ECONOMICS AND SECURITY COMMITTEE (ESC)

THE ECONOMIC CONSEQUENCES OF THE COVID-19 PANDEMIC

Report

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I. INTRODUCTION

1. The global community is currently undergoing the most consequential pandemic since the outbreak of Spanish influenza in 1918-19. Pandemics, however, are not as rare as many have thought. Indeed, there have been four major pandemics over the last 120 years when flu viruses genetically mutated, and the resulting novel viruses overwhelmed humanity's natural defences: 1918, 1957, 1968, and 2009. The lethality of these diseases, however, has varied considerably. The so-called swine flu of 2009, for example, proved mild in its health impacts, unlike the 1918 influenza, but it spread widely and rapidly because of the high rate of global integration and dense global travel networks (Verikios et al., January 2011).

2. It is too soon to fathom the toll that the current outbreak of the COVID-19 virus will exact on Western societies and the world as a whole, but it is already clear that the economic costs have been very substantial and are likely to impinge on the global economy for several years at least. What is particularly worrisome is that this highly infectious virus has made it very difficult to carry out normal human interaction and compelled millions of people to remain home and to venture out only for the most essential reasons. This has effectively put a sudden stop to entire categories of human and economic activity. The global economic consequences have accordingly been considerable and, in some cases, catastrophic.

3. It is essential that parliamentarians and policymakers understand the underlying economics of pandemics as they are charged with formulating approaches to managing and containing the pandemic while minimising the economic crisis and its daunting aftermath. Myriad economics papers published in recent years have sought to model the macro-and microeconomic impacts of pandemics. The purpose of this report is neither to build a model nor delve deeply into this important and instructive literature. It is rather to illustrate the various economic forces at play and how these are shaping the policy calculations that governments are undertaking to mitigate the immediate and longer-term economic impacts of the pandemic. It will also seek to identify how societies might best hedge against future pandemics in far more serious ways than has been done in the past. The CORONA-19 pandemic has served as a clarion call to the international community that far more vigilance and preparation will henceforward be essential. This will not come without substantial costs. But the price of inaction or under-preparation is, as we are now sadly learning, far greater.

II. DEFINING PANDEMICS AS ECONOMIC PHENOMENA

4. For the purpose of analysis, it is important to recognise pandemics as negative external or exogenous economic shocks. They can move from not being part of the economic landscape on one day to suddenly becoming perhaps the most dominant variable shaping economic activity in a country, or indeed the world, soon thereafter. In economic terms, disease might be understood as a phenomenon external to the normal working of an economy. But once the shock is felt, it can affect supply, demand, and monetary and fiscal conditions in profound ways. Under the conditions of a pandemic, consumer and investor behaviour can radically and suddenly shift. As has become apparent in the current pandemic, contractions occur almost immediately in output levels, corporate investment, household spending, employment, and trade (OECD,14 April 2020).

5. A pandemic can also shape intangibles like uncertainty, which is the great nemesis of growth-oriented economic behaviour premised on the longer-term, including basic investment decisions. A global pandemic perceived to be economically consequential will trigger an immediate flight from risk and set off an ever-more frenetic search for assets which promise to depreciate least in times of grave uncertainty - triple A bonds, cash, and gold might be three examples - even when these carry their own risks. Developing countries can undergo a precipitous withdrawal of investment capital as investors seek safe havens usually in the most developed economies. Economic calculation moves from the long-term to the immediate. All sectors of economic society face consequences as a result and households, consumers, industry, service providers, investors, exporters, importers, workers, and government all need to adjust as a result. Government itself is

likely to undergo a dramatic transformation as it is the highest expression of the collective interest and responsible for generalised responses in the face of grave societal challenges. It might not be an exaggeration to suggest that in times of pandemic, even those who tend to see markets rather than states as the central drivers of economic organisation begin to lean towards the state simply because no private actor has the breadth, the reach, the legitimacy, and the mandate to formulate collective responses to such profound challenges. Francis Fukuyama has argued that state capacity, social trust and leadership are critical to countering the impact of pandemics. Countries with dysfunctional states, polarized societies, or governments unable to rise to the occasion have fared poorly and left their citizens vulnerable to the ravages of the disease (Fukuyama, 2020).

6. Arguing this does not mean that markets are automatically relegated to a tertiary function in the midst of a pandemic crisis. To the contrary, they continue to play an important role in allocating resources and even in mitigating the disaster itself - for example, by developing vaccines or palliative treatments, distributing food, and meeting other essential needs of citizens who feel that they are under siege. That said, state-market relations invariably shift at moments of great societal risk. There is very clear evidence that the COVID-19 crisis is no exception in this regard as states have embarked upon massive interventions to cope with medical challenges while holding economic depression at bay.

7. Of course, the nature of the pandemic itself will shape its economic consequences. Among the critical factors here are the percentage of the population infected, the number of work weeks lost due to sickness or lockdown, the share of those infected who die - otherwise known as the morbidity rate - and the duration of the pandemic (Jonung and Roeger, 2006). Some models (Verikios et al., January 2011) suggest that low virulence-high infectiousness epidemics are likely to have more profoundly negative economic consequences than high virulence-low infectiousness epidemics. This is because infectiousness undermines human-to-human contact, without which an economy cannot properly function, even in a digital age. The level of global integration might also be consequential. Regions that are more globally integrated are more likely to suffer negative economic consequences as global trade falls than those that are less integrated globally.

8. Another factor obviously is the duration of the pandemic. Most pandemics in the past have not endured for long periods of time. Generally, they last three to four months, although there is a risk that after a peak and decline in the summer, for example, a pandemic can reoccur with a vengeance in the ensuing flu season. The COVID-19 pandemic shows signs that it will endure significantly longer than this and that it is explosively contagious. Obviously, the length of time during which the pandemic impedes economic activity and imposes added medical and social costs will partly determine the overall cost of the disease. If a second wave occurs, the impacts can be even greater. This was the case during the so-called Spanish influenza in 1918-1919 and is a grave concern now as the Northern hemisphere enters the so-called flu season.

III. SHUTDOWNS AND THE ECONOMY

9. It is also important to recognise that measures undertaken to minimise the impact of a pandemic can undermine the economy, at least over the short-term. This has been patently obvious during the current crisis as governments have required businesses and schools to shut down and workers to remain at home both to minimise the spread of disease and to lower the risk of collapsing national health care systems. While lockdowns buy time, lower pressure on highly stressed health care facilities and workers, and reduce rates of infection, they also shutter whole swathes of national economies. In an integrated global economic order, bottlenecks become immediately apparent as commercial enterprises close their doors, thereby magnifying the adverse impact on national economies. Intermediate goods required for manufacturing finished products are not shipped and shipping itself may be delayed or restricted. The particular risk of infection to those at sea only exacerbates the problem as do governments that embark upon uneconomic protectionist fixes.

10. Of course, the economic argument for lockdowns is that the cost of inaction would be significantly higher. This has been a matter of considerable political debate during the current crisis, and countries have indeed adopted different strategies. Many experts today agree that reopening a national economy without having effectively lowered the curve of infection, and failing to undertake a range of measures to prevent additional infections, including social distancing, effective detection, testing, isolating and treating protocols, minimisation of hot spots, and fully educating engaged and empowered communities risks triggering additional rounds of mass infection, which, in turn, would have additional massive economic costs (WHO, 2020). Failing to generate social consensus around government measures can both increase the duration of the medical crisis and trigger political unrest without resolving the confidence problem that so hinders economic activity. It is increasingly apparent that those societies unwilling to swallow tough measures early on will confront far more significant epidemiological and economic challenges down the road and these, in turn, can have significant political, societal, and strategic consequences.

IV. MACRO- AND MICROECONOMIC DIMENSIONS OF THE CURRENT CRISIS

11. Given the rapidity of change induced by the economic shock of the COVID-19 pandemic, it is difficult to assess fully its impact on growth. Initial studies conducted by the OECD suggest that output in many economies initially fell between one fifth and one quarter, while consumer expenditure declined by one third during the early weeks of the crisis (OECD,14/4/20). This is significantly greater than any impact felt during the financial crisis of 2008-2009, although that study did not venture beyond initial impacts. Annual numbers will hinge on the degree and duration of the disease and shutdown, the degree of demand decline and supply bottlenecks, the nature and speed of implementation of offsetting structural, fiscal, and monetary measures, and international responses or lack thereof.

12. That said, there is little doubt that annual growth figures for 2020 in nearly every developed country will be significantly lower, and the impact will be even greater in developing countries. Based on early partial data, the OECD suggests that the annual decline for national economies might be 2% for every month that strong containment measures are in place (OECD,14 April 2020). Additional factors here include the uncertainty of how long current measures will remain in place, divergence in national and regional approaches to shutdowns, differing levels of support for consumers and businesses, as well as persistent uncertainty, which will have the effect of undermining investor confidence. The numbers for both Europe and the United States, however, have proven considerably worse than these initial projections.

13. When the world’s economies are all slowing together, there is also a negative procyclical effect that only hastens the collective decline of the global economy. In normal times, the impact of deteriorating economies on global growth is often at least partly offset by those national economies undergoing a rise in demand and growth. Those economies, through the trading order, import goods from slowing economies and thereby provide a much-needed stimulus to them. In the current crisis, virtually no economies are growing so there is a collective push downward with few breaks beyond the injection of government cash to keep consumers solvent and vital businesses functioning. So far, therefore, no economy has emerged as an engine of global recovery. Both Europe and the United States slowed markedly in the second quarter of 2020—a trend which had very adverse impacts on growth among their trading partners. China’s current low growth is not significant enough to act as a genuine engine of growth.

14. A pandemic will obviously take a significant share of workers out of the job market. Some fall victim to layoffs while others are compelled to stop working simply because of schools closing in cases where there are no other alternatives to childcare. Indeed, as schools are often powerful agents of disease spread, school closings are generally seen as essential public health measures in the face of a pandemic. But the impact on the work force of such closures is immediate and consequential.

15. A pandemic will also have a rapid and negative impact on trade, particularly once governments essentially shut down commercial activities and undertake measures to close borders. Even if the pace of international trade growth has slowed in recent years, in part, because of mounting protectionist sentiment, trade remains a central engine of economic growth, development, and innovation. Many industries continue to rely upon global supply chains, but the coronavirus has severed critical key links in those chains. Indeed, the sudden fall in international trade could prove one of the most devastating longer-term economic consequences of the current crisis. Just as trade growth has been a critical factor in wealth generation in the many years since the end of World War II, so too would the shutdown of trade become an agent of wealth destruction.

V. INITIAL IMPACTS

16. Business activity in Europe and the United States literally crashed in March as countries began to undertake measures to slow the spread of the COVID-19 virus. The IHS Markit Flash Composite Purchasing Manager's Index dropped to historic lows in the United States, the Eurozone, and the United Kingdom, with readings in all three areas showing that a majority of businesses were reporting a sharp deterioration in activity compared with the previous month. This data, published in mid-March, reflected conditions before the full extent of economic damage had become apparent. The most significant initial impacts were in consumer sectors including hotels and restaurants, as well as transport and travel. Manufacturing slowed less, although the decline was nonetheless deeply concerning (Arnold et al, 2020).

17. The OECD has sought to assess the impact of sectoral closures on national economies. The most affected sectors experiencing output declines of between 50-100% include a range of service sectors like travel, tourism, and any business in which consumers and service providers are necessarily in direct contact. Indeed, many retail businesses were quickly shuttered, including restaurants and theatres. Construction was struck due to containment measures, the collapse of demand due to mounting financial difficulties, and the general worsening investment climate linked to mounting uncertainty. Manufacturing suffered less in this climate, although the transportation manufacturing sector has been and remains hard hit due to the fall in orders and supply bottlenecks. The OECD believes that these developments knocked off 20-25% of output in most OECD countries in the first weeks of the crisis. But the annual impact will hinge on the intensity and length of shutdowns, the financial damage inflicted by the crisis, and how poised countries and companies are to recover.

18. The collapse of consumer spending has certainly been a key factor in these declines, with the greatest impact on more discretionary types of spending in largely shuttered sectors like clothing, restaurants, and tourism. Obviously, essential goods demand does not undergo the kind of reductions seen in sectors considered more discretionary in nature. In OECD models, consumer spending accounts for roughly three-fifths of GDP, so any precipitous collapse in consumer outlays is immediately significant.

19. Specific impacts will nevertheless vary by country. Germany, for example, will be struck by a fall in the transport sector, while Italy and Greece are vulnerable to a reduction in tourism and travel. Countries more dependent on commodity production will also be affected by demand and price conditions in those markets. In its initial modelling, the OECD estimates that business closures could precipitate a 15% fall in output in advanced economies and major emerging-market economies after the full implementation of confinement measures (OECD, 14 April 2020).

20. Consumer demand is also an essential component of growth. It has, for example, long been an engine of the US economy, typically accounting for two thirds of GNP growth there. It played an oversized role during the recovery from the last recession. The fall of that demand has thus had a sharp impact on US growth. There are concerns that US consumers will not be poised to play the role they previously did once this crisis is over. The monthly season adjusted unemployment rate in the United States, stood at 7.9 % in August 2020 down from 14.7 % in April (U.S. Bureau of Labour

Statistics, 2 October 2020.) Consumer demand has been undermined by the weak job market. In an era of grave economic uncertainty and debt overhang, consumers are also likely to place a greater emphasis on savings, and confidence is unlikely to return quickly after a brutal and exacting recession (Cordray, 2020).

21. Timing is another factor as different countries have been struck in varying ways by COVID-19. Indeed, countries enact shutdowns at different times and in different ways. The first to lower disease spread may have the advantage of also being the first to return to normal economic and societal rules. But those countries confront the problem that other economies may remain shuttered. Recovery times are obviously conditioned by the effectiveness of initial national responses. China, which was struck early and responded with strong quarantine and testing measures, was positioned to ramp up economic activity at an early phase of the global crisis. That said, it is confronting a range of difficulties that are now hampering recovery, primarily because as a trading country, it depends on foreign demand to grow and that foreign demand is currently in a state of collapse. Other countries enacted shutdowns but then opened too soon leading to significant spikes in the virus which undermined ambitions for recovery. Corporate debt overhang will also prove a particularly compelling challenge as firms confront serious liquidity problems and, depending on the health of their respective financial systems, may not enjoy full access to credit markets needed to survive the downturn.

VI. SELECTED SECTORAL IMPACTS

A. FINANCIAL MARKETS

22. As a result of the pandemic, financial markets today confront their greatest challenge since the global financial crisis of 2008. In some respects, these markets entered the current crisis even more vulnerable than they were twelve years ago. In both instances, there was an inordinate amount of debt when crisis struck. In 2008 that debt was held by financial institutions. In the current crisis, much of the debt is held by business and governments. Indeed, corporate debt has doubled since the last crisis, and the quality of this debt has declined substantially. According to the OECD, more than half of corporate bonds were or were near junk status in March when COVID-19 struck. While the amount of AAA rated corporate bonds on the market has diminished as a share of all bonds on the market, the amount of BBB bonds, which are just above junk status rose to roughly 50% of the total. In the current crisis, these are extraordinarily vulnerable to a downgrading to junk status.

23. Many companies had taken on highly leveraged loans in recent years. Companies that assumed substantial debt and are cash driven are poorly positioned to weather the economic fallout linked to the pandemic and are thus more likely to default on these loans. Many of these firms are operating in sectors that have been particularly struck by the crisis, including airlines, energy, manufacturing, and consumer goods businesses.

24. Financial firms have collateralised many outstanding loans in debt packages and sold these on to investors like pension funds, banks, and insurance firms. In a growing economy, such debt is sustainable, particularly when interest rates are low, and earnings are high. But these loans look far less viable during a downturn and can accelerate a recession. The OECD has warned of a vicious cycle in which economic activity falls precipitously. This then reduces business income, defaults rise, credit downgrades occur, investors and funds dump debt on the market, credit becomes more expensive and this, in turn, feeds into further defaults. Indeed, the cost of corporate borrowing rose as the pandemic struck, and debt sell-offs began. In the market, lenders suddenly had to worry about the creditworthiness of borrowers, while many businesses were poorly positioned to borrow to meet short term obligations. This created serious liquidity problems that could eventually cause economies to seize up and trigger more generalised solvency problems.

25. Fortunately, central banks today have had wiggle room to launch quantitative easing measures and debt and equity purchases, both to inject liquidity into national economies and to prop up suddenly ailing firms. Governments and fiscal authorities have also felt compelled to invest equity directly into ailing and indebted firms or, where allowed, they have directly purchased assets. The OECD suggests that governments ought to focus on preventing defaults where possible. This will likely require substantial government support for cash-starved business and consumers. The risk here is that this might worsen government balance sheets and lead to a moral hazard problem by which firms come to assume that there is always an investor of last resort – in this case, the government – to bail them out. Returning assets to private markets could take years depending on the pace of recovery. But this risk might well be outweighed by the systemic threat posed by an impending spiral to depression (Medcraft, 2020).

B. TRAVEL

26. Consumer spending during pandemics is also likely to fall precipitously as the public focuses its expenditure only on what is essential. The travel and tourist sectors are among the first victims of a pandemic-induced recession as travel itself poses very apparent medical risks not only to travellers but also to destination sites. Indeed, among the most powerful initial agents of the spread of COVID-19 were those who had travelled to so-called “hot spots” where the virus first took hold – Hubei in China and Lombardy in Italy are two examples here. Both are important business travel destinations and are very much linked to the global economy.

27. Travellers are powerful agents of disease spread. Therefore, among the most important measures taken to restrain disease spread are border closures, lockdowns, and a range of other travel restrictions. These measures have obvious negative impacts. As the airline industry is a cash dependent business, the economic consequences of grounding an air fleet can quickly become catastrophic not only for the airliners but also for airline manufacturers and the tourism, hospitality, and trade sectors. In the 2003 SARS epidemic, which was relatively mild in its impact, the travel and hotel businesses were the most affected. The travel industry has been struck far more severely in the current crisis because the pandemic globalised so quickly.

28. If one considers that Boeing is the single largest exporter in the United States, the potential impact on the US economy of a dramatically shrinking travel and airline business becomes apparent. Obviously, this is the case in Europe as well, as vital companies like Airbus play a central role in the continent’s economy and its technological development. This core industry is now beset by dramatically shrinking sales as the airline customer base is also in crisis. The problem extends deeply into both the North American and European economies as the supplier base for large manufacturers is large and dispersed. The pandemic has stuck the passenger aviation far more than cargo aviation due to lockdowns and restrictions on international travel. That sector is expected to lose an estimated USD314 billion in 2020 and the recovery could take several years. Recession, continued restrictions, and passenger concerns will continue to plague the sector over the coming months (Mazareanu, 2020).

29. The automobile sector has been similarly impacted and is beset not only with falling demand but also a serious disruption in Chinese parts exports and plant closures in Europe and North America. The European Automobile Manufacturer’s Association announced that the market had contracted by 45.1% as of June and forecast that sales would end up falling by 25% in 2020 due to the COVID 19 epidemic and related recession (EAMA, 2020). US vehicle sales were forecast to fall by about 34% in the second quarter (Wayland, 2020). Demand falls on this scale will also result in substantially less energy demand over the coming year (see below), although the depth and duration of declines will depend on the duration and breadth of the COVID19 outbreak. In any case, car companies may have to divert capital from technology development to cover current operational costs, and a number of firms may be pulling out of certain sectors of the market to slash expenses (Deloitte, 2020). The parts manufacturer Bosch alone closed 100 manufacturing sites following the outbreak (Miller and Campbell, 2020).

C. THE ENERGY SECTOR

30. In a pandemic, the energy sector will obviously be struck by falling consumer, transport, and industrial demand, lockdowns preventing even local travel, and collapsing trade. All of this has transpired in the current crisis. Indeed, the economic recession precipitated by the COVID-19 crisis and measures to slow its spread combined with a Saudi-Russian price war drove oil prices to their lowest level in decades, although prices have since partly rebounded due to production agreements among major suppliers.

31. In a report published in June 2020, the International Energy Agency (IEA) estimated that global energy demand would fall by roughly 6% in 2020 relative to 2019. This represents the greatest fall in 70 years in percentage terms and the largest ever in absolute terms. Coal demand dropped 8% in the first quarter compared to the year before, in large measure because Chinese demand had tumbled so significantly due to manufacturing shutdowns. Global oil demand fell by 5% in that same period, and by March, global road transport activity dropped 50% relative to the 2019 average for that period. Aviation energy use fell 60%. Gas demand, however, was less affected, as gas consumers were largely struck only after the first quarter. Electricity demand has fallen by 20% in locked down economies as the fall of industrial electricity use has more than compensated for the increase in home demand. Only renewables underwent demand growth in that period as a result of new capacity additions.

32. Not surprisingly, annual global CO2 emissions are slated to decline by an estimated 8% in 2020. This, of course, could be a temporary phenomenon unless investments are made in cleaner energy infrastructure over the coming years. Recoveries from previous global economic crises have generally been accompanied by significant increases in emissions. The IEA is thus urging governments to ensure that clean energy transitions are included in planning for economic recovery.

33. Oil markets have been on rollercoaster ride in 2020. By the end of March 2020, US crude prices had fallen below USD 20 per barrel, and unsold supply threatened to overwhelm storage facilities. By April 21, benchmark US crude oil prices were actually trading at negative prices for the first time ever. This meant that producers or traders were paying other market participants to take the oil off their hands due to exceedingly high rates of stockpiling and the collapse of demand (Brower et al., 2020). While demand fell, the supply of oil continued to increase due to a Russia and Saudi Arabia price war at the beginning of the crisis. Interestingly, Brent Crude, which is generally moved to market by large super-tankers, is less dependent on storage facilities than US crude, and its price remained above USD 20 per barrel while Texas prices briefly moved toward zero. By early May, the Russians and Saudis had resolved their dispute and prices jumped to USD 30 p/b, but uncertainty about the future continues to roil the industry. By 17 September Brent Crude was trading at around $42/barrel and prices had stabilised after several months of dramatic turmoil.

34. One possible upshot of this energy price collapse could be that the many shale producers in the United States and Canada as well as some high cost Asian producers will be driven out of business. Shale oil is significantly more expensive than, for example, oil produced in the Gulf, and struggles to compete when prices fall. The collapse of oil prices placed enormous stress on the US shale industry which until recently was acting as the world's "swing producer". Between March and late July 2020, US onshore oil production fell by roughly 20%, and there are few signs that this will rebound soon. The sector is now beset by bankruptcy, with myriad US drilling companies finding it difficult to service debt at current prices. US oil producers have accordingly reduced capital expenditure by roughly 50%. The three most important shale service providers have taken write downs of almost $45bn over the past year (McCormick, 2020). And even as activity picks up, they are planning for a significantly leaner future. Only many months of stable prices at substantially higher prices would reverse these negative trends. In June domestic shale oil production in the United States stood at 7.3 million b/d down substantially from the March production of 8.3 million b/d. (Saefong, 2020).

35. Although the Saudis were clearly displeased that Russia initially refused to participate in OPEC-arranged production cutbacks, both countries welcome the decline of the North American shale industry as it has weakened their own market leverage in recent years. Russia, moreover, has had a clear geopolitical interest in depriving its greatest strategic rival of what has proven to be an effective energy weapon that to some extent has limited its own suasion power in Europe. Russia, however, will pay a high price if oil and gas prices remain low for an extended period of time. Oil and gas revenues generate roughly 50% of Russia's consolidated budget revenue, or USD 130 billion. A Russian emergency fund of USD 165 billion has now been tapped at a rate of roughly USD 300 million a day, and the country is on target to spend nearly 50% of its savings by the end of the year. Low energy prices and Russia's budgetary break-even price of US$42 per barrel now limits the capacity of the Kremlin to add resources to its US$174bn national wealth fund. Income from the wealth fund's holdings can now be used to cover budget expenditures until 2022 (Foy and Seddon, 2020).

36. The World Bank forecasts that the Russian economy will undergo a 6% decline in GDP this year and at the end of July the Central Bank cut interest rates to a post-Soviet low of 4.25%–the fourth rate cut this year (The World Bank, 6/7/20). Inflation remains below the 4% target, giving the Bank space for rate cuts aiming to prop up demand and investment. By late July, the Rouble had fallen by 15% as a result of plunging energy prices, recession and sanctions. Russia's Finance Ministry wants to cut government spending by up to 10% from next year to restore the state's finances. It is proposing budget cuts of US$65 billion over 2021-2023. Elements of the budget could be slashed by as much as 10%, and defence spending could be cut by 5% if the Ministry's recommendations are embraced (Moscow Times, 2020). The Kremlin, however, is worried about rising domestic dissent and in the past has used its aggressive military posture to deflect criticism. The crisis has clearly put both social and defence spending at risk.

D. THE DEFENCE SECTOR

37. The defence industrial sector has also been struck by the crisis. As noted above, the commercial aviation sector has been hit hard by the crisis and this has had spill over effects on the defence industrial base, striking both prime contractors and sub-contractors. The cancellation of commercial orders for firms working in both civilian and military markets creates cash flow problems that invariably effect the defence component of these enterprises. In some ways, however, these industries are cushioned from the worst elements of the crisis as defence funds for the coming year are already allocated. But the longer-term impacts are potentially serious as the defence industrial base is eroded by falling commercial orders and potentially by government defence budget cuts as well. Defence firms are also affected by shutdowns and the closing of plants as due to heightened infection risks to workers. Coping with the medical challenges obviously adds to cost and slows down production of vitally needed military systems. Higher costs could undermine longer-term investments as could stock price declines, and so these firms may even require additional government support to weather the storm. Over the medium term, defence contractors could confront difficulties keeping highly skilled workers employed which would obviously impinge on their capacity to develop innovative products for the military (Sreekumar, 2020).

38. Coping with this challenge will demand smarter approaches to defence procurement and deeper defence industrial and even doctrinal cooperation among allies. These are notions that have long been promoted by NATO itself in initiative like "Smart Defense" and by working with industry through for the NATO Industrial Advisory Group (NIAG). Economic crisis should make these kinds of approaches more attractive to hard pressed governments seeking savings without compromising security.

39. Parliamentarians are ultimately charged with balancing risk and cost. Although discussions about defence spending have been somewhat less salient in recent months due to the severity of this economic crisis, geo-political risks have not gone away. Indeed, they have been exacerbated. Still, defending defence budgets can be politically challenging in times of a downturn. Doing so will nonetheless be essential and it will be important for leaders to stress to voters both the enduring

nature of strategic risk, the role of national militaries and alliance cohesion in mitigating those risks and the critical contributions made by the defence industrial sector to national security, national economic development and technological advance—all of which are critical to economic recovery and long-term economic vitality. The defence spending commitments NATO member governments had adopted remain valid in an era of a pandemic. Allied governments and parliaments, however, will need innovative approaches to allocate at least 2% of GNP on defence with 20% of this spending for major equipment procurement, including related research and development outlays. It is important to recognise that for those countries undergoing a fall in GDP due to recession, the budget allocation needed to achieve this 2% spending is less than it would be if their economies were growing.

VII. SOCIAL AND EMPLOYMENT DIMENSIONS

40. While the COVID-19 crisis is above all a compelling medical and public health challenge, it also threatens jobs and workers welfare. Government employment strategies and policies can lower the risk to workers, who are also essential consumers. The unemployed require income support, while companies need financial assistance to manage shortfalls in income and liquidity.

41. Governments have undertaken a range of policies to protect workers in the current crisis. In most cases, health and safety measures have been prioritised. While costly in the short term, work place shutdowns and enforced lockdown measures have been implemented to slow the spread of disease (or flatten the curve in now common parlance) and to prevent health care systems from being overwhelmed with sick patients. New practices for teleworking have been introduced, and, in many instances, trade unions have been engaged to help establish new workplace rules including rotating workers between workplace and home-based work to reduce the possibility of exposure to the disease. Some of these measures may turn out to be transformative, as companies are now employing range of technologies and practices that could boost productivity even after this pandemic has run its course. Several governments have provided financial support to facilitate the development and adoption of these capabilities to ensure that companies continue to be operational and employees remain productive even if working at home. Finally, unemployment benefits, other income supports, and even programmes to help cover housing costs all reduce social dislocation and keep societies better poised for recovery (OECD, 20/4/20).

42. A number of countries have adopted short-term work employment schemes that subsidise firms to help them retain their work force even as those firms wrestle with temporary falls in demand. These programmes help upgrade worker training, which can result in higher productivity gains. By keeping these workers employed and paid, even at reduced rates, firms are conceivably better positioned to recover quickly as the crisis winds down. Such measures also help sustain consumer demand and preserve social cohesion at a moment of serious public health and economic crisis. Keeping workers gainfully employed endows national economies with a degree of economic agility and resilience that would prove far more difficult to achieve in the event of mass unemployment—a condition that also triggers very dangerous social and political side effects.

43. In a similar way, paid sick leave has also been a critical policy tool as it helps keep exposed workers away from the workplace. These policies not only support the sick, they help reduce the spread of the disease. Failure to compensate sick workers simply incentivises sick and infectious workers to return to the workplace, dramatically raising the risk of infecting other workers and effectively lengthening the lifespan of the pandemic. Many governments have recognised the importance of enhancing sick leave coverage in the current crisis and some are also providing compensation to the self-employed when they become ill.

44. Testing and contact tracing obviously help reduce workplace transmission rates. Tests help reduce illness in the workplace and schools, increase worker and public confidence in the safety of the workplace and schools, add an additional degree of economic security, and generally quicken the pace of economic recovery. These measures are costly but eminently worthwhile when

considering the alternatives, including potential economic losses induced by the loss of public confidence and continued uncertainty about the path of the disease (Summers, 2020). Likewise, mask wearing in public spaces, including the workplace, is a highly effective means of containing the spread of COVID-19. Senseless attacks on mask wearing or spreading false information about their efficacy during a pandemic only endangers the public.

45. Finally, strategies are needed to address the problem of childcare. As long as schools were closed, it was very difficult for parents to return to work unless there were alternate childcare solutions. While not ideal, working from home has been a solution for some kinds of workers with young children. Obviously, however, many jobs cannot be carried out remotely. Finding alternative care arrangements has thus posed another key challenge for national and local governments as well as for employers. Many countries have opened day care facilities for the children of essential workers, particularly in the healthcare sector, while others have provided extra financial support to active workers with children (OECD, 20 April 2020).

46. Of course, employees cannot work if their firms are failing. Emergency government support for businesses, through liquidity injections, credits, or tax and social contribution deferrals, can help preserve the economic superstructure needed to sustain employment and make possible a longer-term economic health. Not surprisingly, a range of OECD governments and even central banks have embarked on extraordinary measures to support the commercial sectors of their societies.

VIII. CENTRAL BANK AND GOVERNMENT RESPONSES

47. Indeed, governments cannot sit idly by in the face of dramatic economic shocks. They need to bolster demand and ensure that supplies of that which is most crucially required for survival are available and affordable. This is no easy task, and as has been evident in the current crisis, responses have entailed massive injections of government spending, partly in the form of income supplements to help citizens weather the crisis as well as all manner of spending to cope directly with the medical crisis itself.

48. There are invariably a range of automatic stabilisers that kick in as national economies begin to shut down, although these obviously differ substantially across countries (Jonung and Roeger, 2006). These stabilisers include public health insurance pay outs, unemployment outlays and government transfers to the most affected regions and sectors of the economy. These transfers differ across countries, and this is why less interventionist states may need a range of special measures to facilitate the kind of outlays that might be more cooked into the very structure of more interventionist social welfare states. Of course, improvising on the spot comes with some risks and efficiency costs as less interventionist states may lack the mechanisms and know-how for administering those payments. In such cases, there is a need to build administrative systems from scratch under extraordinary emergency conditions. This can be an enormously difficult and complex undertaking, and setbacks are more than likely.

49. But it is also important to recognise what government intervention cannot achieve. There is, for example, no cut in interest rate that will revive the tourism or restaurant sectors in the midst of a pandemic and enforced shutdowns. Those industries along with many others simply will not function without permission to reopen and consumer confidence in their essential safety. An interest rate cut, however, will at least make it possible to borrow cheaply to help companies survive an extended period of economic inactivity. In any case, at the onset of the pandemic, governments are far more likely to restrict economic activity through lockdowns than encourage normal commercial activity as containing the spread of disease at the onset is essential.

50. Central banks have drawn on lessons derived from the 2008 financial crisis and their leaders know that in the face of a shock-induced recession, creating and borrowing money is critical to limiting damage to the real economy. The situation varies by country and circumstance. The US Federal reserve oversees the world's preferred reserve asset, and this confers privileges which

other banks simply do not enjoy. Yet, the United States entered the crisis with a high level of public deficits. The European Central Bank (ECB), by comparison, has been relatively hampered by an institutional focus on inflation, the persistence of nation states within its area of competence, and the lack of fiscal integration within the EU (Mallaby, 2020). Developing countries Central Banks, by contrast, have not enjoyed the same kind of leeway to pursue loose fiscal and monetary policies. Indeed, in the first two months of the crisis, 100 billion of investment capital moved from developing countries to the wealthiest countries. Without access to these kinds of financial tools, 90 developing countries have requested support from the IMF in the face of this calamity (Mallaby, 2020).

51. It is very difficult to gauge at this early moment the degree of economic devastation that the COVID-19 pandemic has wrought, nor is it evident now how long this severe recession will endure. One thing is certainly very clear. The economic destinies of North America and Europe will remain linked by a dense web of trade and investment ties as well as diplomatic and security links. Trade between the EU and the United States in 2018 was valued at USD 1.3 trillion (or 22.4% of total US trade) while European companies employed 4 million Americans. US trade with Canada that year was valued at USD 725 billion. Investment flows dwarf these trade numbers, and just prior to the UK's departure from the EU, the EU invested USD 2.596 trillion in the United States and the U.S., in turn, invested USD 3.270 trillion in EU countries—figures that accounted for half of the world's total Foreign Direct Investment that year (Congressional Research Service, 2020). This is a long way of saying that a deep recession on one side of the Atlantic will immediately spill over to the other side—as occurred during the 2008-2009 financial crisis. The need for close economic cooperation and coordination among Allied countries on both sides of the Atlantic is self-evident while the rise of protectionism will only kill the goose that laid the golden egg.

A. THE CHALLENGE IN THE UNITED STATES

52. The weight of the US economy in any global economic model is substantial so what transpires in that essential economy will immediately have global implications. The United States has undergone an unprecedented steep and rapid decline of demand and employment, which has required both the federal and state governments to mount massive efforts to counteract the worst consequences of the pandemic and the economic shutdowns that were imposed across most states. There are long-term implications for some of these policies. A deep US recession will have global implications and will seriously depress demand for both European and Asian goods.

53. US GDP fell at an annual rate of 4.8% in the first three months of 2020. In April alone, the United States shed 20 million jobs, essentially eradicating ten years of job growth in that economy (Stevis-Gridneff and Ewing, 2020). The unemployment level by early May had hit 14.7%, the highest level since the great depression (Long, 2020) but job growth over the summer brought the rate back down to 8.4% in August (US Bureau of Labor Statistics, 4/9/20). Perhaps most worrying over the longer-term is soaring government and corporate debt. The federal government will likely spend USD 4 trillion more than it collects in revenue in 2020, and the budget deficit will be two times larger than any year since 1945. A range of corporations that had taken on debt over the past decade are now compelled to raise more cash in the bond market simply to maintain solvency.

54. Although the US economy had enjoyed a long period of growth prior to the onset of the current crisis, it had also taken on increasing debt through a series of tax cuts that were not offset by any substantial spending reductions. The sale of treasury bills had financed this debt, but there are now concerns about debt sustainability as borrowing reaches historic levels and these concerns have fed into debates over supplemental emergency spending. So far, low interest rates have made this borrowing feasible. The problem would be significantly more complicated if interest rates were to rise or if investors were to suddenly look to diversify holdings away from dollar denominated assets. US companies have drawn on hundreds of billions from standing credit lines to weather the current storm, but higher interest rates would raise the risk of defaults and this would be a worrisome development.

55. The Federal Reserve Bank has undertaken several unprecedented measures including lending to companies and local governments. By mid-April, the Fed had lowered interest rates to zero and had undertaken a huge USD 2 trillion fiscal expansion to keep a suddenly moribund national economy afloat in the early stages of the crisis. In the view of the US economist Lawrence H. Summers, the Fed has, by necessity, become a fiscal policy maker. But the Central Bank's rapidly expanding role could draw it into politics in ways that might provoke concern about its independence and long-defended credibility. When the pandemic wanes and when the United States returns to growth, the Fed, like other central banks, will need an exit strategy to offload many of these assets from its books. Failing to do so would mean a massive asset transfer to the state and undermine the culture of risk taking which is central to US economic success. Again, this is a problem with which Europe will also need to wrestle, although it will confront additional challenges linked to the institutional gaps surrounding the euro system (Carnegie, 2020).

56. The United States entered the crisis with consumer debt relative to the US economy lower than it was during the 2008 crisis. But this masked a number of other challenges. Around 50 million households are now more indebted than in 2008, and the numbers are growing as millions have been laid off in the current crisis. Consumer debt write-offs may prove necessary—something that would exact a heavy toll on the banking sector. At the end of 2019, the US debt stood at roughly US$17 trillion or about 80 percent of GDP. By June 2020, the debt stood at US$20.53 trillion, or roughly 106 percent of GDP although it is important to note that GDP had fallen since 2019. These figures do not include government liabilities to the Social Security and Medicare trust funds Total US government, business and household debt is now greater than 250% of annual output, which is 75% higher than in 1980 (Phillips, 2020). In the private sector, corporations are finding it challenging to make payments on outstanding loans while keeping employees on the payrolls. US citizens themselves have also been compelled to run down savings to weather the current downturn.

57. One bright spot is that interest rates are currently very low, which has lowered the cost of borrowing in the United States at the onset of the crisis. This has provided space for activist monetary and fiscal measures to support demand in the face of the crisis. Of course, it is not clear how long these low rates will endure and the degree to which they might distort investment patterns - a phenomenon that can engender poor investment decision-making and undermine long-term growth. There has been substantial assistance provided to Americans struck by the crisis through the US$2.2 trillion Cares Act, and a discussion is now underway in Washington to determine future support.

58. A second potential bright spot for the United States is that the dollar remains a standard haven for foreign investors, and this will likely limit the degree of flight from that asset. But over the longer-term, the dollar's reputation could be at stake if US borrowing rates are perceived to be unsustainable or if productive investment is consistently undermined by the need to pay back soaring borrowing bills. A similar phenomenon has been evident in Japan, the economy of which has been stagnant for years (Lynch, 2020).

59. Like a number of other low saving countries, the United States could eventually find it very difficult to unwind this debt. Economists, most of whom agree that the current emergency spending is essential, will invariably point to two paths for doing so over the long-term: spending cuts and/or tax hikes. Both policies would impinge on growth over the short and medium terms and could only be launched during a period of marked economic growth rather than during a recession. Neither would be popular. But the alternative might well be soaring interest rates or high inflation, particularly if investors begin to sour on US Treasury bills and other investment assets. Capital used to pay off today's bills would be capital not used for productive investment needed for long-term growth. This promises to pose longer-term economic and political difficulties in the world's most important economy which would have consequences for the global economy.

60. At the end of July, the US government confronted the most devastating three-month economic decline in the country's history. The drop eradicated roughly five years of growth. GDP fell 9.5% in the second quarter of 2020 due to a collapse of consumer spending, plummeting business

investment and shutdowns. The fall in GDP in the second quarter was the equivalent of a massive 32.9% annual decline (Casselman, 2020).

61. The US crisis has also struck the money markets, with the dollar falling to its lowest level since 2010 against a basket of its largest trading partners' currencies. The dollar fell 4.7% in July alone. The dollar sell-off was fuelled by the historic fall in GDP as well as uncertainty about federal and state policies to take on the COVID-19 pandemic (Dempsey and Lockett, 2020).

62. Although a number of US states have ended lockdowns, U.S. health experts warn that the pandemic is not fully under control. This means that the health crisis in the United States could endure or return to a second wave—an event that would be economically devastating. Of course, the risk of a second wave must also be considered in Europe which has its own serious economic challenges to manage and which saw significant spikes in contagion during the summer and early fall of 2020.

B. EUROPE

63. The economic situation in Europe is variegated with some countries apparently better poised to weather the economic storm than others. This is hardly surprising given the diversity of national economic structures both within the EU and throughout the continent, as well as the demonstrated capacity of several countries to push down the curve of infections with a degree of efficacy. Preliminary estimates for the second quarter of 2020 in Europe had GDP down by 12.1% in the euro area and by 11.9% in the EU compared with the first quarter of 2020 (Eurostat 31/7 2020). This was the lowest growth since records began in 1995. Germany's GDP fell by 10.1%, Italy's by 12.4%, France's by 13.8% and Spain's by 18.5%. The United Kingdom which has suffered the most deaths related to COVID-19 in Europe also appears to have suffered the worst economic impact. Its economy shrunk by 20.4% in the second quarter after falling 2% in the first three months of the year. The Bank of England estimates that the U.K. economy will not return to the level it had achieved in 2019 until the end of 2021. It cut interest rates to 0.1% in August while pumping US$390 billion into bond-buying programmes (Togoh, 2020).

64. The economic impact of the COVID-19 pandemic on Europe became apparent as soon as governments introduced lockdown measures in mid-March. Many strictures were loosened by summer but early signs that the virus had again begun to spread led governments to reimpose controls on some economic activity and the movement of people. This will undoubtedly have additional economic consequences. The Commission's Summer 2020 forecast projected that the euro area economy will contract by 8.7% in 2020 and grow by 6.1% in 2021. The EU as a whole is forecast to contract by 8.3% in 2020 and grow by 5.8% in 2021. The Commission expects a degree of recovery in the second half of the year, although much will hinge on the course of the pandemic. This recovery will very likely be incomplete and uneven with some economies remaining mired in crisis. Those countries that have most successfully contained the virus are obviously among those best poised for recovery (European Commission, 7/7/20).

65. These forecasts, however, could be utterly upended by the depth and duration of the pandemic. The scattered re-imposition of lockdown measures over the summer could be a harbinger of what would transpire if a genuine second wave sets in. The Commission's current forecast, however, assumes that lockdown measures will continue to ease, and there will not be a 'second wave' of infections.

66. The initial responses included approval of state aid measures totalling EUR 1.9 trillion or 12% of GDP. The Eurogroup of Finance Ministers also swiftly approved EUR 500 billion in additional financing with promises of a collective stimulus package to come. Drawing from its difficult experiences in the 2008-2009 crisis, the European Central Bank quickly pumped liquidity into the Eurozone, although many economists were not convinced that this would be sufficient to hold back the tides. The Bank established a Pandemic Emergency purchase programme to help member governments issue debt to finance measures needed to weather the crisis. The question will be

whether over the long run, the ECB will be positioned to engage in the unlimited purchase of national debt—known as Outright Monetary Transactions– in exchange for some degree of policy conditionality. The worry is that some of the most economically stressed EU countries may ultimately be compelled to seek an ordered restructuring of debt. Again, member governments were divided, at least partly along North-South lines, over the question of issuing Eurobonds. The prospect of national defaults in the more stressed countries might change this or it could lead to a broader political backlash against the EU, so the policy stakes here remain very high indeed (Munchau, 2020).

67. In the early phase of the crisis, there were concerns that European solidarity could be among the victims of a pandemic induced economic collapse. Beyond apparent North-South and East-West tensions, there also seemed to be a renationalisation of economic policy among EU member states. This included the closure of national borders and the suspension of European rules on state aid as states scrambled to subsidise suddenly threatened companies. A vociferous debate over French President Emmanuel Macron's proposal to issue European-wide bonds seemed to suggest that Europe would not achieve a unified outlook on building a full-fledged monetary union backed by an integrated fiscal system (Rapoza, 2020).

68. But a flurry of diplomatic activity over the summer saw Europe unambiguously reject renationalisation and embrace an ambitious EU wide stimulus policy to counteract the recessionary impact of the pandemic. German Chancellor Merkel detected a clear threat to European Union and cohesion among its member states and along with President Macron launched an initiative that would permit the European Commission to raise funding on the financial markets, and distribute it to member states in need of support (Lehne, 2020).On 21 July 2020, the European Council agreed an EU budget deal that includes a 750 billion Euro Recovery Fund called 'Next Generation EU' to assist member states struck by the COVID-19 crisis. For the first time, the EU will borrow from capital markets to finance budgetary outlays. EU member governments also decided to temporarily raise the spending ceiling of 2% of the EU Gross National Income, which will allow the Commission to raise the additional 750 billion Euro from the financial market. It will distribute funds through a range of EU programmes. The loans will be repaid no earlier than 2028 and no later than 2058. The initiative should not be understood as a full throttled embrace of fiscal federalism, but it partly moves the EU in that direction. The programme essentially relies on the creditworthiness of stronger states which positions them to assist more financially vulnerable states.

69. The Commission will distribute Euro 390 billion in grants to the hardest-hit member states, while the remaining Euro 360 billion will be issued as low-interest loans to any member states. Grants worth of Euro 312.6 billion will be made available between 2021-2023 through the EU's Recovery and Resilience Facility. To qualify, member states must prepare national recovery plans that detail proposed reforms. The remaining Euro 77.5 billion will underwrite existing EU programmes (Brunsden et al., 2020). The recovery package will pose important administrative burdens on member states and the European Commission, which will now distribute five times more resources than it typically allocates in a given year (Fleming et al., 2020). The Commission now wields a consequential fiscal tool to complement the monetary policies of the European Central Bank. This is especially important when near-zero interest rates require a shift in emphasis from monetary to fiscal policy. European leaders will also have to determine how these debts will be paid back and whether the EU will require enhanced taxing authority to do so.

70. State aid also has long been a source of trade tension between North America and Europe. The emergency rules, which seek to salvage some elements of a level playing field, are slated to last until the end of 2020, although they could be prolonged depending on the broader economic context. But the Commission ideally wants to return to a situation in which firms are competing on quality and price and not on subsidy levels. The goal for now, however, is preserving the continent's commercial and industrial infrastructure for an eventual return to growth, while implicitly recognising that members states in any case are going to provide strategic support to stricken companies (Carnegie, 2020).

71. The message from Brussels has been that the crisis presents an opportunity for a degree of structural reform and it now has more resources to advance these ambitions. The emerging strategy embraces both a green and a digital economy. The risks of overreliance on China for medical and protective equipment and drug manufacturing has also emerged a critical European concern. European governments are clearly concerned that because of the current recession, their commercial and technological assets could be vulnerable to takeover by strategic competitors like China. The Commission is aware of this risk and is now considering strategies to defend core assets from unwanted acquisitions.

IX. MULTILATERAL RESPONSES

72. The renationalisation of economic policymaking has become a worrying trend. Some analysts suggest that another blow has been struck against multilateralism precisely when international collaboration is most needed. Indeed, curbing the pandemic and the attendant economic crisis requires deeper international collaboration as neither phenomenon recognises borders as such. It goes without saying that those focused on fostering recovery will need to recognise this truth and craft international policies accordingly.

73. Indeed, this is a moment when a new kind of globalism may be essential to ensure that the current downturn does not evolve into an enduring global depression. This should be informed not by some internationalist idealism but rather a hard-boiled understanding of how best to defend national interests in a globally integrated economic order. Existing international institutions will remain essential. This is obviously true for the Alliance that defends NATO members' collective security interests, but it will also be the case for those institutions like the International Monetary Fund (IMF), the World Bank, the World Trade Organization (WTO), the IEA, and the OECD that are vital vehicles for information sharing and collective economic action in the face of an economic crisis. These institutions have all mobilised to generate multilateral rather than purely national responses to the current crisis.

74. The World Bank, for example, approved its first emergency operations from the fast-track facility for COVID-19 with USD 1.9 billion for emergency health support. It initially underwrote projects in 25 countries, while the International Finance Corporation (IFC) mobilised to help the private sector in developing countries weather the storm. The World Bank announced that it would deploy USD 160 billion over 15 months to help developing countries address the immediate health consequences of COVID-19 while promoting inclusive growth, assisting small and medium enterprises, and protecting the most vulnerable).

75. The IMF has offered various services to help countries manage this crisis both through lending and the provision of expertise. It is working closely with the World Bank, the World Health Organization, and other multilateral lending institutions. The Fund has a range of facilities and instruments for providing this support, including the Rapid Credit Facility and Rapid Financing Instrument, which provide emergency financial assistance to member countries without requiring full-fledged lending programmes. These loans—which could amount to USD 50 billion for low-income and emerging markets—can be disbursed very quickly to help IMF member countries address emergencies such as the coronavirus. The IMF is expanding existing lending programmes to help borrowing countries meet emergency needs linked to the pandemic. This lending also serves as a catalyst for other donors. Through the Catastrophe Containment and Relief Trust, it provides debt relief to the poorest and most vulnerable countries with outstanding obligations to the IMF. The IMF can also provide support through a new financing arrangement under its existing facilities such as Stand-By Arrangements (IMF, 9 April 2020).

76. The OECD is generating analysis of the health, economic, and societal crisis and to lay out detailed policy recommendations based best practices. It is also fostering policy coordination among members and partners to maximise the impact of government policy. These efforts underpin G7 and G20 efforts to define collective multilateral responses to the crisis. The OECD covers a broad range

of topics, including macro- and microeconomics, health and education policies, fiscal responses and taxation, and short-term measures and policies to assist the most vulnerable. It is conducting sectoral analysis and seeking to identify the shortest and most effective pathways to recovery, to identify how to coordinate international responses and explore long-term implications of what is unfolding today. It shares this work with national legislators through its international parliamentary network with which this Committee is linked.

X. TOWARDS ECONOMIC RECOVERY

77. Several models and statistical studies on actual pandemics suggest that the greatest economic impacts of pandemics transpire both during the pandemic and in the year following the outbreak. The rate and type of recovery will be driven by myriad factors including the so-called curve of the pandemic itself, government medical and economic responses to it, structural conditions in national economies, and developments in the global economy that inevitably shape supply, demand, and financial conditions. A high saving economy, traditionally running significant balance of payments surpluses, would theoretically have some reserves to cover the costs of keeping a national economy afloat during a period of pandemic-induced shutdown. A country running structural budget and trade deficits would likely confront a more complex set of challenges both during and following the pandemic, although this is ultimately conditioned by access to credit. That country might have to borrow substantially to finance current expenditure, resulting in longer-term uncertainties about how this debt might be financed, with increased taxes, higher inflation, and higher interest rates all possibly entering the mix over the long-term. Of course, all three of these would undermine growth, and this points to the tricky challenge chronic borrowing countries might face over the longer-term in the wake of an economically consequential pandemic. In the case of very large countries or blocs like the United States and the EU, soaring borrowing will also shape credit conditions in the rest of the world. A flight to quality has already occurred, and this is generating enormous financial pressures in developing countries.

78. There are other structural factors that will shape economic recovery. Wage flexibility could be one example here. It could be argued that employment levels will return to normal more quickly the greater the level of wage flexibility in a given country. Most Western societies, however, have influential trade unions and strict laws governing wage changes. The resultant wage stickiness short of other concessions could potentially slow employment growth following an economic shock which has dealt a blow to productivity. Of course, there are myriad other factors determining employment levels, including firm solvency, but it is worth considering these kinds of structural factors which will certainly feature among the forces shaping recovery.

79. In general terms, the rate and degree of recovery will be reflected in the pace that businesses reopen, that workers return to their jobs, and consumers feel sufficiently confident to spend their earnings. Past recoveries from pandemics have been relatively quick. This was the case, for example with the SARS epidemic in Hong Kong in 2003. It was also the case in the wake of the far more devastating Spanish influenza in 1918 in the United States where retail sales growth rates jumped from -6% in December 1918 to 8% in January 1919. In both cases, pent up consumer demand during the pandemic expressed itself quickly in the early recovery phase (Jonung and Roeger, 2006). Of course, neither of these pandemics was as wide ranging in impact as the COVID-19 virus has been, and nobody can say at this juncture how long this crisis will endure. The economy emerging from the COVID-19 will begin from a far deeper trough, triggered by a virtually simultaneous global economic shutdown in which hundreds of thousands of enterprises both big and small have been shuttered and millions of employees have simply not been able to work across the world.

80. The hope is that the current recession will assume a V shape and that the initial down-turn will be the only one. But many epidemiologists foresee a second wave in the fall corresponding with the onset of flu season (MacFarlane et al., 2020). At this writing, full lockdowns have largely ended in Europe while the United States provides a much more mixed picture because the virus is not

under control in much of the country. There are deep concerns that the pandemic could return in the fall with a vengeance on both sides of the Atlantic. Economists warn if that were to happen, the economic situation could turn even more dire and that this could well trigger social and political instability in many countries. For this reason, it is very important to reopen economies in a way that is deeply informed by medical insights. Pandemics ultimately do not follow economic or political logic. If anything, they dictate the terms in which economic life unfolds—at least, until they have been controlled or eradicated.

XI. CONCLUSIONS

81. Pandemics are by nature international in scope. They do not respect borders and they generally do not differentiate by nationality or ethnic group, although undoubtedly the most marginalised are often the most likely to suffer the worst consequences. The course of a pandemic can be shaped by myriad factors, some of which are beyond the capacity of society to control. In extreme cases, the level of social mobilisation needed to minimise the impact of disease on society can be intense and painful. Measures can range from enforced quarantine, massive expansion of emergency medical facilities, and powerful support for research into possible vaccines or palliative responses that can reduce the health impacts of the virus.

82. It goes without saying that the international community, as a whole, gravely underestimated the risk of a deadly pandemic or blithely assumed that medical advances had been so consequential as to minimise the risk posed by, for example, a novel virus. The consequence of this hubris is still revealing itself. At the very least, the international community now stands to derive important if nonetheless painful lessons for the future. One obvious observation follows on directly from this point: henceforward, governments around the world must recognise that global pandemics are not one-off events. They are recurrent over human history. Moreover, the world has never been so densely populated and so integrated in so many ways. This mean that the risk of disease spread has never been greater. Climate change is likely also to play into this toxic mix of circumstances. Coping with this threat will not be easy, and it is impossible to forecast when the next event will occur, what form it will take and from where it will originate.

83. More effective and sophisticated methods to understand and mitigate risk will thus be essential (NATO PA, 2005). Given this disturbing admixture of uncertainties and probabilities, what are governments to do? There is, in fact, no hard answer to that difficult question. It is certainly hoped that the experience of the current Covid-19 pandemic will impart long-term lessons on how best to prepare for future shocks on this order. It might be helpful to consider the notion of hedging or taking an investment position that seeks to minimise risk or, in this case, to place society in a better position to counter the risk of future pandemics when they do occur. Doubtless hedging will be costly. But what the current crisis tells us is that failing to hedge against the likelihood of future pandemic could well be costlier and even catastrophic. In some ways or in some places, this may even demand a certain reimagining of the state and its purposes. It also demands a degree of rethinking about how we collectively define national security, because the damage that pandemics can potentially inflict is not so dissimilar to the impact of war or civil strife.

84. In specific terms, governments will need to invest in infrastructure, institutions, personnel, equipment, training, procedures, contingency planning and thoroughly articulated international procedures and vehicles aiming for coordinated collective action. On the economic front, more planning and financial set-asides are needed so that support for citizens and commercial operators can be assured during the lockdown phases of pandemics. We are now learning the hard way that failing to make such set-asides can be economically devastating.

85. From the outset of a pandemic, clear and credible long-term strategies will be needed to unwind debt burden that will almost inevitably mount as these crises unfold. Once implemented after the end of a pandemic, these strategies will be painful and politically difficult to implement, but they will also be essential for long-term recovery. There should be no illusion that this pandemic's costs

can simply be written off. They cannot be, and those countries that confront this reality with sober realism will emerge stronger than those that seek either to wish them away or to forge economically bankrupt corporatist-protectionist solutions which will ultimately prove immiserating. Many western governments have launched ambitious stimulus packages which include measures to cope with potential liquidity crises. But those that do so from positions of relatively high debt will confront particularly difficult challenges once the medical crisis itself has concluded. Governments should heed OECD warnings about debt sustainability while working to minimise the moral hazard problem so that the commercial sector continues to accept responsibility for poor decision making. Indeed, taxpayers cannot be expected to underwrite risky corporate behaviour over the long-term. That said, governments need to move with alacrity at the onset of pandemics to ensure that the worst aspects of the crisis are counteracted and not allowed to drag entire economies into sustained depression.

86. Banks will almost inevitably adopt very defensive and risk averse measures as recession mounts. Governments will have to jump into the breach to ensure that national economies remain solvent. To do so, they will need to find ways to ensure that firms with a prospect of remaining viable have access to liquidity needed to weather the current storm. Those programmes must include incentives for repayment and discernible exit strategies. Making loans convertible to equity in the case of default would help backstop taxpayers ultimately funding these programmes. Banks should also be incentivised to ease repayment terms for loans outstanding to business and consumers, while governments should be prepared to inject liquidity into households to help sustain demand through this crisis.

87. There are no purely national solutions to this economic crisis. International policy is essential, particularly among like-minded developed countries with close financial and trade links. This coordination needs to address a range of monetary and fiscal measures and it must avoid beggar-thy-neighbour policies that would be little more than a shortcut to global depression. Fiscal and monetary policy coordination, a renewed openness to free trade, public health policy collaboration and cooperation on developing vaccines and palliative treatments are all essential (Smart, 2020). Regulatory coordination can help prevent the emergence of unhelpful “regulatory arbitrage”. The current crisis has already demonstrated that purely national approaches to addressing pandemics are almost futile. Countries will need to cope with the economic fallout from this crisis at the local, regional, national, and international levels.

88. Collective international responses must also ensure the continued functioning of the global trade and financial systems. Multilateral institutions like the IMF, the World Bank, the WTO, and the OECD will have critical roles to play in helping to devise and coordinate these efforts. Both the G7 and the G20 will need to provide critical political and diplomatic support for these efforts and can help ensure that key global players are on board. Allied countries should work to reinvigorate the World Health Organization so that it can play its part in coordinating global responses to pandemics and in epidemiological information sharing. None of this will be easy, particularly as there are new signs of tension among some of these players—China and the United States, for example. There is also significant room for improving U.S-European cooperation on these matters. The transatlantic relationship needs to be put on a more stable footing and those areas of dispute that cannot be resolved currently, should be compartmentalised so as not to upend this vital engine of security and prosperity for both continents (Smart, 2020).

89. Close consultations among Allied nations will be needed to deal with the geopolitical implications of this instability and to reassert the notion of solidarity among likeminded, market-oriented, liberal democracies. Collective measures to shore up the international financial order in light of this pandemic will be essential. Here Allied governments have a compelling role to play. Close cooperation between the Fed and the ECB, along with Allied central banks from countries like Canada, Norway, and Turkey for example, will help ensure that Allied financial systems are liquid and functioning. At a moment when pressures will invariably mount to pursue protectionist measures to deal with national economic challenges, Allied governments will need to reassert their respective commitment to multilateralism as one of the keys to national recovery and prosperity.

90. It is also essential to consider the plight of developing countries, many of which are being struck very hard by the current crisis. In much of Africa, for example, the economic fallout has been far more significant than the pandemic itself. The collapse of global trade and the precipitous fall in commodity prices have struck hard. New lending programmes —for example through enhanced IMF SDR allocations and in some cases debt repayment moratoria or outright forgiveness—could place some countries on a trajectory for recovery and growth. Failure on this front, would pose new and dangerous economic and security risks to the global financial system and international community writ large.

91. Efforts will be needed to develop better methods for coping with catastrophic risk before real events materialise. Allied governments should begin to forge broad social agreements about the nature of risk so that their societies are better positioned to cope with it when events like global pandemics emerge. This effort should recognise humankind's special responsibilities for stewardship over a fragile planet. Along these lines, innovative partnerships among governments, scientists, and economists must be forged to better prepare for catastrophic risk. Risk management also demands new kinds of conversations between government and the private sector. It should be generally understood that preparing for one set of risks can also help societies cope with unanticipated ones.

92. Efforts are also needed to protect strategic industries from purchase from China or other rival countries. Not only should governments worry about China controlling core 5G technologies, but they should also be mindful of where critical medical technologies are manufactured and ensure that there is no overreliance on any single supplier country, particularly if that country is considered a strategic rival. But it is also important that this does not become a slippery slope to protectionism.

93. Allied governments also need to recognise that even the combination of a global pandemic and economic crisis will not put an end to global geopolitics. If anything, the confluence of these tragic developments will sadly only accelerate and amplify geopolitical threats. Although there will be understandable temptations to engage in massive defence spending cuts to reallocate funds for social purposes, doing so would be highly risky and naïve. NATO member governments and parliaments should accordingly rededicate themselves to preserving the 2% of GDP defence spending commitments to which all NATO governments have signed up.

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