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The effects of COVID-19 on domestic and international security in democratic and authoritarian regimes

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Abstract

While numerous studies have examined how the COVID-19 pandemic has affected health care systems, supply chains, and economies, we do not understand how the pandemic has impacted the security of democratic and authoritarian states from a global standpoint. Thus, this study examines how COVID-19 has affected the security of democratic and authoritarian regimes. In conducting a historical, qualitative review of the security effects of the pandemic, we find that COVID-19 significantly affected domestic and international security for democratic and authoritarian states in both similar and varied ways. Additionally, the manner in which states responded to the pandemic was often conditioned by their regime type and by the nature of the governing leadership during the pandemic. These findings have important implications in considering how COVID-19 affected the security of democratic and authoritarian states, how regime type shapes government responses to infectious disease outbreaks, and how democratic and authoritarian states may respond to future pandemics.

Keywords: COVID-19; pandemic; domestic security; international security; democratic states; authoritarian states

Introduction

Prior research documents the myriad ways in which COVID-19 has affected the lives of individuals around the world in areas such as government stay-at-home orders, health care, supply chains, inflation, school closures, and mental health (Carr et al., 2022; Fong et al., 2020; Jung et al., 2020; Kirkpatrick et al., 2020; Long et al., 2022; Mansell et al., 2023; Sajjad, 2021). Emerging scholarship also examines the effect that the COVID-19 pandemic has had on state security regarding health care identification and response systems, human security, and the preparedness of military forces (Albert et al., 2021). However, we do not fully understand how the pandemic has affected state security when considering the regime type of states. That is, we lack an understanding of whether democratic and authoritarian states are more or less secure as a result of the pandemic. Additionally, we do not understand the ways in which the pandemic has shaped the security of democratic and authoritarian regimes in the near and long term or how democratic and authoritarian states may respond to the security challenges presented by future pandemics.

To address these questions, this article examines the effects that the COVID-19 pandemic has had on domestic and international security in democratic and authoritarian regimes. Regarding domestic security, we analyze how the pandemic has affected political stability (political extremism, protests, and coups), and political violence (civil conflict, civil war, and terrorism) in democratic and authoritarian regimes. With respect to international security, we analyze how the pandemic has affected international trade, international cooperation, and interstate conflict (cyber conflict and kinetic conflict). The overall aim is to better understand how the pandemic has affected the security of democratic and authoritarian states and consider how future pandemics could impact state security based on regime type.

We examine the effect of COVID-19 on domestic and international security of democratic and authoritarian regimes because crises such as pandemics can present both similar and dissimilar challenges to states based on their regime type (i.e., democratic or authoritarian). Additionally, regime type can impact the manner in which governments respond to security challenges and the resulting effects that pandemics have on state security. However, in some instances, democratic and authoritarian states may face similar challenges and respond in comparable or disparate ways depending on the nature of the existing government at the time of the crisis. Thus, in this study, we present a qualitative historical analysis to compare the effect that the pandemic has had on domestic and international security in democratic and authoritarian regimes and to highlight similarities and differences regarding government responses as well as the security threats that emerged during the pandemic.

In conducting our review, we contend that the pandemic has presented numerous challenges to domestic security in democratic and authoritarian states. In general terms, both democratic and authoritarian regimes witnessed increased political instability, protests, and political extremism during the pandemic. Democracies and authoritarian states experienced significant domestic security challenges during the pandemic, with varied responses depending on the nature of the governing leadership at the time of the pandemic. Furthermore, during the pandemic, many regions with a large percentage of authoritarian states witnessed a greater number of coups, terrorist attacks, and civil conflicts compared with more heavily democratic regions. With respect to international security, the pandemic led to more protectionist economic policies and aggressive resource allocation of medical supplies, personal protective equipment (PPE), and manufacturing items by many democratic and authoritarian regimes as well as increased tensions between the two global major-power states (the United States and China) and their respective allies.

On the international stage, realist notions of protectionism, resource allocation, and states seeking to maximize their own security appeared more commonplace than liberal principles of cooperation stemming from the effects of international institutions and shared norms and interests. While some states did undertake cooperative and humanitarian efforts during the pandemic, and international trade remained constant but at lower levels than before the pandemic, states often sought to protect their own economic well-being at the expense of cooperative efforts, especially during the early days and at the height of the pandemic. However, in many cases, international trade and commerce have rebounded to pre-pandemic levels.

Lastly, while the number of interstate conflicts did not change significantly during the pandemic, specific conflicts such as the war in Ukraine presented serious security challenges in Europe and further strained tensions between the United States and China and their respective partners. In summary, the pandemic created numerous security challenges for democratic and authoritarian states both domestically and internationally; understanding how these challenges emerged and were confronted can help researchers and policymakers better prepare for future infectious disease outbreaks.

The layout of the article is as follows: First, we discuss the conceptualization of democratic and authoritarian regimes, our case selection criteria, and the rationale for comparing democratic and authoritarian states. Next, we examine how the pandemic has affected domestic security in democratic and authoritarian states. We then analyze how the pandemic has affected international security in democratic and authoritarian regimes while considering the international relations (IR) theories of realism, liberalism, and constructivism. In our analysis, we seek to better understand how the pandemic has impacted the security of democratic and authoritarian states in both unique and similar ways. Finally, we discuss how democratic and authoritarian states may respond to the security challenges presented by future pandemics through the lens of the major IR theoretical perspectives.

Regime type classification and case selection

Democracies are generally defined as having many of the following characteristics: regularly occurring free and fair elections, executive constraints, checks and balances within the government,

enfranchisement of a large percentage of the population, political rights and civil liberties, and judicial oversight. Authoritarian regimes are frequently regarded as lacking some or all of these features. When considering whether states are democratic or authoritarian, we referenced Freedom House (2023) and the Varieties of Democracy data set (Coppedge et al., 2021). One important note is that there is frequent scholarly disagreement regarding whether some states are democratic, authoritarian, or mixed regimes (i.e., not fully democratic or authoritarian) based on existing regime type indices. Furthermore, the regime type classification of some states can vary annually. Thus, the discussion of a given state as democratic or authoritarian is not intended to be a definitive classification for all states given the variation in regime type measures and annual fluctuations in levels of democracy/authoritarianism for some states. Rather, it is intended to be a guide in discussing the regime type of states.

Regarding the states examined, we do not limit our focus to a small number of states or a particular region because we attempt to present a broad analysis while also focusing on specific examples to highlight the ways in which the pandemic has affected the security of democratic and authoritarian states globally. The examples cited span multiple regions (Asia, Africa, Latin America, the Middle East, and North America) and include developing and developed states. However, the examples are not intended to be an exhaustive sample of democratic and authoritarian states. Rather, the examples are chosen based on data availability and to provide real-world illustrations of how the pandemic has affected security in democracies and authoritarian regimes. Our approach is similar to other qualitative and historical studies that combine a broad analysis with specific cases to highlight general trends along with real-world examples (Acemoglu & Robinson, 2013; Fukuyama, 2011).

We compare democracies and authoritarian states to attempt to explain how democratic and authoritarian states were affected by the pandemic in similar and disparate ways regarding domestic and international security. In addition, we employ this comparison to better understand how democracies and authoritarian states responded similarly or dissimilarly to the pandemic. We compare democracies and authoritarian states because of the variation in government institutions and political cultures within each regime type that can uniquely affect government decisions, security polices, and political and security outcomes (Easton & Montinola, 2017; Filson & Werner, 2004; Hyde & Saunders, 2020). This approach is similar to previous studies that disaggregate states by regime type when analyzing security-related events (Debs & Goemans, 2010; Filson & Werner, 2004; Gaibullov et al., 2017).

Democracies and domestic security: Political stability and political violence

Political instability is important to analyze within the context of domestic security because the way that pandemics affect the political stability of states and their institutions has a direct impact on domestic security. A breakdown in government functioning, or the weakening of government institutions, can lead to mass discontent and security issues. The pandemic has affected political stability and the security of democracies in a number of ways. Some researchers contend that the psychological consequences of “pandemic fatigue” have significantly impacted human behavior regarding compliance with government policies (Jørgensen et al., 2022, p. 1). This argument is based on the notion that pandemic fatigue affected the degree to which individuals complied with pandemic-related rules and regulations. Jørgensen et al. (2022) theorize that pandemic containment policies “may have consequences far beyond the health domain” (p. 1). Thus, they analyzed “discontent with the entire political establishment” among Western countries, such as Sweden, Denmark, Germany, and the United States, and determined that the societal impact of COVID-19 does “raise concerns about the stability of democratic societies, which were already strained by strife prior to the pandemic” (Jørgensen et al., 2022, p. 1). Interestingly, they found that “pandemic fatigue does not ... elicit support for strong leaders, suggesting that pandemic fatigue elicits active forms of discontent rather than passive submission to authority” (Jørgensen et al., 2022, p. 8). When comparing quantitative data before and after lockdown measures, there appears to be a link between violent protests and the stress of enduring a global pandemic such as COVID-19. Worldwide demonstrations increased by 7% in 2020 compared with 2019 (Bartusevičius et al., 2021, p. 1391).

Sometimes, “protestors seem[ed] to be condemning authorities’ specific failures in addressing the public health crisis” and “governments [became] the target of public demonstrations” as ineffectual mandates and preexisting tensions collided (Blanc & Brown, 2020). There was a strong correlation between these events and pandemic restrictions. For example, “in Italy, an anti-lockdown protest turned into a riot, wounding 10 police officers” (Bartusevičius et al., 2021, p. 1392). In Colombia, violence was perpetuated by both rioters and police. A nongovernmental organization, Temblores, reported over 1,700 victims of police brutality in response to protests (Uwishema et al., 2022, p. 2). At the same time, many violent protesters destroyed or vandalized structures and attacked both police officers and stations (Uwishema et al., 2022, p. 2). Though protests—and sometimes violent ones—are not uncommon, it is possible that stress and anxiety related to the pandemic fostered hostile environments more prone to domestic violence.

In their attempt to identify a potential link between the COVID-19 burden and anti-government sentiments, Bartusevičius et al. (2021) collected two-wave panel data from citizens in the United States, Denmark, Italy, and Hungary (p. 1393). They determined that the perceived COVID-19 burden was associated with a nearly 4% increase in radicalism intentions; 6.7% of respondents “expressed intentions to engage in political violence,” and the COVID-19 burden “was associated with self-reported participation in political violence” (Bartusevičius et al., 2021, p. 1398). In the United States, the perceived COVID-19 burden was tied to reports of engaging in violent protests (Bartusevičius et al., 2021, p. 1401).

Bloem and Salemi (2021) examined the effect that the pandemic had on domestic violent conflict—for example, battles and bombings, as well as civil demonstrations such as protests or riots—by analyzing data from the Armed Conflict Location and Event Data (ACLED) project. Five quantitative case studies (including two democracies, India and Chile) were analyzed to better understand “the complex relationship between contemporaneous political climate, pandemic risk, policy response, and intergroup conflict” (Bloem & Salemi, 2021, p. 4). Their results indicate a short-term decline in intergroup conflict events at the onset of the pandemic, which included a decline in protests, but these events returned to pre-pandemic levels by the last few months of 2020 (Bloem & Salemi, 2021, p. 8). They observed that democracies such as India “may have a U-shaped protest trend over the initial months” of the pandemic, but that “countries facing multiple economic shocks over the period (e.g., Lebanon) exhibit diminishing protests over time” (Bloem & Salemi, 2021, p. 8).

According to Kruglanski et al. (2020), “the uncertainty and confusion caused by the COVID-19 pandemic were being widely exploited by ... domestic terror groups” as both a “recruitment tool and justification for violent activities” (p. 1). Far-right extremism had already been on the rise, with terrorist attacks increasing more than 300% in a five-year period leading up to the pandemic (Kruglanski et al., 2020). Far-right domestic terrorists used the pandemic to target perceived enemies including foreigners, minorities, and the government. The efforts to identify individuals to blame for the pandemic served as a recruitment tool for domestic terror groups (Kruglanski et al., 2020). By combining an anxious group (the general public) experiencing the uncertainty of the pandemic in addition to stay-at-home orders with extremists taking advantage of vulnerable individuals, there has been “an observed increase in activity on online extremist platforms” (Ackerman & Peterson 2020, p. 62). Additionally, the confusion surrounding COVID-19 in the early days of the pandemic was conducive to a rise in anti-government attitudes. Misperceived or ineffective responses to the virus led individuals and groups to exacerbate government missteps, causing a rise in anti-government extremism and an increase in domestic terrorism concerns (Ackerman & Peterson 2020, p. 62). Across the United States, individuals were arrested for threatening to kill governors or attack police department headquarters, indicating a troubling trend regarding homegrown terrorist threats (Ackerman & Peterson 2020, p. 63).

Authoritarian regimes and domestic security: Political stability and political violence

The pandemic provided a new impetus for popular uprisings and protests in several authoritarian states, as public dissatisfaction with government responses to the health crisis fueled grievances and calls for

political reform. In Belarus, for example, mass protests erupted following the August 2020 presidential election, in which President Alexander Lukashenko claimed victory amid allegations of electoral fraud. The government's perceived mishandling of the pandemic, including downplaying the severity of the virus and failing to implement adequate safety measures, contributed to public dissatisfaction and fueled protests (Tétrault-Farber & Zavyalova, 2020). In Iran, the pandemic had a significant impact on political stability, with the government facing criticism for its handling of the crisis and the economic hardships endured by the population. The pandemic also exacerbated existing social tensions and political divisions, with protests erupting over the government's response to the crisis and its perceived failure to protect the public. According to a report by the International Crisis Group (2020), "with Iran's leadership already under enormous domestic pressure, the toll taken by the coronavirus might also affect its calculus."

Many other authoritarian regimes experienced instability during the pandemic. Though coups are not as common as they were five decades ago, there were six coups in 2021 "as military and authoritarian leaders [took] advantage of COVID-19 and political unrest," making coups more commonplace in 2021 than in the entire decade before (U.S. Global Leadership Coalition, 2021; see also Repucci & Slipowitz, 2022). From Mali to Guinea-Bissau, Africa experienced significant unrest and instability during the pandemic. On the African continent alone, there were 11 coup attempts between August 2020 and November 2022, with 13% of African countries experiencing a coup during that period, and "all but one coup worldwide since the onset of the global COVID-19 pandemic" took place in Africa (Chin & Kirkpatrick, 2023, p. 2). One example of how the pandemic affected political stability and coup attempts is Sudan. COVID-19 created many problems in Sudan as the country faced inflation over 400% in July 2021 (International Crisis Group, 2021). Three months later, in October 2021, the military declared a state of emergency and staged a coup—though Prime Minister Abdalla Hamdok was eventually reinstated, he ended up resigning in response to pressure from citizens and political groups, leaving the government under military control (Repucci & Slipowitz, 2022).

The COVID-19 pandemic also significantly impacted political stability in authoritarian regimes in other regions, as the health crisis exposed vulnerabilities in governance and public services, exacerbating existing tensions and discontent. Gotabaya Rajapaksa, who governed Sri Lanka through his "modern authoritarian rule," faced rolling protests regarding mismanagement and economic policies over the course of eight months (Abayagoonasekera, 2022). Ultimately, Rajapaksa had to flee after his home was stormed by protesters, who succeeded in forcing his resignation, and he was replaced by Ranil Wickremesinghe (Carnegie Endowment for International Peace [CEIP], 2023). In September 2021, President Alpha Condé of Guinea was deposed by a coup following his constitutional amendment to secure a third term and amid reports of harassment, intimidation, and arrests of opposition members "in an atmosphere of insecurity linked to restrictions because of the COVID-19 pandemic" (Human Rights Watch, 2020; Repucci & Slipowitz, 2022). In Bolivia, the interim government led by Jeanine Áñez, which took power in 2019, faced allegations of human rights abuses and repression during the pandemic (Watts, 2021). The government's perceived mishandling of the crisis contributed to its defeat in the October 2020 elections, paving the way for the return of the Movement for Socialism party (Kohl & Farthing, 2021, p. 1).

Numerous authoritarian Central Asian states also witnessed an increase in instability and protests during the pandemic. For many, lockdowns and quarantines "sparked backlash, with at least 103 protests linked to the pandemic and the region's respective government responses since the virus" erupted on the scene (Jardine *et al.*, 2020). To track dissent patterns in Central Asia, a team at the Oxus Society for Central Asian Affairs produced the Central Asia Protest Tracker (CAPT) to trace protests across the region. Though the data begin before the 2020 health crisis, they show that "protests ... have been exacerbated by the COVID-19 pandemic" (Jardine *et al.*, 2020, p. 5). The CAPT revealed that there were 74 pandemic-related protests pertaining to issues from PPE costs to businesses being shuttered in Kazakhstan (Jardine *et al.*, 2020). COVID-19 aggravated Turkmenistan's ongoing food crisis as a result of border closures and contributed to a reduction of roughly 60% of the state's food supplies (Jardine *et al.*, 2020, p. 10). This led to demonstrations in multiple provinces as the government continued to

employ propaganda through images of fully stocked shelves to attempt to convey a sense of control and security (Jardine et al., 2020, p. 10). The pandemic also contributed to the escalation of civil conflict in some authoritarian states as governments redirected resources to deal with the health crisis, potentially weakening their capacity to address ongoing conflicts and maintain stability (International Crisis Group, 2020). For example, fighting in the Libyan civil war increased after the pandemic began. Though both sides were already heading for an escalation, the pandemic accelerated tensions as the international community was distracted from the recent peace treaty that was being ignored, and both sides believed the other would topple with the added pressure of the health crisis (Ide, 2021, p. 5).

As the Libyan case highlights, civil conflicts in authoritarian states have been affected by the pandemic. The health crisis revealed weaknesses in governance and public services, leading to unrest in additional authoritarian regimes. For example, in the Philippines, President Rodrigo Duterte's response to the pandemic was heavily criticized for its heavy-handed approach, including the imposition of strict lockdown measures and increased military presence (Green, 2020). These measures raised concerns about human rights abuses and further inflamed tensions between the government and rebel groups, contributing to the escalation of civil conflicts.

Before COVID-19 emerged, many states in the Middle East and North Africa (MENA) region were already struggling with civil conflicts, extremism, humanitarian crises, and militarized factions (Norlén, 2022). Though some large oil-producing states were more stable, these autocratic regimes still faced significant security issues (Norlén, 2022). Destabilized security in the region is a serious problem as "fragile states tend to respond with repressive military tactics, clamping down on both illegitimate and legitimate political expression, reinforcing a vicious circle of authoritarianism, dissent, repression, and conflict" (Norlén, 2022, p. 109). In fact, many authoritarian leaders in the region quickly took advantage of emergency procedures related to the pandemic to procure more power for themselves. President Abdel Fattah al-Sisi of Egypt "approved amendments to the constitution that extended the country's Emergency Law to grant him and the security forces additional powers in the name of coronavirus containment" (Norlén, 2022, p. 118). Furthermore, in Egypt, protesters calling for the release of political prisoners because of the danger of rapid spread of COVID-19 in jails were detained on charges of "incitement to organize a demonstration and spreading false news" (Reuters, 2020a).

In Tunisia, massive spikes in COVID cases incited civil unrest and, in response, a massive power grab by President Kais Saied. Halfway through 2021, President Saied and Prime Minister Hichem Mechichi had a public disagreement over Tunisia's response to the pandemic. A week later, on Republic Day, a large demonstration in the streets occurred because there was outrage over an inadequate supply of vaccines at a clinic and citizens were disappointed about unemployment rates (Youssef, 2022, p. 94). President Saied took advantage of this domestic turmoil by assuming executive authority as he "dismissed the government and froze parliament" (Amara & Mcdowall, 2021). Saied's political opponents designated it a coup and called for demonstrations and protests in the streets, while some citizens cheered and sang the national anthem (Amara & Mcdowall, 2021). Similar to other authoritarian states, the contradictory public response to this type of event exemplified a deeply divided domestic situation exacerbated by distress, fear, and anger revolving around the state's inadequate response to the novel coronavirus pandemic.

One major challenge to regional security in authoritarian states in the MENA region during the pandemic was the issue of refugees and internally displaced persons. It is estimated that over 17 million internally displaced people and over 2.5 million refugees were creating "security conditions and crowding in refugee camps that have made virus containment difficult," exacerbating already poor conditions and causing an increase in conflict in states such as Yemen (Norlén, 2022, p. 116). Such exorbitant numbers of people seeking refuge in a different country during a global health pandemic put additional strain on authoritarian states grappling with the influx of population. Attempting to divide already limited resources, such as PPE, and figuring out how to safely enforce social distancing or quarantine measures in overcrowded refugee camps was of particular concern during the COVID-19 crisis. In Yemen, Syria, and Nigeria, terrorists stepped in to assist with the health crisis in an attempt "to win the sympathies of at-risk populations and undercut the governments" (Basit, 2020, p. 265). The

Shiite Hezbollah in Lebanon sent thousands of doctors, nurses, paramedics, and activists to help care for the sick and contribute to the sanitation of public areas, and the Hayat Tahrir Al-Sham in Syria encouraged COVID-19 testing (Basit, 2020, p. 266).

Regarding terrorism in authoritarian states in the MENA region, affiliates of ISIS and al-Qaeda remained active and maintained shelter in Syria, Libya, Yemen, and Iraq because of tenuous security in the region (Norlén, 2022). Many terrorist groups took advantage of fewer troop movements during COVID-19 to travel more freely within states (Norlén, 2022). Throughout 2020, ISIS in Iraq and Syria continued waging insurgency in an attempt to “destabilize the region, recruit new members, and regain territory” (U.S. Department of State, 2021, p. 112). As many authoritarian regimes became heavily militarized, there was concern that “as COVID worsens societal vulnerabilities and state fragility, advanced military equipment may end up in the hands of insurgents, terrorists, and nonstate actors, further exacerbating current tensions” (Norlén, 2022, p. 120). Readily available arms, limited troop movements, and weapons illicitly supplied to nonstate actors have the potential to continue to create significant security issues connected to civil conflict and terrorism in the MENA region.

Regarding terrorism in authoritarian regimes more broadly, the pandemic’s impact has been complex. The United Nations (UN) Counter-Terrorism Committee Executive Directorate (2021) noted that while the pandemic generally led to a decrease in terrorist attacks globally, it also created opportunities for terrorist groups to exploit weakened states and adapt their tactics (pp. 7–8). This suggests that the pandemic may have had both direct and indirect effects on terrorism in authoritarian regimes, as governments could use the crisis as an opportunity to tighten their grip on power and suppress dissent, while terrorist groups could exploit the situation to advance their agendas.

Democratic and authoritarian regimes, COVID-19, and domestic security: Overview

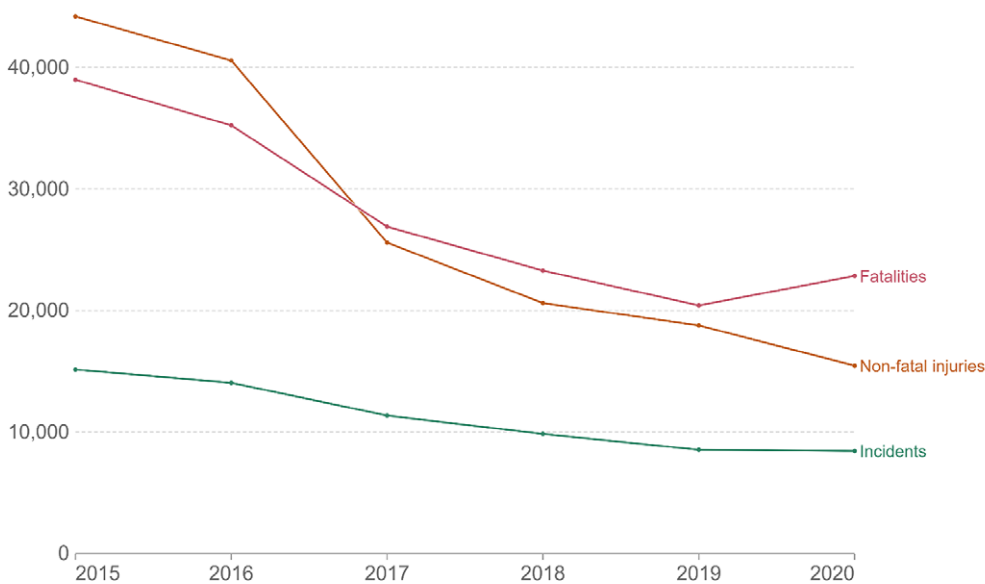
From a global perspective, the pandemic did not lead to a significant rise in terrorist attacks overall. Figure 1 displays the average number of terrorist attacks worldwide from 2015 to 2020, along with the number of fatalities and injuries related to terrorism. In examining Figure 1, we see that in 2019, there were a total of 8,537 terrorist incidents, 20,412 fatalities, and 18,776 injuries stemming from terrorist attacks. In 2020, the number of terrorist incidents decreased to 8,433, terrorism-related fatalities rose to 22,847, and terrorism-related injuries decreased to 15,466. Thus, while the number of deaths from terrorism increased by 11%, the number of incidents fell by 2%, and the number of injuries declined by 18% in 2020 (Global Terrorism Database [GTD], 2022).

Figure 2 displays the number of terrorist attacks by region as a percentage of all regions from 2015 to 2020. In examining Figure 2, we observe that in 2020, the largest number of terrorist attacks occurred in South Asia (33.36%) and sub-Saharan Africa (23.67%), followed by the MENA region (21.36%) (GTD, 2022). The majority of states in these regions are authoritarian. In addition, these regions may have experienced a significant amount of terrorism in 2020 partly as a result of political instability related to the pandemic, which exacerbated existing tensions within states. A report by the UN Development Programme (2021) explained that “in fragile contexts, the highest rates of COVID-19 infections have been found in countries that ... also have the highest burden of violence” (p. 2), including states such as Nigeria, the Democratic Republic of the Congo, Cameroon, Burundi, Mali, and South Sudan. Violence inflicted by nonstate actors and domestic terrorists was partly attributable to state security forces’ prioritization of the pandemic. Specifically, “all of the major UN-designated terrorist groups in Africa recorded an increase in activities in 2020 compared to the same period in 2019,” with health and aid workers being common targets (United Nations Development Programme [UNDP], 2021, p. 9).

Regarding the pandemic and political stability and protests, in the first year of the pandemic, there were over 25 “significant protest movements” directly connected to COVID-19 around the world (van der Zwet *et al.*, 2022). The Carnegie Endowment for International Peace’s Global Protest Tracker indicated that over 100 countries (of which nearly 80% were authoritarian) endured major protests (U.S. Global Leadership Coalition, 2021). One example is Cuba, where for a week in July 2021, food and

Incidence, fatality and injury from terrorist attacks, World, 2015 to 2020

The total number of recorded terrorist incidents, fatalities and non-fatal injuries by country or region. This includes fatalities or non-fatal injuries of both victims and perpetrators.



Source: Global Terrorism Database (2022)

OurWorldInData.org/terrorism • CC BY

Figure 1. Incidence, Fatality, and Injury from Terrorist Attacks, Worldwide, 2015 – 2020

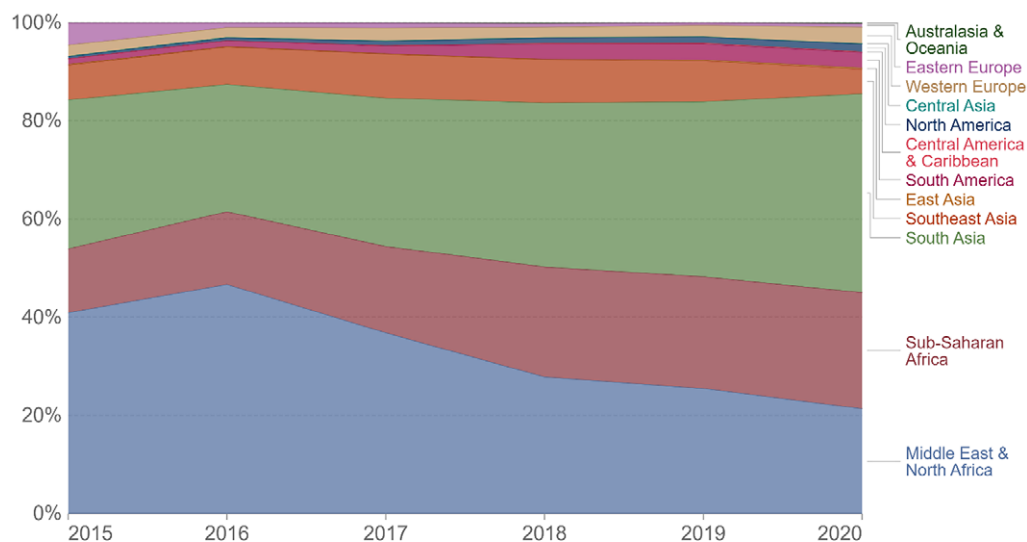
medicine shortages across the country sparked a protest of over 5,000 citizens who were frustrated with political repression and poor services for the public (CEIP, 2023)

Though many protests, particularly in democracies, centered around opposition to strict lockdown measures, numerous authoritarian states experienced civil conflict and protests in response to lethal force imposed on protesters or in response to other “secondary impacts of the pandemic” (UNDP, 2021, p. 3), such as social, political, and security factors. The UN Development Programme indicated that troubling trends were emerging in fragile, conflict-affected areas in the world and that the pandemic was contributing to rising protest levels, democratic backsliding, rising authoritarianism, an increase in extreme poverty, and a correlation between COVID-19 levels and intrastate violence (UNDP, 2021, p. 3). In Ethiopia, for example, in August 2020, many people took to the streets to protest the arrest of zonal officials, who were accused of meeting in violation of social distancing measures. In response to the protests, bystanders and protesters alike were violently assaulted by security forces, with at least 16 individuals killed and over a dozen injured in the ensuing clashes (Amnesty International, 2020).

In summary, the effects of the pandemic on domestic security in democratic and authoritarian regimes reinforces prior research on how international and national crises can impact citizen discontent, protests, political extremism, and political stability (Maerz et al., 2020; Svulik, 2012). Both democracies and authoritarian states witnessed a rise in political demonstrations, protests, and various forms of political extremism during the pandemic. Greater political extremism and displays of public discontent were evident in many states regardless of regime type. This reinforces prior work on the effect that crisis situations can have on mass mobilization, whereby large numbers of individuals find it easier to organize collectively when national emergencies highlight existing societal divisions and government responses to crises are viewed as inadequate (Maerz et al., 2020). Additionally, many regions with a disproportionate number of authoritarian states experienced a rise in coups, terrorism, and civil conflict during the pandemic compared with more heavily democratic regions. This was likely a result of the added political,

Terrorist attacks by region, 2015 to 2020

The total number of terrorism-related incidents per year. The source defines a terrorist attack as: "the threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation." The perpetrators of the incidents must be sub-national actors; data does not include acts of state terrorism.



Source: Global Terrorism Database (2022)

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Figure 2. Terrorist Attacks Worldwide by Region, 2015 – 2020

economic, and societal stresses created by the pandemic, the exacerbation of existing tensions within states in these regions, and dissatisfaction with government responses to the pandemic.

Overall, the COVID-19 pandemic has had a complex and multifaceted impact on political stability, protests, civil conflict, and terrorism in democratic and authoritarian states. While some regimes managed to suppress dissent and maintain control, others experienced increased unrest and political violence as a result of the crisis and in response to the pandemic. We now examine how the pandemic has affected international security in democratic and authoritarian regimes.

International relations theories: The pandemic and international security

In considering how the pandemic has affected international security in democratic and authoritarian regimes, we first discuss how the major IR theories of realism, liberalism, and constructivism predict states should behave during an international crisis event such as a pandemic. While numerous useful IR theories and perspectives exist, we examine these perspectives because they frequently guide research in international security and can provide useful frameworks for considering how states may respond to international crisis events. We begin by discussing the earliest IR theory, realism.

Realism

From the realist perspective, international politics is essentially a struggle for power among self-interested states in an environment defined by anarchy. At the system level, and building upon Waltz's (1979) static view of power relations, Gilpin (1981) believed that the dynamic distribution of power should be the focus. When an international crisis such as a pandemic occurs, it is possible that the relative power distribution is altered to some extent, which may affect great-power relations and conflict

outcomes. For example, yellow fever helped defeat Napoleon's troops in Haiti during the Haitian Revolution as Europeans caught the disease every summer, whereas the Haitian rebels were immune (Snowden, 2019, pp. 127–128). Similarly, Napoleon's invasion of Russia in 1812 was affected as much by dysentery and typhus as by the Russian army (Snowden, 2019, p. 140).

Regarding international political economy, realists are skeptical that economic interdependence will bring peace among states and pessimistic about the prospects of international institutions and cooperation. Instead, they emphasize self-help and relative gains. Realists argue that states, driven by inherent insecurity in international competition, worry more about how well they will fare compared to other states (relative gains) instead of the absolute benefits (Gilpin, 1981, 1987; Lake, 1984; Snidal, 1991; Waltz, 1979). Besides, realists also emphasize the importance of self-sufficiency. For example, Gilpin (1977) argued that states “have placed much greater emphasis on security values such as social stability or self-sufficiency than on income gains from the free operation of markets” (p. 22). In short, realists believe that states care more about security needs, economic autonomy, and winning than about absolute gains from international trade and cooperation. This perspective naturally leads to the implication that states tend to adopt protectionist policies when the global economy is in decline to stabilize their domestic economies (Lake, 1984). In short, a realist would expect that COVID-19 may intensify the competition among major powers, increase the danger of hegemonic transition and war, and motivate states to implement protectionist trade policies.

Liberalism

Different from realism, liberalism contends that increasing interdependence in the world economy unites states and allows them to cooperate for mutual benefits (Keohane & Nye, 1973), facilitated by international institutions. Reflecting on realism, Keohane (1984, 1986) accepted the realist assumption that the international system is characterized by anarchy, but he argued that international institutions bring regulations and provide opportunities for states that seek to maximize their national interests to cooperate and coordinate with each other. From this liberalist—or, more precisely, neoliberalist—view, international institutions can do the following: provide information, improve contracting environments, reduce transaction costs, and set standardized procedures for states. States thereafter can increase interactions, overcome uncertainty, advance mutual interests, and even establish long-term cooperation as a result of reputational concerns and the shadow of the future (Cooley, 2009).

Neoliberalists believe that under the shadow of an event like a global pandemic, states must cooperate to overcome global challenges. Liberals would contend that the international exchange of knowledge, medical resources, and technology may be improved with the help of international institutions such as the World Health Organization (WHO) and the UN. An example can be found in examining past global pandemics, such as severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS), in which scientists across the world coordinated to combat these infectious diseases (Basrur & Kliem, 2021). Neoliberalists would hold an optimistic view that this cooperative behavior would extend to state actors, who are concerned about their international reputation and chances of future cooperation, which could be damaged if they act in a self-centered, protectionist way. For instance, China and the United States cooperated to combat the Ebola virus in 2013–2014, along with some African countries (Alhammadi, 2022). Liberal institutionalists believe that international institutions help states cope with market failure (Keohane, 1984, pp. 50–51), which is probable when a pandemic occurs. Therefore, neoliberalists may expect that intergovernmental cooperation and international trade will increase or remain stable during a pandemic, and the world economy will recover quickly.

Regarding international conflict, neoliberalists believe in the capability of international institutions to ease tensions among states. Keohane (1984) argued that “cooperation therefore does not imply an absence of conflict. On the contrary, it is typically mixed with conflict and reflects partially successful efforts to overcome conflict, real or potential” (pp. 53–54), and international regimes’ “principles, rules, and institutions create linkages among issues that give actors incentives to reach mutually beneficial

agreements. They thrive in situations where states have common as well as conflicting interests on multiple, overlapping issues and where externalities are difficult but not impossible to deal with through bargaining” (p. 97). A global pandemic such as COVID-19 is likely a situation in which states have a common interest in containing the virus. However, they may have conflicting interests, such as denying responsibilities, undermining rival states’ power, and stabilizing domestic economies through protectionism. Based on neoliberalism, international institutions should flourish in this situation and help promote cooperation, provide opportunities for issue linkage, negotiation, and bargaining, and therefore reduce the risk of interstate conflict.

Constructivism

Regarding the differences among the major IR theories, realism and liberalism have one thing in common: they are both based on an ontology of rationalism (Keohane, 1988). They believe that states are rational actors and act instrumentally in pursuit of their ranked preferences and treat actors’ identities and preferences as exogenously given (Wendt, 1992). Nevertheless, constructivism is different ontologically. Constructivism emphasizes norms, identities, knowledge, and values and how the understanding of these concepts is constructed through social interactions. The constructivist perspective further argues that states and societies act according to who they think they are and what they believe is most appropriate (Abdelal *et al.*, 2006; Farrell, 2002). Hence, collective identities and social norms lead states to their own interpretations of conventional concepts of IR, such as power, security, economic interdependence, international institutions, and more, which thereafter guide states’ behaviors.

From the constructivist perspective, the impact of a global pandemic on international security depends on identities, norms, and individual actors’ interpretations of the pandemic. If a nation, a government, or a society feels its identity is being threatened or its norms are being violated, the risk of interstate conflict may increase (Farrell, 2002). For example, from the constructivist perspective, if a state such as China seizes the opportunity of COVID-19 to grow its narrative power and promote an authoritarian order (Chang, 2021), constructivists may expect to observe stronger security communities and more tensions between security communities of different values and norms. States of the same identity, such as liberal democracies, may collaborate more on security issues to defend their norms and values against the “other” nondemocracies (Risse-Kappen, 2016), and vice versa. Further, collective identities not only define “in-group” friends but “out-group” enemies as well (Wendt, 1994). As collective identities are strengthened and reinforced through social interactions within their own communities, the boundary between friends and enemies becomes clearer which may increase between-group hostility (Simon & Klandermans, 2001). In addition, it would be easier for states to overcome collective action problems and carry out collective security arrangements under these conditions, which could increase the danger of conflict.

Constructivism may also expect more intergroup violence domestically, which could have spillover effects on international security. Throughout history, when an unknown and deadly disease occurred, some groups blamed outsiders and minorities out of fear of out-group communities. For example, in the fourteenth century, Jews were targeted in European countries, especially France and Germany, during waves of plague and blamed for spreading pestilence, led by panicked Christian populations, which caused a great number of deaths in Jewish communities (Price-Smith, 2008, p. 42; Snowden, 2019, p. 64). During both SARS and COVID-19, East Asian minorities experienced stigmatization and became victims of hate crimes and violence around the world (Eichelberger, 2007; Gover *et al.*, 2020). Civil conflict has been known to cross borders and lead to international disputes (Gleditsch, 2007; Gleditsch *et al.*, 2008).

When used as an approach to international political economy, constructivism argues that the rules of international markets are socially constructed, and collective identities and perceived norms influence how states interpret their place in the world economy (Abdelal, 2009). Contrary to liberalists’ belief in the pacifying effects of economic interdependence and realists’ emphasis on self-sufficiency, constructivists

claim that whether interdependence is pacifying or risky depends on states' identities and perceptions of themselves. For example, the United States may view trade with the European Union (EU) as an opportunity, while economic dependence on China or Russia is perceived as a security threat. International institutions, from the perspective of constructivism, are helpful in promoting international trade in the sense that they can fix meanings, promote norms and values, and establish rules of policymaking (Chwieroth, 2007; Finnemore & Sikkink, 1998). In addition, how much a norm is accepted regionally depends on how much the norm fits into the regional actors' priors and identities (Acharya, 2004). According to this view, international institutions may simply reinforce actors' prior beliefs and norms through interactions, and COVID-19 could lead to more economic cooperation between states with shared identities and values whereas trade between states with different identities may decline.

Having reviewed the major IR theories, we now discuss how the pandemic affected international cooperation and conflict in democratic and authoritarian states while considering the major IR perspectives.

Democracies and international security: The pandemic and international cooperation

Research shows that not only did COVID-19 have an impact on domestic security within democratic states, it also presented challenges to international trade and cooperation involving democracies. Mena and colleagues (2022) argue that globalization can be beneficial for economies, but that "it has also exposed nations, firms, and individuals to systemic supply chain risks" (p. 77) such as pandemics. COVID-19 was unique as far as economic crises go because it involved quarantines, lockdowns, and social distancing measures that further complicated global value chains (Kejžar et al., 2022, p. 3476). Countries such as the United Kingdom, Italy, France, and the United States experienced significant impacts on their trade (Mena et al., 2022, p. 77). Globally, the economy contracted by 3.3% in 2020, with the EU "among the most affected economies, with a drop in GDP of 6.3 percent in 2020" (Kejžar et al., 2022, p. 3476).

To analyze the first wave of COVID-19's impact on trade within the EU, Kejžar et al. (2022) use "the logic of Newton's law of universal gravitation ... that trade between two economic areas will be directly proportional to the product of their market sizes ... and inversely proportional to the square of the distance between their centers" (p. 3482). They applied this logic to EU member states' monthly bilateral trade data from June 2015 to September 2020 and used data from the Eora Multi-Region Input-Output database to calculate global value chain indices (Kejžar et al., 2022, p. 3482). They found that in the first seven months of the pandemic, there was a 21% drop in total exports and a 24% drop in total imports (Kejžar et al., 2022, p. 3491). This type of data exemplifies why "uncooperative behavior" between states "emerged as governments competed to secure access to scarce resources, such as personal protective equipment (PPE), ventilators, and vaccines" (Mena et al., 2022, p. 77).

Though COVID-19 directly impacted global trade, which fell by 8.9% in 2020, its effects and severity varied depending on the state and region (Dickinson & Zemaityte, 2021). The pandemic had varied impacts regarding its effect on trade, the specific economic sectors that rebounded quickly, and which countries recovered sooner than others. Dickinson and Zemaityte (2021) found that trade in services fell more than trade in goods, which also recovered more quickly because goods were in higher demand. Hayakawa and Muknoki (2021) analyzed trade data from January to August 2020, finding "negative effects on non-essential or durable products ... but positive effects in industries providing medical products". This is indicative of why trade in China declined less than in other regions—because there was high demand for medical goods and PPE, in addition to "China's ability to reopen its domestic supply chains ahead of other countries," they experienced less of an impact and a faster rebound than many other states (Dickinson & Zemaityte, 2021). An analysis by the Organisation for Economic Co-operation and Development ([OECD] 2021) found that compared to China, the United States and euro area were slower to recover, with the United States seeing growth in imports more than in industrial production. Additionally, Latin America, with its raw materials, saw exports drop but steadily rebound, while

recovery in Africa and the Middle East “lags behind, with production and exports far behind trend and imports continuing at past levels” (OECD, 2021). These data suggest that a variety of factors were at play concerning the extent to which states’ economies and trade were affected by the pandemic: how quickly their production returned to pre-pandemic levels, what goods and services they were already offering (with medical and pharmaceutical equipment and natural resources being in higher demand), the extent to which they depended on imports for goods, and how interconnected and dependent their economies were with other states.

The UN Conference on Trade and Development published a report on statistics that revealed a remarkable comeback for global merchandise trade in 2021 (up 22.4%) compared to the same period during 2020 (Merah, 2021). Furthermore, in 2020, global exports fell by nearly \$1.5 trillion and global services trade contracted by 20%, the greatest decline since records began (Merah, 2021). Though trade in services did increase in 2021, the growth was not strong enough to return to pre-pandemic levels because of a sharp decrease during the pandemic (Merah, 2021). Additionally, maritime trade decreased by nearly 4% the first year of the pandemic, while global foreign direct investment “dropped by a dramatic 35% in 2020 to almost 20% below the levels recorded after the 2009 global financial crisis,” indicating the massive scale on which the pandemic impacted trade worldwide (Merah, 2021).

With respect to international cooperation over resources, in the United States, the Federal Emergency Management Agency limited exports of PPE, while the Defense Production Act restricted the export of items such as surgical masks, hospital gloves, and respirators (Quirk, 2021, p. 156). The EU “made all personal protective equipment exports subject to authorization and prohibited their exportation without license,” while the United Kingdom required licenses to export PPE outside the EU (Quirk, 2021, p. 158). India went beyond typical PPE export restrictions and restricted vitamins and antimalarial medication, and Indonesia banned exports of some medical equipment and sanitizers (Quirk, 2021, p. 158). Ultimately, more than 90% of trade restrictions were made up of limitations on exports (Quirk, 2021, p. 156). These responses indicate a tendency for many states to implement protectionist policies in the face of novel, global emergencies such as the COVID-19 pandemic—though merchandise trade did rebound after states acquired more reliable medical information regarding virus containment procedures.

Another important aspect of international cooperation that is important to consider is how the pandemic affected relations among the two leading democratic and authoritarian global powers—the United States and China. Though the United States and China were experiencing political and economic tensions before 2020, the pandemic exacerbated stress between the states. The Chinese government was surprised by the swift change in the political atmosphere during the Donald Trump administration with the threat from the administration to impose higher tariffs on Chinese exports (Boylan *et al.*, 2021). In an attempt to partially repair U.S.-China trade relations, a compromise was reached in January 2020 in which China agreed to higher U.S. agricultural imports. However, beyond economic tensions, the pandemic also brought a “rapid deterioration of political and security relations” between the United States and China as strains over the South China Sea and global health problems exacerbated existing pressures (Boylan *et al.*, 2021). With a recent U.S. Department of Energy assessment reporting that a “lab leak [is] the most likely origin of the COVID-19 Pandemic,” as well as accusations by U.S. officials that China may be supplying Russia with nonlethal military assistance in its war in Ukraine, it is reasonable to assume that U.S.-China relations may remain tense, exacerbated by the effects of the pandemic, regional concerns (e.g., Taiwan reunification) and economic competition (Gordon & Strobel, 2023; Kube, 2023).

Authoritarian regimes and international security: The pandemic and international cooperation

The COVID-19 pandemic has been a double-edged sword regarding authoritarian regimes and international cooperation. In one sense, some authoritarian rulers collaborated with one another to provide assistance. For example, following Venezuela’s flawed parliamentary elections in the midst of the pandemic, when few Venezuelans had access to PPE or clean water, the international community

imposed sanctions on Venezuela. However, Russia, China, and Turkey provided trade and investment benefits to Venezuela to bolster the regime and offset the impact of sanctions (Rendon & Fernandez, 2020; Repucci & Slipowitz, 2022). However, like many democratic states, authoritarian regimes also imposed restrictions on PPE exports and moved to conserve resources for themselves—particularly at the onset of the pandemic. One major difference between authoritarian regimes and democratic states was the varied responses to trade concerns regarding food (Reuters, 2020b). Compared to democratic states such as the United States, France, and the United Kingdom, the restrictions on food exports and imports among authoritarian regimes was unique. In general, democratic states rarely implemented restrictions on food exports, while food export restrictions emerged in several authoritarian states. The restrictions occurred overwhelmingly in authoritarian regimes in Central Asia, Southeast Asia, and North Africa (World Trade Organization [WTO], 2023).

Russia undertook several trade-related measures to protect its food and medical supplies during the pandemic. At varying stages between March and June 2020, Russia temporarily implemented export bans on PPE, imposed an export quota on wheat and various grains, and extended the medical products that were exempt from its value-added tax (WTO, 2023). In Saudi Arabia, there was a temporary export ban on diagnostic tests and PPE as well as pharmaceuticals and medical equipment. Cambodia also implemented a temporary ban on exports of foods such as rice and fish while restricting imports of frozen meat from certain areas. In Egypt, in addition to PPE restrictions, the state also implemented export bans on some leguminous vegetables and beans (WTO, 2020).

The pandemic also affected international cooperation in many authoritarian regimes in the MENA region. In Syria, for example, the pandemic disrupted trade and economic relations with other states, particularly those in the region. This affected the state's ability to import essential goods and services and led to further economic hardship for the population. Moreover, the pandemic limited the ability of external actors to intervene and support the various parties involved, complicating efforts to find a diplomatic solution to the crisis. According to a report by the UN (2020), “the preexisting and underlying fragility of the Syrian economy—in addition to multiple shocks over the past 12 months—has meant that COVID-19 related factors has had a disproportionate negative socio-economic effect” (p. 3).

In Iran, the pandemic affected the country's relations with other states, particularly the United States, which imposed sanctions on Iran and restricted its access to essential goods and services. The pandemic further complicated efforts to negotiate a new nuclear deal with the United States and other states, which could have significant implications for Iran's security and regional influence. According to a report by the Carnegie Endowment for International Peace, “The pandemic has made the prospects of renewed diplomacy and the lifting of U.S. sanctions on Iran more remote” (Takeyh & Salehi-Isfahani, 2020, para. 1).

North Korea, which repeatedly reported that it had no cases of COVID-19, experienced escalating international tension with some other states. Despite President Trump's offer to assist Kim Jung Un with the effects of the pandemic, “both countries seemed unwilling to demonstrate the flexibility needed for real bilateral progress” (Yun & Aum, 2020). North Korea conducted five ballistic missile and rocket launches, which coincided with President Trump's offer to help the state, which has taken advantage of the pandemic as an opportunity to substantially increase its border security (Human Rights Watch, 2022; Yun & Aum, 2020). The North Korean Ministry of Foreign Affairs indicated that the regime had no desire to work with the United States, despite the global threat of COVID-19, due to previous perceived slights such as the failed Hanoi summit and the strong sanctions imposed on North Korea because of their nuclearization (Yun & Aum, 2020).

While the pandemic frequently reduced trade and economic cooperation between numerous states, it also hindered health cooperation for both democratic and authoritarian states. After the WHO “appeared to defer to China's political calculations,” world leaders from the United States and the Japanese deputy prime minister responded harshly, with the Japanese deputy prime minister referring to the WHO as the “Chinese Health Organization” and President Trump “halting U.S. funding for WHO in order to conduct a review,” calling for change in WHO policy or the United States would withdraw funding (Fidler, 2020, p. 245). China condemned these statements and actions and pledged to increase support for the organization (Fidler, 2020, p. 245).

The Chinese Communist Party's pledge to assist with the world's struggle against COVID-19 was also met with increased suspicion among rising international tensions. As the world experienced massive PPE shortages, China, a major exporter of PPE such as gloves and masks, began scaling back on these and related exports to preserve its own stock (Bown, 2022). A few months later, China returned to pre-pandemic PPE export rates, but their "prices also skyrocketed and remained elevated through 2020" because demand outweighed supply (Bown, 2022, p. 114). When China revised the rules governing export quality control, which slowed the international transfer of supplies, the U.S. government "quickly worried that Beijing was taking advantage of its market power and restricting exports for other, potentially political, reasons" (Bown, 2022, p. 119). U.S. senators from both major parties expressed concern over the delays (Brunnstrom, 2020). To ease tensions, the Chinese embassy in Washington responded by explaining how the transfer of the supplies would be streamlined, and it released a fact sheet highlighting the large amounts of N95 and surgical masks that had been exported to the United States in just over a month (Brunnstrom, 2020).

Australia also experienced rising political tensions with China following the COVID-19 outbreak. Australia had "relatively stable" relations with China in the years leading up to 2020 but quickly "took an increasingly assertive stance" following the beginning of the pandemic (Pan & Korolev, 2021, p. 115). Scott Morrison, the Australian prime minister, started an international inquiry into COVID-19's origins, to which China's state-run newspaper, the *Global Times*, responded, likening Australia to gum stuck to the bottom of China's shoe (Pan & Korolev, 2021). Despite China's position as Australia's largest trade partner, their interdependent relationship experienced a sharp, negative shift (Pan & Korolev, 2021).

The examples of greater economic and political tensions between numerous democratic and authoritarian states are indicative of increased international tensions in response to a novel, worldwide pandemic. Many policymakers—such as U.S. President Joe Biden, U.S. Trade Representative Robert Lighthizer, and members of the European Parliament—began calling for more robust self-sufficiency and a reduction in intensive and intertwined trade and supply chains (Baldwin & Freeman, 2020; Bown, 2022). Thus, it appears that many democratic and authoritarian states advanced more protectionist policies in the wake of the pandemic.

The pandemic and international cooperation: Overview

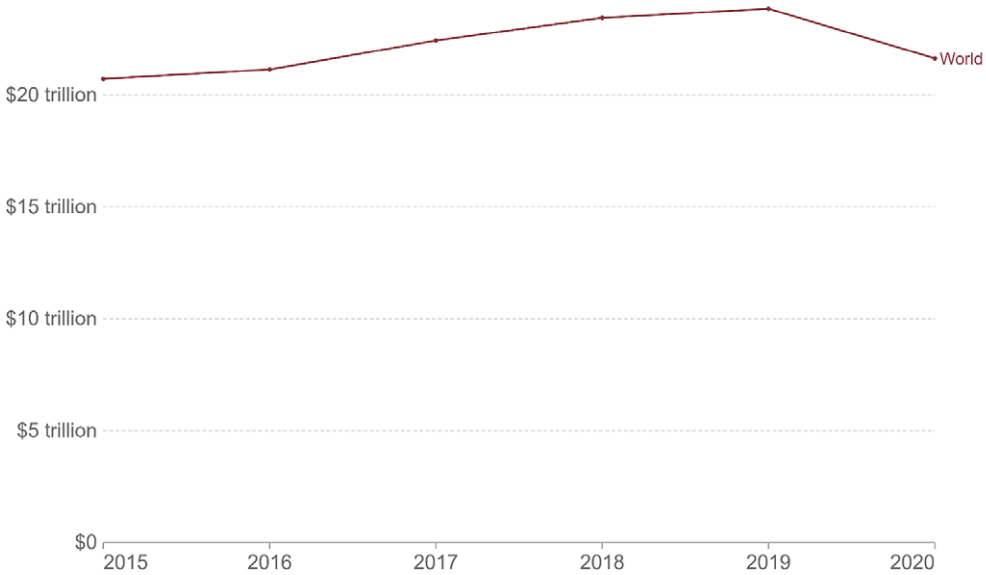
When analyzing the effects of the pandemic on international trade and cooperation in authoritarian and democratic states and considering the major theoretical perspectives in IR, several themes emerge. First, many states, both democratic and authoritarian, resorted to more protectionist policies regarding international trade and commerce during the pandemic, which aligns more with realist expectations. The average amount of yearly international trade from 2015 to 2019 was \$19.32 trillion (WTO, 2023). In 2020, international trade fell to \$17.65 trillion (current U.S. dollars) (Sabanoglu, 2022). Figure 3 displays the total amount of global imports of goods and services from 2015 to 2020. In examining Figure 3, we see that in 2020, global imports decreased by \$2.22 trillion (constant U.S. dollars) compared with the previous year (OECD, 2022; World Bank, 2022).

Figure 4 displays the amount of trade as a percentage of GDP from 2015 to 2020. In examining Figure 4, we see that from 2019 to 2020, worldwide trade declined by 4.71%, trade in the United States decreased by 2.91%, and trade in China decreased by 1.38%. The reduction was largely due to the effects that the pandemic had on labor and supply chains, but more protectionist economic policies also contributed to the decline. With limited domestic inventories of key resources (medical, health, and manufacturing) because of the pandemic and supply chain issues, many states sought to protect their own domestic supplies rather than acting altruistically and supporting allies or other states. This conforms with realist theory, which contends that states are ultimately concerned with their own security and survival (Mearsheimer & Alterman, 2001), especially during times of crisis. As Basur and Kliem (2021) remark, "While all the identified approaches [realism, liberalism, and constructivism] have something to offer, realist theory, which highlights the prioritization of national interests over

Imports of goods and services, 2015 to 2020



Imports of goods and services represent the value of all goods and other market services received from the rest of the world. Data are in constant U.S. dollars. This means values are corrected for inflation.



Source: World Bank and OECD

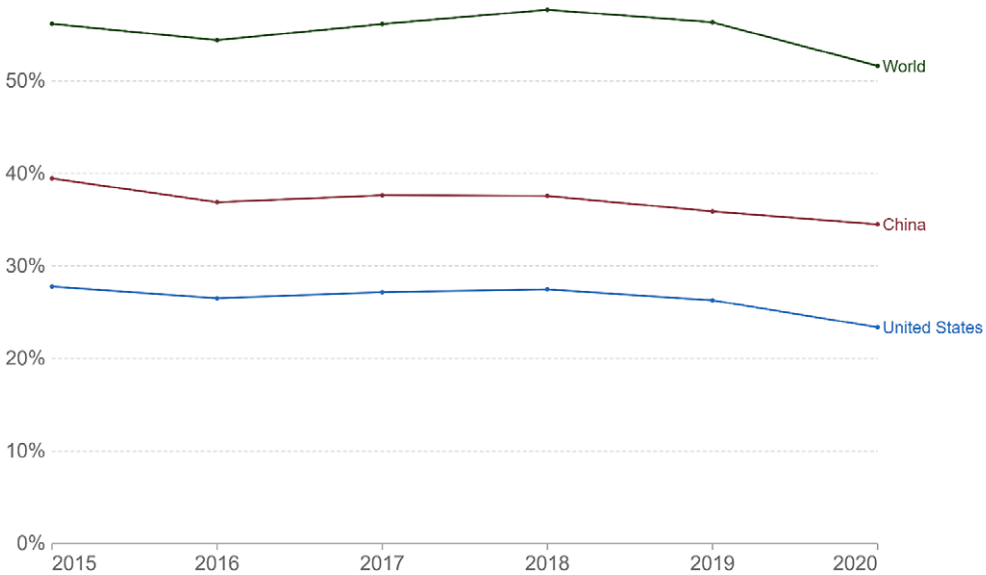
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Figure 3. Imports of Goods and Services, 2015 – 2020

Trade as share of GDP, 2015 to 2020



Shown is the 'trade openness index' – the sum of exports and imports of goods and services, divided by the gross domestic product.



Source: World Bank and OECD

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Figure 4. Trade as Share of GDP, 2015 – 2020

collective action, provides the most optimal approach for a full understanding of global responses to COVID-19” (p. 1). Government policies from numerous democratic and authoritarian regimes seem to reinforce realist notions of self-sufficiency and preservation with respect to states protecting vital resources and supplies during the pandemic. While some states did act altruistically at times and provided aid and assistance to other states, in the aggregate, numerous democratic and authoritarian regimes displayed a tendency to consistently place their own needs ahead of other states regarding their approach to protecting vital resources and supplies. We now examine the effect that the pandemic had on international conflict in democratic and authoritarian states.

Democracies and international security: The pandemic and international conflict

Democracies did not experience a significant increase in interstate conflicts during the pandemic. However, with the onset of the COVID-19 pandemic, India and Pakistan saw increased armed confrontations in the contested Kashmir region (Ide, 2021, p. 4). There is disagreement regarding whether these confrontations were a result of the pandemic—some have argued that it had no bearing because there have long been tensions in this region. However, there is evidence that “Pakistan’s support for pro-Pakistani insurgents increased to put additional pressure on India during the COVID-19 crisis” (Ide, 2021, p. 4). For its part, the Indian army took advantage of public attention being directed to a public health crisis to “launch a heavy crackdown campaign against (presumed) insurgents in Kashmir” (Ide, 2021, p. 4). These examples highlight the argument that states may be occasionally vulnerable to aggressive actions on behalf of foreign adversaries during health crises due to the effect crises have on the preparedness of states’ security forces (Albert *et al.*, 2021).

While interstate conflict involving democracies did not significantly increase during the pandemic, democracies were targeted in a substantial number of cyberattacks. Cyberattacks were prolific during the pandemic, with a persistent monthly rise in significant publicly recognized cyberattacks in 2020 (McGuire, 2021, p. 4). Organizations consistently targeted included pharmaceutical companies (which saw a 50% rise in cyberattacks) and health care organizations (with a 45% rise) (McGuire, 2021, p. 5). The attacked entities spanned states around the globe and involved all manner of cyberattacks. Some pandemic-related attacks included the network of a Czech hospital being taken down, a vaccine trial group in the United Kingdom encountering a ransomware attack, and both unspecified cyberattacks on a U.S. health agency and the targeting of a construction company building emergency hospitals in the United Kingdom (Muthuppalaniappan & Stevenson, 2021, p. 4). In July 2020, U.S., U.K., and Canadian authorities disclosed purported state-sponsored cyberattacks on various institutions developing vaccines to combat COVID-19 (Muthuppalaniappan & Stevenson, 2021, p. 12). In their research, Lallie *et al.* (2021) found that the first cyberattack tied to COVID-19 occurred a month after the first reported case, with the next attack occurring just two weeks later, before the frequency of attacks sharply increased (p. 10).

Authoritarian regimes and international security: The pandemic and international conflict

Authoritarian states such as Russia regarded the pandemic as an opportunity to advance their foreign policy agendas through increased information warfare operations. To realize Vladimir Putin’s goal of subverting the West, Russia viewed the pandemic “as an ideal way for Russia to deal a powerful blow not only to the EU, but to inflict damage on the ties between Europe and its North American allies” (Sukhankin, 2020, p. 1). A worldwide health crisis such as COVID-19 provided Russia with a means for conducting disinformation campaigns capable of inflicting damage and sowing distrust on a global scale. In the early days of the pandemic, state-sponsored media took several approaches to these campaigns. These included accusations that European leaders “demonstrated complete incompetence in dealing with the crisis” to promulgating conspiracy theories that COVID-19 was created in the United States in an effort to subvert China’s growing economy, and labeling contact tracing an attempt to institute a totalitarian state (Sukhankin, 2020, p. 4; see also Johnson & Marcellino, 2021). Russian state actors also

claimed that the virus heralded the end of an era ruled by post–Cold War powers and that it was now China’ and Russia’s time to assume the role as new world leaders (Sukhankin, 2020, p. 4). By taking advantage of the anxiety and uncertainty created by the pandemic, Russia hoped to destabilize relationships within the EU as well as those between the United States, Canada, and the EU (Sukhankin, 2020, p. 5). Spreading malicious disinformation was harmful to public safety and global health efforts. In this way, Russia contributed to increased international anxiety by following a main strategy of Russian active measures, which endeavored to weaken “democratic legitimacy” through “creating societal tensions” surrounding the COVID-19 health crisis (Moy & Gradon, 2020).

With respect to the pandemic and kinetic (physical) interstate conflict, an example of a significant violent interstate conflict between authoritarian states occurred during the first year of the pandemic, which was the 44-day war involving Armenia and Azerbaijan. The conflict was fought over Nagorno-Karabakh, the status of which has been contested by Armenia and Azerbaijan since the Soviet Union collapsed (Kazaryan et al., 2021). In September 2020, Azerbaijan, with support from Turkey, launched a massive attack against Nagorno-Karabakh. In just a week and a half, *The Guardian* reported “that half of the entire Karabakh population ... [had] already been displaced to Armenia, further exacerbating the humanitarian catastrophe in this region” (Kazaryan et al., 2021). As a result of the influx of displaced persons and the need for medical facilities to shift their focus from nonemergent cases, the daily number of COVID-19 diagnoses in Armenia was eight times higher following the beginning of the conflict (Kazaryan et al., 2021).

Additional tensions flared between India and China during the pandemic. In June 2020, the Nepalese House of Representatives endorsed an effort to update the national emblem with a more current map of the state (Shakya, 2020; Sharma, 2020). This was problematic because the map clearly included disputed territories with India within Nepal’s borders (Shakya, 2020). Both politicians and mainstream media in India were outraged, with some accusing China of influencing this decision (Shakya, 2020). This issue came to a head when Indian citizens were injured and killed on the Nepalese side of the border, which nearly resulted in additional altercations. However, before tensions reached a breaking point, many diplomats urged reconciliation over the Nepal issue (Shakya, 2020). Following the deadly June 2020 clash, there was a temporary decrease in disputes along the 2,100-mile border between China and India. However, violent skirmishes emerged in January 2021 and December 2022 (BBC News, 2022a, 2022b).

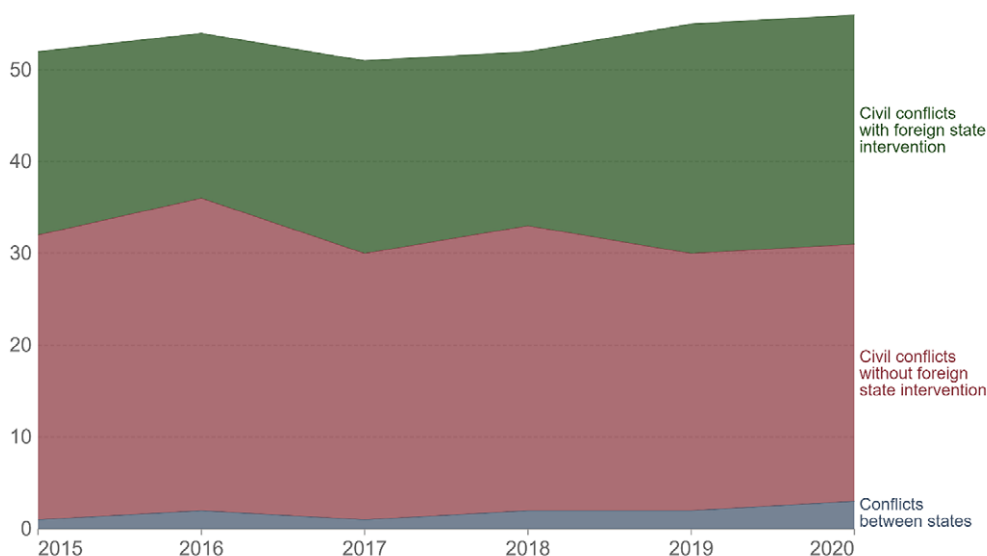
In general terms, the pandemic has had varied effects on interstate conflict in authoritarian regimes. Though existing tensions such as those between Yemen and Saudi Arabia, which saw rebels launch an offensive against Saudi Arabia and a responding airstrike by a Saudi-led coalition in February and March 2021, remained unchanged or increased in some areas, there is evidence that international conflicts involving authoritarian states did not significantly increase worldwide (Center for Preventive Action, 2023). The ACLED project “reports a substantial reduction in both armed conflicts and deaths [from intrastate and interstate conflicts]” globally with fatalities worldwide dropping by over 20% compared to 2019 (Gugushvili & Mckee, 2022, p. 17). However, the effects varied by region with some regions such as those in the Middle East experiencing higher levels of conflict during the pandemic (Mehrl & Therner, 2021). In addition, the war in Ukraine, which began at the end of the pandemic, has produced significant wartime mobilizations and fatalities while increasing tensions among the leading democratic and authoritarian global actors (the United States and China) and their allies.

The pandemic and conflict: Overview

In considering the major theoretical perspectives and interstate conflicts during the pandemic, states did not appear to conform with realist or liberal expectations. The international community did not witness a significant change in interstate conflict patterns during the pandemic. Figure 5 displays the number of state-based conflicts worldwide from 2015 to 2020. In examining Figure 5, we find that from 2019 to 2020, the number of civil conflicts involving foreign interventions (25), and those that did not involve foreign interventions (28), remained the same, and there was one additional interstate conflict during the period, for a total of (3) interstate conflicts (UCDP, 2023).

State-based conflicts, World, 2015 to 2020

State-based conflicts are between states, or a state and a non-state armed group. One-sided violence – such as massacres or genocide – is not included.



Source: OWID based on UCDP/PRIO

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Note: Conflicts are included if fighting in them caused at least 25 military and civilian deaths in a year.

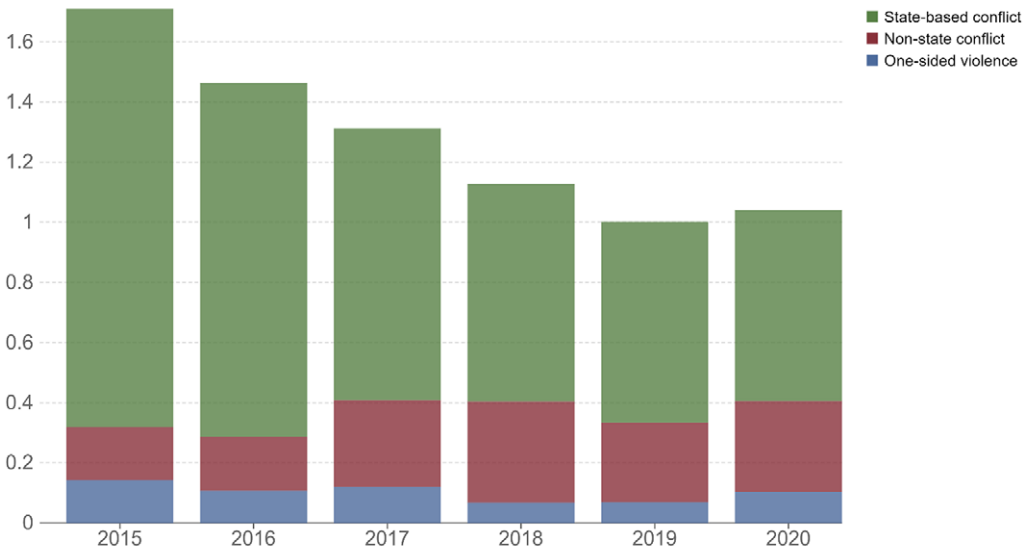
Figure 5. State-Based Conflicts, Worldwide, 2015 – 2020

Figure 6 displays the conflict death rates from different types of conflicts (deaths per 1,000 people) from 2015 to 2000. In examining Figure 6, we find that from 2019 to 2020, the death rate from state-based conflicts decreased from .67 to .64, the death rate from nonstate conflicts increased from .26 to .30, and the death rate from one-sided violence increased from .07 to .10 (UCDP, 2023). In further considering broad trends in armed conflict during the pandemic, Mehrl and Thurner (2021) used real-time data to analyze the short-term effect of the outbreak on conflict engagements and utilized ACLED data to analyze both the spread of COVID-19 and battle events. In doing so, they identified multiple trends. The results initially indicated that the virus's spread had no impact on global conflict, but when the authors analyzed the results by region, the data revealed decreased battle numbers in Europe, Southeast Asia, and the Caucasus, but lockdowns in the Middle East increased fighting “by an estimated 20 weekly battle events per country” (Mehrl & Thurner, 2021, p. 289). An important issue addressed in their conclusion is that these data sets and results are only as useful as the reported numbers of battles—with COVID-19 taking center stage, it is possible these results are skewed (Mehrl & Thurner, 2021, p. 290). Therefore, they advised that “the positive effect of government lockdowns on battles in the Middle East” be interpreted as conservative, “and caution against a too optimistic interpretation of the other, negative effects on armed conflict” discussed earlier (Mehrl & Thurner, 2021, p. 290).

Thus, in reviewing these figures, during the pandemic, democratic and authoritarian states did not appear to resort to overly aggressive or offensive military measures in general to secure vital resources, as some realists might expect. In addition, international institutions, shared democratic norms, and trade did not lead to significant declines in interstate conflict, as liberals might predict. Rather, patterns of interstate conflict remained relatively unchanged, with the exception being the war in Ukraine, which emerged toward the end of the pandemic. This pattern of interstate conflict may conform most closely with constructivist expectations. More specifically, most states were not motivated to attack other states to increase their resources, power, and security, nor were states less likely to engage in conflict because of the pacifying effects of liberal forces. Rather, states' identities may have contributed to their foreign policy

Death rate in conflicts, World, 2015 to 2020

Deaths per 100,000 people. Included are deaths of soldiers and civilians from fighting, excluded are deaths from disease or famine.



Source: UCDP

Note: The sources' 'best' estimates are used.

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Figure 6. Death Rate in Conflicts Worldwide, 2015 – 2020

actions during the pandemic, as Russia's territorial expansion in Ukraine highlights, which conforms with Russia's history of revisionist actions and expansionist ideations. Additionally, the war in Ukraine and states' national identities likely contributed to the strengthening of alliances between western democracies and NATO states as well as firmer ties between China, Russia, India, Brazil, and South Africa (Ashby et al., 2023; Magil & Rees, 2022).

Furthermore, while interstate conflict did not appear to significantly increase in the aggregate during the pandemic, tensions did escalate between the two leading democratic and authoritarian states in the international system (the United States and China). Although the pandemic may not be directly responsible for the growing polarization between United States and China and their respective allies, heightened tensions during the pandemic likely contributed to the speed and strength of the divide (Hameiri, 2021), along with each state's perceptions of how their values and identities were threatened by one another during the pandemic. Continued trade disputes during the pandemic, accusations regarding the origins of COVID-19, and disparate views over the war in Ukraine accelerated the pace by which the United States, China and its partners pursued policies that sought to contain one another. These policies have been evinced by each state expanding strategic economic and security agreements with other states, politically motivated foreign direct investments targeting specific host states on behalf of China, confrontational foreign policy statements by leaders of both states, and purposeful military positioning and maneuvers by the United States and China (Ashby et al., 2023; Ng & Guinto, 2023; Stone et al., 2022; White House, 2022).

Conclusion: Responding to future pandemics

COVID-19 significantly affected the domestic security of democratic states. Democracies faced increased political extremism and mass discontent during the pandemic, partly as a result of government

responses to the pandemic as well as the effect that the pandemic had on exacerbating existing economic, social, and political tensions. In considering domestic security and future pandemics, democracies must be better prepared on multiple fronts. As previous scholars contend, democratic leaders must have more efficient health care response systems in place and ensure that their security forces remain properly trained and equipped during infectious disease outbreaks (Albert *et al.*, 2021). This should be accomplished to improve health outcomes during virus outbreaks and to make sure that states are prepared for potentially higher levels of intrastate violence stemming from pandemics. Relatedly, democracies should also consider how pandemics could aggravate existing economic, social, and political tensions within their states to attempt to minimize political extremism and political violence during health crisis situations. Developing pandemic response plans with input from political actors from various political perspectives could aid in producing more unified, coordinated, and widely accepted responses. Lastly, democracies should initiate discussions at both the societal and governmental levels regarding how to protect their democratic institutions and norms during future pandemics with the aim of ensuring that their governments do not become susceptible to the ambitions of opportunistic, autocratically minded leaders that could lead their states into authoritarianism.

Authoritarian regimes faced similar domestic security challenges as democracies during the pandemic. Mass discontent, protests, and civil unrest increased in authoritarian states. One difference was that political violence from terrorism, civil conflicts, and coups was more commonplace in authoritarian regimes. In responding to future pandemics, authoritarian states must also be better prepared to provide proper health care to their citizens and ensure that their basic needs are met (e.g., food, fuel, and medical supplies). Mass discontent emerged during the pandemic in some authoritarian regimes as the public viewed government responses to the pandemic as nontransparent and ineffective and as food and other resources became scarce. Focusing on how to provide basic supplies to the public during pandemics and how to develop proper health care policies in response to infectious disease outbreaks could assist authoritarian governments to manage future pandemics more effectively. Additionally, as with some developing democracies, numerous leaders in authoritarian regimes expanded their political power during the pandemic, which led to greater public distrust regarding their government's response to the pandemic. While authoritarian regimes often do not have the same intuitional mechanisms in place as democracies to limit the expansion of executive power, authoritarian leaders should be aware that exploiting a national crisis such as a pandemic to unnecessarily increase their positions of power may be met with strong public resistance which could undermine the government's ability to properly respond to infectious disease outbreaks.

Regarding international security, the major IR perspectives remain useful in attempting to explain state behavior during international crises such as pandemics, with each theory appearing to be more accurate in some areas and less in others. In reviewing the major IR theories and the effect that COVID-19 had on international security in democratic and authoritarian states, no theory appears to fully explain state behavior during the pandemic. Realist expectations appear to be more accurate regarding the effects the pandemic had on international trade and cooperation. Weakened trade as a result of COVID-19 restrictions, supply chain issues, and aggravated tensions between world powers, including the United States and China, harmed the international economy. While many of these issues were difficult to address, such as the effect that the pandemic had on the ability of workers to perform their normal duties and disruptions to logistics and supply chains resulting from travel restrictions, international cooperation to solve these issues was severely lacking. Instead of advancing cooperative solutions and working with international institutions to address the problems, many democratic and authoritarian states pursued more protectionist policies that limited trade and cooperation and sought to protect critical domestic supplies.

With respect to international conflict, neither realism nor liberalism appears to account for the largely unchanged levels of interstate conflict during the pandemic. The global community did not experience a significant change in interstate conflict during the pandemic. While interstate conflicts did still occur, their number and severity did not significantly vary from prior periods in general terms. The exception was the war in Ukraine, which ushered in an interstate conflict the scale of which had not been seen in

Europe since the end of the Second World War. Here, constructivism may be the most useful perspective in considering the identities of states and their predispositions toward conflict during an international crisis event such as a pandemic, as Russia's invasion of Ukraine highlights. The Russia-Ukraine conflict also strained relations between the United States and China and their respective allies. As previously mentioned, the combination of preexisting tensions between the United States and China, COVID-19 which further accelerated the divide between the two states, and the Russia-Ukraine conflict has increasingly moved the United States and China to seek to protect their international spheres of influence to a greater extent by: forming strategic partnerships with other states, initiating purposeful military maneuvering in key regions, and issuing more confrontational rhetoric directed at one another. The United States and China should seek to improve communications and diplomatic channels during infectious disease outbreaks to reduce the likelihood of conflict escalation and to produce optimal economic outcomes for their states and citizens. Given the vast resources and technological capabilities of each state, and the currently high levels of economic interdependence between the states, more effective cooperation during health crises could reduce tensions while addressing the needs of each state and improving their overall well-being.

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