

Jobless and Stuck: Youth Unemployment and Covid-19 in India

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Abstract. Youth unemployment is a big challenge in developing economies, but there is a limited understanding of the dynamics that cause increases in unemployment among young workers. This article examines unemployment and inactivity among the youth workforce in India, where the economic contraction from the pandemic was solely responsible for reversing the trend of decades of declining global inequality. Young workers face higher unemployment, have fewer transitions to work and are more likely to get stuck in unemployment. They have a strong desire for public employment programmes, with over 80 per cent preferring job guarantees as a policy option to tackle unemployment, despite the implementation and design problems that have sometimes afflicted such programmes.

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1. Introduction

Much of the labour force in developing economies is young and informally employed, with little recourse to social protection and unemployment benefits (Ohnsorge and Yu, 2021). The pandemic caused livelihood losses everywhere. While many developed economies provided support to overcome these losses, developing economies were more limited in their policies to address recovery from the crisis. Government relief programmes often proved inadequate and did not reach new individuals who were being pushed into poverty. Subsequently, GDP has started to come back to pre-pandemic levels. But unemployment has remained higher than before and this is driven primarily by unemployment among the youth (Barford et al., 2021).

Young workers make up the bulk of unemployed individuals. They are also expected to face a much higher burden of the scarring effects of prolonged periods of unemployment through livelihood losses, lower future earnings, reduced human capital accumulation and well-being, and potential recourse to criminal activities. A large literature in the developed world shows that unemployment rates are higher among the youth and even more so during economic downturns. This poses risks of long-term scarring impacts, which tend to lower reemployment wages, erode human and social capital and result in worse physical and mental health for young individuals and their communities.¹ Scars from entering a weak labour market and from unemployment spells when young are not transitory, and active labour policies are an important tool to prevent young workers from prolonged worklessness and the ills it brings with it (Machin and Manning, 1999; Arulampalam et al., 2001; Von Wachter, 2020).

While much is understood about the dynamics of youth unemployment and active labour market policies in the developed world, there is a limited understanding of it in developing economies. A growing body of work shows that youth unemployment is a big challenge in developing countries and has been exacerbated by population growth and economic crises in recent decades (Cho et al., 2012; Bandiera et al., 2022, Dhingra and Kondirolli, 2021). The pandemic has intensified these pressures, with large numbers of young workers having lost their jobs and finding it even harder to return to work. Yet there is little knowledge of the

¹ See, for example: Jacobson, LaLonde, and Sullivan (1993), Ruhm (1991), Sullivan and von Wachter (2009), Browning and Heinesen (2012), Eliason and Storrie (2009), and Bentolila and Jansen (2016) for long-term unemployment from the pandemic.

drivers of youth unemployment and the prospects of returning to work, particularly amid the scale and urgency of the huge shock to livelihoods since the pandemic.

Studying unemployment dynamics in the developing world is challenging because of limited panel data and low labour market participation rates. The problem is made worse by the lack of timely data to determine the impacts of economic crises and the policies needed to recover from them. This article fills the knowledge gap by examining unemployment dynamics in India, providing some of the first estimates of employment transitions from a panel of individuals before and during the pandemic. It shows that the youth are more likely to face worklessness and to remain stuck in it. Inflows into inactivity among young workers peaked during the pandemic, reinforcing the pre-existing trends of lower inflows into work and higher chances of being stuck in unemployment.

India has a large young and informal workforce, typical of developing countries,² and it also suffered one of the deepest economic contractions from the pandemic (see Ray and Subramanian, 2020). In fact, the contraction in India is solely responsible for the reversal of declining trends of global inequality. For three decades, inequality in the world had been falling. The pandemic reversed this trend, and the reversal was driven by the economic contraction and livelihood losses that occurred in India (Deaton, 2021; Ferreira, 2021). The pandemic resulted in a sharp increase in unemployment, especially among young workers in urban areas who were at the frontlines of the pandemic (NSO, 2020). While GDP recovered in 2021, unemployment has remained above its pre-pandemic levels, especially among young workers. Protests over jobs have jolted the country and its political and economic landscape. In the light of these developments, this article provides findings from primary data on the potential of different labour market recovery policies in delivering a transformative recovery from long-term worklessness in India and, more broadly, in developing economies where the majority of the workforce is young and informally employed.

The rest of the article is organised as follows. We start with a description of the data, definitions, and findings on transitions between employment, unemployment, and inactivity in

² In 2018, informal employment amounted to 88.6 per cent of total employment in India, with similar rates in the region (81 per cent in Nepal, 94.7 per cent in Bangladesh, 81.7 in Pakistan), but higher rates than Latin American countries (69.4 Peru, 62.4 Colombia) and much higher rate than for example South Africa 35.3 per cent (Ohnsorge and Yu, 2021).

section 2. We then proceed to recovery policies and preferences of young workers in section 3, followed by a discussion and conclusion in section 4.

2. Labour market flows in India

This section presents findings on youth unemployment and dynamics from a longitudinal panel of individuals whose employment status and transitions are obtained from the Consumer Pyramids Household Survey (CPHS) data of the Centre for Monitoring the Indian Economy between January 2017 to August 2021.

2.1. Unemployment dynamics – Framework

Following Petrongolo and Pissarides (2008), we model three different types of employment status – employment, unemployment, and inactivity. By definition, the change in the unemployment rate Δu_t is the sum of the rates at which individuals enter into unemployment from employment and inactivity ($eu_t + iu_t$) minus the rates at which individuals exit unemployment and move on to employment or inactivity ($ue_t + ui_t$). When unemployment deviates from its steady state (Elsby et al. 2012), as is appropriate to consider for the period of the pandemic in a young country, the change in unemployment needs to also account for new entrants into the working-age population who might face higher unemployment rates. Let n_t denote the share of new entrants who face an unemployment rate that is Δu_{nt} higher than that of older cohorts. Then an exact decomposition of the change in the unemployment rate is:

$$\Delta u_t = n_t \times \Delta u_{nt} + (eu_t + iu_t) - (ue_t + ui_t)$$

If, as is conventional, the focus is on steady-state unemployment and a constant demographic composition, then n_t is zero and we get the usual relationship: the change in the unemployment rate is driven by inflows into unemployment minus outflows out of unemployment.

To understand the sources of change more generally, the change in the unemployment rate can be decomposed into the contribution of new entrants and incumbents in the working-age population. The latter can be further decomposed into those who join the ranks of the unemployed from employment, which has been the focus of a large literature documenting that it is a lead indicator of unemployment increases in the developed world.

In the presence of inactivity, which is a key feature of labour markets in developing countries, the unemployment rate also consists of those who join the ranks from inactivity. For example, during cost-of-living crises, young females might enter the labour force to increase household incomes, leading to increases in iu_t . Developing countries rarely provide unemployment benefits to displaced workers, blurring the distinction between unemployment and inactivity. Although this blurring is more widespread in developing economies, the feature is also observed in developed countries when workers become discouraged from finding employment and exit the labour force despite unemployment benefit programmes. Therefore, studies on unemployment dynamics routinely examine transitions to unemployment and inactivity.

The second term in the equation is the sum of inflows into unemployment (from employment and inactivity). The third term instead accounts for outflows from unemployment. This consists of individuals who leave unemployment to go into employment, which is often seen to lag periods of increases in unemployment in the developed world. It also consists of outflows from unemployment to employment, as was witnessed during the pandemic in the health and care sector in many economies.

Much of the literature on unemployment dynamics focuses on the inflows and the outflows from unemployment and their relative contributions to determine the sub-populations for different labour market policies. We augment this literature to a developing country context and account for demographics, which is important in understanding youth unemployment in economies where the share of the working-age population is increasing over time. To undertake the decomposition, the subsequent sections first estimate the transition matrix for individuals who are incumbent in the working-age group and whose change in employment status is well-defined between employment, unemployment, and inactivity. Then we examine the extent to which new entrants altered the unemployment dynamics.

2.2. Unemployment Dynamics: Findings

A key challenge that has limited research on the dynamics of unemployment in developing countries is the scarcity of panel data and consistent unemployment definitions to determine work transitions over time. The CPHS is a panel survey conducted three times per year, and the employment status of an individual is recorded during each of those three times. Individuals report their employment status (employed, unemployed and looking for work, unemployed and not looking for work, or unemployed and out of the labour force). Employment status is

recorded based on daily recall at the time of the interview, and the unemployment rate is defined as the share of unemployed individuals in the labour force (i.e., those who are employed or unemployed and looking for work). While the CPHS falls short of being nationally representative, it provides a large panel of randomly sampled individuals who can be tracked over time to study unemployment dynamics.³ Based on these data, the main facts on youth unemployment are provided below.

Fact 1: Youth unemployment drives the national unemployment rate, and the pandemic has exacerbated youth unemployment.

During 2017-2020, nationally representative data from the Periodic Labour Force Surveys of India show that the labour force participation rate in India was between 37 and 40 per cent (based on the usual status of an individual during the year), and the unemployment rate was 5-6 per cent of the labour force.⁴ Among young workers between the ages of 15 to 29 years, labour force participation rates were similar, between 38 and 41 per cent. But young workers have much higher unemployment rates.

In fact, the national unemployment rate is driven by youth unemployment, which averages between 15 and 18 per cent (NSO 2018, 2019, 2020). They have also fared particularly poorly since the pandemic, with unemployment rates soaring to over a third during the first wave of the pandemic, along with a reduction of 1 to 2 percentage points in labour force participation.

As official data are updated with a lag and do not have a longitudinal structure across long time periods, this article draws on the CPHS panel to determine the dynamics of unemployment and the impacts of the pandemic. Youth unemployment jumped from 34 per cent in 2019 to about 38 per cent during the peak of the first wave of the pandemic, according to CPHS data (which is highly similar in this dimension to the official statistics). As of May-August 2021 (towards the end of the sample), the youth unemployment rate was still five percentage points higher than the pre-pandemic level.

³ A discussion of the representativeness concerns arising from exclusions at the bottom end of the consumption distribution, especially in rural areas, is provided in Drèze and Somanchi, 2021; Dhingra and Kondirolli, 2022.

⁴ The unemployment rate is higher - 9 per cent - when the definition of employment status is based on the current weekly employment status of the individual rather than the usual status in the year.

Fact 2: More young workers dropped out of the labour force during the pandemic, and fewer found jobs. The youth are more likely to be stuck in unemployment and more likely to move from employment to joblessness (inactivity or unemployment).

The pandemic had a larger negative impact on the young. Half of the employed young workers became inactive or unemployed in 2020 compared to 20 per cent of the national average. Moreover, as of May 2021, they are more likely to remain in unemployment (73 per cent of young workers compared to 44 per cent among the older group) and more likely to become unemployed or exit the labour force (14 per cent of employed versus 4 per cent of the older group). To understand the dynamics underlying these unemployment trends, we examine the likelihood of an individual transitioning from one employment status to another over time.

Figure 1a shows that among all individuals employed from January to April 2019, 4.3 per cent left the labour force, and less than one per cent of them became unemployed from May to August 2019. Out of those who were unemployed before, 15.5 per cent got employment, and 19 per cent became inactive in the following quarter. The rest 65.7 per cent remained unemployed. Out of those who were inactive, just two per cent entered unemployment, and 3.3 per cent became employed. Therefore, the vast majority, 94.7 remained inactive (Full results of transitions are in Table A1 of the Appendix).

It is hard to benchmark these patterns against other emerging and developing economies due to a paucity of such studies. It is nonetheless instructive to compare it to European countries where youth unemployment has been particularly high and where comparable data are available. Overall, India has much lower labour mobility compared to European countries and the main difference emerges from unemployment outflows. The likelihood of moving from unemployment to employment in India is less than half of the rate in European countries, and there is also a lower chance of getting work after being inactive (Appendix Table A2). These differences have also been reinforced since the pandemic.⁵

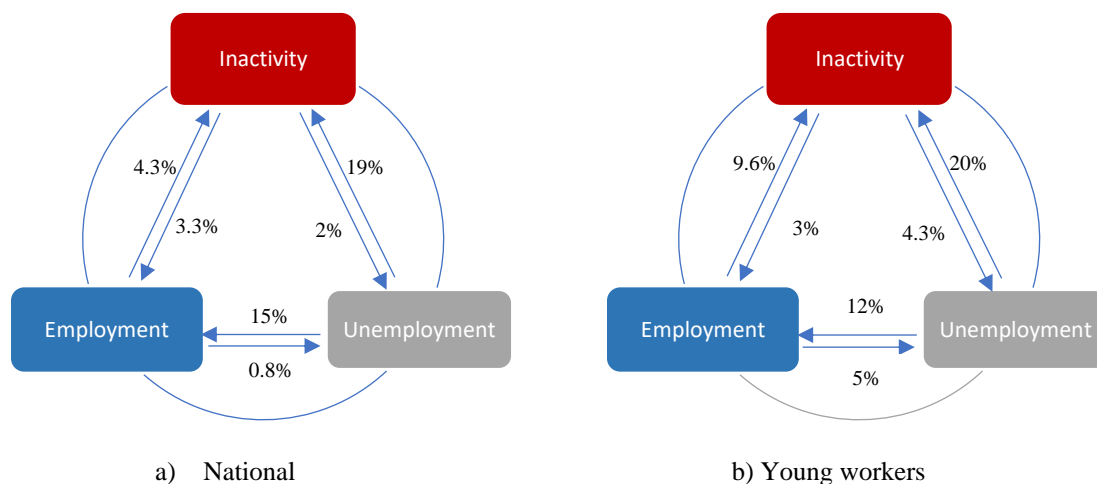
When we focus on young individuals in Figure 1b, the main insight is that flows into and out of employment are less conducive to being in work. Moves from unemployment to

⁵ For comparability, the transition probabilities are reported for all working-age individuals in a given year (as opposed to conditioning on having been in the working-age population in the previous year).

employment are much lower for young workers and have become a lot worse since the pandemic (12 per cent compared to 28 per cent for older unemployed in 2019, and 7 per cent compared to 38 per cent for older unemployed in 2021). Entry into work from inactivity, though, is similar across the young and old. Young workers are also more likely to lose employment and fall into unemployment (4.7 per cent compared to 0.3 per cent in 2019 and 5.3 per cent compared to 0.9 per cent in 2021) or inactivity (9.6 per cent compared to 3.6 per cent in 2019 and 8.4 per cent compared to 3.2 per cent in 2021). Flows from employment to unemployment have increased since the pandemic and by one percentage point more for younger workers.

Both inflows and outflows from work, therefore, drive higher youth unemployment. In what follows, we provide further evidence on the key facts from Figure 1. To sum these up, young workers have about ten percentage points higher separations from work. They also have three percentage points lower inflows into work from unemployment. Finally, young workers move between unemployment and inactivity more frequently.

Figure 1: Quarterly labour market flows 2019 (% of initial status)



Source: CPHS. Transitions in labour market status in India: January-April to May-August 2019 for all India (a) and January-April to May-August 2019 for workers aged 15 to 25 (b), as a percentage of the initial status.

Worklessness among the youth can be further decomposed into inflows and outflows over time, which we document next for those who transition from employment, unemployment, and inactivity.

Fact 2a: The youth are more likely to move out of employment into joblessness. Outflows from employment rose sharply during the pandemic. Afterwards, younger workers experienced a slight increase in the likelihood of becoming unemployed.

Young workers have much higher separations from work. They are over ten percentage points less likely to stay in employment than older workers. Two-thirds of this difference comes from higher transitions to inactivity and the rest from transitions to unemployment.

During the first wave of the pandemic, when India was under a strict national lockdown, there was a big jump in transitions from employment to unemployment and inactivity, with the bulk of the change towards inactivity. These transitions from employment to joblessness drove the unemployment rate during the first wave, and there was some churn afterwards, with more unemployed youth finding employment. These trends have since abated, and the gaps between younger and older workers in transitions from employment to unemployment or inactivity have slightly increased because younger workers are more likely to become unemployed.

Fact 2b: The youth are less likely to move out of unemployment into employment compared to older cohorts. Transitions from unemployment to inactivity peaked during the first wave of the pandemic. Afterwards, unemployed youth became much more likely to stay stuck in unemployment and not find work afterwards.

Moving out of unemployment is much harder for young workers; older workers are over two times more likely to move out of unemployment into employment. Two-thirds of this difference comes from continuing unemployment, while the rest from transitions into inactivity (Table A1 in the Appendix).

During the first wave of the pandemic, many unemployed youth stopped looking for work. This came down as the dust settled down on the first wave, and more unemployed youth also started to find work afterwards. But the pandemic contributed to making it even harder than before for unemployed youth to transition into work. They became about five percentage points more likely to stay unemployed after the pandemic, which is in stark contrast to the higher likelihood of finding work among the older cohorts.

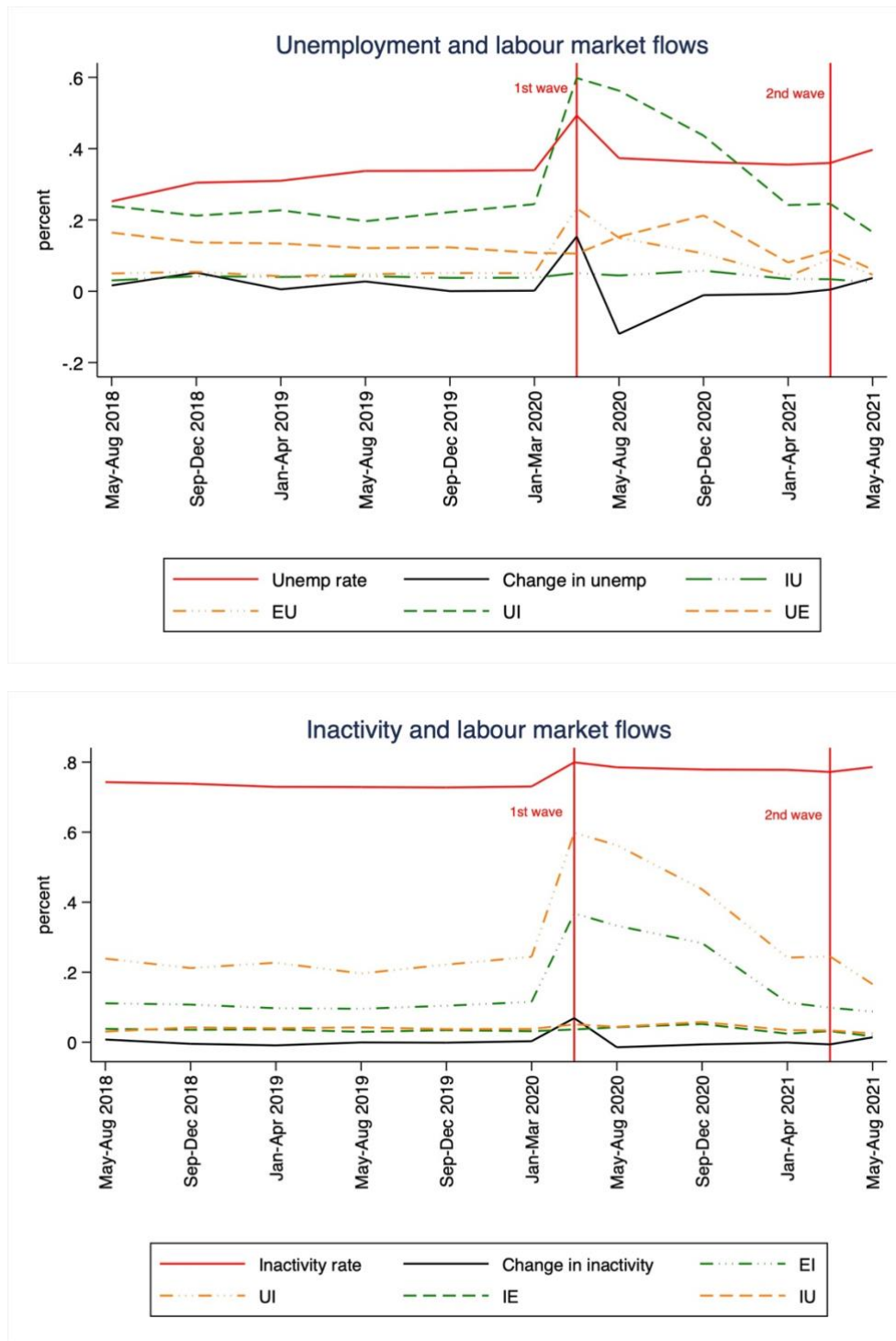
Fact 2c: The youth are more likely to move out of inactivity, but outflows are mostly to unemployment. Inactivity rates spiked during the pandemic, and afterwards, both young and old workers became more stuck in inactivity.

As might be expected for age reasons, older workers are more likely to stay inactive, but they also have somewhat greater possibilities of getting a job after having been inactive. The youth, instead, are less likely to remain inactive but find it harder to transition to work after being inactive. Typically, young workers who drop out of the labour force are more likely to start looking for work. This changed during the pandemic when more and more young workers remained inactive, and transitions to employment worsened compared to older workers. After the first wave had passed, more people stayed out of the labour force, and inactive workers became even less likely to find work or look for work.

Placing the inflows and outflows next to each other also enables an understanding of which margin is more important and the differences in the evolution of inflows and outflows over time. For clarity of visual representation, Figure 2 shows the unemployment and inactivity rates and plots them together with inflows and outflows (into or from each status). Young workers have seen increasing unemployment and inactivity, starting from about 25 to just under 40 per cent and from 75 to almost 80 per cent during the period, respectively. Over this period, it is inflows into unemployment and inactivity that came before the increases in rates, while the outflows followed.

As observed for developed countries, gross transition flows rise during crises, and inflows from employment drive increase in worklessness while outflows lag them. This is in line with empirical findings from the developed world, but contrary to the canonical assumption in macroeconomics that gross flows decline with rising unemployment and outflows are lead indicators of unemployment increases while inflows lag them (Elsby et al., 2012). Consequently, these findings provide evidence for this fact from the unemployment dynamics literature in a very different context of a large developing country with informality and youth unemployment.

Figure 2: Unemployment, inactivity, and labour market flows among young workers

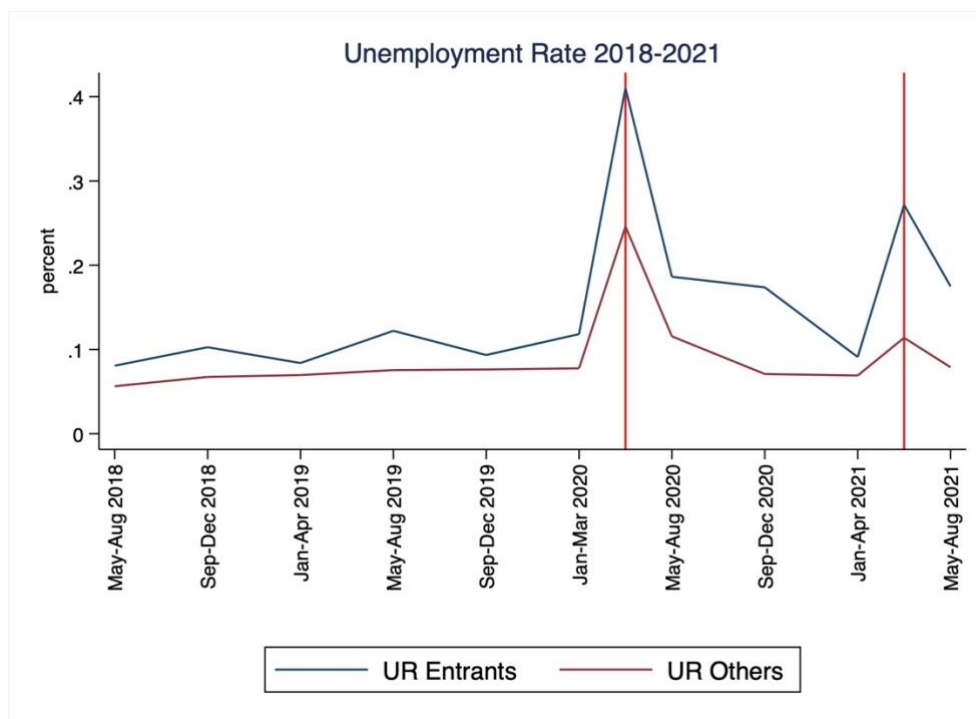


Source: CPHS. The sample includes individuals 15 to 25 years old. Transition rates are calculated as the share of status in the previous quarter. Unemployment rate is the share of individuals in the labour force who were unemployed and looking for work. The change in unemployment is calculated as the sum of the rates at which individuals enter into unemployment from employment and inactivity (EI+IU) minus the rates at which individuals exit unemployment and move on to employment or inactivity (UE+UI). Inactivity rate is the share of the individuals in the working-age population who are out of the labour force. The change in inactivity is the sum of the rates at which individuals enter inactivity from employment and unemployment (EI+UI) minus the rates at which individuals exit inactivity and move into unemployment and employment (IU+UE)

Fact 3: The share of new entrants in the working-age population is under two per cent, and they have unemployment rates which are, on average, three percentage points higher than the incumbents.

Between 2018 and 2021, the share of new entrants in the working-age population was under two per cent. They have had a higher unemployment rate compared to the rest of the working-age population even before the pandemic, 12 per cent versus 7.6 per cent in May 2019 and a much higher 17.5 per cent compared to 7.9 per cent among others in May 2021 (Figure 3). Therefore, the contribution of the demographic composition has been concentrated and growing in terms of unemployment but small in aggregate – under a quarter of a percentage point.

Figure 3: Unemployment rate of new entrants in the working-age population



3. Recovery Policies

The findings of the previous section show that youth unemployment is an important feature of developing country labour markets. The pandemic has exacerbated it, and more young workers find it harder to get out of worklessness. While GDP has recovered to its pre-pandemic

levels in India since 2021, unemployment has remained above its pre-pandemic levels. Youth protests over the lack of employment opportunities have sprung up across the country, and there are proposals to put in place active labour market policies to address the joblessness crisis.

Research on the impact of active labour market policies (ALMPs) such as training, job-search assistance, subsidised private and public employment, or a combination of the above shows that these policies have the potential to effectively address unemployment even after periods of economic crises. Specifically, they are more effective in addressing structural unemployment, such as through human capital formation and training, which are usually not the focus of policies designed for tackling short-term unemployment.

Active labour market policies have seen renewed interest across the world. The ILO and the OECD have called for public employment programmes, including job guarantees, to assist young workers' labour market recovery (ILO, 2020; OECD, 2020). India already runs the world's largest job guarantee programme under its Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), which entitles rural households to demand 100 days of work a year from the government. Demand for work under the programme went up by 1 billion person-days of work after the pandemic, but there has been no such lifeline for the youth in urban areas.⁶ Proposals to address the deep unemployment crisis in urban areas include policies such as an urban job guarantee to expand the remit of the existing rural job guarantee programme (Azim Premji University, 2019 and 2021), a Decentralised Urban Employment and Training programme (Drèze 2020) and a multi-year paid government internship programme (Banerjee et al. 2019). They are expected to fill the gap created by the private sector's continued inability to generate decent work for the large young informal workforce of the country.

A large amount of literature seeks to evaluate the performance of the national rural employment guarantee and finds positive impacts on wages, livelihoods, and the creation of public assets. While these can be studied from ex-post evidence of the programme, many active labour market policies remain untried, and there is a paucity of evidence on what policies might be effective in urban settings and in addressing youth unemployment. To fill this gap, we report findings from a primary survey in low-income urban areas designed to examine which policies

⁶ <https://timesofindia.indiatimes.com/india/after-2020-21-record-peak-dip-in-rural-jobs-scheme-demand/articleshow/90602341.cms>

are reaching workers who have experienced livelihood losses from the pandemic and which policies they expect would be most effective in addressing unemployment in their areas.

The primary survey, conducted by the LSE's Centre for Economic Performance (CEP), collected information from a random sample of individuals from the low-income states of Bihar, Jharkhand, and Uttar Pradesh. Individuals who had worked before the pandemic and were between 18 to 40 years old were interviewed to understand the experience of individuals who have been in the labour force and whose work may have been impacted by the pandemic.

The survey focuses on worklessness, the evolution of employment prospects and policies to tackle unemployment in low-income urban areas. It was conducted from 21st January 2021 to 18th March 2021, just before India was hit by a second wave of the pandemic. The survey sample was drawn randomly from a panel of individuals available from field visits to 150 lower-income urban ward clusters (50 wards each in Bihar, Jharkhand, and Uttar Pradesh), and is representative of workers in these low-income states, as shown in Dhingra and Machin (2022). The first round of the survey collected information on work status before and during the pandemic. A second round of the survey expanded sample coverage to overrepresent workers who had lost their job during the pandemic to examine recovery policies from the population of policy interest. The survey elicited preferences of individuals over policies for tackling unemployment in their area. The design of policy preferences takes the form of a stated choice experiment embedded in the primary survey, which we explain in detail in the next section. Overall, the survey interviewed 4,763 individuals aged 18-40 years. This included 3,201 respondents who had been interviewed by phone during the first wave of the pandemic and a boost sample of 1,562 respondents who had become unemployed since the pandemic.

3.1. Policy information experiment

Policy preferences of individuals were elicited by asking them about their views on the policies they think would be more/most effective in tackling unemployment in urban areas. To minimise framing bias, questions on labour market policies were framed in different ways, and individuals were randomised into each type. First, equal numbers of individuals were randomly assigned across policy questions that directly asked or did not ask about their opinions on the different policy options. Then within each group, equal numbers of respondents were randomly assigned to getting or not getting information on the job guarantee and cash transfer policies of

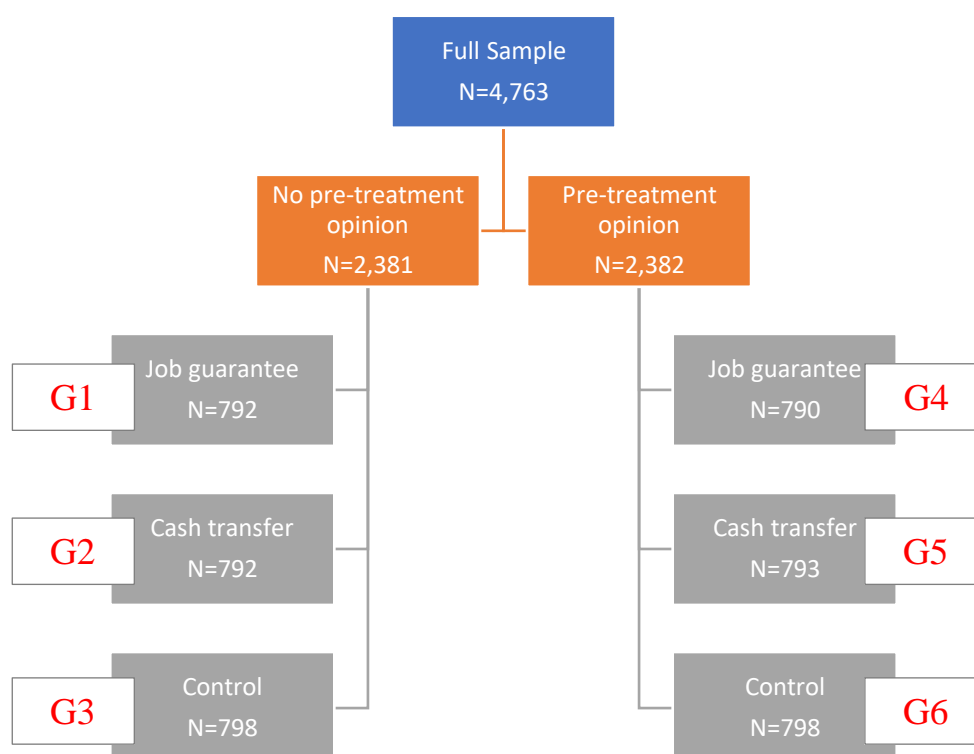
the government over the previous year. Then again, within each group, individuals were asked to choose between a job guarantee and a cash transfer with the order of the option decided according to the assigned group (job guarantee first for the job guarantee treatment group, cash transfer first for the cash transfer treatment group).

The full sample was randomly assigned to two groups: the **pre-treatment opinion** and **no pre-treatment opinion**. The first group was asked: “*We would like to ask you about your views on the work situation and the role of government. Which one of these policies, paid by the government, do you think would be most effective in tackling unemployment in urban areas? Job Guarantee for Urban Workers; Direct Cash Transfer for Urban Individuals; Wage Subsidy to reduce labour costs for industry in the area; Land Grant, Tax holiday or Other Incentives in the area to industry; Other (with open-ended answers).*”

The pre-treatment policy opinion group consists of individuals who choose between policies before getting any information from the survey on existing labour market policies. While this is helpful in examining the efficacy of the information provided, it comes with the concern that individuals may be reluctant to change their views to be perceived as being correct. Therefore, half of the sample was randomised into being asked their pre-treatment opinion, and the rest were asked to choose their preferred policy for the *first* time after being given the information on existing policies of the government.

After being assigned to the pre-treatment opinion and no pre-treatment opinion, both groups were then randomly assigned to one of three groups: the first group was shown the information on job guarantees first, cash transfers second (G1 and G4); the second group was shown the information on cash transfers first, job guarantees second (G2 and G5), and the third group was shown no information (G3 and G6).

Figure 4: Labour market policy experiment design



The information contained in the job guarantee and cash transfer policy opinion was as follows:

Job guarantee: Job guarantee programmes create jobs for individuals in public and community works. Through MGNREGA, the government has to provide up to 100 days of work to individuals in rural areas that are not able to find work otherwise. In 2020 until now, the government has reported that 11 crore persons in rural India demanded work and received Rs 5,000 each on average for the year. Examples of urban job guarantees include an urban NREGA in Kerala and new schemes in Jharkhand, Himachal Pradesh, and Odisha.

Cash transfers: Cash transfers enable individuals to start their own work or to look for jobs. Through Cash Transfers, the government directly deposits cash into the accounts of beneficiaries like for Jan Dhan and PM-KISAN payments. In 2020 until now, the government has reported that 42 crore beneficiaries are covered by cash transfer schemes and received about Rs 1,500 each on average for the year. Examples of urban cash transfers include payments to urban Jan Dhan accounts.

G1 and G4 were then asked: “*How good, on a scale of 0 to 10, do you think a job guarantee programme, paid by the government, would be to tackle unemployment in urban areas?*” and “*How good, on a scale of 0 to 10, do you think a cash transfer programme, paid by the government, would be to tackle unemployment in urban areas?*”

G2, G3, G5 and G6 were asked the same questions in the opposite order.

Everyone was asked: “*Which of the two would you prefer in your area?*” *Job guarantee/Cash transfer for G1 and G4; Cash transfer/Job guarantee for G2, G3, G5 and G6.*

Following Kuziemko et al. (2015), post-treatment questions are worded slightly differently from the pre-treatment opinion to avoid survey fatigue and the possibility of respondents being reluctant to change their answers. While much of the stated policy choice literature focuses on making the choice under consideration more salient for individuals so that their preferences can be elicited, this is much less of a concern in our case. The choice is about unemployment policies which are of direct relevance and huge economic importance to the individuals being surveyed. Moreover, the policy choices are being elicited in a context where the existing policies (such as MGNREGA and Jan Dhan transfers) are highly publicised and at a time when unemployment was one of the most salient debates in the local and national discourse.

Having provided their post-treatment policy options, respondents were asked about the reasons for their choices. Those who chose cash transfers were asked: “*Why do you prefer cash transfers?: Wages under job guarantee programmes are too low; Work under job guarantees is not very desirable; Workers face delays in job guarantee payments; 100 days of work isn't enough; Job guarantee work is too rationed; Job guarantee programmes are run by job contractors; Cash transfers are more flexible; Cash is helpful for those working away from their area; People need more cash, they can always get better work; Cash transfers will enable people to do or look for better work; Government should not be doing any such programmes; Other (with open-ended answers).*”

Those who chose job guarantees were asked: “*Why do you prefer a job guarantee?: Job guarantee will directly address the lack of work; Job guarantee will directly address livelihood insecurity; Workers are sure to get paid from the government, even if they are delays; People need more days of work; People need work in their areas; People need work, not just cash; Cash transfers are too low; Cash transfers don't reach people; People should not take money*

without working; People won't want to work or look for work if they are getting cash transfers; Government should not be doing any such programmes; Other (with open-ended answers).

3.2. Experiment findings

An overwhelming majority would choose a job guarantee over a cash transfer programme (84.46 per cent overall, and 85 per cent of those who do not receive any treatment). Information on the government's existing programmes for job guarantee or cash transfers does not have a systematic impact on the policy choices of young workers (Table 1, Column1). The order of the information provided on job guarantee programmes and cash transfer programmes also does not alter the main point: the vast majority of young workers would like a job guarantee and prefer it to cash transfers (Table 1, Column 2). However, there is some slight but statistically insignificant shift away from preferring a job guarantee when information is provided on the government's existing programmes.

Table 1: Prefer job guarantee over cash transfer

	(1)	(2)
Information	-0.008 (0.011)	
CT information		-0.004 (0.013)
JG information		-0.013 (0.013)
Constant	0.850*** (0.009)	0.850*** (0.009)
Observations	4763	4763

Notes: Source: CEP Survey 2021. The outcome variable takes a value of one if an individual chooses a job guarantee and zero if they choose a cash transfer. The coefficient on the constant therefore is the sample average for those preferring a job guarantee among the group which is not randomly assigned to receiving any information. *Information* treatment takes a value of one if an individual is given a cash transfer or job guarantee information treatment and zero otherwise. *CT information* takes a value of one if an individual is given a cash transfer information treatment and zero otherwise. *JT information* takes a value of one if an individual is given a job guarantee information treatment and zero otherwise.

Table 2: Prefer job guarantee over cash transfer

	(1)	(2)
Opinion x information	-0.048 (0.047)	
Opinion x CT information		-0.060 (0.054)
Opinion x JG information		-0.036 (0.053)
Observations	4764	4764

Notes: Source: CEP Survey 2021. The outcome variable takes a value of one if an individual chooses a job guarantee and zero if they choose a cash transfer. *Opinion* treatment takes a value of one if an individual is asked to choose their preferred labour policy to tackle unemployment. *Information* treatment takes a value of one if an individual is given a cash transfer or job guarantee information treatment and zero otherwise. *CT information* takes a value of one if an individual is given a cash transfer information treatment and zero otherwise. *JT information* takes a value of one if an individual is given a job guarantee information treatment and zero otherwise.

The policy preferences and the role of information on the government's programmes can be examined further for the group of youth whose pre-treatment opinion on policies was collected. Table 2 reports results from the panel dimension of the policy options. Half of the sample was asked their opinion and also asked to choose the policy option, which provides a pre-treatment and a post-treatment policy preference for an individual. Individual fixed effects are included, so identification of the information treatment comes from those who switch their preferred policy option after being randomly assigned to an information treatment. Column 1 shows a slight but statistically insignificant drop in preference for a job guarantee. Similar results obtain in Column 2, which splits the information by the order in which it was given.

Overall, the sample average for choosing a job guarantee is very high, and the reduction in the demand for a job guarantee occurs with more information but is small and still leaves support for a job guarantee at 80 per cent or more.

The main reason why respondents choose cash transfers over a job guarantee programme is flexibility (28 per cent). The Government of India has made paltry increases in wages under the rural job guarantee, and there have also been concerns over job rationing in the past. This seems to be reflected in some individuals (17 per cent) preferring cash transfers due to the low earning potential of job guarantees from low wages and rationing. The role of contractors in job guarantees also contributes to some individuals preferring a cash transfer. Among those who prefer a job guarantee, the vast majority said that job guarantees would directly address the lack of work or livelihood insecurity (67, 18.7 per cent) and provide certainty over wage payments (5.4 per cent).

Among individuals who switch from wanting a job guarantee to wanting a cash transfer upon receiving information about the government's programme, the reasons are quite similar to the ones chosen by the non-switchers. But switchers are over-represented by individuals who feel that the presence of job contractors, the nature of work under job guarantees and the wage payment delays associated with job guarantees make them less preferable to cash transfers.

Table 2: Reason prefer job guarantee/cash transfer

	(1)	(2)
Prefer job guarantee to cash transfers:		
JG will directly address the lack of work	0.671	
JG will directly address livelihood insecurity	0.187	
Workers are sure to get paid by the government	0.054	
People need work in their areas	0.036	
People need more days of work	0.029	
People need work, not just cash	0.008	
People should not take money without working	0.008	
Cash transfers are too low	0.005	
Government should not be doing such programmes	0.001	
Prefer cash transfers to job guarantee:		
Cash transfers are more flexible	0.282	0.256
Wages under JG programmes are too low	0.169	0.211
JG are run by job contractors	0.119	0.022
JG work is too rationed	0.116	0.100
CTs will enable people to do or look for better work	0.067	0.033
Work under job guarantees is not very desirable	0.064	0.111
Workers face delays in job guarantee payments	0.062	0.144
Cash is helpful for those working away from their area	0.056	0.056
People need more cash; they can always get better work	0.047	0.056
Observations	4603	90

Notes: Source: CEP Survey 2020. Column 1 includes the full sample; Column 2 includes individuals who choose a job guarantee among the five policy options but choose a cash transfer after given the information treatment.

4. Policy discussion and conclusion

This article contributes to the literature on unemployment dynamics by estimating transition probabilities for moving between employment, unemployment, and inactivity. The focus is on unemployment in India, which has been rising in recent years and has been severely exacerbated by the pandemic. The rise in unemployment has opened risks of long-term unemployment and livelihood losses which threaten income growth and well-being. This problem is a feature of many developing economies, where the bulk of the workforce is informally employed and has little recourse to unemployment benefits, and where youth unemployment is a burgeoning problem.

We first show that the youth are more likely to be stuck in unemployment and more likely to move from employment to joblessness. This manifests itself through a 16 percentage points lower likelihood of moving from unemployment to employment and through a ten percentage points higher likelihood of moving from employment to worklessness. Young workers move more frequently between unemployment and inactivity. Therefore, young workers are faced

with greater churn, especially from employment to worklessness, that on the net makes them less likely to be in work.

High unemployment among the youth has recently been termed the biggest challenge in India, and there has been intense public debate over the ability of public employment programmes to generate jobs, particularly in the aftermath of the pandemic. To understand policies for addressing youth unemployment, the article presents findings from a stated choice experiment embedded in a primary survey of young individuals whose work was impacted by the pandemic. The overwhelming majority, over four-fifths, of individuals would like a job guarantee from the government to tackle the unemployment crisis. The rest would mostly like a cash transfer to provide flexibility in income support and finding work. Information regarding the performance of the government in comparable welfare programmes in other areas reduces the share of individuals who prefer a job guarantee to a cash transfer. Five per cent of individuals switch from choosing a job guarantee, and the reasoning is driven by updates on their views regarding job rationing, wage delays and the role of private contractors in job guarantee programmes.

APPENDIX

Table A1: Labour market flows conditional on the initial status

Labour Force Flows May-Aug 2019

	National	Urban	Rural	15-25	26-64	Low-income states
From unemployment						
Unemployment	0.657	0.660	0.655	0.682	0.559	0.639
Inactivity	0.189	0.200	0.182	0.197	0.156	0.188
Employment	0.155	0.140	0.163	0.121	0.285	0.173
From employment						
Unemployment	0.008	0.009	0.008	0.047	0.003	0.016
Inactivity	0.043	0.049	0.041	0.096	0.036	0.041
Employment	0.948	0.941	0.951	0.857	0.962	0.943
From inactivity						
Unemployment	0.020	0.022	0.019	0.043	0.005	0.028
Inactivity	0.947	0.947	0.946	0.928	0.959	0.944
Employment	0.033	0.031	0.034	0.030	0.036	0.028
Observations	431777	277135	154642	127492	304285	103048

Labour Force Flows May-Aug 2020

	National	Urban	Rural	15-25	26-64	Low-income states
From unemployment						
Unemployment	0.260	0.245	0.269	0.276	0.183	0.231
Inactivity	0.533	0.571	0.509	0.566	0.378	0.581
Employment	0.207	0.184	0.222	0.158	0.439	0.187
From employment						
Unemployment	0.067	0.069	0.066	0.147	0.055	0.099
Inactivity	0.136	0.147	0.130	0.337	0.105	0.096
Employment	0.797	0.784	0.804	0.516	0.840	0.805
From inactivity						
Unemployment	0.023	0.025	0.022	0.042	0.010	0.020
Inactivity	0.909	0.912	0.907	0.916	0.904	0.941
Employment	0.069	0.063	0.071	0.043	0.085	0.039
Observations	227029	151907	75122	70442	156587	67148

Labour Force Flows May-Aug 2021

	National	Urban	Rural	15-25	26-64	Low-income states
From unemployment						
Unemployment	0.684	0.701	0.675	0.732	0.443	0.642
Inactivity	0.190	0.171	0.200	0.195	0.168	0.262
Employment	0.126	0.127	0.125	0.074	0.389	0.096
From employment						
Unemployment	0.013	0.014	0.013	0.053	0.009	0.009
Inactivity	0.038	0.036	0.039	0.084	0.032	0.030
Employment	0.949	0.951	0.948	0.863	0.959	0.961
From inactivity						
Unemployment	0.013	0.013	0.014	0.027	0.003	0.011
Inactivity	0.963	0.965	0.961	0.953	0.970	0.973
Employment	0.024	0.021	0.025	0.020	0.027	0.017
Observations	288190	191156	97034	90936	197254	77837

Notes: Source: Consumer Pyramids Household Survey May-August 2021. Transition rates are calculated as the share of initial status in the previous quarter. Sample includes individuals 15 to 64 years old in the labour force. Low-income states column includes individuals living in the states of Bihar, Jharkhand, and Uttar Pradesh. *In labour force* includes individuals who were employed or were unemployed and looking for a job. *Unemployed* is the share of individuals in the labour force who were unemployed and looking for a job. *Employed* is the share of individuals in the labour force who were employed. *Inactive* are individuals out of the labour force and individuals who are unemployed and not looking for a job.

Table A2: Transitions in labour market status in India and EU countries in 2019 and 2021

	2019		2021	
	India	EU	India	EU
From unemployment				
Unemployment	0.657	0.545	0.684	0.512
Inactivity	0.189	0.262	0.190	0.240
Employment	0.155	0.193	0.126	0.248
From employment				
Unemployment	0.008	0.015	0.013	0.014
Inactivity	0.043	0.025	0.038	0.028
Employment	0.948	0.960	0.949	0.959
From inactivity				
Unemployment	0.020	0.031	0.013	0.032
Inactivity	0.947	0.937	0.963	0.918
Employment	0.033	0.032	0.024	0.050
Working-age population as a share of the overall population	0.670	0.645	0.673	0.642

Notes: Transitions in labour market status in India, Q2 to Q3 2019 and Q2 to Q3 2021 (source: CPHS) and transitions in labour market status in the EU, Q2 to Q3 2019 and Q2 to Q3 2021 (source: Eurostat) as a share of the initial status. The working-age population is reported as a share of the total population in 2020 (source: OECD).

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