Conference summary

The conference brought together policymakers and practitioners, international institutions, and leading academics to shed light on the factors shaping labour market trends in a post-COVID world characterised by rapid technological advances and the need for a transition to low-carbon economies. The aim was to address issues related to these developments from both practical and research perspectives and draw robust and novel policy implications.

The COVID-19 pandemic has induced fundamental shifts in labour markets, working arrangements and business models. On the one hand, the digitalisation and broader technological change that gained impetus during the pandemic could put economies on a higher productivity path, while providing greater flexibility for workers and employers alike. On the other hand, many workers are still not back in the labour force, resulting in a tight labour market. Against this background, the conference explored options to minimize the risk of scarring from the pandemic, policy lessons to boost resilience, as well as the mechanisms through which technological change is shaping the labour market and impacting firm dynamics.

Keynote presentation by Richard Freeman:

Post-shock reallocation and risks: The role of labour market and policies.

The Conference was opened by **Luiz de Mello**, Director, Policy Studies Branch, OECD Economics Department, who welcomed participants, provided the motivation for choosing post-COVID labour market trends and challenges as a topic for the Conference and invited Professor **Richard Freeman** to make the opening presentation.

In his presentation, Richard discussed four major shocks or trends that have impacted or are likely to impact economies and the labour market, namely the pandemic, the war in Ukraine, the global financial crisis and climate change. These events share in common a few characteristics, including that they are big, rare (though more frequent than a normal distribution would predict) unpredictable in how they hit or unfold, and sometimes transformative. For instance, he mentioned how in the past the great depression had created opportunities to improve labour systems in ways favourable to workers. As for the recent shocks, in particular COVID, they create opportunities to strengthen safety nets for low-income workers, improve well-being through remote work that can save commuting costs and office space, and foster digitalization and other technological developments.

In terms of policy lessons, Richard suggested that investment in improving early warning systems would have great potential value given the difficulty of predicting the types of shocks faced in the past decade. Given also the uncertainty surrounding this type of shocks, he argued in favour of strengthening modes of *decision-making under dep uncertainty* as a mean to respond flexibly to shocks of differing magnitude. Finally, he suggested to invest in improving the supply chain of responses to disasters, including by devoting more attention to analysis of ways to improve the construction and funding of infrastructure and housing.

Session I: New work patterns from COVID and digitalisation

The first session of the conference after the keynote speech discussed recent evolutions in the labour market after COVID, and in particular the diffusion of telework and digital technologies. The session was opened by **Alain de Serres**, Deputy-Director of the Policy Study Branch, OECD Economics department, who stressed how the topic is a key challenge for both policy and analysis, considering the recent nature but also the large scale of the phenomenon.

The first paper, presented by **Yashodan Ghorpade** (World Bank), investigates the trade-off for workers between flexibility on the job and salaries. With the aid of a discrete choice experiment where respondents to a survey were asked to choose their preferred job from two hypothetical job descriptions with randomly-assigned flexibility and earning attributes, the paper examines how preferences differ between workers in standard vs freelance jobs in Malaysia in the post-COVID labour market. The analysis finds that workers are willing to pay a premium in terms of foregone salary in exchange for greater work flexibility in place and time, and that this is more frequent among freelance workers, but also that the premium is not large (at most 10% of the salary). The preference for flexibility is heterogeneous across individuals and not strongly related to observable characteristics of the worker, including gender.

The second paper, as presented by **Marina Tavares** (IMF), introduced a number of descriptive facts about digitalisation around the world during and after the COVID-19 crisis. During the crisis, adoption of digital technologies increased considerably, and especially so where initial ICT intensity was lower (e.g., food processing industries, small and medium enterprises, South-East European countries). After the crisis, productivity growth was fastest in these same sectors, and among high-digital firms. Sectors that were initially more digitalised, conversely, experienced lower productivity losses during the crisis, and employment in initially more digitalised countries and occupations fell less. After this initial "cushion" effect, however, more digitalised occupations did not experience significantly higher employment gains than less digitalised occupations.

In the third presentation, **Mathias Dolls** (IFO) described the results of a large survey of workers and employers about working from home (WFH). The survey covered 27 developed and emerging countries in two waves, between 2021 and 2022, and yielded a number of stylised facts. Mathias stressed how preferences for the extent of WFH differ between workers and employers (1.5 vs 0.7 days a week, respectively) and significantly across countries. Similar to the first paper, the possibility to WFH for 2 or 3 days a week is evaluated by employees at 5% of their salary on average, and even more by women, parents and workers with longer commutes. The productivity gains from WFH during the crisis came as a surprise and increase the probability that employers maintain WFH in the future.

Luca Marcolin (OECD) discussed the three papers, framing them in the broader remote work literature. All three papers signal that WFH during COVID was a positive experience for both workers and employers, with positive impacts on performance and utility. Moreover, they all provide evidence pointing at the fact that WFH will persist in the future: economic agents have now more information about WFH, and some of them have already invested greatly in making WFH happen. This resonates with evidence provided by the OECD on the persistence of remote work in online job advertisements, and on the perception of managers and workers according to the OECD survey on telework practices. Possible future work could strengthen the evidence base of positive productivity returns to WFH and the set of framework conditions that enables them, or expand the analysis of the impacts of remote work on other socio-economic outcomes, such as innovation, job security, or heath.

Session II: Lessons from labour market policies during COVID-19

The second session focused on the role that COVID-19 related policy support schemes played in shaping firm dynamics and labour market outcomes. **Marcello Estevão** (World Bank) moderated the session and led the discussion.

The first paper, presented by **Lilas Demmou** (OECD) and resulting from the collaboration between the OECD Economics Department and the Directorate for Science, Technology and Innovation, delivers four main takeaways: i) employment adjusted to the COVID-19 shock mainly through the downsizing of surviving firms, while survival rates increased or remained stable; ii) the reallocation process remained productivity enhancing, although to a lower extent compared to the pre-crisis period; iii) job retention schemes (JRS) were efficient at preserving jobs, especially in most hit sectors; iv) JRS support was allocated in a relatively efficient way and did not seem to have generated distortions from a productivity-enhancing reallocation perspective.

Victoria Nuguer (IADB) presented a second paper that uses a macro search and matching model calibrated to the Mexican economy to analyse the labour market and macroeconomic implications of digital adoption policies in Latin America following the COVID-19 outbreak. The model shows that digital adoption has been critical to foster the recovery in the short-term, as it boosted GDP, employment and labour income. The overall positive effects persist also in the longer term, with higher average firm productivity and higher GDP. Yet, the removal of barriers impeding digital adoption also results in lower employment and larger labour income differentials between formal and informal workers, pointing to a potential trade-off between improved macroeconomic outcomes and labour income inequality.

Finally, **Elias Albagli** (Bank of Chile) presented the third paper, a joint work with the IMF. The analysis shows that both the credit guarantee programme and the employment furlough scheme implemented in Chile increased firms' sales. However, the mechanisms at play were different between the schemes. On the one hand, by easing financial frictions, the credit guarantee programme led to higher capital accumulation and employment, increasing firms' size while leaving workers earnings and firms' productivity unaltered. On the other hand, the employment furlough scheme, by easing contractual frictions and thus lowering the cost of firing and re-hiring workers, induced firms to reorganize their production, increasing workers' churning and earnings as well as firms' productivity, but reducing net employment.

Overall, the discussion, initiated by **Alexander Hijzen** (OECD), highlighted how the three papers point to a positive (non-damaging) role of support schemes on employment (reallocation), whether in the form of job retention, credit support or digital adoption policies. Moreover, three areas for further discussion were identified. First, additional efforts are warranted to evaluate the cost-effectiveness of the support schemes (i.e. the cost per job saved) to ensure the benefits have outweighed the costs. Second, similar interventions were characterized by different design features across countries: understanding the role of these features in shaping economic outcomes and schemes' cost-effectiveness is key to eventually tailor new programmes in case of renewed need. Third, the potential use of these schemes as automatic stabilisers was discussed, though participants underlined the specificity of the COVID-19 shock and the necessity to adapt policies to the peculiar nature of the shock (i.e. whether there are imbalances associated with the shock or not, and of which type).

Session III: Labour market impacts of technology and labour policies

The third session delved into the labour market effects of technology and labour policies, placing special emphasis on the interplay between technology and other advancements and their impact on workers' outcomes. This encompassed aspects such as worker task allocation, unemployment rates, as well as early retirement or voluntary resignations. The session was moderated by **Florence Jaumotte** (IMF).

The first paper, presented by **Jennifer Poole** (American University), examines the extent to which the increased utilization of digital technology leads to a shift in labour demand towards cognitive and non-routine tasks. Additionally, it investigates whether labour market institutions, established to safeguard workers from such transformations, might inadvertently restrict firms from efficiently allocating resources and reaping the full benefits of technology adoption. The paper finds that strict labour market regulations not only hinder favourable adjustments by firms but also disproportionately benefit skilled workers. The authors argue that this is due to higher adjustment costs, which are proportional to the cost of labour and therefore higher for skilled workers. Consequently, an enforcement bias emerges, favouring skilled workers in the process.

Jonathan Heathcote (Fed Minneapolis) presented the second paper that uses a multi-sector directed search model extended to incorporate endogenous quits both to other jobs and to non-employment. This paper goes beyond examining the unintended consequences of well-intended policies and looks into the crucial aspect of designing desirable policies, specifically focusing on unemployment insurance. It highlights that incorporating the possibility that workers may choose to leave their jobs when their incentives are altered by the availability of unemployment insurance leads to a different perspective on policy design. The findings suggest that in such cases, a less generous unemployment insurance policy is preferable to ensure optimal outcomes.

Finally, **Naomitsu Yashiro** (IMF) presented the third paper, which examines the effects of technology on labour market outcomes, with a specific focus on elderly populations. The study suggests that older workers engaged in routine tasks are more susceptible to displacement by computers and robots, potentially leading them to opt for early retirement in the face of rapid technological advancements. This tendency is particularly evident when there are special entitlements or relaxed criteria for unemployment and disability benefits. Importantly, the paper also reveals that well-intentioned policies, such as training and lifelong learning initiatives, can be undermined if early retirement policies discourage workers from seizing these opportunities and firms from providing them.

Overall, the discussion initiated by **Filiz Unsal** (OECD) underscored that the impact of technological progress on labour markets is not solely determined by technology itself but is significantly influenced by institutions and public policies. Finding the right balance between restrictive labour regulations and incentives for firms to invest in human capital is crucial. Also, the effectiveness of some other areas of public intervention (such as offering support to return to the labour force or eliminating discriminatory practices for older workers) in easing the adjustment cost for unskilled workers has not been explored. A more nuanced approach to optimal unemployment insurance is also suggested, especially across people that quit versus fired, given the potential role played by cyclical conditions and differences in initial wealth levels. This calls for a comprehensive understanding and consideration of different factors to inform effective policy design and facilitate smooth labour market adjustments.

Policy Panel: How to build resilient labour markets in the face of rapid changes

The conference concluded with a policy panel moderated by OECD Chief-Economist **Clare Lombardelli**. The panellists were **Richard Freeman** (Harvard University), **Nicola Fuchs-Schundeln** (University of Frankfurt) and **Betsey Stevenson** (University of Michigan).

Clare launched the panel discussion by asking each panellist to give their views on trends in the labour market, and on what have been some of the key lessons from the recent crises regarding labour market policies.

Nicola started her intervention by showing what has been a common trend across advanced economies, that is a rise in employment rates over the past two decades, which by and large, coincided with a decline in average hours per workers over the same period. She explains this negative correlation between the intensive and extensive margins by a decline in the fixed cost of work, which brings in the labour market workers with relatively weak attachment such as older workers, those with disabilities or mothers with young children. The COVID crisis and the acceleration of work-from-home practices contributed to the reduction of the fixed cost of joining the labour market, suggesting that the trend would be expected to continue or even strengthen. In terms of policy response, she mentioned that in this context it is not enough to look at the evolution of unemployment rate following adverse shocks but that attention to hours worked was also needed. Finally, she explained that while job retention schemes such as short-time work programmes used mainly in Europe have appeared to be more effective than the practice of firing and re-hiring that was common in North America, it is not clear that such schemes would be optimal in the future given the acceleration of digitalisation may call for more rapid reallocation of resources.

Betsey highlighted three key lessons from the pandemic and aftermath. First, the massive spending by government not only prevented a deeper and more contracted recession, helping to limit hardship, but also contributed to a more rapid and robust recovery. Second, a massive reallocation in spending from services to goods took place in the initial recovery phase of the pandemic, with employment losses in services being far greater and slower to recover, and a pattern which might repeat in the future. Third, there has been in the United States huge differences across categories of workers in terms of the change in employment rate following the crisis: the employment rate of young workers as well as white male has come down most significantly while that of women as well as black and Hispanic workers has largely recovered. Fourth, how we measure recovery depends on where we believe the economy would have gone in the absence of the pandemic, which is not straightforward. In this regard, the labour force participation rates of both mothers and fathers in the United States have recovered quite well, having almost reached the level that would have come out should the pre-COVID upward trend have continued.

Richard started by noting how remarkable the recovery had been, at least from a quantitative perspective and relative to the 2008-09 recession, and how the labour market had played a key role in this rapid recovery. From a quality angle, it is too early to tell what the longer-term impact on inequality will be, but the quantitative data suggests that the economy is back to some normality, again in sharp contrast with the 2008-09 episode. The one major change is the generalisation of working-from-home practices with implications for both the labour and property markets. He emphasised that the pandemic had shown that the economy is more robust than we thought it was, thanks to both lessons learned from earlier crises and digital technologies, but that technological advances were not otherwise showing up in higher productivity and wages.

For the second round of questions, Clare started by asking Nicola to what extent we should worry about the impact of school closure on the (future) labour market and what could be done to minimize such impact?

After mentioning some data about estimated days of school closure in different countries, Nicola noted that the (more immediate) burden on parents (especially mothers) had been more discussed than the impact of children's human capital. Developing a model based on a production function with human capital, she estimated that school closure in the United States could lower future annual earnings of affected children by 1.8%, which sums up to 2.4% of GDP, while also contributing to rising inequality given that children from better-off households could benefit more from access to better alternatives mode of learning during and after school closures.

Clare then asked Betsey what can be said about the gender implications of the crisis and more specifically about how the pandemic has impacted women's labour market experience and whether she sees risks of scarring effects.

Betsey mentioned that women were hardest hit by the pandemic, performing jobs that generally involve more contact with people than in the case of men, and hence were either cut back or in some cases maintained, but with higher health-related risks. However, the employment rate of women also recovered more rapidly than anticipated, contrasting with earlier recessions, which have tended to hit male-dominated manufacturing jobs hardest, and have been typically followed by a very slow recovery – if any – in their employment rate. In this respect, women appear to be more flexible in looking for jobs of a different nature or in a different sector. Finally, she noted that the roll-out of technologies has had a generally positive impact on women's wages, leading notably to wage compression, in particular when those technologies were introduced during economic expansions.

To close the discussion, all three panellists were asked what in their views might be the impact of emerging AI technologies on the labour market and for labour policies.

The panellists broadly shared the views that there were reasons to be optimistic regarding the labour market implications of AI, insofar as this might affect the jobs of skilled workers, who may be better equipped to adapt their skills to perform different tasks and/or transit to new jobs. There were more concerns expressed about the broader implications on institutions, democracies and risks of concentrated power in the hands of a few large firms. Concerns were expressed also about the inequality impact, and it was mentioned that the development of AI may require a growing distinction between the distribution of work and the distribution of income to better handle the potential inequality implications.