



Factors influencing inclusive economic resilience in middle-income countries

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Question

What are the key threats to the resilience of middle-income countries and their at-risk population groups? How can middle-income countries promote inclusive economic resilience in the face of these challenges through policies and systems, specifically including those related to:

- *Revenue mobilisation*
- *Management of investment flows and financial system risks*
- *Crisis management*

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1. Summary

The 2008/9 global financial crisis and now COVID-19 has demonstrated that both financial sector volatility and contagious diseases can cause huge worldwide economic disruptions. Threats to economic stability are numerous – spanning not just financial crises and public health issues but also ecological degradation and climate change, natural disasters, trade wars, civil unrest, terrorism and conflict. Future shocks could also include technological shocks (e.g. increasingly powerful artificial intelligence) that could increase long-term growth but cause severe disruption to economies in the short-term and create hardship for businesses and workers that struggle to adjust.

Key findings relevant to inclusive economic resilience in middle-income countries are that:

- Middle-income countries appear to be less economically resilient on average than high-income countries based on a broad range of measures. This is supported by early data suggesting that COVID-19 has had a greater negative impact on manufacturing output in middle-income countries compared to high-income countries.

The substantial economic progress achieved by middle-income countries in the past two decades is at risk in the wake of COVID-19. They may require additional support from high-income countries and IFIs in order to recover. Efforts should be made to ensure that gains from future growth in middle-income countries are protected by measures to enhance their economic resilience.

- Middle-income countries are also less inclusive in their economic resilience than high-income countries. This reflects the very patchy coverage of social protection schemes. This is particularly problematic since social protection systems serve a double function following economic shocks: they both serve as automatic fiscal stabilisers and help protect the vulnerable.

Middle-income countries should progressively build up social protection systems. This needs to remain in line with increased revenue mobilisation to ensure that it can be sustainable.

- Countries with poor macroeconomic fundamentals – including high levels of inflation, over-valued exchange rates, asset price bubbles and a weak banking sector characterised by high non-performing loan (NPL) rates – are more likely to be undergo a major crisis following a negative economic shock.

Middle income countries can increase their economic resilience by deploying sound macroeconomic policies that prevent the emergence of bubbles and excess liquidity during economic boom periods.

- Fiscal policy is key to mitigating the consequences of negative economic shocks.

If middle-income countries focus maintain sound fiscal policies in normal times (including effective control of government expenditure), they will increase their fiscal space to respond effectively to future economic shocks.

- One critical requirement to increase fiscal space is to improve on middle-income countries frequently weak revenue raising capacity.

Key measures that can be taken by middle income countries include (Junquera-Varela, et al., 2017): (1) increasing the effectiveness of taxation of the incomes of self-employed professionals and the investment income of the very wealthy; (2) enhancing taxation of

natural resource production; (3) increased revenue collection from 'sin taxes' (e.g. on alcohol and cigarette) and 'green taxes' (e.g. fuel duty); (4) encouraging business formalisation in order to enhance corporation tax and VAT revenue; (5) reducing tax exemptions and incentive schemes; and (6) improving tax administration performance.

- Regulations that significantly reduce labour and goods market flexibility can prolong recessions following negative economic shocks.

Middle-income countries need to strike a balance between regulations designed to protect workers and promoting goods and labour market flexibility.

- Controls on cross-border capital flows are frequently used by middle-income countries, particularly during crises. The evidence they can be an effective means of reducing economic volatility, without necessarily compromising economic growth. However, they can be challenging to implement and can have unintended consequences, for example by providing increased opportunities for corruption.

Middle-income countries looking to introduce capital controls may require support in order to ensure that they achieve their objectives without compromising growth and broader development objectives.

- Rigorous systems and procedures for crisis management can promote economic resilience. However, it is the effectiveness of a country's public administration system in general that will tend to constrain the effectiveness of crisis response. Evidence from the global financial crisis and from COVID-19 suggests that governments that score highly on standard measures of effectiveness and which have effective public administration systems tended to cope better.

Middle-income countries should prioritise developing robust public administration systems and developing professional cadres of officials at both the policy and operational levels.

- The effectiveness of government responses to a crisis appear to be strongly influenced by factors that can be challenging to quantify, such as political culture, social attitudes and the personality and priorities of key political leaders. Moreover, every shock is unique and exert different pressures on the economy and on government systems. An economy that is vulnerable to a shock that affects the tourism sector may – for example – not be particularly vulnerable to one focused on manufacturing, and vice versa. Similarly, a government with systems that enable it to respond effectively to a financial crisis, may struggle to cope with a pandemic or a natural disaster.

Attempts to quantify economic resilience are likely to have limited effectiveness as predictive tools. Development agencies and middle-income country governments should not assume that resilience in the face of previous crises or COVID-19 implies resilience to the next shock. Countries need to consider the different implications of a wide variety of potential future shocks and take steps to ensure they can be resilient to those shocks.

- Different regions and areas of a country are frequently differentially effected by shocks. For example, a climate event that has little impact at the national scale may have a severe effect on particular communities.

Governments in middle-income countries need to consider community-level resilience as well as national resilience, and to develop systems that allow them to channel support effectively to where it is most needed during a crisis.

- Prior learning from previous crises appears to give a strong advantage to countries that have dealt with similar shocks within the institutional memory of key institutions.
This suggests that governments will respond more effectively to future rounds of COVID-19 than they did early on, and that the world will likely be more prepared for future pandemics than they were for this one. However, it implies that we can have limited confidence that lessons from COVID-19 will enable governments to deal more effectively with future major crises of a different sort (e.g. natural disasters or technological shocks).
- Systems that contain "slack" in normal times are less likely to buckle in the face of unprecedented demands following severe negative shocks.
Development programmes should acknowledge potential trade-offs between the efficiency and resilience of systems. Middle-income countries should ensure that systems contain sufficient to cope with negative shocks.

Three key terms are utilised in this paper, which are to some extent overlapping, and all relate to the threats these kinds of shocks pose:

- "Economic vulnerability" refers to country's inherent "susceptibility to being harmed" by these kinds of exogenous shocks (Briguglio, 2016). Discussions of economic vulnerability generally focus on the likelihood of a severe negative shock occurring and on factors that can be considered largely outside the influence of the immediate control of government policy.
- "Economic resilience" refers to "the extent to which an economy can withstand or cope with the negative effects" of exogenous shocks (Briguglio, 2016). Discussions of economic resilience tend to focus on factors that determine the depth and persistence of the negative consequences of a shock once it occurs, and on factors that are significantly influenced by government action. In practice, it is not always possible to draw a sharp a boundary between "economic resilience" and the "resilience" of a society more broadly; whilst this review focuses on the economic consequences of shocks, almost any feature of a system that enables a country to prevent or cope effectively with negative shocks will contribute to economic resilience.
- "Inclusive economic resilience" is a term coined for the purposes of this paper at the request of the Foreign, Commonwealth and Development Office (FCDO). It reflects the FCDO's emphasis on the importance of ensuring that economic resilience is achieved in a way that protects the interests of everyone in society. This implies that policies designed to promote economic resilience should take account of the specific needs of women, the poor, the disabled, marginalised minorities and other vulnerable groups.

There is a very large body of literature relevant to this review, though much of it does not use the term economic resilience directly, which this review cannot fully do justice to. Notably, there are a huge number of peer-reviewed academic papers on the causes and management of negative economic shocks, crises and recessions. This is complemented by a wide range of discussion papers on the same topics by international financial institutions and a smaller body of practitioner papers, with the latter mainly focused on community-level economic resilience. This paper draws heavily on papers discussing the Asian Financial Crisis of 1997, the Global Financial Crisis of 2008/9 and recent papers focused on the response to COVID-19.

This paper is divided into six sections. Section 2, explores the factors that effect a country's economic vulnerability, whilst Sections 3 does the same for economic resilience and Section 4 for inclusive economic resilience specifically. Section 5 then focuses on middle-income countries and discusses the particular issues they frequently face that can exacerbate their economic vulnerability and hamper inclusive economic resilience. Finally, Section 6 focuses on three areas where many middle-income countries could prioritise reforms in order to improve their economic resilience, namely: increasing revenue mobilisation, improving their management of investment flows and the financial system and developing crisis management capacity. Section 6 also discusses the importance of ensuring that development programming in middle-income countries balances support for increased efficiency and robustness in order to promote both growth and economic resilience.

2. What are the sources of economic shocks and what factors affect vulnerability to them?

Negative economic shocks are unpredictable or hard-to-predict events that can cause severe disruption to the normal functioning of an economy. The likelihood of some kinds of shocks can be reduced by action at the local, national, regional or global scale, whilst others remain outside of realistic human control and all that can be done is to mitigate their consequences. The evidence from recent decades suggest a wide range of threats to economic stability, including in middle-income countries.

A wide range of events can cause economic shocks. Examples from recent decades include:

- **Financial crises**, frequently linked to issues such as unsound financial sector practices (e.g. the Global Financial Crisis of 2008/9)
- **Currency crises**, frequently linked to a combination of fixed-exchange rates and a failure to control inflation. Currency crises have also often shared features of financial crises, such as the bursting of asset price bubbles (e.g. the Asian Financial Crisis of 1997)
- **Sudden shifts in commodity prices**. For example, the 1970s oil price boom negatively impacted on economic growth in many energy consuming advanced economies. In contrast, the post-2014 drop in global energy prices severely affected the economies of energy producing middle-income countries such as Venezuela, Russia, Algeria and Nigeria.
- **Public health crises** such as SARS and Ebola caused specific economic disruption in affected areas, whilst the COVID-19 pandemic is causing huge global economic disruptions
- **War and civil conflict** have caused huge economic hardship in many middle-income countries. Notably the conflict in Syria (2011-) and Yemen (2015-) have caused both to fall out of the rankings of middle-income countries and return to lower-income country status.
- **Severe climate events** occasionally cause severe economic damage in affected countries. For example, the 2004 tsunami caused damage USD4.5 billion of damage in Indonesia's Aceh Province (25% of provincial annual income) (Rego, 2004). In addition, every year a large number of climate events occur which cause economic disruption to

affected countries. Individually these events tend to have a relatively small economic impact – around 0.05% reduction in GDP on average for a climate event affecting 1% of a country's population, according to a recent paper focused on developing countries (Simonet et al., 2017) – but cumulatively their effects are very significant. Events of this kind – including droughts, wildfires, floods and tropical storms – are expected to become more frequent and severe as a result of climate change (Van Aalst, 2006).

There is a problem of "massive imprecision" in the assessment of the probability of rare events such as severe negative economic shocks (Taleb, 2010). This needs to be taken into account when considering issues related to economic resilience. This imprecision reflects the common existence of "fat-tail distributions", where events of unusual severity are less unlikely than might be expected based on intuition and standard risk management theories (Taleb, 2010). For example, even the most severe natural disasters of recent memory have been relatively modest compared to the potential impact that would result from calamitous events of the scale that we know have occurred in previous eras. Indeed, it is plausible that the next major source of global instability could be something as unexpected as a volcanic eruption so large that it causes damage to infrastructure across multiple countries (Self, 2006).

Even once a shock occurs estimation of the likely scale of the economic consequences is often hugely challenging. This is borne out by the fact that in February 2020 researchers were estimating that the economic global cost of COVID-19 could be USD360 billion (Raga and te Velde, 2020), whilst less than a month later forecasts were suggesting that the cost would likely be in the trillions of dollars (Fernandes, 2020; McKibbin & Fernando, 2020).

Economists use the term "economic vulnerability" to refer to a country's "susceptibility to being harmed" by exogenous shocks (Briguglio, 2016). Discussions of economic vulnerability generally focus on the likelihood of a severe negative shock occurring and on factors that are largely outside the influence of the immediate control of government policy.

Briguglio (2016) ranked 183 countries using an Economic Vulnerability Index (EVI), with their scores being determined by four factors:

- **Trade openness** (the average of imports/GDP and exports/GDP)
- **Export concentration** (the percentage of exports made up of a country's three largest export product groups)
- **Dependence on strategic imports** (percentage of imports relating to food and fuel)
- **Proneness to natural disasters** (disaster damage as a percent of GDP over the period 1980-2011).

The inclusion of three trade-related measures reflects the fact that countries that depend on trade will be more affected by economic crises originating in other countries. High trade as a proportion of GDP increases the impact on a national economy of global demand fluctuations. Moreover, if a country's exports are highly concentrated then any global demand shock affecting its key export lines would have a particularly severe effect. In addition, because demand for essential goods such as food and fuel is highly inelastic, if its imports are highly concentrated on these products, it will find itself particularly vulnerable to increases in global prices.

The relevance of trade-dependency to economic vulnerability appears to be borne out by evidence from the 2008/9 global financial crisis. Maeoka et al.'s (2012) cross-country regression identified high levels of trade-dependency as a key factor influencing how badly affected different OECD countries were by the crisis. Those countries that were highly dependent on "manufacturing exports such as capital goods or durable goods" and those heavily dependent on "strategic imports such as fuel" were found to be particularly affected. In addition, Stewart (2012) argues that the impact on Mexico was particularly severe because its exports were so highly concentrated towards the USA.

The EVI is somewhat narrow, since it does not consider internal sources of shocks that are of human origin, but are outside of government control. The experience of recent decades is that many serious shocks have been caused by social disruption and conflict. In particular, issues such as prevalence of non-state armed actors in a country or the existence of historic ethnic or religious grievances affects not only a country's ability to respond to a shock (i.e. its economic resilience), but also the probability of certain shocks occurring (e.g. large acts of terrorism or a civil conflict).

Whilst risk factors can be identified, it is very challenging to assess the likelihood of shocks and how economically vulnerable any particular country is to them. The EVI provides a useful starting point for assessing the economic vulnerability of middle-income countries. However, the threats to economic stability are likely more numerous and severe than is commonly imagined and our understanding of which countries are most economically vulnerable may be limited. This suggests that developing and maintaining economic resilience should be a priority for all countries.

3. What is economic resilience and what factors influence it?

Economic resilience has been defined as "the extent to which an economy can withstand or cope with the negative effects" of exogenous shocks (Briguglio, 2016). Briguglio describes two potential forms of economic resilience, relating to the ability of a country to: (1) "absorb" the effect of external economic shocks, which he associates with having the economic flexibility to enable a quick recovery; and (2) to counteract the harmful effects of such "shocks", which he associates with fiscal strength. Resilience can rest on actions taken at the national and local level and by both state institutions, formal non-state institutions and through informal collective and individual action (Rose, 2004). Whilst Briguglio's definition is far from the only one in use, it provides a useful starting point and has the advantage of leaving open the question of what it means to "withstand or cope with" negative effects, enabling a discussion that goes beyond the narrowly technical to examine the broader political and social imperatives that influence decision making in crisis situations.

Briguglio (2016) assessed economic resilience for 188 countries using an Economic Resilience Index (ERI) which takes account of:

- **Macroeconomic stability (MES)**, including government debt as a percentage of GDP, inflation and the current account balance

- **Market flexibility** (MFX), based on the Economic Freedom of the World Index's (EFWI) labour market regulations and business regulations scores and a measure of financial prudence (FPR). The FPR in turn is based on Global Competitiveness Index scores for the "soundness of banks and regulation of securities" and credit to the private sector as a proportion of GDP)
- **Political, social and environmental governance**, measured by the political Worldwide Governance Indicators (WGIs), the non-income components of the Human Development Index (HDI) and the environmental performance index (EPI)

Briguglio's ERI helped introduce a more systematic way of thinking about economic resilience, but it is unclear whether it successfully captures all the relevant factors. The predictions one would have made based on ERI scores have not aligned well with early assessments of COVID-19 response. Indeed, many of the countries that had been judged highly resilient (e.g. the USA and the UK) appeared to fare badly, whilst countries that performed variably on the index and had little in common – such as South Africa, Vietnam, Germany, New Zealand and Singapore – won praise for the effectiveness of their response (Kavanagh and Singh, 2020).

Overall, whilst a range of factors that affect resilience have been identified, there is little indication that a set of characteristics can be defined that would enable reliable predictions regarding which states will prove resilient to future crises. Six months in to the COVID-19 pandemic, theories developed to explain why some countries initially seemed to respond better to the crisis than others began to appear questionable. Despite the early praise for Singapore's "gold standard" response (Niehus, Salazar, Taylor, & Lipsitch, 2020), it has struggled to contain further waves of infection and now has a case rate amongst the highest in the world (Woo, 2020). Similarly, despite the WHO's (2020) praise for its "incredible" early response, by August South Africa's handling of the crisis was being described as "troubled" and its lockdown was in "disarray" (Naudé and Cameron, 2020). On balance, it appears that our ability to predict which countries will prove economically resilient to shocks remains limited. Indeed, it appears that a broad range of factors affect resilience to economic shocks, that these factors are hard to quantify and that they are often highly context specific rather than generalisable to all shocks.

Macroeconomic stability and cross-border financial flows

The evidence on the impact of foreign investment flows on economic growth rates and the risk of economic crises remains contentious. Panel-data evidence has found a positive association between FDI inflows and growth for South Asian middle-income countries (Murari, 2017) and for middle-income countries globally over the period 1996-2015 (Hayat, 2018). In contrast, evidence from Latin America indicates that the impact is mixed for upper-middle income countries and negative for lower-middle income countries (Alvarado et al., 2017). Cross-country evidence also indicates that positive effects may be contingent on broader economic freedoms in the recipient country (Azman-Saini et al., 2010), on having a relatively low level of natural resource production dependency (Hayat, 2018) and - to a lesser extent – on institutional quality (Hayat, 2019). However, FDI flow volatility also appears to be negatively associated with growth (Lensink and Morrissey, 2006).

Large inflows of foreign portfolio investment may increase the risks of economic shocks, particularly in countries with relatively under-developed financial systems. Foreign portfolio investment can be more easily and rapidly reversed than foreign direct investment (Durham, 2004), potentially creating cascades of failure if global markets lose confidence in an economy. The relationships between FDI and foreign portfolio investment and economic volatility was extensively analysed in the wake of the East Asian Financial Crisis of 1997, with asset price bubbles associated with rapid foreign portfolio investment flows into East Asian countries frequently blamed for precipitating the crisis (Fernandez-Arias, et al., 2001).

Financial sector regulation

The lessons of recent crises have led to a much greater focus on the importance of effective financial sector regulation in promoting economic resilience. Rousseau and Wachtel (2011), and many others, have argued that rapid growth of credit and weak regulation led to a weakening of banking sectors around the world culminating in the global financial crisis of 2008/9. As Brownbridge and Kirkpatrick (1999) note, financial sector reforms may increase efficiency but they can also increase the vulnerability to financial crises by "allowing banks to hold more risky assets than would be the case in a regulated system, by exposing banks to greater competition, or by exposing them to a greater degree of market risk, such as interest-rate or exchange-rate risk." Weller (2001) argue that emerging economies have tended to become more vulnerable to banking crises following financial sector liberalisation, including the removal of credit ceilings, reduction in lending requirements and removal of market entry restrictions. These risks are arguably stronger in countries which go into liberalisation with relatively under-developed financial sectors and in systems where there are strong implicit guarantees that could encourage risky practices (Tornell and Westermann, 2002).

Fiscal space

The severity of negative economic shocks can frequently be reduced by using increased government expenditure to maintain economic activity and protect vulnerable businesses and individuals. Haider (2020) describes policy measures that can lessen the negative economic consequences of an epidemic or financial crisis, including fiscal stimulus packages, job retention schemes and credit guarantee schemes for effected businesses. Similarly, Capano et al.'s (2020) list of the most common policy responses to COVID-19 reveals that social distancing measures was only ranked number five. The top four were all fiscal measures, namely: (1) tax payment deferrals; (2) targeted tax cuts and exemptions; (3) relaxation of eligibility rules for unemployment insurance and introduction of compensation for loss of income due to reduced working hours; and (4) relaxation of loan conditions and interest rate cuts.

Countries which can raise revenue effectively and can borrow from financial markets easily and cheaply are better able to finance the expenditure needed to respond to economic shocks (Haider, 2020). Building fiscal space have long been considered key to state-building and inclusive development (Junquera-Valera et al., 2017), but its relevance to economic resilience is equally clear. Countries with strong credit ratings are able to secure cheap financing internationally, whilst those that have poor credit ratings may find the cost of borrowing prohibitive. Countries can improve their credit ratings by lowering levels of debt, keeping inflation stable and relatively low, maintaining foreign exchange reserves, keeping current account deficits under control and building a track record for meeting debt obligations. Even where countries are

looking to finance expenditure by borrowing it is vital that they can demonstrate the ability to raise revenue via taxation and to control public expenditure. If they cannot demonstrate the ability to do this, they will lack credibility with markets, increasing their costs of borrowing.

The COVID experience demonstrates the relevance of fiscal space to economic resilience.

Large and wealthy countries with good access to credit markets have rapidly increased borrowing in order to finance programmes that lesson the blow on those whose jobs or business were affected by the crisis. Amongst smaller states, Woo (2020) notes that the "operational and analytical capacities" that bolstered Singapore's efforts to manage COVID-19 pandemic depended heavily on fiscal capacity, whilst its USD370 billion of pre-crisis reserves enabled it to cushion the economic blow of the crisis on citizens and businesses.

Market flexibility.

Economies are better able to recover from a shock if prices and wages are able to adjust through market processes. Duval et al. (2007) used OECD data to conduct a cross-country regression evidence and found that strict employment protection legislation delays recovery from shocks, whilst strict product market regulations may initially dampen the impact of a shock but also ends up delaying recovery. The authors estimate that for the average OECD country a two standard deviation decline in EPL stringency would reduce the half-life of output gaps by half a year, whilst a two standard deviation increase in PMR would decrease the initial depth of a shock by half.

Government effectiveness.

Evidence from COVID-19 confirms that governments that score highly on standard measures of effectiveness and which have effect public administration systems tend to cope better with major crises. Regression analysis suggests a negative association between measures of government effectiveness and COVID-19 case mortality rates (Liang et al., 2020). Woo (2020) describes how Singapore's strong policy development and disaster response capacity supported its early successes in containing COVID-19. Similarly, Janssen and der Voort's (2020) case study of the Dutch response to COVID-19, concludes that "bureaucracies are vital" in crisis response, enabling "agility and adaptability" by supporting rapid implementation of new policies and systems and compliance with new measures.

Major crises require the rapid mobilisation, coordination and deployment of national resources. Wein and Rose (2011) utilise data from simulations of the consequences of earthquakes to argue for the importance of minimising business interruption by "speeding recovery through repair and reconstruction." This kind of "dynamic resilience" has parallels with the response to COVID-19, which has frequently required rapid and concerted action, with planning and delivery processes sped up far beyond the levels that would be possible in normal times. Here the financial, project management and engineering resources mobilised by China to construct two specialist COVID hospital in Wuhan in February 2020 (NPR, 2020) stands out.

Whilst some have suggested that COVID-19 demonstrates that authoritarian governments have an advantage when it comes to responding to major crises, it remains unclear whether this is really the case. Potential advantages include the ability of authoritarian regimes to act decisively in the national without needing to worry about external scrutiny or electoral consequences. Numerous commentators have discussed China's success in enforcing the very

strict lockdown in Wuhan that helped contain the disease there with relatively little loss of life, as well as early successes in Singapore and the apparent success in Turkey. However, many commentators have pointed to the early failure in China, where the government's instinct to "suppress information" meant that COVID was not brought under control early enough to prevent it spreading globally (Alon, et al., 2020). In addition, Frey et al. (2020) provide regression evidence showing that autocratic states implemented stricter measures to reduce mobility than democratic states, but that their measures were less effective. In contrast, Petersen (2020) analysed testing rates as a proxy for effectiveness of response, finding that both very democratic and very autocratic states performing variably but relatively well on average, whilst anocracies (intermediate regimes between democracies and autocracies) performed poorly across the board.

Other factors

There is evidence that economic resilience is not a general characteristic of a country, but rather is always relative to the specific shock perturbing a system – as a consequence it is very difficult to make general predictions about which countries will prove resilient to future shocks. Sensier et al. (2016) note that there was little correlation between those European regions that proved resilient to the economic shocks of the early 1990s and those that proved resilient to the global financial crisis of 2008/2009. Maeoka et al. (2012) argued from data from the 2008 financial crisis that fuel exporting countries are more resilient. However, in 2014 a massive global decline in energy prices meant that energy exporters such as Algeria, Russia and Venezuela suffered severe economic and social disturbances whilst energy-importing countries continued to grow. Similarly, Stewart (2012) notes that the reliance of many poor Philippine households on remittances from relatives abroad was a source of vulnerability during the global financial crisis, whilst Makhoul et al. (2020) identifies the continued flow of remittance payments as underpinning the surprising resilience of many poor families in conflict-affected Syria.

This has led to the development of indices that attempt to assess economic resilience in the face of specific threats. For example, when Raga and te Velde (2020) assessed different countries' economic resilience in February 2020, they (like Briguglio) included measures related to fiscal space, but left out the measures focused on market flexibility and switched from generic governance indicators to two measures focused specifically on the health sector: health expenditure as a share of GDP and the Healthcare Access and Quality Index (GBD 2015 Healthcare Access and Quality Collaborators, 2017). This reflected a recognition that economic resilience in the face of COVID would be highly dependent on the quality of each country's health system. Assessing economic resilience to different kinds of shock (e.g. AI-related service sector automation) might require assessment of quite different factors.

However, even relatively tailored assessments often appear to have limited predictive validity. Kavanagh and Singh (2020) note that specific indices developed to assess countries' capacity to prevent and mitigate epidemics, such as the Global Health Security (GHS) Index, have proved to be poor predictors of the effectiveness of responses to the COVID pandemic. Even Raga and te Velde's (2020) February 2020 assessments of vulnerability and likely economic resilience in the face of coronavirus have had limited predictive success. For example, Mongolia was assessed as highly vulnerable both due to its direct links to China (then the epicentre of the epidemic) and due to it being a relatively open economy, and was assessed as low on resilience based on its macroeconomic fundamentals and performance on the Health

Quality Index. In contrast, Mexico was judged to be highly low on vulnerability based on direct links to China, relatively low on vulnerability based on trade openness and much more economically resilient than Mongolia. Yet Mongolia's monthly manufacturing output dropped year-on-year by an average of 9% over the period February to June, whilst Mexico's dropped by an average of 20%. In addition, as of September almost 74,000 people have died from the disease in Mexico, with over 700,000 cases recorded, whilst Mongolia appears to have avoided community transmission entirely to date and has no recorded deaths.

Past experience with similar crises appears to be critical in managing and preserving economic resilience during a crisis. It is notable that many of the states judged to have responded most effectively to COVID-19 in the early months of 2020 were those that had been most effected by the SARS outbreak (in descending order of number of SARS cases): China, Hong Kong, Taiwan, Canada, Singapore and Vietnam (WHO, 2003). It is also noticeable that Singapore's performance was strong in areas for which SARS had prepared it (e.g. case identification and contact tracing), but dropped sharply once it came to dealing with an issue for which SARS provided no blueprint, namely managing the spread of the disease amongst migrant workers living in densely-populated housing (Woo, 2020). This is not the first time that "prior experience and political learning" has proven relevant. For example, the relatively strong performance of East Asian countries in handling the 2008/9 global financial crisis, appears to be partly related to their prior experience during the Asian Financial Crisis of 1997 (Athukorala, 2010), in which their performance was much more haphazard.

Even less tangibly, the personalities of individual leaders and the political pressures they face appears to play a major role in the effectiveness of national responses to crises. Kavanagh and Singh (2020) note that early "tentative successes" amongst COVID-19 responses rested on "leadership that took the threat seriously, listened to experts, and was able to quickly and effectively implement policies." These kinds of factors are not likely to be permanent features of any system and cannot be altered by the kinds of programmes donors might conduct in middle-income countries.

Government systems that are built in normal times and optimised for static efficiency are unlikely to prove resilient to severe shocks – robustness requires "excess capacity". Resilience requires "organisational slack" of the kind that the Singaporean health system developed in the aftermath of SARS by building the National Centre for Infectious Diseases Hospital (Woo, 2020). The hospital was created specifically to be used in case of a SARS-like epidemic and in normal times was largely left to focus on research activities. However, when COVID-19 began it enabled a rapid and effective response. The counterpoint to this is the way in which a shift to efficient "just-in-time" inventory systems and the dismissal of medical stockpiles as "an unnecessary expense" led to shortages of personal protective equipment in many countries early in the COVID-19 response (Feinmann, 2020). The importance of organisational slack is not confined to health sector – different kinds of shock could put unprecedented strains on other parts of government such as the fire service, police, military or even the education system. It also applies to non-sectoral systems: a highly lean civil service may not be able to respond to the new demands of a crisis as effectively as one which in normal times contains an element of redundancy.

The resilience of different countries in the face of superficially similar shocks often relate to hard-to-quantify historical, social and cultural factors. The trajectories of Tunisia and Libya since 2011

is illustrative. Both countries went through a revolution against a dictator at roughly the same time, but whilst Tunisia preserved sufficient national consensus and unity to conduct a relatively successful democratic transition and preserve some level of economic stability (Ouhibi, 2019), Libya descended into a protracted civil conflict which has led to the implosion of its economy. The factors underpinning these different trajectories are varied, but the much greater importance of tribal and regional identities in Libya compared to Tunisia appears relevant (Henneburg, 2019), as does the greater prominence of norms related to social justice, compromise and unity in Tunisian political and social dialogue (Mahmoud & Súilleabháin, 2020).

The relevance of social and cultural factors to resilience in the face of shocks has also been partly borne out in relation to the COVID-19 crisis. Inter-country differences in public attitudes and acceptance of similar COVID-related restrictions has been widely noted, with high levels of public compliance appearing to play a role in early successes in bringing the disease under control in some countries. This has been quantified by Frey et al. (2020), who found greater compliance with rules to reduce geographic mobility in countries with more collectivist cultures compared to those that were more individualistic.

All this indicates that economic resilience may be highly unpredictable, with the effectiveness of national responses to a crisis – and therefore of economic resilience – heavily dependent on the personalities of those in key leadership positions, on sector-specific capacity, and on the existence of a cadre of officials that have learnt from their experience in similar crises in the past. This suggests that the response to future COVID-like epidemics will be much better than those of early 2020. However, it also implies that those countries that responded most effectively to COVID may not be those that respond best to a future natural disaster, unprecedented refugee flows or a Chernobyl-like nuclear catastrophe.

4. What is inclusive economic resilience and what factors influence it?

By extension to Brugglio's (2016) definition, inclusive economic resilience can be understood as the ability of a country to withstand or cope with the negative effect of exogenous shocks, whilst protecting the interests of all its citizens. The term has been coined specifically for this paper, with the intention of reflecting the FCDO's emphasis on protecting vulnerable groups and individuals as a core component of fostering economic resilience. Inclusion is important to the debate around economic resilience because features of a system that create resilience for some actors may not benefit others or could even increase their vulnerability. Inclusive economic resilience requires that the state is willing and able to channel resources and support to the people and communities where it is needed most.

It is important to note that there are potential tensions between inclusivity and economic resilience. Martin (2012) illustrates the potential for disparate interests of different groups when it comes to responding to an economic shock. He discusses how the resilience of firms may be increased if they have the ability to take measures that "cut costs and increase productivity" this might increase the vulnerability of workers facing reductions in working hours, wage decreases or loss of benefits. A key aspect of economic resilience is the ability of an economy to adjust and adapt in the face of a shock. In practice, this can involve job losses and bankruptcies, which can cause severe hardship for vulnerable individuals and communities. Whilst regulations or programmes that protect against these issues can help to stave of the symptoms of a crisis in the

short-term in some circumstances they may prevent or delay adjustments that would support a sustainable recovery.

However, a lack of inclusion can also undermine economic resilience. This has been borne out by the example of Singapore during the COVID-19 crisis. Singapore won widespread praise for its handling of the epidemic, but its relative neglect of the plight of poor migrant workers meant that it struggled to control subsequent waves of infections, which spread rapidly in crowded migrant worker accommodation (Woo, 2020). This has undoubtedly exacerbated the economic disruption caused by the pandemic.

Inclusive economic resilience can be understood along two dimensions: vertical and horizontal inclusivity. The vertical inclusivity of economic resilience relates to the extent to which the interests of the most vulnerable individuals in society are protected following an economic shock. Vertical inclusivity would encompass disparities in the effects of shocks and responses to shocks on groups such as:

- The very poor
- The disabled and sick
- The aged
- Children
- Marginalised ethnic, tribal or religious minority groups
- Migrants, refugees and the internally displaced
- Women and girls
- Sexual minorities

COVID-19 has demonstrated the challenges of ensuring that the interests of vulnerable groups are protected following major shocks. Notably, in many countries young people and those in insecure forms of employment (e.g. zero-hours contracts) have been disproportionately affected by job losses and reduced economic activity. In Singapore failures to build inclusion into the country's pandemic response led to suffering for one particularly vulnerable group, migrant workers, who were both more affected by the disease and frequently faced sudden deportation as a result of job loss (The Straits Times, 2020).

The horizontal dimension to the inclusivity of economic resilience, relates to spatial disparities in the impact of shocks (Martin, 2012). Different regions and areas of a country may be differentially affected by economic shocks, so that a relatively small shock in national terms may have a severe effect on particular communities. Notably the effects of natural disasters and climate events, as well as civil unrest and conflict, are often geographically concentrated. However, even more classic economic shocks often have an uneven effect based on the economic specialisations of different areas. In the UK, the disproportionate negative impact of the recession of the early 1980s on industrial areas of the North of England exemplifies this issue. Such issues can relate both to differential vulnerability of different regions, and differences in the support provided to different areas following shocks based on factors such as the importance of different areas to ruling elites.

Wealthier countries are generally more able to ensure that inclusion is built into economic resilience following crises, though it does not mean that they always do so. Countries with

higher GDP per capita tend to be more economically resilient in general based on Briguglio's (2016) ERI, though they are not inherently so (Sensier et al., 2016). Wealthier countries also tend to have a lower proportion of the population that is highly vulnerable due to poverty and are able to channel more resources to support those who are vulnerable during a downturn.

The existence of adequate social protection schemes is vital to protecting the interests of vulnerable individuals in the aftermath of an economic shock. Workers subjected to job losses and reduced hours, as well as the self-employed whose work dries up, face sudden, acute reductions in their income. Where unemployment benefits, income support and other mechanisms already exist, this issue is mitigated. The practical significance of this is discussed by Stewart (2012), who finds that the existence of social protection schemes in the Southern European, Eastern European and Latin American countries most effected by the 2008/9 global financial crisis was a factor explaining why the impact on poverty of that crisis was less severe than that of the 1980s debt crisis, despite the much greater falls in domestic domestic product in 2008/9. Such schemes are normally complex and time-consuming to set-up, so they normally need to be in place prior to a crisis. It is frequently easier to scale up such scheme than to create them from scratch, so having a social protection system in place (even if set at a relatively modest level) can give governments options when it comes to responding quickly and effectively to a crisis.

Whilst it is included in this section on the inclusivity economic resilience, social protection schemes are a potentially important tool in promoting economic resilience in general. Social protection schemes may serve as automatic stabilisers that mitigate the aggregate economic consequences of a crisis without the delays that tend to occur when designing tailored fiscal responses (Quak, 2020). However, the empirical evidence suggests that the generosity of such schemes (e.g. unemployment benefit replacement rates) has little impact on either the persistence or depth of shocks.

5. How economically vulnerable and resilient are MICs currently and why?

Based on Briguglio's (2016) ERI and EVI, 38 out of 109 middle-income countries are identified as of low economic resilience, including 22 which were also identified as being of highly economically vulnerable (see

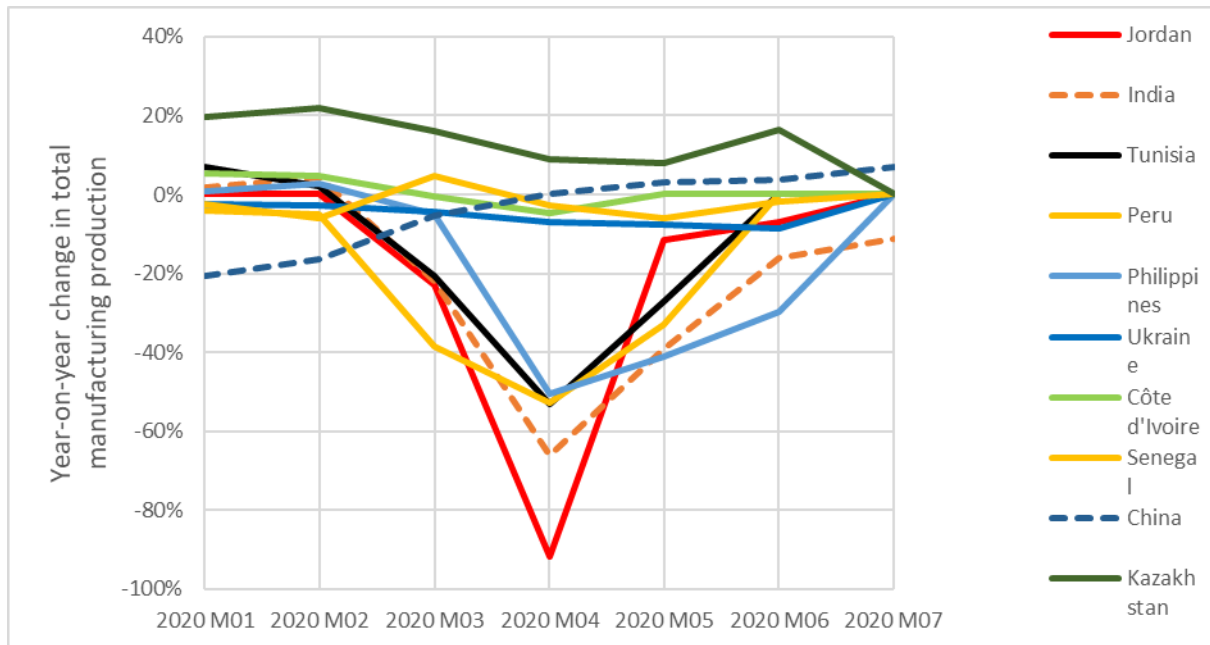
See: Table 1, below). 11 out of 56 upper-middle income countries are identified as of low resilience, with six of those also identified as highly vulnerable. 27 out of 53 lower-middle income countries were identified as low resilience, with 16 of these also identified as highly vulnerable.

See: Table 1: Middle-income countries classed as low economic resilience. Source: Briguglio (2016, p.1069), https://www.emerald.com/insight/content/doi/10.1108/JES-12-2014-0203/full/pdf?casa_token=hMqRR1orHM0AAAAA:wp2UaCem_9TtRhWNC9Zq8ZFS-jpIYNHf3c5XCv9xDi8Cg6c0MoWjE8ZCzbBL1AAxEeO5xbmpErE9Q2hNEXeIEenhHVbLLbNbubUtOfmBXwZirWVTmlo

Early data on the economic impact of COVID-19 supports this picture of high economic vulnerability and/or low economic resilience amongst many middle-income countries, notably in comparison to high-income countries. In the absence of comprehensive within-year GDP estimates, one imperfect but informative measure of the impact of COVID-19 is to compare UNIDO's monthly total manufacturing output figures for 2020 to the same months in 2019. Data for the 36 middle-income countries with at least three months of 2020 data currently available is presented in for the period January-July (Table 2, below). For most of these countries – with the notable exception of China, where the impact of the pandemic on manufacturing peaked much earlier – the most affected month was April 2020. For the 35 middle-income countries with available data the average year-on-year decline in manufacturing output in April was 28%. This compares to just 19% for the 34 high-income countries with available data.

Whilst almost all middle-income countries have been negatively affected by COVID-19, the early evidence suggests substantial variation in the severity of the economic impact that does not align well with predictions based on Briguglio's (2016) EVI and ERI. Figure 1, below, plots the results for the five most and five least-affected middle-income countries in April 2020. In that month production declined by an average of 5% year-on-year in the five least-affected countries, but by an average of 63% in the five most-affected countries. None of the five worst-affected states based on this measure were assessed as having low economic resilience based on Briguglio's ERI. In contrast, amongst the least-affected, Senegal was assessed has low in economic resilience based on the ERI, whilst Côte d'Ivoire and the Ukraine were assessed as being of both high vulnerability and low resilience.

Figure 1: impact of COVID-19 on manufacturing in 10 middle-income countries.



Source: UNIDO (<https://stat.unido.org/database>), reproduced with permission

Table 2: year-on-year change in total monthly manufacturing output for January-July 2020 in 37 middle-income countries.

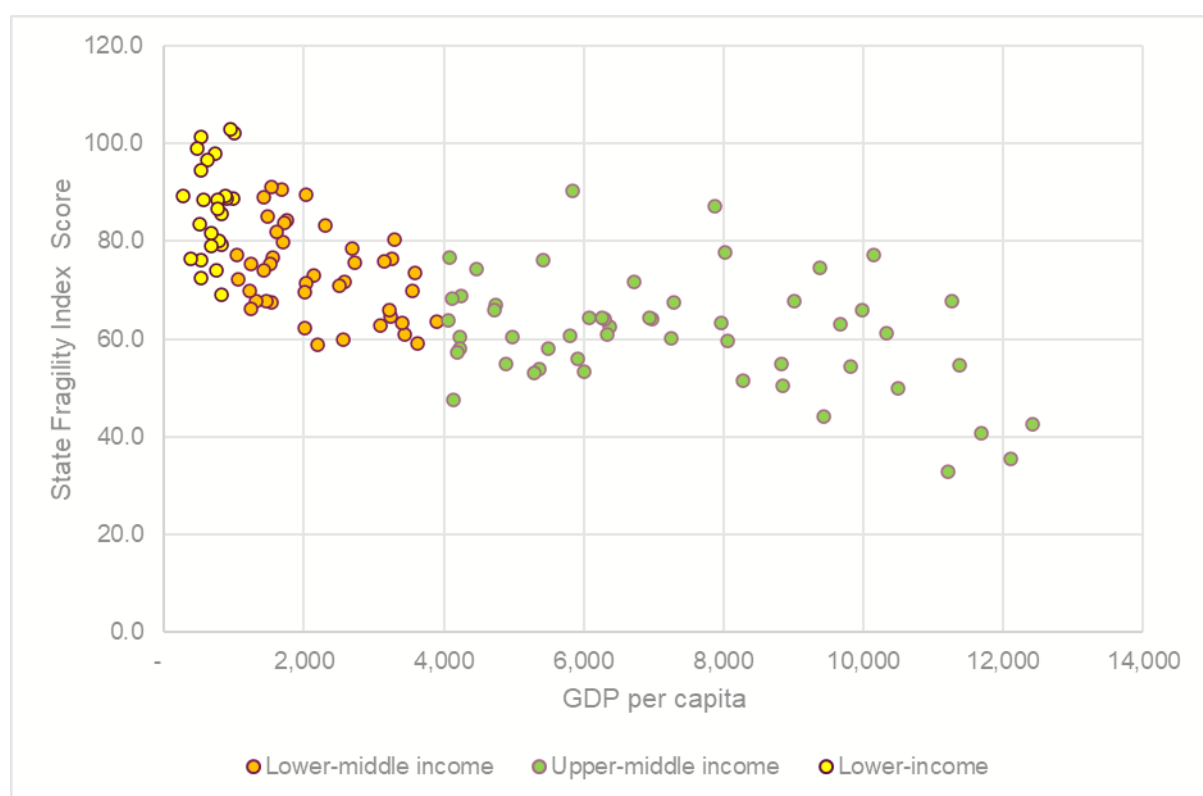
	2020 M01	2020 M02	2020 M03	2020 M04	2020 M05	2020 M06	2020 M07
Jordan	0%	0%	-23%	-92%	-12%	-7%	N/A.
India	2%	4%	-22%	-66%	-39%	-16%	-11%
Tunisia	7%	2%	-21%	-53%	-27%	N/A.	N/A.
Peru	-4%	-5%	-38%	-53%	-33%	N/A.	N/A.
Philippines	1%	3%	-5%	-50%	-41%	-30%	N/A.
South Africa	-2%	-3%	-5%	-48%	-32%	-18%	-12%
Sri Lanka	1%	2%	-28%	-45%	-27%	-18%	-6%
Honduras	5%	5%	-30%	-44%	-49%	-26%	N/A.
North Macedonia	3%	4%	-12%	-39%	-32%	-15%	-8%
Pakistan	-5%	-2%	-14%	-39%	-26%	-13%	N/A.
Malaysia	2%	7%	-3%	-38%	-23%	5%	2%
Mexico	-1%	-3%	-6%	-36%	-36%	-18%	-10%
Colombia	3%	2%	-8%	-35%	-24%	-11%	-9%
Turkey	7%	9%	-1%	-33%	-20%	1%	4%
Argentina	0%	0%	-17%	-32%	-24%	-9%	-7%
Brazil	2%	0%	-9%	-31%	-21%	-12%	-3%
Moldova	8%	7%	0%	-28%	-14%	-9%	N/A.
Bangladesh	7%	7%	6%	-25%	N/A.	N/A.	N/A.
Bosnia and Herzegovina	-4%	-5%	-16%	-24%	-18%	-9%	-9%
Nicaragua	7%	16%	-3%	-22%	N/A.	N/A.	N/A.
Ecuador	4%	2%	2%	-21%	-8%	33%	N/A.
Serbia	7%	2%	2%	-19%	-9%	2%	-1%
Bulgaria	2%	-1%	-7%	-18%	-16%	-9%	-6%
Thailand	-5%	-5%	-12%	-16%	-21%	-18%	N/A.
Egypt	N/A.	1%	-11%	-15%	-12%	N/A.	N/A.
Viet Nam	7%	7%	7%	-15%	-8%	2%	1%
Mongolia	-16%	12%	-25%	-14%	-16%	1%	N/A.
Russia	4%	2%	3%	-10%	-6%	-7%	-3%
Belarus	-4%	1%	-3%	-8%	-2%	-1%	N/A.
Costa Rica	3%	10%	7%	-7%	-10%	-8%	-3%
Ukraine	-3%	-3%	-4%	-7%	-8%	-9%	N/A.
Côte d'Ivoire	5%	5%	-1%	-5%	N/A.	N/A.	N/A.
Senegal	-3%	-6%	5%	-3%	-6%	-2%	N/A.
China	-21%	-16%	-6%	0%	3%	4%	7%
Kazakhstan	20%	22%	16%	9%	8%	16%	N/A.
Guatemala	6%	5%	-8%	N/A.	N/A.	N/A.	N/A.

Source: UNIDO (<https://stat.unido.org/database>), reproduced with permission

An alternative indicator of indicator of low economic resilience is state-fragility. The Fragile States Index (The Fund for Peace, 2020) attempts to capture factors that undermine the functioning of a state. This includes attempted measures of some of the harder to quantify factors that (as per the previous discussion) may underpin whether a country can respond effectively to a crisis. The index takes into account: (1) lack of control over security apparatus; (2) factionalised elites; (3) group grievances; (4) economic strength; (5) economic inequality; (6) human flight and brain drain; (7) state legitimacy; (8) quality of public services; (9) respect for human rights; (10) demographic pressures; (11) refugees and internally displaced persons; and (12) external interventions.

Some middle-income states are beset by problems of high fragility, which is likely to severely reduce their economic resilience. Figure 2, below, shows a scatter plot for lower-income and middle-income countries comparing GDP per capita to a modified measure of the state fragility index (including all measures except economic strength). As can be seen, whilst there is a correlation between GDP per capita and state fragility, several lower-middle income countries score very poorly. These include (from most fragile downwards): (1) Cameroon; (2) Zimbabwe; (3) Iraq; (4) Nigeria; (5) Myanmar; (6) Libya (upper-middle income); (7) Pakistan; (8) the Republic of Congo; (9) Kenya; and (10) Côte d'Ivoire.

Figure 2: Fragility in middle-income countries.



Source: Author's own, data taken from Fragile States Index (The Fund for Peace, 2020), <https://fragilestatesindex.org/>

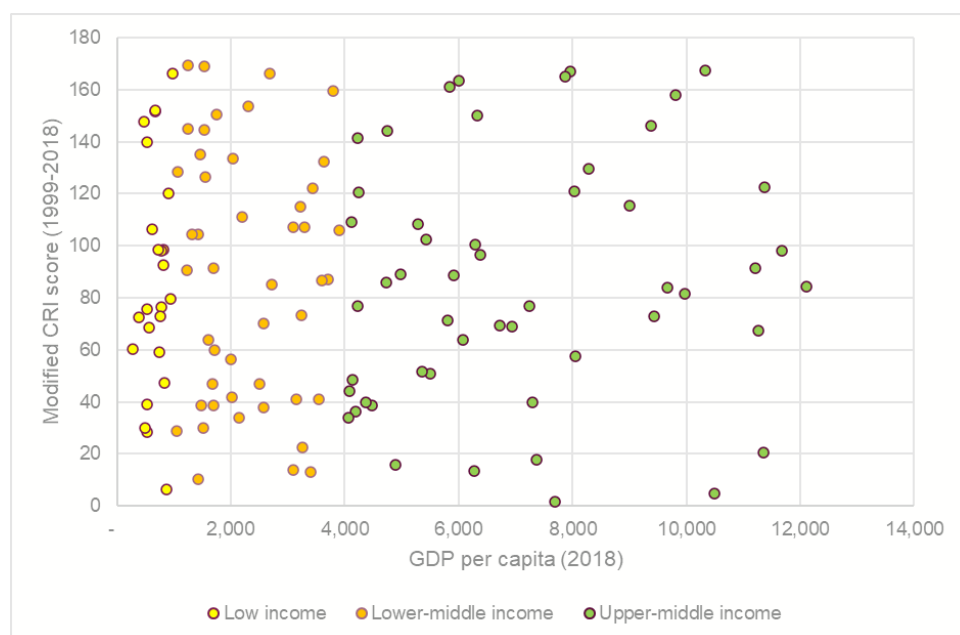
In addition, a substantial minority of middle-income countries are anocracies, which are known to be plagued by instability and low levels of effectiveness potentially also reducing their economic resilience. Anocracies are intermediate states between autocracies

and full democracies. 28 out of 88 middle-income states classified according to their regime type by Boix, Miller and Rosato (2013, 2018) were found to be anocracies. Anocracies have been found to be of particularly high risk of political and economic instability. Petersen (2020) also found that anocracies were the least likely regime type to perform well in terms of COVID testing rates.

A substantial minority of middle-income countries face serious risks of climate-related shocks. GermanWatch (Eckstein et al., 2020) has developed a climate risk index using data from weather-related disasters over the period 1999-2018, which takes into account: (1) number of deaths; (2) number of deaths per 100,000 population; (3) losses in PPP USD; and (4) losses as a proportion of GDP. Analysis was conducted as part of the research for this paper, utilising a modified version of this dataset (using just losses as a share of GDP and deaths per 100,000 population, in order to create an index that can be used to compare the vulnerability of countries regardless of size and population), to compare climate risk (with smaller numbers indicating more risk) to GDP per capita. As can be seen, from Figure 3, below, for lower and middle-income countries, there is no clear relationship between GDP per capita and this measure of climate risk though a simple regression analysis covering 178 countries revealed a statistically significant association between GDP per capita and reduced climate risk. However, this only explains 3% of variation in risk. Indeed, some of the highest risk countries on this measure are in fact upper-middle income countries, such as Dominica, Grenada, Fiji and Belize.

Small, island states – many of which are middle-income countries – appear particularly vulnerable to climate risks. Out of the top fifteen most vulnerable countries based on this measure only two are not island states: lower middle-income Myanmar (fifth most vulnerable) and upper-middle income Belize (tenth most vulnerable). This fits with analysis suggesting that Caribbean island states can expect a natural disaster every few years that results in damage and losses in excess of 5% of GDP (Bustillo and Velloso, 2018).

Figure 3: risk of climate-related shocks and GDP per capita.



Source: Author's own, data taken from Climate Risk Index (Eckstein et al., 2020)

Middle-income countries perform variably based on measures of macroeconomic stability, with a minority showing signs of serious weaknesses prior to the COVID-19 pandemic and a high proportion having poor credit ratings. In 2018 at least 27 middle-income countries had reserves equivalent to three months or less of imports, including Myanmar, several small island Caribbean states and Belarus. Fourteen had external debts greater than 90% of GDP. A number appear particularly vulnerable based on these measures, including Mongolia with external debts equivalent to 254% of GDP and reserves equivalent to just four months of imports and Djibouti with external debts equal to 158% of GDP and one month of imports worth of reserves. Of the 53 middle-income countries rated by Moody's for sovereign risk in 2020 only thirteen scored at lower-medium grade or above (see Table 3: Table 3, below). This demonstrates the challenges faced by middle-income countries securing financing from international markets, which potentially limit their ability to counteract shocks using fiscal policy.

Table 3: sovereign risk ratings for middle-income countries.

Grade	Lower-middle income	Upper-middle income
Upper-medium grade	N/A.	Malaysia China Botswana Peru
Lower-medium grade	Indonesia Philippines India	Mauritius Kazakhstan Mexico Bulgaria Thailand Colombia
Non-investment grade speculative	Morocco Bangladesh Senegal	Brazil Dominican Republic South Africa Fiji Paraguay Namibia Azerbaijan Georgia Guatemala Armenia
Highly speculative	Bolivia Tunisia Angola Ukraine Papua New Guinea Honduras Nicaragua Cambodia Pakistan	Costa Rica Turkey Montenegro Belarus Bosnia and Herzegovina Jamaica Albania Jordan Moldova Mongolia Sri Lanka El Salvador
Substantial risks	N/A.	Belize Surinam Cuba Ecuador
Extremely speculative	N/A.	Lebanon Argentina

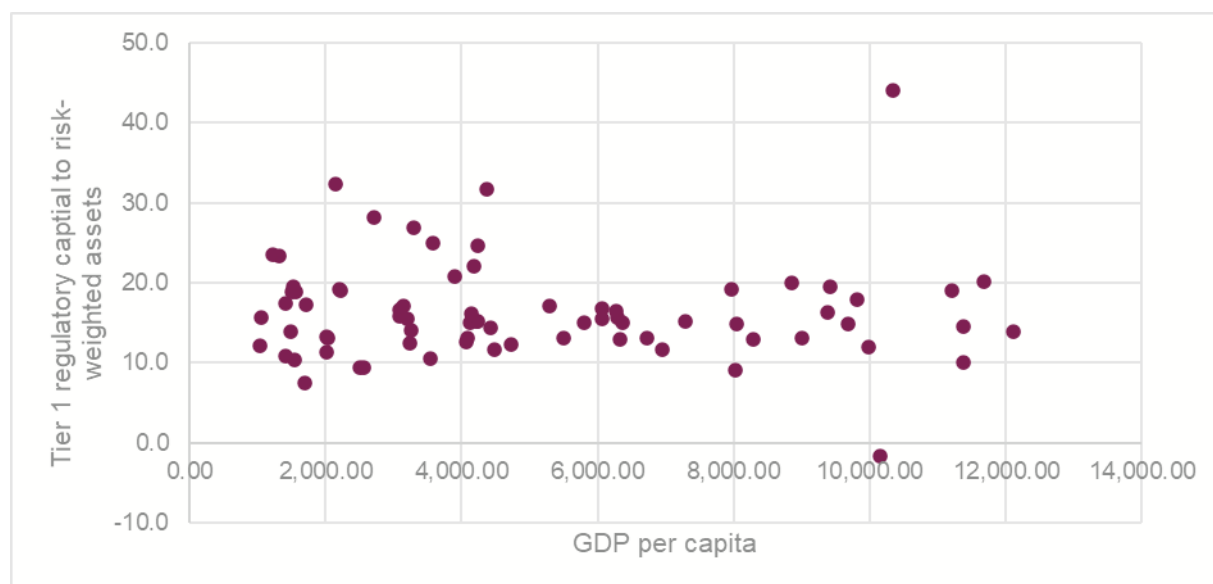
Source: Author's own, data taken from <https://countryeconomy.com/ratings>

Other measures indicate severe fiscal constraints in a substantial number of middle-income countries. In at least 30 middle-income countries government revenue represents 15% or less of GDP, in at least 22 there were more than 70 children or old people per 100 working age adults, whilst in 31 less than 50% of the total population were in employment. This indicates both that revenue collection capacity is weak and that many may have a relatively small taxable base relative to demands on expenditure. This could make it harder for these governments to take decisive action following shocks.

There is evidence that maintaining sound macroeconomic fundamentals is particularly important for small middle-income countries. These countries are particularly likely to default in the wake of structural shocks and that their cost of borrowing tends to be high relative to larger countries. For example, in the wake of the global financial crisis smaller Caribbean states were particularly likely to restructure bond payments, causing sovereign debt spreads for Caribbean states to increase significantly and their sovereign debt rating to decreasing significantly relative to the larger Latin American states (Bustillo and Velloso, 2014). Whilst this is partly an indication of their economic vulnerability, it also reduces their economic resilience by limiting their options for using fiscal policy for stabilisation and to protect the vulnerable.

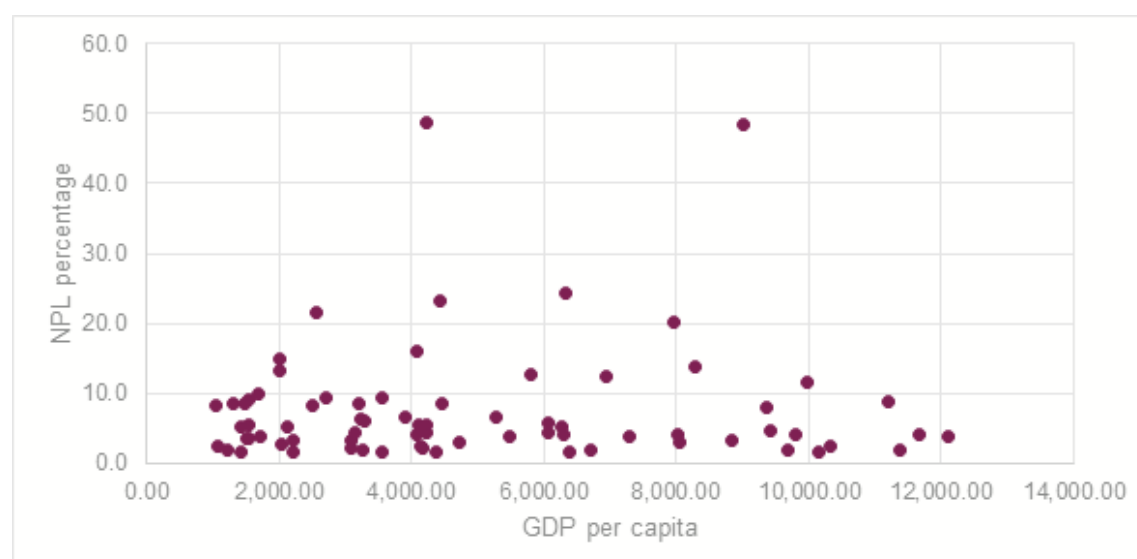
Average bank capital-asset ratios were unexceptional in most middle-income countries in the run-up to COVID-19. However, these is likely to have changed this year as the risk-weightings of assets will have deteriorated sharply. In all middle-income countries except Equatorial Guinea the average Tier 1 capital-asset ratio was above the 6% minimum specified under Basel III in 2018 (see Figure 4, below) though this does not imply that this is the case for all banks within each country. Indeed, the average regulatory Tier-1 capital-asset ratio for middle-income countries was only slightly below that for high-income countries (16% rather than 17%). However, there was fairly substantial variation amongst middle-income countries, with a number (e.g. Bangladesh, Lebanon, Honduras, Vietnam, Russia, Cameroon, Bolivia and Myanmar) having a Tier 1 capital-asset ratio in the 7-11% range which characterised those countries most badly affected by the global financial crisis in the run up to 2008/9 (Navajas and Thegeya, 2013).

Figure 4: average bank Tier 1 regulatory-capital to risk-weighted assets in middle-income countries. Source: IMF (<https://data.imf.org/>), reproduced with permission



Non-performing loan ratios (NPLs) were moderate in most middle-income countries prior to COVID-19, but worryingly high in a small minority – the situation is likely to have deteriorated this year, increasing the risks of banking crises going forward. Figure 5 plots the most recently available IMF data on NPLs (all pre-COVID) against GDP per capita for 68 middle-income countries. The median rate is just 5%, slightly more than the median of 2% for higher-income countries, and it appears that lower-middle income countries are more likely than higher-middle income countries to have a high NPL. However, 20% of the sample (13 countries) have a NPL ratio over 10%, compared to just 10% for the higher-income countries. Furthermore, those middle-income countries with higher NPL ratios also tend to have weaker Tier 1 capital-asset ratios. This indicates that there are a minority of middle-income countries were likely already fairly vulnerable to banking crises prior to COVID-19. Many businesses and individuals are likely defaulting on loan payments in the wake of COVID-19 or will do so in the near future. This implies that – beyond the COVID-19 pandemic itself – there will be a heightened risk of financial sector shocks in middle-income countries in the next few years.

Figure 5: Non-performing loan ratios (%) compared to GDP per capita in middle-income countries. Source: World Bank (<https://data.worldbank.org/>), licensed under [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](#),



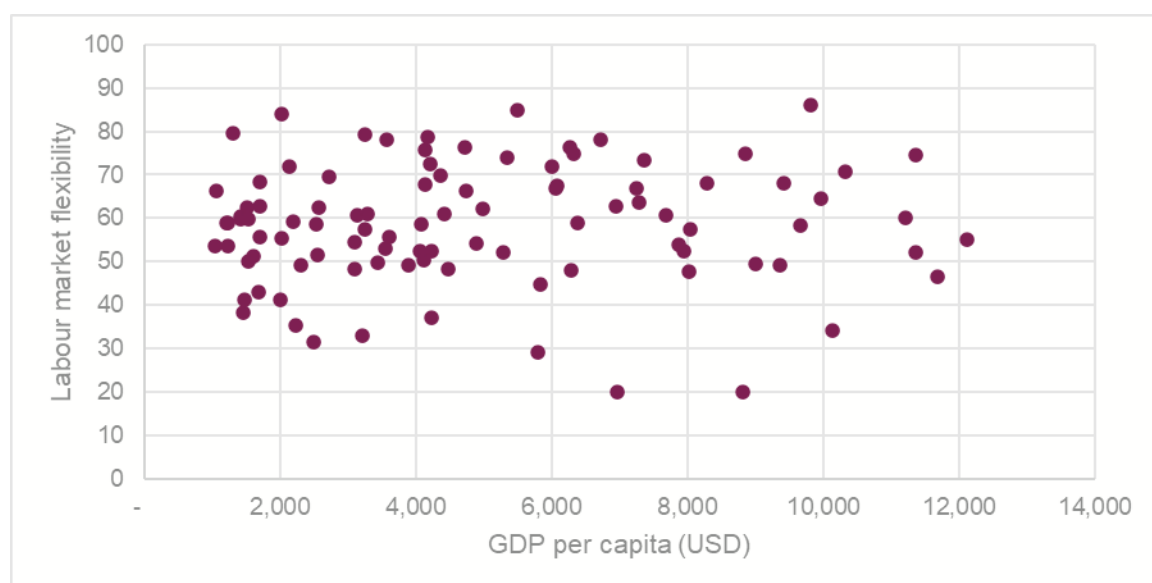
A high proportion of middle-income countries are relatively open economies with high levels of trade dependency, which increases their susceptibility to financial shocks. In 2018, out middle-income countries with available data, 68 had a trade to GDP ratio above the global average of 59%, compared to just 35 below the average. Moreover, 38 middle-income countries had a trade to GDP ratio above 90%. In addition, World Integrated Trade Solution (WITS) (World Bank, 2020) data reveals that those middle-income countries for which data is available had a substantially higher export concentration than do high income countries. Together this suggests a pattern of middle-income country vulnerability to international demand shocks.

Data from the ILO (2017) indicates very patchy coverage of social protection schemes in many middle-income countries, reducing their ability to rely on automatic fiscal stabilisers during crisis and increasing the likely negative impact of shocks on vulnerable groups. In many African middle-income countries (e.g. Ghana; Kenya; Lesotho; Nigeria) unemployment

social protection coverage is entirely missing, whilst in other parts of the world coverage is often low even in upper-middle income countries (e.g. less than 8% in Brazil). In general, old age protection coverage is better than unemployment protection (e.g. in Africa: 16% in Ghana; 25% in Kenya; and 94% in Lesotho), but it remains variable even comparing countries from the same region and similar GDP per capita (e.g. 52% in Ecuador but just 22% in Paraguay). Coverage for the severely disabled appears even more varied, with universal coverage in some middle-income countries (e.g. Brazil), but minimal coverage in many other (e.g. 2% in Bolivia).

Labour market regulations vary widely across middle-income countries, with low levels of flexibility in some potentially limiting their ability to adjust appropriately in the face of economic shocks. The Heritage Foundation assesses labour market freedom as part of its Economic Freedom of the World Index. As can be seen from Figure 6, below, middle-income countries vary widely based on this 0-100 scale, with no clear relationship between relative wealth and labour market flexibility. A similar pattern of wide variation in performance, largely uncorrelated with GDP per capita, can be found for the Ease of Doing Business Index (which I take as a proxy for well-managed and flexible business environment).

Figure 6: labour market flexibility compared to GDP per capita in middle-income countries. Source: World Bank (www.doingbusiness.org), licensed under Creative Commons Attribution 4.0 International License (CC BY 4.0),



6. What kinds of policies and systems would support inclusive economic resilience in MICs?

This section examines three policy areas in which reforms could potentially increase the economic resilience of middle-income countries.

Revenue mobilisation

Increasing fiscal space in middle-income countries will need to rest on two main planks: increased revenue mobilisation and expenditure prioritisation and control. On the revenue side, the relatively poor performance of middle-income countries is clear: high-income countries

have a tax-GDP ratio slightly below 40% on average, for upper-middle income countries it is not much more than 30% and lower-middle income countries tend to have a ratio of only around 25% (Junquera-Valera et al., 2017).

The World Bank (Junquera-Varela, et al., 2017) has set out a number of priorities for revenue reform in middle-income countries, including:

- **Increasing revenue from direct taxation**, especially by increasing the effectiveness of taxation of the incomes of self-employed professionals and the investment income of the very wealthy. This both offers the opportunity to increase fiscal space overall and to make taxation policy more equitable, supporting the inclusivity of economic resilience.
- **Appropriate taxation of natural resource production**, utilising corporate income taxes, resource rent taxes and/or royalty payments. This is particularly relevant given the number of lower-middle income countries which depend heavily on natural resource exports.
- **Increased revenue collection from 'sin taxes'** (e.g. on alcohol and cigarette) and 'green taxes' (e.g. fuel duty), which both have revenue raising potential and can help to reduce the need for expenditure in other areas (e.g. health spending). Currently most LMIC countries impose much lower rates of tax on cigarettes than do advanced economies.
- **Measures to increase corporate taxes and VAT through business registration, regulatory and tax administration reforms to encourage business formalisation, and measures to encourage switching from cash to electronic payments.**
- **Reducing tax expenditure** (i.e. exemptions and incentive schemes), with a likely first step being publishing details of tax expenditures and/or including tax expenditure as a line item in the government budget
- **Improving tax administration performance and efficiency**, through measures such as corporatisation of revenue authorities, improved use of ICT, increased use of risk-based audits and improved communication with tax payers.

Management of investment flows and financial system risks

Controls on capital inflows and outflows have been frequently used by middle-income countries, particularly during times of crisis and amongst countries with fixed exchange rates. The East Asian Crisis also led Malaysia and some other East Asian countries to adopt controls on capital outflows in an effort to control the crisis and increase stability in the future (Kaplan and Rodrik, 2002). Such controls have also been adopted in other parts of the world, for example controls on inflows in Chile in the 1990s. In the run up to and aftermath of the global financial crisis of 2008/9, capital controls were even more frequently utilised in middle-income countries, including Brazil, Colombia, Indonesia, South Korea, Taiwan and Thailand.

Since the late 1990s economists have increasingly come to accept that capital controls have a role to play in reducing the risks of economic shocks. In the wake of the East Asian Financial Crisis of 1997 crisis many commentators noted that those East Asian countries that most closely controlled capital inflows – notably China, Taiwan, and India – were least effected by the crisis (Crotty, et al., 1999). Analysis by Maud et al. (2011) suggests that controls on capital inflows make monetary policy more independent, reduce real exchange rate pressures, and alter

the composition of investment inflows towards longer maturity investments (thus reducing volatility), whilst not affecting the overall volume of inflows. Controls on capital outflows also appeared to be effective in the case of Malaysia, though elsewhere they have proved very hard to enforce and largely ineffective (Maud et al, 2011). Indeed, in a reversal of its stance in previous decades, the IMF now recommends the use of controls on both capital inflows and outflows in certain circumstances.

However, capital controls need to be designed carefully to be effective and to avoid adverse consequences. The design and implementation of these controls is a complex matter, and badly designed controls can exacerbate corruption and deter productive investments (Hartwell, 2001). Even in the case of the poster-child for capital controls - Malaysia during the Asian Financial Crisis – there is evidence that controls may have had negative consequences. In particular, they have been blamed for an intensification in a culture of "crony capitalism" that may have reduced economic growth and stability in the long-term (Kaplan and Rodrik, 2002).

Regardless of whether capital controls are utilised, sound macroeconomic policy can help reduce disruptive volatility in capital flows following shocks. There is evidence that FPI volatility is strongly influenced by the volatility of expectations regarding future macroeconomic variables such as the interest rate, inflation, exchange rate, market capitalization rate and GDP (Karimo and Tobi, 2013). Whilst these are clearly all influenced by exogenous factors they are also influenced by policies adopted by governments and central banks. As a result, it is reasonable to conclude that building a reputation for sound fiscal and monetary policy will reduce the volatility of capital flows during a crisis, supporting economic resilience.

Sound financial sector regulation is increasingly recognised as vital to ensuring economic resilience in the face of economic shocks. The Basel III accords on banking regulations represented a key development in the wake of the Global Financial Crisis designed to prevent the reoccurrence of similar crises. The standards are still in the process of implementation, with the deadline for implementation of some enhanced rules delayed from 2022 to 2023 in light of the need in many countries to focus on the immediate coronavirus response (Bank of International Settlements, 2020). Only a few middle-income countries (Argentina, Brazil, China, India, Indonesia, Mexico, Russia, South Africa and Turkey) are members of the Basel Committee on Banking Supervision, which developed Basel III. However, there is evidence that countries that adopt the kinds of regulations recommended by BASEL III are less likely to suffer from severe financial crises in the face of economic shocks (Navajas & Thegeya, 2013).

Crisis management

Effective governments are better able to respond to the challenges posed by severe economic shocks. General government effectiveness and policy capacity is generally as important as the specific of crisis planning and response protocols, particularly when it comes to dealing with novel and multi-dimensional shocks (Woo, 2020). This is not something that can be built rapidly or through easy fixes. Improving government effectiveness during crises requires the development over time of systems for policy development and implementation and competent cadres of civil servants at the policy level. It also requires the existence of competent operational-level staff with appropriate standard-operating-procedures (Baubion, 2013).

Crisis management procedures are also important, especially systems for cross-government coordination. Often crises require working across normal sectoral categories and

organisational units in order to develop a response that is both rapid and comprehensive. There is some evidence that pre-planned crisis management protocols and coordination mechanisms can help achieve this (Janssen and der Voort, 2020). Such systems and procedures are, however, generally not a substitute for strong centre-of-government institutions (e.g. Prime Ministers' Offices and Finance Ministries) capable of coordinating the response to a complex emergency across government.

The OECD (Baubion, 2013) has identified five cross-cutting issues that affect the effectiveness of crisis management by governments. This includes the need for an overall crisis governance framework, the importance of access to scientific knowledge and expertise, the centrality of leadership, development of inter-agency response networks that can be mobilised and coordinated to achieve a cohesive response, and capacity for international cooperation. In addition, evidence from the 2015 MERS outbreak and the 2020 COVID pandemic has borne out the longstanding understanding of the importance of effective public communication during a crisis, including the ability to use both regular and social media in order to increase compliance with necessary measures (Lee & Hong, 2016; Rao, et al., 2020).

Countries can also help prepare for future crises by moving towards a systematic approach to identifying future threats and conducting contingency planning for their eventuality. An example of this approach concerns Singapore's creation of the Centre for Strategic Futures in the wake of SARS. The Centre was situated at the heart of government, within the Prime Minister's Office, and was tasked to conduct "horizon scanning", with the promotion of "resilience" being one of its specific tasks (Centre for Strategic Futures, 2017).

Ensuring an appropriate balance between the efficiency and robustness of systems

Resilience is not without costs and is not compatible with a single-minded pursuit of efficiency in which resources are exclusively allocated to maximise immediate productivity or value-for-money. As Nasim Nicholas Taleb has noted, in overly-optimised systems, "errors compound, multiply and swell", creating dangerous cascades that might be avoided in a system that was less efficient but more robust.

Wu et al. (2020) argue that the key to resilience in the face of severe shocks is to build-up "excess capacity" or "slack" that will normally be underutilised. This is not a prescription that is confined to specific domains (e.g. having more emergency beds than you need in normal times), since the specific capacities that will be tested by future shocks are generally hard to predict. Instead, it requires a recalibration of public administration priorities across the board, away from a narrow focus on efficiency or optimisation for routine procedures, towards an approach that also takes account of the need for robustness in the face of unexpected demands and shocks. This relates to an acceptance of built-in system inefficiencies that support upscaling and adaption when required. Examples of this could concern the existence of taxes set at very low rates, which may be inefficient in terms of the revenue collected relative to the cost of collection, but which offer the opportunity to rapidly increase revenue by increasing rates. This may be particularly relevant for borrowing-constrained middle-income countries.

An appreciation of the potential trade-offs between efficiency and resilience needs to be built into future development programming in middle-income countries. One of the dominant paradigms that has influenced the design of development programming, the New

Public Management (NPM) approach (Valters and Whitty, 2017), has often led to a focus on increasing the efficiency of the economic and political systems of lower- and middle-income countries rather than their resilience. There is a strong case to be made for more development programmes to be designed specifically to support increased resilience in middle-income countries. However, a more important initial priority is probably to ensure that programming explicitly takes account of the possibility of trade-offs between primary programme objectives and economic resilience. One possibility to ensure that economic resilience concerns are built into the design of future programmes would be to require that programme business cases for new programmes consider a question such as: "what impact will this programme have on economic resilience." This would, to some extent, represent a natural extension of the existing requirement that business cases for programmes in fragile states, consider the potential impact on state fragility and conflict risks (DFID, 2011).

7. References

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Key websites

- International Monetary Fund Data: <https://data.imf.org/>
- John Hopkins University Coronavirus Resource Center: <https://coronavirus.jhu.edu/map.html>
- UNIDO Data Portal: <https://stat.unido.org/database>
- World Bank Open Data: <http://data.worldbank.org/>
- World Bank Integrated Trade Solution: <https://wits.worldbank.org/>
- <https://countryeconomy.com/ratings>

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