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The proper role of government in the market economy: The case of the post-COVID recovery

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ABSTRACT

The long-lasting, widespread COVID-19 pandemic has imposed huge challenges on public health as well as economic recovery. Governments must take an active role in designing and enforcing economic policies to address various problems that pure market forces cannot, such as externalities and the absence of risk markets. Covid-19 has exposed deficiencies in current arrangements and the need to develop better institutions. We also need to develop better understandings of the relationship between government, the market, and other institutions within society.

1. Introduction

The COVID-19 pandemic has caused varying degrees of damage followed by diverse paths to recovery around the world. There have been both successes and failures in the effort to contain the spread of the disease and mitigate its adverse effects on public health and the economy. Some economies have been able to swiftly and successfully contain the spread of the virus, allowing for remarkable recoveries, while others are still struggling with surging infections. In order to restore robust growth, market forces alone are inadequate to resolve the various issues at hand. Governments must step up to fill this void and play a key role in recovery. This paper aims to examine the importance of government in restoring economic growth.

This paper is divided into four sections. In the first section, I lay out the challenges faced by the public health sector, the measures required to contain the virus, and the difficulties in restoring growth. In the second section, I discuss why market forces fail, and explore the areas where government intervention is crucial. In the third section, I evaluate assumptions about the role of government in the market economy, revealing that economists often place an undue amount of confidence in the market to resolve problems on its own. Finally, I review the necessity of a new research in the fields of government and economics.

2. Mounting tasks in the lengthy path to Post-COVID economic recovery

2.1. Difficulty controlling the disease impedes the speed of recovery

The first issue to address is how to control the pandemic itself, which is crucial for a robust recovery. This requires more precautions and measures to be enforced. On one hand, we must normalize mask-wearing, enhance testing and tracing, maintain social distancing, and avoid congregation to contain the spread of the disease. We should also focus on increasing safety in high-risk environments, such as nursing homes.

On the other hand, we also have challenges to address when it comes to the effective treatment of the disease. Uncertainty remains since there is still little knowledge about the effectiveness of the therapeutics being used against this new disease. Although there are currently a few approved vaccines, their overall long-term effectiveness are still to be explored during widespread inoculation, especially concerning recently identified highly transmissible new variants in several countries.

In the US, while the vaccine roll-out was initially sluggish due to a shortage of mass production and difficulties in distributing and administering the shots, it has now picked up quickly, with millions of shots being administered every day.[1] Significant race-based disparities in vaccine take-up have also resulted in lower vaccination rates in Black and Hispanic communities compared to the white population, which is alarming given higher infection rates in the Black and Hispanic communities. Furthermore, some people distrust the healthcare system and are hesitant to receive the vaccine even when it is available. However, the US at least finds itself in a better position compared to a year ago, when there was little knowledge about the disease. More importantly, the new administration under President Biden has rolled out plans calling for more coordinated efforts across state and federal governments in mask-mandating, testing, vaccinations, treatments, medical care, etc.

[1] According to the Centers for Disease Control and Prevention (CDC), the share of total population having received 1 or more doses of vaccine, and both doses, are 17.7% and 9.2% respectively by March 7, 2021.

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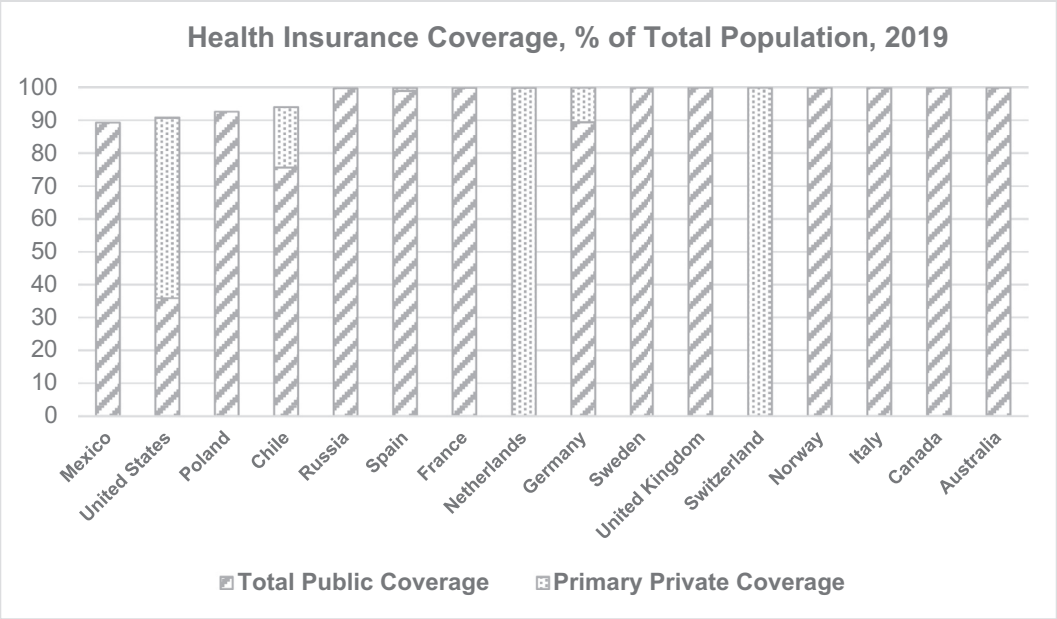

Fig. 1. Health insurance coverage.
Source: OECD Health Statistics.

during its first 100 days. Moreover, in rejoining the World Health Organization, the US has once more united with the international community in efforts to combat the pandemic and its fallout.

Due to its continuing to mutate, and given the high level of contagiousness, COVID-19 cannot be fully controlled until every nation in the world succeeds.

2.2. Huge social costs associated with the pandemic

After a yearlong battle with the pandemic, the death toll of COVID-19 in the US surpassed 520,000 by early March—a staggering figure, comparable to the American lives lost in World War II, Korea, and Vietnam combined. With over twenty-eight million reported cases worldwide, COVID-19 amounts to the largest public health threat since the 1918 influenza pandemic. Although US cases have plummeted in recent weeks, the daily number of new infections is still above 50,000, partly due to the recently identified new variants. With a one-year decrease in life expectancy during the first half of 2020 reported by the Centers for Disease Control and Prevention, this pandemic may well have a long-term impact on public health.

Besides the damage caused to public health, the virus has had an equally significant economic impact on households and businesses across the nation. The US yearly GDP fell by 3.5% in 2020—the worst drop since World War II, though markedly less than that in Europe. After reaching a historical peak of 14.7% last April, the unemployment rate gradually declined to 6.2% in February 2021, which is still well above the 3.5% rate in February 2020, showing long-lasting stagnation in the labor market recovery. Moreover, these "headline" unemployment numbers mask the true depth of the weaknesses in the labor market, reflected more accurately in reductions in the level of employment.

2.3. The overall system of social protection does not provide sufficient help for the poor and vulnerable

The huge inequities and inefficiencies in the provision of care and treatment within the US healthcare system have impeded controlling the spread of the disease, and thereby the nation's recovery. First, about 9.2% of the American population (about 30 million people) lacks health insurance. This is a higher uninsured rate than most OECD economies, as shown in Fig. 1. Unlike most countries in the sample, primary private coverage consists of a higher proportion relative to public coverage in the United States. Second, low-income individuals and people of color are more likely to lack health insurance coverage.[2] The dependence of more Americans on private employer-provided insurance means that the loss of jobs can also lead to a loss of insurance coverage—especially troublesome in the midst of pandemic.

The absence of unemployment insurance provides a weak buffer for the economy in the face of a crisis. For example, the proportion of income maintained after three months of unemployment in the US is 57%, lower than many developed economies in the OECD, as shown in Fig. 2. The US rate declines to 8% after six months of unemployment, compared to a gradual drop to around 30% after 25 months for the OECD aggregates.

Furthermore, due to the insufficient provision of paid sick leave, many employees cannot afford to stay home when they are ill, increasing difficulties in containing the spread of COVID-19. Before the pandemic, the United States had relatively low coverage of paid leave compared to other developed nations (Heymann et al., 2009 and OECD, 2020). In response to the pandemic, the Families First Coronavirus Response Act was passed to offer two weeks of paid sick leave for workers on whom the virus had an impact, but only for certain public employers and private employers with fewer than 500 employees but more than 50 employees, excluding more than half of all workers. Thus, many infected Americans, especially when asymptomatic, have continued to work, partly because they do not have paid sick leave. This situation is most prevalent in people with a shortage of savings who are living paycheck to paycheck. Moreover, many low-wage employees are frontline workers who must

[2] According to the 2019 National Health Interview Survey for adults aged 18-64, 25.8% of those categorized as poor (with income less than 100% of the Federal Poverty Level) are without health insurance, compared to 9% for those not categorized as poor (with income of 200% FPL or greater). Additionally, 29.7% of the Hispanic population and 14.7% of the non-Hispanic Black population are uninsured, compared to 10.5% for non-Hispanic white individuals. Artiga et al. (2020) find that under the Affordable Care Act between 2010 and 2018, Black Americans were 1.5 times more likely to lack insurance than white Americans, and the uninsured rate of Hispanic people was 2.5 times higher than that of whites.

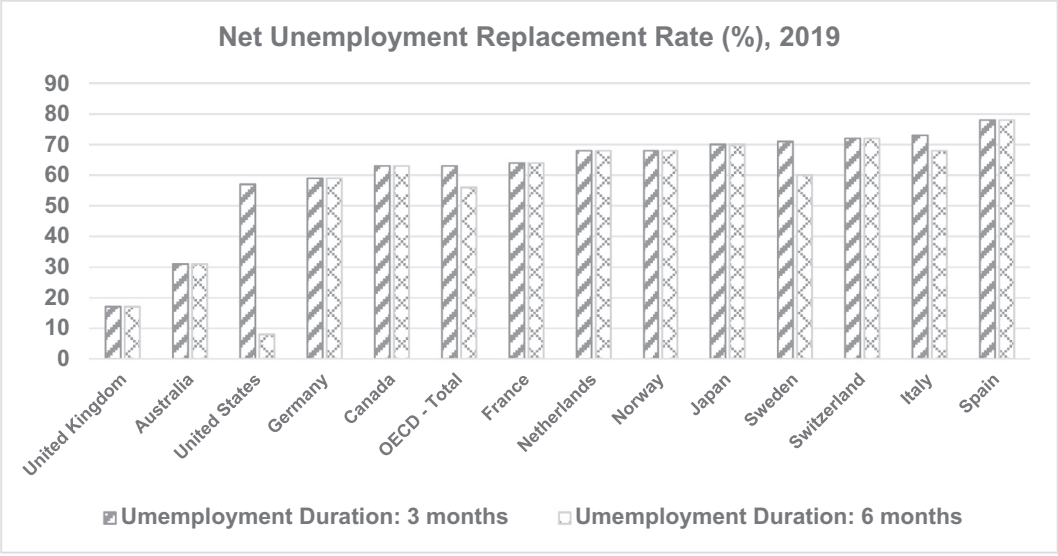

Fig. 2. Replacement rate in unemployment insurance
Source: OECD Statistics (Note: The replacement rate is the proportion of income that is maintained after a certain number of months of unemployment. Rates refer to a single person without children earning 67% of the average wage, including social assistance benefits and excluding housing benefits.).

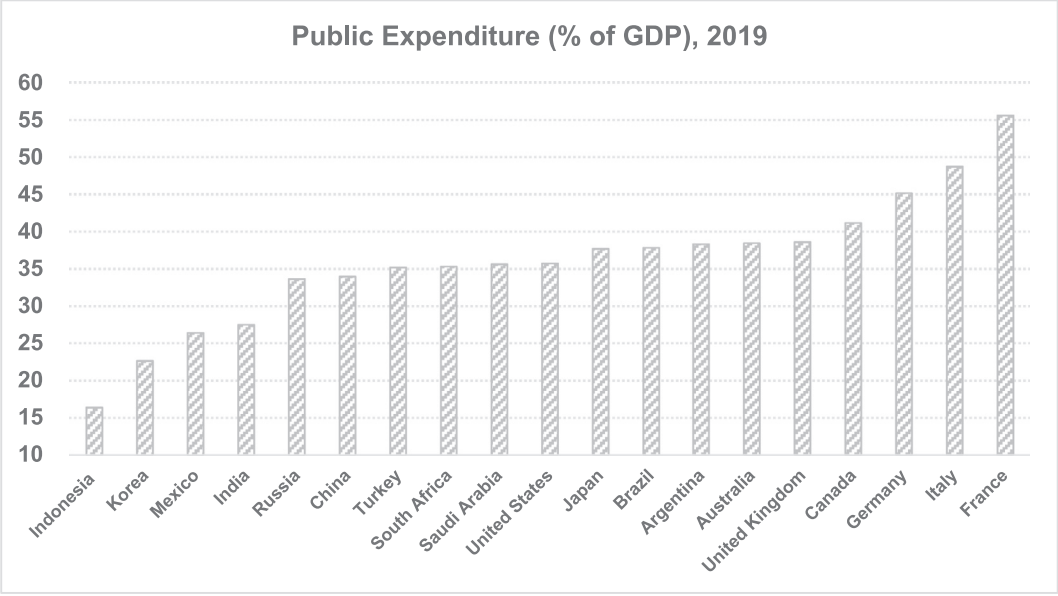

Fig. 3. Public Expenditure as a Share of GDP
Source: IMF (Note: Economies listed are G-20 countries excluding the European Union).

continue to work outside of their homes during lockdowns. The high risk of exposure to the virus makes these workers more vulnerable, especially those who work in transportation, logistics, warehousing, and food industries.[3]

2.4. A delayed and ill-designed stimulus package has prolonged the path to recovery

A slow and contentious legislative process with inadequate presidential leadership inhibited strong responses both to the disease and its economic aftermath. The COVID-19 packages passed in Spring 2020 were poorly designed and implemented, and much of the money meant to bring relief was not received by those most in need. Furthermore, the relief package was not designed for such an extensive crisis lasting over one year. State and local governments face severe budgetary constraints and are in dire need of additional funding. Still, the massive size of the programs made up for the deficiencies in design, partly accounting for the difference in the magnitude of the downturn between the US and some other advanced countries. The arrival of the Biden administration represented a substantial change. The disease was taken seriously; experts were listened to; science was given its due; competency in government began to be restored; and serious economic packages both to provide relief and to address longstanding deficiencies in the American economy began to be formulated. The passage of the $1.9 trillion Recovery Package has led to substantial upward revisions in expectations for the US economy, with the IMF projecting 6.4% growth for 2021,

[3] See for example, Berube and Bateman (2020) and Tomaskovic-Devey et al. (2020).

enabling America to exceed pre-pandemic projections by the end of the year.

2.5. Enormous hysteresis effects

One of the most important issues for restoring growth is addressing the economic damage of COVID-19, some of which could be long term, giving rise to hysteresis effects. The first of these is bankruptcy, which tends to be associated with a loss of human capital, organizational capital, and informational capital. These economic consequences occur, for instance, when small businesses are forced to dissolve and file for Chapter 7[4] bankruptcy. Such bankrupt firms will not be able to recover when the pandemic is over—they don't just become "unbankrupt."

The second example of hysteresis effects are related to the impacts on corporate balance sheets; the deterioration in their balance sheets undermines the ability and willingness of corporations to make investments or even produce. Increases in defaults have also had an impact on bank balance sheets.

Third, the weakening of household balance sheets has led to less spending on durables due to decreases in income and wealth. The worsening of household and firm balance sheets and the increase in uncertainty in imperfect risk markets tends to prompt more precautionary savings, thus weakening aggregate demand.

All of the factors listed above have impeded the speed of recovery. The damage would have been limited if we had been able to bring the pandemic under control in a short period—say, six weeks. Yet, COVID-19 has been severely affecting life in the United States for over a year now, and it is expected to go on for even longer. This means greater damages and more obstacles to recovery.

Depending on the kinds of health and economic policies deployed not only in the United States, but also around the world, there is still much uncertainty regarding the path to recovery. It is still a possibility that COVID-19 may last for a very long time to come rather than subsiding as a temporary phenomenon. While the rapid deployment of effective vaccines and the strong measures taken by the Biden administration have provided hope that the end of this travail is in sight, the continued mutation of the disease and the large numbers of individuals who seem resistant to obtaining the vaccine are sources of concern.

There are many tasks ahead to restore robust economic growth. Economic policies should be aimed at mitigating or minimizing damage and putting us in a better position for recovery. For example, recovery will be easier if workers have been able to keep connections with their firms, both in the short-term and long-term. That means when business restarts, employers will not have lost their firm-specific human capital. Some countries have been more successful than others at keeping unemployment low, such as New Zealand, Germany, and most European countries. In contrast, the United States' policy has been badly designed, poorly administered, costly, and relatively ineffective. Similarly, when small businesses are denied assistance, they go bankrupt, and society will be faced with the task of creating new businesses after the pandemic, which is much more difficult than keeping old businesses alive. Hence, there may be high costs associated with those early failures.

3. Why pure market forces are inadequate to restore economic growth

Decades of weak government intervention have left the health and economic systems of the United States fragile in the face of a prolonged pandemic. Arrow and Debreu (1954) established a set of conditions under which markets efficiently "solve" economic problems. However, those conditions are not typically satisfied and markets do not work well in general, in the sense that there are typically government interventions that can enhance economic (Pareto) efficiency.[5] In this section, we will discuss different aspects of the failure of market forces, and in the subsequent section we will outline the active roles that governments should take, and the past experiences of public intervention in several countries.

3.1. Externalities

The very nature of contagious disease creates an externality that is impossible to deal with through the price system. This means that one person's decision to go to work or do any activity that might expose someone else imposes a cost on others that he does not pay for. The best response would be to have action-specific taxes, i.e. interaction-specific taxes, which are difficult to impose. That is why we instead have very imperfect instruments of public intervention such as lockdowns, quarantines, and so forth to stop the spread of the disease. There are also measures, such as paid sick leave, which affect behavior in ways that reduce adverse externalities. Unfortunately, as previously mentioned opposition from big companies resulted in large fractions of the workforce not having paid sick leave. A second type of externality is related to the macroeconomy. The bankruptcy of one firm affects others, while the rescue of one firm has social benefits as well. There are many other aspects of behavior that give rise to macroeconomic externalities, such as excessive foreign denominated debt.

3.2. Absence of the market for risk

Particularly relevant to behavior throughout the pandemic is the absence of risk markets.[6] If there were good insurance markets, individuals and businesses would have been able to purchase insurance against the ravages of the disease and its economic consequences. One of the striking things in the United States and other countries is that many businesses thought they had bought insurance to cover business interruption. Businesses paid thousands of dollars of premiums every year to guard against an event just like this. But this turned out to be in vain, as the insurance companies claimed that fine print in the policies meant that the business interruption resulting from the Covid-19 lockdown was not covered.

The absence of good insurance markets also has significant macroeconomic implications, as it leads to strong precautionary behavior by households and firms, which reduces aggregate demand.

Thus Covid-19 has exposed the importance of this key "market failure," imperfect risk markets, as well as related market failures—the difficulties of enforcing contracts, including those that arise from the ambiguity of language.

3.3. Compensation for firms in preparation for disaster

The last important market failure associated with risk is the need to compensate firms for undertaking activities that will only be of value in unusual events. Such activities include building stockpiles of masks, protective gear, ventilators, etc. However, compensation for something that occurs once every 10 to 20 years does not exist. This is why it is a public responsibility to address these contingencies.

[4] Chapter 7 is an option for corporations and limited liability companies going out of business for help facilitate an orderly liquidation.

[5] As discussed in Stiglitz (1993), these conditions are "extremely special and empirically irrelevant". A large amount of literature shows that these conditions are essentially the only conditions under which markets are efficient. Greenwald and Stiglitz (1986) illustrate that when markets are incomplete or there is imperfect information, markets are not constrained Pareto efficient.

[6] Rothschild and Stiglitz (1976) characterize insurance market equilibrium under adverse selection and show that competitive equilibrium may not exist. Stiglitz and Yun (2013) study how the presence of moral hazard and adverse selection affect the optimal and equilibrium insurance contracts and discuss the role of the market and the government in implementing optimal allocation.

4. The proper role of government in post-COVID recovery

What are the roles of government? Covid-19 has illustrated the important roles that government can and should play. As we discussed in Section 2, the more effectively the government can control the pandemic and its economic aftermath, the smaller the lasting damages will be and the sooner recovery will take place. Beyond the public health aspects of recovery, there are multiple roles the government can fill, especially when it comes to fixing problems that the market cannot resolve on its own. The following subsections highlight more generally some of the many roles that government needs to play more generally.

4.1. Regulation

The first role the government must play is regulation. Private companies have an incentive to make money, but they often accomplish this by taking advantage of others. For example, we have seen this in the previously mentioned exploitation by insurance companies during the pandemic. Governments must impose regulations to prevent such exploitation and pursue other social goals.[7] Imperfect and asymmetric information, incomplete risks markets, and other market failures imply that price interventions by themselves do not work well compared to price interventions accompanied by regulation and other government actions.

4.2. Socialization of risks

A second role of the government is to provide social insurance. Individuals face many significant risks that are not insured (or insurable) by private markets, such as unemployment, retirement, and social security. Private markets especially fail when there are correlated risks that affect everyone, and in such circumstances the government should act as a reinsurance company of last resort. So too for macroeconomic events where systemic risk is beyond the capacity of any insurance company, social insurance must be provided.[8] And we must consider the macroeconomic implications of counterparty risk.

This is not a new role for the government, but public policy seems to have a short memory of previously learned lessons. For example, companies writing insurance went bankrupt during the 1997 Asian financial crisis, with the consequence that those who thought they had purchased insurance were not covered.

4.3. Mitigating the moral hazard problem

Whenever individuals obtain insurance, there is the possibility of "moral hazard," that they will not take the action required to mitigate the moral hazard. How significant these adverse incentive effects is often not clear. A judgment must be made about how important the moral hazard effects are relative to the value of risk mitigation.

Let us look at one example that is being debated in the United States in terms of a very specific program—unemployment, one of the risks associated with the disease. Private markets never provide unemployment insurance, and therefore every society relies on publicly provided unemployment insurance. With stronger unemployment insurance, there may be some incentive not to search for a new job. The question is how important such a moral hazard is. Unemployment insurance is a fraction of their normal income and most individuals know that it is only temporary. Knowing how hard it is to get a good job, they are not going to take advantage of unemployment insurance. They may not go to work because they're afraid of the virus, but the unemployment benefits are not going to drive their decision. Moreover, when there are few if any jobs available, individuals will not search: the lack of searching is not because of unemployment insurance, but because of the absence of employment opportunities.

There has been controversy in the United States because the original unemployment package raised benefits to compensate for a few states that provided only a small fraction of wages in unemployment benefits. To prevent people from going hungry or suffering in other ways, the government granted $600 per week in addition to normal unemployment benefits, resulting in higher unemployment pay than wages. However, a cross-state empirical study found no evidence supporting the argument that the above unemployment insurance discouraged people from working.[9] Although young people who believe they are invincible continue to take risks, the extent to which they do this is not affected by their insurance. Conversely, old people who are cautious do not take risks no matter what their insurance is like. Overall, insurance has a second-order effect.

4.4. Lessons on the role of government from US economic history and East Asian economic growth

The first lesson is that the government must step in to solve problems of market failures, e.g. associated with large externalities. The creation of new institutions brings societal change, which generate large societal externalities. Arrow (1962a, b) and Stiglitz (1987) show too that markets are inefficient in the allocation of resources to innovation in both how and how much they direct that innovation.[10] The countries that have had rapid economic growth over the past half century, including those in East Asia, have typically dealt with market failures better than those countries that have failed to grow.

The second lesson is that integral support from the government for market development is extremely important. It is hard to identify any economy that has achieved successful development in the absence of strong government intervention. This was the case for US economic growth in the 19th and early 20th centuries as well as in the rapid economic growth in East Asia and China since the end of World War II.

In the 19th century, the United States was an agricultural economy. The government supported agricultural extension services to boost productivity in agriculture and bring technology to farmers across the country. It was again the government that facilitated the structural transformation from an agricultural economy to a manufacturing economy after the Great Depression. The massive expenditures for World War II also facilitated the transformation of the US economy. The huge research expenditures in World War II and afterward during the Eisenhower administration, especially the support of US research universities, were instrumental in providing the US with its technological leadership in many areas. The improvement of the standard of living in the US has been based upon publicly funded basic research; the private sector simply would not have provided adequate support on its own.

Government has also played an important role in the East Asian Miracle.[11] For successful East Asian economies, the key has been not to move the technology frontier, but to bring in knowledge from elsewhere and catch up. Markets alone cannot achieve this goal. When I was chief economist at the World Bank, we argued that what separated developing from developed countries was the gap in knowledge, not just the

[7] See Stiglitz (2009) for further discussions on the rational for government intervention as well as the types and instruments of regulation.

[8] Stiglitz and Yun (2014) offer an explorative design of a social insurance program, income contingent loans, which effectively provide interstate and intertemporal smoothing with minimal adverse effects on incentives.

[9] See Bartik et al. (2020), Finamor and Scott (2021), and Marinescu et al. (2020).

[10] Innovation is inherently risky, marked by imperfect information and incomplete insurance markets. As a public good, knowledge cannot be supplied efficiently by private markets.

[11] Stiglitz (2016) provides a detailed review of the growth processes in these economies, where the state played a catalytic and a regulatory role, at the same time acknowledging the importance of markets. These economies depart from the Washington Consensus policies, which called for a small state, limited government activism, and paid no attention to inequality or social cohesion.

gap in resources. Markets work to maintain such knowledge gaps, and government is needed to overcome them.[12]

This view has been increasingly recognized. In Mariana Mazzucato's book, *The Entrepreneurial State*, she emphasizes the role of the government in promoting innovation. This is among the lessons we should learn from successful economies—that it is only through state action that market failures can be (partially) overcome to achieve sustained growth. In the case of the East Asian Miracle, this gave birth to the concept of "the developmental state." A few countries in Africa have invoked this idea, and it has contributed to their successes in development.Mazzucato, 2013

5. The case for systemic studies of government and economics

To ignore the role of government is to ignore a very large fraction of the economy—in some places the public sector makes up 30% of the economy, while in others it comprises up to 60%.[13] A more general way to label the field of government and economics is "economics of government and collective action" since collective action can take place at many different levels (national, regional, provincial, local) and through a variety of mediums (government, unions, civil society, NGOs).

5.1. Economists are often wrong in making specific assumptions about the role of the government in the market economy

Many economists involved in policymaking are overly confident in the ability of the market to resolve problems. They recognize externalities and imperfect insurance markets, and they are able to realize that large risks must be socialized because no insurance company is capable of bearing them. However, when it comes to government policy many economists are prone to forget these truths and start championing the virtues of the market. Some believe that markets, even if they fail to solve all problems, it is better to rely on them than to turn to government. Of course, it is clear that governments don't always work. Anyone who has lived in the US or watched the country under the Trump administration understands the concept of government failure. And yet, if we look across the world, the most successful countries all have successful governments. New Zealand, for example, has done a fantastic job containing the pandemic, based on people's confidence in government, trust in science, and their social solidarity.

The lesson is simple: we need to work to create better institutions in both the public and private sector. In general, economists tend to mystify Adam Smith and misinterpret him as an advocate of unfettered markets. But in his book *An Inquiry into the Nature and Causes of the Wealth of Nations*, Smith spends page after page discussing the necessity of government to make sure the market works. His invisible hand is just a very small part of the book. He was extraordinarily sensitive not only to market failures in efficiency, but also to the inadequacy of markets in guarding against exploitation. Smith argued that government was needed to prevent the exploitation of workers and consumers. The government had an important role too in providing for education.Smith, 1976

5.2. Social sciences, political science, and public choice

Economics cannot be separated from political science and other social sciences. Political science is the study of government and the way we make decisions collectively. The government sets the rules and regulations that underpin the economy. It sets the interest rates and levels of taxes and expenditures that regulate the macroeconomy. It provides the infrastructure, the education, the basic research on which the economy relies. Public choice, influenced by James Buchanan, is a branch of economics that tries to address the incentives of public decision-makers. However, this field has been less successful than hoped because it is founded on the belief that everyone is selfish and power-hungry.

However, there is a great deal of research to show that people are not utterly selfish. We see this within our families, where we hope to interact with one another in ways that are not utterly selfish. We also see this within our country and the world, which is full of people who have devoted their lives to helping others. Thus, public choice theory embodies a particularly narrow view of human nature. One of my own strands of research in recent years that I have done with Karla Hoff (Hoff and Stiglitz, 2016) and others is to develop a theory of endogenous preferences and behavior. Among the questions we have asked is the following: what are the factors that determine the extent to which people act in an altruistic way versus the extent to which they act selfishly?

5.3. The need for new methodologies to study government and economics

To study government and economics, we should deploy a wide variety of techniques including theoretical research, case studies, and historical studies.

First, we must form a strong theoretical foundation to inform studies in government and economics. We need theoretical foundations regarding the nature of the individual, society, and their interaction. Much of the fashionable recent work in economics has taken a particularly narrow view. It has also focused on situations where the economy is assumed to be (almost) always in equilibrium. For example, dynamic stochastic general equilibrium models (DSGE), one of the standard macroeconomic models, always assume equilibrium even though every interesting situation occurs during disequilibrium, such as the unanticipated shocks and financial crises of 2008 and 2020.[14]

Second, care has to be taken in making the right assumptions. We always have to simplify. But making the wrong simplifications will, for instance, lead to the wrong policies. Our earlier discussion has provided multiple examples. For instance, in Covid-19, the first-order effect among firms and upper income individuals was an increase in precautionary behavior, which is not part of the standard DSGE model.

Spending all one's energy solving complex problems of intertemporal substitution takes away attention from other problems, such as the responses to changes in risk. Similarly, today, in thinking about climate change, the standard economic models focus more on the intertemporal effects than on the overwhelming risks that it poses.

Third, we must properly utilize other disciplines. Economists should draw more upon research from other disciplines such as sociology, political science, and psychology. One example is Elinor Ostrom's seminal contribution to economics as a political scientist.[15] The prior presumption among right-wing economists for managing local externalities associated with the common pool problem (such as associated with fisheries) was always to assign property rights according to the Coase Theorem. However, Ostrom (1990) identifies an alternative– regulatory frameworks– to prevent overfishing which have worked well in many developing countries. Furthermore, she showed that the property rights solution had significant disadvantages including high transaction costs and the tendency to lead to inequality.

[12] There is a potential role for the government since markets are not efficient in general when technology is endogenous. Policies aimed at improving the static allocation of resources often fail when promoting learning, advancing knowledge, and closing the knowledge gap within a country, as well as the gap between developing and developed economies.

[13] There are different measures of the size of the public sector. Fig. 3 shows public expenditure as a share of GDP for G-20 countries, which vary from 16% for Indonesia to 56% for France in 2019.

[14] Stiglitz (2018) provides a detailed assessment of the problematic micro foundations of DSGE models in incorporating aspects of economic behavior.

[15] Ostrom is one of the few political scientists and the first woman to win the Nobel Prize in economics.

6. Conclusion

In addition to the provision of a fiscal stimulus package, there is a long list of other ways in which the government is needed to fill the gaps of the market in facilitating a robust economic recovery. To name a few, beyond ensuring full employment, these include, regulating externalities, promoting robust competition, guarding against exploitation, limiting market power, and providing social protection. In the countries with the most successful COVID-19 responses, government has played these roles effectively.

The pandemic has laid bare the dire need for reforms to create good governance, addressing both government and market failures, and improve institutions. Unfortunately, in some Western countries, including the United States, there is a pervasive and unfounded belief that the market will solve everything on its own. However, wealthy and powerful market players tend to work against solutions that are best for society as a whole when it means they must relinquish some of their money and authority, hence the need for government intervention. But those same forces will try to impede the government undertaking the roles which it should play. Moreover, some governments are corrupt. The power to do good also enables the capability to do bad, as seen in the Trump administration. Thus, we must work to correct market failures *and* government failures. It is a never-ending struggle to create good institutions.

That is why research on government and economics is important. It is only by studying these institutions and finding out when they succeed and when they fail that we can move toward building better institutions. We are never going to create perfect institutions, but I believe we can create better institutions both in the public and private sector, and develop better frameworks for them to work together and with others, including civil society and NGO's.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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