

PROTECTING WORKERS, FIRMS, AND WORKER-FIRM ATTACHMENT DURING COVID-19: ECONOMIC CONSIDERATIONS FOR THE ASSESSMENT OF POLICY MEASURES

The economic crisis triggered by the COVID-19 pandemic has been of a different nature than typical recessions. It was not driven by a lack of aggregate demand resulting from monetary policy mistakes or credit market frictions. Instead, activity in significant parts of the economy was restricted intentionally—whether by the government or by private actors—to combat the public health crisis. As a consequence, businesses that would otherwise be in perfectly fine shape saw their continued existence threatened.

To preserve organizational knowledge and other forms of intangible capital, employer-employee links, and firm-specific human capital and to facilitate the recovery, governments provided various types of support to businesses affected by the crisis and their employees. Globally, policy makers adopted a wide range of policies to address the consequences of this public health crisis (Gentilini et al. 2022; ILO 2022a).

Significant efforts have been dedicated to document the patterns of labor-related policy responses across countries by income level, the number of COVID-19 cases, the extent of the output and employment shocks, and the level of public debt (Contreras et al. 2023). But much of the analysis of these programs has been focused on Organisation for Economic Co-operation and Development (OECD) countries, particularly on the United States (see, for example, the symposium on Macro Policy in the Pandemic in the Spring 2022 issue of the *Journal of Economic Perspectives* or the essays in Strain and Veuger, 2023).

The purpose of this note is to provide an overview of some of the basic economic considerations for the design and assessment of these policy measures, with special attention to emerging economies. We start by sketching the economic context of the response to the COVID-19 crisis (section 1), highlighting the impacts of the pandemic on firms and workers, and the value of the ties that link firms and workers. We outline a simple framework for policy assessment that accounts for the mechanisms that transmit COVID-19 shocks through the economy.

We consider the implications of two key distinguishing features shared by many emerging economies on policy making. First, they typically have a larger informal sector than advanced economies, which dilutes the value of firm-worker ties and makes the distribution of support through firms a less natural option for policy makers. Second, they operate under fiscal constraints that both bind policy makers' hands directly and make generous support programs riskier in the medium term.

We then apply this framework to analyze an array of policies that have been deployed to prevent and address business failures and job losses in sectors directly or indirectly affected by the pandemic. We classify these policies as labor market policies meant to support workers in their capacity as employees, firms in their capacity as employers, and firms as businesses, as well as generalized income support policies. In conclusion, we draw lessons for policy makers.

1. THE IMPACTS OF COVID-19

1.1. The Impact on the Macro Economy

The COVID-19 pandemic triggered reductions in output not registered in decades: global gross domestic product (GDP) shrank by over 3 percent in 2020 (IMF 2021). Unlike the fallout from the global financial crisis, these reductions in output were in large part the direct consequence of intentional decisions made by households, firms, and governments to navigate public health risks.

Macroeconomists have suggested a variety of models to assess this unusual shock.

Prominently, Guerrieri et al. (2022) propose a straightforward model that treats the impact of the pandemic, at least initially, as a supply shock. Limitations on the ability of firms and workers in certain industries to provide their usual services reduce output in those sectors. This output reduction is accompanied by a drop in compensation for workers, entrepreneurs, and the owners of firms in the affected sectors as well as decreased demand for the goods and services produced by their suppliers.

Through these channels, what started out as something reasonably conceptualized as a supply shock will trigger negative demand shocks affecting the rest of the economy, leading to even greater contractions in output. The presence of economies of scale in affected firms (Céspedes, Chang, and Velasco 2020) or credit market imperfections in an environment of reduced collateral values (Céspedes, Chang, and Velasco 2020; Fornaro and Wolf 2020) can exacerbate these problems even further.

Alfaro, Becerra, and Eslava (2020) analyze the impact of these shocks on employment, particularly in countries with significant informal employment. They find that job losses because of the COVID-19 shocks were concentrated in industries that are heavily reliant on direct contact with customers and cannot rely on telework as easily, as one might expect. Informal jobs in those sectors and in the wider economy were at particular risk. However, while informal employment was hit hard initially, it also bounced back relatively rapidly. The authors interpret this as evidence of the cost associated with (re-)establishing formal employer-employee ties

and, by implication, of the value of preserving them. Employer-employee ties are not lost or have low value among informal jobs, which most frequently are in self-employment and small establishments with relatively low productivity.

1.2. The Impact on Firms

The negative shocks caused by the COVID-19 pandemic had markedly different effects on different types of firms. Firms in businesses directly affected by public health measures and concerns were hit the hardest, in many cases overwhelming firm-specific productivity levels or size, in clear contrast to typical patterns associated with recessionary periods. A particularly distinctive result is that at-risk firms were not necessarily, or even generally, low-productivity firms or firms that would not have been able to compete during a 'normal' period of depressed aggregate demand. As a result, significant amounts of intangible capital—that is, human, social, organizational, informational, and so on—were at risk of destruction (Corrado et al. 2022).

In addition to important sectoral differences, some general patterns have been noted in works such as that of Bartik et al. (2020). Preserving employer-employee ties through a period of negative shocks is generally easier for larger and more productive firms, as they are less likely to become liquidity constrained and more likely to remain solvent. This fact influenced the design of many business support programs, including the American Paycheck Protection Program, a detailed description and preliminary assessment of which can be found in Autor et al. (2022a, 2022b) and Hubbard and Strain (2020).

In contrast, without government intervention, the crisis would also have accelerated the closure of low-productivity firms through the usual, and in many ways, desirable process of creative destruction. These firms may have had lower liquidity at the moment of the shock and may have struggled to adjust to the new environment even without liquidity constraints. Low-performing and smaller businesses may also have a more difficult time gaining access to government support programs. In developing countries, in particular, they tend to be informal and thus do not qualify or are hard to reach, or they may find it burdensome to claim benefits for which they qualify.

Furthermore, even conditional on survival, without government support, small firms would more likely be forced to lay off essential workers than large firms. They would therefore be more likely to disappear and face a steeper road back if they intend to restart operations. Small formal firms would, by definition, incur greater losses of organizational and firm-specific human capital than their informal counterparts (Alfaro, Becerra, and Eslava 2020), potentially leading to a process of informalization of the economy.

1.3. The Impact on Workers

Containment measures and consumer hesitancy were primary reasons for reduced output and employment in sectors directly affected by the public health crisis. Occupations that were disproportionately affected were those that required in-person contact, especially indoors, and are nonessential in the sense that work-arounds are not overly costly. Overrepresented among those occupations are those of relatively low-skilled, low-income workers who are particularly vulnerable to income shocks and who are often liquidity constrained.

For example, Bartik et al. (2020) find that drops in employment were greatest in the services sector, especially in the low-wage segment. Most affected were leisure and hospitality services, including restaurants and hotels, other services, and retail trade. Systematic differences were also observed in the probability of job loss and labor force exit across sociodemographic groups. For instance, the workers most likely to exit the labor market, at least in the US, were those above the age of 65 and those without high school degrees. Around the world, particularly in emerging economies, women and youth between the ages of 15 and 24 were hit hardest by the job losses (ILO 2022b).

Employment losses in sectors that suffer the consequences of reduced demand from firms and workers in directly affected industries, on the other hand, will more closely resemble those we observe in a typical recession. In fact, where full employment was restored before the end of the pandemic, unaffected sectors absorbed workers from affected sectors and the full employment level of output and consumption in these sectors was higher.

Even without full employment, such 'mobile' workers will be able to maintain their consumption levels in a way that workers who cannot move cannot, due to borrowing constraints. The overall reduction in output without government intervention will thus be greater if cross-sectoral labor mobility is lower (Gibbons and Katz 1992).

Employment losses have dramatic negative consequences for workers and their families as well as the communities in which they live. Cohorts of college students who graduate into a recession earn persistently and substantially lower wages (Kahn 2010; Schwandt and von Wachter 2019). Individuals who lose their jobs do not just face large earnings losses but consequences that go well beyond the immediate loss of wages (Jarosch 2021). They face mental health problems (Farré, Fasani, and Mueller 2018) and are more likely to struggle with substance abuse and commit suicide (Autor, Dorn, and Hanson 2019; Pierce and Schott 2020). Negative employment shocks also deter marriage formation and fertility and increase the risk of children living in poverty (Autor, Dorn, and Hanson 2019).

These and other problems have immediate as well as long-term consequences for the wider economy and society as a whole.

Less time spent in employment limits workers' ability to gain experience and build human capital of the types that are hard to acquire in a formal education setting. Reduced earnings, consumption, and output have a direct fiscal impact by both bringing down tax revenue and triggering increased spending on various social insurance and welfare programs. This in turn is likely to either trigger tax increases or crowd out the provision of public goods, harming long-term growth and prosperity.

Increases in crime harm the victims directly; incarceration and other forms of punishment are extraordinarily costly both to the offenders and to society as a whole. These costs include but are not limited to expenditures on the criminal justice system as well as the health and labor market consequences of incarceration and the marker of a criminal record (Shoag and Veuger 2019).

Children who grow up in poverty are less likely to complete high school and college and find employment after their formal education ends (Bastian and Michelmore 2018). This leads to intergenerational transmission of the various negative effects of lack of employment discussed here.

Workers who lose their jobs at an older age, on the other hand, have typically accumulated disproportionate amounts of firm-specific and industry-specific human capital and are, partially because of that, less likely to find matches that allow them to be as productive as they were before the job loss.

These considerations highlight the importance of avoiding mass layoffs, the urgency of supporting those workers whose employment prospects were harmed by the pandemic, and the potential value of supporting employer-employee links.

1.4. The Impact on Employer-Employee Links

While the textbook response to a negative demand shock is for firms to implement layoffs, there are costs associated with finding and hiring the right workers. Without obvious post-pandemic shifts in demand, it is suboptimal to incur these costs again after the public health crisis is abated to reconstitute the same employer-employee links that existed before the pandemic.

However, in the presence of borrowing constraints or persistently suppressed demand, it is difficult for firms to sustain a maximum-employment equilibrium and firm-worker links will be lost. This will make it more difficult for firms to recover productivity after the shock passes, which amplifies the effect of the negative shock.

The consequences of worker turnover also vary depending on the substitutability between incumbent and outside workers.¹ When a firm's production process depends on firm- or even job-specific human capital, outsiders are imperfect substitutes for insiders (Heining and Jäger 2019). Hiring a replacement worker post-downturn forces the firm to incur new hiring and training costs, while the effective loss of

firm- and job-specific human capital reduces the former employee's earning potential.

Preserving employer-employee links may thus allow for a faster recovery while protecting both employers and employees from incurring unnecessary costs. These considerations are of particular importance in environments characterized by long tenures and high levels of firm- and job-specific human capital. Their importance is exacerbated in environments where labor market regulations make layoffs costly, as they raise the option value of not hiring after the downturn has passed. All these factors combine to reduce the value of employer-employee links significantly in low-skill and informal areas of the economy.

2. EVALUATING POLICY OPTIONS

While the setting of the COVID-19 pandemic was a new one for policy makers, the criteria by which we might judge policy choices are not necessarily different from what they would otherwise be. We can classify these criteria in three general categories.

First, how *effective* were different policy options? Did they achieve the set goals? Did they let households consume and did they help firms survive? Did they reduce or at least not increase the spread of the disease?

Second, how *efficient* were different policy options? What was their fiscal impact? How did they affect incentives to work, save, and innovate? Minimizing the fiscal burden per business or job saved or for a given level of consumption or growth potential preserved is particularly important for emerging economies, which are often more liquidity constrained and more exposed to sudden changes in the international financial context.

Third, how *equitable* were different policy options? Were households, firms, and workers in similar situations treated similarly? Were vulnerable members of society protected? Were the effort and risk-taking by frontline workers rewarded appropriately?

¹ See Schmutte (forthcoming) for a more extensive theoretical treatment and for an overview of the empirical evidence on the value of employer-employee links.

We provide a broad assessment of different policy options based on these criteria. They are grouped in four categories: supply-side labor market policies, focused on individuals in their capacity as workers; demand-side labor market policies, focused on firms as employers; labor market policies to support firms as

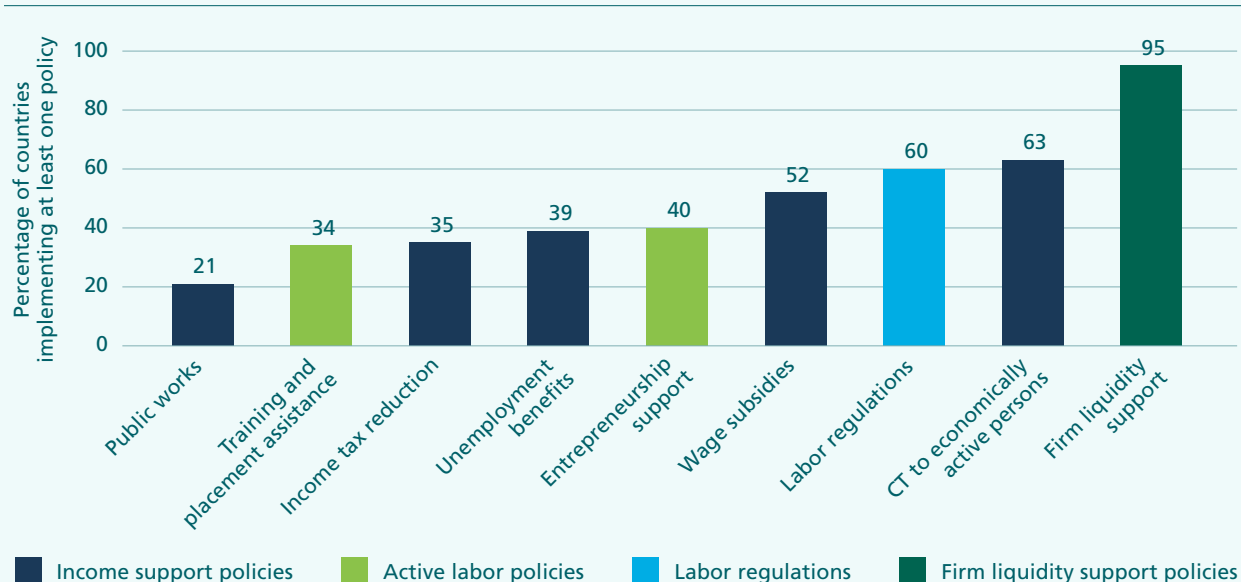
businesses; and generalized income support policies. Different policy makers will, of course, attach different weights to the pros and cons of various policies. We focus here on a period when efforts to suppress the pandemic were under way.

BOX A. COVID-19 LABOR MARKET AND JOBS POLICY MEASURES

More than two years since the onset of the COVID pandemic, countries worldwide have introduced an unprecedented number of social protection and jobs policies to mitigate the economic effects of the COVID-19 crisis.

According to the World Bank COVID-19 Social Protection and Jobs Policy (SPJ) Inventory that tracks policy responses across 224 countries, over 5,700 social assistance and labor market policies were launched or announced between January 2020 and January 2022. More than half (3,436) of the responses are programs and policies that affect the labor market (Kamran et al. 2023). On the supply side of the labor market, they include policies that help workers maintain their income such as income tax reduction, wage subsidies, employee-side payroll tax cuts, and unemployment benefits. On the demand side of the labor market, they cover policies that help firms retain workers, such as relief from social security contributions; employer-side payroll tax cuts; and wage subsidies, tax credits, or grant payments associated with hiring or retention of workers. Furthermore, the inventory includes firm liquidity support policies that help businesses survive, including tax relief for firms, credit facilities, credit guarantees, and corporate tax reductions, as well as generalized policies that support aggregate demand such as public works for the unemployed and cash transfers to economically active persons. Information on other policies such as labor regulations and active labor market policies such as entrepreneurship support, training, and placement assistance is also collected.

Figure A
Percentage of countries with at least one labor market policy, by policy category



Source: Global Database on Social Protection and Jobs Responses to COVID-19 (2021). Own elaboration, based on Kamran et al. (2023).

Among countries implementing these policies, all but one in the sample, or 98 percent of countries, introduced at least one labor market policy [Figure A], with an average of 13 labor market policies each. Most labor market policies, about 60 percent, are newly adopted by governments. This is true irrespective of countries' income level and may stem from the lack of preexisting policies in developing countries [Contreras et al. 2023]. The remaining are adaptations of existing programs such as expansion of the number of beneficiaries.

Although expenditure data are incomplete, recorded expenditures on labor market initiatives were substantive, amounting to an average of 3.59 percent of GDP [US\$32.6 billion] across countries [Kamran et al. 2023].

It is worth emphasizing that all the policies discussed here can be targeted more or less stringently at different firms (by sector, by size, on the basis of revenue losses) or households (by employment status or by income). Targeting requires more administrative capability but reduces the fiscal cost at similar levels of effectiveness. A concern about targeting, especially on the basis of characteristics that recipients have control over and future characteristics, is that it can produce perverse incentives and unintended consequences. We highlight these where they are of particular concern.

2.1. Support for Workers

A commonly deployed set of policies aimed to provide financial support directly to individuals on the basis of their place in the workforce. Some of these are countercyclical by nature, such as unemployment insurance benefits, and target workers who have lost market earnings. Other policies supplement market earnings or reduce the tax burden on labor income, at least in partial equilibrium: examples are earned income tax credits, wage subsidies, and employee-side payroll tax cuts.

All these policies have one goal in common: to allow workers to maintain their consumption levels in the face of reduced market earnings. This is particularly clear in the case of unemployment benefits, where the policy objective is to reduce workers' earning losses after a separation. Beyond that shared goal, they have different effects.

Two policies that illustrate some of the tradeoffs involved are unemployment insurance benefits on the one hand and employee-side payroll tax cuts on

the other hand. The fundamental difference between these two sets of policies is how we condition on (continued) employment.

Effectiveness

Unemployment benefits are particularly effective at channeling funds to workers who would otherwise struggle to maintain their consumption levels. This was particularly important in the context of the COVID-19 crisis, where we saw dramatic job loss in numerous countries. Employee-side payroll tax cuts were much less effective in this situation, as they channel funds to workers who are still employed and not to those who have lost their employment. A disadvantage of both approaches is that the link to employment makes it less likely that support will reach workers in the informal sector.

Both types of programs are effective in sustaining demand for industries that were not directly affected by the pandemic, though the propensity to consume will be greater for unemployment benefits, especially given the concentration of job losses among low-income workers. A major disadvantage of unemployment benefits is that they are necessarily preceded by the severance of employer-employee links.

Finally, unemployment benefits were more attractive from a public health perspective, as they do not incentivize workers to engage in more work activity (and in fact do the opposite; see Holzer, Hubbard, and Strain 2021). Employee-side payroll tax cuts, by making work more attractive, will contribute at the margin to the spread of the disease unless the additional work performed crowds out risky leisure activities.

Efficiency

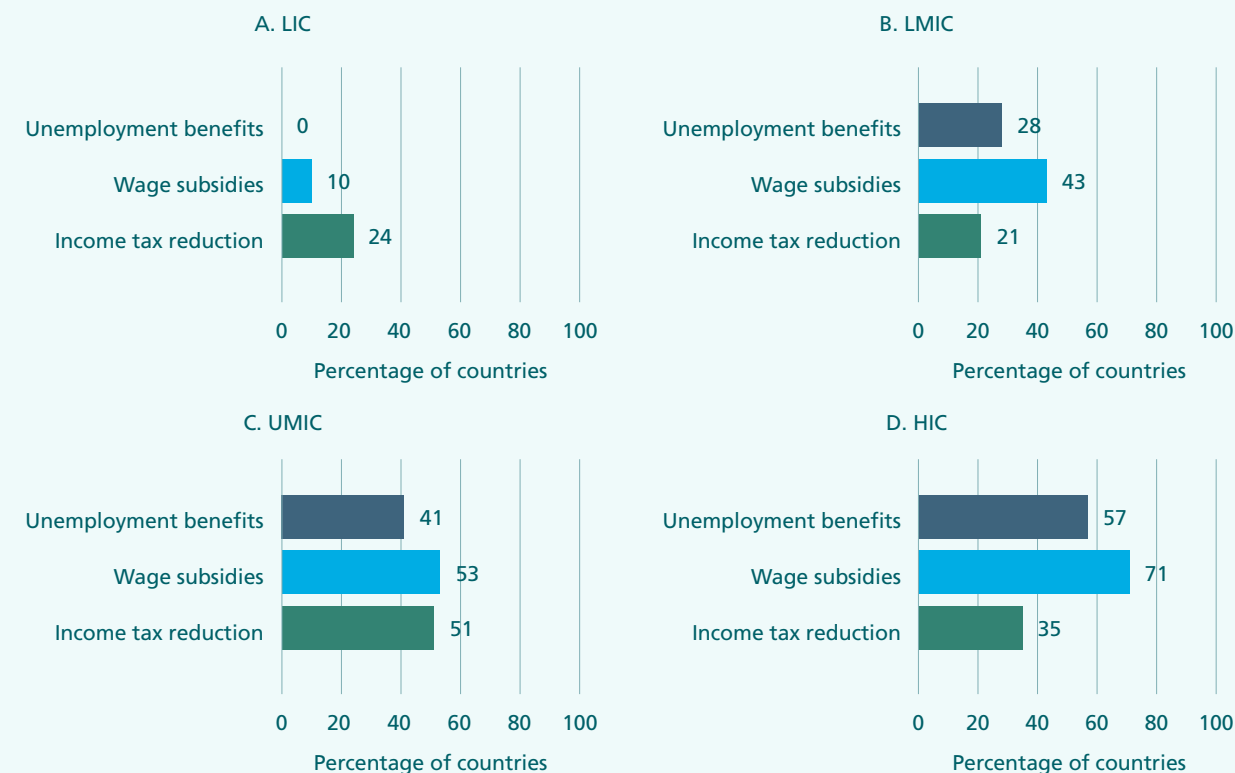
To the extent that consumption smoothing was the primary objective of policy makers, unemployment benefits came at a low fiscal cost, as they reached workers who lost significant market income. Employee-side payroll tax cuts, on the other hand, can only do so to the extent that workers saw their hours reduced or were part of a household that contained workers who lost their employment.

There are countervailing forces here, though. Valuable employer-employee links had to be broken for workers to qualify for unemployment benefits, destroying their firm-specific human capital and generating search costs down the road. Workers' non-firm-specific human capital will also have deteriorated during their unemployment spell. While some have argued that more generous unemployment benefits increase the quality of workers' next match, the relevant counterfactual here was continuation of the original match.

BOX B. POLICY MEASURES SUPPORTING INDIVIDUALS IN THEIR CAPACITY AS WORKERS

About one-third of countries sought to help workers directly by boosting unemployment benefits, offering wage subsidies, or reducing or postponing income taxes (Figure B). Lower-income countries (LICs) tended to implement only one of these policies at a time, while lower-middle-income countries (LMICs) and upper-middle-income countries (UMICs) introduced on average two of these policies at a time. LICs prioritized public works programs and income tax reductions. LMICs were able to implement more unemployment benefit programs, in some cases accompanied by wage subsidies. UMICs, in turn, prioritized wage subsidies, accompanied by either unemployment benefits or income tax reductions.

Figure B
Percentage of countries with at least one worker support policy, by country income level



Source: Global Database on Social Protection and Jobs Responses to COVID-19 (2021). Own elaboration, based on Kamran et al. (2023).

Most programs related to wage subsidies and unemployment benefits were newly created in response to the economic downturn. Wage subsidies were introduced by 52 percent of countries. In the case of unemployment benefits, while most new policies were implemented in higher-income countries (63 percent) compared to LICs (0 percent), their scaled-up adoption is explained by the existence of unemployment insurance schemes—an estimated 94.5 percentage points more likely [Contreras et al. 2023].

On average, the budget allocated to cash transfers for workers is US\$714 million, larger than the combined value of all other traditional labor market policies [US\$686 million], including unemployment benefits and wage subsidies. This is especially true for LMICs and UMICs and might be explained by LMICs' and UMICs' increased ability to target specific types of workers.

Equity

As emphasized earlier, unemployment benefits were attractive because they reached workers who have recently lost significant market income. In the pandemic context, job losses were concentrated among low-income workers, who are particularly vulnerable financially, which makes them attractive targets for support. This was more so the case in the context of supply restrictions that forced businesses to close or operate at reduced capacity.

On the other hand, while the so-called essential workers continued to receive their regular pay, they and their families were exposed to greater health risks during the pandemic. Employee-side payroll tax cuts functioned as compensation for increased risk, especially when targeted appropriately. That said, the incidence of employee-side payroll tax cuts is less clear than that of unemployment benefits, especially beyond the very short run.

Unemployment benefits and employee-side payroll tax cuts can in principle be targeted across the income distribution as one prefers, through phase-ins, phase-outs, and variation in replacement rates. A disadvantage is that they will usually be tied to formal employment within a firm, leaving self-employed workers and workers in the informal economy to fend for themselves.

2.2. Support for Firms as Employers

An alternative way to provide support to workers was to help their employers and firms maintain employment levels. This has taken the form of wage subsidies or tax credits associated with the hiring or retention of

workers, employer-side payroll tax cuts, grant payments associated with maintaining employment during a downturn, or schemes that facilitate short-time work or temporary layoffs.

All these policies shared one common purpose: they directly rewarded companies that maintain employment levels or links to pre-crisis employees. This is particularly clear in the case of employer-side payroll tax cuts, which provide a direct cash benefit in exchange for avoiding layoffs.

There are differences between the different policies in this category as well: some approaches envision an unchanged number of hours worked, while others focus on maintaining employer-employee links even during a period of reduced hours. Here we compare employer-side payroll tax cuts to short-term work subsidies along the lines of the German Kurzarbeit system, described in more detail in Krebs (2023).

Effectiveness

This set of policies explicitly combined two objectives: to facilitate consumption smoothing for workers and to preserve employer-employee ties. Relative to programs that provided direct support to workers, the incidence of the support provided here landed more on employers. At the margin, this is precisely what will have motivated them to keep employer-employee links intact.

The incidence of inframarginal payments is unclear and they presumably benefited owners of capital and other stakeholders in addition to employees. If governments were simply trying to replace the market income of employees, the previous category of measures was

presumably preferable. And neither type of program will have been particularly effective in reaching the informal sector.

Which links to preserve and how is where the policies in this category differ. Kurzarbeitergeld and other types of financial support for temporary reductions in hours per worker focus on preserving the number of workers tied to each employer, while they allow for reductions in total hours worked. Employer-side payroll tax cuts typically do not embody a preference for the number of workers who continue to be employed over total hours worked. All else being equal, they will lead to more hours worked, while short-term subsidies will lead to a smaller number of layoffs.

Efficiency

Support for short-term work approaches is particularly attractive when employer-employee ties are valuable and costly to reestablish through renewed matching, as they maximize the number of links preserved. Labor markets with greater fixed costs of hiring and firing are likely to be particularly fertile ground for this type of approach. Employer-side payroll tax cuts, on the other hand, will be more attractive if there are high levels of variation in the value of employer-employee ties across workers within the same firm.

To the extent that the formal sector is where valuable employer-employee ties were concentrated, these approaches will have been relatively efficient and likely more so than approaches that targeted the universe of firms, both formal and informal.

Equity

Policies in this category were unlikely to help workers in the informal sector and did not help workers who end up losing their jobs. This, in addition to the opaque incidence discussed previously, made these policies relatively regressive. There are differences between employer-side payroll tax cuts and short-term work programs as well. Facilitating short-term work spreads the loss of income and experience across all workers at a given firm, while employer-side payroll tax cuts were of most help to those workers who were harder to replace.

2.3. Firm Liquidity Support

Apart from policies that supported businesses in their capacity as employers, there is a suite of policies that supported businesses to help them deal with the downturn, whether they maintain employment levels or not. The idea here was to ensure the survival of the economy's supply side, particularly in industries where public health measures and consumer hesitation make profitable operations impossible.

The approaches in this category share a common theme in that they were explicitly designed to help businesses and not just those employed by the businesses. This broader approach can be justified by considering the value of organizational knowledge and other intangible capital, the network effects of continued business operations, and a desire to preserve entrepreneurs' (access to) capital.

The two broad subcategories of support here are grants and loans. Grants can include tax relief or new spending that may be conditional on certain levels of revenue loss or that can be industry specific. Loans can be explicitly or implicitly subsidized, available only for certain industries or firm sizes, and be provided by fiscal or monetary authorities.

Effectiveness

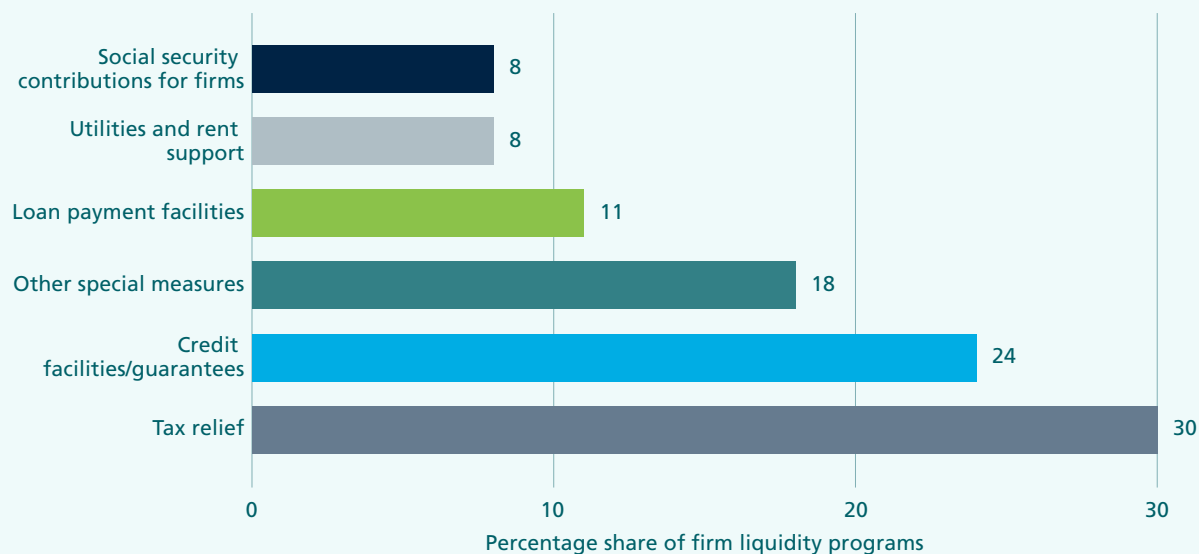
In terms of pure effectiveness, it is difficult to beat generous grants to a broad universe of firms, though firms in the informal sector may remain difficult to reach. While providing cheap credit helped some firms survive, from the perspective of the firm, not having to return the money made survival strictly easier. This in turn helped preserve employment at these firms as well.

Survival of firms that received government support has had implications beyond directly affected firms: for example, it helped preserve formal-informal links and through that channel provided relief to parts of the economy that are otherwise difficult to reach. Note that even at inframarginal firms, these types of support served to avert capital shallowing.

BOX C. POLICIES SUPPORTING FIRMS IN THEIR CAPACITY AS EMPLOYERS AND BUSINESSES

Firm liquidity support programs, aimed at helping businesses survive and keep their employees, were the most widely used labor market policies. They comprised 77 percent of all labor market policies introduced. Most countries prioritized giving firms tax relief, followed by credit facilities and guarantees, loan payment facilities, deferral or reductions in social security contributions, and utility and rent support. Almost all countries adapted existing programs to improve firm liquidity, but most governments that introduced access to credit guarantees developed these funds in direct response to the pandemic.

Figure C
Policies supporting firms in their capacity as employers and businesses



Source: Global Database on Social Protection and Jobs Responses to COVID-19 (2021). Own elaboration, based on Kamran et al. (2023).

Tax relief measures such as the postponement of corporate tax payments, extension of value added tax [VAT] credits, additional deductions for tax credits, or the extension of the deadline for settling tax liabilities were taken by 76 percent of countries. Around 35 percent of countries allowed firms to postpone the payment of their part of social security contributions. These policies have likely been an easy way for governments to help businesses without having to make additional transactions or reallocating resources.

Many governments also introduced more active policy options to inject firms with liquidity. Around 67 percent of the countries created credit guarantee funds, allocating an average of US\$1.2 billion. While UMICs allocated the biggest budgets to these funds, LICs and LMICs also implemented this policy but with a smaller budget. Meanwhile, 51 percent of the countries also offered loan repayment facilities to support businesses' liquidity, by reducing the interest on their loans or allowing firms to restructure or postpone their debts.

Efficiency

A focus on efficiency dramatically shifts this picture. Just as grant support is preferable from the firm's perspective, credit support is cheaper from the government's perspective. In the worst-case credit scenario—the entire principal was lost—the government's total loss still did not exceed that associated with a grant.

In addition to this obvious difference on the expenditure side, a number of other efficiency considerations are important. Support that was too generous will have led to the survival of what are often called zombie firms—firms that would have gone under in a normal business environment. Keeping such firms afloat delays the reallocation of resources toward more productive ends. Employer-employee ties and organizational capital at such firms are effectively of negative social value. Support that is overly generous can also have crowded out the normal operations of the financial sector and led to problems or unnecessary adjustments in that sector.

Of course, support that is not generous enough helped inframarginal firms survive. The key tradeoff here, from an efficiency standpoint, was to target aid at firms that genuinely need support, without reaching too many firms that would have gone under even in the absence of the COVID-19 pandemic. This targeting was particularly important for governments working under stringent fiscal constraints.

Equity

To the extent that direct grants or credits to businesses benefited the owners and customers of businesses, this type of support was likely regressive (Autor et al. 2022b). This may speak in favor of credit support over grants, as a less generous regressive program will have had desirable redistributive properties. In more practical political terms, it may have spoken in favor of tying general business support to employment, even if most support is in effect targeted at firm survival as opposed to the preservation of employment levels per se (cf. the US Paycheck Protection Program).

2.4. Generalized Income Support Policies

The final set of policies we discuss is special in that they are not targeted in particular at the situation in the labor market or at preserving any of these links that we have emphasized so far. It is a broad category of macro instruments that range from looser monetary policy from direct payments to households. Cash transfers, in particular, experienced a breakthrough moment during the COVID-19 crisis, as documented in detail in Gentilini (2022). For a country-level overview of the broader macroeconomic response to the pandemic, see IMF (2022).

Effectiveness

These generalized policies are particularly useful in reaching workers in the informal sector and for countries where large numbers of workers who have lost market income would fall through the cracks of the safety net. They can be effective in supporting households economically while reducing public health risk; see, for example, Karlan et al. (2022) for evidence from an experiment involving mobile transfers to low-income Ghanaians during the pandemic.

Efficiency

Generalized policies are by nature not efficient in preserving employer-employee links or in helping affected workers smooth their consumption. To the extent that they reduce aggregate demand shortfalls, they may be relatively efficient for macroeconomic stabilization. This will be the case if they produce a greater stimulative effect than other policies discussed here, which is plausible given their ability to reach low-income households and participants in the informal sector. In countries that face significant budgetary constraints, such considerations will inform the choice between either generalized cash transfers or programs more directly targeted at the supply side.

At the same time, large parts of the global economy have faced significant inflationary pressure since at

least mid-2021. In some of those places, especially in advanced economies, the more targeted instruments described earlier delivered effective, efficient, and equitable aid to businesses and households without producing unnecessary overheating.

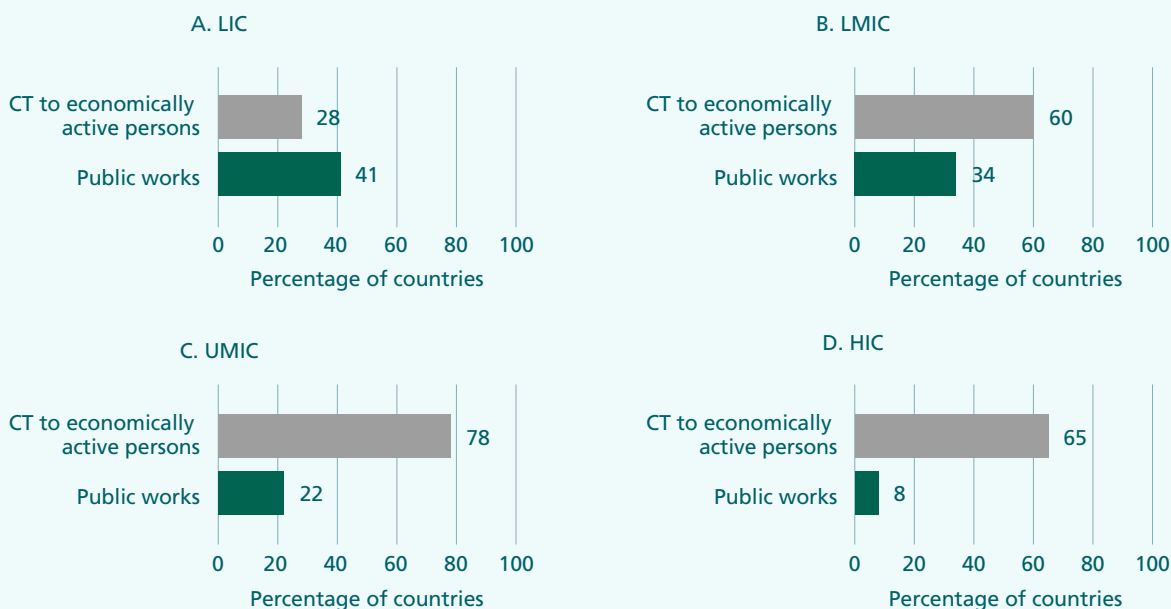
Equity

Especially in economies with an extensive informal sector, targeting support at all households as opposed to only those that include formal sector workers may be quite beneficial from an equity perspective.

BOX D. GENERALIZED INCOME SUPPORT POLICIES

Governments directly targeted self-employed or informal wage workers, rather than households, with cash transfers. Cash transfers were largely adaptations of existing programs. Over 38 percent of cash transfer programs were directed to workers, commonly in informal settings. Public works were also adapted to the crisis, to help informal workers who lack income protection. Cash transfers were particularly prevalent among LMICs and UMICs, possibly explained by their increased ability to target specific types of workers. Meanwhile, LICs prioritized public works in their policy response, which highlights the role of safety nets for informal workers in countries that have no other social security mechanisms.

Figure D
Percentage of countries with at least one cash transfer and public works program, by country income level



Source: Global Database on Social Protection and Jobs Responses to COVID-19 (2021). Own elaboration, based on Kamran et al. (2023).

On average, budgets allocated to cash transfers for workers were roughly equal to the combined value of all other labor market policies, including public works, unemployment benefits, and wage subsidies. Moreover, the budget allocated to cash transfers for workers was twice as large as the amount allocated to non-labor cash transfers. Governments have allocated on average US\$686 million for increasing workers' income through traditional labor market policies, while the average budget for cash transfers directed to workers is US\$714 million, compared to US\$304 million for non-labor-related cash transfers.

3. CONCLUSIONS

The policy response to the COVID-19 pandemic featured dramatic interventions by governments all around the world. Many of these efforts were focused on businesses and their workers and the links between them. We have given a broad overview here of some of the key questions policy makers faced as they navigated the uncertain and rapidly changing economic landscape shaped by the public health crisis.

Perhaps the key takeaway from our analysis is that setting up support programs in a manner that facilitates the recovery was feasible and in fact accomplished by numerous governments. Preserving high-value employer-employee links and other forms of intangible capital was accomplished through aid in the form of short-term work subsidies, payroll tax cuts, and direct support to companies.

Workers who nevertheless lost their jobs in the formal sector have been supported with unemployment benefits. These efforts have been accompanied by generalized fiscal and monetary support, sometimes in the form of cash transfers, to stabilize the macro economy and aid households without regard for their position in the labor market.

The latter aspect of the policy response, generalized aid to households without regard for their position in the labor market, was of particular importance in countries with large informal sectors. It may have been counterproductive in advanced economies, where overshooting by fiscal and monetary policy makers has contributed to significant inflationary pressures.

REFERENCES

- Alfaro, Laura, Oscar Becerra, and Marcela Eslava. 2020. "EMEs and COVID-19: Shutting Down in a World of Informal and Tiny Firms." National Bureau of Economic Research (NBER) Working Paper 27360.
- Autor, David, David Cho, Leland D. Crane, Mita Goldar, Byron Lutz, Joshua K. Montes, William B. Peterman, David D. Ratner, Daniel Villar Vallenias, and Ahu Yildirmaz. 2022a. "An Evaluation of the Paycheck Protection Program Using Administrative Payroll Microdata." *Journal of Public Economics*, 211 (2022): 1-9.
- Autor, David, David Cho, Leland D. Crane, Mita Goldar, Byron Lutz, Joshua K. Montes, William B. Peterman, David D. Ratner, Daniel Villar Vallenias, and Ahu Yildirmaz. 2022b. "The \$800 Billion Paycheck Protection Program: Where Did the Money Go and Why Did it Go There?" *Journal of Economic Perspectives* 36 (2): 55–80.
- Autor, David, David Dorn, and Gordon Hanson. 2019. "When Work Disappears: Manufacturing Decline and the Falling Marriage Market Value of Young Men." *American Economic Review: Insights* 1 (2): 161–178.
- Bartik, Alexander W., Marianne Bertrand, Zoë B. Cullen, Edward L. Glaeser, Michael Luca, and Christopher T. Stanton. 2020. "How Are Small Businesses Adjusting to COVID-19? Early Evidence from a Survey." *Proceedings of the National Academy of Sciences* 117 (30): 17656–17666.
- Bastian, Jacob, and Katherine Michelsmore. 2018. "The Long-Term Impact of the Earned Income Tax Credit on Children's Education and Employment Outcomes." *Journal of Labor Economics* 36 (4): 1127–1163.
- Céspedes, Luis Felipe, Roberto Chang, and Andrés Velasco. 2020. "The Macroeconomics of a Pandemic: A Minimalist Model." NBER Working Paper 27228.
- Contreras, Ivette, Melanie Khamis, David Newhouse, and Michael Weber. 2023. "How Did Countries Respond to the COVID-19 Crisis? Emerging Patterns on Jobs-Related Policies." *JobsWatch COVID-19 Brief*, World Bank.
- Corrado, Carol, Jonathan Haskel, Cecilia Jona-Lasinio, and Massimiliano Iommi. 2022. "Intangible Capital and Modern Economies." *Journal of Economic Perspectives* 36 (3): 3–28.

- Farré, Lídia, Francesco Fasani, and Hannes Mueller. 2018. "Feeling Useless: The Effect of Unemployment on Mental Health in the Great Recession." *IZA Journal of Labor Economics* 7: 8.
- Fornaro, Luca, and Martin Wolf. 2020. "Covid-19 Coronavirus and Macroeconomic Policy." Barcelona School of Economics (BSE) Working Paper 1168.
- Gentilini, Ugo. 2022. "Cash Transfers in Pandemic Times: Evidence, Practices, and Implications from the Largest Scale Up in History." World Bank.
- Gentilini, Ugo, Mohamed Almenfi, Hrishikesh TMM Iyengar, Yuko Okamura, John Austin Downes, Pamela Dale, Michael Weber, David Newhouse, Claudia Rodriguez Alas, Mareeha Kamran, Ingrid Veronica Mujica, Maria Belen Fontenez, Muhammad Ezzat, Sandra Asieduah, Vikesh Ramesh Mahboobani Martinez, Gonzalo Javier Reyes Hartley, Gustavo Demarco, Miglena Abels, Usama Zafar, Emilio Raul Urteaga, Giorgia Valleriani, Jimmy Vulembera Muhindo, and Sheraz Aziz. 2022. "Social Protection and Jobs Responses to COVID-19: A Real-Time Review of Country Measures." Version 16. World Bank: February 2.
- Gibbons, Robert, and Lawrence Katz. 1992. "Does Unmeasured Ability Explain Inter-Industry Wage Differentials?" *Review of Economic Studies* 59 (3): 515–535.
- Guerrieri, Veronica, Guido Lorenzoni, Ludwig Straub, and Iván Werning. 2022. "Macroeconomic Implications of COVID-19: Can Negative Supply Shocks Cause Demand Shortages?" *American Economic Review* 112 (5): 1437–1474.
- Heining, Jörg, and Simon Jäger. 2022. "How Substitutable Are Workers?" Evidence from Worker Deaths." MIT.
- Holzer, Harry J., R. Glenn Hubbard, and Michael R. Strain. 2021. "Did Pandemic Unemployment Benefits Reduce Employment? Evidence from Early State-Level Expirations in June 2021." NBER Working Paper 29575.
- Hubbard, Glenn, and Michael R. Strain. 2020. "Has the Paycheck Protection Program Succeeded?" Brookings Papers on Economic Activity Fall 2020.
- IMF (International Monetary Fund). 2021. "World Economic Outlook: Managing Divergent Recoveries." International Monetary Fund: April.
- IMF. 2022. "Policy Tracker: Economic Responses to COVID-19 by 197 Countries." International Monetary Fund: August 23.
- ILO (International Labor Organization). 2022a. "COVID-19 and the World of Work: Country Policy Responses." Geneva, ILO.
- ILO. 2022b. "Global Employment Trends for Youth 2022: Investing in Transforming Futures for Young People." Geneva, ILO.
- Jarosch, Gregor. 2021. "Searching for Job Security and the Consequences of Job Loss." NBER Working Paper 28481.
- Kahn, Lisa B. 2010. "The Long-Term Labor Market Consequences of Graduating from College in a Bad Economy." *Labour Economics* 17 (2): 303–316.
- Kamran, Mareeha, Ingrid Mujica, María Belén Fontez, David Newhouse, Claudia Rodriguez Alas, and Michael Weber. 2023. "Exploring Two Years of Labor Market Policy Responses to COVID-19: A Global Effort to Protect Workers and Jobs." JobsWatch COVID-19 Brief, World Bank.
- Karlan, Dean, Matt Lowe, Robert Darko Osei, Isaac Osei-Akoto, Benjamin N. Roth, and Christopher R. Udry. 2022. "Social Protection and Social Distancing During the Pandemic: Mobile Money Transfers in Ghana." NBER Working Paper 30309.

- Krebs, Tom. 2023. "German Labor Market Policy during and after the COVID-19 Recession." In *Preserving Links in the Pandemic: Policies to Maintain Worker-Firm Attachment in the OECD*, edited by Michael R. Strain and Stan Veuger. Pp. 115-135. AEI Press.
- Pierce, Justin R., and Peter K. Schott. 2020. "Trade Liberalization and Mortality: Evidence from US Counties." *American Economic Review: Insights* 2 (1): 47–64.
- Schmutte, Ian M. 2023. "The Value of Job Matches." In *Preserving Links in the Pandemic: Policies to Maintain Worker-Firm Attachment in the OECD*, edited by Michael R. Strain and Stan Veuger. Pp. 9-31. AEI Press.
- Schwandt, Hannes, and Till von Wachter. 2019. "Unlucky Cohorts: Estimating the Long-Term Effects of Entering the Labor Market in a Recession in Large Cross-Sectional Data Sets." *Journal of Labor Economics* 37 (S1): S161–S198.
- Shoag, Daniel, and Stan Veuger. 2019. "The Economics of Prisoner Reentry." In *Education for Liberation: The Politics of Promise and Reform Inside and Beyond America's Prisons*, edited by Elizabeth English and Gerard Robinson. Lanham, Maryland: Rowan and Littlefield.
- Strain, Michael R., and Stan Veuger. 2023. *Preserving Links in the Pandemic: Policies to Maintain Worker-Firm Attachment in the OECD*. AEI Press.

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