OECD

TACKLING CORONAVIRUS (COVID-19):
CONTRIBUTING TO A GLOBAL EFFORT

oecd.org/coronavirus

Supporting jobs and companies: A bridge to the recovery phase

10 March 2021

One year after the outbreak of the COVID-19 crisis, the future looks certainly brighter but it is not yet time to withdraw policy support for people and companies. Even if the headline labour market figures in many countries look better than in Q2 2020, millions of workers are still on job retention schemes and millions of others are unemployed or underemployed. In the coming months, while countries prepare for the implementation of their recovery plans, it is essential to continue supporting families and companies still deeply affected by the crisis, while providing the right incentives for job creation and resuming work. Without these measures, the recovery would start from an even worse economic and social starting point. The short-term costs are high but they are much lower than the costs of mass bankruptcies, layoffs and a depressed economy and labour market. Furthermore, the short-term costs can be reduced by enhancing the targeting of support to the most vulnerable sectors, companies and households, while fostering start-ups and job creation.

Key messages

- One year after the outbreak of a novel coronavirus (COVID-19), which caused a global health, social and economic crisis with no parallel in living memory, countries have developed and authorised multiple vaccines at record speed. The future looks certainly brighter. However, it is not yet time to reduce policy support as was done too early in the aftermath of the global financial crisis.
- Millions of workers are still on job retention schemes while millions of others are unemployed or underemployed. The financial situation of many firms has substantially weakened. Moreover, new virus variants and the logistics of the vaccination plan will still impose restrictions to economic activity in the coming months. Even in the OECD countries, the widespread vaccination of the population to halt the diffusion of the virus is not projected before Q3 2021 at best. Therefore, in the absence of continuous support, the risk of a surge in bankruptcies and in unemployment is very high.
- In the next few months, while countries still need to rely on containment measures with strong effects on the economy, it is essential to continue supporting families and companies affected by the economic effects of COVID-19. The support should be adapted to target families most in need and jobs that are likely to return viable, while providing the right incentives for job creation and to resume work. Withdrawing support too soon to the many still in need risks generating mass bankruptcies and job losses in sectors still deeply affected by containment measures, making the recovery more difficult and uncertain. In particular, strong policy measures are needed to:
    - Support sectors and workers that continue to be severely impacted by the health crisis;
    - Encourage business creation and avoid bankruptcies of high performing but over-indebted companies;
    - Promote hiring and adapt support for jobseekers and employers.
- Young people deserve special attention. Countries need to act quickly and help young people maintain their links with the labour market and education system to prevent the crisis from leaving long-lasting scars on their careers as happened for many of them after the global financial crisis when decisive measures to help them were delayed by several years.

Introduction

One year after the outbreak of SARS-CoV-2, there is finally some certainty about how the world will exit the pandemic. Multiple vaccines have been developed, authorised at record speed and are now being distributed, raising hope for a return to leave strict containment measures behind in a not too distant future. Thanks to unprecedented government and central bank action, the worst has been avoided (OECD, 2020[1]). Global activity has recovered in many sectors and the collapse in employment has been partially reversed. Most of the economic fabric has been preserved and could revive quickly.

However, "*it ain't over till it's over*". The December 2020 OECD Economic Outlook projects that, as the world emerges from the shadow of the pandemic, global GDP could rise by 4.2% in 2021. But uncertainty remains very high. Growth is contingent on the evolution of the pandemic and the impact of the new variants of the virus, the effectiveness of health policies, vaccination distribution and continued government support to still deeply affected firms, workers and households. At the same time, there are still important bottlenecks in the manufacturing and distribution of vaccines. Vaccination campaigns will take probably a

Tackling coronavirus (COVID-19) - Browse OECD contributions

year or more to cover a sufficiently large share of the population that would ensure herd immunity (Anderson et al., 2020[2]). Moreover, the new virus variants appear to be more infectious and there are also concerns that they may make existing vaccines less effective. In case of protracted uncertainties and weak confidence, the global growth is estimate to be lower by around 2.75 percentage points in 2021 (OECD, 2020[3]). A striking feature of the OECD projections is the shrinking contribution of Europe and North America to global growth, though that may reverse somewhat should vaccine distribution be fast and efficient.

Moreover, while the global economy is expected to gain momentum over the coming two years, output is projected to remain 4 to 5% below pre-crisis trends in many countries even by the end of 2022 (OECD, 2020[3]), raising the spectre of substantial permanent costs from the pandemic. Therefore, it is critical that the lessons learned in the aftermath of the global financial crisis – and in the aftermath of the first wave of the pandemic – are applied. We cannot afford to let our guard down too early and withdraw policy support too early.

This phase of transition towards the beginning of the recovery needs to be handled carefully, as many companies and households, in particular among the most vulnerable groups, have been struggling for a year now. The take up of job retention schemes is down from the peak reached in April 2020 but increasing again as countries face the second pandemic wave. At the same time, the gap between firms that have recovered and those that remain financially weak and may never recover is growing; in such a situation, identifying which are viable jobs worth supporting is even more important.

Striking the right balance is far from easy. Withdrawal of support too soon, as was done in the aftermath of the global financial crisis, would lead to bankruptcies, higher unemployment and poverty, and economic hardship has a highly tangible impact on well-being. In the absence of adequate public support, families may be forced to cut down on essential consumption, such as food, shelter, and health care or cut short education or training (OECD, 2014[4]). Young people, in particular, risk being once again the big losers of the current crisis, much like during the global financial crisis when they suffered heavily. They risk paying the price of the COVID-19 crisis over their entire life, not only in terms of worse earnings and employment prospects but also on a number of other social outcomes ranging from starting a family to criminal activities and health prospects (Wachter, 2020[5]).

The key question that policy-makers currently face is how to adapt support measures in the transition phase supporting those disproportionally affected while promoting job creation and facilitating reallocation towards firms and sectors which are hiring. In particular, there is a concern that generous income support may worsen labour market outcomes in the medium term and delay a recovery by reducing work incentives. However, evidence based on the global financial crisis suggests that the efficiency costs of providing support as long as there are long queues of jobseekers may not be very large (Rothstein, 2011[6]; Lalive, Landais and Zweimüller, 2015[7]; Landais, Michaillat and Saez, 2018[8]; OECD, 2020[9]).

A bridge to the recovery phase

The dynamics of the virus, including the recent mutations that have heightened its diffusion, as well as some bottlenecks in the manufacturing and distribution of vaccines, which are slowing down the vaccination campaigns, may undermine confidence and require strict containment measures to be retained extending the period before the recovery can begin. While countries are preparing their long-term recovery plans, the short-term management of the COVID-19 crisis should not take a back seat.

Comprehensive public health interventions as well as safe working environments remain key to limit and mitigate new COVID-19 outbreaks until vaccination becomes widespread. Until then, economic performance remains subject to the dynamics of the virus. Also, the effectiveness of the vaccination campaign will have a major effect on the economic recovery and therefore on employment thanks to the

Tackling coronavirus (COVID-19) - Browse OECD contributions

positive externalities of vaccination, whereby the social benefits far exceed the costs (Brito, Sheshinski and Intriligator, 1991[10]; Boulier, Datta and Goldfarb, 2007[11]) as well as its role in decreasing the uncertainty that overshadows companies' and families' decisions.

After almost a year of crisis, uncertainty about future developments remains high and strict containment measures are still being implemented in many countries. There is a growing risk of a widespread sense of "pandemic fatigue". Many companies – in particular SMEs in the most affected sectors – are on the verge of bankruptcy unless clarity is given on the support they would be able to secure to endure a protracted period of uncertainty and low (or no) activity.

As far as the labour market is concerned, strong measures are needed to:

- Support sectors and workers that continue to be severely impacted by the health crisis;
- Encourage business creation and avoid bankruptcies of high performing but over-indebted companies;
- Promote hiring and adapt support for jobseekers and recruiters.

These measures will still entail short-term expenditures, but these should be seen as an investment to prevent a short-term crisis from turning into a long-term one, with lasting effects on employment and growth and hence also on public deficit and debt.

Support sectors and workers that continue to be severely impacted by the health crisis

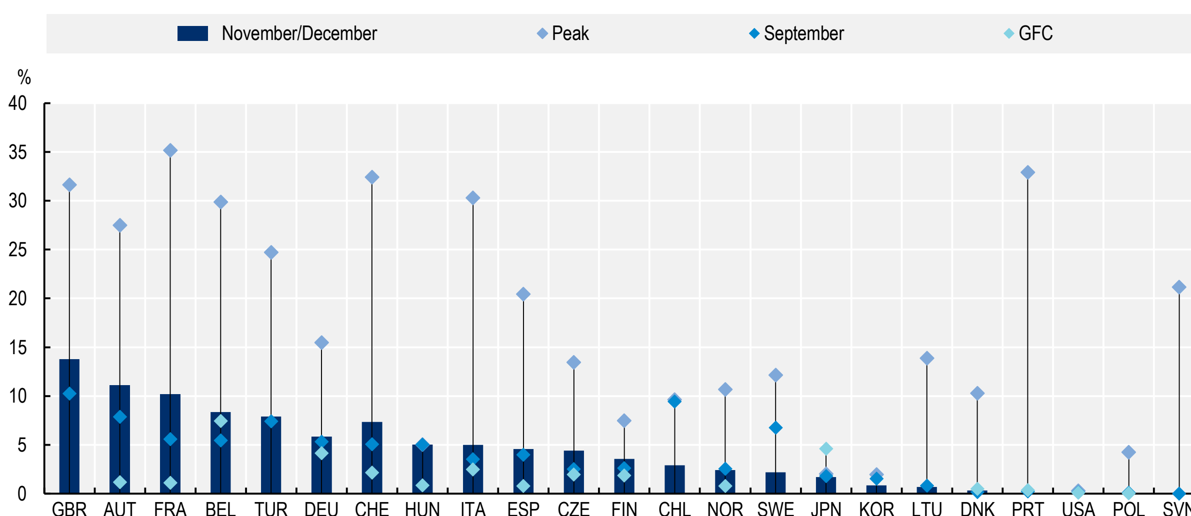
Workers, including the self-employed, who have been durably impacted by the health crisis as well as companies in sectors still subject to closures or administrative restrictions, need to continue to be supported while ensuring that they have the right incentives to restart the activity as soon as possible.

General and encompassing job retention schemes have been essential to cushion the impact on the labour market in the first phase of the COVID-19 crisis (OECD, 2020[1]; 2020[3]). At their peak in Q2 2020, up to a third of workers were on a job retention scheme (JRS) in several OECD countries (Figure 1). As companies reopened in the post-confinement phase, the share of workers on JRS also significantly decreased. However, recent data suggest that the take-up was again increasing in November and December as countries were facing the second pandemic wave. In 2020, the take up of JRS, even in the post-confinement phase, dwarfed what was experienced at the peak of the global financial crisis in 2009 (Hijzen and Martin, 2013[12]).

Tackling coronavirus (COVID-19) - Browse OECD contributions

Figure 1. Participation in job retention schemes is well below the Q2 peak but still sizeable

Share of dependent employees, latest available data



Note: Take-up rates are calculated as a percentage of dependent employees in Q1 2020. Note: Peak date refer to April/May for most countries (October for Hungary and Japan). Japan, the Netherlands, Portugal: Stocks are estimated as 3 months cumulative flows. Italy: Latest data are provisional estimates. the United States: Refer to Work sharing benefits.
Source: OECD calculations using national sources.

As the COVID-19 crisis evolved, JRS appeared to respond quickly and effectively to the large negative shock to the labour market. As countries keep fighting against the pandemic, they remain an important tool to support companies and workers. In the current phase of uneven opening of economic activities across sectors and regions, the focus should be on jobs that are likely to return viable.[1] Discriminating between viable and unviable jobs is inherently difficult, especially in sectors still affected by mandatory restrictions where market signals about the viability of firms and jobs is very weak. Moreover, the reallocation process is likely to remain largely subdued until there is a significant increase in business and job creation. However, countries can use a number of levers to gradually enhance the targeting of support towards jobs more likely to survive and to workers in jobs that remain at risk, in particular by differentiating support between sectors that remain subject to mandatory restrictions and the rest.

Firms in sectors not subject to mandatory restrictions could be asked to bear part of the costs of short-time work schemes or introduce limits to the maximum duration of job retention schemes. In the case of firms that remain subject to mandatory restrictions, it is very difficult to assess their future viability and support should remain largely unconditional. Further targeting within the most affected sectors is possible, by tailoring the eligibility conditions to the strictness of the mandatory restrictions.

In all scenarios, it is essential to promote the mobility of workers from subsidised to unsubsidised jobs by requiring or allowing workers benefiting from job retention schemes to register with the Public Employment Service (PES) and benefit from their support, and/or by promoting the participation of workers on reduced hours in training. In the Netherlands, for instance, employers applying for JR support have to declare that they actively encourage training since June 2020, while the government has taken additional measures to make online training and development courses freely available. In France, workers have a clear financial incentive to take up training as, in this case, the JRS benefit increases from 84% of their net pay, to 100%.

---

[1] See the *OECD Employment Outlook 2020* (OECD, 2020[1]) and the policy brief on job retention schemes (OECD, 2020[9])) for more details.

Tackling coronavirus (COVID-19) - Browse OECD contributions

Survey data by the French Ministry of Labour (DARES, 2020[13]) show that, in the Q3 2020, around 15-20% of workers employed in a company making use of JRS were undertaking some form of training. The share was somewhat higher in large and medium-sized enterprises.

Organising training in such a way that it can be combined with part-time work and irregular work schedules while maintaining physical distancing is clearly challenging. However, training is essential to prepare workers on JRS for the recovery, even more now that JRS have been in place for several months. Incentives (or requirements) to register with the PES and reskilling/upskilling similar to those of classical unemployment benefits would help JRS to protect workers without hindering the reallocation of employment towards expanding firms and sectors.

As the crisis lasts longer, claimant numbers for "last-resort" minimum-income benefits may rise, as workers who lost their jobs and incomes in the initial phase of the crisis exhaust their unemployment benefit entitlements or run down on their savings. A number of countries have temporarily increased benefit amounts, relaxed means testing, or introduced one-off payments. As they consider rolling back these concessions, countries could review and simplify entitlement criteria and application procedures with a view to making minimum-income benefits more reactive and accessible to encourage take-up. Effective targeting is important, but countries need to ensure that those in urgent need continue to receive support. For example, countries could gradually reintroduce income tests to allow households to adjust their expenditure, while keeping asset tests relaxed (e.g. exempt family homes or any business assets) as long as job opportunities remain scarce. Countries may also want to expand these programmes to improve the coverage of young adults, who may have not worked long enough to be eligible to receive unemployment benefits, but have worked above the threshold to meet the income criteria of social assistance.

Encourage business creation and avoid bankruptcies of high performing but over-indebted companies

Massive support measures taken by public authorities as well as and temporary changes to insolvency procedures have been successful in putting business failures on hold during the COVID-19 crisis. Data show that firms' closures declined on average by 30% in the OECD in 2020 (OECD, 2021[14]), despite the unprecedented fall in GDP.[2] Without government support, bankruptcy rates would have probably doubled for SMEs compared with 2019 (Gourinchas et al., 2020[15]). Accommodation and Food Services, Arts, Entertainment and Recreation, Education, and Other Services are among the most affected sectors. However, business creation has also fallen to record low levels (even compared to the 2009 crisis) and, within the companies created, the riskiest projects with high growth potential are not seeing the light of day. The risk of a large number of bankruptcies is very high without a substantive reallocation to new and growing firms.

A process of creative destruction is necessary to allow resources to be (re)allocated from least to more productive activities to sustain economic growth as well as good employment and earnings prospects for workers. However, the return to a 'normal' creative destruction process will be gradual as business creation takes time and the burden of increased corporate debt may not lead to efficient outcomes. In the next few months, there are at least two risks to manage. The first is a risk of high performing but over-indebted companies going bankrupt or reducing their innovation and investment efforts in order to pay off their debts due to a phenomenon of "debt overhang", i.e. high levels of debt curtailing investments and leading to an underinvestment problem[3] (Demmou et al., 2021[16]). The second is a risk of saving low-performing

[2] See also Cros, Épaulard and Martin (2020[26]) for France, and Wang et al. (2020[27]) for the United States.

[3] Borrowing from Kalemli-Özcan, Laeven and Moreno (2018[28]), "*high levels of debt [may curtail] investments because the benefits from additional investment in firms financed with risky debt accrue largely to existing debt holders rather than shareholders. This reduced incentive to invest implies that firms with high levels of debt face an underinvestment problem*."

Tackling coronavirus (COVID-19) - Browse OECD contributions

companies (the so-called zombie companies) that were unviable before the crisis but were able to survive thanks to public support. In both cases, aggregate productivity, which was already a concern before COVID-19 started, would be negatively affected (Adalet McGowan, Andrews and Millot, 2017[17]).

In the short term, the first type of risk would be probably more serious than the second, in particular for employment. In order to avoid massive defaults by companies, particularly SMEs, that were viable before the crisis, it will be necessary to deal with high levels of corporate debt and the high numbers of bankruptcy proceedings, which in some cases may require the restructuring of debts contracted during the crisis.

For the moment, public support is essentially focused on existing companies, but the creative destruction process can only start if business creation resumes. The impact of a "lost generation of firms" can be very substantial. Sedláček (2020[18]) has estimated that in the United States, had firm entry remained constant during the global financial crisis, output would have recovered four to six years earlier and unemployment would have been 0.5 percentage points lower even ten years after the crisis.

Moreover, a substantial body of evidence shows that new companies account for a large share of job creation (Criscuolo, Gal and Menon, 2014[19]; Haltiwanger, Jarmin and Miranda, 2013[20]). It is therefore essential to support start-ups – notably the more innovative ones – and encourage start-up creation in order to avoid the loss of an entire generation of new firms. It is also advisable to offer appropriate protection to self-employed workers, such as offering unemployment insurance to self-employed in those countries where this is not available or relaxing eligibility conditions for setting up businesses in the next few years. This would make it possible to limit the risks associated with setting up a business in an already high-risk environment. Social partners can also play a role in promoting the creation and growth of new firms by tailoring the provisions of sectoral/branch agreements to the needs and risks of small and young firms.

Promote hiring and adapt support for jobseekers and recruiters

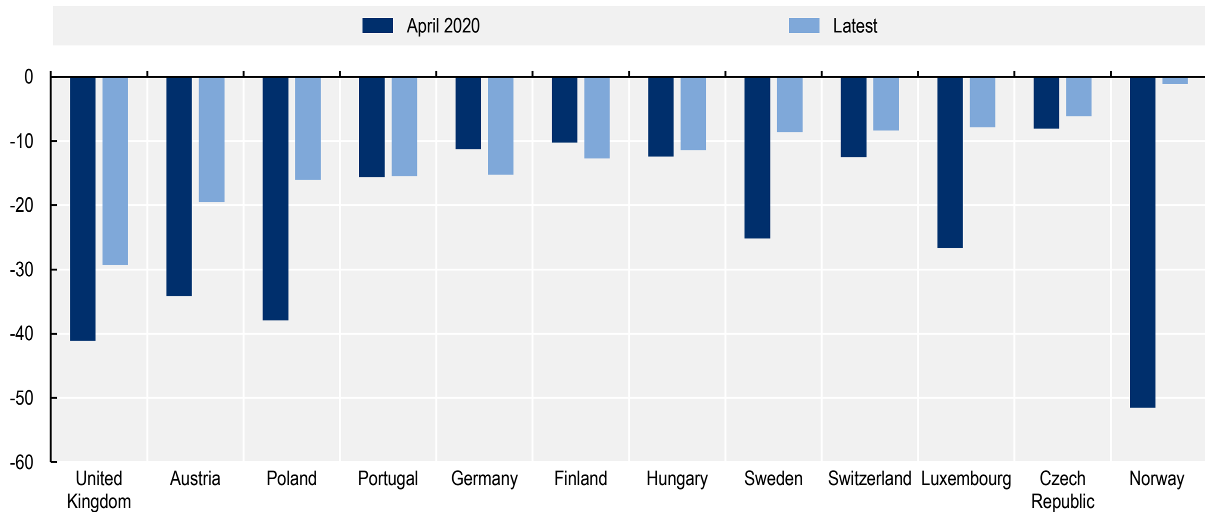
There will be no way out of the crisis without a substantial rebound in job creation, which remains well below the pre-pandemic levels (Figure 2). Jobs lost since the outbreak of COVID-19 will not easily return. Hence, the priority is to create *new* jobs. The recovery plans that many OECD countries are preparing will play a key role in this. However, their full rollout will take several months or years.

In the short term, fiscal and monetary policies need to remain supportive – see the latest OECD Economic Outlook (OECD, 2020[3]). At the micro level, temporary and targeted hiring subsidies can be an effective tool to promote job creation and a number of OECD countries have recently introduced or renewed such schemes (for instance, Australia, France, Italy and the United Kingdom). Evidence from the global financial crisis suggests that hiring subsidies can boost job growth and be cost effective (Cahuc, Carcillo and Le Barbanchon, 2018[21]). Direct job creation can also be envisaged, in particular to support the logistics of testing and vaccination. The creation of "*youth corps"* – or more generally *public health job corps* like the one envisaged in the United States – to help delivering vaccines, contact priority people, carry out administrative tasks, and manage flows in vaccination centres is an option to be considered.

Tackling coronavirus (COVID-19) - Browse OECD contributions

Figure 2. Job vacancies are still below the pre-pandemic level

Percentage change in the total number of unfilled job vacancies since January 2020, seasonally adjusted



Note: The bars represent the percentage change in the stock of unfilled job vacancies in the reference month compared to January 2020. Latest data refer to January 2021 for Austria, Germany and Hungary, December 2020 for the Czech Republic, Finland, Luxembourg, Norway, Poland, Sweden and Switzerland and November 2020 for, Portugal and the United Kingdom.
Source: OECD Short-Term Labour Situation database.

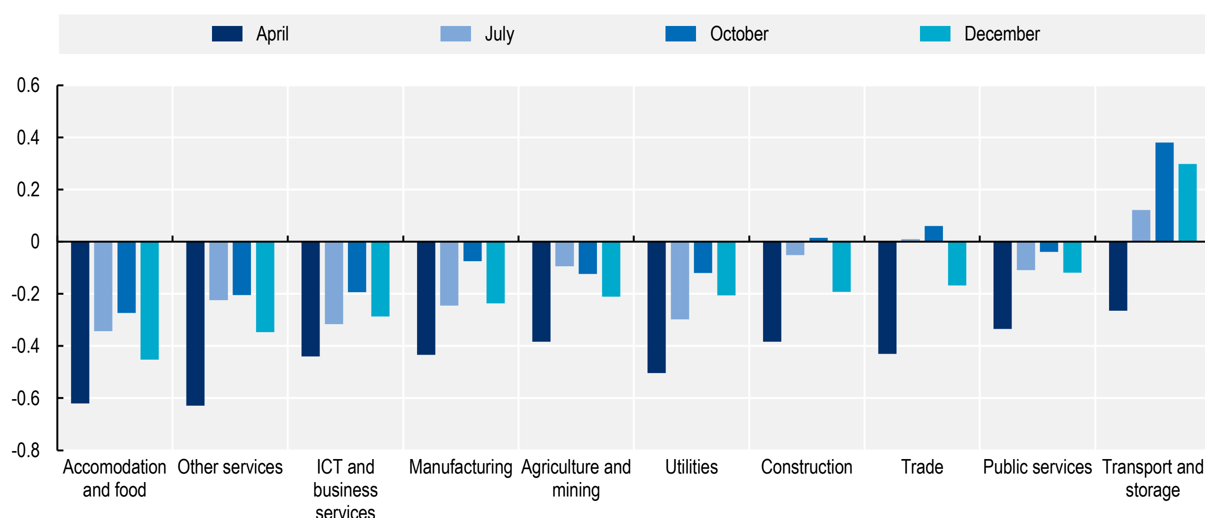
While the volume of job openings remains well below the pre-pandemic level and the second pandemic wave has led to a fall in job openings again after some improvements during the summer of 2020, there is a significant heterogeneity across sectors and occupations (Figure 3). High frequency indicators of online job postings show that, in December 2020, while labour demand in accommodation and food services was 45% lower than the pre-pandemic level, in transport and storage services online job postings were 30% higher than in January 2020. Similar heterogeneity is found when looking at the occupational level: online job openings for hospital workers, employees of food retailers and warehouse personnel remained the same or increased compared to the pre-pandemic period (OECD, forthcoming[22]).

These data suggest that, even if job opportunities remain limited and switching jobs is not necessarily easy (in terms of skills required but also geographical distribution), there is scope to reallocate some workers from sectors and occupations where demand is likely to remain low for some time to sectors and occupations where demand is recovering faster. Hence, assistance to find new work remains essential even during a pandemic to help workers seize on job opportunities and upskill or retrain, though physical-distancing requirements reduce the scope of in-person training courses on offer. In particular, countries need to scale up active labour market programmes (ALMP) that have proven particularly effective such as job search support and counselling.

Tackling coronavirus (COVID-19) - Browse OECD contributions

Figure 3. Job postings remain depressed in some sectors while they are recovering in others

Percentage change in online job postings since January 2020



Note: Based on online job postings in Australia, Canada, New Zealand, the United Kingdom and the United States.
Source: OECD calculations based on data from Burning Glass Technologies.

Moreover, PES can also provide effective help to employers, not just jobseekers. The results of a large-scale randomised experiment in France where the PES offered free recruitment services to small and medium enterprises suggest that a shift in the pre-screening and filtering burden of the recruitment process away from the firm to the PES counsellor can have a substantial net effects on job posting and hiring (Algan, Crépon and Glover, 2020[23]).

To face these multiple challenges, PES need additional resources (either through direct hiring or, in the short term, through external support by engaging private-service providers). Some OECD countries, for instance the United Kingdom, have already started increasing PES staff. Absent new resources, existing schemes and services will be overburdened by a surge in demand, which, most likely, will also lead to a marked decrease in the quality of the services offered.

In the aftermath of the global financial crisis, resources for training, job placement, and recruitment support did not increase enough while unemployment was soaring. In 2007-10 the number of unemployed increased by 54% while ALMP spending increased only by 21% on average in the OECD area. As a result, the average amount spent per jobseeker actually decreased by 21% at the time when the need was strongest (OECD, 2011[24]). This time, addressing the COVID-19 labour market challenges will require substantial additional investments in ALMPs and PES. However, increasing resources may not be effective if PES face capacity constraints in terms of personnel, space or material. PES can also free up some resources by suspending non-essential activities, scaling down job-search monitoring services and relaxing application procedures for benefit claims (OECD, 2020[25]). Moreover, countries with modernised, proactive and digitally advanced PES are in a better position to provide affective and agile support to jobseekers, employers and workers, through the use of profiling tools, digital tools and services and good co-operation practices with key partners.

Finally, it is of paramount importance not to lose contact with young people who recently lost their jobs or left school without finding employment – see Box 1. More vulnerable young people often do not get in contact with the PES, because they are not entitled to income support, lack trust in public authorities or are simply not aware of the support they can receive. Rapid and proactive outreach – in collaboration with schools and youth organisations and through social-media campaigns – may be particularly important in the current crisis.

Tackling coronavirus (COVID-19) - Browse OECD contributions

Box 1. Giving young people the support they need

In the aftermath of the global financial crisis, governments acted far too late to address the labour market difficulties of young people, leaving them with long-lasting scars on their employment outcomes and earnings. It took an entire decade before the OECD youth unemployment rate returned to its pre-2008 level. Protracted school closures imposed due to COVID-19 raise the risk of school dropout. New graduates find the entry door to the labour market shut and young workers are the first to lose their jobs. Young workers are also less likely to receive support from standard unemployment insurance schemes due to short and unstable employment records.

To prevent the crisis from leaving long-lasting scars on young people's careers and well-being, countries need to act quickly and help young people maintain their links with the labour market and education system. The realisation that early action is key is also the basis of the European Union's Youth Guarantee, a commitment made by all EU Member States in 2013 to ensure that all young people below 25 receive a good-quality employment or training offer within four months of leaving school or becoming unemployed. The European Union recently launched the Reinforced Youth Guarantee and several OECD countries have taken specific initiatives in 2020 to cope with the crisis. For instance:

- France and Italy introduced hiring subsidies for young workers.
- Australia, Denmark, France, Germany and Ireland have introduced wage subsidies to help companies maintain or expand their apprenticeship and in-firm training programmes.
- Germany and Scotland have introduced additional subsidies for employers who take on apprentices who have been made redundant during the crisis.
- Canada expanded its Summer Jobs Programme that provides wage subsidies for below-30 year-olds.
- Korea invested in digital training programmes for youth and introduced a Youth Digital Job Plan
- Japan eased eligibility requirements to access student loans and offered emergency benefits to undergraduate and graduate students in financial need

The OECD Action Plan for Youth sets out a toolkit of measures that countries and stakeholders can take to promote better outcomes for young people. This includes cost-effective active labour market measures, such as counselling, job search assistance, entrepreneurship programmes, and intensive support for more disadvantaged young people.

Conclusions

In the coming months, while countries prepare for the implementation of their often massive recovery plans, it is essential to continue supporting families and companies affected by the persisting negative economic effects of COVID-19, as well as providing the right incentives for job creation and to resume work.

Even if the headline labour market figures in many countries look better than in Q2 2020, millions of workers are still unemployed, underemployed or supported by job retention schemes. Many firms face a substantially weakened financial position and an uncertain outlook. In such a situation, there is a clear risk of a sudden surge in bankruptcies and unemployment resulting from ongoing containment measures, persistent uncertainty and lack of adequate support rather than from firms' inefficiencies and/or a healthy "creative destruction" process. In other words, without maintaining, albeit more targeted, support measures to firms and households still deeply affected by the crisis, the recovery will start from an even worse economic and social starting point characterised by mass bankruptcies and high unemployment. The short-

Tackling coronavirus (COVID-19) - Browse OECD contributions

term costs of this are high but they are much lower than the benefits of avoiding mass bankruptcies and layoffs and a depressed economy and labour market. Furthermore, even these short-term costs can be reduced by enhancing the targeting of support to the most vulnerable sectors, companies and households, while fostering start-ups and job creation.

While many instruments and facilities already exist, the human and financial resources at their disposal may need to increase (or maintained in those countries which already increased them) in order to respond effectively to the increase in the number of beneficiaries and to avoid bottlenecks. Granular and real-time administrative and survey data are a key asset to guide policy making in particularly difficult times. Remarkable efforts made at the onset of the pandemic by several countries to make data available in a timely and wide manner should continue.

References

Adalet McGowan, M., D. Andrews and V. Millot (2017), "Insolvency Regimes, Technology Diffusion and Productivity Growth : Evidence from Firms in OECD Countries", *OECD Economics Department Working Papers*, No. 1425, OECD Publishing, Paris, https://dx.doi.org/10.1787/36600267-en. [17]

Algan, Y., B. Crépon and D. Glover (2020), "Are Active Labor Market Policies Directed at Firms Effective? Evidence from a Randomized Evaluation with Local Employment Agencies", J-PAL. [23]

Anderson, R. et al. (2020), "Challenges in creating herd immunity to SARS-CoV-2 infection by mass vaccination", *The Lancet*, Vol. 396/10263, pp. 1614-1616, http://dx.doi.org/10.1016/s0140-6736(20)32318-7. [2]

Boulier, B., T. Datta and R. Goldfarb (2007), "Vaccination Externalities", *The B.E. Journal of Economic Analysis & Policy*, Vol. 7/1, http://dx.doi.org/10.2202/1935-1682.1487. [11]

Brito, D., E. Sheshinski and M. Intriligator (1991), "Externalities and compulsary vaccinations", *Journal of Public Economics*, Vol. 45/1, pp. 69-90, http://dx.doi.org/10.1016/0047-2727(91)90048-7. [10]

Cahuc, P., S. Carcillo and T. Le Barbanchon (2018), "The Effectiveness of Hiring Credits", *The Review of Economic Studies*, Vol. 86/2, pp. 593-626, http://dx.doi.org/10.1093/restud/rdy011. [21]

Criscuolo, C., P. Gal and C. Menon (2014), "The Dynamics of Employment Growth: New Evidence from 18 Countries", *OECD Science, Technology and Industry Policy Papers*, No. 14, OECD Publishing, Paris, https://dx.doi.org/10.1787/5jz417hj6hg6-en. [19]

Cros, M., A. Épaulard and P. Martin (2020), *Les défaillances d'entreprises dans la crise Covid-19 : zombification ou mise en hibernation ?*, France Stratégie, Paris, https://www.strategie.gouv.fr/sites/strategie.gouv.fr/files/atoms/files/fs-cae-2020-point-de-vue-defaillance-entreprises-covid-19-decembre.pdf (accessed on 4 January 2021). [26]

DARES (2020), *Activité et conditions d'emploi de la main-d'oeuvre pendant la crise sanitaire Covid-19*, DARES, Paris. [13]

Tackling coronavirus (COVID-19) - Browse OECD contributions

Demmou, L. et al. (2021), "Insolvency and debt overhang following the COVID-19 outbreak: Assessment of risks and policy responses", *OECD Economics Department Working Papers*, No. 1651, OECD Publishing, Paris, https://dx.doi.org/10.1787/747a8226-en. [16]

Gourinchas, P. et al. (2020), *COVID-19 and SME Failures*, National Bureau of Economic Research, Cambridge, MA, http://dx.doi.org/10.3386/w27877. [15]

Haltiwanger, J., R. Jarmin and J. Miranda (2013), "Who Creates Jobs? Small versus Large versus Young", *Review of Economics and Statistics*, Vol. 95/2, pp. 347-361, http://dx.doi.org/10.1162/rest_a_00288. [20]

Hijzen, A. and S. Martin (2013), "The role of short-time work schemes during the global financial crisis and early recovery: a cross-country analysis", *IZA Journal of Labor Policy*, Vol. 2/1, p. 5, http://dx.doi.org/10.1186/2193-9004-2-5. [12]

Kalemli-Özcan, Ṣ., L. Laeven and D. Moreno (2018), *Debt Overhang, Rollover Risk, and Corporate Investment: Evidence from the European Crisis*, National Bureau of Economic Research, Cambridge, MA, http://dx.doi.org/10.3386/w24555. [28]

Lalive, R., C. Landais and J. Zweimüller (2015), "Market Externalities of Large Unemployment Insurance Extension Programs", *American Economic Review*, Vol. 105/12, pp. 3564-3596, http://dx.doi.org/10.1257/aer.20131273. [7]

Landais, C., P. Michaillat and E. Saez (2018), "A Macroeconomic Approach to Optimal Unemployment Insurance: Theory", *American Economic Journal: Economic Policy*, Vol. 10/2, pp. 152-181, http://dx.doi.org/10.1257/pol.20150088. [8]

OECD (2021), "Business dynamism during the COVID-19 pandemic: Which policies for an inclusive recovery?", *OECD Policy Responses to Coronavirus (COVID-19)*, OECD Publishing, Paris, https://doi.org/10.1787/f08af011-en. [14]

OECD (2020), "Job retention schemes during the COVID-19 lockdown and beyond", *OECD Policy Responses to Coronavirus (COVID-19)*, OECD Publishing, Paris, https://doi.org/10.1787/0853ba1d-en. [9]

OECD (2020), *OECD Economic Outlook, Volume 2020 Issue 2*, OECD Publishing, Paris, https://dx.doi.org/10.1787/39a88ab1-en. [3]

OECD (2020), *OECD Employment Outlook 2020: Worker Security and the COVID-19 Crisis*, OECD Publishing, Paris, https://dx.doi.org/10.1787/1686c758-en. [1]

OECD (2020), "Public employment services in the frontline for employees, jobseekers and employers", *OECD Policy Responses to Coronavirus (COVID-19)*, OECD Publishing, Paris, https://doi.org/10.1787/c986ff92-en. [25]

OECD (2014), "The crisis and its aftermath: A stress test for societies and for social policies", in *Society at a Glance 2014: OECD Social Indicators*, OECD Publishing, Paris, https://dx.doi.org/10.1787/soc_glance-2014-5-en. [4]

OECD (2011), *OECD Employment Outlook 2011*, OECD Publishing, Paris, https://dx.doi.org/10.1787/empl_outlook-2011-en. [24]

OECD (forthcoming), *An assessment of the impact of COVID-19 on job and skills demand using online job vacancy data*, OECD Publishing, Paris. [22]

Tackling coronavirus (COVID-19) - Browse OECD contributions

Rothstein, J. (2011), *Unemployment Insurance and Job Search in the Great Recession*, National Bureau of Economic Research, Cambridge, MA, http://dx.doi.org/10.3386/w17534. [6]

Sedláček, P. (2020), "Lost generations of firms and aggregate labor market dynamics", *Journal of Monetary Economics*, Vol. 111, pp. 16-31, http://dx.doi.org/10.1016/j.jmoneco.2019.01.007. [18]

Wachter, T. (2020), "The Persistent Effects of Initial Labor Market Conditions for Young Adults and Their Sources", *Journal of Economic Perspectives*, Vol. 34/4, pp. 168-194, http://dx.doi.org/10.1257/jep.34.4.168. [5]

Wang, J. et al. (2020), "Bankruptcy and the COVID-19 Crisis", *SSRN Electronic Journal*, http://dx.doi.org/10.2139/ssrn.3690398. [27]

Contacts

Stefano SCARPETTA (✉ stefano.scarpetta@oecd.org)

Stéphane CARCILLO (✉ Stéphane.Carcillo@oecd.org)

Andrea GARNERO (✉ andrea.garnero@oecd.org)

This paper is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and the arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Note by Turkey
The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union
The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at http://www.oecd.org/termsandconditions.

Tackling coronavirus (COVID-19) - Browse OECD contributions