendation

- **The best policy to avoid or minimize scarring will be effective use of fiscal policy to promote employment creation.** Beyond that, having policies that prevent spillover effects from unemployment (such as skill atrophy or reduced motivation), or which overcome stigma effects (for example, via wage subsidy program to increase incentives for hiring young unemployed jobseekers), can reduce the size of scarring effects.

8. Vellori, A. and J. Parman. 2021. Disease, downturns, and wellbeing: Economic history and the long-run impacts of COVID-19. *Explorations in Economic History* 79 (2021): 101381. <https://doi.org/10.1016/j.eeh.2020.101381>

Significance

- The study reviews the evidence on the long-run effects on health, labor, and human capital of both historical pandemics (with a focus on the 1918 Influenza Pandemic) and historical recessions (with a focus on the Great Depression).

Research Questions

- How past crises can inform our approach to COVID-19 —helping tell us what to look for, what to prepare for, and what data we ought to collect now.

Methodology

- Comprehensive literature review and documentation of evidence from historical pandemics and economic shocks

Main Findings

- **For 1918 influenza pandemic and other depression-era resource deficits, there is wide-ranging adverse long-run effects on later-life human capital and labor market outcomes among U.S. cohorts exposed to the pandemic.** These include substantial reductions in high school completion rates, wages, and socioeconomic status, alongside large increases in the probability of living in poverty, the receipt of welfare payments, the likelihood of incarceration, and —particularly among men —the probability of physical disability. This is more pronounced in poorer areas, and areas that received less relief spending.
- **In Taiwan there is evidence of permanent scarring.** For example, cohorts exposed to the pandemic in utero faced penalties with respect to educational attainment, heights, kidney disease, circulatory and respiratory issues, and diabetes (Lin and Liu, 2014).
- **Studies generated mixed results on the phenomenon of labor market scarring or the idea that economic conditions at the time of labor market entry may have lasting effects on training decisions, occupational choice, career trajectories, and lifetime income.** Some studies suggest that the impact of initial labor market conditions diminishes over the course of an individual’s career (often within the first decade), while others find that some penalties associated with early-career shocks can be cumulative and permanent.
- **Some studies strongly suggest that downturns may have important “overhang” that may potentially reduce prosperity for decades to come, both for directly affected cohorts and the wider economy.** These effects are often heterogeneous by skill level and may be driven by mismatch in initial job placement, lower initial wages (which may be partially related to job mismatch), reduced working time, and delays in finding employment, among other factors.
- **Strategic responses to these shocks may themselves have implications for short- and long-run labor market prospects.** Responses such as migration, temporary exit from the

labor force, and human capital acquisition among others may directly impact long-term labor market situation.

- **Evidence on occupational transitions and socioeconomic mobility also suggest important career-stage gradients in scarring: younger workers were crowded out of the best local job opportunities by their older counterparts.** For example, young workers in more rural areas were pushed out of farming by older workers who retained these jobs at higher rates, and into general laborer and non-occupational positions; and those in more industrial areas being pushed into farming, the less desirable class of occupations in these areas.
- **Studies show substantial and persistent penalties for all workers in severely hit areas, but especially for new labor market entrants.** Many younger workers during the Depression accepted work that they otherwise might not have considered in better economic times —whether because of their now-dire need, the additional competition from older workers, or some combination of these factors. Moreover, many young people seeking work were locked out of the labor market completely by their older counterparts.
- **Experience of the 1918 influenza pandemic suggests that disease exposure can impact individuals throughout their lifetimes,** both directly through poorer ongoing health, and indirectly through reduced investment in human capital. The costs were not limited to those individuals directly exposed; instead, they spilled over within households and across space, sectors and generations.

9. Furceri, D. and Kothari, S. 2021. The effects of COVID-19 containment measures on the Asia-Pacific region. *Pacific Economic Review*, Vol. 26 Issue 4. <https://doi.org/10.1111/1468-0106.12369>

Significance

- Governments introduced various non-pharmaceutical measures to contain the virus, ranging from the introduction of testing and tracing systems to nationwide lockdowns covering all non-essential sectors. While these containment measures were deemed essential to limit the health costs of the virus, they have widely been associated with large economic costs.
- This paper assesses the impact of containment measures on health (COVID-19 cases) and economic (Google mobility data) outcomes in the Asia-Pacific region.

Research Questions

- What is the impact of containment measures on health and economic outcomes in the Asia-Pacific region?

Methodology

- Inputs from IMF desk economists are used to construct a novel narrative index of containment measures for 11 countries in the Asia-Pacific region.
 - The index distinguishes between economic sectors (services, industry, retail), thus providing a more granular view of restrictions related to economic activity.

Main Findings

- Containment measures have been successful in reducing the spread of the virus (though with some heterogeneity) but have also been associated with large short-term economic costs.
 - 30 days after the imposition of a complete lock-down (shut down of all non-essential activities in all six sectors—equivalent to a change of 1 in the index), the number of confirmed cases is over 50% lower than the baseline without any restrictions.
 - The effectiveness of containment measures in reducing infections depends crucially on country characteristics, including population density and the quality of the health system.
- Differences in strategies across countries regarding the closing of the industrial sector have mattered.
 - imposing less severe restrictions on industry has been associated with lower economic costs without leading to worse health outcomes, possibly reflecting the less contact intensive nature of industrial activity.