Helpdesk Report

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Mitigating the economic impacts of epidemics and financial crises: Focus on middle-income countries

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Question

What evidence and lessons exist from efforts to mitigate negative effects on inclusive growth resulting from previous epidemics, financial crises and the current Covid 19 crisis in middle income countries? What are the lessons learned from measures for preparedness, response, recovery and promoting resilience in the short, medium and longer term?

Contents

1. Summary

As governments around the world seek to respond rapidly and appropriately to the impacts of COVID-19, it can be beneficial to look back at responses to similar global systemic shocks. This can reveal relevant lessons, ranging from public health measures to policies for reducing the economic costs. This rapid literature review looks at lessons learned from efforts to mitigate the negative economic impacts of prior epidemics and the COVID-19 pandemic, and financial crises. The focus is on inclusive growth measures and geographically on middle-income countries, although lessons are also drawn from and applicable to lower- and higher-income countries. These secondary economic impacts are explained in detail in a companion paper (Lucas, 2020), which provides a breakdown of impacts, by industry/sector, type of shock, and affected demographic.

As discussed in a prior literature review on evidence and lessons learned to mitigate the secondary impact of disease outbreaks (Kelly, 2020), there is limited robust evidence on responses to the secondary effects. While, there is a range of literature to draw upon that discusses interventions to mitigate the economic impacts of epidemics and financial crises and lessons learned, they rarely extend to quantitative findings or to clear attribution of measures to specific outcomes. This report nonetheless reveals useful lessons from prior disease outbreaks and financial crises to address the negative economic impacts of COVID-19 disruptions and to promote inclusive growth. Policy and programme interventions fall under: health and preparedness; monetary policy and support to the financial sector; and fiscal policy and social protection. It is important that policies and programmes are carefully designed to mitigate immediate and short-term impacts with a view to promoting, or at a minimum, not undermining longer-term economic recovery. Where possible, this complementarity or tension between the short- and long-term is noted in the various interventions discussed in this paper.

Health and economics

Investing in health capacity and pandemic preparedness is one of the most productive investments for health and for inclusive economic growth (WHO, 2016; Brahmbhatt and Jonas, 2015). It can not only mitigate the disastrous health impacts of epidemics and pandemics, but also contribute to mitigating negative effects on the economy and to fostering inclusive growth (ILO, 2020). There have been repeated calls by international commissions and panels to scale up investment in global health security and to strengthen outbreak preparedness and responsiveness, subsequent to the SARs (2002-2004) outbreak in Asia and H1N1 swine flu (2009) outbreak in the USA and Mexico, and again after the Ebola outbreak (2013-2016) in West Africa (2013-2016) and ZIKA outbreak (2015-2016) in the Americas and the Caribbean (IWG and Financing Preparedness, 2017; Moon et al., 2015). Nonetheless, countries chronically underinvest in preparedness planning, disease and risk monitoring, and primary care (IWG and Financing Preparedness, 2017; Moon et al., 2015). This may be due in part to the lack of macroeconomic assessments of pandemic risk (Revenga and Galindo, 2020; IWG on Financing Preparedness, 2017).

Global and regional action

It is generally recommended that international trade should be preserved during epidemics, with policies that address short- and long-term trade (Stephens, 2017). During the 2008-2009 global financial crisis, trade policy discussion often focused on the issue of protectionism, however most governments seemed to conclude that moves to restrict trade are counterproductive (Green, 2010). In the current COVID-19 environment, the fragmentation of supply chains and the risk of an economic recession have also tempted countries to turn to unilateral and isolationist policies, but this may be the opposite of what is needed to boost global output and employment (Revenga and Galindo, 2020; Wei, 2020). The pandemic is also threatening global food security, through export restrictions (Hendrix, 2020). Support from multilateral organisations, and joint global action to keep export markets open, will be crucial for overcoming negative effects of protectionist policies and actions (Revenga and Galindo, 2020).

It is also essential that efforts be made quickly to mobilise resources and support for lower and middle income countries (LMICs) to engage in immediate responses and long-term recovery efforts (Patel et al., 2020). The capacity for economic response is weaker in parts of Asia and Latin American middle-income countries (where health capacities are also weaker). Countries with considerable poverty, such as in large African economies (Egypt, Ethiopia, Nigeria and even South Africa) and the whole Indian subcontinent (India, Pakistan and Bangladesh), are likely to require even more support (Revenga and Galindo, 2020). While much was done internationally to tackle the Ebola outbreak, more could have been done to ensure economic stability, and to encourage continued international investment in the region despite the ongoing epidemic at the time (Gostin, 2015).

An effective response to the economic impacts of COVID-19 will require global coordination of large-scale funding from international financial institutions and major bilateral and multilateral donor agencies (Patel et al., 2020). The Asian financial crisis altered the way governments and international organisations respond to financial crisis, moving away from structural adjustment policies to fiscal stimulus packages (Samphantharak, 2019; Ortiz, 2011) This reversal in thinking was demonstrated during the global financial crisis, when governments and international organisations instead implemented massive fiscal stimulus packages and near-zero interest rate policies (Samphantharak, 2019). Evaluations of interventions during the global financial crisis finds that overall, the crisis impact in most countries was not as severe as expected, partly because of international efforts (IBRD, 2017). In order to address the economic impacts of COVID-19, it is also recommended that governments are prepared to do 'whatever it takes' in terms of macroeconomic policies (Baldwin and di Mauro, 2020).

Monetary policy and support to the financial sector

During the global financial crisis, central banks throughout the world mitigated the impacts of the crisis, including decline in output and trade flows, with expansionary monetary policies (Baldwin and di Mauro, 2020; Chauffour and Malouche, 2011). These included actions to cut interest rates and maintain the country's liquidity, and targeted assistance to financial institutions. Countries that already had strong regulatory environments, such as Brazil and East Asian countries, demonstrated greater resilience to the crisis (Toshniwal, 2012; Green, 2010).

One of the biggest threats to the economy is that *viable* businesses become illiquid, resulting in a chain-reaction of bankruptcies, job losses and reductions in spending – resulting in a negative feedback loop that undermines growth. These kinds of impacts have materialised during prior pandemics, transforming temporary disruptions into permanent effects (Baldwin and di Mauro, 2020; Beck, 2020; Odendahl and Springford, 2020). Central banks can coordinate with financial institutions to support viable businesses that would not have otherwise gone under (Baldwin and di Mauro, 2020; Odendahl and Springford, 2020). Governments could offer temporary and targeted credit guarantees for the near-term liquidity needs of these firms (Gopinath, 2020). Once epidemics have come to an end or are under control, longer-term economic recovery can be promoted by helping people to restart activities affected by the epidemic through greater access to credit (Guinea, 2014). In China, financial institutions have continued to support firms during the post-COVID-19 outbreak period, centred on restarting the economy, with reduced interest rates and credit lines for the resumption of work and production (Huang et al., 2020).

A key lesson learned from prior economic shocks, in particular the East Asian financial crisis (1997-1998), is that while it is essential to support businesses and to prevent the failure of otherwise viable businesses, propping up non-viable businesses can also hurt longer-term recovery (Paci et al., 2010).

Fiscal policy and social protection

In the case of the COVID-19 crisis, monetary policy has been less effective, unlike during the 2008 financial crisis, as the main shock is coming from the real economy, rather than the financial sector. Fiscal policy will play a greater role (Baldwin and di Mauro, 2020; Wei, 2020).

It is important to strengthen resilience to future shocks by creating or preserving fiscal space for countercyclical stimulus measures if they are necessary (IBRD, 2017). Studies of Mexico's peso crisis, the East Asian crisis and the global financial crisis find that countries that had the fiscal space and flexibility to implement countercyclical expansionary policies experienced smaller recessions and lower output volatility, demonstrating greater economic resilience (IBRD, 2010; Ortiz et al., 2009). International actors should provide support toward removing the obstacles that preclude countries from using countercyclical monetary and fiscal policy, with greater attention to expenditure allocations and revenue mobilisation (IBRD, 2017; Ortiz et al., 2009). In order to promote longer-term economic recovery once the COVID-19 health crisis is contained and business operations begin to normalise, a stimulus package in the form of tax cuts or higher public investment to boost aggregate demand is desirable. This would also need to be consistent with available fiscal space (Bofinger et al., 2020; Gopinath, 2020).

An evaluation of the World Bank's response during the financial crisis finds that insufficient attention was given to the available space for fiscal stimulus and to the reversibility of stimulus measures (IBRD, 2017). Post-crisis reversibility of short-term programming is also important to the successful design of fiscal policy interventions, such that countries do not experience deteriorating fiscal deficits in the long-term (IBRD, 2010; Paci et al., 2010).

Effective and efficient social protection systems are significant sources of resilience, providing support to the vulnerable and to a demand-led recovery (ILO, 2020). They are powerful economic and social stabilisers of economies and societies, especially if they are already in place prior to a crisis (ILO, 2020). Existing social protection schemes have the potential to absorb more resources and deliver them to a growing number of targeted households (Revenga and Galindo, 2020). The Ebola outbreak in West Africa revealed that the lack of social protection measures in the context of health epidemics aggravates poverty, unemployment and informality, resulting in greater fragility (ILO, 2020). Whereas, in Brazil, the government was able to expand its pre-existing large conditional cash transfer programme to address the impacts of the Zika epidemic on marginalised populations. Lessons from the global financial crisis also reveals that the readiness of countries' social protection systems was a binding constraint (IEG, 2012). Governments must now also provide comprehensive social protection responses to the economic impacts of the COVID-19 epidemic (Gerard et al., 2020).

Support to SMEs and the self-employed

Small and medium enterprises (SMEs) are the engines of the economy in most lower- and middle-income countries (Patel et al., 2020). Key economic lessons from the Ebola crisis include the importance of stabilising jobs and livelihoods and support for SME development as a crucial pathway to economic recovery (Guinea, 2014). Several countries in Southeast Asia launched new programmes during the East Asian crisis aimed at creating jobs through enterprise development, but their reach did not extend to the most vulnerable, who did not have assets to serve as collateral (Betcherman and Islam, 2001). Recommendations during the current COVID-19 crisis include strong support for employment to facilitate the recovery process. SMEs and the self-employed will be particularly affected by the various disruptions (ILO, 2020). Priorities should include supporting firms with financial relief, such as tax relief, subsidies and refinancing, to avoid bankruptcy and, in turn, permanent damage to the economy (Blanchard, 2020). Gender responsive fiscal policy would allow for identification of SMEs that are owned by women in order to ensure that support efforts respond to their specific needs (UNDP, 2020). Support measures should also been extended to self-employed workers (Stephens, 2017).

Support to SMEs that facilitate the maintenance of employment can contribute to longer-term economic recovery through lower decline in productivity and in aggregate demand. Firms that are able to keep existing employees and not have to hire and train new employees when the economy recovers, will be able to recover faster with less turnover costs (Stephens, 2017). Losing employees also destroys the specific human capital gains achieved on the job that benefits the firm and the worker (Paci et al., 2010).

Many governments in lower- and middle-income countries have already implemented or are considering policy options to support SMEs during the COVID-19 crisis (ILO, 2020; Patel et al., 2020). Measures to support SMEs in China are considered to be crucial to boosting domestic demand, the production networks and the global value chain – thus helping to safeguard the stable development of the economy as a whole (Huang et al., 2020). Such measures include temporarily deferring and waiving social security contributions and certain taxes, exemptions on some rent payments, loan extensions, small-business lending and interest rate reductions and subsidy increases (Bouey, 2020; Gopinath, 2020; Huang et al., 2020; ILO, 2020). Despite these efforts, SMEs in China still face struggles to meet the COVID-19 prevention requirements of local government agencies necessary to reopen (Bouey, 2020). Many small businesses have also found that reopening only means they are required to pay rent and salaries without revenue, due to continued lower demand (Bouey, 2020). Digital technologies may provide some targeted credit support to struggling SMEs. Research has shown that fintech applications (e.g. e-commerce finance platforms and supply chain finance platforms) can significantly reduce the operational volatility and improve the survival rate of SMEs (see Huang et al., 2020).

Support to larger companies and job retention

Similar to the case for SMEs, support to larger companies could include benefits that enable them to continue to pay their employees in order to ensure that livelihoods are not lost in the short- and long-term, and companies can remain competitive (Stephens, 2017). International companies could also be given incentives to maintain their investments. This was not done during the Ebola outbreak, and many foreign companies left affected West African countries or retracted workers (Stephens, 2017).

Governments around the world have adopted new job retention schemes amidst the COVID-19 epidemic, or expanded existing ones, as in the case of Brazil, (Gerard et al., 2020). The aim of such schemes is to avoid the destruction of existing jobs, which should be viable again once the public health response is relaxed. Subsidizing these jobs allows firms to continue operations, even if at some reduced level, while sparing workers and firms the costs of finding a new job and replacing the worker, speeding up the economic recovery (Gerard et al., 2020). In many contexts, job retention schemes are also logistically easier than setting up an unemployment insurance programme (Gerard et al., 2020).

Support to specific sectors

Identifying the particular jobs, sectors or geographic areas through which the economic downturn is transmitted is a precondition for effective targeting of policy interventions (Rassy and Smith, 2013; Paci et al., 2010). Employment interventions to protect the sectors most immediately affected and those most vulnerable may yield relatively higher returns (Paci et al., 2010). In countries where the tourism sector is important, for example, policies should be designed to mitigate the impact on this sector in the event of an epidemic, which would also minimise spillover effects to the larger economy (Noy and Shields, 2019). The prior SARS (Severe acute respiratory syndrome) epidemic resulted in substantial economic losses in the tourism and hospitality sectors in China, but these losses were not necessarily unpreventable. The relative speedy recovery after SARS is attributed in part to the existence of crisis management systems established by tourism enterprises prior to the onset of SARS (Gu and Wall, 2006). Lessons from the H1N1 swine flu outbreak in Mexico also points to the need to engage in targeting and preparedness – identifying affected industries that are important to the national and regional economy and allocating greater resources to them rather than providing nation-wide subsidies (Rassy and Smith, 2013).

The COVID-19 crisis has resulted in disruptions to production, initially in Asia, then spreading to supply chains across the world. Labour-intensive manufacturing industries and service industries have been severely affected, with longer-term recovery expected to be tougher in the services (Huang et al., 2020; Odendahl and Springford, 2020). Providing support to service sectors will also have the effect of targeting support to women, who are often overrepresented in these industries, in particular tourism, transport, entertainment, cleaning and remunerated domestic services (ILO; 2020; UNDP, 2020). In Latin America, for example, there are nearly twice as many businesswomen in tourism than in any other sector (UNDP, 2020).

Unemployment insurance

Maintaining livelihoods and labour-related income are essential to protect the ability of workers to provide for themselves and their families and to lessen the negative impacts of crises on consumer spending and aggregate demand. When the labour market transmission of shocks occurs largely through reduction in formal sector employment, the existence of an effective unemployment insurance system can serve as an automatic stabiliser, compensating those who lose their jobs (Khanna et al., 2010; Paci et al., 2010). Countries that have pre-existing ‘automatic stabilisers’ have greater options during times of crisis and are better able to support workers who are laid off (Gerard et al., 2020; Espino, 2013). The introduction or extension of unemployment benefits, the latter of which was achieved in South Korea during the East Asian crisis, is a possibility in middle-income countries with good administrative capacity (Paci et al., 2010). During the global financial crisis, reduction in earnings in middle-income countries was often driven by a reduction in hours worked. In such cases, innovative policies that offered workers access to income maintenance to compensate for temporary reduction in standard working hours (e.g. granting partial compensation from the unemployment benefit system on a pro-rata basis for the hours lost or providing paid training opportunities) were effective interventions (Khanna et al., 2010). The disruptions caused by COVID-19 are expected to result in significant job loss (Gerard et al., 2020). Various countries, such as the Philippines, have expanded unemployment benefits (ILO, 2020). It may be important also to relax job search requirements and extend eligibility rules, such as in Brazil, where workers often have to work for at least one year to become eligible for any benefits (Gerard et al., 2020).

Cash transfers

In the absence of unemployment insurance systems, labour market contractions during the global financial crisis were mitigated in some cases by launching or scaling up temporary labour-intensive public works or income-support programmes, such as cash transfers (e.g. in El Salvador, Mexico, Latvia and Moldova). These measures can also benefit informal workers or workers who are subject to wage reductions (IEG, 2012; Paci et al., 2010). In addition, they can stimulate the economy through consumer spending and increased aggregate demand (Gerard et al., 2020; ILO, 2020; Green, 2010). In countries that already have cash transfer programmes in place, expanding benefits and eligibility is essential in mitigating the economic and social impacts of COVID-19 (Patel et al., 2020). Many countries, such as Indonesia and Kenya, have temporarily topped up the amount received by beneficiaries of social assistance programmes in order to enhance income security and boost aggregate demand (Gerard et al., 2020).

Cash transfers can provide support not only during the earlier phases of outbreak and national lockdowns but also during the recovery phase to restart economic activity (Patel et al., 2020). Cash transfer programmes in West Africa were instrumental for Ebola survivors, orphans and other families of persons who died of Ebola, who received disbursements to restart livelihood activities (Guinea, 2014; Patel et al., 2020). During the global financial crisis, cash transfers were also given to low-paid poor workers in middle-income countries in order to protect their livelihoods from long-term deterioration (Khanna et al., 2010).

Conditional cash transfers (CCTs) can serve the dual objective of dampening income shocks and promoting investments in human capital, which in turn can improve the longer-term potential of the economy (Green, 2010; Paci et al., 2010). CCTs that require school attendance or the use of health facilities can mitigate against declines in human capital stemming from epidemics and financial crises, particularly among poorer households that are more likely to withdraw from education (Evans and Over, 2020). Due to Brazil's pre-existing large CCT scheme, Bolsa Familia, the country already had in place a financing mechanism to respond to the impacts of the Zika epidemic (UNDP, 2017). While CCTs can in principle improve upon the performance of unconditional cash transfers and contribute to longer-term recovery, successful implementation of such schemes requires substantial administrative capacity (Paci et al., 2010). In the current COVID-19 crisis, it is recommended that CCT and public works programmes are temporarily made unconditional, as the conditions may undermine social distancing (Gerard et al., 2020).

While permanent CCT programmes, such as those in Latin America, are well suited to addressing chronic poverty, there are concerns that they may lack the flexibility to protect the near poor and/or transitory poor, who also need to be targeted during crises (IEG, 2012). Experience from previous crises in developing countries suggest that measuring impacts of crises should be a priority in order to identify populations, households and enterprises most in need to target for support (Revenga and Galindo, 2020). During the Ebola epidemic, this was done effectively through low-cost phone surveys in Sierra Leone and Liberia (Revenga and Galindo, 2020). Some developing countries, such as Colombia and Peru, have already been taking innovative steps toward preparedness and response to the COVID-19 crisis, identifying those most affected through street and phone polling (Revenga and Galindo, 2020).

Using existing programmes to extend assistance to new beneficiaries requires not only information on potential beneficiaries, but also payment infrastructure to reach them (Gerard et al., 2020). Some governments, as in Chile and India, have leveraged identity-linked bank accounts, established for financial inclusion purposes to provide direct support to the poor (Gerard et al., 2020). In Brazil, the government has also created a new website to extend coverage to informal workers at large (Gerard et al., 2020). Relying on digital payment infrastructures is quick and safer in an epidemic, but it may exclude vulnerable households, who do not have access to a computer or smartphone. Delivery to recipients could be facilitated instead by involving local governments or non-state actors (Gerard et al., 2020).

In-kind transfers

Policies and programmes designed to assist in the short-term must aim to ensure that basic essentials are available (Stephens, 2017). Programmes may provide cash, in-kind assistance (e.g. food, fuel) or subsidised access to essential goods and services (e.g. health services, housing). Where supply chains are impacted or prices rise, in-kind provision will be most powerful, and public procurement will support producers as well (Gerard et al., 2020). Food security and maintaining livelihoods were key priority areas during the Ebola outbreak (Stephens, 2017; Guinea, 2014). Similarly, during the COVID-19 crisis, governments in many middle-income countries are developing short-term support measures to help vulnerable populations meet basic needs. India, for example, announced a $23 billion aid package, aimed at feeding 800 million of its poorest citizens through distribution of wheat, rice, and pulses (Patel et al., 2020).

Public works programmes

During the East Asian crisis, public works programmes provided unemployed workers with much-needed income, particularly in the absence of unemployment insurance schemes (Betcherman and Islam, 2001). While such programmes can be vital for long-term potential growth, they often fail to provide effective support to economic activity in the short term due to frequent delays (Green, 2010). Some large infrastructure projects were also considered wasteful (Samphantharak, 2019). In addition, as observed in Central America during the global financial crisis, women risk being underrepresented as beneficiaries of public works programmes as construction is traditionally considered a ‘male’ sector (Espino, 2013). During the current COVID-19 crisis, the conditions of public works programmes cannot be fulfilled during lockdown, but could be a source of recovery in the post-outbreak phase (Gerard et al., 2020). In China, a number of key projects related to energy, transportation and information technology industries have been launched and financed by special local government bonds (Huang et al., 2020).

2. Health and economics

Investing in health capacity and pandemic preparedness is one of the most productive investments for health and for inclusive economic growth (WHO, 2016; Brahmbhatt and Jonas, 2015). It can not only mitigate the disastrous health impacts of epidemics and pandemics but also contribute to mitigating negative effects on the economy and to inclusive growth (ILO, 2020).

The health sector, however, is traditionally viewed as a cost to the economy – an expense to be carefully controlled to protect opportunities for inclusive growth (WHO, 2016). Recent studies have found instead that the health sector's annual growth rate exceeds that of the manufacturing and service sectors (see WHO, 2016). Driven by research and technology, the health sector is well positioned to be have a large employment effect in the wider economy, expanding the number of decent jobs and building skills through education and training. It is able to redeploy workers from manufacturing and other service sectors, making it an important stabilising factor during economic slowdowns (WHO, 2016). In the current context, targeted investment in health systems is essential in building resilience against COVID-19, while also providing an opportunity to create decent jobs (ILO, 2020).

Pandemic preparedness

There have been repeated calls by international commissions and panels to scale up investment in global health security and to strengthen outbreak preparedness and responsiveness, subsequent to the SARs and H1N1 swine flu outbreaks, and again after the Ebola and Zika outbreaks (IWG and Financing Preparedness, 2017; Moon et al., 2015). The Harvard-LSHTM Independent Panel on the Global Response to Ebola finds that the shortage of capacities in Guinea, Liberia and Sierra Leone to detect, report and respond rapidly to outbreaks enabled Ebola to develop into a national, and worldwide, crisis (Moon et al., 2015). Nonetheless, countries chronically underinvest in preparedness planning, disease and risk monitoring, and primary care (IWG and Financing Preparedness, 2017; Moon et al., 2015).

There have been some regional efforts to improve preparedness that can serve as important models, in particular lessons from SARs. East Asian countries that appear to have responded most effectively to COVID-19 – Hong Kong, Taiwan, Singapore, Japan and to some extent, China, are also those that suffered most from the prior SARS epidemic. They learnt and implemented lessons in response (Revenga and Galindo, 2020). The SARS epidemic left the world four clear lessons for improved healthcare and capacity to address epidemics:

1. **Invest in preparedness systems**, such as 'wide net' surveillance systems, isolation and quarantine policies and effective contact-tracing systems. East Asian countries gained important clinical insights into the coronavirus from their SARS experience, and implemented infrastructure adjustments in hospitals (including building outside waiting rooms to avoid crowding potentially infectious patients in air-conditioned emergency rooms). In the case of Singapore, for example, the institutional structures and the health control, tracing and surveillance systems put in place during SARs were quickly refined and applied during the H1N1 pandemic and currently in the case of COVID-19. The contact-tracing system it developed helped cut the time to trace an infected person down to a few hours (Revenga and Galindo, 2020).
2. **Centralise decision making** in authorised and adequately resourced institutions (such as Taiwan's Central Epidemic Command Centre) and/or strengthen command, control and coordination systems between government agencies (as Singapore did). Understanding the significance of the state's role in crisis management and the importance of building the state's capacity to act, decide and manage a dangerous outbreak was one of the most important lessons to emerge from SARS (Revenga and Galindo, 2020).
3. **Strengthen investment in public health and research**, such as by creating new infectious diseases programmes in major universities; strengthening relationships

between public health officials and the research community; funding clinical research and building a world-class research capacity (Revenga and Galindo, 2020).

4. **Be transparent and timely in public communications** (Revenga and Galindo, 2020). It is essential to prioritise the active and transparent reporting of timely and accurate data and to prevent the spread of inaccurate or biased information (Noy and Shields, 2019). Available clear and visible information can guide individual responses in a way that minimises transmission pathways. It can also contribute to economic resilience by curtailing misinformation, reducing uncertainty and boosting confidence at all levels of the economy (ILO, 2020; Noy and Shields, 2019; Noy et al., 2019).

The general failure to effectively adopt these lessons elsewhere, leaving many countries unprepared to face a double health-economic shock, may be due in part to the lack of macroeconomic assessments of pandemic risk (Revenga and Galindo, 2020; IWG on Financing Preparedness, 2017). This is despite such assessments frequently recognising, in the after-math, the tremendous economic costs of such events. Further, the few macroeconomic assessments that are done are not systemically linked to country policy and budgeting processes. These shortfalls have the effect of depriving preparedness of the fiscal and policy attention that it warrants (IWG on Financing Preparedness, 2017). It is essential that the scale of risk associated with infectious disease crises is made visible and salient to governments, particularly ministries of finance (IWG on Financing Preparedness, 2017). Governments need in turn to invest domestically in building core public health and system capacities and to mobilize adequate external support to supplement efforts in poorer countries (Moon et al., 2015).

Engaging the private sector

Engagement of the private sector and public institutions beyond the health sector remains limited in overall epidemic and pandemic preparedness, planning and intervention (Smith et al., 2019; IWG on Financing Preparedness, 2017). Given that private-sector companies have much to lose from disease outbreaks, the systematic lack of engagement of private sector actors in aspects of the response is a notable gap (UNDP, 2017). Research on Ebola and Zika, for example, emphasise the need for collaboration with the local private sector (Tambo et al., 2017; UNDP, 2017).

Possible ways to engage the private sector more effectively include:

1. **Building greater awareness of the risks of infectious disease outbreaks** amongst private sector leaders. The aim is to improve their own internal preparedness; reduce resistance to taxes or regulations related to reinforcing pandemic prevention and response; and increase inclination to work with governments to mitigate the risks (IWG on Financing Preparedness, 2017). Drawing on previous epidemics, business continuity planning has proved to promote business sustainability by identifying and managing risks; establishing response plans; and taking action to minimize disruption and ensure that the workplace and workers are protected and prepared (ILO, 2020).
2. **Involving the private sector in government plans to reinforce preparedness and response**, and leveraging relevant private sector assets and capabilities (IWG on Financing Preparedness, 2017). Constructive and persistent channels of communication between governments and social partners is important in developing effective responses at the enterprise, sectoral and macroeconomic level, as demonstrated by historic economic crises (ILO, 2020).

3. **Introducing regulations to enforce appropriate investment by particular private sector companies in risk mitigation and preparedness**. Companies to target include those involved in livestock production, where there is a notable risk of infectious diseases (IWG on Financing Preparedness, 2017).

3. Global and regional action

While the COVID-19 crisis has hit higher income countries first, both in its health and economic aspects, the effects have quickly been spreading to middle-income and low-income countries that have less capacity to respond (Revenga and Galindo, 2020). Many low-income and some middle-income countries will need global support to mobilise the resources needed to tackle the health crisis and its economic impacts (Revenga and Galindo, 2020).

Trade and investment

It is generally recommended that international trade between epidemic countries should be preserved (Stephens, 2017). While the Harvard-LSHTM Independent Panel on the Global Response to Ebola recommends that trade and logistics operators are preserved in order to maintain ordinary economic operations (Moon et al., 2015), it does not give any specific advice on how this is to be accomplished (Stephens, 2017).

Lessons from SARS include the need for a short- and long-term trade policy to ensure that both short- and long-term economic effects of epidemics are mitigated (Stephens, 2017). The emphasis on a long-term policy is based on findings that the economic impacts of epidemics are frequently felt long after the pathogen is contained, up to five years later (see Lee 2013; cited in Stephens, 2017). As such, short-term trade barrier reprieves and temporary beneficial trade conditions of only a few months are unlikely to be beneficial for the longer-term (Stephens, 2017).

During the 2008-2009 global financial crisis, trade policy discussion often focused on the issue of protectionism, however most governments seemed to conclude that moves to restrict trade are counterproductive (Green, 2010). Protectionist actions, such as the introduction of domestic subsidies to support domestic producers across the globe, were minimally followed or quickly terminated. As such, on balance, while trade was still affected by declines in consumer spending and aggregate output demand, protectionist impacts on international trade was limited (Green, 2010).

In the current COVID-19 environment, protectionist trade policies may also be more counterproductive than helpful (Revenga and Galindo, 2020; Wei, 2020). The economic impact of COVID-19 disruptions requires evaluation through multiple lenses, including manufacturing supply chains; tourism, transportation and service relationships; and energy and commodity demand and prices (Mann et al., 2020). These linkages and factors will have different weights for different countries (Mann et al., 2020). Given these global interconnections, it is essential to look beyond national responses and assess which global coordinated actions can make a difference. At a time when borders are closing, supply chains are fragmenting, and transport, trade and logistics networks are under stress, there may be a temptation to turn towards unilateral and isolationist policies (Revenga and Galindo, 2020). The risk of an economic recession also often tempts countries to raise trade barriers (Wei, 2020). These actions, however, may be the opposite of what is needed to boost global output and employment (Revenga and Galindo, 2020; Wei, 2020).

The COVID-19 pandemic is threatening global food security, through export restrictions (Hendrix, 2020). While larger economies lose efficiency and purchasing power over time when turning inward, they can withstand the costs for a longer period of time. In contrast, for many developing countries, being cut off from hard-currency income in the form of lost exports can threaten lives (Obstfeld and Posen, 2020). Over the longer term, escalating deglobalisation could result in cutting the global South from access to global opportunities, inputs and technology which could impede their recovery from any crisis significantly (Obstfeld and Posen, 2020).

Support from multilateral organisations, and joint global action to keep export markets open, will be crucial for overcoming negative effects of protectionist policies and actions (Revenga and Galindo, 2020). The G20 needs to take aggressive steps to safeguard global food security, in particular (Hendrix, 2020). It is recommended that the G20 disavow export restrictions, with the possible exception of India, the only G20-member major exporter with a large undernourished population (Hendrix, 2020). The G20 should also commit publicly to intervene should prices in global markets begin rising rapidly, through the actual release of physical stocks and in some cases, merely the announcement of the intention to release. During the global financial crisis in 2008, the announcement alone by Japan that it might release stockpiled purchases of US-exported rice was sufficient to bring down prices (Hendrix, 2020).

Policies should also be in place to mitigate disruptions to foreign direct investment (FDI) during epidemics (Stephens, 2017). FDI is essential to economic growth and recovery in developing countries. During the Ebola outbreak, FDI in West Africa was put on hold from many sources. This likely slowed economic recovery even after Ebola was stopped. Plans to maintain and encourage FDI during and after epidemics will improve economic recovery (Stephens, 2017). Where possible and beneficial, the affected country could offer incentives to companies that continue investment during a specific period of time. Incentives could include tax breaks by the home country, special insurance from losses incurred because of the epidemic, or even a scheme of government matching capital investments within the area (Stephens, 2017).

China, during the post-outbreak period of COVID-19, has focused on restarting the economy with a package of policies to stabilise international trade and foreign investment and to further open the market. These include export tax rebates and an increase in foreign trade credits and extension of debt rollovers for small trading firms severely affected by the epidemic (Huang et al., 2020). Commercial insurance companies have also been encouraged to offer short-term trade credit insurance and lower fees for trading firms (Huang et al., 2020).

<u>Diversification</u>

Lessons from prior financial crises and their impacts in Southeast Asia demonstrate that diversification in exports can mitigate the economic impacts of financial crises (Samphantharak, 2019). Due to their outward-oriented development strategy, the countries in the region have been particularly vulnerable to global fluctuations on their exports. The global financial crisis, for example, led to drop in exports from the region, resulting in an economic slowdown in many countries in Southeast Asia (Samphantharak, 2019). A comparative study of middle-income countries in Latin America and East Asia finds that GDP in countries in the latter region fell to a higher extent than Latin American nations due to greater reliance on export-led growth in East Asia (Foxley, 2009).

While Southeast Asia remains dependent on exports, the region has diversified away from primary products into manufacturing since the mid-1980s debt crisis, lessening the negative economic impact of the global financial crisis (Samphantharak, 2019). The severity of crises thus depends on how domestic governments responded to prior external shocks (Samphantharak, 2019). Many learned from the debt crisis in the 1980s and the East Asian financial crisis and implemented policy reforms that helped to mitigate the economic impacts of the global financial crisis (Samphantharak, 2019).

Attention to regional trade networks may also contribute to mitigating the effects of a decline in global trade. The rise in intra-regional trade in Asia, prior to the global financial crisis, helped to mitigate some of the decline in demand from OECD countries (Green, 2010). Similarly, in Africa, intra-African trade has been resilient and rising rapidly since the global financial crisis (Mold and Mveyange, 2020). With imports to East Africa from China disrupted due to COVID-19, governments and industries in the region could benefit from greater attention to regional value chains (Mold and Mvenyange, 2020).

Coordination and support for developing countries

The fact that the COVID-19 crisis is impacting almost all countries at much the same time, in terms of health and economic effects, makes it particularly challenging to organise a coordinated global response that can mitigate impacts (Revenga and Galindo, 2020). Governments in many high-income countries are overwhelmed managing their own domestic COVID-19 crises and multilateral agencies are facing unprecedented demands for support (Patel et al., 2020).

Despite these constraints and challenges, it is essential that efforts be made quickly to mobilise resources and support for LMICs to address immediate response and long-term recovery efforts (Patel et al., 2020). As seen from the global financial crisis and from the H1N1 swine flu pandemic in the USA and Mexico, economic and health impacts will spread quickly to lower- and middle-income economics, where under-resourced systems and institutions are much less prepared to roll out an adequate response (Revenga and Galindo, 2020). The capacity for economic response is weaker in parts of Asia and Latin American middle-income countries (where health capacities are also weaker). In countries with considerable poverty, such as in large African economies (Egypt, Ethiopia, Nigeria and even South Africa) and the whole Indian subcontinent (India, Pakistan and Bangladesh), thin investment capacities and unprepared healthcare systems are of particular concern and likely to require special support (Revenga and Galindo, 2020). Comparing the outbreak of Ebola in the Western African countries of Guinea, Liberia and Sierra Leone in 2013-2016 and the outbreak of the Middle East Respiratory Syndrome (MERS) in South Korea in 2015, the countries in Africa lacked significantly the preparedness and resources to address the epidemic. In contrast, Korea had the resources and capacity to effectively deal with the health and economic impacts (Gostin, 2015).

While much was done internationally to tackle the Ebola outbreak, more could have been done to ensure economic stability, and to encourage continued international investment in the region despite the ongoing epidemic at the time (Gostin, 2015). The health and economic impacts of Ebola (including border closing and trade restrictions) produced significantly more hardships (Stephens, 2017).

The G20 which came into being in response to the global financial crisis must act even more forcefully during this current pandemic crisis, with more lasting commitment (Obstfeld and Posen, 2020). Without international support, the COVID-19 pandemic will leave deep scars in the developing world, adding to their debt burdens and causing a massive reversal of development gains (Gelpern et al., 2020; Patel et al., 2020). While not every economy is suffering in the same way and amount, all economies need to move in the same direction, as each country's health and economic performance largely depends on the rest of the world (Obstfeld and Posen, 2020; Revenga and Galindo, 2020).

An effective response will also require global coordination of large-scale funding from international financial institutions and major bilateral and multilateral donor agencies (Patel et al., 2020). To help manage debt distress for the countries most exposed, the G20 should call for a temporary pause on sovereign debt payments to official and private creditors (Gelpern et al., 2020).

The Asian financial crisis altered the way governments and international organisations respond to financial crisis, moving away from orthodox policies to fiscal stimulus packages. Subsequent to Mexico's peso crisis in 1994, Mexican authorities implemented a harsh austerity program that included higher taxes, increases in energy prices, and expenditure cuts. While this contributed to an improvement in investor confidence and a more stable economy in the longer-term, the country experienced significant hardship in the interim (Ortiz, 2011). Companies suffered from drastic declines in consumer demand. The orthodox policies imposed on Thailand and Indonesia by the IMF at the beginning phase of the Asian financial crisis – including high interest rates and austere fiscal policy – have received criticism for having exacerbated the severity of the crisis. It resulted in more bankruptcies of firms and financial institutions and reduced aggregate demand, which pushed the economy into further recession (Samphantharak, 2019). A comparative study of countries that were affected by Mexico's peso crisis, the East Asian crisis and Russian crisis finds that countries that tightened monetary and fiscal policy during these crises experienced larger output contractions and more severe recessions than the countries that followed a looser policy stance. The study cautions, however, that these outcomes may not necessarily be due to the different policy responses, but to the pre-existing conditions of the country at the start of the crisis (Ortiz et al., 2009). International actors should thus seek to support the removal obstacles that preclude countries from using countercyclical monetary and fiscal policy in times of external financial crisis, as this flexibility can result in smaller recessions and lower volatility of output (Ortiz et al., 2009). For further discussion, see discussion on 'fiscal space' under the fiscal policy section.

A reversal in thinking toward more expansionary policies was demonstrated during the global financial crisis, when governments and international organisations instead implemented massive fiscal stimulus packages and near-zero interest rate policies (Samphantharak, 2019). The World Bank Group provided, for example, fiscal, financial sector and social safety net support, which helped to improve country resilience to global financial crisis (IBRD, 2017).

Evaluations of interventions during the global financial crisis finds that overall, the crisis impact in most countries was not as severe as expected, partly because of international efforts (IBRD, 2017). In some cases, notably in Indonesia, precautionary World Bank funding helped countries meet their continued financing needs at reasonable cost (IBRD, 2017). Lending was increased to fill financing gaps, particularly to middle income borrowers. The Bank also sought to facilitate countercyclical fiscal spending and to protect public expenditure in key social sectors to mitigate the impact of the crisis on the most vulnerable (IBRD, 2017). Disbursements helped countries maintain social programmes and microfinance. In Mexico, for example, support was given to Oportunidades (the national CCT programme that helps the most vulnerable families to cope with poverty) and in Bangladesh, an International Development Assistance loan helped to mitigate the impact of high food prices on the poor through an expansion of social safety net programmes, including public works (IBRD, 2010).

In order to address the economic impacts of COVID-19, it is also recommended that governments should be prepared to do 'whatever it takes' in terms of macroeconomic policies (Baldwin and di Mauro, 2020). Some view the prospects for economic recovery as better than in the global financial crisis to the extent that there is a clear path of recovery and rebound after the end of the epidemic (Bofinger et al., 2020; Odendahl and Springford, 2020). This presupposes however that governments enact early and aggressive economic policies to (see Baldwin and di Mauro, 2020; Blanchard, 2020; Bofinger et al., 2020; ILO, 2020; Odendahl and Springford, 2020; Revenga and Galindo, 2020):

- Support the liquidity of households and firms and minimise unnecessary bankruptcies that could cause permanent damage to the economy;
- Protect the financial system;
- Offset lost wages for workers and ensure people have money to keep spending;
- Protect the most vulnerable through social protection measures, including targeted transfers;
- Stimulate the economy more broadly, such as through public investment and tax relief and subsidies to support business continuity, particularly SMEs and the self-employed;

4. Monetary policy and support to the financial sector

During the global financial crisis, central banks throughout the world came to the rescue to mitigate the impacts of the crisis, implementing expansionary monetary policies (alongside expansionary fiscal policies) (Baldwin and di Mauro, 2020). The clear character of the crisis as stemming from problems in financial markets was a cue to central banks everywhere to move quickly to easing credit conditions (Green, 2010). Following coordinated action by OECD monetary authorities, the central banks of Southeast Asia (Malaysia, Thailand, Indonesia and the Philippines) also reacted in a coordinated manner to aggressively reduce key policy interest rates and make credit more generally available (Samphantharak, 2019; Green, 2010).

The central banks of many middle income countries, such as Argentina, Brazil, India, Indonesia and South Africa, also provided significant support to their local banks. These measures helped to mitigate the global decline in output and trade flows and stimulated more confidence in the outlook of individual countries (Chauffour and Malouche, 2011). The government in Brazil, similar to other emerging market economies, used state financial institutions to kick-start lending and to provide liquidity to asset markets (Toshniwal, 2012). Interventions in Mexico, which was greatly affected by the crisis due to its close economic relations with the U.S., also helped the country to mitigate impacts. The government used a variety of tools, including interventions by the central bank to cut interest rates and maintain the country's liquidity, targeted assistance to financial institutions, and actions to increase confidence by securing lines of credit (Villarreal, 2010). While Mexico did not use the credit lines, their existence were enough to improve confidence in the economy (Villarreal, 2010).

Countries that already had strong regulatory environments demonstrated greater resilience to the crisis. Brazil's strict regulatory environment, for example, resulted in greater resilience and helped Brazil to avoid some of the problems seen elsewhere (Toshniwal, 2012).

Similarly, the stronger regulatory systems and internal systems implemented in Southeast Asia after the East Asian crisis helped it to weather the crisis better (Green, 2010).

In the case of the COVID-19 crisis, monetary policy has not been particularly effective, unlike during the 2008 financial crisis, as the main shock is coming from the real economy, rather than the financial sector (Baldwin and di Mauro, 2020; Wei, 2020)**.** Despite major cuts in interest rates by central banks, including the European Central Bank, expectations of the depth and duration of the crisis seemed rather unaffected (Baldwin and di Mauro, 2020; Wei, 2020). In such circumstances, there is a limit to how much more central banks can do to stimulate the economy (Baldwin and di Mauro, 2020; Wei, 2020). While governments should be prepared to use monetary policy as a tool, as in the global financial crisis, fiscal policy will play a greater role during the COVID-19 crisis (Baldwin and di Mauro, 2020).

It is essential that efforts are made to ensure that the economic crisis produced by COVID-19 and related disruptions does not develop into a financial crisis (Beck, 2020; Wyplos, 2020). The economic disruption has resulted in shocks to the financial sector, reflected in financial market distortions and funding concerns for many market participants, including banks. Households that are not earning money, for example, might not be able to repay mortgages and consumer credits (Beck, 2020).

One of the biggest threats to the economy is that *viable* businesses become illiquid, resulting in bankruptcies and job losses (Baldwin and di Mauro, 2020; Beck, 2020; Odendahl and Springford, 2020). Businesses that took on significant levels of debt in recent years are particularly vulnerable to reductions in the cashflow (Baldwin and di Mauro, 2020). Businesses that no longer have clients, due to current disruptions, may be unable to repay loans and may draw down credit lines (Beck, 2020). The bankruptcy of one firm can put other firms in danger, resulting in a chain-reaction of bankruptcies, along with ensuing labour layoffs. In turn, workers who lose their jobs spend less. These kinds of impacts have materialised during prior pandemics, transforming temporary disruptions into permanent effects (Baldwin and di Mauro, 2020; Beck, 2020; Odendahl and Springford, 2020).

Central banks can provide emergency liquidity to the financial sector and coordinate with financial institutions to support viable businesses that would not have otherwise gone under (Baldwin and di Mauro, 2020; Gourinchas, 2020; Odendahl and Springford, 2020). They will need to step in as a lender of last resort to their governments, to banks and other financial institutions, which in turn could help to stabilise the markets (Wyplos, 2020). Coordination among central banks, finance ministers, bank regulators and public investment banks is required (Odendahl and Springford, 2020).

Small and medium enterprises, which may be less prepared to withstand sharp disruption, are more likely to require support. Governments could offer temporary and targeted credit guarantees for the near-term liquidity needs of these firms (Gopinath, 2020). South Korea, for example, has expanded lending for business operations and loan guarantees for affected SMEs. Financial market regulators and supervisors could also encourage, on a temporary and time-bound basis, extensions of loan maturities (Gopinath, 2020). During the outbreak period in China, the central bank eased market credit through conventional policy instruments (Huang et al., 2020). Financial institutions cut the loan rate and provided additional credit to virus-related manufacturers, daily necessity retail and delivery sectors, and producers of critical medical products (Huang et al., 2020). In order to support small and medium enterprises, commercial banks were required to roll over debt contingencies (Huang et al., 2020).

A key lesson learned from prior economic shocks is that while it is essential to support businesses and to prevent the failure of otherwise viable businesses, propping up non-viable businesses could hurt longer-term recovery. During the East Asian crisis, for example, Korean credit guarantee policies towards SMEs were often provided to relatively unproductive SMEs, which undermined the effectiveness of mitigating interventions. In contrast, in the case of larger firms, banks reallocated credit away from less efficient firms to more efficient firms, which paved the way for longer-term recovery (Paci et al., 2010). Similarly, during the 1980s debt crisis, a comparative look at the credit market policies of Mexico and Chile finds that while both countries suffered severe economic shocks, Chile recovered much faster than Mexico. This is attributed in large part to the willingness of Chile to let inefficient firms go bankrupt, whereas Mexico was not (Paci et al., 2010).

Once epidemics have come to an end or are under control, longer-term economic recovery can be promoted by helping people to restart activities affected by the epidemic through greater access to credit (Guinea, 2014). This can be through the provision of long-term credit facilities (operating through commercial banks) to increase access to credit by firms that reduced operations (Guinea, 2014). In China, during the post-COVID-19 outbreak period, the government focused on restarting the economy, with financial institutions continuing to support SMEs with reduced interest rates and credit lines for the resumption of work and production (Huang et al., 2020). For further discussion on support for restarting livelihood and business activities, see the cash transfers section.

5. Fiscal policy and social protection

Mitigating the negative impacts from the disruptions caused by COVID-19 requires extensive fiscal stimulus as the main shock is coming from the real economy (Baldwin and di Mauro, 2020). As noted previously, while monetary policy was of greater importance during the global financial crisis, there was a global consensus on the additional need for fiscal stimulus (IBRD, 2010). Similar to flattening the epidemic curve, it is important to flatten the "recession curve" through macroeconomic interventions that can mitigate the negative economic impacts and counter a deep and prolonged recession.

See: Figure 1. Flattening the recession curve, Source: Gourinchas, 2020, p.35, https://voxeu.org/content/mitigating-covid-economic-crisis-act-fast-and-do-whatever-it-takes

It is important to strengthen resilience to future shocks by creating or preserving future fiscal space for countercyclical stimulus measures, if they are necessary (IBRD, 2017). A study involving countries affected by Mexico's peso crisis and East Asian Crisis finds that countries which had the flexibility to implement expansionary policies experienced smaller recessions and lower output volatility (Ortiz et al., 2009). This was also a key lesson drawn from the 2008 financial crisis. Countries with limited fiscal space had less room to respond and suffered more severe impacts; whereas those with more fiscal space demonstrated greater economic resilience (IBRD, 2010). Countries with higher levels of GDP per capita, lower levels of debt, lower inflation, larger foreign exchange reserves and positive or only moderately negative fiscal and current account balances are considered to have more fiscal space. They are also more likely to have positive macroeconomic benefits from a fiscal stimulus package (van Doorn et al., 2010). Pre-existing conditions in each country can greatly affect the types of responses possible, constraints, and outcomes in the short- and longer-term (Ortiz et al., 2009). A country without these pre-existing conditions might still be able to run a fiscal expansion, without destabilising the economy, if markets are confident that the level of debt is sustainable and of the prospect of macroeconomic stability (van Doorn et al., 2010). For further discussion, see the section on coordination and support for developing countries.

For a detailed discussion on lessons learned from public finance management reforms introduced in developing countries after a financial crisis, that contribute to the creation of fiscal space, see K4D report 810 (Quak, 2020).

As a group, developing countries had grown more rapidly than developed countries, prior to the financial crisis, which allowed them to lead the global recovery (IBRD, 2010). Among middle-income countries, China, Nigeria, Chile, Malaysia and Thailand had higher levels of fiscal space, with Egypt, Argentina, Turkey, the Ukraine and Hungary at the lower ends (van Doorn et al., 2010). After a series of countercyclical fiscal policy measures, most countries ended up with less macroeconomic space by the end of 2009 than at the start of the crisis. Countries with greater fiscal space were more able to ramp up their fiscal spending and had the largest room to respond to the prolonged crisis (van Doorn et al., 2010). An evaluation of the World Bank's response during the crisis finds that while its attention to reforms in public financial management can be expected strengthen fiscal sustainability over the long-term, more attention needs to be given to concrete measures to strengthen medium-term fiscal sustainability (IBRD, 2017). Greater attention to expenditure allocations and revenue mobilisation could help to create or preserve the space for fiscal countercyclical stimulus measures (IBRD, 2017). For further discussion on pre-existing conditions and fiscal space, see the section on coordination and support for developing countries.

In the case of COVID-19, a stimulus package in the form of tax cuts or higher public investment to boost aggregate demand is desirable in order to promote longer-term economic recovery once the health crisis is contained and business operations begin to normalise. It would, however, have to be consistent with available fiscal space (Bofinger et al., 2020; Gopinath, 2020).

Post-crisis reversibility of short-term programming is also important to the successful design of fiscal policy interventions, such that countries do not experience deteriorating fiscal deficits in the long-term (IBRD, 2010; Paci et al., 2010). Policies designed to mitigate the short-term impact of crises, such as countercyclical spending programmes are typically temporary in nature. Such programmes, while having helped to mitigate the impacts of the global financial crisis, have also contributed to deteriorating fiscal deficits in both developed and developing countries. They needed to be rolled back as recovery took hold (IBRD, 2010). An evaluation of the World Bank's response during the financial crisis finds that insufficient attention was given not only to the available space for fiscal stimulus, but also to the reversibility of stimulus measures (IBRD, 2017). Fiscal policy interventions should be able to be scaled up quickly and effectively as crises evolve, and scaled down as recovery begins – similar to automatic stabilisers, such as unemployment benefits or cash transfers systems that allow for the number of beneficiaries to change in response to need (Paci et al., 2010).

Effective and efficient social protection systems are significant sources of resilience, allowing societies to cope with emergencies and to mitigate the impact of potential crises – providing support to the vulnerable and to a demand-led recovery (ILO, 2020). They are powerful economic and social stabilisers of economies and societies, especially if they are already in place prior to a crisis (ILO, 2020). Existing social protection schemes have the potential to absorb more resources and deliver them to a growing number of targeted households

(Revenga and Galindo, 2020). Unemployment and social assistance schemes, and other safety nets of last resort, for example, can be quickly expanded to cover the most vulnerable households that lack savings and assets to draw on during an extended crisis (Revenga and Galindo, 2020). It is also well recognised that social protection pays an important role in supporting aggregate demand, and supporting a demand-led recovery, during crises (ILO, 2020).

Experience from prior epidemic crises in developing countries demonstrates that expenditures must prioritise strengthening the social safety net (Revenga and Galindo, 2020). Support programmes for the poor and marginalised, that operate countercyclically, can mitigate negative impacts on growth. The programmes expand when growth weakens, shrinking when more opportunity for employment emerges (Green, 2010). The Ebola outbreak in West Africa revealed that the lack of social protection measures in the context of health epidemics aggravates poverty, unemployment and informality, resulting in greater fragility (ILO, 2020). In contrast, many governments in Latin America and the Caribbean have since the 1990s established targeted social safety nets to alleviate poverty and inequality. Brazil’s Bolsa Familia, for example, one of the largest conditional cash transfer schemes in the world, was relied upon in the government’s response to Zika and demonstrated a unique ability to adapt to the situation (UNDP, 2017). For further discussion, see the cash transfers section.

Lessons from the global financial crisis also reveals that the readiness of countries’ social protection systems was a binding constraint (IEG, 2012). The immediate severity of the financial crisis did not allow for the development of new and more efficient programmes (IEG, 2012). Even middle-income countries with established social protection systems found it challenging to adapt their programmes to identify which groups were most affected and to target them (IEG, 2012). In Europe and Central Asia, for example, the social protection programmes that could be used to mitigate crisis impacts were typically small, fragmented and poorly coordinated, targeting narrow groups. It was not possible to repurpose them to address temporary shocks, resulting in limited impact (IEG, 2012). Better-prepared countries typically had broader social protection systems whose different programs complemented one another, allowing for flexible scale up and reach of crisis-affected and poor and vulnerable people (IEG, 2012). In response to the global financial crisis, the number of developing countries with some form of social safety net has doubled, from 72 in 2000 to over 150 in 2018. This will help greatly in the current COVID-19 crisis (Revenga and Galindo, 2020).

Governments in developing countries will have to provide comprehensive social protection responses to the economic impacts of the COVID-19 epidemic (Gerard et al., 2020). These measures include those aimed at extending existing social protection policies to vulnerable populations (UNDP, 2020). The most vulnerable groups and households during the COVID-19 crisis are most likely to be the elderly, youth, women, informal workers, and low-wage workers. Such workers are least likely to be able to work remotely, most likely to lose their jobs due to extended illness, and less likely to have savings to serve as a buffer during an economic downturn (Revenga and Galindo, 2020; UNDP, 2020). An economic safety net, comprising of cash transfers, sick leave, and subsidized health coverage, is necessary to help the most vulnerable and to support enterprises that serve them (Revenga and Galindo, 2020). Wage subsidies and tax relief could further help businesses hit by supply disruptions and a drop in demand to stay afloat (Baldwin and di Mauro, 2020; Gaspar and Mauro, 2020).

Support to SMEs and the self-employed

Small and medium enterprises are the engines of the economy in most lower- and middle-income countries (Patel et al., 2020). In China, for example, they comprise 99.6 percent of the country's companies and 80 percent of national employment (Bouey, 2020). They account for more than 60 percent of China's GDP, contribute more than 50 percent of tax collections and hold more than 70 percent of the country's patents (Bouey, 2020). In Africa, SMEs account for up to 90 percent of all businesses (Patel et al., 2020).

Key economic lessons from the Ebola crisis include the importance of stabilising jobs and livelihoods and support for SME development as a crucial pathway to economic recovery (Guinea, 2014). This can be achieved through strengthening the capacity of microfinance institutions, vocational training, socioeconomic rehabilitation, and grants to revitalise new and existing enterprises (Guinea, 2014).

Several countries in Southeast Asia launched new programmes during the East Asian crisis aimed at creating jobs through enterprise development, but their reach did not extend to the most vulnerable (Betcherman and Islam, 2001). These new programmes were in addition to pre-existing programmes to support self-employment and the development of small enterprises, focused on credit and technical support services. Malaysia launched funds for small-scale entrepreneurs in 1998, for example, aimed at creating self-employment opportunities, and for small and medium-sized industries. Thailand also introduced some small programmes to promote self-employment and the government and some commercial banks introduced credit programmes for SMEs in 1999 (Betcherman and Islam, 2001). Similarly, the Indonesian government requires commercial banks to set aside a percentage of their loans for small borrowers. Various government programmes and cooperatives also offered subsidised credit to micro-entrepreneurs and SMEs, particularly famers, transmigrants and women. Despite these many programmes, however, the most vulnerable were unable to gain access as most require collateral and are thus not available to borrow without assets (Betcherman and Islam, 2001).

Recommendations during the current COVID-19 crisis include strong support for employment to facilitate the recovery process. SMEs and the self-employed will be particularly affected by the various disruptions (ILO, 2020). In response to uncertainty and fear, enterprises are likely to delay investments, purchases of goods and the hiring of workers (ILO, 2020). Priorities should include supporting firms through financial relief, such as tax relief, subsidies and refinancing, to avoid bankruptcy and, in turn, permanent damage to the economy (Blanchard, 2020). Salary supplements can help to ensure that workers can remain employed and collect their wages (Gourinchas, 2020; UNDP, 2020). Exemptions from (or support to) social contribution payments can be made contingent on a commitment to maintain employment (UNDP, 2020).

Support to SMEs that facilitates the maintenance of employment can contribute to longer-term economic recovery through lower turnover costs and less decline in aggregate demand. Firms that are able to keep existing employees and not have to hire and train new employees when the economy recovers, will be able to recover faster with less turnover costs (Stephens, 2017). Losing employees also destroys the specific human capital gains achieved on the job that benefits the firm and the worker (Paci et al., 2010) (For further discussion, see the section on support to larger companies)**.** Such measures to support SME employment, alongside support to the liquidity of SMEs and/or cash transfers to businesses and wage subsidies could dampen the amplification loops of bankruptcies or reduction in operations, employment loss, and declines in consumer spending and aggregate demand (Gaspar and Mauro 2020; Gourinchas, 2020). This in turn can greatly reduce the economic downturn (Gourinchas, 2020).

A precise segmentation of ownership of SMEs will allow for more responsive support. Gender responsive fiscal policy, for example, enables identification of SMEs that are owned by women in order to ensure that support efforts respond to their specific needs (UNDP, 2020). Resources and supports could potentially be deployed through organisations with established local networks of SMEs in developing countries, such as the National Small Business Chamber, a non-profit membership organisation of 127,000 SMEs in Africa (Patel et al., 2020).

Many governments in lower- and middle-income countries have already implemented or are considering policy options to support SMEs during the COVID-19 crisis, aimed at protecting workers in the workplace, stimulating the economy and labour demand, and supporting employment and income (ILO, 2020; Patel et al., 2020). South Korea, for example, has introduced wage subsidies and tax breaks for small merchants (Gopinath, 2020; ILO, 2020).

China, the furthest along in the post-COVID-19 outbreak and recovery process, can be looked to for lessons, particularly in the case of SMEs. They are the engines of the economy and the primary source of the country's economic growth - and have been more severely affected by the epidemic. (Bouey, 2020; Huang et al., 2020). A survey conducted by researchers from Tsinghua University of 995 SMEs in February found that the income of 30 percent of the companies has dropped by over 50 percent; and over one-third of the companies reported that they could stay open for only one month with current cash flow, 33 percent could sustain two months, and less than 10 percent could stay open for more than six months (Bouey, 2020). Most of the financial pressure (62.8 percent) is from paying salaries and employee insurance and social security, followed by rent and loan payments (Bouey, 2020). The possibility of large-scale closures of SMEs and an increased unemployment rate would in turn further suppress demand and investor confidence (Bouey, 2020).

Measures to support SMEs in China are considered to be crucial to boosting domestic demand, the production networks and the global value chain – thus helping to safeguard the stable development of the economy as a whole (Huang et al., 2020). The central and local governments in China have since February adopted a series of measures to mitigate the pressures on SMEs. These include temporarily deferring and waiving social security contributions and certain taxes, exemptions on some rent payments, loan extensions, small-business lending and interest rate reductions and subsidy increases (Bouey, 2020; Gopinath, 2020; Huang et al., 2020; ILO, 2020). In some cities, enterprises that did not lay off employees could benefit from deduction of social insurance payments and subsidies for employee on-the-job training (Huang et al., 2020). SMEs have high expectations of substantial government support, including tax relief and subsidies (see Table 1).

See Figure 2: Expectations of government support due to coronavirus shocks, Source: Huang et al., 2020, p. 86, https://voxeu.org/content/mitigating-covid-economic-crisis-act-fast-and-do-whatever-it-takes

Despite these efforts to provide support to SMEs in China, enterprises still face struggles to meet the COVID-19 prevention requirements from the local government agencies necessary to reopen (Bouey, 2020). Some local governments have also pushed the burden of COVID-19 prevention entirely on businesses. If one COVID-19 case cluster shows up in a business, the business will be closed for a longer period. Further, due to continued, widespread low market demand, many small businesses have found that reopening only means they are required to pay rent and salaries without revenue (Bouey, 2020).

Digital technologies may provide some targeted credit support to struggling SMEs. Research has shown that fintech applications (e.g. e-commerce finance platforms and supply chain finance platforms) can significantly reduce the operational volatility and improve the survival rate of SMEs (see Huang et al., 2020). Compared with traditional commercial bank loans, internet fintech platform have several advantages, including: relatively complete credit rating systems specifically for SMEs through the use of big data; real-time monitoring of debtors; and lending practices that are free from geographic restrictions allowing SME credit on a larger scale (Huang et al., 2020). Further, in the specific context of COVID-19, the ability to complete credit transactions remotely online contributes to prevention and control of the epidemic (Huang et al., 2020). It is thus recommended that internet fintech platforms are currently leveraged to provide loans to SMEs (Huang et al., 2020). The digital company, Alibaba Group, is leveraging its technology and experience of operating during the earlier SARs epidemic to support SMEs during the COVID-19 pandemic, working with other financial institutions in China to provide financial support to around 10 million micro-and-small enterprises around the country. They aim to assist with the resumption of work and production, and efforts to expand production. Specific measures include interest-free ad low-interest loans to SMEs (Huang et al., 2020).

Specific measures have also been extended during prior crises to self-employed workers, who are also more likely to suffer from economic downturns and disruptions from epidemics (Stephens, 2017). A temporary basic salary offered to those that are self-employed for the duration of the epidemic and its subsequent recovery would alleviate the economic suffering of many (Stephens, 2017). During the current COVID-19 outbreak, some countries have considered extending the logic of social insurance programmes to registered self-employed workers. It can be challenging, however, to determine their “usual” earnings level prior to the crisis and the reduction in earnings caused by the crisis (Gerard et al., 2020). These challenges will likely be greater in developing countries, where there may be less information on self-employed workers’ past or current earnings. In such contexts, another option would be to make unconditional monthly transfers of a fixed amount, such as the *Auxilio Emergencial* in Brazil, which will provide self-employed workers with a monthly payment of 60 percent of the minimum wage for the next three months (Gerard et al., 2020). A complementary option is to provide emergency low-interest credit lines for self-employed workers, allowing them to borrow a maximum amount to pay themselves in the coming months. Such policies have recently been recently implemented in some countries, such as in South Africa, to support SMEs pay their workers’ wages during the crisis, and could be extended to self-employed workers (Gerard et al., 2020). Repayment of loans could be made contingent on self-employed workers’ future income or gross revenue crossing above a certain threshold, to mitigate concerns of taking on more debt (Gerard et al., 2020).

Offering workforce development training and support to young job seekers, that helps to cultivate entrepreneurship, may also contribute to building human capital. It can alleviate disruptions in on-the-job human capital accumulation, and contribute to longer-term recovery (Patel et al., 2020; Paci et al., 2010).

Support to larger companies and job retention

Domestic companies are often hit hardest by epidemics as they do not have the broader resources that multinational corporations have to spread their losses over multiple markets and operations (Stephens, 2017). Employees are thus at risk of being laid off during economic hardship (Stephens, 2017). Countries with higher income, such as South Korea, were able to establish a well-funded economic stimulus package to help domestic companies during the MERS outbreak (Stephens, 2017).

Similar to the case for SMEs, support to larger companies could include benefits that enable them to continue to pay their employees in order to ensure that livelihoods are not lost in the short- and long-term, and companies can remain competitive (Stephens, 2017). International companies could be given special claims in order to encourage them to maintain their overseas presence, which is frequently essential to lesser developed country operations, particularly in terms of offering significant employment opportunities (Stephens, 2017). During the Ebola outbreak, many foreign companies left affected West African countries or retracted workers. If incentives had been offered to these companies, they may have made different decisions (Stephens, 2017).

In the case of the COVID-19 crisis, governments in developing countries must intervene to provide financial support for distressed companies and encourage firms to not lay off workers (Revenga and Galindo, 2020). Similar to provisions being made for SMEs, firms that have to pay wages amidst reduction in production (due to inadequate supplies or labour) should be offered support, for example in the form of grants and deferral of tax collection. There is a risk to tax deferral, however, in that firms that are on the cusp of bankruptcy will also be able to defer taxes, leaving shortfalls in future tax collection (Odendahl and Springford, 2020).

Governments around the world have adopted new job retention schemes amidst the epidemic. Such programmes already existed in some countries, for example in Brazil, and could be used more widely to protect employment in the formal sector (Gerard et al., 2020). These schemes provide subsidies for temporary reductions in the number of hours worked, replacing a share of the earnings forgone by the worker due to the hours not worked, over a maximum period of time (Gerard et al., 2020). In Thailand, for example, a recent job retention scheme covers a fixed share of workers' monthly earnings. In Morocco, a new programme provides a fixed monthly amount to workers whose jobs are temporarily suspended. In Brazil and South Africa, the amount of forgone earnings received is lower for higher-wage workers. Targeting income support to low-wage workers can help more workers for a given budget but requires higher-wage workers to make more of an adjustment (Gerard et al., 2020).

The aim of such schemes in the current crisis is to avoid the destruction of existing jobs, which should be viable again once the public health response is relaxed. Subsidizing these jobs could allow firms to continue to operate, even if at some reduced level, while sparing workers and firms the costs of finding a new job and replacing the worker, speeding up the economic recovery (Gerard et al., 2020). Research shows that finding the right workers is a key challenge to firm growth in developing countries; and that displaced employees in the formal sector take much longer to find a new formal job than in higher-income countries. As such, the destruction of existing jobs can have severe longer-term impacts on the size and productivity of developing countries' formal sectors (Gerard et al., 2020). For further discussion, see the SME section.

In many developing countries, worker that are laid off would have no recourse to unemployment insurance, making job retention schemes even more essential. In many contexts, job retention schemes are also logistically easier than setting up an unemployment insurance programme, as governments could use firms as intermediaries to channel the income support to their workers (Gerard et al, 2020). Even with a job retention schemes, many workers will likely be laid off. Developing countries with existing unemployment insurance programmes will be better able to support them (Gerard et al., 2020). See the section on unemployment insurance benefits.

While job retention schemes are considered effective interventions to aid in short and long-term recovery, tax cuts to businesses may be less desirable. Governments in Southeast Asia offered tax cuts to businesses during the global financial crisis to a greater extent than tax cuts to support the incomes of the poor. The latter has a more immediate impact on spending and aggregate demand, however, whereas cuts for businesses did not feed so strongly or quickly into aggregate demand (Green, 2010). The reason behind such support for companies may reflect experience from the East Asian financial crisis in which corporate insolvencies posed much of the broad risk to the economy (Green, 2010). The availability of contingency financing for companies, by international facilities, could however provide positive signalling effects on markets. This was the case with Indonesia, where such financing contributed to confidence-building and macroeconomic stability (IBRD, 2010).

In the case of the current COVID-19 crisis, support to companies in China will also influence the status of the global supply chain. Delays in factories returning to full-capacity production will continue to affect exports and undermine the global supply chain (Bouey, 2020). China's share of global outputs is extensive in electrical equipment, motor vehicles parts, metals, textiles, mineral products and wood products among other output (Bouey, 2020). The Hubei Province, for instance, is a hub for the automotive, electrical equipment and ship-building sectors. As such, disruptions to the supply chain are inevitable (Bouey, 2020), but the duration can be alleviated through job retention and other support schemes.

Support to specific sectors

Identifying the particular jobs, sectors or geographic areas through which the economic downturn is transmitted is a precondition for effective targeting of policy interventions (Paci et al., 2010). While economic analysis of epidemics has often focused on calculating reductions for country-wide GDP, there is evidence that economic activity might not be reduced homogenously (Rassy and Smith, 2013). Employment interventions to protect the sectors most immediately affected and those most vulnerable may yield relatively higher returns (Paci et al., 2010).

In countries where the tourism sector is important, policies should be designed to minimise the impact on this vulnerable sector in the event of an epidemic, in order to protect it and to minimise spillover effects to the larger economy (Noy and Shields, 2019). The prior SARS epidemic resulted in substantial economic losses in the tourism and hospitality sectors in China, but these losses were not necessarily inevitable nor unpreventable. The local tourism market experienced a relative speedy recovery after SARS. This is attributed in part to the existence of crisis management systems established by enterprises prior to the onset of SARS, demonstrating the importance of having precautionary systems in place prior to crises (Gu and Wall, 2006). The Chinese government also implemented various measures to address the consequences of SARS on the tourism industry, including the provision of information, tax reductions, subsidies and the expansion of existing and new marketing initiatives (Gu and Wall, 2006). A study on the government's response finds that there is broad agreement that these measures had been helpful to tourism enterprises and effective in reducing their costs and stimulating the market (Gu and Wall, 2006).

Lessons from the H1N1 swine flu outbreak in Mexico also points to the need to engage in targeting and preparedness – identifying affected industries that are important to the national and regional economy and allocating greater resources to them rather than providing nation-wide subsidies (Rassy and Smith, 2013). In addition, mapping the major trade partners and supplying markets for the affected industries could also help in anticipating the international response and the implications of that response, in order to better plan (Rassy and Smith, 2013). The H1N1 swine flu pandemic, which emerged in Mexico and the USA in April 2009 took place in the middle of the global financial crisis, which by itself had already reduced tourism (Rassy and Smith, 2013). The repercussions of H1N1 on the tourism and pork sectors coincide with the economic losses experienced by Southeast Asian nations following SARS or by the UK after foot and mouth disease (FMD) and bovine spongiform encephalopathy (BSE) outbreaks (Rassy and Smith, 2013).

To mitigate the economic impact, Mexico adopted a mixed strategy of marketing and fiscal support measures (Rassy and Smith, 2013). Lack of formal assessments makes it difficult, however, to determine whether fiscal support measures reached the intended recipients or whether it helped; and whether marketing campaigns, which entrepreneurs affected by prior pandemics preferred, actually contributed to recovery of the tourism sector (Rassy and Smith, 2013). There is a clear lesson to seek to evaluate such measures in order to inform preparedness and subsequent measures to mitigate the economic impact of such outbreaks (Rassy and Smith, 2013). The ability of an industry to recover tends to depend on a combination of the ability to restore consumer confidence, substitute availability, and the capacity of the industry to organise and respond to the crisis. There is some prior research that demonstrates comprehensive, adaptable strategies implemented jointly by producers/suppliers and the government are most effective in bringing about recovery (see Rassy and Smith, 2013).

The COVID-19 crisis has resulted in disruptions to production, initially in Asia, then spreading to supply chains across the world. Labour-intensive manufacturing industries and service industries have been severely affected due to movement restrictions stemming from the outbreak (Huang et al., 2020). While all businesses, regardless of size, are facing significant challenges, the aviation, tourism and hospitality industries are particularly affected, with a real threat of significant declines in revenue, insolvencies and job losses (ILO, 2020; Mann et al., 2020). Retail, entertainment and transport have also been particularly affected by disruptions to supply and demand (UNDP, 2020). Support should be strengthened for firms operating in the service and manufacturing industries that are experiencing the most severe impacts (Huang et al., 2020; UNDP, 2020).

Longer-term recovery is expected to be tougher in service industries post-COVID epidemic, **requiring targeted support**, unlike in manufacturing industries which are expected to rebound quicker (Odendahl and Springford, 2020). In contrast to the aftermath of financial crises, when debts proved to be unsustainable and result in a prolonged period of lower consumption, manufacturing businesses should recover more easily after epidemics as once businesses restock, consumers are likely to make up for forgone spending without delay (Odendahl and Springford, 2020). In contrast, it is impossible to make up for forgone social consumption (e.g. forgone meals and entertainment), resulting in a longer period of struggle in the services sector. As such, interventions will need to be tailored to the different sectors, with some manufacturers possibly being able to cope with solely liquidity support, whereas more extensive fiscal support will be needed to speed the recovery in services after the worst of the pandemic is over (Odendahl and Springford, 2020).

Providing support to the most affected sectors will also have the effect of targeting support to women, who are often overrepresented in service industries, in particular tourism, transport, entertainment, cleaning and remunerated domestic services (ILO; 2020UNDP, 2020). In Latin America, for example, there are nearly twice as many businesswomen in tourism than in any other sector (UNDP, 2020).

Unemployment insurance benefits

An important way to mitigate the economic impacts of crises is by maintaining labour-related income (Paci et al., 2010). When the labour market transmission of shocks occurs largely through reduction in formal sector employment, the existence of an effective unemployment insurance system (or in countries with low institutional capacity, a public works system) can serve as an automatic stabiliser, compensating those who lose their jobs (Khanna et al., 2010; Paci et al., 2010). In contrast, when the labour market adjustment occurs through earnings or number of hours worked, losses are spread more widely across the workforce. In such cases, income maintenance programs (e.g. cash transfers, partial unemployment insurance, temporary wage subsidies or income tax credits) are more important (Khanna et al., 2010).

Expanding the social insurance system to provide more support to formal employees is an important aspect of social protection strategies in developing countries (Gerard et al., 2020). Formal employees constitute a major employment category in many developing countries, particularly in middle-income countries, despite large numbers of workers in the informal sector (Gerard et al., 2020). These workers are likely less well prepared than their counterparts in richer countries to cope with the economic impact of the crisis. (Gerard et al., 2020).

Countries that have pre-existing 'automatic stabilisers' have greater options during times of crisis (Espino, 2013)**. The introduction or extension of unemployment benefits is an option in middle-income countries with good administrative capacity** (Paci et al., 2010). An extension of the duration of the entitlement may be appropriate, and coverage can be extended to previously unprotected groups, such as workers with short employment histories or workers in small and medium enterprises (Paci et al., 2010). This was demonstrated by South Korea during the East Asian crisis (Paci et al., 2010). When the crisis materialised, none of the affected countries, apart from Korea to a small extent, had unemployment insurance schemes or other policies in place to help workers cope (Betcherman and Islam, 2001). The Employment Insurance System in Korea, which had been established 1995, a couple of years prior to the crisis, was initially limited to workers in firms with more than 30 employees. In response to the crisis, coverage was extended to firms with fewer than 5 workers, temporary workers employed at least 1 month, and part-time workers working more than 18 hours a week. The length of time workers could collect benefits also increased. Despite these reforms, only 12 percent of unemployed workers were receiving benefits in mid-1999 (Betcherman and Islam, 2001).

In countries with an unemployment insurance system in place, adjusting benefits to compensate workers for a reduction in the number of work hours can also be effective in supporting income and allowing employers to retain workers in times of weak demand (Khanna et al., 2010; Paci et al., 2010). During the global financial crisis, reduction in earnings in middle-income countries was often driven by a reduction in hours worked. In such cases, innovative policies that offered workers access to income maintenance mechanisms to compensate for temporary reduction in standard working hours (e.g. granting partial compensation from the unemployment benefit system on pro-rata basis for the hours lost or providing paid training opportunities) were effective interventions (Khanna et al., 2010). Targeted income maintenance programs, in the form of cash transfers to low-paid poor workers, also helped to protect the livelihoods of the most vulnerable households from long-term deterioration (Khanna et al., 2010).

The absence of unemployment insurance programmes may reflect large informal sectors. In such cases, other income-support programmes are particularly effective to benefit both formal and informal sector workers (IEC, 2012). In Latin America and the Caribbean, the absence of unemployment insurance benefits, in comparison to countries in Europe and Central Asia reflect the large informal sector in LAC (IEC, 2012). Where it was not possible for governments and international organisations to provide support to unemployment insurance during the global financial crisis, contractions in the labour market were instead mitigated through launching or scaling up temporary labour-intensive public works or income-support programmes, such as cash transfers (e.g. in El Salvador, Mexico, Latvia and Moldova), which can also benefit informal workers (IEG, 2012). For further discussion on support to informal workers, see the section on cash transfers.

The disruptions caused by COVID-19 are expected to result in significant job loss – and countries with pre-existing unemployment insurance are considered to be in a better shape to support these workers (Gerard et al., 2020). Various countries have expanded unemployment benefits. In the Philippines, for example, the Social Security Scheme is prepared to pay unemployment benefits to 30,000 to 60,000 workers projected to lose their jobs following possible layoffs or business closures (ILO, 2020). For those laid off, unemployment insurance could be temporarily enhanced by extending its duration, increasing benefits, or easing the terms of eligibility as in the case of prior crises, as has been done in prior crises (Gopinath, 2020). It may be important to relax job search requirements and extend eligibility rules. In South Africa, for example, workers are usually eligible for one day of unemployment insurance for every six days of employment (Gerard et al., 2020). In Brazil, workers often have to work for at least one year to become eligible for any benefits, which could leave laid-off workers who have limited job tenure (e.g. less than a year) with little income support throughout this crisis and no other employment options in the short run (Gerard et al., 2020). Governments should also consider funding paid sick and family leave where it is not among standard benefits, to ensure that unwell workers or their caregivers can stay home without fear of losing their jobs during the pandemic (Gopinath, 2020). Income protection can mitigate the disincentives against disclosing potential infections, especially amongst low-income and already disadvantaged groups of workers (ILO, 2020).

In many developing countries, mandatory severance payments remain more common than unemployment benefit schemes, but severance schemes suffer from weaknesses that require government support. In the absence of unemployment insurance and other income-support measures in East Asia, labour market interventions during crises have focused on direct job creation schemes and on severance pay (Betcherman and Islam, 2001). Widely used in Southeast Asia, severance pay varied from two to six month's salary in the affected countries at the time of the economic crisis. Enforcement was weak, however, and many bankrupt companies failed to meet their obligations, without consequences. Special funds were subsequently established in Korea and Thailand to guarantee that severance is paid (Betcherman and Islam, 2001). The insurance value of such lump-sum payments is also limited, however, when workers cannot find new jobs quickly, and/or firms facing severe reductions in cash flow may struggle to pay what they owe their workers (Gerard et al., 2020). During the COVID-19 crisis, governments should thus consider providing firms with low-interest loans to fund severance pay obligations and/or topping up the severance amount and spreading its payment over time (Gerard et al., 2020).

Cash transfers

Unconditional cash transfers

There is strong evidence that unconditional cash transfers during crises can promote resilience, contributing to quicker recovery of assets and standards of living for families and communities (Patel et al., 2020). If sufficiently generous, unconditional cash transfers have been found to be very cost-effective options for protecting the most vulnerable, particularly in low-income countries, as they have low administrative costs and do not distort prices. They are easier to implement than conditional cash transfers, especially in low institutional capacity settings, and can be rolled out more quickly (Paci et al., 2010).

Demand-side measures to protect workers facing income losses because of infection or reduced economic activity are essential to protect affected workers - and to stimulate the economy through consumer spending (ILO, 2020). While they are not specific labour market interventions, targeted cash transfers can be an effective method to compensate workers when labour market adjustments occur primarily via wage reductions or when there are significant numbers of informal workers (Paci et al., 2010). Further, transferring funds to poor people can support spending on domestic goods and services, but programmes must engage in effective targeting (Green, 2010). During the global financial crisis, unconditional cash transfers provided support to the poor in Indonesia. In the first two months of 2009, the programme provided support for 18.5 million households (Green, 2010). While social protection programmes do not generally play a large part of crisis packages in South East Asia, lessons from Indonesia demonstrate that there is capacity to provide meaningful assistance to those most in need (Green, 2010). These programmes also encourage aggregate demand, through spending on locally produced goods and services that can mitigate the economic downturn (Green, 2010).

In countries that already have cash transfer and other social protection programmes in place, expanding benefits and eligibility will be essential in mitigating the economic and social impacts of disruptions from COVID-19 (Patel et al., 2020). Many countries have temporarily topped up the amount received by the current beneficiaries of social assistance programmes in order to enhance income security and boost aggregate demand (Gerard et al., 2020). In Hong Kong, adult residents will receive a one-time cash transfer of $1,280, which is expected to boost the economy by 1 per cent (ILO, 2020). In Indonesia, the government has increased both the benefit amount and the frequency of its cash transfer programme. It has also granted three months of free electricity to 24 million customers with low power connections (Gerard et al., 2020). In Kenya, the government has increased the amount of its pension and orphan and vulnerable children's grant (Gerard et al., 2020).

In developing countries where the informal sector often comprises a large part of the economy, cash transfers or other forms of social assistance not tied to formal labour are especially important (Gerard et al., 2020). Social insurance programmes, such as unemployment insurance benefits or subsidised temporary lay-off schemes, will fail to reach a large share of vulnerable households in such contexts (Gerard et al., 2020; Revenga and Galindo, 2020). South Africa's child support grant, for example, reaches many poor households who are in informal jobs (Gerard et al., 2020). Maintaining and expanding these programmes to support informal workers throughout the crisis will provide some minimal support to many affected households (Gerard et al., 2020). They are particularly important as those employed in the informal sector are often likely lose their jobs first, in addition to having weak recourse to social protection systems (Patel et al., 2020). For further discussion, the section on unemployment insurance benefits.

Cash transfers can provide support not only during the earlier phases of outbreak and national lockdowns but also during the recovery phase to restart economic activity (Patel et al., 2020). Cash transfer programmes in West Africa, implemented by UN agencies and other international organisations, were instrumental for Ebola survivors, orphans and other families of persons who died of Ebola. They received disbursements to restart livelihood activities (Guinea, 2014; Patel et al., 2020). During the global financial crisis, cash transfers were also given to low-paid poor workers in middle-income countries in order to protect their livelihoods from long-term deterioration (Khanna et al., 2010). Cash transfers can thus be important to address the longer-term economic consequences of pandemics (Patel et al., 2020).

Conditional Cash transfers

Conditional cash transfers often serve the dual objective of dampening income shocks and promoting investments in human capital, which in turn can contribute to the longer-term potential of the economy (Green, 2010; Paci et al., 2010). CCT programmes are a popular form of income support in some developing countries. Assistance is conditional on a particular behaviour encouraged by the state (e.g. enrolling children at school or using health facilities) (Gerard et al., 2020). CCTs can thus help channel funds to the most vulnerable while nurturing human capital accumulation, which can be beneficial in the long run (Paci et al, 2010). In Latin America and the Caribbean, CCTs have been the most widespread form of intervention during crises since the mid-1990s (Espino, 2013).

Due to Brazil's pre-existing large CCT scheme, Bolsa Familia, the country already had in place a financing mechanism to respond to the impacts of the Zika epidemic. It became one of the few countries to respond to Zika with a specific adapted social protection instrument early on, providing support to affected families, to parents of children with microcephaly and support to prevention efforts in the form of insecticides for families receiving benefits under Bolsa Familia (UNDP, 2017). It is important to address early on caregiver withdrawal from the labour force, potentially permanently, and to provide education and livelihood support for those negatively impacted by Zika (UNDP, 2017).

CCTs that require school attendance or the use of health facilities can mitigate against declines in human capital, particularly among poorer communities, stemming from epidemics and financial crises. Experience from prior financial crises suggests that in even short-term crisis-induced reductions in earnings may force households to engage in behaviour that is detrimental to their long-run welfare. This can also seriously undermine the quality of labour supply in the long term (Paci et al., 2010). Such actions include reducing investments in education and other sources of human capital and depleting productive assets (Paci et al., 2010). In Indonesia, for example, the East Asian crisis was associated with significant declines in school enrolment among the poorest, particularly in rural areas. Poor households may also spend less on health and nutrition (Paci et al., 2010). School closures in response to epidemics result in lost learning opportunities, but more vulnerable students may not return to the education system, translating to lower long-term earning trajectories for them and their families, and reduced overall human capital for their economies (Evans and Over, 2020). CCT programmes can help to mitigate these impacts. During the global financial crisis, the Philippines, for example, implemented a programme that targeted 700,000 families, helping to meet the health and educational needs of children (Green, 2010).

It is important to monitor the impact of cash transfers in order to ensure that they are designed in a way that does not exacerbate inequalities, social divisions and marginalisation. A study of gender dimensions of the global financial crisis in Central America, for example, finds that CCTs aimed at mitigating the effects of the financial crisis often involved men controlling decisions about spending. Transfers should not reproduce the traditional gender division of labour and reinforce the role of women as primary caregivers (Espino, 2013). Such transfers need to be accompanied by training opportunities, along with support in areas such as domestic violence, healthcare, and temporary employment (Espino, 2013). In addition to strengthening the labour force participation of women, attention also needs to be paid to diversifying beyond the range of jobs typically help by women and to childcare demands (Espino, 2013).

While CCTs can in principle improve upon the performance of unconditional cash transfers and contribute to longer-term recovery, successful implementation of such schemes requires substantial administrative capacity (Paci et al., 2010). This may not be possible in some developing countries, particularly in crisis situations where the ability to scale programmes up (and subsequently down) quickly and efficiently enables governments to respond quickly (Paci et al., 2010).

In the current COVID-19 crisis, it is recommended that CCT and public works programmes are temporarily made unconditional, although removing conditionalities may be legally or politically difficult (Gerard et al., 2020). In India, for example, a relief package to increases the wage for workers under the rural employment scheme made no provision to make public work sites compatible with social distancing (Gerard et al., 2020). Other public works programmes, such as Ethiopia's Productive Safety Net Programme already provide food and cash for those identified by communities as unable to work. This feature could possibly be extended to all programme recipients, removing the condition of providing food and cash against public works (Gerard et al., 2020).

<u>Targeting</u>

The ability to effectively target vulnerable groups is a key aspect of effective social assistance programming (Gerard et al., 2020). Targeted support can be more effective in addressing economic dislocation caused by health and economic crises rather than large programmes that apply across the board, such as cutting labour taxes (Wyplos, 2020). Different targeted programmes provide relief to specific socio-demographic groups, based on demographic, occupation and/or economic indicators (e.g. social pensions for the elderly or grants for orphans; support to famers and other occupational groups; transfers to households deemed poor based on assets) (Gerard et al., 2020). Epidemics and economic crises can have a disproportionate impact on certain segments of the population, which exacerbate inequalities (ILO, 2020). Experience with prior epidemic outbreaks, such as Ebola, Zika, MERS, SARS and H1N1, and current information on COVID-19 reveal that the most vulnerable are disproportionately affected by the diseases and by government responses to it (UNDP, 2020). They include the elderly, youth, women, people with disabilities, low-income households, households highly exposed to shocks, and informal workers without social protection or any kind of insurance (ILO, 2020; UNDP, 2020). Developing countries can during crises leverage all their programmes simultaneously to provide assistance to a wide range of vulnerable groups (Gerard et al., 2020).

While transfer programmes may suffer from inclusion errors or corruption and diversion, they need to be relied upon in times of emergency even if targeting is not perfect (Gerard et al., 2020). Efforts should be made to improve targeting, though. In Southeast Asia, transfer programmes to support the poor and near-poor, in Indonesia, Thailand, the Philippines and Viet Nam, during the global financial crisis were criticised for weak targeting and monitoring (Green, 2010).

While permanent CCT programmes are well suited to addressing chronic poverty, there are concerns that they may lack the flexibility to protect the near poor and/or transitory poor, who also need to be targeted during crises (IEG, 2012). During the global financial crisis, governments in LAC scaled up CCTs, with support from international organisations (IEG, 2012). There are concerns, however, over weaknesses in targeting all those in need (IEG, 2012).

Experience from previous crises in developing countries suggest that support for measuring impacts of crises should be a priority in order to identify populations, households and enterprises most in need and to target support to them (Revenga and Galindo, 2020). During the Ebola epidemic, this was done effectively through low-cost phone surveys in Sierra Leone and Liberia, building on a framework to gather just-in-time information on the impacts of ill health and economic hardship (Revenga and Galindo, 2020). During the COVID-19 crisis, it is also necessary to monitor health and economic situations across and within countries in order to mitigate the most urgent needs (Revenga and Galindo, 2020). In South Africa, it is recommended that cash transfer programmes are temporarily extended to new households, whose information were collected to target these programmes, but who had prior to the crisis been deemed ineligible (Gerard et al., 2020).

Some developing countries have already been taking innovative steps toward preparedness and response to the COVID-19 crisis, by identifying those most affected. In Colombia, for example, a multi-phased programme is being implemented in the capital to identify households that would experience severe income loss under quarantine. This was achieved early in the pandemic, through a four-day quarantine simulation (Revenga and Galindo, 2020). The local administration gathered data through street and phone polling, among other methodologies, which helped with the development of a targeted guaranteed minimum income programme for 350,000 households, in collaboration with banks and international NGOs (Revenga and Galindo, 2020). The programme aims to support poor or near-poor households during the quarantine, with few conditions, to increase the capacity to stay home (Revenga and Galindo, 2020). In Peru, a similar programme has been enacted by the central government to reach over 3 million households with informal and independent workers (Revenga and Galindo, 2020).

Using existing programmes to extend assistance to new beneficiaries requires not only information on potential beneficiaries, but also payment infrastructure to reach them (Gerard et al., 2020). Some governments, as in Chile and India, have leveraged identity-linked bank accounts, established for financial inclusion purposes to provide direct support to the poor. Even populations at the margins of social protection systems, such as migrant workers in the informal sector who are not registered where they work, can be reached through associations that work with them (Gerard et al., 2020). The state of Bihar in India, for example, has announced a transfer to all migrant workers stranded in other states and aims to perform identity checks through a phone app (see Gerard et al., 2020). In Brazil, households recorded in the *Cadastro Unico* (the Brazilian census of the poor) will be eligible for the same *Auxilio Emergencial* (emergency assistance programme) as formal self-employed workers, but the government has also created a new website to extend coverage to informal workers at large (Gerard et al., 2020).

Relying on digital payment infrastructures is quick and safer in an epidemic, but it may exclude vulnerable households, who do not have access to a computer or smartphone. In such cases, it would be necessary to set up physical collection points or direct delivery systems for these households while still respecting social distancing measures. Otherwise, there is a risk that bank branches could become overcrowded, as in Peru, where recipients of *Bono Yo Me Quedo en Casa* programme went to banks to cash their benefits (Gerard et al., 2020).

Delivery to recipients could be facilitated by involving local governments or non-state actors, although there is a risk of resources being diverted by local elites or used for clientelism (Gerard et al., 2020). Local structures could be involved in identifying individuals in dire need of additional support. In Latin America, censuses of the poor used to target CCT programmes are usually updated by local administration (Gerard et al., 2020). In Rwanda, local structures are being used to target in-kind food security packages to vulnerable households. There is a toll free line for households to report if they have been missed out in the targeting, in order to avoid exclusion errors (Gerard et al., 2020).

The increasing availability of Internet-based tools and mobile phones for tracking fund disbursement can increase the effectiveness in the provision of support and prevent leakages (Green, 2010). In an emergency, however, the benefits from improving targeting and reducing leakages can be less than the costs if an improved process leads to substantial delays in implementation (Gerard et al., 2020).

In-kind transfers

Policies and programmes designed to assist in the short-term must aim to ensure that basic essentials are available (Stephens, 2017). In developing countries, malnutrition is a key concern, alongside jobs and economic output (Stephens, 2017). Food security and maintaining livelihoods were key priority areas during the Ebola outbreak (Stephens, 2017; Guinea, 2014). Similarly, during the COVID-19 crisis, governments in many middle-income countries are working to develop short-term support measures to help vulnerable populations meet basic needs in the midst of intense disruptions to daily life (Patel et al., 2020). India, for example, announced a $23 billion aid package, with a focus on helping to feed 800 million of its poorest citizens through distribution of wheat, rice, and pulses, and a one-time cash transfer to 30 million senior citizens and 200 million poor women over three months (Patel et al., 2020). Many lower-income countries may not, however, have the domestic resources to rapidly launch these kinds of supports (Patel et al., 2020). International and national NGOs are complementing government efforts in many LMICs, providing support to the provision of food and essential hygiene and sanitation products (Patel et al., 2020).

Social assistance programmes may provide cash, in-kind assistance (e.g. food, fuel) or subsidised access to essential goods and services (e.g. health services, housing). Where supply chains are impacted or prices rise, in-kind provision will be most powerful, and public procurement will support producers as well (Gerard et al., 2020). For example, the Indian government doubled the monthly food grain (wheat and rice) household allowance and added pulses to the ration provided by the Public Distribution System (Gerard et al., 2020). Where households can buy goods and services at reasonable prices, cash transfers are quicker to implement and easier to exchange than in-kind transfers (Gerard et al., 2020).

For further discussion on food security, see the discussion on food exports in the trade and investment section).

Public works programmes

During the East Asian crisis, public works programmes provided unemployed workers with much-needed income, particularly in the absence of unemployment insurance schemes (except in Korea) (Betcherman and Islam, 2001). Such programmes included labour-intensive infrastructure construction programmes and credit schemes to promote self-employment and enterprise development (Betcherman and Islam, 2001). While some programmes were considered to be poorly designed and rushed into operation, once the crisis hit, lessons from Indonesia indicate that schemes that involved local communities have performed far better than those planned and implemented without such participation (Betcherman and Islam, 2001).

While public works programmes focused on infrastructure investment can be vital for long-term potential growth, they often fail to provide effective support to economic activity in the short term (Green, 2010). Infrastructure projects as part of public work programmes have the potential to provide employment in the short-term and to lay the foundation for longer-term economic growth (Paci et al., 2010). During the global financial crisis, fiscal stimulus in the form of spending on large infrastructure projects in South East Asia were considered wasteful projects, however, that did not contribute quickly to improving aggregate demand as many projects were subject to delays (Samphantharak, 2019). The Philippines did experience some success with leveraging an existing active programme of capital expenditure to implement small infrastructure programmes (Green, 2010). Infrastructure projects that form part of fiscal stimulus, need to be planned in advance and have clear and quick implantation plans, which is difficult to ensure (Green, 2010).

In addition, as observed in Central America during the global financial crisis, women risk being underrepresented as beneficiaries of public works programmes as construction is traditionally considered a ‘male’ sector (Espino, 2013). There are many tasks related to public investment, however, in which there is no objective reason to prefer men over women. Many women work for the road maintenance SMEs, for example, and in finishing work on construction projects (Espino, 2013). Public investments in childcare have not been included among countercyclical measures, despite their potential in terms of employment generation, contribution to recovery, and social protection (Espino, 2013).

During the current COVID-19 crisis, the conditions of public works programmes cannot be fulfilled while schools and public works sites have been closed, but could be a source of recovery in the post-outbreak phase (Gerard et al., 2020). As discussed above under conditional cash transfers, removing requirements for public works are necessary unless proper provisions are made to make sites compatible with social distancing (Gerard et al., 2020). Several ministries in China, which has begun the process of restarting its economy in the post-outbreak phase, have coordinated to effectively expand domestic demand by stimulating infrastructure investment (Huang et al., 2020). A number of key projects related to energy, transportation and information technology industries have been launched and financed by special local government bonds (Huang et al., 2020).

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- https://dobetter.esade.edu/en
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