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Received 29 September 2021 Revised 20 October 2021 Accepted 23 October 2021

# Public policy measures for COVID-19 crisis management: lessons from the UAE

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#### **Abstract**

**Purpose** – The COVID-19 pandemic has exposed the fragility of government institutions and prompted a broad range of policy measures from governments around the world. Policy responses to the pandemic have varied considerably, both in nature and in success. This paper highlights the policy capacities of the UAE in different areas that have contributed to managing the COVID-19 crisis. Specifically, the paper examines the functional capacity, analytical capacity, fiscal capacity, well-timed information-sharing capacity and political capacity of the UAE in addressing the pandemic.

Design/methodology/approach – The study on which this paper was based adopted a mixed-method approach to analyze policy capacities. The trajectory and timeframe of COVID-19 from February 2020 to February 2021 were observed intensively and included in the policy capacity analysis. The secondary dataset was collected from several sources and assessed using rapid content analysis to highlight the formal and institutional policy measures implemented during the crisis. To complement the policy analysis and understand the key role of policymakers, semi-structured interviews were conducted with local officials working in various line departments that formulate and implement policy strategies for the UAE government. Findings – The findings of the study showed that although COVID-19 has severely impacted the UAE, the nation has effectively controlled the spread of the virus and reduced its mortality rate. The UAE government has taken swift policy actions concerning coercive control and mitigation based on a centralized decision-making style, the strengthening of administrative capacity by collaboration, coordination with different departments, successful communication with residents, the allocation of adequate financial resources and a high level of trust in the government by citizens.

Originality/value — This work contributes to the existing literature by highlighting the policy capacity approach to managing the crisis. The UAE case can be used by policymakers as comparative studies of policy designs, tools and capabilities that can be implemented to manage future pandemics and other crises.

Keywords COVID-19, Pandemic, Crisis, Policy capacity, UAE

Paper type Research paper

## Introduction

Currently, the entire world is confronting one of the most severe and unprecedented crises in human history. The COVID-19 pandemic has expanded rapidly and historically, affecting 214 countries, regions and territories. With 106,555,206 cases and 2,333,446 deaths globally (as of February 10, 2021), the World Health Organization (WHO) has declared a global pandemic (WHO, 2020), and there is no stop to the spread. The US, India, Brazil, Russia, Spain, Argentina, France, the UK, Italy, Mexico and Iran have recorded significantly more cases and deaths from the virus than the rest of the world. The COVID-19 pandemic has affected practically all sectors of society, including not just the health sector but also tourism,



Fulbright Review of Economics and Policy Vol. 1 No. 2, 2021 pp. 246-265 Emerald Publishing Limited e-ISSN: 2635-0181 p-ISSN: 2635-0173 DOI 10.1108/FREP-09-2021-0054 © Mrutuyanjaya Sahu. Published in *Fulbright Review of Economics and Policy*. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at <a href="http://creativecommons.org/licences/by/4.0/">http://creativecommons.org/licences/by/4.0/</a> legalcode

education, infrastructure and construction, civil aviation and food production and distribution and poses a threat to economic growth not experienced since the Great Depression. The crisis has also prompted one of the most significant global collective failures in history but has conversely presented an excellent opportunity to broaden our understanding of development. Addressing the effects of COVID-19 on society and overcoming the global crisis it has wrought requires urgent action and collaboration at the regional and international levels (Weible *et al.*, 2020).

As the entire world remains mired in great uncertainty due to the pandemic, one thing has become clear: COVID-19 will be the defining policy capacity challenge of the current era. More than simply a human tragedy, the global pandemic has brought to light the fragility of governing institutions and the role of public policy in crisis management while generating insights into dealing with such situations (Dunlop, Ongaro, & Baker, 2020). Public policies play an essential role in resolving societal problems, with most citizens relying on their government to address a range of issues and challenges. Whether it is a traditional problem pertaining to water, electricity, housing, security, employment, etc. or a newer challenge, such as climate change and terrorism, citizens look to their government as a problem solver (Peter, 2015). However, the COVID-19 pandemic is different from other challenges as it requires proper knowledge, effective solutions and policy designs and rapid interventions to halt the spread of the disease (Boin, Stern, & Sundelius, 2016).

The Gulf Cooperation Council (GCC) states, which include Bahrain, Saudi Arabia, Qatar, Oman, Kuwait and the United Arab Emirates (UAE), have had to simultaneously confront a two-pronged crisis: the decline in oil prices—the primary source of income for GCC nations—and the COVID-19 pandemic, both of which have instigated an array of social and health changes. The GCC is considered the most significant corridor of international labor migration in the world. The demographics of the UAE, for instance, are incredibly diverse, with expatriates constituting almost 80% of the total population. However, regardless of the economic, regional and demographic diversity of the UAE, the COVID-19 pandemic has revealed that no country has adapted quickly and adequately enough to mitigate the crisis at its current scale. Saudi Arabia has the highest number of cases among the GCC states, followed by the UAE, with 391,524 cases and 1221 deaths (February 28, 2021). While most GCC governments have struggled to develop solutions to the social, economic and health challenges of the pandemic, the UAE government has shown great policy and governance capacity by making progressive policy decisions and taking swift action to control the spread of the virus throughout the region.

Political capacity has become a significant concern as governments grapple with increasingly diverse issues. The growing difficulty of many contemporary social issues and the increasing demands of the population pose extraordinary challenges to the capacity of policymakers to develop and execute effective policies (Woo, 2020). There is a natural tendency in times of crisis for people to expect their government to protect their lives and livelihoods, to provide complete response and recovery operations and to learn the proper lessons. The COVID-19 crisis has reshaped the socio-economic and political landscape and challenged the policy capacities of decision-makers. The complexity of the pandemic is attributable to how little is known about the SARS-CoV-2 virus. Consequently, world governments have made major policy decisions despite a high level of uncertainty. Thus, the pandemic has provided a window of opportunity to examine how governments develop and implement policy measures to address crises and the degree to which citizens accept and follow government guidelines and instructions.

This work contributes to the existing literature by highlighting the policy capacity approach to managing problems and addressing several challenges and ambiguities that have been heightened due to the COVID-19 crisis. Through a policy capacity-based approach, this study sought to analyze the policy capabilities that have enabled the UAE government to

take various actions to address the pandemic. The study attempted to answer the following research questions: How has the UAE government handled the health, social and economic risks of the COVID-19 crisis? How have political leaders, local bureaucrats and citizens responded to the ongoing crisis? How have political leaders and local bureaucrats collaborated and coordinated across departments and made prompt decisions to address the pandemic? How have political leaders and local bureaucrats communicated the severity of the crisis to citizens? How have timely policy interventions strengthened policy capacity and political legitimacy in the UAE?

To answer these questions, this study adopted a mixed-method approach to analyze policy actions. First, health-related themes and existing institutional and policy tools commonly deployed by the UAE government to manage crises were examined. The trajectory and timeframe of the COVID-19 pandemic, from February 2020 to February 2021, were observed intensively and included in the policy capacity analysis. The secondary dataset was collected from several sources, such as Our World in Data (2020), the Oxford University website, Worldometers, journal articles, documents published by the UAE government, public media releases and various social media content and assessed via rapid content analysis to highlight the formal and institutional policy measures implemented during the crisis. To enhance the validity of the data, these sources were compared with the local government database. Second, to complement the policy analysis and better understand the role of key policymakers, semi-structured interviews were conducted with local officials working in various line departments that formulate and implement policy strategies for the UAE government.

The remaining sections of this paper are organized as follows. Section 2 outlines the analytical framework for the study. Section 3 reviews the policy responses of the UAE government. Then, drawing from the analytical framework, section 4 provides an in-depth discussion of the policy capacities of the UAE government in managing the COVID-19 crisis at five different levels: functional capacity, analytical capacity, fiscal capacity, information and communication capacity and political capacity. Finally, section 5 presents the research findings and outlines lessons that can be learned from the UAE experience.

## Public policy and crisis management: analytical framework

Public policies are developed in the face of societal challenges or opportunities. Policymaking is not the same across policy areas and is dependent on the degree of urgency in making a policy decision (Peter, 2021). Managing and resolving social problems depend on interfaces of public policy stages or processes and a prompt interrelationship with (1) identifying the societal problem and expressing demands for government action, (2) setting agendas and discussing issues and problems with differences between persons, groups, coalitions and networks, (3) developing policy design and implementation to resolve crises, (4) crafting crisis narratives and (5) policy legitimation in developing political support for enforcing local and global decisions (Chakrabarty & Chand, 2016). These conditions present critical policy capacity challenges associated with adroit decision-making, public education, relevance, liability, learning and reform and wide-ranging cooperation and coordination between public and private sectors in addressing crises (Boin, 2009).

The concept of capacity in a state's policymaking procedures is not new. Early attempts to understand the state's capacity focused on the process of state strengthening and economic development (Evans, 2014). More contemporary literature on the state's capacity to develop policies has focused on organizational and governance perspectives, embracing a variety of topics such as public security, governmental corruption and social inequality. Policy capacity generally refers to the ability of public sectors to organize and implement public service delivery and positive policy outcomes. More recent research on policy capacity has sought to

understand capacity as the "set of skills and resources or skills and abilities required to perform policy functions" (Wu, Ramesh, & Howlett, 2015). Some scholars, such as Davis (2000), have argued that policy capacity should include the ability of governments to implement and make decisions on preferred action choices effectively. Moore (1995) suggested a "strategic triangle" that includes public value, legitimacy and support and organizational capacity, which are essential to the effective functioning of public sector organizations. Similarly, Holmberg and Rothstein (2012) argued that the design and capacity of systematic policies depend on the preconditions of elements of governance, such as openness, the rule of law, information sharing, societal confidence and legitimacy.

There is no doubt that the success of policymaking and implementation indicates the existence of several strategic capabilities. However, in cases where capacity is put in place to deal with policy problems or potential crises, the emphasis on policy results may not precisely reflect this excess capacity, which may or may not be used. Therefore, a better technique would need to be considered to examine capacity in its various shapes and mechanisms. The various types of capacity that have been recognized in the available literature include political, organizational, technical, infrastructure, military and fiscal capacity (Savoia & Sen, 2012; Woo, 2020).

Recently, scholars from public policy and public administration have widely recognized that political capacity is vital for policymakers in crisis management. Great crises affect the core of policy capacities and thus pose major questions in terms of capacity, legitimacy and trust among citizens. The capacity to govern is associated with the capacity of government to make decisions, formulate resource allocation strategies and manage the necessary resources efficiently for the delivery of results (Fukuyama, 2013). Policy and governance capacity are also associated with relations between the state and society to mobilize the support and approval of citizens for policy implementation. As policy capabilities vary significantly across functions, levels of government and regions, good policy design and implementation for unpredicted and unfamiliar crises, for dealing with ambiguities, for confronting pressing issues and for responding to people's expectations are at once vital and tremendous tasks for policymakers (Christensen & Lægreid, 2020), For democracy to be successful and consolidated, or for authoritarian regimes to have political legitimacy over time, it is imperative to have high-level governance and administrative capacity (Lodge and Wegrich, 2014). High-capacity levels are associated with higher outputs and strategic outcomes, while lack of capacity is considered a significant cause of policy disaster and sub-optimal outcomes (Wu et al., 2015).

Policy capacity to manage crises and take action occurs at three levels: functional. analytical and political. These three capacity levels are interdependent, subject to different considerations and contributive to the independent and unique policy development process. First, functional capacity refers to preparedness and decision-making and implementation on the ground. The availability of financial capital and the effectiveness of physical capital (infrastructure, lab testing, RT PCR kits, gloves and masks) and human capital (frontline health workers, medical staff and other experts) can help mitigate the immediate risks of crises, such as the current pandemic. Second, analytical capacity ensures that policy design is technically sound and implementable with well-established coordination and collaboration between different levels of government. This is predominantly necessary given the increasing importance of target-based policy development, which entails the abilities of the various officials involved in all aspects of the decision-making process, including the implementation and evaluation of policy decisions. Third, political capacity consists of the political responsibilities taken by political and administrative leaders in enforcing policy actions and disseminating information. The current COVID-19 pandemic calls for better regulation in crisis management and response to changing circumstances and events at all three levels (Boin & Hart, 2010).

The COVID-19 pandemic has led to the effective formulation and implementation of a wide range of policy actions among governments. Governmental approaches to the COVID-19 crisis have varied from one country to another in terms of the composition, timing, speed and strength of policy actions (Aksoy, Ganslmeier, & Poutvaara, 2020; Peter, 2021). Some countries have employed a coercive strategy by imposing full-scale or partial lockdowns, closing their borders and/or restricting intra-border movement and compelling citizens to comply with crisis mitigation measures (Hale, Petherick, Phillips, & Webster, 2020). One-third of the global population has been socially restricted (from school closures to maintenance orders). For example, the Government of India declared an extensive lockdown on March 24, 2020, restricting the movement of 1.3 billion people at the national, provincial and local levels (Hebbar, 2020). Also, some countries have prepared and implemented institutional policy measures, strengthened disaster preparedness, required citizens to comply with crisis mitigation measures and handled pandemic-related challenges effectively, such as Singapore. Vietnam, South Korea, Hong Kong and Taiwan. In contrast, the US and the UK failed to act quickly and were widely criticized by their publics for failing to properly exercise functional and operational capabilities in crisis management (Capano, Howlett, Jarvis, Ramesh, & Goval, 2020).

The COVID-19 pandemic is a cross-border crisis that is continuing to have severe impacts on multiple operational sectors and states while introducing new governance challenges (Bynander & Nohrstedt, 2019). International cooperation and coordination have expanded among states to strengthen the analytical capacity to address the crisis. These states have been guided by various international organizations, like the WHO, as well as health professionals and research experts. Policy cooperation has been facilitated by international networks, different government departments, private sectors and local organizations with the aim of implementing research initiatives and policy interventions (Mesfn, 2020; Parker et al., 2020). Various stakeholders have become involved during the crisis, and effective policy initiatives are urgently needed. Many countries are sharing their experiences and information, which has substantially enhanced understanding of the virus and its effect at different stages (Khan, 2020). Nevertheless, the lack of analytical and information capacity may delay government responses to the crisis. There are many examples of how various governments, such as China's, have failed to effectively collect and share information related to COVID-19 in a timely manner or to proactively make decisions to mitigate the crisis, consequently weakening the collective response to the pandemic at the global level (Mao, 2021).

Political communities that formulate global health policies include health experts, researchers and public health practitioners, local government officials, social scientists, legal experts and other highly experienced modelers who may better understand the current and future risks and impacts of the pandemic (Stone, 2019). However, mitigating COVID-19 depends on the decision-making capacity of policymakers and local bureaucrats. Moreover, the policy decisions stemming from this capacity can address various issues beyond public health and crisis mitigation and prevention (Capano *et al.*, 2020). As a result, most policy responses to COVID-19 have exposed both the weaknesses and strengths of past policy approaches, as well as emerging challenges (Bodin, Nohrstedt, Baird, Summers, & Plummer, 2019). Also, as COVID-19 is a novel disease, more accurate knowledge is required to understand the nature of the pandemic, with many governments deploying artificial intelligence, big data and citizen data to strengthen and accelerate current policy responses. For example, South Korea, China and Singapore have used these technologies to strengthen analytical capacity, raise awareness among their citizens and develop their databases to track and monitor the virus case by case at the provincial level.

The world of crises and catastrophes has changed and undoubtedly poses the most difficult challenges to political leaders. Crises are usually a surprise to leaders and their agencies. However, political leadership and political acumen play a critical role in a well-functioning crisis management system (Rosenthal, Boin, & Comfort, 2001). Such a system empowers policymakers to deal with crises through better coordination of cooperation with the various levels of government and organizations to analyze the situation and provide appropriate public services (Christensen, Lægreid, & Rykkja, 2016). Responding to the turmoil caused by the COVID-19 pandemic, the choice was between controlling the spread of the virus and eliminating it. Options in this regard included social and economic costs and benefits and raised relevant questions about how policymakers should address these costs and benefits.

With increased engagement by citizens, civil society groups and media, most policy responses have been reviewed and discussed through competitive frameworks and the assignment of blame (Brandstrom & Kuiper, 2003). For example, in the US, there were notable differences between states in the approaches taken toward lockdowns. Some national governments, including those of the UK, Brazil, Ireland (Khan, 2020) and Sweden (Henley, 2020), have received widespread public criticism for their piecemeal approach and slow policy interventions in addressing the first wave of COVID-19. These inadequate policy interventions inevitably called into question the political capacity, policy analysis skills, managerial expertise and political judgment of these nations in times of crisis. Indeed, there is a substantial opportunity for state leaders to reduce policy conflict by taking into consideration the positions of opposing political parties, pressure groups and regular citizens and thereby strengthen the government's policy measures. However, high levels of individual political capacity may fail to ensure the effectiveness of policy measures because a variety of other resources and facilities are needed at both the operational and system levels to carry out these measures effectively.

This broad analytical framework is particularly significant for examining the UAE government's policy responses to the COVID-19 crisis. This paper, therefore, highlights the functional, analytical and policy capacities of the UAE government in addressing COVID-19. It also addresses two additional capacities, fiscal capacity and information and communication capacity. The following section discusses the UAE's attempts to manage the COVID-19 pandemic with respect to these five capacities.

# Policy responses to COVID-19 in the UAE

The COVID-19 pandemic has had an unprecedented impact on billions of people worldwide, including in the UAE (UN, 2020). In response to the crisis, the governments of most countries, including that of the UAE, initially took a similar approach with a high level of commitment to controlling or preventing the spread of the virus both regionally and globally. As a result, the UAE became the first GCC country to report a case of COVID-19 on January 29, 2020. The victim was a 73-year-old Chinese woman from Wuhan who was visiting family members in the UAE (NCEMA, 2020). The National Emergency and Crisis and Disasters Management Authority (NCEMA) of the UAE government revealed its COVID-19 action plan on March 5, 2020 and outlined preventive health measures. These measures emphasized hand washing, social distancing, quarantining of affected persons, testing and tracing, health screening, internal and external travel restrictions, a night curfew, the cancellation of public events and mass gatherings, the closure of schools and universities, non-essential businesses and government services and the raising of public awareness (see Table 1).

## **Functional capacity**

In times of crisis, robust decision-making and policy capacity play a significant role. Functional capacity is defined here as the skills or abilities required to perform policy functions in different areas. The UAE had no experience in pandemic crisis management and

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-, <del>-</del>	Population	9.9 million
Table 1. Devolved timeline and	First recorded case	January 29, 2020
	First recorded death	March 21, 2020
	Confirmed cases as of February 28, 2021	391,524
	Rate of infection per million people	295
	Confirmed deaths as of February 28, 2021	1,221
	Case fatality rate	0.31%
	Closure of schools and universities	March 8, 2020
	Lockdown introduced	March 22, 2020
	Cancellation of public events and gatherings	March 22, 2020
	International and domestic travel restrictions	March 23, 2020
	Gatherings during the first phase of lockdown	Maximum 30%
	Stay-at-home restrictions	April 4, 2020
	Reopening for international tourists	July 7, 2020
	School reopenings	February 14, 2021
	Social distancing	2.5 m
COVID-19 outcomes in	Access to testing	Any symptomatic cases
the UAE	Source(s): Compiled by the author from different sources	

made significant decisions in highly uncertain and urgent circumstances. The UAE's centralized decision-making capacity has enabled the government to make timely decisions, galvanize its administration into action and implement effective policies at various levels of the Emirates. The decision-making process was swift. The main decisions of the national government on how to address the pandemic were made by the Cabinet in close cooperation with the Ministry of Health & Prevention (MoH&P) and the NCEMA. From the outset, UAE political leaders worked closely with health experts and professionals, unlike in the US, or delegated responsibility to bureaucrats, as in Sweden. The UAE government has emphasized a collaborative approach based on a high level of mutual trust among political and local administrative executives.

#### Border control and travel bans

The link between population movement and disease monitoring is crucial, involving land, air and sea entry points. This is especially relevant for the UAE as a major center for international transport, trade and logistics, which requires the strengthening of the systems and capabilities of the government. On February 24, 2020, in the interest of public safety and health, the MFAIC Department announced a travel ban, calling on all UAE citizens to stay away from Iran and Thailand and evacuating UAE citizens from Wuhan, China and Iran. As cases of the virus increased, the Ministry of Education (MoE) declared the closure of schools and universities for a month, beginning on March 8, 2020. On March 18, 2020, the UAE prohibited its citizens from traveling abroad and suspended entry of all valid residence visa holders for two weeks as a precautionary measure. On March 20, 2020, the UAE closed its border, halted the entrance of GCC citizens and banned the movement of citizens between regions within Abu Dhabi and both inside and outside of the Emirates. Subsequently, the government introduced legislation to cancel public events and gatherings and halt domestic and international travel. In addition, the NCEMA and the Civil Aviation Authority banned all incoming and outgoing passenger flights and the transit of air passengers to the UAE for two weeks starting on March 23, 2020.

In late March 2020, the UAE government announced tighter restrictions on movement, introducing health checkpoints at boundary control facilities with remote-sensing

thermographic screening intended to minimize the impact on crowd flow while providing a basis for case referrals. In addition, evacuees received medical testing and monitoring at the newly established Emirates Humanitarian City in the UAE to ensure their health and safety. On March 26, 2020, the Ministry of Human Resources and Emiratization (MoHRE) decided that a maximum of 30% of the workforce of private companies was allowed to be physically present at their offices, while others were allowed to work remotely (MoHRE, 2020). From March 26 to 29, 2020, the UAE announced the "National Disinfection Program," which required the complete sterilization of all public, transport and metro services. Traffic and the public were restricted during this period, while public transportation and subway services were stopped. On April 4, 2020, the government announced full restrictions on citizen movements for two weeks. However, essential services like retail food outlets, including union co-operative stores and supermarkets, and pharmacies and drug deliveries were permitted to stay open.

Travel restrictions were gradually lifted for national resident visa holders on June 1, 2020, with a mandatory negative COVID-19 PCR test needed to enter the UAE. Upon returning, travelers had to submit to home quarantine for 14 days after taking a COVID-19 test, which could be decreased to seven days for travelers from low-risk countries or professionals in critical areas. Restrictions on local population movements were partially removed on June 4, 2020. Restaurants, cafés, gymnasiums and pools were allowed to be open from 6:00 AM to 9:00 PM for citizens with a predetermined maximum capacity of four people. All of these facilities were required to check the temperature of those who sought entry. As a small state comprising 9 million people and implementing a high degree of preparedness and functional capacity, the UAE has successfully facilitated the monitoring and regulation of population movements.

# Testing and contact tracing

COVID-19 has challenged global health care systems concerning the delivery of care services. During the course of the pandemic, the relative capacity of the health systems of different countries has determined how well they have responded to the crisis. In order to understand the effectiveness of the health system in the UAE, for which limited data and evidence are available, the current research adopted three quality indicators: (1) the number of tests conducted, (2) containment based on cases of infection per million residents and (3) treatment based on the case fatality rate (CFR), which is the proportion of people who have died after testing positive. Compared with other GCC states, the UAE has been described as having a high-quality health care system and services. Paradoxically, the UAE has only 1.3 hospital beds per 1,000 people; in comparison, South Korea has 11.5 hospital beds per 1,000 people, the Russian Federation has 8.2, Saudi Arabia has 2.7, and Lebanon has 10 (United Nations, 2020). Looking at the increase in COVID-19 cases, the MoH&P identified six areas in which there were major deficiencies: the health workforce, medical supplies, hospital beds, patient care, vaccines and technologies and information gathering concerning the coronavirus.

On April 4, 2020, the MoH&P announced the addition of 5,000 hospital beds to increase medical capacity for the quarantining and treatment of infected patients. The MoH&P has mobilized additional health workers, increased staff and doctors in intensive care settings and used remote diagnosis and telemedicine to keep non-infectious patients out of hospitals to streamline health care. COVID-19 testing has been widely conducted and has provided considerable support irrespective of immigration status. The relevant data show that the UAE has done remarkably well with regard to testing, with more than 600 tests carried out per 1,000 people (Worldometer, 2020). The UAE government has launched an interactive health map that includes data for 13 COVID-19 screening sites and hospitals, health care centers and clinics. On April 12, 2020, the MoH&P launched the Home Testing Program to help those with physical disabilities who could not easily access testing facilities and/or could not express or communicate with others.

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Figure 1 below shows that on February 28, 2021, the UAE had 391,524 positive cases of COVID-19. This indicates around 390 COVID-19 cases per million residents—unlike in the US, where there have been 26,865,702 cases of COVID-19 per 334 million residents. However, there was a sharp increase in cases in the second wave beginning in January 2021 as the UAE government reopened for international tourism. That said, the data show that despite high COVID-19 infections in the second wave, rapid and robust policy measures for testing, screening and isolation have led to a low COVID-19-related mortality rate and minimal transmission among citizens and non-nationals. Figure 2 below shows the decline in the UAE's CFR, from 1.4% in March 2020 to 0.31% on February 28, 2021, which is lower than the CFR of other countries, such as the US, the UK, Italy and Egypt.

Overall, the functional capacity of the UAE has been satisfactory. The UAE's decisionmaking process is highly centralized and top-down and is based on the cooperation of

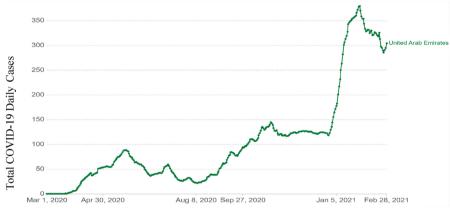
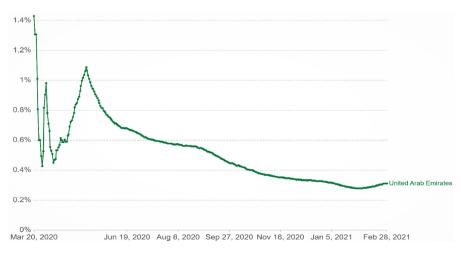


Figure 1. COVID-19 daily new cases per million residents, UAE





**Figure 2.** COVID-19 case fatality rate, UAE

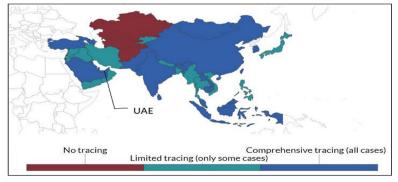
Source(s): Our World in Data (2020)

political, administrative and health experts. The government first adopted a mitigation strategy based on coercion, emphasizing stricter restrictions and a complete lockdown and prioritizing health over the economy. This was followed by a control strategy that progressively lifted restrictions according to learning experiences. However, COVID-19 has posed severe challenges to the quality of the UAE's health care systems, underscoring the need for better enhancement and emergency preparedness, which, if ignored, will present considerable challenges in the near future.

## Analytical capacity

The COVID-19 crisis is becoming increasingly complex and is rapidly intertwining with other profound issues. This is occurring after only several months of extensive scientific research on and responses to the pandemic, and as such the critical parameters of the pandemic, such as how it is spreading and the symptoms it causes, are still poorly understood (Capano *et al.*, 2020). In such a predicament, analytical capacity plays an essential role in accessing and applying technical and systematic information and investigative techniques and tools to design and execute policies in a well-organized and cost-effective way. By the end of March 2020, the NCEMA released the Guidelines for Medical Rapid Response and Public Health Aspects of COVID-19 in the UAE. The guidelines are intended to inform physicians about rapid PCR tests, laboratory tests, patient care and quarantine communication standards and to mitigate the impacts and mortality rate of the virus.

From the outset, the MoH&P cautioned against the high risks posed by the COVID-19 pandemic and reserved enough drugs and emergency equipment to treat infections. In addition, on April 3, 2020, the MoH&P launched an innovative smartphone application, "Stay Home," and later, "Trace COVID," to ensure that citizens adhered to mandatory self-quarantine requirements in the best interest of society. Figure 3 below shows that the UAE government emphasized comprehensive contact tracing. This started at hospitals, where patients were prompted to map their movements and identify those they had contacted over the preceding 14 days. An investigation process followed, carried out by local health authorities to determine whether those who had been in close contact with patients were at risk of infection. Contacted persons who were determined to be asymptomatic were quarantined for 14 days, while the symptoms of the coronavirus are suggested for checking with physicians and taking preventive measures (The Law Library of Congress, 2020).



Source(s): Our World in Data (2020)

Figure 3. COVID-19 contact tracing, UAE

In addition to contact tracing, the UAE government has implemented a mass vaccination campaign to control the spread of COVID-19, offering four effective vaccines—Sinopharm, Pfizer-BioNTech, Sputnik V and Oxford-AstraZeneca—free of charge to citizens and other residents over the age of 16, after ensuring that each recipient has no condition that would make vaccination inadvisable (Khaleej Times, 2020). Figure 4 above shows that by February 23, 2021, the UAE government had fully vaccinated 22% of the population, with the plan to vaccinate the full 100% of the eligible population by the end of 2021. Achieving this goal would represent a major milestone in the pursuit of herd immunity. Currently, the UAE ranks second globally behind Israel for doses per 100 people. As mentioned above, testing, contact tracing and a comprehensive vaccination program are the UAE government's key strategies for controlling the spread of the virus. With these functional capacities, the UAE has focused on physical and technological infrastructure and tools as a form of analytical capacity to improve the government's capacity to accumulate and investigate extensive volumes of data.

The experience of the UAE during the last year of the pandemic has demonstrated its capacity to engage relevant staff from other sectors of public service. The MHA and law enforcement authorities have contributed enormously to the government's ability to track contacts. However, while the UAE has developed significant functional capacities in its health care system and public service, some challenges have been faced in controlling and managing infections among foreign migrants, especially low-skilled and low-income migrants, who often reside in crowded locations and informal settings. These migrants are often exposed to sub-optimum living conditions with a lack of essential health care, water and sanitation (UN, 2020).

Summarizing the analytical capacity of the UAE, the UAE government has followed successful models and learned from the positive experiences of Asian countries such as Singapore and South Korea. There is no doubt that the UAE has recognized the importance of technical analysis capabilities and developed similar applications. These applications have been widely used in Asian countries for rapid testing and data-assisted contact retrieval and quarantine for infected individuals. Nevertheless, the lack of data and information on the high risk of infection among foreign migrant workers represents a more profound gap in the government's analytical capacity.

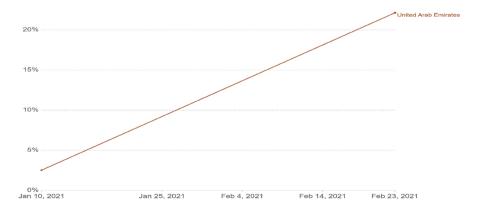


Figure 4.
Proportion of population completely vaccinated, UAE

Source(s): Our World in Data (2020)

## Fiscal capacity

The COVID-19 pandemic has adversely affected the largest economies in the world, including that of the UAE. The UAE government had already been struggling to recover from the 2009 financial crisis, with several sectors under stress, particularly over the past five years. The impact of the pandemic has challenged the "Dubai model," which has been known as a crucial regional trade and transport hub since the 1990s. The spread of the virus caused airlines to shut down, damaged tourism and cultural linkages and stifled global investment, trade and foreign exchange. Prior to the pandemic, economic growth had already declined from 4.4% of GDP in 2012 to 3% in 2016 to 1.6% in 2019. On average, oil prices plummeted from US\$93 per barrel in 2014 to US\$57 in 2019 to as low as US\$10 in 2020 (World Bank, 2020).

To contain the pandemic and alleviate its economic impact, the UAE government has taken prompt and concerted actions on budget allocation for business sector growth, strengthening health services and tourism development. The fiscal responses can be divided into three major categories. First, fiscal measures include government lending to businesses, either directly or through economic agents such as banks or the central bank, which tend to focus on small and mid-size enterprises (SMEs). Second, to contain the pandemic and alleviate its financial shock, the UAE government allocated a flexible stimulus budget of AED 32 billion (US\$8.7 billion or 2.8% of GDP) through various economic initiatives, including reducing multiple government fees, labor charges and other charges for the private sector (International Monetary Fund, 2020).

Second, fiscal measures include transfer expenditures, such as payments to businesses, unemployment subsidies and tax deferrals. The fiscal policy initiatives of the UAE have provided grants for water and electricity and credit assurances and financial support to SMEs These include postponing installment payments and interest on loans and credit cards over three months, suspension of all rental property eviction cases and the deferred collection of rent payments and service fees for tenants. On July 11, 2020, Dubai announced a new package worth AED 1.5 billion (US\$0.4 billion), including the cancellation of certain government fines, tax repayments to hotels and restaurants and catering various banking facilities to individuals and corporations. In late October 2020, Dubai announced a further AED 500 million (US\$136.14 million) economic package to strengthen the local economy, bringing the total Dubai stimulus package for 2020 to AED 6.8 billion (US\$1.851 billion) (Godinho, 2020). The other Emirates have used similar measures to assist trade and business and benefit local companies that have suffered the most from the pandemic.

Third, credit guarantees came from governments that support the credit risk of bank loans to target sectors and firms. To protect the national economy and protect consumers and businesses, the Central Bank of the United Arab Emirates (CBUAE) declared a financial support plan of AED 50 billion (US\$13.614 billion) to strengthen several fiscal measures at the domestic level. Banks were advised to provide temporary relief from principal and interest payments on outstanding loans for all private sector firms and retail customers affected by the pandemic.

The travel and hospitality industry is currently one of the sectors impacted the hardest by the COVID-19 pandemic, as it has affected travel demand and supply. The UAE received approximately 16.73 million visitors in 2019, which dropped to 5.5 million in 2020 due to the pandemic. Tourism is a vital part of the UAE's economy, contributing 11.9% of the country's GDP in 2019 (Gulf Today, 2020). When international travel restrictions were imposed to prevent the spread of COVID-19, the UAE was one of the most affected countries. In addition, Expo 2020, which was expected to bring considerable investment in the UAE, was postponed, severely impacting the sector. To revive the tourism sector, each Emirate has taken exceptional measures to boost tourism by waiving licensing fees for tourism-related businesses and implementing temporary exemptions in business-related expenses to support the tourism and hospitality industry. The UAE government also received the opportunity to

host the Indian Premier League (IPL) in September 2020 (a 20-20 cricketing event considered the most-watched cricket league in the world). Furthermore, the UAE authorities have progressively reopened shopping centers, entertainment areas and other businesses, subject to social distancing requirements and have facilitated the voluntary repatriation of expatriate workers. In a precarious situation, surrounded by economic pressure, the decision to do so was considered a bold move, but one that substantially contributed to the nation's economy.

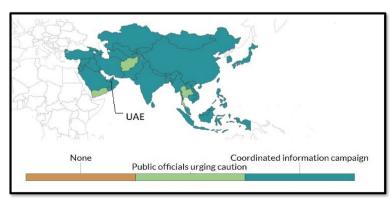
The above discussed economic measures offered reassurance to citizens, residents and visitors, ensured the continuity of government operations across all industries, reduced the financial burden of the COVID-19 crisis and circumvented severe negative impacts on the country's different sectors. However, in a situation of high uncertainty, economic growth decreased, reflecting the high increase in unemployment. Thus, a swift, adaptive approach to government fiscal capacity is crucial for effectively managing the crisis.

# Information-sharing capacity

Policymakers depend on substantive and technical information-based tools to legitimize their decisions. Discursive communication approaches as policy measures have received little attention in policy design and implementation (Howlett, 2005). Such techniques are essential to policy success because they influence policy process opinions and sway policymakers' decisions and measures. Governments have generally persuaded people to change their behavior through proper narratives and messaging about the pandemic and its risks. This has occurred, however, against the backdrop of public disinformation and an absence of communication between levels of government, leading to misleading interpretations, rumors and fake news on social media.

The UAE government has stressed that the fight against COVID-19 is a top priority and has enhanced information capacity through several measures. First, an effective inter-governmental reporting system has been implemented. Figure 5 below shows that since the onset of the crisis, DHA and NCEMA officials have been conducting daily media briefings to promptly share updated pandemic information. Second, the government has used social media platforms to communicate and coordinate information to the public effectively. Third, in addition to public awareness campaigns, the MoH&P has also incorporated emotional and moral value messages to encourage the public to stay home and enhance their support of preventive measures.

On April 1, 2020, the NECDMA launched "Weqaya," a virtual platform designed to raise public awareness about COVID-19. The platform provided the public with critical information about taking preventative health and safety measures (Khaleej Times, 2020).



**Figure 5.** Public information campaigning, UAE

Source(s): Our World in Data (2020)

The mainstream mass media campaign also included public service statements to enhance voluntary compliance with COVID-19 rules, including staying at home, self-quarantining, wearing masks, maintaining social distancing and avoiding public gatherings. In addition, on April 12, 2020, Abu Dhabi launched a COVID-19 awareness campaign by flying a helicopter across the UAE and posting "Work Dedication and Home Safety" messages in Arabic and English, urging all social groups to work from home to keep themselves and others safe and to control the spread of COVID-19 (Gulf News, 2020).

Overall, communication by the UAE government about the crisis has been characterized by precise, well-timed and emotional messages, and policy advice has been provided by health experts and policy and administrative officials. These measures have proved to be very important because local NGOs, private sector businesses, citizens and resident migrants have made crucial efforts to manage the crisis. These appropriate communication policy approaches are designed to provide judicious and precise information to the public and influence the public's perception of pandemic-related issues as a national existential risk to the health system. By doing so, the government has legitimized the implementation of policy measures concerning the pandemic, has guided public reactions and has promoted public trust.

# Political capacity

Managing the pandemic has not been easy. Organizational chaos, media pressure and inaccurate information are just a few of the factors that have made it very difficult for leaders to make sound decisions (Rosenthal *et al.*, 1997). Public policy does not stand alone; on the contrary, well-coordinated and collective action by departments is essential. Public policy is formulated, enforced and applied with authority by government institutions (Peters, 2015). Every aspect of the policymaking process and implementation requires proper coordination between government institutions, non-profit organizations and uneven bureaucratic arrangements.

Furthermore, government institutions give public policy three distinctive characteristics: (1) legitimacy, (2) universality and (3) coercion. Scholars have argued for the importance of legitimacy for crisis management. During times of crisis, maintaining public confidence and preserving political legitimacy have been a significant challenge for many government leaders. Legitimacy can be defined as the ability of leaders to gain compliance with new laws or public policies by cultivating the belief that everyone is complying. The legitimacy function is aimed at promoting and restoring public confidence in political authorities and trust in institutions, the system and related processes (Boin & Lodge, 2021).

The federal monarchical form of government in the UAE entails strong leadership and political capacity, which have enabled the UAE to coordinate among the Emirates and line departments to deliver quick and immediate preemptive measures. The political centralization and top-down management system have helped the UAE government make decisive policy decisions and mandate-driven operational capacity. The government has promoted better inter-governmental coordination and collaboration to tackle the crisis. Managing a health crisis is not a natural mandate of the NECDMA. In the UAE, the NECDMA has collaborated with the DHA and federal bureaucrats to enforce central policy measures, establish a rapid disaster management team, provide logistics, supplies and health facilities, formulate local-level strategies and plans and disclose information about COVID-19 through several media platforms. The strong mobilization and effective cooperation and coordination capacity among all seven Emirates and the solid bureaucratic system have played a significant role in overcoming the challenges of implementing COVID-19 health policies.

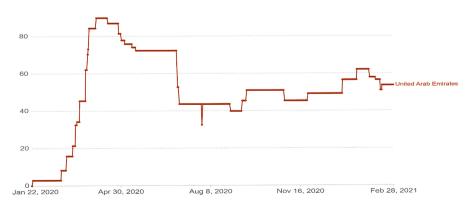
Second, public policies require universality. Only public policies apply to all members of society. The UAE government has extended social welfare measures to all residents, including the most vulnerable segments of society. These policies have been target-oriented, including unemployed persons, low-income persons, women, children, youth, older people

and migrants in a vulnerable position with limited access to health and other social protection services. For instance, the government extended residence permits for expatriates, which would have expired on March 1, 2020, for three months and lifted administrative penalties on expired permits until December 2020. To protect the well-being of migrants, the UAE government ensured the implementation of a new insurance plan from 2018 for migrant workers, which included compensatory sickness benefits for people affected by COVID-19. Also, the government encouraged working from home, adopting short-time work compensation, providing food security and improving workplace health and safety regulations to ease the impacts of the pandemic.

In addition, the UAE government has allowed irregular migrants who entered the country without valid documentation to leave the country voluntarily with a temporary ban of two years, after which they can re-enter the country (UN, 2020). This measure has certainly helped thousands of expatriates in a vulnerable position who were experiencing severe hardships due to canceled employment contracts, wage reduction, or a backlog of payments. However, it is unclear what measures have been taken by the UAE government for informal sector job holders, such as domestic workers and caregivers (mostly women), who have no health coverage and limited access to social safety nets.

Finally, coercive capacity is the ability of the government to compel citizens to comply with government policies and anti-contagion guidelines. The experiences of many countries have shown that understanding the gravity of the COVID-19 pandemic and compliance with authorities' directives is essential in the fight against the virus. The rentier state characteristics of the UAE play a critical role in the social and welfare development of citizens through different coercive measures. With a formidable political capacity, the UAE government has adopted a mandatory containment strategy to control the pandemic and has empowered the local police force and other coercive organizations to ensure public compliance.

The stringency of government responses to the pandemic has been measured with the COVID-19 Government Response Stringency Index, a composite measure based on nine containment indicators from 1 to 100, where a higher value denotes a stricter response. Figure 6 below summarizes this scale and demonstrates that the stringency of the UAE government's response in April 2020 was around 90%. The UAE's proactive stringent management efforts included mandatory face mask usage, fines for quarantine violations, prohibitions on public gatherings and operational regulations. Afterward, a series of guidelines for private offices, restaurants and gyms were announced, including capacity limitations, random temperature checks and mask requirements. In addition, the police forces and military personnel have played a significant role in enforcing mitigation measures, such



**Figure 6.** COVID-19 stringency index. UAE

Source(s): Our World in Data (2020)

as ensuring night curfews and disinfection programs and maintaining social distancing. While ensuring these safety measures, 129 violators have been fined AED 50,000 (US\$13,612) and referred to the Attorney General for non-compliance with home quarantine instructions as per the home quarantine guidelines (NECDMA, 2020). Although there have been numerous well-known cases of citizens violating the rules pertaining to safety measures, the UAE population has overall shown a high degree of voluntary compliance and cooperation with government prevention and control measures.

The political capacity of the UAE government demonstrates that the nation's political leaders have been successful in linking governance capacity with legitimacy, highlighting that the UAE has adequate resources and sufficient political will to handle the pandemic. The process of giving meaning to the crisis took place against the backdrop of great mutual trust between political leaders and local populations. Many press briefings and messages emphasized that the government cared about the lives and livelihoods of its citizens. Citizens' positive support has in turn reinforced political capacity, policy responses, attitudes and behaviors pertaining to adherence to government guidelines and rules.

#### Humanitarian assistance

In the age of globalization, the nature of "crisis" has changed. The whole world has entered a new phase characterized by "transboundary crises" that can be differentiated from traditional crises by their potential to permeate regions, national borders and different sectors, e.g. from the financial system to production sectors by their longevity effects (Boin, 2009). The COVID-19 pandemic is a prime example of a transboundary crisis that initially impacted the health sector but has spilled over into many others (economy, state, society) and has become global in scope. Consequently, it serves as an excellent arena in which to examine how countries coordinate and support each other on technical, economic, political, social and humanitarian grounds. The UAE authorities have shown tremendous global leadership in providing support to vulnerable sections of society and countries. For example, several UAE government and nongovernmental organizations and agencies came together to aid low-income households and migrant workers stranded in the country after the international travel hiatus. On April 19, 2020, the UAE government launched the "10 Million Meals" campaign to support low-income families and others who were severely financially impacted by the pandemic.

The Emirates Red Crescent (ERC) declared that it would support stranded laborers and give the necessary support to family members of those who died from COVID-19, irrespective of national origin. This gesture, which is part of the national "You are among your families" initiative, has been implemented in several vital stages and has strengthened the programs of philanthropic organizations in the field of social services. "Together We Are Good" is a local community-based program developed by the Social Contribution Authority and Ma'an program in Abu Dhabi to allow the community to support the government's efforts to tackle the health and economic challenges caused by COVID-19 (Arab News, 2020). In addition, the UAE government has facilitated home tests for physically disabled people to ensure their safety and provided free stem-cell therapy to 73 critically ill COVID-19 patients. Beyond this, the UAE has sent aid planes with medical equipment to 47 nations along with 523 tons of medicine and food and 523,000 medical professionals (The National News, 2020). These efforts show the continued political capacity and ethical accountability of the UAE in the management of global crises that threaten humanity.

#### Conclusion

This study examined the public policy measures taken by the UAE to address and mitigate the COVID-19 health crisis. As discussed above, the five levels of policy capacities have allowed the UAE government to handle the COVID-19 crisis very effectively at the regional

and national levels. These actions have resulted in low death rates from COVID-19 in the UAE and have limited the spread of the virus among citizens and the resident migrant community. The UAE's management of the pandemic must be recognized in the context of seasoned political leadership, dependable bureaucrats, a strong state, excellent economic resources, low population density and a rentier state approach based on a high-trust society.

There are many lessons to be drawn from the UAE's design and implementation of crisis management policies. First, functional capacity and organizational flexibility have been crucial to dealing with the crisis. The UAE's primary emphasis on developing a health care system is at the core of its operational capability. The importance of functional capacity rests in the availability of hospitals beds, diagnostics facilities, protection equipment for frontline workers (e.g. protective masks, safety goggles, hazardous material suits), medicine and pharmaceutical management. Also, the timely availability of human resources, like medical doctors, nurses and health volunteers, for treating infected patients is critical. Besides increasing medical supplies, a second component of the UAE's analytical capacity is carrying out vigorous contact tracing and massive rapid PCR tests as well as mass vaccination programs, home quarantine and social distancing. Despite the lack of past experiences and preparation in some areas, the UAE government has managed to control the pandemic efficiently by implementing a suppressive approach and a control policy based on a co-operative and centralized decision-making style.

Second, as the crisis has unfolded, it has become crucial to balance saving lives with saving livelihoods. National leaders and policymakers have acted urgently to protect their economies. Immediate measures to stimulate the economy have been essential to ensuring the sustainability of society as a whole. Due to the severe business and economic impacts of COVID-19 in the UAE, around 70% of SMEs have closed, and many migrants have lost their jobs. To minimize the economic impact of the pandemic and protect vulnerable migrants, the UAE government has emphasized health spending and passed sizeable economic stimulus packages as well as employment insurance and social assistance measures to support small businesses and revive the economy.

Third, during the pandemic, public confidence and well-timed information from the government are critically important. UAE government officials sought to provide sufficient and accurate information on numbers of cases, rates of recovery and numbers of deaths on a near-daily basis by both state-controlled and external sources. The UAE government also raised awareness about the pandemic and how to deal with it without causing mass panic. The government has also taken the initiative to lead a massive campaign to change behaviors during the pandemic. This includes the mandatory use of masks in public and maintaining social distancing. In doing so, the government has legitimized the implementation of policy measures, enhanced public trust and convinced national and global audiences of the effective management of COVID-19 in the UAE.

Fourth, political and administrative capacity is relevant to managing crises like COVID-19. The UAE's soft-authoritarian rentier state approach to effective governance demonstrates a high level of public support despite a lack of political accountability, predicated upon states maintaining social stability and economic development. Political capacity may be further strengthened by the success of the UAE in the management of past economic and social crises, such as the global economic crisis of 2008 and the Arab Spring movement in 2011. However, the UAE has retained a relatively high degree of political confidence, and policy adherence has played a crucial role in its political capacity. Also, institutional coordination and collaborative governance among federal states and timely cooperation between different departmental levels, like the NCEMA, the MoH&P, the MoF and the military and police forces, have played an important role in safeguarding public adherence to COVID-19 control and preventive measures. Finally, the UAE government has shown extraordinary global leadership through cross-border collaboration among countries, policy fields and

professional expert bodies, as well as humanitarian support with medical equipment, food aid and medical professionals to ease suffering and combat the pandemic.

In conclusion, the UAE case demonstrates an effective understanding of the policy responses needed to combat and contain the COVID-19 pandemic. However, the UAE's experience and policy interventions may only be applicable to small states with small populations and similar political-social and demographic compositions, not large countries with large populations and different governmental structures. Furthermore, the various economic measures taken by the UAE government are only feasible in countries with significant financial reserves and adequate fiscal capacity. As a result, further research is required to understand the role of policy responses to COVID-19 in different countries worldwide. Nonetheless, the UAE case can be used by policymakers as comparative studies of the policy designs, tools and capabilities that can be employed to manage future pandemics and other crises.

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