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A Letter from the Ford School of Public Policy's Dean Michael Barr

As dean of the Gerald R. Ford School of Public Policy, I am pleased to support the 18th volume of the Michigan Journal of Public Affairs, an entirely student-driven publication of first-rate public policy articles from graduate students, emerging scholars, and policy professionals.

The work of these individuals shows rigorous, objective policy analysis, and effective communication to illuminate critical public policy issues facing the world and offer substantive solutions to address these pressing challenges. I hope you will enjoy the breadth and excellence of the articles in this volume.

To the editorial board: Congratulations on an outstanding publication and thank you for your leadership and perseverance in the face of COVID-19 and these unprecedented times. You exemplify the highest levels of professionalism, resourcefulness, and hard work.

Sincerely,

Michael S. Barr

Joan and Sanford Weill Dean of Public Policy Frank Murphy Collegiate Professor of Public Policy Roy F. and Jean Humphrey Proffitt Professor of Law

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A Letter from the Editor-in-Chief

Dear readers,

We are proud to share with you Volume 18 of the Michigan Journal of Public Affairs. This year we are publishing the journal under unusual circumstances, as we did one year ago when the COVID-19 crisis was just beginning. Since then, as students and policy practitioners we have done our best to virtually engage with important policy issues while acclimating to a new normal still mired by racial injustice and inequality—both made worse by the pandemic. Despite these challenges, it was inspiring to read the work of this year's talented authors. The pieces in this journal address issues that continue to plague our communities, domestic and abroad: our writers tackle financial inclusion, unemployment insurance in the gig economy, North Korea's military strategy, the relationship between government trust and the COVID-19 pandemic response, and best practices to reduce recidivism in the state of Michigan.

Manseok Lee's "North Korea's Nuclear Weapons and Evolving Military Strategy" covers North Korea's military strategy and reveals insights that could prove beneficial in addressing subsequent threats from the country. Through a "scenario-based" approach, Lee provides readers with potential North Korean military strategies.

Two pieces explore how financial inclusion efforts should better serve marginalized groups. In partnership with Solidaridad Network, Sophia Hart and Carolina Dominguez address how NGOs, the private sector, and government should improve financial inclusion for Columbia's small-scale artisanal miners in "Colombia's Artisanal And Small-Scale Miners Search For Financial Inclusion." In Adrienne Harris and Emma Macfarlane's "Redefining Financial Inclusion," readers will gain insight on reconceptualizing financial inclusion to ensure effective application regardless of industry. Harris and Macfarlane implore us to understand that access to a bank account alone does not equal true financial inclusion. They go on to offer a new definition of financial inclusion, which prioritizes usage of other financial services including those beyond traditional products.

The pandemic has exposed the tenuous nature of employment for non-traditional workers as well as the importance of trust in government. In an era where people are increasingly joining the gig economy, Andrew Krantz looks at how unemployment insurance (UI) can be broadened to better incorporate gig workers in "Unemployment Insurance Reform and Non-Standard Labor." As Krantz notes, the CARES Act made UI available to 14 million gig workers. That so many individuals needed these protections is significant, underscoring the importance of UI during tumultuous times. Additionally, Jean Vilbert uses statistical analyses to review the association between trust in government and the number of cases and deaths from the novel coronavirus in 28 countries between February and August 2020.

Two more pieces touch on how to improve communities to ensure they work for all residents, specifically by promoting racial justice in housing policy and by reducing the rate of recidivism. In "Affirmatively to Further the Purposes': Affirmatively Furthering Fair Housing Under the Biden Administration," Jamison Koeman offers a new look at housing policy to address the barriers that continue to segregate neighborhoods by race. Koeman argues that the Biden administration should develop a stronger "Affirmatively Furthering Fair Housing" statute to prohibit housing discrimination. Nevo Polonsky's "Policy Options for Humanely Reducing Recidivism in Michigan" offers an analysis of how a prison nursery program and free transportation for visitors could interrupt the cyclical nature of recidivism and its intergenerational effects in communities in Michigan.

This journal would not have been possible without the work of our Editors and Executive Board, guidance from our faculty lead, Luke Shaefer, support from Dean Michael Barr, and encouragement from University of Michigan leaders at the Gerald R. Ford School of Public Policy. We extend our gratitude.

Sincerely, Mariatu Santiago Editor-in-Chief

Colombia's Artisanal and Small-Scale Miners Search for Financial Inclusion

By Carolina Dominguez & Sophia Hart

in collaboration with Elizabeth Echavarria of Solidaridad Network

Abstract

Colombia consistently ranks at the top across different indices regarding favorable environments for financial inclusion. However, there seems to be a disconnect between policies considered conducive for change and the reality for informal sectors like artisanal and small-scale mining (ASM). Despite the enactment of financial inclusion policies, many artisanal and small-scale miners have yet to see substantial positive change to their profession or their communities. This article will examine the strengths and weaknesses of financial inclusion laws and regulations in Colombia as it relates to ASM. Specifically, through referencing two cases of mining communities affected by the lack of financial inclusion, this article explains current Colombian laws and decrees that affect informal sectors like ASM, and offers recommendations for three important stakeholders in ASM: government, the private sector, and NGOs.

Our partner in this research, Solidaridad Network, is working on an ASM financial inclusion pilot as part of the project Practice for Change, financed by the Netherlands Ministry of Foreign Affairs. Solidaridad Network is an international civil society organization that envisions a world in which the economy works for all, while respecting the planet, each other, and generations to come. The organization enables farmers and workers to earn a living income, shape their own future, and work to make sustainability through supply chains the norm. This type of work is important because access to financial opportunities and services will improve the lives of miners and their small communities. These opportunities will enable them to continue on the path to formalization and work without the threat of violence.

ASM in Colombia

Artisanal and small-scale mining has existed in Colombia for centuries, and has mostly been conducted by native peoples. The practice was originally based on the principle of "first in time, first in right," which means that whoever finds minerals first is entitled to them.³ Historically, this has allowed rural communities to search for nat-

ural resources on government lands without a legal permit. However, mining rights today belong to those who appear in the Mining Register. The Mining Register excludes artisanal and small-scale miners due to their lack of formal business practices, keeping them from legally being able to do their jobs and provide for their communities.⁴ The 2011-2012 mining census found that 63 percent of operations lacked legal mining titles in the National Mining Registry and, in 10 of the departments surveyed, over 80 percent of operations did not have legal mining titles.⁵

ASM activity in Colombia is significant, representing 72 percent of the country's total gold production as reported in 2013.6 However, since the early 2000s, Colombia has experienced increased violence in mining towns from neo-paramilitary and drug trafficking groups looking to sell gold to fund their criminal enterprises.7 This type of illegal mining has brought in approximately 7 billion dollars a year for criminal groups.8 In response, since 2015, the government has prioritized ending illegal mining in order to cut off a lucrative source of income for armed groups.9 Significantly, artisanal and smallscale miners lose the most in the ongoing battle between the Colombian government and these illicit groups. The government has often lumped together the ASM sector working towards formalization (informal mining) and the illegal criminal operations of military and drug trafficking groups (illegal mining), creating greater barriers to formalization and, most importantly, to sustainable and productive livelihoods for the miners.

Financing Gold Mining in Antioquia

Gold is found in 44 percent of Colombia's departments, including the Department of Antioquia, which contains most of the country's gold and represents approximately half of all gold production. Most of the gold production in Antioquia is carried out by artisanal and small-scale miners. For example, the 2011-2012 census estimated that about 1,224 mining units out of a total of 1,526 produced gold without a mining title in Antioquia, approximately 80 percent. A more recent study by the

Antioquia Department of Mines shows that the number without a mining title is closer to 1,664 mining units.¹²

Formalization of artisanal and small-scale miners and their operations is an arduous process that can require a significant amount of capital that these miners often do not possess. As a result, ASM miners often look to private investors for the resources necessary to raise operational and labor standards and to generate additional profit. Importantly, increases in profit make it easier to legitimize their businesses and be included in the formal sector of the mining industry. For example, the small-scale miners of the town of Frontino in the Department of Antioquia are some of those without formal titles who would benefit from financial opportunities and investment. Financial inclusion of ASM is important for these miners, who are mostly young men in their twenties and thirties supporting their families. These men have exclusively worked in ASM and typically serve as the main breadwinners in their households in towns like Frontino, where career opportunities are minimal.13

There is also a significant amount of ASM activity in San Roque, Antioquia.14 While ASM miners in San Roque, unlike those in Frontino, have largely secured necessary authorization and permits to operate, they remain in need of large financial investments before they are fully able to start selling gold.¹⁵ These miners are looking for investments that range between \$30,000 and \$50,000 USD per mine to be able to continue working.¹⁶ This type of investment is hard to find, because many financial institutions are hesitant to lend to gold miners. For example, banks are aware that gold mining in Colombia is often associated with terrorism, human rights violations, money laundering, and crime. As a result, even when a financial institution is willing to offer financial services to smallscale miners, such as those in San Roque, the terms and conditions are inflexible and often detrimental to the miners' operations and future endeavors.¹⁷ In this sense, while these small-scale businesses have received some recognition as legitimate businesses, they have often been excluded from the mechanisms of financial support that would offer the capital necessary to build critical infrastructure and provide adequate security for their employees. Without the investment, the mines may never become fully functioning, formal businesses.¹⁸

Financial Inclusion

The World Bank defines financial inclusion as "individuals and businesses that have access to useful and affordable financial products and services that meet their needs–transactions, payments, savings, credit and insurance–delivered in a responsible and sustainable way."¹⁹

While there have been major advances in financial inclusion over the last two decades, around 1.7 billion adults still do not have access to a formal bank account, one of the key components of financial inclusion.²⁰ In response to this challenge, global programs, governments, and the private sector have taken action in a variety of ways to expand financial inclusion.

At the international level, there have been multiple initiatives that support increased financial inclusion. For example, eight of the United Nations' 17 Sustainable Development Goals (SDGs) include targets for expanded financial inclusion.²¹ The World Bank has also supported government initiatives to create financial inclusion plans and frameworks in a number of countries.²² Additionally, the Alliance for Financial Inclusion includes 100 institutions and 88 countries. Members can collaborate, share best practices, and work towards advancing financial inclusion at multiple levels of government.²³ Each of these international organizations can have a large impact on the countries with which they work, so it is significant that they are focusing on this issue.

In addition to intergovernmental organizations' emphasis on financial inclusion, governments throughout Latin America have initiated an array of laws and policies to improve in this area. For example, Chile's government-run Central Bank created a universal access debit card program called CuentaRUT allowing anyone in the country with an identity card to access a bank account.24 Additionally, during the COVID-19 pandemic, the governments of Peru²⁵ and Colombia²⁶ opened accounts for citizens in order to provide them with cash transfers for pandemic relief. Financial inclusion is necessary on more than just an individual scale, and governments are working to expand financial opportunities for Small and Medium Enterprises (SMEs), as well. According to the Financial Inclusion Index developed in the IMF Working Paper, "Financial Inclusion: Zooming in on Latin America," the region has done well overall with inclusion of firms. Chile, Barbados, Brazil, and Peru rank the highest in the region, and overall, the percentage of SMEs with a line of credit is similar to that of Asia (46 to 48 percent respectively).²⁷ However, there are often high collateral requirements for lending, leading a large share of SMEs to view access to finance as a major constraint.²⁸ As a result, there is still a large gap in access to financial services for businesses operating informally. When businesses are not recognized formally, private investors and banks may not fully know or understand SMEs' potential to be profitable entities, so they remain unfinanced.

As governments continue to work to expand financial inclusion for individuals and businesses, the private sector has also enabled major advances in financial

inclusion. Private sector advances in mobile money and fintech are fostering digital financial inclusion worldwide, including in Colombia. While banks are a powerful force in Latin American economies, causing slower development of fintech, the industry has rapidly grown and the climate for mobile money is very promising.²⁹ Compared to regions of the world already using mobile money widely, Latin America "is notable for more diverse business models, a high degree of integration with the formal financial system, and a strong focus on building a mobile financial ecosystem from the start."30 With increased access to digital money transfers and savings options, more and more people can be connected to formal financial systems. Ideally, this digital revolution in banking will also benefit SMEs. Banks in Colombia have been working to reduce the barriers to lending to SMEs that have traditionally existed by creating units that focus solely on SMEs and by placing some emphasis on site visits.³¹ However, business owners that hope to acquire SME loans still face considerable challenges, and there is a need for more robust financial assistance.32 Critically, the growth in this industry is made possible through laws and regulations conducive to advancing financial inclusion.

Colombia's Financial Laws, Decrees & Commitments

Colombia has been repeatedly celebrated for its progressive law and policy environment regarding financial inclusion. For example, the Global Microscope 2019 report indexing 55 countries in Latin America, Asia, and Africa, concluded that Colombia earned first place for its progress on financial inclusion, with mobile money growth of 147% over the last few years.³³ Colombia's first-place status is due in part to laws passed in the last two decades that outline the need to improve the financial inclusion of the Colombian people. These laws and decrees include:

- Intersectoral Economic and Financial Education Committee (CIIF) (Decree 457): created the CIIF, in charge of designing and implementing the financial education policy and enhancing the financial inclusion policy.³⁴
- "The Financial Inclusion Law" (Law 1735): created a new financial license to allow new players, including non-banks, to enter the low-cost electronic deposits market and also called for proportionate "know-your-customer" (KYC) requirements in order to facilitate greater access to financial services among low-risk populations.³⁵
- Digital transaction environment (Law 1734): facilitat-

- ed the creation of specialized electronic deposit and payment companies to promote more robust financial opportunities for different populations.³⁶
- Collaboration between banks and fintech companies (Decree 2443): enabled investment and collaboration between traditional financial institutions and FinTech enterprises.³⁷
- The Alliance for Financial Inclusion's Maya Declaration: committed 70 financial institutions from developing and emerging countries (including Colombia) to making concrete financial inclusion targets, implementing in-country policy changes, and regularly sharing progress updates.³⁸

The Importance of Financial Inclusion in the ASM Sector

Colombia has made important strides in the promotion of financial inclusion. However, financial inclusion legislation has yet to benefit ASM miners or help them achieve their financial goals. There are at least four possible explanations for the current disconnect between Colombia's progressive laws and regulations and the experiences of those who work in ASM.

- 1. There is a **lack of an evaluation component** to the regulations and programming focused on financial services. While there are some monitoring elements, without a full evaluation of the impact that certain laws, regulations, or programs have on different populations within the country, it is impossible to know the effectiveness of the implemented changes and therefore create plans for the future.³⁹
- 2. While financial outcomes are emphasized, there is less focus on programs that build financial capabilities, which are often overlooked as essential to the success of financial literacy.⁴⁰
- 3. Laws and regulations do not promote clear and simple procedures with sensible enforcement frameworks. In the case of creating more simplified banking services for the underserved, the rules state that financial institutions must have procedures in place to verify the content and identity of customers, but do not provide further clarity on how to do so. In addition, the simplified banking services regulation contains language stipulating stringent record-keeping requirements for businesses and individuals, including the need to have physical copies of documentation for a period of at least five years, which can create additional barriers for vulnerable populations.⁴¹

4. Financial inclusion laws and regulations are not enough on their own to fully address inequalities that plague the most vulnerable. There are often policy tradeoffs between achieving growth and achieving equity. The Colombian government has to balance its stance on how to navigate the desire to grow its economy with the possible exacerbation of inequalities that uncalculated economic growth may cause. 42

Identifying areas for improvement among stakeholders can help further explain the disconnect between the regulatory and legal framework in Colombia and the reality for informal sectors. Government policies and bank programs that are meant to benefit SMEs have not been reaching ASMs. The stigma around informal ASMs resulting from their perceived association with illegal mining has kept ASMs from being fully included in initiatives for financial inclusion. In economic terms, there is an imperfect information problem between the private sector and ASM. Private investors have often regarded small-scale mining as an unnecessary risk due to the perception that small mines are related to illegal activities. By expanding and updating research on ASM, the private sector could better understand the industry and its business functions, including specific production cycles and management structures. In addition, global initiatives like SDGs, which emphasize the importance of financial inclusion in all sectors, can serve to motivate the private sector's social responsibility strategy to focus on the formalization of ASM. From the miners' standpoint, they may not recognize the advantages of engaging with financial institutions, because they are not completely aware of the resources that could be available to them from the private sector. They often lack the business knowledge or understanding of the law to effectively adhere to government requirements. Imperfect information among government, financial institutions, and miners leaves miners unable to advocate effectively for their livelihoods.

Recommendations for Stakeholders

The Colombian government, private sector (banks, fintech, etc.), and NGOs are stakeholders that could help expand financial inclusion for ASM. The recommendations for each stakeholder are as follows:

Government

- 1. The Ministry of Mines and Energy should strengthen its ties with the CIIF to increase opportunities for ASM.
- 2. Authorities should collect up-to-date information

- about ASM by completing an updated Mine Census or comprehensive study and make it available to investors.
- Governments should edit or amend existing financial inclusion laws in order to address how groups like ASM may navigate barriers to accessing formal financing.
- 4. Governments should produce campaigns for potential investors about the ASM situation in Colombia and outline the difference between illegal and informal mining, as well as what is actually risky about the ASM sector in Colombia versus what the perception of risk is internationally.

To account for the lack of evaluation in regulations and programming focused on financial services, it is important that an updated Mine Census be conducted. A new census will allow for opportunities to assess the type of progress made over the last decade, and to understand the best methods of evaluating the successes and failures of policy, laws, and initiatives in ASM. Additionally, current laws should be amended to account for the specific barriers that ASM face. Current enforcement of financial inclusion laws are unclear and do not account for ASM as a sector. Such changes should be made to account for the structural and systemic challenges the ASM sector faces, as well as to strengthen ties to existing coalitions and committees. One of the systemic challenges of ASM is the prevalent inequalities these miners experience. It is the Colombian government's responsibility to explicitly distinguish illegal mining from informal mining in order to encourage a financial environment that is more conducive to ASM investment. These recommendations address areas 1, 3, and 4 identified for improvement in the previous section.

Private Sector (banks, fintech, etc.)

- Financial institutions should not offer one-sizefits-all products for ASM. Rather, financial institutions should have ongoing and detailed conversations with miners about their unique financial needs.
- Banks should use similar qualitative indicators and qualifications as those used for SME loans for ASM operations, as well as consult with NGOs who are familiar with ASM and may be able to provide support.
- 3. Banking institutions should eliminate transaction fees for gold traders and merchants in order to increase enrollment in credit/debit systems.
- 4. Banks should consider alternatives to traditional collateral, such as gold, equipment, land rights,

etc.

- 5. Banks and fintech companies should collaborate to better reach ASM and traders.
- Different potential ASM investors (including banks, fintech, microfinance, etc.) should build a network of different financing levels depending on the size and scope of the project so more opportunities can be funded.

It is not always clear how banks should implement laws and regulations. These recommendations emphasize areas that need strengthening when working with ASMs. Credit risk assessments can be difficult for an ASM that does not have a traditional credit score. In order to fulfill their obligations to better include ASMs and other SMEs in the formal financial market, banks should develop alternative ways to assess them. Creating differentiated products for ASM that include financial education and personalized communications with the bank can help emphasize both financial outcomes and programs that build financial capabilities, as well as inequalities in the formal financial sector that affect the most vulnerable. These recommendations address areas 2, 3, and 4 identified for improvement in the previous section.

NGOs

- Nongovernmental organizations should recommend the CIIF to stakeholders as an avenue for financial inclusion of ASM.
- 2. NGOs should help build technical capacity of ASMOs (Artisanal and Small-scale Mining Organizations) to receive responsible mining certifications in order to help them qualify for loans and formal status (e.g., strong management skills, worker records, records of amount of gold mined, responsible mining and due diligence practices).
- 3. Organizations should make the reality and needs of ASM known to the government and private sector, reducing the stigma and the perception that the industry is high-risk.
- 4. Organizations should work with the government to produce more research on ASM in the country.

NGOs can help bridge the information gap between miners, banks, and the government. Their knowledge can help strengthen enforcement mechanisms and advise the government on ways to best reach ASMs. This can in turn enhance the evaluation component needed to help understand the financial landscape for ASMs. In helping to expand technical capacity and financial knowledge of ASMOs, NGOs can also help increase the likelihood of success for miners as they take on loans or leases for

capital equipment. This could demonstrate to the private sector and government that ASMs are viable businesses for investment. NGOs have a very important role to play in raising awareness of the systemic and social inequalities affecting financial inclusion for vulnerable populations, including ASMs. Through their close work with ASMs, NGOs have a unique responsibility to uplift the voices of those who have been marginalized and caught between a government classifying their work as illegal and violent armed groups threatening their lives. These recommendations address areas 1, 2, and 4 identified for improvement in the previous section.

Conclusion

Financial inclusion in Colombia has made tangible progress in recent years. The gaps that remain affect ASM particularly due to their often remote locations, position in vulnerable communities, and public perception as violent and high-risk. Colombia's extensive set of laws and policies on financial inclusion are a positive step, but more needs to be done to reach the most vulnerable sectors. Policy implementation should be context-dependent, flexible, and measurable. Creating a complicated formalization landscape for miners creates barriers that do not reflect Colombia's forward-thinking existing laws. There is power in seeing mining cooperatives as viable organizations able to participate in group-lending and make connections with international gold traders as intermediaries for loan programs. However, the long-term goal of ASM is to enter the formal sector to gain stability and growth through access to formal finance.

Miners like those in Frontino and San Roque want to continue their work and provide for their families in a safe and healthy environment. They hope to be proud of their profession without facing negative stereotypes. They wear apparel saying "Orgulloso de ser minero" (Proud to be a miner) and "Soy minero" (I am a miner) as part of an effort to reduce stigma. While ASM often begins as an informal undertaking with precarious working conditions, it is possible for it to develop into a profitable livelihood and contribute to local economic development goals. If ASM continues to operate largely outside of the formal sector, without access to formal finance, the stigma around it will remain and the full scope of benefits for the community will be unrealized.

Notes

- 1. "Who We Are," Solidaridad Network, accessed March 5, 2021, https://www.solidaridadnetwork.org/who-we-are/.
- 2. Ibid.
- 3. Cristina Echavarria, ""What is legal?" Formalising artisanal and small-scale mining in Colombia," (London: IIED, 2014), https://www.responsiblemines.org/wp-content/uploads/2017/05/What-is-legal-C-Echavarria.pdf.
- 4. Ibid.
- 5. Ibid.
- 6. "Global Trends in Artisanal and Small-Scale Mining (ASM): A review of key numbers and issues," Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF), (Winnipeg: IISD, 2017). https://www.google.com/url?q=https://www.iisd.org/system/files/publications/igf-asm-global-trends.pdf&sa=D&ust=1611553462385000&usg=AOvVaw05Rsq7R0t5x-3kLh_OLhQ1w.
- 7. Diego Ibarra Sanchez, "Illegal Gold Mining Fuels Violence in Colombia." Latin America News | Al Jazeera. *Al Jazeera*, May 7, 2017. https://www.aljazeera.com/gallery/2017/5/7/illegal-gold-mining-fuels-violence-in-colombia.
- 8. Pedro Vargas, "Así 'Lavan' El Oro De La Minería Ilegal En El País," *Portafolio.co*, June 10, 2016. https://www.portafolio.co/economia/gobierno/lavan-oro-mineria-ilegal-pais-497191.
- 9. Ibid.
- 10. Christina Echavarria, ""What is legal?" Formalising artisanal and small-scale mining in Colombia"; Massé, Frédéric and Munévar, Juan. Debida Diligencia en La Cadena de Suministros de Oro Colombiana: Minería Aurífera en Antioquia. (European Union: OECD, 2015). https://mneguidelines.oecd.org/Antioquia-Colombia-Gold-Baseline-SP.pdf.
- 11. Ibid.
- 12. Ibid.
- 13. Elizabeth Echavarria, email message to authors, January 22, 2021.
- 14. Elizabeth Echavarria, "Reporte Visita a Campo Frontino (Antioquia) 2020," unpublished report for Solidaridad Network sent to authors, January 18, 2021.
- 15. Elizabeth Echavarria, "Reporte Visita a Campo San Roque (Antioquia) 2020," unpublished report for Solidaridad Network sent to authors, January 18, 2021.
- 16. Ibid.
- 17. Ibid.
- 18. Ibid.
- 19. "Financial Inclusion: Overview," World Bank, accessed January 25, 2021. https://www.worldbank.org/en/topic/financialinclusion/overview.
- 20. Ibid.
- 21. "Financial Inclusion and the SDGs," UN Capital Development Fund (UNCDF), accessed January 25, 2021. https://www.uncdf.org/financial-inclusion-and-the-sdgs.
- 22. "Financial Inclusion Overview: Results," World Bank, accessed January 25, 2021. https://www.worldbank.org/en/topic/financialinclusion/overview#3.
- 23. "Alliance for Financial Inclusion: Home Page," AFI-Global, accessed April 4, 2021. https://www.afi-global.org/.
- 24. Erika Arraño and Juan Pablo Cova, "The Chilean Experience of a Universal Access Debit Card," in *Bank of Morocco CEMLA IFC Satellite Seminar* at the ISI World Statistics Congress on "Financial Inclusion" (Marrakech, Morocco: July 14, 2017), https://www.bis.org/ifc/publ/ifcb47i.pdf: 3.
- 25. Francisco Aldaya, "Peru Forces Bank Accounts onto Millions, a Potential Financial Inclusion Boon," S&P Global Market

- Intelligence, September 14, 2020. https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/peru-forces-bank-accounts-onto-millions-a-potential-financial-inclusion-boon-60231754.
- 26. "The Impact of Emergency Cash Assistance During the COVID-19 Pandemic in Colombia," Innovations for Poverty Action, January 5, 2021. https://www.poverty-action.org/study/impact-emergency-cash-assistance-during-covid-19-pandemic-colombia.
 27. Era Dabla-Norris, et al., "Financial Inclusion: Zooming in on Latin America," (IMF working paper: September 2015): 9.
 28. Ibid., 9.
- 29. Mireya Almazan and Jennifer Frydrych, "Mobile financial services in Latin America & the Caribbean: State of play, commercial models, and regulatory approaches," (GSMA, 2015). https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2015/09/2015_GSMA_Mobile-financial-services-in-Latin-America-the-Caribbean.pdf: 5. 30. Ibid., 5.
- 31. Constantinos Stephanou and Camila Rodriguez, "Bank Financing to Small and Medium-Sized Enterprises (SMEs) in Colombia," (World Bank Policy Research Paper, 2008). https://www.researchgate.net/publication/23550480_Bank_Financing_to_Small_and_Medium-Sized_Enterprises_SMEs_in_Colombia: 5.
- 32. Ibid., 5.
- 33. "Global Microscope 2019: The enabling environment for financial inclusion," Economist Intelligence Unit. (New York, NY, 2019): 8.
 34. Decree 457, Intersectoral Economic and Financial Education Committee (Colombia, March 22, 2020), https://dapre.presidencia.gov.co/normativa/normativa/DECRETO%20457%20DEL%2022%20 DE%20MARZO%20DE%202020.pdf.
- 35. Law 1735, The Congress of Colombia (Colombia, October 21, 2014), https://dfsobservatory.com/sites/default/files/Ley_1735_2014.pdf.
- 36. Law 1734, The Congress of Colombia (Colombia, September 8, 2014), http://www.suin-juriscol.gov.co/viewDocument.asp?ruta=Leyes/1687435.
- 37. Decree 2443, Ministerio de Hacienda y Crédito Público (Colombia, December 27, 2018), http://es.presidencia.gov.co/normativa/normativa/DECRETO%202443%20DEL%2027%20DE%20DICIEMBRE%20DE%202018.pdf.
- 38. "Maya Declaration," Alliance for Financial Inclusion | Bringing smart policies to life, accessed January 25, 2021. https://www.afi-global.org/maya-declaration.
- 39. Liliana Rojas-Suarez, "Financial Inclusion in Latin America: Facts, Obstacles, and Central Banks' Policy Issues," (Inter-American Development Bank: 2016). https://publications.iadb.org/publications/english/document/Financial-Inclusion-in-Latin-America-Facts-Obstacles-and-Central-Banks-Policy-Issues.pdf.
- 40. 2019 Global Microscope: 24.
- 41. Liliana Rojas-Suarez and Lucia Pacheco, "An Index of Regulatory Practices for Financial Inclusion in Latin America: Enablers, Promoters and Preventers" (BBVA Research & Center for Global Development: June 2017): 29, 48.
- 42. Era Dabla-Norris, et al., "Financial Inclusion: Zooming in on Latin America," (IMF working paper: September 2015): 23-24.
- 43. Elizabeth Echavarria, email message to authors, January 22, 2021.

Redefining Financial Inclusion

By Adrienne Harris & Emma Macfarlane†

with support from the Center on Finance, Law & Policy

Introduction

"Financial inclusion in India is soaring," reads a 2019 headline from the World Economic Forum.¹ The article is rife with promising statistics. In just seven years, the number of Indian citizens holding a bank account increased from forty to eighty percent,² providing what the author described as a "creditable achievement" for the country and one that addressed the "basics" of financial inclusion.³ If the principal requirement for financial inclusion is access to a bank account, then the author's conclusion may be correct. But has the nation achieved real financial inclusion when close to half of these accounts are inactive?⁴

The article exposes one of the problems with our current definition of financial inclusion. Both governments and international organizations frequently use a check-the-box approach based on access instead of looking at affordability, suitability, or consumer preferences. Access to a bank account?⁵ Check. Have a debit card?⁶ Check. Financial inclusion satisfied.

Reality is more nuanced. Twenty percent of account owners worldwide have never deposited or withdrawn money from a bank account in their name. Some rural populations in Sub-Saharan Africa may forgo the use of a bank account, but are active in investing and exchanging money on digital platforms. If financial needs are met via financial technology (fintech) apps and non-predatory alternative lenders, the absence of a bank account may not indicate exclusion from the financial system.

Financial inclusion definitions serve as the foundation for national economic policies. Countries and banks use these definitions to create financial programs. Viewed in this light, the meaning of financial inclusion is more than an abstract concept. It has the potential to shape the very basis of our national (and international) economic policies.

This article argues for a broader definition of financial inclusion than those currently proposed by international organizations working within the financial services space – a definition that is more comprehensive, more accurate, and more workable. Part I outlines the

current definitions of financial inclusion that governments, central banks, and international organizations use today. Part II describes the weaknesses that exist within these definitions and why a new formulation is necessary. Part III briefly addresses the relationship between financial inclusion and financial health, and why both are worthwhile and interconnected pursuits. Finally, Part IV sets forth a proposal to redefine financial inclusion by drawing on the realities of the global financial frameworks, traditional and otherwise, that are in place today.

I. Defining Financial Inclusion

Proposed definitions of financial inclusion run the gamut from the general to the specific. On one end of the spectrum are broad explanations. For example, the Organisation for Economic Cooperation and Development (OECD) endorses a definition of financial inclusion satisfied by, "affordable, timely and adequate access to regulated financial products and services and broadening their use by all segments of society."10 Other institutions offer a narrower description of the term. The World Bank notes that the "first step" to financial inclusion for both individuals and businesses is having access to a "transaction account," which thereby serves as a gateway to other financial services. 11 The G20 Financial Indicators echo the World Bank's approach: The G20 countries have endorsed nine factors as indices of financial inclusion.¹² Of these nine factors, five focus on the number of accounts or branches of "commercial banks," one on the "number of ATMs," and one on the number of "registered mobile money agent outlets" (with each statistic showing the number per 100,000 adults). 13 Only one of the nine factors is concerned with actual transactions completed by adults during the year.14

Although definitions vary, they usually reference access as a means to some socially desirable end. Many commentators, international institutions, and governments position financial inclusion as beginning with access to formal financial services.¹⁵ The desired end goal anticipated from such access ranges from the alleviation of poverty,¹⁶ to the improvement of economic develop-

ment,¹⁷ to the robust participation of individuals within their national economy.¹⁸ While mere access might be enough in some settings – for example, developed countries in the Global North – such a formula does not guarantee real financial inclusion in developing countries within the Global South. That organizations such as the OECD, the G20, and the World Bank espouse this view of inclusion is not surprising; the Global South is structurally underrepresented within each of these international bodies.¹⁹ This may limit the organizations' abilities to determine the needs of individuals in developing countries to effect real financial inclusion.

Financial inclusion is important to define precisely - and accurately - for the effective monitoring and implementation of the aforementioned economic policies. Studies abound on the effects of initiatives intended to strengthen financial inclusion.20 However, without a clear and consistent definition befitting of the financial services ecosystem, problems arise. For instance, the variance in definitions of financial inclusion hampers our ability to compare such studies against one another,²¹ which in turn may limit the efficacy of national economic strategies intended to bolster financial inclusion. Conversely, working toward a shared and well-defined meaning of financial inclusion creates an environment whereby studies of financial inclusion may be measured against one another.22 This in turn can lead to well-informed and strategic adjustments that ensure effective outcomes.

II. Weaknesses with Current Definitions of Financial Inclusion

Existing definitions of financial inclusion hinge upon an individual's or business' "access" to a "formal" or "regulated" financial service. The term "access" refers to an individual's ability to use a financial service without regard to whether the individual is in fact using the service. "Formality" is often used to describe traditional financial services, such as checking and savings accounts and brick-and-mortar banks. The distinction between "formality" and "regulation" is thus often blurred or nonexistent. The use of these terms in defining financial inclusion raises three issues.

First, the current definitions of financial inclusion frequently rely upon a notion of "access" that fails to account for the use of financial services. Access encompasses the opportunity to regularly use transaction accounts, savings and retirement accounts, mobile money accounts, insurance, and credit.²⁷ However, access to financial resources is not enough if the individual or business in question does not make use of the financial

service.

"Usage" of financial services, then, is an element that should be met to satisfy financial inclusion. A survey of low-income households conducted in Washington D.C., Los Angeles, and Chicago in 2005 underscores this conclusion. The study found that two-thirds of the surveyed households were not using their bank accounts despite having access to them.²⁸ Instead, they depended upon informal services outside of banks to meet their financial needs.29 In light of the survey's results, the authors of the study refuted categorizations that divided consumers neatly into "the banked and the unbanked."30 Instead, the authors preferred the term "underbanked" to reflect the range of consumer engagement with the "mainstream financial system." They advocated – as we do now - for a holistic approach to the assessment of financial services that takes into account consumer engagement with "alternative financial service providers." 32

The second and interrelated problem of imputing this definition to financial inclusion is the "formality" benchmark, which renders the definition both overand under-inclusive. The definition is under-inclusive because people that do not have access to formal financial services are not necessarily excluded from the financial system. If we accept that at least one component of financial inclusion is the ability to take advantage of financial services that meet one's needs, 33 then access to affordable, informal, and potentially unregulated digital payment services could meet this requirement.

The definition is overinclusive because even if a citizen has access to formal financial services, it does not necessarily follow that they can use these services to meet their financial needs. It may be the case that the in- or less formal (and perhaps un- or less regulated) solution better meets a consumer's needs. For example, one may have a bank account in their name while being unable to make meaningful use of it. This could be for any number of reasons. The bank's monthly fees might make the account's use prohibitive, or the time lag for funds' availability may be inconvenient. Traditional definitions would count this consumer as included because they have access to a formal account, even though it is the cost of "formality" that in fact makes them less useful.

Finally, assessing an individual's level of financial inclusion based upon their access to "regulated" services is an antiquated understanding of the financial services available today. Brick-and-mortar banks – the traditional, regulated, and formal financial service – are no longer the sole or even primary method to access financial products and services. For example, mobile-based lending apps have gained enormous popularity in Kenya

over the past ten years,³⁴ yet the industry remains largely unregulated.³⁵ This phenomenon is not unique to Kenya; digital payment systems have experienced exponential growth in the past decade the world over.³⁶ These online payment systems have frequently flourished in areas without regulatory regimes already in place for payment systems.³⁷ This underscores the contention that access to "regulated" or "formal" financial services is a false barometer for financial inclusion.

Regulation is certainly important for consumer protection and other purposes. But making regulation (or "formality") a prerequisite for inclusion could be a mistake. A financial product or service may be informal and even unregulated but still safe and accomplish the objectives policymakers seek by promoting access to formal systems. This is not to argue for the promotion of unregulated financial products and services. It is to argue that common definitions of financial inclusion may be overly prescriptive.

In sum, measuring financial inclusion by an individual's access to formal or regulated services – like the mere fact of having a traditional bank account – should no longer be the gold standard. Financial inclusion should more readily acknowledge, for example, the non-bank digital payment systems that many countries depend upon. This in turn will make the definition of financial inclusion itself more inclusive. For instance, nearly half of the world's mobile money customers reside in sub-Saharan Africa. In failing to acknowledge this population's access to financial services through avenues other than a bank account, we risk ignoring the financial realities and innovations of individuals outside of the global north.

Popular commentary in the media frequently digs in on this final point concerning regulation. One of the main criticisms levied against the proposition of relying on fintech and other non-bank services to foster financial inclusion is the perceived lack of regulatory oversight and resultant concern that fintech firms are permitted to behave badly and with impunity.⁴⁰ To a certain extent, such concerns have been borne out. For example, some fintech lenders in Kenya have skirted around regulatory oversight by refusing to accept customer deposits; the same creditors have also charged an extraordinary 100% annualized interest on consumer loans.41 This has caused critics to characterize the fintech industry as a whole as, "a novel, digitized form of slow violence" perpetrated by "techno-capitalists" who steal from the poor and stockpile "runaway profits" for themselves. 42 In our view, this is both an over-generalization and overstatement of the ills of fintech and other typically unregulated financial services. Certainly, bad actors exist within these unregulated spaces. But to write off such services because they are unregulated neglects the enormous potential of the industry as a whole. It also conveniently fails to acknowledge the success story of M-Pesa; or the alternative credit scoring fintech company Lenddo;⁴³ or the Kenyan Smile Identity app, which allows for alternative forms of identification for individuals who are without or unable to obtain traditional identification cards.⁴⁴ In sum, it is easy to cherry-pick bad actors to make the case for tying the requirement of regulation to financial inclusion. However, this approach impermissibly cabins the universe of entities that we identify as helping consumers achieve true financial inclusion.

There are tangible repercussions to how we formulate and interpret the definition of financial inclusion; as such, this debate is more than mere semantics. It may be easier to simply point to the existence of a bank account and claim success in achieving financial inclusion. But, fundamentally, this is an incomplete picture. Such definitions are inadequate because they condition economic policy to focus on the institution that is providing financial services instead of the services and people themselves. We would be remiss to discount the impact that alternative payment services have on financial inclusion merely because they are not a bank, or because they fall outside regulatory regimes. In sum, the debate surrounding the definition of financial inclusion extends further than deliberation about nomenclature. It is about examining the processes available within the financial system that allow for individuals' short- and long-term financial stability.

III. Financial Inclusion is Not Enough

Accurately defining and working towards financial inclusion is only the first step. The separate but related concept of financial health is equally important. Jennifer Tescher of the Financial Health Network gives an elegant explanation of the terms' conceptual differences: "While inclusion is primarily about getting people into the formal financial system, as measured by account ownership, financial health is the desired outcome." Tescher argues that central banks should view financial inclusion as the baseline, but that their ultimate focus should be ensuring their citizens' financial health.

Inclusion is merely a means; financial health is the end. Policymakers gain indispensable insight from monitoring citizens' financial health. Although inclusion and health are indeed different (albeit related) concepts, we should view individuals' financial health as one indicator of whether the policies created to ensure financial inclusion are meaningful and working.⁴⁷ Even if we assume that financial health provides a better

framework, financial inclusion is nevertheless an indispensable threshold. When financial inclusion is defined correctly, it can improve citizens' financial health, particularly those low-income and vulnerable individuals who are most in need of it, and produce a "possible multiplier effect" on the economy.⁴⁸

In sum, Tescher notes that "what gets measured, gets managed." Financial health should be one way of measuring the efficacy of our current policies promoting financial inclusion. To improve financial inclusion is to work toward the improvement of financial health. It is for this reason that the definition of financial inclusion is crucial to get right.

IV. Redefining Financial Inclusion

How, then, should financial inclusion be redefined to more accurately reflect our intentions for the concept? It is tough to impart a working definition of financial inclusion in a world in which the financial challenges that individuals face vary so widely. For example, financial inclusion within the United States might entail a focus on ensuring citizens' access to affordable, non-predatory lending services in the mortgage market.⁵⁰ In rural areas of the Global South, financial inclusion might instead mean addressing the problem of remoteness through initiatives such as improved broadband access.⁵¹

While recognizing that a broadly applicable definition of financial inclusion may be a challenge to articulate, the global community can still modernize the definitions set forth to date. To start, the definition of financial inclusion should be broadened to include access to non-traditional sources of financial services. Put simply, financial inclusion should not hinge upon access to a traditional bank account.

The new definition should also focus on the activities and processes that consumers use rather than the products offered by financial institutions. In this regard, simple access is insufficient. Access to (or in other words, the ready availability of) a financial service should not be enough to merit financial inclusion. Rather, the definition should incorporate the actual use of such products and services. Instead of defining inclusion as "access to," inclusion should be defined by "regular usage of."

The remaining dimension of financial inclusion is the products and services to which consumers have access. Financial inclusion should take stock of whether the customer may transact, borrow, and insure safely, effectively, and affordably. In this realm, financial inclusion may not be satisfied by unlimited, easy access to and regular use of predatory digital loan services.⁵² In-

stead, certain conditions must be met that make a financial service appropriate for the consumer in question.⁵³ These conditions may include a range of factors, such as the service's price and terms; its quality for value; its safety of use; and the number of users within the system, so as to allow for the consumer's reasonably unrestricted use of the service.⁵⁴

Financial inclusion is a desirable end in and of itself; its ability to act as a conduit for financial health only serves to further underscore its importance. It is necessary to formulate a workable, comprehensive, and above all, accurate definition for the term. Only once this first building block is in place does our global financial system have a chance at total financial inclusion.

Notes

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- 1. Ramesh Iyer, "Financial Inclusion in India is soaring," World Economic Forum, Jan. 14, 2019. https://www.weforum.org/agenda/2019/01/financial-inclusion-in-india-is-soaring-heres-what-must-happen-next/.
- 2. Ibid.
- 3. Ibid.
- 4. "At 48%, India tops in bank users with inactive accounts, says World Bank," *The Hindu Business Line*, April 19, 2018. https://www.thehindubusinessline.com/money-and-banking/at-48-indiatops-in-bank- users-with-inactive-accounts-says-world-bank/article23606293.ece.
- 5. The World Bank uses this as one of the indicators to satisfy financial inclusion. See World Bank. *The Little Data Book on Financial Inclusion*, (Washington, DC:World Bank Publications, 2012), 10.
 6. Ibid.
- 7. "At 48%, India tops in bank users with inactive accounts, says World Bank," *The Hindu Business Line*, April 19, 2018. https://www.thehindubusinessline.com/money-and-banking/at-48-indiatops-in-bank- users-with-inactive-accounts-says-world-bank/article23606293.ece.
- 8. See Francesco Pasti, "State of the Industry Report on Mobile Money," GSMA 2018, 10-11. https://www.gsma.com/r/wp-content/uploads/2019/05/GSMA-State-of-the-Industry-Report-on-Mobile-Money-2018-1.pdf.
- 9. "Financial Access Survey," IMF Data, 2020. https://data.imf.org/?sk=e5dcab7e-a5ca-4892-a6ea-598b5463a34c&sId=1412015057755.
- 10. "Financial Inclusion and Consumer Empowerment in Southeast

Asia," (OECD 2018), 9. http://www.oecd.org/finance/Financial-inclusion-and-consumer-empowerment-in-Southeast-Asia.pdf (the full definition reading, "[f]inancial inclusion refers to the process of promoting affordable, timely and adequate access to regulated financial products and services and broadening their use by all segments of society through the implementation of tailored existing and innovative approaches, including financial awareness and education, with a view to promote financial wellbeing as well as economic and social inclusion.").

11. "Financial Inclusion," The World Bank, last modified October 2, 2018. https://www.worldbank.org/en/topic/financialinclusion/overview

12. "Financial Access Survey," IMF Data, 2020. https://data.imf.org/?sk=e5dcab7e-a5ca-4892-a6ea-598b5463a34c&sId=1412015057755.

13. Ibid. The remaining two factors are concerned with the number of life insurance policy holders and the number of mobile money transactions conducted by adults.

14. Ibid

15. See e.g., Muhamed Zulkhibri & Abdul Ghafar, "Ismail, Financial Inclusion & Poverty Alleviation," ix-x (Muhamed Zulkhibri & Abdul Ghafar Ismail eds., 2018) (defining financial inclusion as, "a process that ensures the ease of access, availability and usage of formal financial services for all members of an economy"); see also "Defining Financial Inclusion," AFI 5-6 (July 2017). https://www.afi-global.org/sites/default/files/publications/2017-07/FIS_GN_28_AW_digital.pdf (providing a brief overview of the differing definitions that countries use to describe financial inclusion in their own national directories).

16. See e.g., Carlos Schönerwald and Matías Vernengo, "Microfinance, Financial Inclusion, and the Rhetoric of Reaction: The Evolution and Limitations of Microfinance in Brazil," Latin American Policy 7, no. 2 (2016): 356–57. doi:10.1111/lamp.12101.

17. Ibid.

18. See e.g., Bruno L. Yawe, "The evolution of merchant payments and mobile payments to enable financial inclusion," *Journal of Payments Strategy & Systems* 12, no. 4 (2018): 314–15.

19. "What are the main criticisms of the World Bank and the IMF?" Bretton Woods Project, June 4, 2019. https://www.brettonwoodsproject.org/2019/06/what-are-the-main-criticisms-of-the-world-bank-and-the-imf/#_Toc10127387.

20. See e.g., "Financial inclusion studies," Innovations For Poverty Action, n.d. https://www.poverty-action.org/program-area/financial-inclusion/studies.

21. "Financial Access Survey," IMF Data, 2020. https://data.imf.org/?sk=e5dcab7e-a5ca-4892-a6ea-598b5463a34c&sld=1412015057755.

22. Ibid.

23. *See* "Financial Access Survey," IMF Data (2020), https://data.imf.org/?sk=e5dcab7e-a5ca-4892-a6ea-598b5463a34c&sId=1412015057755.

24. *See e.g.*, Timothy Adams, "Why Financial Inclusion Matters," Center on Financial Inclusion, 2 (Oct. 22, 2018), https://content.centerforfinancialinclusion.org/wp-content/uploads/sites/2/2018/10/ Why- Financial-Inclusion-Matters.pdf.

25. See e.g., "Financial Inclusion and Consumer Empowerment in Southeast Asia," OECD (2018) 9. http://www.oecd. org/finance/Financial-inclusion-and-consumer-empowerment-in-Southeast-Asia.pdf; "Financial Access Survey," IMF Data, 2020. https://data.imf.org/?sk=e5dcab7e-a5ca-4892-a6ea-598b5463a34c&sId=1412015057755. (reading in part, "[f]inancial inclusion refers to the process of promoting affordable, timely and adequate access to regulated financial products and services . . ." [emphasis added]).

26. "Banking the Underbanked: Formal vs. Informal Financial Inclusion, Does it Matter?" Sustainable & Inclusive DFS, Nov. 6, 2018. https://sustainabledfs.medium.com/banking-the-underbanked-formal-vs-informal-financial-inclusion-does-it-matter-1693974de449; "Access to Formal Finance," The Mango Tree (2021). https://mangotree.org/Access-to-Formal-Finance.

27. "Financial Inclusion and Consumer Empowerment in Southeast Asia," OECD (2018) 9. http://www.oecd.org/finance/Financial-inclusion-and-consumer-empowerment-in-Southeast-Asia.pdf 28. Mandira Sarma, "Measuring Financial Inclusion for Asian Economies," in Financial Inclusion in Asia, 8 (Sasidaran Gopalan & Tomoo Kikuchi eds., 2016); Ellen Seidman, Moez Hababou & Jennifer Kramer, "Getting to Know Underbanked Consumers," The Center for Financial Services Innovation, September, 2005. https://www.findevgateway.org/sites/default/files/publications/files/mfg-en-papergetting-to-know- underbanked-consumers-a-financial-services-analysis-2005.pdf.

29. These services ranged from "buying money orders and sending remittances from other than a bank to using payday lenders, pawn shops and auto title lenders as primary sources of credit." "Financial Inclusion and Consumer Empowerment in Southeast Asia," (OECD, 2018), 4. http://www.oecd.org/finance/Financial-inclusion-and-consumer-empowerment-in-Southeast-Asia.pdf; Ellen Seidman, Moez Hababou & Jennifer Kramer, "Getting to Know Underbanked Consumers," The Center for Financial Services Innovation, September 2005. https://www.findevgateway.org/sites/default/files/publications/files/mfg-en-paper-getting-to-know- underbanked-consumers-a-financial-services-analysis-2005.pdf.

30. Ibid., 4.

31. Ibid., 5.

32. Ibid., 1.

33. See "Financial Inclusion and Consumer Empowerment in Southeast Asia," (OECD, 2018) 9, http://www.oecd.org/finance/Financial-inclusion-and-consumer-empowerment-in-Southeast-Asia.pdf 34. "We Need a Law to Regulate Mobile Loan Apps in Kenya, Says CBK Governor, Patrick Njoroge," Bitcoin KE, March 29, 2019. https://bitcoinke.io/2019/03/we-need-a-law-to-regulate-mobile-loan-apps-in-kenya-says-cbk-governor-patrick-njoroge/.

35. Victor Odundo Owuor, "Mobile-based lending is a double-edged sword in Kenya," *Quartz Africa*, October 5, 2019. https://qz.com/africa/1722613/mobile-money-lending-in-kenya-helps-but-also-spikes-debt/.

36. Ibid., 316, 320.

37. For example, Tanzania's online payment system was in place well before its internal regulatory regime caught up. See Bisi Lamikanra and Joleen Young, "Payment Developments in Africa," KPMG no. 2 (Nov. 2016): 3. https://assets.kpmg/content/dam/kpmg/ng/pdf/dealadvisory/ng-KPMG-Payment-Developments-in- Africa-Volume-2.pdf ("[d]espite significant gaps in the current regulatory regime governing payments, Tanzania boasts a safe, secure – and increasingly innovative – payment sector. While the country remains a largely cash-dominated economy, this spotlight report finds that Tanzania's Central Bank, policy makers and payment participants are eager to improve the efficiency, convenience and accessibility of payment systems.").

38. 45.6% of mobile money users are in Sub-Saharan Africa. Further, over 60% of the adult population in Sub-Saharan Africa has a registered mobile money account. Francesco Pasti, "State of the Industry Report on Mobile Money," GSMA 2018, 10-11. https://www.gsma.com/r/wp-content/uploads/2019/05/GSMA- State-of-the-Industry-Report-on-Mobile- Money-2018-1.pdf.

39. See "Financial Inclusion on the Rise, But Gaps Remain, Global Findex Database Shows," World Bank, April 19, 2018. https://www.

- worldbank.org/en/news/press-release/2018/04/19/financial- inclusion-on-the-rise-but-gaps-remain-global-findex-database-shows (detailing the gap between bank account ownership in different regions of the world).
- 40. See generally Deloitte, "The Future of Fintechs: Risk and Regulatory Compliance," October 2017. https://www2.deloitte.com/us/en/pages/regulatory/articles/future-of-fintechs-risk-and-regulatory-compliance.html.
- 41. Kevin P. Donovan & Emma Park, "Perpetual Debt in the Silicon Savannah," *Boston Review*, September 20, 2019.
 42. Ibid.
- 43. Lenddo is a Fintech company that has helped economically empower 2.4 million applicants to more accurately predict an individual's character or 'willingness to pay' and provide an alternative mechanism when traditional credit scores are unavailable, inaccurate, or prevent individuals from obtaining the credit they need. *See* Wajiha Ahmed, "How fintech is changing the Global South," World Economic Forum, November 15, 2017; "Our Products," Lenddo (2021). https://www.lenddo.com/products.html.
- 44. See Wajiha Ahmed, "How fintech is changing the Global South," World Economic Forum, November 15, 2017.
- 45. Jennifer Tescher, "The Central Bank of the Future and Financial Health," Center for Finance Law and Policy, June 5, 2020.
 46. Ibid.
- 47. Empirical studies have found that "financial inclusion could produce synergies and mitigate medium instability and expected losses of the financial sector." Martin Čihàk, Davide S. Mare & Martin Melcky, "The Nexus of Financial Inclusion and Financial Stability," The World Bank Group, 2016. doi:10.1596/1813-9450-7722.
- 48. H. R. Khan, Reserve Bank of India, Address at BANCON 2011, Chennai: Financial Inclusion and Financial Stability: Are They Two Sides of the Same Coin? (Nov. 4, 2011) in RBI Monthly Bulletin, Mar. 2012, at 553, 554, https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/06SPBUL120312.pdf.
- 49. Jennifer Tescher, "The Central Bank of the Future and Financial Health," Center for Finance Law and Policy, June 5, 2020; "Financial Inclusion on the Rise, But Gaps Remain, Global Findex Database Shows," World Bank, April 19, 2018, 2. https://www.worldbank.org/en/news/press-release/2018/04/19/financial- inclusion-on-the-rise-but-gaps-remain-global-findex-database-shows (detailing the gap between bank account ownership in different regions of the world). 50. See "Curbing Predatory Home Mortgage Lending," U.S. Department of Housing and Urban Development: U.S. Department of Treasury, (Washington, DC:2000), 17.
- 51. See Mandira Sarma, "Measuring Financial Inclusion for Asian Economies," in Financial Inclusion in Asia, 8 (Sasidaran Gopalan & Tomoo Kikuchi eds., 2016; See also Anir Chowdhury, "Digital Financial Inclusion of the Rural Poor in Bangladesh," World Bank Blogs, March 15, 2017. https://blogs.worldbank.org/endpovertyinsouthasia/digital-financial-inclusion-rural-poor-bangladesh.
- 52. *See e.g.*, Victor Odundo Owuor, "Mobile-based lending is a double-edged sword in Kenya," Quartz Africa, October 5, 2019. https://qz.com/africa/1722613/mobile-money-lending-in-kenya-helps-but-also-spikes- debt/.
- 53. Mandira Sarma, "Measuring Financial Inclusion for Asian Economies," *in* Financial Inclusion in Asia, 7 (Sasidaran Gopalan & Tomoo Kikuchi eds., 2016)(defining "condition exclusion" as "exclusion due to unaffordable prices of financial products").
 54. Ibid., 17.

"Affirmatively to Further the Purposes": Affirmatively Furthering Fair Housing Under the Biden Administration

By Jamison Koeman

In 1968, Congress passed the Fair Housing Act in order to end housing discrimination. Today, the law prohibits discrimination on the basis of race, color, national origin, religion, sex, familial status, and disability in the sale and rental of housing, mortgage lending, and advertising. In addition, the act prohibits harassment, coercion, and retaliation, and requires reasonable accommodations for people with disabilities. A short provision passed with the original Fair Housing Act, called the "Affirmatively Furthering Fair Housing and Urban Development (HUD) and other executive agencies implementing programs related to housing and urban development must conduct implementation "affirmatively to further the purposes" of the statute.³

Despite the passage of the Fair Housing Act, a step that would seem to portend the end of housing discrimination, segregation, and disparate opportunity in the United States, the issue still persists. According to the National Low Income Housing Coalition, Black, Native American, and Hispanic homebuyers still face several discriminatory barriers, including racially motivated steering, underexposure to homes, and a system of credit scoring and lending practices that disadvantages prospective homebuyers without a credit history.4 In addition, Black, Native American, and Hispanic households account for a disproportionate percent of extremely low-income renter households. For example, Black households account for over a quarter of extremely low-income renter households despite being only 12% of households overall.⁵ Discriminatory barriers to homeownership and affordability in the rental market are only two of several factors leading Black, Native American, and Hispanic households to often congregate by race and ethnicity, thereby furthering patterns of housing segregation.6

Affirmatively Furthering Fair Housing in the Last Decade

Until 2015, localities receiving federal funding were required to conduct an Analysis of Impediments (AI) to identify fair housing issues in their communities. 14

Als were expected to identify barriers to fair housing at the local level and promote fair housing planning. However, research found that Als did not meet this expectation due to limited regulation, poor oversight, and a lack of resources to support localities.⁷ The research showed that Als too often were outdated, lacked content, failed to provide a timeline for implementing their recommendations, and failed to provide an elected official's signature.⁸

AFFH regulations strengthened in 2015 when a more comprehensive rule established the Assessment of Fair Housing (AFH). The AFH provided greater depth of information than the former AIs and the new rule clarified HUD's assessment metrics, improved oversight, and supported localities with a data tool for fair housing analysis. Importantly, the new rule stated that the goal of AFFH is to "overcome the legacy of segregation, unequal treatment, and historic lack of access to opportunity in housing" and required localities to not only incorporate their findings into their planning processes, but also make proactive steps towards achieving fair housing in their communities in order to receive federal funds. As a result of the 2015 rule, there was greater incentive and support to further fair housing at the local level.

However, the Trump administration overturned the 2015 rule in 2020 with a new regulation that argued HUD had too much power over local land use laws and the definition of AFFH. HUD's 2020 AFFH rule rejected AFFH's prior definition on the premise that "jurisdictions may find many ways to advance fair housing that HUD officials cannot predict." In doing so, the 2020 rule left interpretation of the phrase up to local discretion and reduced opportunity for federal oversight.

Similar to the Obama administration, the Biden administration now has the opportunity to pave a new path towards fair housing. In the following pages, I will first address the legal landscape surrounding the definition of AFFH. Second, I will summarize the literature evaluating the 2015 rule, including local compliance, HUD's assessment tool, and legal implications. Finally, and relying on the legal and empirical base, I will offer recommendations for a Biden administration's efforts to implement a new and emboldened AFFH rule.

Defining AFFH in the Legal Landscape

The AFFH provision of the Fair Housing Act of 1968 states that HUD must conduct implementation "affirmatively to further the purposes" of the Fair Housing Act. ¹⁴ In interpreting this statute, the Trump administration contended that they had the ability to shape the meaning of AFFH in order to justify their 2020 rule. They cited the 1984 Supreme Court ruling *Chevron v. NRDC*, where the EPA was allowed deference when interpreting the term "stationary source" within the Clean Air Act, and argued that the same would hold for HUD when interpreting the AFFH provision of the Fair Housing Act. ¹⁵ Similar deference would most likely occur under the Biden administration as long as the AFFH provision was interpreted within reason.

Considering judicial history in the United States, the AFFH provision most reasonably favors stronger executive action to "overcome the legacy of segregation, unequal treatment, and historic lack of access to opportunity in housing." In 1987, NAACP, Boston Chapter v. Secretary of HUD established that the language in the Fair Housing Act describes HUD's "obligation to do more than simply not discriminate itself." In reviewing this case, the 2020 rule supposes that little action beyond prohibiting discrimination is required on the part of HUD. But the opinion of the case goes further, saying "This broader goal...reflects the desire to have HUD use its grant programs to assist in ending discrimination and segregation, to the point where the supply of genuinely open housing increases." 19

Support for a broader goal was also found in several other prominent cases. For example, in 1970, *Shannon v. HUD* outlined the interrelationship between the Civil Rights Act of 1964 and Fair Housing Act of 1968 to demonstrate that AFFH goes beyond prohibiting housing policies that create disparate effects, saying that "by 1964, such a program had to be nondiscriminatory in its effects, and by 1968 the Secretary had to affirmatively promote fair housing." Further, in 1973, *Otero v. New York City Housing Authority* stated "Action must be taken to fulfill, as much as possible, the goal of open, integrated residential housing patterns and to prevent the increase of segregation, in ghettos, of racial groups whose lack of opportunities the Act was designed to combat." ²¹

AFFH as an instrument to end residential segregation and enhance opportunity has been supported at the Supreme Court. In 1972, the Supreme Court case *Trafficante v. Metropolitan Life Ins. Co.* showed preference to a broader goal of AFFH when it was written that "Senator Mondale who drafted § 810(a) said, the reach of the proposed law was to replace the ghettos 'by truly integrated

and balanced living patterns."22 In 2015, in Texas v. Inclusive Communities Project, the Supreme Court stated "The Court acknowledges the Fair Housing Act's continuing role in moving the Nation toward a more integrated society."23 HUD's 2020 rule only partially interprets the court's opinion in favor of a limited view of AFFH when it notes that "the Supreme Court has specifically held that the Fair Housing Act 'is not an instrument to force housing authorities to reorder their priorities."24 However, Texas v. Inclusive Communities Project continues in support of a more proactive interpretation of AFFH, saying, "Rather, the FHA aims to ensure that those priorities can be achieved without arbitrarily creating discriminatory effects or perpetuating segregation."25 Despite the 2020 rule's hesitancy to define AFFH in a way that encompasses active steps toward integration, federal court opinions over the last 50 years have tended to outline this broader view. Accordingly, HUD's job is not only to refrain from discriminating, but also to end residential discrimination and segregation.

HUD's 2015 AFFH Rule: Successes and Pitfalls

The evidence on the 2015 rule, while limited, suggests that the rule furthered a mission consistent with a definition of AFFH that aims to end residential discrimination and segregation. The 2015 rule, however, was not exempt from pitfalls in several key areas. The literature analyzed three main components of the 2015 rule, including the assessment process and compliance of localities, the affirmatively furthering fair housing tool (AFFH-T) and its data, and legal effects of the rule.

HUD Review and PHA Compliance

A measurable success of the 2015 rule was strong compliance. In the first few years of rolling out the new assessment requirements, HUD sought AFHs from only a few localities. Until 2018, HUD had only received 49 AFHs representing 103 localities.²⁶ Even among this small sample of assessments, evidence indicated that assessments were more robust than the previous AIs. According to Steil and Kelly, an AFH that would most likely result in local action will show 1) measurable objectives and 2) new policies in support of the goal of AFFH. Consequently, the establishment of the 2015 rule led localities to identify more goals with measurable objectives and new policies than previously done during the AI process.²⁷ For example, El Paso County's 2009 AI expressed the goal to empower people to avoid predatory lending without providing a way to measure progress, but their 2016 AFH expressed a commitment to build 100 affordable homes in

areas of opportunity, which was a measurable goal.²⁸

In addition, HUD performed AFH review with diligence. The rollout of the program saw a low AFH acceptance rate. Of the 49 AFHs submitted until 2018, only 18 were initially accepted, another 14 were accepted after revision, and 17 were not accepted because they lacked adherence to fair housing or civil rights standards, meaning the proposals would discriminate or contribute to discrimination, or were incomplete.²⁹ Although a low acceptance rate was observed, Steil and Kelly explain that it was more thorough enforcement and more explicit guidance from HUD than previously under the AI process that led to a lower acceptance rate.³⁰

The likelihood that HUD would accept an AFH depended on several factors. Municipalities that provided more measurable objectives to advance fair housing tended to have more Community Development Block Grant (CDBG) funding, liberal public opinion, higher share of Black residents, and higher levels of Black-White segregation.³¹ Municipalities also benefitted when they received technical assistance from local organizations or partnered with other municipalities to conduct regional analyses.³²

Despite widespread improvement in the clarity of the AFH assessment process over the past AI process, Zimmerman and O'Regan indicate that HUD could have still improved delineation of fair housing goals and strategies for localities to follow and, therefore, needed to continue to refine the rule and assessment process.³³ However, in working to refine the assessment process, localities would not only need better instruction, but also adequate local capacity. The capacity needed to perform data analysis and complete housing assessments could have led localities to opt out of HUD programs.³⁴ Compliance costs for all participating local governments around the nation totaled \$25 million per year according to HUD predictions.35 To make things worse, localities were not able to use more than 20 percent of CDBG funding towards administrative expenses, a rule that significantly favors larger, more resourced cities over smaller ones due to the uniform costs of conducting an AFH.³⁶ The local investment required by the 2015 rule, if untouched, could have promoted disparate fair housing opportunity between large, resourced cities and small, underfunded localities into the future.

Concerns with the AFFH Tool

The 2015 rule created the Affirmatively Furthering Fair Housing Tool (AFFH-T), a publicly available resource to assess and recommend affordable housing placement. HUD's intentions to improve data collection were noteworthy, but fair housing advocates took concern with

the sufficiency of the tool and its data.³⁷ First, since only county and census tract-level data were available, there was concern that the data were not area-specific enough.³⁸ While data at smaller geographic levels tend to have a larger margin of error, the limitations of measuring segregation at the census tract level have been long-recognized.³⁹ Measurement at the census tract level differs between large cities, where a racial group may reside within a large area, and small towns, where racial composition changes quickly across the landscape. An additional limitation with larger area-level measurements is that census tract-level data incorrectly assume equal proximity within-tract and equal dissonance between-tracts.

Second, data robustness and user experience were subpar. The tool did not include robust data to better characterize neighborhoods, such as crime rate, public safety, public health, recreational amenities, and anchor institutions. 40 Adding this data would reflect the end goal of connecting all racial groups to safer, healthier, and more resourced neighborhoods. In addition, while compatibility with Microsoft Excel strengthened the tool's user experience, the tool's usability would be improved by incorporating more regular data updates and creating the ability to download maps in .jpeg or .pdf formats. 41

Finally, as discussed before, some localities lacked the technical literacy to competently use the assessment tool and successfully complete AFHs whereas others received support from local organizations. It is noticeable that outside support aided localities and that HUD intended public participation, but it was clear that HUD did not properly plan for collaborative action. Collaboration was neither incorporated into the tool's design nor incentivized by HUD through funding opportunities.⁴² Silverman et al. suggested that HUD did not provide enough guidance on the public participation process and did not provide enough support to adequately incentivize local participation.⁴³

Legal Strengths and Limitations

While disparate treatment has long been prohibited by policy, the 2015 rule furthered AFFH aims by incorporating disparate impact theory into HUD regulation.⁴⁴ Disparate treatment claims include cases where a policy discriminates against protected groups on its face or has the intent to discriminate against protected groups.⁴⁵ On the other hand, according to a 2013 HUD regulation, disparate impact claims include "harm to a particular group of persons by a disparate impact."⁴⁶ While the two types of claims are similar, the important distinction is that disparate impact claims can be brought against a policy that is face-neutral but results in discriminatory effects. For

example, Daoud writes that nuisance and crime free ordinances seem free of bias at face-level, but data presents that these ordinances disproportionately harm women, people with disabilities, and people of color.⁴⁷

Although the 2015 rule's use of disparate impact theory was groundbreaking, it introduced legal challenges as well. O'Regan and Zimmerman suggest that the correct balance between local discretion and HUD oversight was not achieved in the rule.⁴⁸ Connolly argues that the rule actually shifted liability enough to disincentivize local participation.⁴⁹ Under disparate impact theory, the onus to integrate communities was placed more heavily on local governments, and therefore, localities faced greater liability when using HUD funding.⁵⁰ Due to the strength of the disparate impact claim, the rule creates the obligation for local governments to guarantee that their policies and practices do not contribute toward disparities.⁵¹ For affluent localities, who can more likely afford housing programs with state and local dollars, the increased legal liability coming with HUD funds may lead them to reject participation.

On the contrary, it must be stated that too much reliance on local policy decisions and local advocate capacities threatens fair housing aims. Connolly describes that the rule is compelled to rely on market forces and individual choices that have failed to integrate American communities. Further, the reliance on grassroots advocates to monitor localities and bring disparate impact charges for violations of fair housing may mean that fair housing rules are only properly enforced in areas with a strong community of fair housing legal advocates. A new AFFH rule must find the correct balance between local discretion and HUD oversight, and address local capacity challenges.

Recommendations for a New AFFH Rule

A new AFFH rule under the Biden administration would restore HUD's responsibility to affirmatively further fair housing as the Fair Housing Act intended. A rule similar to the 2015 rule is one of the best strategies the Biden administration can use to legally and effectively advance fair housing and, therefore, should be a priority in the first year of the Biden presidency. The Biden administration can meaningfully promote fair housing by implementing the 2015 rule with the following reforms.

First, consistent with Hensley's recommendation, HUD should improve upon the original AFFH-T by including data as specific as the census block level.⁵⁴ This would allow localities with rapid spatial changes in neighborhood demographic makeup to appropriately detect fair housing issues. The 2015 rule established a program

that was useful for large, resourced cities, but wasteful for small towns to pursue. This is evidenced by the lack of granular data to detect fair housing issues in small towns and the absence of funding opportunities to help small, understaffed localities complete a robust AFH.⁵⁵

Second, consistent with Bostic and Acolin's recommendation, HUD should offer funding for localities to collaborate with other localities in the same region or local organizations that specialize in data analysis.⁵⁶ To incentivize collaboration, localities, especially under-resourced ones, need access to funding to receive technical assistance. This recommendation would only improve the quality of AFHs, enhance compliance across the board, and potentially relieve HUD of administrative burden in the review of the assessments. Furthermore, granting funding to complete AFHs would nearly dismiss local investment as a reason for localities to opt out of HUD programs.

Third, HUD must appropriately balance local discretion with federal pressure.⁵⁷ As Connolly mentioned, in addition to local investment, localities were disincentivized to participate in HUD programs due to a liability shift toward localities.⁵⁸ Withholding funding cannot serve as punishment if localities are considering opting out of HUD funding in order to sidestep greater oversight. Bostic and Acolin suggest that it would be appropriate for HUD to err on the side of local discretion when proper justification is provided for local action, at least during the first years of the program, even if the locality does not cite HUD's preferred policies.⁵⁹ Doing so would enhance collaboration between local and federal government and preserve compliance among localities.

Finally, HUD should improve upon the original AFFH-T by enhancing data robustness and user experience. Silverman and colleagues noted that several neighborhood characteristics such as safety, access to amenities, and public health were not included in the AFFH-T data. Furthermore, the tool lacked regular, consistent updates and the ability to download maps in multiple formats. While these changes seem small, improving the user experience and analysis ability will enhance public participation, a goal of the 2015 rule that never quite lived up to its potential. 2

HUD's obligation to affirmatively further fair housing not only involves prohibiting discriminatory action, but also demands that HUD see the end to residential discrimination and segregation. Given this responsibility, HUD should quickly implement a rule to build upon the 2015 rule using these recommendations. Six years after a strong attempt by the Obama administration, the Biden administration has the opportunity to build upon past work to execute a stronger AFFH statute.

Notes

- 1. "Fair Housing Act," 42 U.S.C. § 3604 (1968).
- 2. Fair Housing Act.
- 3. Fair Housing Act.
- 4. Andrew Aurand et al., "The Gap: A Shortage of Affordable Homes" (Washington (DC): National Low Income Housing Coalition, n.d.).
- 5. Aurand et al.
- 6. Leah Platt Boustan, "Racial Residential Segregation in American Cities" (National Bureau of Economic Research, May 9, 2013, https://doi.org/10.3386/w19045.
- 7. U. S. Government Accountability Office, "Housing and Community Grants: HUD Needs to Enhance Its Requirements and Oversight of Jurisdictions' Fair Housing Plans" (Washington (DC), October 14, 2010), https://www.gao.gov/products/GAO-10-905.
- 8. U. S. Government Accountability Office.
- 9. "Affirmatively Furthering Fair Housing," 80 FR § (2015).
- 10. Raphael Bostic and Arthur Acolin, "The Potential for HUD's Affirmatively Furthering Fair Housing Rule to Meaningfully Increase Inclusion," in *A Shared Future: Fostering Communities of Inclusion in an Era of Inequality* (Cambridge, Massachusetts: Joint Center for Housing Studies of Harvard University, 2018), 236–51.
- 11. "Affirmatively Furthering Fair Housing," 80 FR § (2015).
- 12. Raphael Bostic and Arthur Acolin, "The Potential for HUD's Affirmatively Furthering Fair Housing Rule to Meaningfully Increase Inclusion," in A Shared Future: Fostering Communities of Inclusion in an Era of Inequality (Cambridge, Massachusetts: Joint Center for Housing Studies of Harvard University, 2018), 236–51.
- 13. "Preserving Community and Neighborhood Choice," 85 FR § (2020).
- 14. Fair Housing Act.
- 15. Chevron U.S.A., Inc. v. NRDC U.S. 467 (1984). (supreme.court).
- 16. Affirmatively Furthering Fair Housing, 80 FR § (2015).
- 17. NAACP, Boston Chapter v. Secretary of HUD, No. 86–1111 (court.appeals March 19, 1987).
- 18. Preserving Community and Neighborhood Choice, 85 FR § (2020).
- 19. NAACP, Boston Chapter v. Secretary of HUD, 817.
- 20. Shannon v. United States Department of Housing & Urban Development (court.appeals December 30, 1970).
- 21. Otero v. New York City Housing Authority (court.appeals September 12, 1973).
- 22. Trafficante v. Metropolitan Life Ins. Co. (supreme.court December 7, 1972).
- 23. Texas Department of Housing and Community Affairs v. Inclusive Communities Project (supreme.court June 25, 2015).
- 24. Preserving Community and Neighborhood Choice, 2020.
- 25. Texas Department of Housing and Community Affairs v. Inclusive Communities Project, 135.
- 26. Justin P. Steil and Nicholas Kelly, "Survival of the Fairest: Examining HUD Reviews of Assessments of Fair Housing," *Housing Policy Debate* 29, no. 5 (September 3, 2019): 736–51, https://doi.org/10.1080/10511482.2018.1524444.
- 27. Justin Steil and Nicholas Kelly, "The Fairest of Them All: Analyzing Affirmatively Furthering Fair Housing Compliance," *Housing Policy Debate* 29, no. 1 (January 2, 2019): 85–105, https://doi.org/10.1080/10511482.2018.1469527.
- 28. Justin Steil and Nicholas Kelly, "The Fairest of Them All: Analyzing Affirmatively Furthering Fair Housing Compliance," *Housing Policy Debate* 29, no. 1 (January 2, 2019): 85–105, https://doi.org/10.1080/10511482.2018.1469527.
- 29. Justin P. Steil and Nicholas Kelly, "Survival of the Fairest: Examining HUD Reviews of Assessments of Fair Housing," *Housing Policy*

- Debate 29, no. 5 (September 3, 2019): 736–51, https://doi.org/10.1080/10511482.2018.1524444.
- 30. Justin P. Steil and Nicholas Kelly, "Survival of the Fairest: Examining HUD Reviews of Assessments of Fair Housing," *Housing Policy Debate* 29, no. 5 (September 3, 2019): 736–51, https://doi.org/10.1080/10511482.2018.1524444.
- 31. Justin Steil and Nicholas Kelly, "The Fairest of Them All: Analyzing Affirmatively Furthering Fair Housing Compliance," *Housing Policy Debate* 29, no. 1 (January 2, 2019): 85–105, https://doi.org/10.1080/10511482.2018.1469527.
- 32. Justin P. Steil and Nicholas Kelly, "Survival of the Fairest: Examining HUD Reviews of Assessments of Fair Housing," *Housing Policy Debate* 29, no. 5 (September 3, 2019): 736–51, https://doi.org/10.1080/10511482.2018.1524444.
- 33. Katherine O'Regan and Ken Zimmerman, "HUD's Affirmatively Furthering Fair Housing Rule: A Contribution and Challenge to Equity Planning for Mixed-Income Communities," NYU Furman Center, August 2019, 22.
- 34. Brian J. Connolly, "Promise Unfulfilled? Zoning, Disparate Impact, and Affirmatively Furthering Fair Housing," *The Urban Lawyer* 48, no. 4 (2016): 785–838.
- 35. Katherine O'Regan and Ken Zimmerman, "HUD's Affirmatively Furthering Fair Housing Rule: A Contribution and Challenge to Equity Planning for Mixed-Income Communities," NYU Furman Center, August 2019, 22.
- 36. Connolly, "Promise Unfulfilled?"
- 37. Katherine M. O'Regan and Ken Zimmerman, "The Potential of the Fair Housing Act's Affirmative Mandate and HUD's AFFH Rule," *Cityscape* 21, no. 1 (2019): 87–98.
- 38. Desiree C. Hensley, "Affirmatively Furthering Fair Housing in the Deep South: Obama's AFFH Rule Won't Make Rural America Less Segregated," *Virginia Journal of Social Policy & the Law* 26, no. 2 (2019): 92–136.
- 39. Barrett A. Lee et al., "Beyond the Census Tract: Patterns and Determinants of Racial Segregation at Multiple Geographic Scales," *American Sociological Review* 73, no. 5 (October 2008): 766–91, https://doi.org/10.1177/000312240807300504.
- 40. Robert Mark Silverman, Li Yin, and Kelly L. Patterson, "Siting Affordable Housing in Opportunity Neighborhoods: An Assessment of HUD's Affirmatively Furthering Fair Housing Mapping Tool," *Journal of Community Practice* 25, no. 2 (April 3, 2017): 143–58, https://doi.org/10.1080/10705422.2017.1306818.
- 41. Ibid.
- 42. Katherine M. O'Regan and Ken Zimmerman, "The Potential of the Fair Housing Act's Affirmative Mandate and HUD's AFFH Rule," *Cityscape* 21, no. 1 (2019): 87–98.
- 43. Robert Mark Silverman, Li Yin, and Kelly L. Patterson, "Siting Affordable Housing in Opportunity Neighborhoods: An Assessment of HUD's Affirmatively Furthering Fair Housing Mapping Tool," *Journal of Community Practice* 25, no. 2 (April 3, 2017): 143–58, https://doi.org/10.1080/10705422.2017.1306818.
- 44. Brian J. Connolly, "Promise Unfulfilled? Zoning, Disparate Impact, and Affirmatively Furthering Fair Housing," *The Urban Lawyer* 48, no. 4 (2016): 785–838.
- 45. Ibid.
- 46. Implementation of the Fair Housing Act's Discriminatory Effects Standard, 78 FR § (2013).
- 47. Maysa Hassan Daoud, "America's Continued Fair Housing Crisis and the Ignored Solution: The Affirmatively Furthering Fair Housing Rule Note," *Saint Louis University Law Journal* 64, no. 4 (2020 2019): 685–710.
- 48. O'Regan and Zimmerman, "HUD's Affirmatively Furthering Fair Housing Rule: A Contribution and Challenge to Equity Planning for

Mixed-Income Communities."

- 49. Brian J. Connolly, "Promise Unfulfilled? Zoning, Disparate Impact, and Affirmatively Furthering Fair Housing," *The Urban Lawyer* 48, no. 4 (2016): 785–838.
- 50. Ibid.
- 51. Ibid.
- 52. Ibid.
- 53. Michael Allen, "HUD's New AFFH Rule: The Importance of the Ground Game," NYU Furman Center, September 2015, https://furmancenter.org/research/iri/essay/huds-new-affh-rule-the-importance-of-the-ground-game.
- 54. Desiree C. Hensley, "Affirmatively Furthering Fair Housing in the Deep South: Obama's AFFH Rule Won't Make Rural America Less Segregated," *Virginia Journal of Social Policy & the Law* 26, no. 2 (2019): 92–136.
- 55. Ibid.
- 56. Raphael Bostic and Arthur Acolin, "The Potential for HUD's Affirmatively Furthering Fair Housing Rule to Meaningfully Increase Inclusion," in *A Shared Future: Fostering Communities of Inclusion in an Era of Inequality* (Cambridge, Massachusetts: Joint Center for Housing Studies of Harvard University, 2018), 236–51.
- 57. Katherine O'Regan and Ken Zimmerman, "HUD's Affirmatively Furthering Fair Housing Rule: A Contribution and Challenge to Equity Planning for Mixed-Income Communities," NYU Furman Center, August 2019, 22.; Raphael Bostic and Arthur Acolin, "The Potential for HUD's Affirmatively Furthering Fair Housing Rule to Meaningfully Increase Inclusion," in A Shared Future: Fostering Communities of Inclusion in an Era of Inequality (Cambridge, Massachusetts: Joint Center for Housing Studies of Harvard University, 2018), 236–51.
- 58. Brian J. Connolly, "Promise Unfulfilled? Zoning, Disparate Impact, and Affirmatively Furthering Fair Housing," The Urban Lawyer 48, no. 4 (2016): 785–838.
- 59. Raphael Bostic and Arthur Acolin, "The Potential for HUD's Affirmatively Furthering Fair Housing Rule to Meaningfully Increase Inclusion," in *A Shared Future: Fostering Communities of Inclusion in an Era of Inequality* (Cambridge, Massachusetts: Joint Center for Housing Studies of Harvard University, 2018), 236–51.
- 60. Robert Mark Silverman, Li Yin, and Kelly L. Patterson, "Siting Affordable Housing in Opportunity Neighborhoods: An Assessment of HUD's Affirmatively Furthering Fair Housing Mapping Tool," *Journal of Community Practice* 25, no. 2 (April 3, 2017): 143–58, https://doi.org/10.1080/10705422.2017.1306818.
- 61. Ibid.
- 62. Ibid.

Unemployment Insurance Reform and Non-Standard Labor

By Andrew Krantz

Executive Summary

Non-standard work arrangements represent a large and growing portion of the U.S. labor force, yet they often lack the protections and benefits offered by standard work arrangements. Independent contractors and workers in the "gig economy" are categorically ineligible for unemployment insurance (UI) benefits under standard eligibility requirements. The CARES Act extended UI benefits to these workers for the first time but offered no plans to cover these workers for the long term. Any comprehensive reform of unemployment insurance will need to include coverage for this crucial group of workers. This brief will examine proposals to extend coverage to workers in non-standard labor arrangements, including a new policy proposal to expand self-employment (SE) income taxes.

Non-Standard Labor

Labor relationships in the U.S. have historically involved a clear relationship between employer and employee, characterized by long-term employment, consistent labor hours, regular pay, and access to benefits. However, large portions of the labor force operate outside of these "standard labor" relationships, and instead engage in what can be referred to as "non-standard labor". While attempting to define non-standard labor can prove difficult, scholars have attempted to classify non-standard labor as including any contract work, temporary employment, and part-time work.¹

A recent and unique example of non-standard labor is that of "gig work," or work in the "gig economy." Gig work is often facilitated by internet-based platforms that connect workers with tasks or "gigs." Definitions of gig work vary, but recent scholarship has sought to define gig work as "short term, requiring completion of finite assignments, and allowing loose boundaries for when and where people must work." While not all non-standard labor constitutes gig work, gig work's in-

creasing prevalence is representative of a larger trend of standard labor's declining market share.

Prevalence of Non-Standard Labor

Changes in technology and labor relations have led to a dramatic increase in non-standard labor arrangements. Economists have estimated that growth in non-standard labor arrangements since the Great Recession has accounted for all net job growth in the US.3 A 2015 estimate of self-employment placed the number of self-employed workers at around 15 million, or roughly 10% of the labor force.4 However, research has found that 10-30% of employers misclassify their employees as independent contractors to avoid UI payroll taxes, meaning that the estimates of the proportion of self-employed workers may be inflated.⁵ While there are disputes over the size of this section of the labor force, a more recent estimate found that, as of 2019, 28% of the labor force identified as self-employed at some point during the week, and that 22% of all workers work multiple jobs.6

It is important to note that measuring non-standard labor can be difficult, especially when trying to isolate workers who subsist solely on the gig economy. However, some estimates place the proportion of workers who rely on gig work as their main source of income as high as 10%. Despite the discrepancies in estimates, it seems that at least 25% of the labor force is now engaged in some form of non-standard labor arrangement. Indeed, research from the Government Accountability Office estimates that roughly 37 million workers are currently in non-standard labor arrangements.

Access to UI Benefits

Non-standard labor faces difficulties in accessing UI benefits due to categorical eligibility requirements and labor definitions. The key eligibility requirement for UI benefits across all states is that a worker

must be unemployed through no fault of their own. While this rule has other consequences in practice, its most important implication is that self-employed workers, independent contractors, gig workers, and laborers engaged in other forms of non-standard labor are excluded from accessing benefits. If workers do not have an employer that pays into the UI program, or if they are unable to determine whether the termination of their work arrangement is through no fault of their own, they are unable to access the crucial wage replacement offered by UI benefits.

The US Department of Labor (DOL) states that under the Fair Labor Standards Act (FLSA), an employee is "one who, as a matter of economic reality, follows the usual path of an employee and is dependent on the business which he or she serves." The DOL has recently proposed a rule to clarify the difference between an employee and an independent contractor, implementing an 'economic reality test' to determine whether a worker is "in business for themselves" as an independent contractor, or is "economically dependent on a putative employer for work" as an employee. This proposed rule has been roundly criticized for allowing companies to more easily classify gig workers and other non-standard laborers as independent contractors, furthering those workers' inability to access benefits such as UI.

Policy Options

The CARES Act extended UI coverage to an additional 14 million workers who were previously ineligible due to non-standard work arrangements. The size of the workforce accessing these benefits solely due to the CARES Act clearly demonstrates the need for substantial UI reform to extend eligibility to non-standard labor on a more regular basis. It is important to note the unusual circumstances surrounding the CARES Act coverage expansion, particularly that the provisions to extend UI coverage were financed through deficit spending. Any future proposal to cover non-standard labor will need to offer a sustainable financing mechanism.

This brief will examine two current proposals to help address UI coverage problems for non-standard labor: private UI benefits and DOL enforcement of labor definitions. In addition, this brief will propose a new coverage mechanism through an expanded self-employment (SE) income tax. Current proposals to reform UI to allow for non-standard labor have included allowing self-employed workers to contribute toward personal

accounts that are matched by the federal government and a job-search allowance that would provide limited unemployment benefits to self-employed workers.^{12,13}

Private Unemployment Insurance Markets

As most non-standard labor is currently ineligible for state UI benefits, private UI plans could provide wage replacement to workers in non-standard labor arrangements. Economists have suggested that private UI markets could supplement state UI programs, leading to a more efficient distribution of social insurance. However, the market for UI programs is underdeveloped, with only two major providers operating as of this year, and neither accepting new customers. 15 16

Additionally, private UI programs may have more fundamental problems in being able to provide adequate benefits. Workers may not be able to accurately predict when they might become unemployed and relying on workers to finance their future unemployment through savings and individual contributions may lead to workers underfunding their unemployment. Further, providers themselves are unlikely to accurately predict economic downturns, and are unlikely to be able to provide full benefits during times of high unemployment.

Create a Clear Definition of Employee

As noted above, the current definitions of employees and independent contractors under DOL's application of the FLSA allow employers to misclassify their employees as independent contractors too easily. This is particularly true for gig workers; companies such as Uber or TaskRabbit act as intermediaries between supply and demand, receiving payment for a service from customers and then subcontracting the work at a lower price to a gig worker. As such, gig workers are characterized by these companies as independent contractors and not employees of the company.

Any meaningful reform of UI to extend coverage to non-standard labor will have to be accompanied by a clearer definition of an employee under current labor law. While a new administration may be able to reverse some of the recent rule changes proposed by the DOL, the responsibility falls to Congress to pass legislation that will strengthen workers' rights and protections, and provide a definition of employer-employee relationships that would allow for workers to maintain access to crucial benefits amid a changing labor market. Additionally, current laws surrounding definitions

of independent contractors should be more strictly enforced, penalizing companies that deliberately misclassify their workers to avoid taxes.

Expand Self-Employment Income Tax

The most practical way to reform the current UI structure to allow for coverage of non-standard labor may be to implement a federal independent worker unemployment fund. Currently, all self-employed workers that file taxes are subject to self-employment (SE) income taxes. These taxes account for self-employed workers' contributions to Medicare and Social Security, similar to payroll taxes paid by standard employees and employers. If an additional tax were added to this current structure, the revenue from this new tax could help to fund UI coverage for all self-employed workers.

This fund could be managed by the DOL, who would then be responsible for the distribution of benefits. UI benefits are currently administered at the state level largely because of financing structures, such as the state UI tax on employers. Since the expanded SE tax would be a federally administered tax, administration of the fund and benefit payments at the federal level would eliminate any benefit differences between states. Benefit duration could be capped at 26 weeks – as is the standard duration for most states - with weekly benefit payments set at a standard wage replacement rate. To be eligible for benefits, workers would need to have filed taxes with the IRS in the last fiscal year. This eligibility structure would allow for the inclusion of millions of independent contractors, gig workers, and other non-standard workers, while providing a source of funding necessary to keep the program sustainable.

Notes

- 1. Arne L. Kalleberg, "Nonstandard employment relations: Parttime, temporary and contract work," *Annual review of sociology*, 26, no. 1 (2020): 341-365.
- 2. Gwendolyn Paige Watson, Lauren D. Kistler, Baylor A. Graham, and Robert R. Sinclair, "Looking at the Gig Picture: Defining Gig Work and Explaining Profile Differences in Gig Workers' Job Demands and Resources," *Group & Organization Management* (2021): 1059601121996548.
- 3. Lawrence F. Katz and Alan B. Krueger, "The Rise and Nature of

- Alternative Work Arrangements in the United States, 1995–2015," *Industrial & Labor Relations Review* 72, no. 2 (2019): 382–416. doi:10.1177/0019793918820008.
- 4. Rakesh Kochhar, Kim Parker, and Molly Rohal, "Three-in-ten US jobs are held by the self-employed and the workers they hire: Hiring more prevalent among self-employed Asians, whites and men," (Washington, DC: Pew Research Center, 2015).
- 5. Catherine Ruckelshaus and Ceilidh Gao, "Independent Contractor Misclassification Imposes Huge Cost on Workers and Federal and State Treasuries," (New York, NY: National Employment Law Project, 2017).
- 6. Jessica Harlan and Jonathan Rothwell, "Self Employed & Gig Economy Trends Report 2019." Intuit Quickbooks. Accessed October 05, 2020. https://quickbooks.intuit.com/self-employed/report/
- 7. GigEconomyData.org. 2020. "Gig Economy Data Hub." Accessed 16 September 2020. https://www.gigeconomydata.org/.
- 8. U.S. Government Accountability Office, Contingent Workforce: Size, Characteristics, Earnings, and Benefits, (Washington, DC, 2015). https://www.gao.gov/products/gao-15-168r
- 9. U.S. Department of Labor, Wage and Hour Division. (2008, July). Fact Sheet #13: Employment Relationship Under the Fair Labor Standards Act (FLSA). Accessed December 01, 2020. https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/whdfs13.pdf
- 10. U.S. Department of Labor, Wage and Hour Division. (2020, September 22). Proposed Rule: Independent Contractor Status under the FLSA, 29 CFR Parts, 780, 788, and 795. Accessed December 01, 2020. https://www.dol.gov/agencies/whd/flsa/2020-independent-contractor-nprm
- 11. U.S. Department of Labor, Unemployment Insurance Weekly Claims. Washington, DC, 2020.
- 12. Till von Wachter, "Unemployment Insurance Reform," *The ANNALS of the American Academy of Political and Social Science*, 2019. 686, no.1 (2019): 121-46. doi:10.1177/0002716219885339.
- 13. Andrew Stettner, Michael Cassidy, and George Wentworth, "A New Safety Net for An Era of Unstable Earnings," (The Century Foundation: New York, NY, 2016). https://tcf.org/content/report/new-safety-net-for-an-era-of-unstable-earnings/
- 14. Raj Chetty and Emmanuel Saez "Optimal taxation and social insurance with endogenous private insurance," *American Economic Journal: Economic Policy* 2, no. 2 (2015), 85-114.
- 15. Allison Martin, "Should you buy private unemployment insurance?" *Investopedia Stock Analysis*. October 10, 2018. https://www.investopedia.com/articles/personal-finance/061416/assure-insurance-should-you-buy-unemployment-benefits.asp
- 16. Roger Jones, "Private unemployment insurance exists it's limited, but it exists!" *The American Genius*. Accessed November 08, 2020. https://theamericangenius.com/finance/private-unemployment-insurance/

North Korea's Nuclear Weapons and Evolving Military Strategy

By Manseok Lee

From the outset, the Charter of the Workers' Party of Korea, the ruling political party of North Korea, has specified the unification of the Korean Peninsula to be its ultimate strategic goal. North Korea's military strategy is designed to achieve this goal by force, through the tactics of surprise, overwhelming firepower, and speed. However, it has proven practically impossible for North Korea to achieve the military capacity required to enact such a strategy, due to the country's limited resources and crippled economy, aging conventional forces, and the fact that its nuclear weapons were not ready for military use. Rather, to date North Korea's military strategy has focused on defending the regime through relatively strong artillery, chemical and biological weapons, several mechanized corps, massive underground facilities, and special warfare forces. Meanwhile, it has used its nuclear weapons as diplomatic leverage for obtaining desired concessions from neighboring countries and the United States.

However, as its nuclear weapons have improved and become militarily viable, North Korea could now employ more revisionist strategies. Thus, Pyongyang is likely to update its military strategy to most effectively employ North Korea's scarce nuclear forces alongside conventional forces in order to achieve its strategic goals. In light of this, there are three key questions to consider. What type of military strategy could North Korea adopt? What factors will influence its choice of a particular strategy? What should the United States-Republic of Korea (US-ROK) alliance do to address the threats posed by North Korea?

The answers to these three questions have both academic and practical significance. On the academic side, this article investigates the relatively understudied dimension of North Korean military strategy, which integrates both conventional and nuclear capabilities. On the practical side, this study generates potentially useful knowledge when it comes to assessing and managing the threats posed by North Korea. Understanding North Korea's updated military strategy is particularly important, because its choice of strategy is likely to shape its military posture which encompasses the composition of its weapons systems, its command and control structure, and the doctrine governing its employment of military power. This suggests

that without a systematic analysis of North Korea's military strategy, policymakers in both Washington and Seoul will be limited in their ability to manage North Korean threats.

The dearth of evidence and information concerning North Korean policymaking has informed the adoption in this article of a scenario-based approach, thereby compensating for the lack of actual examples and meaningful data. Early methods for generating scenarios were often discursive. Yet, this article opts to apply a more structured form using a two-by-two matrix. On the basis of North Korea's ideological and material foundations, the study identifies two critical dimensions to North Korea's military strategy (i.e., the intentions behind operating its nuclear forces and the balance between its nuclear and conventional capabilities). It also explores how different combinations of those dimensions could give rise to situations that differ from extrapolations from the present situation. The study then questions what external conditions could influence Pyongyang's preference for a particular strategy. The possible North Korean military strategies identified in this article are intended to challenge conventional wisdom and are designed to shake up policymakers' assumptions of how North Korea could behave.

North Korea's Strategic Ends and Means

A *military strategy* represents a particular way of using available national means (military capabilities) to achieve distinct ends (military strategic goals). As such, military strategy is a subset of, in addition to being subordinate to, a country's national security strategy. This means that along with other sub-strategies, including diplomatic and economic strategies, a military strategy is implemented as a key component among diverse policy components to achieve certain national security goals.²

Since a strategy serves to connect ends and means, the *pool* of potential military strategies may vary depending on how the available ends and means can be combined. The choice of a particular strategy from the pool of options will be determined by how the external environment will affect the implementation of the strategy and the

achievement of strategic goals. In other words, the combination of available ends and means forms a pool of strategies, while the choice of a particular strategy depends on how the country in question perceives the external environment. If a country believes that it will be difficult to achieve its strategic goals effectively due to constraints imposed by its external environment, it should consider how best to strengthen its means (or adjust its strategic goals). A military strategy, therefore, includes both courses of action, and plans for the construction of means (or military capabilities). In this sense, this article begins with the assessment of North Korea's strategic ends and means to understand the factors that North Korea must consider when exploring potential military strategies.

National Identity and Interests

A country's identity is formed through the distinction between the "self" and "others," and can be explained by the perceived contrast between "amoral and threatening" others and the "moral and threatened" self.4 North Korea has constructed its identity in two ways. First, North Korea has portrayed itself as an anti-imperialist nation surrounded by the U.S. and its allies. In particular, North Korea interpreted the end of the Cold War as the point at which the confrontation between the Soviet Union and the U.S. changed into an anti-imperialist struggle on the part of North Korea against the U.S.⁵ Second, North Korea positively contrasts itself with South Korea, which is considered to have failed to remove the remnants of Japan's colonial rule and to still be ruled by U.S. imperialists. For this reason, North Korea stresses that it is the rightful regime of the Korean people.⁶ Therefore, under the Kim family's leadership, it is North Korea's historic and revolutionary task to liberate South Korea and reunify the Korean Peninsula.⁷ In this sense, the removal of U.S. troops from the Korean Peninsula is core to North Korea's national interest and the realization of its national identity. It is not only important to achieve strategic superiority over South Korea, but also to liberate South Korean compatriots whom the North considers enslaved by U.S. imperialists.

The Great Leader and Strategic Goals

North Korea's national identity and the Kim family dictatorship have a symbiotic relationship that renders the survival of the Kim family a core value to be protected above all others. The *Juche* (주체, self-reliance) ideology, North Korea's organizing principle of both state and society, specifies that North Korean identities can only be realized through the Great Leader who must be a mem-

ber of the Kim dynasty.⁸ This implies that not only is the Kim family indispensable to North Korea's *raison d'être*, but also that the very existence of the North Korean regime depends upon the existence of the Kim family and the guidance provided by *Kimilsungism-Kimjongilism* (김 일성-김정일 주의).⁹ This idea is legally codified within the Charter of the Workers' Party of Korea,¹⁰ as well as the Constitution of North Korea,¹¹ which makes it abundantly clear that the primary objective of North Korea is to uphold the will of the Kim family.

Both North Korea's identity and the Kim family-centric state system have important implications for the strategic culture of Pyongyang's military strategy. First, Kim Jong Un has maintained tight and centralized control over North Korea's nuclear and conventional forces as well as the authority to employ them.¹² This is especially important because, as the Juche doctrine specifies, victory is only possible under the leadership of the Kim family. Kim Jong Un will continue to uphold the ideology of militarism (or military-first politics, 선군정치) and to build up the national military (conventional and/or nuclear), to further bolster his legitimacy. Second, Kim Il Sung's guerrilla tradition, which has heavily influenced North Korean military thinking, also likely affects its strategic thinking. Guerrilla tactics involve attacks at times, as well as in places and ways, that the enemy would not expect so as to render it confused and increase the effectiveness of such military operations. If North Korea applies the guerrilla tradition to its military strategy, its strategy could be bolder or more provocative than Washington and Seoul consider reasonable.

Aging Conventional Forces and Evolving Nuclear Capabilities

Due to the loss of its security patrons, the lack of foreign aid, its failed economy, and international sanctions, North Korea has not had capacity to pursue both nuclear weapons and modernized conventional forces. The regime has prioritized nuclear and missile development over the modernization of its conventional weapons and, consequently, its conventional forces have aged.¹³ Furthermore, North Korea lacks the logistical capability to conduct a war over an extended period of time without the assurance of foreign support. Such constraints mean that North Korea's conventional military forces would only prove effective for a limited time and within a limited geographical area.¹⁴

North Korea's nuclear capability, on the other hand, has steadily developed over the past decades. ¹⁵ Although the size of the country's nuclear stockpile remains unclear, at the time of writing (2021), North Ko-

rea is estimated to possess approximately 20-60 nuclear warheads and enough fissile material to create another 60 nuclear warheads. When it comes to delivery vehicles that could carry nuclear warheads, Pyongyang can realistically threaten both regional targets and the U.S. mainland with a series of missiles that have short, medium, intermediate, and intercontinental range, as well as submarine-launched ballistic missiles. 16 During a military parade held in October 2020, North Korea unveiled a new type of intercontinental ballistic missile (ICBM) that is larger than the Hwasong-15 and estimated to have a potential range of 13,000 kilometers. While the new missile has not yet been tested, once deployed it could carry multiple warheads or decoys intended to confuse missile defense systems and thereby significantly improve North Korea's deterrence against the United States.¹⁷

Possible Military Strategies for North Korea

The assessment of North Korea's strategic ends and means reveals two important dimensions of its military strategy. The first dimension concerns Pyongyang's intentions when it comes to the operation of its military capabilities.¹⁸ North Korea exhibits both security-seeking and revisionist intentions. Since maintaining the security of the Kim regime represents North Korea's foremost strategic goal, it is essentially a security-seeking state. Yet, given that North Korea's key national interests involve driving "the U.S. imperialists" off the Korean Peninsula and completing "the liberation of the Korean fatherland," a revisionist intent is also evident. Here, security represents the most essential motive of any country, which implies that it should always be pursued as the ultimate goal - North Korea is no exception. However, the realization of Pyongyang's revisionist intention could be hampered by the external environment, and it may or may not be pursued depending on the conditions. Therefore, North Korea needs to decide on its intentions based on its perception of the external environment.

The second dimension of North Korea's military strategy concerns the balance between its nuclear and conventional capabilities. The country currently faces a serious imbalance between its conventional and nuclear capabilities. As the U.S.-led economic sanctions and the COVID-19 crisis have done significant damage to North Korea's economy, it would prove very difficult to enhance both types of capabilities. This means that Pyongyang needs to consider how to effectively employ its resources in order to achieve its strategic goals. It remains uncertain whether North Korea will decide to further strengthen its nuclear capabilities or invest its resources in supplement-

ing its conventional capabilities.²⁰ On the one hand, North Korea needs to further strengthen its nuclear capabilities by adding second-strike nuclear forces so as to pressure the U.S. and allow for the implementation of various strategies for nuclear weapons use. On the other hand, North Korea needs to reinforce its conventional forces in order to have flexible response capabilities, as the North's potential range of responses to conventional conflicts would be limited if it fully concentrates on developing its nuclear capabilities.

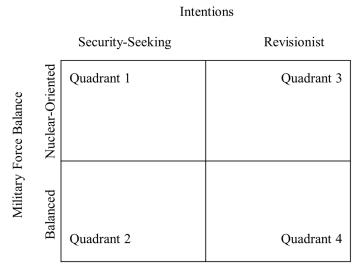


Figure 1: Typology of North Korea's Military Strategy

In light of the above, this article hypothesizes that North Korea's military strategy can be categorized on the basis of two key dimensions: (i) the intentions behind the operation of its military capabilities (security-seeking or revisionist), and (ii) the military force balance between its nuclear and conventional capabilities (nuclear-oriented or balanced). If North Korea manifests a security-seeking intention, Pyongyang will likely rely on its military power to enhance the security of the Kim regime, while at the same time accepting the status quo, remaining satisfied with the existing border with South Korea, and preparing to defend the country from possible attacks by South Korea or other parties.

In contrast, if North Korea manifests a revisionist intention, Pyongyang will likely use its military power to expand its influence on the Korean Peninsula and compel South Korea to make political and ideological concessions. During this time, North Korea still runs the risk of war and incurring expansion costs despite being entirely secure.²¹

The balance between its nuclear and conventional capabilities influences the type of military force in which North Korea will invest. If North Korea chooses to adopt a nuclear-oriented strategy, it will seek to improve its nuclear warheads and delivery means via continuous tests so

as to pose a more serious threat to the U.S. mainland. Ultimately, as some analysts predict, North Korea may want to maintain *minimum deterrence* against the U.S.²²

If North Korea seeks to strike a balance between its nuclear weapons and conventional forces, the size of its nuclear stockpile will likely remain moderate (i.e., at the current level) or could possibly be reduced. It will also use nuclear weapons as a last resort for defending the regime. Additionally, North Korea may cope with various security threats by improving and modernizing its aging conventional forces. If Pyongyang chooses to pursue this strategy, it could also pursue economic development, promote new diplomatic relations with its rivals (i.e., South Korea, Japan, and the U.S.), and work to improve relations with non-rivals like Russia and China.

External Strategic Environment

How could the external strategic environment influence Pyongyang's preference for a particular strategy? As noted earlier, Pyongyang's preference will be influenced by its perception of how the external environment will affect the implementation of its strategy and the realization of its strategic goals. This article identifies four variables relevant to North Korea's perception of the strategic environment: (i) the US-ROK alliance, (ii) South Korea's military capability, (iii) the security orientations of China, and (iv) South Korea's relations with Japan.

The US-ROK Alliance

The alliance is characterized by the provision of strong deterrence based on the U.S. extended nuclear deterrence, the presence of U.S. forces in South Korea, and the availability of U.S. reinforcements during wartime. If the alliance remains robust and ready to thwart North Korea's adventurism, revisionist strategies (which involve a projection of power into South Korean territory) will be associated with a high risk of war, in which case North Korea is unlikely to achieve a favorable outcome. Therefore, Pyongyang will likely prefer to pursue a security-seeking strategy.

As of now, the US-ROK alliance appears to be sending sufficiently strong and credible signals to sternly deal with the increase in North Korea's nuclear warheads and ICBM tests. When North Korea conducted its sixth nuclear test and the Hwasung-14/15 ICBM tests in 2017, the U.S. exerted unusually strong pressure on North Korea by deploying three aircraft carriers to the East Sea/Sea of Japan. Furthermore, journalist Bob Woodward noted that the U.S. had plans for military action at that time.²³ Since then, the U.S. has deployed various strategic surveillance

assets, including the E-8C, RC-135S, RC-135U, and RC-135V/W, whenever there are signs of North Korean nuclear and missile tests.²⁴ The U.S. has regularly deployed its strategic bombers, including the B-52, B-1B, and B-2, on the Korean Peninsula or in Guam to deter further nuclear provocations by North Korea.²⁵ Recently, the U.S. successfully tested its low-yield, high-precision nuclear bomb, the B61-12, which would serve the strongest deterrence against North Korea since the end of the Cold War.²⁶ All of these military measures, in addition to economic sanctions and diplomatic commitments, curb North Korea's incentives for developing further nuclear weapons and choosing revisionist goals.

However, that is not to imply the alliance will work perfectly in the future. In particular, the suspension of key combined/joint military exercises, discord during defense cost-sharing talks, rumors of U.S. troop withdrawals from the Korean Peninsula, and disagreements concerning operational transfer issues could cause North Korea to misjudge the relationship between South Korea and the U.S., and perceive it to be disintegrating. Ultimately, all these issues could inaccurately portray a decline in the U.S.' commitment to South Korean security and lead North Korea to be more confident that the U.S. would be unwilling to intervene if it engaged in provocative actions.

South Korea's Military Capabilities

South Korea's own military power is another key consideration when assessing North Korea's choice of a military strategy. From Pyongyang's perspective, there are two variables of importance in South Korea's military power. First, Pyongyang should consider whether South Korea has nuclear weapons. If South Korea possesses nuclear weapons, the revisionist strategy would not be a realistic option for North Korea regardless of the existence of the US-ROK alliance. This partly explains why some South Koreans are raising the need for nuclear armament with conservative politicians at the center.²⁷ For example, in November 2020, Kim Jong-in, the leader of the conservative party, stated at a conference with foreign reporters that "we need to reconsider how to keep nuclear weapons in South Korea under the strong ROK-US alliance, and if that's not possible, we need to consider South Korea's own nuclear armament."28 However, South Korea should be cautious in its pursuit of nuclear armament as it could incentivize North Korea to further strengthen its own nuclear forces, which could, in turn, result in the need for more nuclear armament by South Korea. In other words, the two Koreas could repeat the nuclear arms race and security dilemma between the U.S. and the Soviet Union during the Cold War.

Second, even if South Korea does not possess nuclear weapons, Pyongyang should consider whether Seoul is armed with strong conventional forces. If South Korea were to present a wide spectrum of threats based on strong conventional forces, North Korea would need to invest resources to enhance its conventional forces. For North Korea, the use of nuclear weapons is an act that would risk the survival of its regime, and it could not flexibly respond to various security situations by relying on nuclear weapons.

South Korea plans to invest considerable resources (about \$300 billion between 2021 and 2026) into strengthening its conventional forces, including the acquisition of F-35 stealth jets and missile defense systems. However, Seoul's conventional military buildup is mainly a response to North Korean nuclear threats.²⁹ South Korea's buildup of conventional forces focused on nuclear threats would not exert diverse types of pressure on North Korea that would influence Pyongyang to strengthen its conventional forces rather than nuclear forces. Rather, such a military buildup could result in a spiral effect that instead incentivizes North Korea to strengthen its nuclear power.³⁰

China's Stance on North Korea

China currently appears ambivalent about its commitment to North Korea's security in the event of a military conflict, because if it chose to intervene, China could quickly be entangled in a major conflagration involving U.S. forces. However, that is not to say that China does not want to have any influence over North Korea's military strategy. China, in particular, has a dual attitude toward North Korea.³¹ On the one hand, if the Kim regime collapses and a regime close to the U.S. takes control, it would lead to a very unfavorable geopolitical constraint on China. Therefore, Beijing may prefer a situation in which North Korea maintains its regime security on the basis of the North's own military capabilities. On the other hand, North Korea strengthening its nuclear capabilities and becoming independent of China's influence would also be an undesirable outcome for China. As a result, China is currently participating in the U.S.-led economic sanctions against North Korea, while reducing the effectiveness of the sanctions regime through toleration of smuggling operations with North Korea.32

In light of this, China would likely support North Korea if it chooses to strengthen its conventional forces. However, if North Korea aims to improve its nuclear capabilities, China is likely to actively participate in international sanctions. China would also assist the North Korean regime if Pyongyang chooses to adopt the security-seeking strategy. However, China could impose sanctions on

North Korea if Pyongyang seeks to pursue a revisionist strategy since such a strategy would pose a serious threat to the national security of China by destabilizing its border

South Korea's Relations with Japan

There has been considerably less discussion concerning the impact that Japan could have in the event of a military clash between the two Koreas. In particular, due to memories of Japanese colonial rule, South Korea is extremely sensitive to Japan's potential military influence on the Korean Peninsula, including the provision of military support and/or intervention.

Regardless of this sentiment, however, Japan's role is an important external factor in North Korea's strategic choices. It is unreasonable to assume that the US-ROK alliance could conduct a war without Japan's support, or that Japan would take no action if it felt its security was threatened by a conflict between the two Koreas. For example, with Japan's support, a larger number of troops, material, and logistics support could be smoothly dispatched to the Korean Peninsula via the seven United Nations command bases on Japanese soil, including the Yokota and Kadena Air Bases, Yokosuka Naval Base, and Futenma Marine Corps Air Station.33 Therefore, if South Korea, Japan, and the U.S. cooperate well together, and if Japan is capable of playing a sufficient role as a wartime rear military base, these factors would exert greater pressure on North Korea and could constrain Pyongyang from adopting a revisionist strategy.

Conclusion

After observing North Korea's military parades in October 2020 and January 2021, many experts determined that North Korea may develop additional nuclear weapons. In contradiction to these assessments, this article indicates that North Korea may choose a military strategy that would create a balance between conventional and nuclear capabilities if (i) the US-ROK alliance remains robust, (ii) South Korea remains non-nuclear and exerts diverse types of pressure on North Korea based on its strong conventional military power, (iii) China maintains its current approaches to North Korean problems, and (iv) if the cooperation between the ROK-US alliance and Japan is working well. Under such conditions, North Korea would likely employ a security-seeking strategy rather than a revisionist one.

Thus, this article first emphasizes the importance of the US-ROK alliance in facing a nuclear-armed North Korea, and sending credible signals that the US-ROK alli-

ance is solid and unwavering. These signals could include measures that strengthen the cohesiveness of the alliance, such as enhancing strategic-level joint exercises and bilateral military exchanges. Second, South Korea should begin to strengthen its conventional military power and fortify its military exercises to pressure North Korea along a diverse spectrum. In that way, Seoul would encourage Pyongyang to believe that nuclear weapons alone may not be enough to cope with all security demands. Third, the US-ROK alliance should consult and cooperate with China since it holds greater influence in attempting to prevent North Korea from choosing nuclear-oriented and revisionist strategies. Lastly, the US-ROK alliance should establish consultative mechanisms with Japan in order to manage the North Korean nuclear threat and develop contingency plans in preparation for North Korean adventurism.

Understanding North Korea's probable choice of military strategies is important in updating the negotiation strategy concerning the North's denuclearization. The decision regarding how to use nuclear weapons is relevant to the issue of why such weapons are necessary. If Pyongyang is likely to further develop its nuclear weapons and adopt revisionist strategies, the US-ROK alliance may need to implement radical measures, such as military action or the nuclear armament of South Korea, as some hawks in Washington and Seoul suggest. However, if North Korea is likely to seek a balance between its nuclear and conventional capabilities and pursue security-seeking strategies, as indicated in this study, a more moderate approach, such as a step-by-step denuclearization process, could prove effective. Accordingly, the scenarios and prospects discussed in this article will hopefully assist the U.S. and South Korea in updating their approaches to North Korea's denuclearization.

Conflict of Interest Disclosure: The views and opinions expressed in this article are those of the author and do not reflect the official policy or position of the government of the Republic of Korea.

Notes

- 1. U.S. Marine Corps, Strategy (MCDP 1-1, 2018), 1-3.
- 2. Hal Brands, *What Good Is Grand Strategy? Power and Purpose in American Statecraft from Harry S. Truman to George W. Bush* (Ithaca, NY: Cornell University Press, 2014), 2-3.
- 3. Henry R. Nau, "Identity and the Balance of Power in Asia," in *International Relations Theory and the Asia Pacific*, ed. G. John Ikenberry and Michael Mastanduno (New York, NY: Columbia University Press, 2003), 213.
- 4. Eric J. Ballbach, "Constructions of Identity and Threat in North Korea's "Diplomatic War" Discourse," *Tiempo Devorado: Revista de Historia Actual* 2, no. 2 (2015): 7.
- 5. Jong Chol Ri, *Songun Politics in Korea* (Pyongyang: Foreign Languages Publishing House, 2012), 23.
- 6. The Institute for Unification Education, *Understanding North Korea* (Seoul: Research and Development Division, Institute for Unification Education, 2017), 91-92.
- 7. Hazel Smith, *North Korea: Markets and Military Rule* (Cambridge: Cambridge University Press, 2015), 45.
- 8. Kyo Duk Lee, *The Successor Theory of North Korea* (Seoul: Korean Institute for National Reunification, 2004), 7.
- 9. In 2012, North Korea adopted "Kimilsungism-Kimjongilism" as the new guiding ideology for the Workers' Party of Korea during the era of self-reliance. The ideology aims to consolidate the legitimacy of Kim Jong Un's rule based on the authority of his grandfather and father. It is rooted in the *Juche* tradition.
- 10. The Charter of the Workers' Party of Korea (amended in 2016).
- 11. The Socialist Constitution of the Democratic People's Republic of Korea (amended in 2019).
- 12. Law on Consolidating Position of Nuclear Weapons State, art. 4.
- 13. David Kang, *American Grand Strategy and East Asian Security in the Twenty-First Century* (Cambridge: Cambridge University Press, 2017), 63-64.
- 14. Manseok Lee and Sangmin Lee, "North Korea's Choice of a Nuclear Strategy: A Dynamic Approach," *Defense and Security Analysis* 36, no. 4 (2020).
- 15. Chung Min Lee, *Fault Lines in a Rising Asia* (Washington, DC: Brookings Institution Press, 2016), 306-310.
- 16. Eleanor Albert, "North Korea's Military Capabilities," Council on Foreign Relations, last modified November 16, 2020. https://www.cfr.org/backgrounder/north-koreas-military-capabilities.
- 17. Jenny Town, "After the parade, North Korea's steady progress matters more than its big new missile," Bulletin of Atomic Scientists, October 16, 2020. https://thebulletin.org/2020/10/after-the-paradenorth-koreas-steady-progress-matters-more-than-its-big-new-missile.
- 18. Charles L. Glaser, *Rational Theory of International Politics: The Logic of Competition and Cooperation* (Princeton, NJ: Princeton University Press, 2010), 38.
- 19. This study does not take chemical and biological weapons into account.
- 20. North Korea also can use limited resources to enhance economic development or any number of other possible goals. This study, however, has narrowed its scope to the military level and so leaves discussions concerning the need to pursue other goals for future research on North Korea's evolving grand strategy.
- 21. As Mearsheimer notes, a security seeker may be willing to provoke a war in order to protect its security. Yet, the present study considers a state that projects military power onto another state's territory to exhibit a revisionist intention. See John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York, NY: WW Norton & Company, 2001), 29-31.

- 22. A minimum deterrence doctrine requires only that nuclear weapons be able to impose sufficient costs on a potential attacker to make an initial nuclear attack appear too costly. To present a credible deterrent, minimum deterrence generally requires second-strike nuclear forces.
- 23. Bob Woodward, *Rage* (New York: Simon and Schuster, 2020), 74. 24. These strategic surveillance assets enable the US-ROK alliance to identify signs of North Korea's provocations through optical observation and signal detection.
- 25. The B-52 and B-2 are nuclear-capable bombers, and the B-1B has the capability to carry large quantities of conventional bombs and drop them deep into the interior of North Korea.
- 26. "B61-12 Nuclear Bomb," Airforce Technology, https://www.airforce-technology.com/projects/b61-12-nuclear-bomb/.
- 27. Toby Dalton, "Between Seoul and Sole Purpose: How the Biden Administration could Assure South Korea and Adapt Nuclear Posture," War on the Rocks, February 9, 2021. https://warontherocks.com/2021/02/between-seoul-and-sole-purpose-how-the-biden-administration-could-assure-south-korea-and-adapt-nuclear-posture/. 28. Kyungwoo Koo, "Kim Jong-in said, 'If we can't denuclearize North Korea, South Korea should also think nuclear weapons development," Sedaily, November 24, 2020. https://www.sedaily.com/
- 29. Ian Bowers and Henrik Stålhane Hiim, "Conventional Counterforce Dilemmas: South Korea's Deterrence Strategy and Stability on the Korean Peninsula," International Security 45, no. 3 (2021): 7-39. 30. Also refer to Ian Bowers and Henrik Hiim, "South Korea, Conventional Capabilities, and the Future of The Korean Peninsula," War on the Rocks, February 11, 2021, https://warontherocks.com/2021/02/south-korea-conventional-capabilities-and-the-future-of-the-korean-peninsula/.

NewsView/1ZAJ6D7X0J.

- 31. Eleanor Albert, "The China–North Korea Relationship," Council on Foreign Relations, last modified, June 25, 2019. https://www.cfr.org/backgrounder/china-north-korea-relationship.
- 32. Eleanor Albert, "What to Know About Sanctions on North Korea," *Council on Foreign Relations*, last modified July 16, 2019. https://www.cfr.org/backgrounder/what-know-about-sanctions-north-korea. 33. United Nations Command, "United Nations Command-Rear Fact Sheet" (DSN 315-225-9850, UNC/CFC/USFK Public Affairs Office), https://www.yokota.af.mil/Portals/44/Documents/Units/AFD-150924-004.pdf.

Policy Options for Humanely Reducing Recidivism in Michigan

By Nevo Polonsky

Executive Summary

Recidivism is a problem that makes our communities less safe, results in negative health outcomes for prisoners and their families, and costs taxpayers money. In Michigan, people of color are disproportionately incarcerated at higher rates. Consequently, recidivism disproportionately increases the total length of time for which people of color are incarcerated. Longer prison stays lead to more negative intergenerational effects, which can create a cycle where communities of color are continually impacted by incarceration. Failing to effectively address recidivism exacerbates existing racial health and incarceration disparities in Michigan.

Michigan has made great strides toward reducing recidivism rates and has seen positive results with the Michigan Offender Success Model. However, there are other cost-efficient evidence-based policies that Michigan can implement to further reduce recidivism in a way that promotes prisoners' wellness. Two promising policy options are implementing a prison nursery in Michigan's female-only prison, Women's Huron Valley Correctional Facility, and implementing statewide free transportation to promote prisoner visitation. Other states have implemented similar policies and, if adopted in Michigan, these options would likely reduce recidivism while saving the state money in the long run.

This analysis assesses three different policy options to reduce recidivism: a prison nursery in Women's Huron Valley Correctional Facility, increased spending for educational programming, and free statewide transportation for prison visitation. Each policy is assessed using three criteria: recidivism reduction, annual cost, and prisoner wellness. Using these criteria, I recommend implementing a prison nursery in Women's Huron Valley Correctional Facility and a free statewide transportation program. These policies will reduce recidivism in a way that is cost-effective while promoting prisoner and community wellness. I do not recommend increasing spending for educational programming because it is less cost-effective, has a less clear path to implementation, and is less impactful in promoting prisoner and family wellness than the other two policy options.

Background

Starting in the 1970s, policymakers began to view incarceration as the most effective method for reducing crime.1 Harsher sentencing and increased drug arrests led to a boom in prison populations across the country, including a three-fold increase in Michigan's prison population between 1978 and 2006.1-3 Increasing prison populations, combined with the relatively stagnant national 3-year recidivism rate of 40% between 1994 and 2007, meant more people were returning to prison each year.4 Michigan recently reported its lowest 3-year recidivism rate in history, at 26.7%.5 However, that means 26.7% of released prisoners are still not contributing socially or economically to their community and are continuing to cost taxpayer dollars. Incarceration also leads to a variety of negative short-term and long-term health, career, and social outcomes that impact incarcerated individuals and their families. While there is no widely regarded acceptable level of recidivism, a 3-year recidivism rate of 26.7% is still too high.

If the criminal justice system successfully prepares prisoners for re-entry, then the cost of their return to prison can be avoided. In fiscal year (FY) 2019-20 Michigan allocated about \$2 billion for the state's prison system, with about 97% of this budget originating from the state's general fund.⁶ A large portion of this cost stems from the resources spent on prisoners annually. The average cost to Michigan is about \$197,000 per prisoner, based on the average 4.2-year sentence for a new prisoner in Michigan and 2015's average annual cost of \$47,000 per prisoner in Michigan.^{7,8} Investing in cost-efficient policy options that support prisoners to reduce recidivism will therefore save Michigan money in the long run.

The financial rationale for reducing recidivism is supplemented by examining the negative effects that incarceration has on an individual's physical and mental health, and thus their life course. Prisoners are at a higher risk of exposure to infectious diseases due to shared personal hygiene items, poor nutrition, and poor ventilation, while the stress of being incarcerated results in a weaker immune response. Consequently, prisoners are at risk of developing weaker immune responses while being

exposed to more pathogens, such as COVID-19. Prisoners who recidivate are at a higher risk for experiencing negative health outcomes because of the additional time they spend in prison. Health conditions which physically weaken prisoners may limit their work opportunities and chronic conditions requiring continued treatment may create a financial burden for prisoners. The negative health outcomes associated with incarceration may make reentry more difficult and may cyclically contribute to recidivism if not properly addressed.

Incarceration can also have a variety of negative impacts on an individual's family and children. Families with an incarcerated parent are likely to experience a decline in household income.¹⁰ One study found that 34% of families go into debt to make phone calls to or visit a loved one who is in prison.11 In addition to decreased financial stability, children with incarcerated parents are more likely to exhibit decreased mental health and face disciplinary action in school.¹⁰ Similarly, children born to mothers who are incarcerated are less likely to form a strong attachment to their mother.¹² Attachment is a key feature of cognitive and physical growth in infants, so failing to establish a strong attachment with a parent or another caregiver can negatively affect the life course of a child. 12 A child who grows up without a strong parental attachment, decreased household income, and reduced mental health is likely to have reduced health and economic outcomes. Additionally, two possible mechanisms for intergenerational incarceration are when children experience financial strain and exhibit maladaptive behavior in response to unmet mental health needs. 13 Decreasing recidivism will support children and families in a way that addresses the intergenerational effects of incarceration and may help break the cycle of incarceration.

The negative and intergenerational outcomes of incarceration become even more insidious when considering the racial disparity in Michigan's prison population. In Michigan, people of color constitute 45.6% of new prison commitments.8 However, only 20.8% of Michiganders are people of color.¹⁴ While it is unrealistic to expect perfect parity between these two values, there is a stark discrepancy between the demographics of Michigan and the demographics of Michigan's prisons. Consequently, communities of color suffer more from the intergenerational effects of incarceration, which exemplifies one way that prisons contribute to structural racism. Policies that continue to reduce recidivism have far reaching beneficial impacts for individuals and families across Michigan, and people of color will feel these impacts more deeply. The combination of improved financial, wellness, and equity outcomes indicate that it is imperative that Michigan continues to reduce its recidivism rate.

Policy Options

Analytical Framework

Three criteria are used to compare the policy options. The first criterion is what the estimated 3-year recidivism rate will be under each policy, based on the number of prisoners each policy is predicted to prevent from recidivating. The most recently reported 3-year recidivism rate, 26.7%, is based on the estimated 11,509 prisoners released in 2016. The scoring metrics for this policy analysis will use this value as the baseline.

The second criterion is the estimated annual cost of programs and initiatives targeted at reducing recidivism. Each policy has a financial cost attached to its implementation and continued execution. Combining this criterion with the first criterion will allow for cost benefit analysis based on the savings associated with decreasing the prison population. The cost of each policy option is considered in the context of the cost of existing policies. Therefore, the baseline for cost is \$132.2 million, which was the allocation for the Offender Success Services in FY 2019-20.6

The final criterion considered in this analysis is how each policy promotes the holistic wellbeing of the prisoners and their families. This analysis considers the promotion of wellbeing as a humanizing aspect of these policies that can encourage sustainable positive outcomes for the prisoners and their families. Even if a prisoner does not recidivate, they still may not be experiencing an overall positive quality of life. For example, a former prisoner may be impoverished or may not have strong social connections. Policies that promote wellbeing will address the aspects of a prisoner's quality of life that look beyond the minimum requirements to prevent them from returning to prison. This includes considering prisoner wellness during their time in prison. The individualized nature of prisoner needs also means that 'wellbeing' will look different for every prisoner, so no uniform or standardized metrics of wellbeing will be used. Some examples of wellness considered in this analysis are social connection, mental health, physical health, and fulfillment.

Current Offender Success Model

The Michigan Department of Corrections (MDOC) employs a three-phase offender success model which provides multiple resources to prisoners and addresses a variety of their needs to prepare them to reenter their communities upon release. The phases are prison, transition to community, and then discharge. During the prison phase, a case plan is developed for each pris-

oner and their needs are assessed. A key aspect of this phase is academic, vocational, and job-readiness training. In the past five years more resources have been devoted to job-readiness training in addition to specialized vocational training. The transition to community phase begins when prisoners approach their release. In this phase a plan accounting for their needs upon reentry is created. Finally, during the community and discharge phase, a prisoner is assigned a parole officer who provides case management and connects them to community resources. Additionally, community programs, such as residential probation diversion, reduce recidivism by providing alternative options to re-incarceration.

Prison Nursery

This policy option involves implementing a prison nursery program in Women's Huron Valley Correctional Facility (WHVCF) for mothers who give birth in prison to increase infant and mother wellness while adequately preparing mothers for reentry.

The existing policy only allows for incarcerated mothers to spend 24-48 hours with their child, with new legislation aiming to extend this time to 72 hours. ^{22,23} Mothers are then separated from their child and eventually lose most access when the child leaves the hospital. ²⁴ The child is placed in alternative care such as living with a relative or the foster care system. ²⁴ The first few months of a child's life are incredibly important for their mental and physical development, and this separation has detrimental impacts on both. ^{12,25} Additionally, family separation may contribute to the likelihood that affected children will also be incarcerated in the future. ¹³

An alternative policy is developing a prison nursery, an evidence-based program that has been successfully implemented in women's prisons in at least eight states.²⁶ Generally, expecting mothers who do not have a history of violence, serious child abuse, or excessive misconduct are eligible for the program.²⁷ Mothers must also be on track to be released within a reasonable amount of time after the birth of their child and must be the primary caregiver of their child upon release. Existing prison nurseries have different eligibility standards regarding how soon after giving birth a prisoner must be released, ranging from 18-36 months. Opponents have argued that raising a child in a prison is unappealing and dangerous for the child.²⁸ However, prison nurseries are developed with the infant's safety in mind and have been shown to positively impact an infant's health.12 In a prison nursery program, when a woman gives birth the mother and child are moved to a specialized nursery ward. The prison nursery model includes infant care, direct care for mothers, Lamaze parenting classes to prepare mothers for a safe and comfortable birth, hands-on training, and care planning so mothers are ready for success after their release. ^{26,27} Some programs even offer GED completion courses. ²⁶ Prison nurseries allow mothers to raise their children while completing their sentence and gaining valuable skills along the way.

Prison nurseries have been shown to reduce recidivism in a way that is statistically significant, so a similar result is expected from implementing a prison nursery in WHVCF. Women who participated in the program had a lifetime recidivism rate of 14%, whereas 53% of women who were not a part of the prison nursery program and were separated from their child recidivated. Based on the WHVCF population and the fact that, on average, about 4% of women who enter prison are pregnant, 82 prisoners are predicted to be eligible for the prison nursery program annually. A prison nursery is expected to prevent an additional 39% of the 82 participants from recidivating, or 32 participants.

In addition to reducing recidivism, prison nurseries have been found to promote wellness by increasing a child's attachment to their caregiver.¹² Infants who develop an attachment to a caregiver feel safe and secure.30 Attachment is an important aspect of healthy growth and life course outcomes, such as infant cognitive development.¹² An average of 60% of infants develop the healthiest form of attachment, secure attachment, across prison nursery programs of different durations. 12 This value is comparable to the 62% of infants who develop secure attachment in standard living situations. 12 The proportion of infants who developed secure attachments was also found to be 75% for infants who participated in prison nursery programs that lasted 12 months. 12 Additionally, fewer infants developed the most harmful form of attachment, disorganized attachment, than expected.12 Disorganized attachment occurs when parents fail to appropriately address an infant's distress and is often associated with maltreatment and atypical parenting founded in parents' own unresolved trauma. 12,25,30 This finding is particularly important because of the many negative outcomes connected to disorganized attachment, including increased stress, hostile behavior expression, and feeding problems as an infant. 25,30 Disorganized attachment is also associated with negative life course outcomes such as reduced adult physical health, increased risk of developing mental health disorders, and relationship and parenting difficulties which may lead their own children to develop disorganized attachment.^{25,30} Prison nurseries were found to be an environment that promotes healthy development for infants in a way that will benefit them throughout their lives and is more likely to disrupt intergenerational trauma than the current separation-focused policy.

As with any new program, an important consideration for implementation is cost. The annual cost of the prison nursery program in the Nebraska Correctional Center for Women is about \$70,000, which includes the annual operating budget and staff salary.²⁶ This prison is about 6.5 times smaller than the WHVCF, so a conservative estimate for the annual cost of implementing a prison nursery program is \$500,000. The average lifetime cost of incarceration is \$160,000 for each female prisoner, so the prison nursery program will be financially self-sustaining if it prevents at least 4 prisoners from recidivating each year.8 Implementing a prison nursery in WHVCF will likely accomplish this goal and therefore be financially self-sustaining on an annual basis. However, this does not account for the initial funding to implement the first year of the program, which includes purchasing necessary equipment and potentially constructing a nursery ward. In addition to decreasing long-term costs, creating a prison nursery may also save money in the short term, which would mitigate some of the initial implementation costs. For example, the prison nursery will provide some basic healthcare which could decrease the amount of money spent on hospital transportation. Another benefit of the prison nursery program is that fewer children will be placed in foster care, saving the state money.²⁶ Additionally, the negative physical and mental health outcomes associated with disorganized attachment from separation can translate to possible future medical expenses, which a prison nursery program can help alleviate.

One barrier to starting a new prison nursery in the WHVCF is implementation logistics. Other program models can provide insight regarding the materials and equipment needed, specific programmatic needs, eligibility requirements, potential liability, and other details necessary for successful implementation. There are multiple models of successful prison nurseries that already exist in other states which can be used as guidance. Most of the current prison nursery models are based on New York state, which has the oldest prison nursery program.²⁶

Eight other states have their own models, so a model that fits the needs of Michigan can be crafted from well-researched best practices taken from existing nurseries.

Increased Education Spending

This policy option expands on the existing Michigan Offender Success Model to increase access to already successful educational programming.

The Michigan Offender Success Model employs many evidence-based practices to reduce recidivism. A major aspect of the existing offender success programming is academic and career-focused education. MDOC acknowledges the importance of education, stating in their annual academic/vocational report that "[f]or every dollar spent on correctional education, five dollars are saved on three-year re-incarceration costs." The long-term benefit of providing prisoners education is supported by research conducted by Hill et al. and Ellison et al. which found that both vocational training and academic training independently reduce recidivism. Therefore, investing additional resources in educational programming is expected to further reduce recidivism.

There is also a clear need to further expand MDOC's current educational programming capacity. Each year thousands of prisoners who express a desire to participate in educational programming remain on a waiting list. This indicates an unmet need and an opportunity to prepare more prisoners with skills for successful reentry. Figure 1 shows the recent waitlists for different programs.

Increasing funding for educational programs in targeted ways is one method to address this need. Doing so will also expand the existing wellness benefits provided by educational and career programming to more prisoners. To increase access, there are two possible approaches for allocating financial resources: targeting prisons that are not providing vocational programs, or broadly increasing funding for academic programming in all prisons.

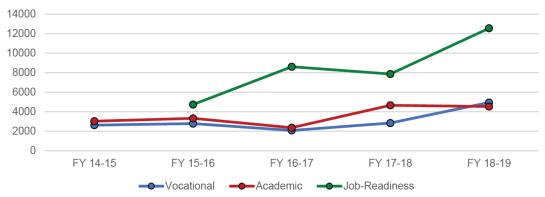


Figure 1: Total Prisoners on Educational Program Waitlists (Source: MDOC Academic/Vocational Reports 2014-19)

Option A: Targeted Vocational Focus

In FY 2018-19, seven Michigan prisons did not offer any vocational training to prisoners.¹⁷ Targeting these prisons by hiring a vocational instructor for each prison will expand programming to prisoners who currently do not have access to this opportunity. Prisoners who participate in vocational training are about 27% less likely to recidivate.³¹ In this analysis, a recidivism rate of 40% was assumed for individuals who did not participate in vocational training based on the national 3-year recidivism rate when the Michigan Offender Success Model was first implemented.⁴ Vocational training is expected to prevent an additional 10.8% of prisoners from recidivating. On average, 1.75% of the prison population was enrolled per vocational instructor in FY19-20. 17 Based on this value and the prison population of the seven targeted prisons, expanding vocational programming is expected to increase enrollment and completion by 13.4% for a total of 214 additional annual program completions.¹⁷ Vocational programming is expected to prevent an additional 10.8% of the 214 participants from recidivating, or 23 participants.

An estimate of the average salary for a prison educator, \$70,000, was multiplied by the seven prisons without programs.³³ An additional \$100,000 was conservatively projected for the upkeep costs of the new programs statewide, including the cost of job-specific supplies and transportation to worksites. This totals about \$600,000 annually.

Option B: Broad Academic Focus

Another method to expand educational programming is to simply increase the annual budget dedicated to existing academic programs, such as GED completion. Increasing the FY 2018-19 budget by 10% will provide an additional \$4.1 million for these programs.⁶ A general funding increase would allow MDOC to decide which prisons are the most in need of additional instructors. One priority should be to fill the 18 existing staff vacancies.¹⁷ After filling vacancies MDOC can assess the needs of specific prisons based on their staffing or the size of their waitlist. If the average salary of a prison educator is about \$70,000, then a conservative estimate of 55 educators can be hired.³³ In 2018, MDOC had 143.5 full time employees for academic programming, which would increase to 198.5 under a 10% funding expansion.¹⁷ This is a 38.3% increase in academic programming staff. It is assumed that a parallel increase would be seen in academic program completion, so an additional 531 prisoners would complete their GED.

Prisoners who participate in academic program-

ming are about 36% less likely to recidivate.³² In this analysis, a recidivism rate of 40% was assumed for individuals who did not participate in educational programming based on the national 3-year recidivism rate when the Michigan Offender Success Model was first implemented.⁴ Academic programming is expected to prevent an additional 14.4% of the 531 participants from recidivating, or 76 total participants. This policy is expected to be financially self-sustaining based on the predicted reduction in recidivism.

Free Prison Transportation

This policy option involves adapting a New York state program to create a statewide busing program in Michigan, which would facilitate prison visits for individuals who are generally not able to visit their incarcerated loved ones.

Prison visits play an important role in reducing recidivism. Prisoners who receive visits during their sentence have been shown to be at least 10% less likely to recidivate. ^{34,35} Visitation was also found to reduce recidivism regardless of the type of crime that a prisoner had committed. ³⁵ Based on Michigan's current recidivism rate of 26.7%, a visitor transportation program would decrease that rate by 10%, resulting in a new recidivism rate of 24%. The recidivism reduction may be larger than 10%, but a conservative estimate was used because this calculation assumes that free transportation will increase prisoner visitation uniformly, which is an oversimplification. ^{34,35}

There are a variety of unique ways that prison visits contribute to recidivism reduction. Prisoners who had more total visits during their incarceration were less likely to recidivate,³⁴ even if visits were from clergy and other individuals without a prior connection.³⁴ Additionally, visits that occurred closer to a prisoner's release date had a larger impact on recidivism reduction, because visits before release provide prisoners opportunities to develop plans for reentry with family and community members.³⁴ Each additional unique visitor also decreased a prisoner's risk of recidivating by 3%.³⁴ This finding indicates the importance of maintaining multiple social connections for prisoners.

Prisoners rely on their social connections upon release to find employment, housing, financial assistance, and a feeling of normalcy. For example, at least 40% of prisoners rely on immediate family members for support upon release.³⁴ Considering the unmet demand for educational and vocational training, maintaining connections through visits offers another route for prisoners to find opportunities that will help them reintegrate into society. It is possible that prisoners who receive more visits already

had stronger social connections before incarceration. So, while facilitating visits may not lead to a linear decrease in recidivism, providing prisoners more opportunities to maintain connections that foster support decreases the likelihood that they will recidivate.

A prisoner's self-perception is another important factor related to their wellness. Visitation and connections to community are predicted to prevent prisoners from developing an identity closely associated with or defined by criminality. At than having a released prisoner think of themselves as a 'criminal' who is out of place in their community, it is healthier for them to view themselves as a normal community member who has also committed a crime and spent time in prison. Similarly, visits can indicate to a prisoner that their community members and social supports view them as a peer and as a potential contributor to the community. Visitation and social connections help prisoners find their place physically, mentally, and socially in the community to which they are returning.

Even though visitation is connected to decreased recidivism, many family and community members are not able to visit incarcerated individuals. One major barrier is the financial cost of visitation, with families going into debt to visit and make phone calls to loved ones who are incarcerated.11 While there are many other costs and fees associated with prison visitation, free transportation would alleviate one of those costs. Free transportation to prisons also reduces the logistical burden for individuals who do not own a personal vehicle. In Michigan, many prisons are in the Upper Peninsula which is far away from most of the population centers of the state. Therefore, trips to these prisons are generally much longer and more difficult to plan and safely complete. Residents of southern Michigan will also have a more difficult time completing trips to the Upper Peninsula in a single day. A holistic free transportation policy will include financial support for overnight accommodations and the additional transportation to and from those accommodations. Taking these additional steps will ensure that the free transportation program is more financially and physically accessible. Implementing the infrastructure to provide free transportation to prisons will enable more prisoners to receive visitors, which will contribute to reductions in recidivism.

Outside of non-profit services, New York was the only state to offer free transportation service until budget cuts eliminated the program. Since then, two bills, A5942 and S731A, have been proposed to revitalize this program. ^{36,37} These bills provide information about the program which would allocate \$1.5 million to provide free busing from major metropolitan locations to the state's prisons. ^{36,37} Busing would be provided at least bi-monthly

and information about bus routes and schedules would be clearly communicated on the Department of Corrections and Community Supervision website. 36,37

When considering the cost of implementing statewide free transportation for prison visitation, the predicted annual cost is about \$1.5 million, based on the estimated cost of New York's statewide prison transportation program.³⁶ The prison population of New York was 77,229 in 2016, which is almost twice as large as Michigan's prison population of 38,761 in 2018.^{3,38} However, the prisons in the Upper Peninsula of Michigan will likely cost more to provide busing to, and have added costs associated with multi-day visits. The predicted annual cost was not adjusted to maintain a conservative estimate, but a statewide free transportation program in Michigan may cost less than this estimate depending on the net effects of differing prison populations and per visit costs. It is not clear what individual costs contribute to the total annual cost. Some likely expenses are renting or purchasing buses, fuel, vehicle insurance, hiring bus drivers, implementing online infrastructure, and hiring dedicated staff for program management. This policy is predicted to prevent over 100 people from recidivating, so even if the estimates are significantly different from the observed result this program is predicted to be cost-efficient.

Recommendations

Evaluating the policy options using relevant scales provides a tool for comparison. Table 1 provides a concise comparison of the different policy options with scoring metrics detailed in Table 2.

An initial comparison indicates that most of the newly proposed policies offer more benefits than the policies currently in place. The newly proposed policies all further reduce recidivism and promote prisoner wellness. Some of the policies are only marginally more expensive than current programs and each policy has been predicted to be financially self-sustaining based on the resulting recidivism reduction. Based on these findings, at least one policy option should be adopted, and if possible multiple policy options, to further advance Michigan's effort to prepare prisoners for successful reentry. This result is expected because the Michigan Offender Success Model has gaps, even if it is a clear improvement upon previous iterations of criminal justice policy.

Comparing the newly proposed policy options to each other quickly shows that the policy options regarding increased educational spending are relatively less impactful at reducing recidivism. Increasing spending to expand either vocational programming or academic programming are still expected to decrease recidivism. However,

Policy	Recidivism Rate	Annual Cost	Prisoner Wellbeing	Total Score
1: Michigan Offender Success Model	1 - 26.7%	5 - 132.2 million dollars	2 – There is excess demand so many prisoners do not benefit. Additionally, socio-emotional wellness gaps exist in current policy.	8
2: Prison Nursery Program	2 - 26.4% (about 30 less individuals annually)	5 - 132. 7 million dollars	5 - Mothers and children are benefited holistically in a way that improves lifelong outcomes for children and has positive intergenerational impact.	12
3: Free transportation for prison visitation	5 - 24.0% (about 310 less individuals annually)	4 - 133.6 million dollars	4 - Visitation and social connection benefit mental health. Prisoners are more likely to have support from their community upon reentry.	13
4A: Increase spending on vocational programming	1 - 26.5% (about 20 less individuals annually)	5 - 132.8 million dollars	3 - Programmatic need is only addressed slightly. This option is better than no change, but not significantly.	9
4B: Increase spending on educational programming by 10% to hire instructors	2 - 26.0% (about 80 less individuals annually)	1 - 136.3 million dollars	3 - Programmatic need is only addressed slightly. This option is better than no change, but not significantly.	6

Table 1: Policy Options Comparison

Score	Recidivism Rate	Annual Cost	Prisoner Wellbeing
1	26.5-27.0%	136-137 million dollars	The policy does not support a prisoner's wellness during their sentence
2	26.0-26.5%	135-136 million dollars	The policy minimally supports a prisoner's wellness during their sentence
3	25.5-26.0%	134-135 million dollars	The policy supports a prisoner's wellness during their sentence
4	25.0-25.5%	133-134 million dollars	The policy strongly supports a prisoner's wellness during their sentence and promotes further wellness after their reentry
5	Less than 25.0%	132-133 million dollars	The policy goes above and beyond supporting a prisoner's wellness during their sentence and promotes further wellness after their reentry, including intergenerational wellness

Table 2: Scoring Definitions Key

the programs are not as cost effective as the other alternatives and do not promote prisoner wellness to the same degree. The large waitlist numbers for academic, vocational, and job-readiness programs shows that there is a clear need for additional resources in this area. However, programming already exists, so these policy options may suffer from diminishing or stagnant returns. The other policy options address recidivism more effectively and offer new services that do not already exist in the current Michigan Offender Success Model.

Additionally, it is unclear if increasing funding for educational programming will be as effective as it appears on the surface. There are many vacancies in the educational programming staff positions across Michigan's prisons. The existing budget should already include these positions, and if this is the case then the educational programs potentially have a surplus of unused funds. If there are barriers to recruiting professional staff for educational programs, increasing the budget with a focus on hiring additional staff is not an effective use of resources. A more nuanced analysis is necessary to understand all the bar-

riers facing educational programming expansion and to develop effective solutions to address these barriers.

Providing free transportation to promote prisoner visitation has the best overall outcomes of the policy options analyzed here. The expected recidivism reduction associated with the transportation program is predicted to be the highest and the cost is not prohibitive, especially considering how the predicted decline in recidivism enables the program to pay for itself. This policy also promotes multiple dimensions of prisoner wellness through strengthening social connections. An important consideration for this policy is the amount of time and effort needed to develop the infrastructure to successfully implement statewide transportation. However, the positive outcomes derived from this policy will be well worth the additional logistical work.

Much like implementing free transportation for visitors, creating a prison nursery is projected to reduce recidivism while saving money in the long run. The estimates predict that implementing a prison nursery at Women's Huron Valley Correctional Facility will not have

as large an impact on reducing recidivism as a statewide free transportation program. By extension, the prison nursery program will save less money annually, even though the program also costs less annually. This is to be expected because of the much narrower focus of the prison nursery program. A prison nursery will only serve a portion of the population, whereas free prison visitation has the potential to impact all prisoners.

The narrow focus of the prison nursery policy presents a unique set of advantages compared to the free visitor transportation policy. Logistically, implementing a successful prison nursery policy is easier in two ways. First, there are more examples to act as a model for a new prison nursery program. There are not any records of currently operating free statewide transportation programs, while there are eight examples of prison nurseries in different states. This means that developing a prison nursery program in Michigan will require less research, which will allow the program to be implemented more quickly and more seamlessly. Second, the scope of the prison nursery policy requires focusing on one prison, Women's Huron Valley Correctional Facility. Conversely, a free visitor transportation policy will require consideration of the different visitation policies for each facility and the large logistical process of creating a schedule for when and where transportation will be offered.

Another important point of comparison is how each policy promotes wellness. These policies promote wellness in different ways, so a direct quantitative comparison cannot be made. Regardless, the prison nursery policy promotes wellness in a way that is more clear and more impactful than the free transportation policy. Increased visitation because of free transportation provides benefits to prisoners and their families, but visits can also cause stress for both parties. 11,34 Prison nurseries promote wellness for mothers and their children in a way that has powerful impacts on the child's entire life. The benefits of prison nurseries extend past the prisoner to their child addressing some of the negative intergenerational outcomes of incarceration and potentially disrupting the cycle of incarceration. The prison nursery policy stands out from the free transportation policy in this way.

After making these comparisons, I advocate for implementing both the prison nursery policy and the free transportation policy. These policies are compassionate, meaningfully promote wellness, save taxpayer dollars, and reduce recidivism. Each of these policies exemplify evidence-based practices and address gaps in the current Michigan Offender Success Model. Implementing these policies that have been used in other states will push Michigan's recidivism reduction efforts even further. If it is not feasible to introduce both policies, the prison nursery

policy should be prioritized. This policy costs less and has a much larger impact on individual and intergenerational wellness. Additionally, there are less unknowns regarding this policy because multiple prison nurseries exist across the country and can be used as references. The prison nursery policy also requires less new infrastructure to be developed. Finally, the prison nursery policy builds nicely on the momentum that Michigan Senate Bills 830 and 831 have generated to promote criminal justice reform for pregnant mothers.

Conclusion

Incarceration is not cost-efficient and leads to negative outcomes for those who are incarcerated and their families. As a result, incarceration uses resources that could be devoted to other important state priorities, such as addressing Michigan's opioid epidemic or investing in infrastructure. Additionally, incarceration creates negative intergenerational consequences that disproportionately impact communities of color. To put these features more bluntly, incarceration is a wasteful system that promotes racial discrimination. Reducing recidivism by preparing prisoners for successful reentry into their communities is one way to address these problems while saving the state money in the long run.

The emphasis that Michigan has placed on reducing recidivism is clear, and the current record-low recidivism rate is the culmination of years of intentional effort. At this moment, well-crafted policy can continue to push progress forward. Two evidence-based options that stand out as methods to reduce recidivism are creating a prison nursery program in the Huron Valley Women's Correctional Facility and implementing a free transportation policy statewide to increase prison visits. The prison nursery program helps prepare new mothers who are incarcerated to take care of their children during their time in prison and after release, while simultaneously benefitting their child's development by promoting stronger attachment. The free transportation policy removes barriers that prevents families and friends from visiting their incarcerated loved ones. Both policies are predicted to save the state money based on how they will decrease recidivism. These policies also address important social and health needs of prisoners and prepare them to successfully return to their communities. Such options are exciting because they further the goals of criminal justice compassionately while supporting communities and potentially reducing the state's spending. This combination of humane and fiscally responsible policy exemplifies the direction that Michigan's continued efforts to reduce recidivism should take.

References

- 1. Steve Redburn, Bruce Western, Steve Redburn, Bruce Western, and Jeremy Travis, *The Growth of Incarceration in the United States: Exploring Causes and Consequences*, In The Growth of Incarceration in the United States: Exploring Causes and Consequences, (Washington D.C.: National Academies Press, 2014), 1–11.
- 2. 2016. State prisons, local jails and federal prisons, incarceration rates and counts, 1925-2016. Prison Policy Initiative. https://www.prison-policy.org/data/.
- 3. 2019. *Total Prison Population, Prison Commitments, and Michigan Census.* Lansing: Michigan House Fiscal Agency. https://www.house.mi.gov/hfa/PDF/Corrections/Corrections_Data_Population_Commitments_and_MI_Census.pdf
- 4. Rep. *State of Recidivism: The Revolving Door of America's Prisons*. PEW Center on States, April 2011. https://www.pewtrusts.org/en/research-and-analysis/reports/2011/04/12/state-of-recidivism-the-revolving-door-of-americas-prisons.
- 5. "Michigan Recidivism Rate Falls to Its Lowest Level in State History," December 13, 2019. Michigan Department of Corrections. https://www.michigan.gov/corrections/0,4551,7-119-1441_26969-520803--,00.html.
- 6. Risko, Robin R. Rep. *Line Item and Boilerplate Summary: Corrections Fiscal Year 2019-20*. Michigan House Fiscal Agency, January 2020. https://www.house.mi.gov/hfa/PDF/LineItemSummaries/MDOC_line%20FY21.pdf.
- 7. Maxwell, John. Issue brief. *Marginal Cost of Corrections: Michigan's Experience*. Michigan Senate Fiscal Agency, August 2015. https://www.senate.michigan.gov/sfa/Publications/Issues/CorrectionsMarginalCost/CorrectionsMarginalCost.pdf.
- 8. Washington, Heidi. Rep. *Michigan Department of Corrections 2018 Statistical Report*. Michigan Department of Corrections, November 14, 2019. https://www.michigan.gov/documents/corrections/MDOC_2018_Statistical_Report_-_2019.07.18_662129_7.pdf.
- 9. Massoglia, Michael, and William Alex Pridemore. "Incarceration and Health." *Annual Review of Sociology* 41 (2015): 291–310. https://doi.org/10.1146/annurev-soc-073014-112326.
- 10. Martin, Eric. "Hidden Consequences: The Impact of Incarceration on Dependent Children." *National Institute of Justice Journal* 278 (May 2017). https://nij.ojp.gov/topics/articles/hidden-consequences-impact-incarceration-dependent-children#citation--0.
- 11. deVuono-powell, Saneta, Chris Schweidler, Alicia Walters, and Azadeh Zohrabi. Rep. "Who Pays? The True Cost of Incarceration on Families". Ella Baker Center, 2015. http://whopaysreport.org/whopays-full-report/.
- 12. Byrne, M. W., L. S. Goshin, and S. S. Joestl. "Intergenerational Transmission of Attachment for Infants Raised in a Prison Nursery." *Attachment & Human Development* 12, no. 4 (2010): 375–93. https://doi.org/10.1080/14616730903417011.
- 13. Halsey, Mark, and Melissa De Vel-Palumbo. Essay. In Generations through Prison: Experiences of Intergenerational Incarceration, 5–12. Abingdon, Oxon; New York, NY: Routledge, 2020. https://www-taylorfrancis-com.proxy.lib.umich.edu/books/mono/10.4324/9781351240574/generations-prison-mark-halsey-me-

- lissa-de-vel-palumbo.
- 14. "U.S. Census Bureau QuickFacts: Michigan," Census Bureau QuickFacts, accessed November 2020. https://www.census.gov/quickfacts/MI.
- 15. Washington, Heidi. Rep. *Michigan Department of Corrections* 2016 Statistical Report. Michigan Department of Corrections, September 5, 2017. https://www.michigan.gov/documents/corrections/MDOC_2016_Statistical_Report_599836_7.pdf
- 16. Rep. *The Michigan Offender Success Model*. Michigan Department of Corrections, May 2016. https://www.michigan.gov/documents/corrections/Michigan_Prisoner_Reentry_Model_05.2012._454416_7. pdf.
- 17. Rep. "Michigan Department of Corrections Academic/Vocational Report FY2019-2020", MDOC, 2020.
- 18. Rep. "Michigan Department of Corrections Academic/Vocational Report FY2017-2017," MDOC, 2019.
- 19. Rep. "Michigan Department of Corrections Academic/Vocational Report FY2016-2017," MDOC, 2018.
- 20. Rep. "Michigan Department of Corrections Academic/Vocational Report FY2015-2016," MDOC, 2017.
- 21. Rep. "Michigan Department of Corrections Academic/Vocational Report FY2014-2015," MDOC, 2016.
- 22. James, Danielle. "Pregnant Prisoners Would Get Better Conditions If Bills Pass." *Spartan News Room.* May 8, 2020. https://news.jrn.msu.edu/2020/05/pregnant-prisoners-would-get-better-conditions-if-bills-pass-2/.
- 23. Senate Bill 830 (MI). http://legislature.mi.gov/doc.as-px?2020-SB-0830
- 24. Pregnant Prisoners. Michigan Department of Corrections, n.d. https://www.michigan.gov/corrections/0,4551,7-119-9741_12798-518133--,00.html.
- 25. Carlson, Joseph R. "Prison Nurseries: A Way to Reduce Recidivism." *The Prison Journal* 98, no. 6 (2018): 760–75. https://doi.org/10.1177/0032885518812694.
- 26. Rees, Corinne. "Childhood Attachment." British Journal of General Practice 57, no. 544 (November 1, 2007): 920–22. https://doi.org/10.3399/096016407782317955.
- 27. Campbell, Julie, and Joseph R. Carlson. "Correctional Administrators' Perceptions of Prison Nurseries." *Criminal Justice and Behavior* 39, no. 8 (2012): 1063–74. https://doi.org/10.1177/0093854812441161.
- 28. Dwyer, James G. "Jailing Black Babies." Utah Law Review 2014, no. 3 (2104): 465–541. https://dc.law.utah.edu/ulr/vol2014/iss3/2/.
- 29. Sufrin, Carolyn, Lauren Beal, Jennifer Clarke, Rachel Jones, and William D. Mosher. "Pregnancy Outcomes in US Prisons, 2016–2017." *American Journal of Public Health* 109, no. 5 (2019): 799–805. https://doi.org/10.2105/ajph.2019.305006.
- 30. Benoit, Diane. "Infant-Parent Attachment: Definition, Types, Antecedents, Measurement and Outcome." *Paediatrics & Child Health* 9, no. 8 (2004): 541–45. https://doi.org/10.1093/pch/9.8.541.
- 31. Hill, Leslie, Samuel J. Scaggs, and William D. Bales. "Assessing the Statewide Impact of the Specter Vocational Program on Reentry Outcomes: A Propensity Score Matching Analysis." *Journal of Offender Rehabilitation* 56, no. 1 (2016): 61–86. https://doi.org/10.1080/105096 74.2016.1257535.

- 32. Ellison, Mark, Kirstine Szifris, Rachel Horan, and Chris Fox. "A Rapid Evidence Assessment of the Effectiveness of Prison Education in Reducing Recidivism and Increasing Employment." *Probation Journal* 64, no. 2 (2017): 108–28. https://doi.org/10.1177/0264550517699290.
- 33. "Prison Teacher Salary Michigan, United States." Salary Expert. ERI Economic Research Institute, 2021. https://www.salaryexpert.com/salary/job/prison-teacher/united-states/michigan.
- 34. Duwe, Grant, and Valerie Clark. "Blessed Be the Social Tie That Binds." Criminal Justice Policy Review 24, no. 3 (2011): 271–96. https://doi.org/10.1177/0887403411429724.
- 35. Mears, Daniel P., Joshua C. Cochran, Sonja E. Siennick, and William D. Bales. "Prison Visitation and Recidivism." Justice Quarterly 29, no. 6 (2011): 888–918. https://doi.org/10.1080/07418825.2011.58 3932.
- 36. Assembly Bill A5942 (NY). https://www.nysenate.gov/legislation/bills/2019/a5942
- 37. Senate Bill S731A (NY). https://www.nysenate.gov/legislation/bills/2019/s731/amendment/a
- 38. Incarcerated Individual Statistics. New York State Department of Corrections and Community Supervision. Accessed November 4, 2020. https://scoc.ny.gov/pop.htm.

Trust In Governments As A Key Factor For The Effectiveness Of Public Policies: The Coronavirus First Wave Case

By Jean Vilbert

Abstract

According to the established literature on governance, trust in governments is a key element to determine the effectiveness of public policies. If citizens trust their government, they are more willing to cooperate with public programs and may even make personal sacrifices for the common good. With low levels of trust, however, even well-designed policies may fail due to the lack of social adherence. To test this hypothesis, this study analyzes the first wave of the coronavirus health crisis, between February and August 2020. The OLS regression performed shows a clear and statistically significant negative relationship between trust in government and both the number of cases and deaths from COVID-19. These results imply that policymakers should consider social trust when designing policies and view the nature of the relationship between civilians and the government as cooperative.

Introduction

Since February 2020, when the novel coronavirus began to spread around the globe, it has been testing governments and governmental operations. The levels of coordinated action, resource mobilization, sense of unity, capacity building, and service delivery now demanded are normally associated with wartimes. Crises like the COVID-19 pandemic cast light on the core functions of public governance. As societies search for a way out of this crisis, they face two challenges: (1) choosing the best policy responses, and (2) figuring out how to both rapidly and effectively implement them.

From the outset of the pandemic, governments' different approaches, response plans, and circumstances have led to remarkably diverse outcomes across nations. The United States, Brazil, and Mexico, for example, have struggled with recurrent outbreaks and might have started responding to the pandemic a little too late. In contrast, South Korea, Taiwan, and Singapore kept a flat epidemic curve by applying prompt and effective contact tracing, while Norway, Finland, and Australia managed to prevent huge outbreaks altogether. Despite all the efforts and

sometimes similar policy instruments employed by differing nations, policymakers and the academic community have tried to understand why they have experienced widely varying outcomes. Beyond government responsiveness to the pandemic, other factors that may help determine why the pandemic evolved disparately across the globe consist of: existent health infrastructure, population density, socioeconomic conditions, early and effective contact tracing, medical population characteristics, institutional structure, competent leadership, underlying cultural orientation, and levels of voluntary compliance.

Many factors, therefore, may jointly explain the disparities across countries, including the level of trust in the government, which has been overlooked. Trust is a characteristic of relationships among individuals, organizations and institutions that affects their interactions.3 In the relationship between citizens and their government, it is the social expectation that authorities are doing the right thing, according to each individual's subjective perspective, and will continue to do so.4 A high level of trust tends to increase the effectiveness of government activity⁵ because it sparks civil compliance and voluntary adherence.6 However, crises, such as natural disasters, economic downturns, political unrest, or a pandemic in this case can put this conviction in check. Low trust in authorities during these sensitive periods may reduce citizens' willingness to make sacrifices, which impacts the capacity of policymakers to implement successful strategies.⁷ For instance, people living in deprived areas, minorities, and communities of color have experienced both historical and current events of discrimination and feelings of "being left-behind," which leads to distrust in public institutions. Members of these communities may be more reluctant to follow the recommended safety measures. A way to overcome this hurdle is to engage in partnerships with trusted organizations that are internal to these communities.8

This is especially relevant when individual sacrifices are high and the gains are not immediately evident⁹ - keeping social distance, staying at home, closing a business, not gathering with family and friends, to fight an invisible enemy. If the degree of trust is not sufficiently high, dissatisfaction can turn into opting out, as Albert

Hirschamn explains in his classical book Exit, Voice, and Loyalty. According to Hirschman, people can essentially have three reactions when they are dissatisfied with the system they integrate: they can conform, they can voice that is, try to change the system from within by speaking out publicly, objecting and protesting – or they can simply exit. How much conformity and voice they will express before exiting depends on their degree of loyalty. 10 In the context of public policy, we can interpret loyalty as trust and exit as disregard for norms and regulations, which impact the outcomes of policies. Despite this, not much has been said about the role of trust in governments as a catalyst for effective measures to fight the COVID-19 health crisis. This study contributes to filling this gap by examining the association between trust in government and the number of cases and deaths from the novel coronavirus in 28 countries from February to August 2020.

Data and Methods

To test the hypothesis that the capacity of a nation to respond successfully to the pandemic depends on trust in government, I used a sample of 28 countries with at least 5,000 confirmed COVID-19 cases as of May 5, 2020, as reported by Johns Hopkins University.¹¹ The nations selected for this study come from diverse geographic regions: North America: Canada, United States, and Mexico; South America: Brazil, Chile and Colombia; Western Europe: Belgium, France, Germany, Ireland, Italy, Netherlands, Portugal, Spain, Switzerland, and the United Kingdom; Scandinavia: Denmark, Finland, and Norway; Central Europe: Austria and Poland; Eastern Europe: Russia; Asia: Japan, Indonesia, Israel, Turkey, and South Korea; Oceania: Australia. Because the pandemic arrived later to the continent of Africa than to these other regions, no African countries are included in this analysis.

The sample also excluded countries without data on the following indicators: number of cases and deaths linked to COVID-19,12 government stringency, daily tests per thousand of population,13 spending on measures to fight the pandemic,14 percent of population aged 65 and above,15 hospital beds per 1,000 people,16 Human Development Index,17 Gini Index,18 and trust in the national government.¹⁹ HDI, Gini, aged population, and hospital beds are adopted to control for socioeconomic development, levels of inequality, population health conditions, and previous heath infrastructure. They are important to ensure that the comparisons across governments' response to the pandemic will be drawn among countries with similar underlying conditions. Without their inclusion, the results could be distorted, under- or overestimating the effects of the explanatory regressors. Government

stringency, tests, and government spending are the core of the policies implemented to deal with the pandemic, following the World Health Organization's guidelines that recommend strict rules of social distancing, reduced individual mobility, and financial aid.²⁰ They are aligned with trust in government, the factor pointed as an omitted variable that can contribute to the outcomes, that is, the effectiveness of the policies to reduce the number of cases and deaths for COVID-19.

In order to explore the effects of the response to the pandemic, an interval must be set between implementation and assessment, that is, the window between when policies were put into place and when the number of cases and deaths are computed. This definition is essential because once a government issues a stay-at-home mandate, for example, people must change their behaviors to comply with the order. Within the viral spread window, those who present symptoms are hospitalized or induced to test. The number of tests and deaths are recorded and then finally reported. Especially in the first months of the pandemic, COVID-19 results and deaths were reported after several weeks. Misattributing this time-interval might result in an inaccurate analysis due to inference bias.²¹

To address the obstacle of the inference bias, I decided the time-interval (lag between policies and outcomes) a priori, before running the regression.²² To set the proper interval, I considered that (a) there is a twoweek lag between a measure being enacted and the effect on case reports,²³ (b) individuals can test positive for up to six weeks after symptom onset,²⁴ and the period for (c) incidence is 21 days and for mortality 33 days.²⁵ Therefore, while this estimation is complex and the timing of the policy impact is large and varies,26 for the purpose of this paper, a window of three months between policy implementation and its expected effects is adequate to cover the spread of the disease and the death toll. The policies - spending, income support, tests, stringency - were considered as those in place on May 5, 2020. The number of cases and deaths were measured cumulatively from the beginning of the pandemic until August 5, 2020. And because this window is short, there is no substantial variance among the policies the same country adopted within it. The standard observed was a gradual or abrupt increase in stringency, tests, spending, and income support. This allows for a one-time cross section analysis instead of repeated cross section or multiple time series.

A cross-country comparison is possible, even allowing for differences in when the pandemic hit or peaked in each region. To confirm this was the case, I ran comparative analyses by clustering, including a larger sample, excluding outliers, and extending the period of analysis. (1) Grouping countries according to the month when the

infection peaked in the first wave and checking the coefficients of correlation by month returns results consistent with the association found in this analysis. (2) Testing a larger sample (N = 42), to include all nations the OECD provides data on trust in government,27 but with fewer variables due to the lack of data on the other parameters, yields similar results, which upholds the applicability of the cross-sectional methodology to the case. It is also important to note that the dataset includes neighboring countries whose first positive cases appeared in similar periods, but that presented broad differences in outcomes over time, with trendlines consistent with the results of this study in the medium run. (3) Testing the dataset with the exclusion of outliers — countries with low trust and a high number of cases/deaths or high trust and a low number of cases/ deaths - reduces the strength of the conclusions but, regardless, generates results strong enough to reject errors from randomness or distortion due to confounders.²⁸ (4) Given that all countries studied possessed additional new cases and deaths after May 6, 2020, the cumulative number of deaths (from February to August) does not mislead the associations.

Although the evaluation period extends for only six months, it provides sufficient data to compare public health outcomes between countries. Furthermore, updated data after this period show that the trends of the number of cases and deaths across nations were roughly sustained.²⁹ Relatively steady patterns of action and outcomes over time reveal that the conclusions of this study may be applicable in the medium- and long-run analyses, with the necessary precautions to avoid extrapolation – predicting beyond the data.³⁰

To address the research question, this analysis employed Ordinary Least Squares (OLS) models. The first model treated the number of deaths from coronavirus reported per million people of each country's population as the dependent variable. The number of deaths is used in the first model because how much a country is testing varies widely across sampled countries. For instance, some countries test very little in relation to their outbreak which causes the number of confirmed cases to represent only a small fraction of the total.31 Conversely, the number of deaths is less subjected to government actions - a positive test result is not required for a death to be registered as related to COVID-19 since "medical practitioners can record COVID-19 deaths if they think the signs and symptoms point towards this as the underlying cause."32 Therefore, the number of deaths weighted for the population size allows for sufficiently reliable comparisons across countries, especially if aligned with further analyses based on the number of cases, which will be performed in this study as a second and confirmatory regression.

It must be acknowledged that data at hand is far from perfect. There is still room for variations derived from countries' priorities - e.g., some countries may only count hospital deaths, whilst others include deaths in homes - or even at the micro-level, the decision-making of a hospital. The dataset used in this study features national numbers, which might overlook sub-national or regional differences. Indeed, these difficulties are not anomalies but rather evidence of the relative limitation of the quantitative data in complex situations. In such cases, researchers can improve their analysis by embracing interdisciplinarity, using all available information, from all disciplines. Numbers need to be complemented by qualitative analysis and historical perspective. An analyst's over-reliance on numerical data may drive governments to chase metrics that fail to reflect reality.³³ Ignoring these limitations leads to superficial analyses about the policies adopted to fight the pandemic and their outcomes.

Besides working with "good enough data," the best metrics available, precautions must be taken to avoid selection bias. One way to do that is to control for conceivable omitted variables, lurking factors associated with the regressors and the regressed variable, that impact the results. The goal is to ensure that the coefficients of the regression are unbiased estimates of the mean of the true population.³⁴ Aware of these obstacles, the present analysis seeks to combine quantitative and qualitative knowledge and observes the mentioned statistical precautionary measures by dividing the independent variables into two groups:

1) Background: these measures are included to control for socio-economic differences and other conditions that can directly impact the status of a country's population. (a) Human Development Index (HDI), a metric calculated based on three components of well-being: life expectancy at birth, years of formal education, and real Gross National Income (GNI) per capita.³⁵ (b) Gini coefficient (Gini), a measure of economic inequality commonly calculated according to the distribution of income.³⁶ Developed countries where the inequalities are smaller, therefore possessing a higher HDI and smaller Gini, are expected to respond better to crisis situations like a pandemic. (c) Percent of population aged 65 and above (Elderly), which accounts for those that are statistically more vulnerable to the virus. (d) Number of hospital beds per thousand of population (Hosp Beds), taking into account the healthcare infrastructure available to deal with the extraordinary demand during the pandemic.

2) Explanatory: these variables attempt to construct a general sense of the policies implemented by governments to

address the coronavirus and public trust in government. (a) Spending per capita on the federal level to address the virus (Spending). (b) Income support, according to the Oxford COVID-19 Government Response Tracker (Ox-CGRT), as an indicator of direct cash payments or similar, including universal basic income and payments to firms if explicitly linked to payroll/salaries (Income Support). This metric is an indicator variable that represents categorical data - it takes 0 if the country offers no economic support or covers less than 50 percent of lost salary; it takes 1 if the country covers more than 50 percent of lost salary. (c) Government stringency, a value between 0 and 100 in the OxCGRT index, which considers ten metrics: school closures, workplace closures, cancellation of public events, restrictions on public gatherings, closures of public transport, stay-at-home requirements, mask mandates, public information campaigns, restrictions on internal movements, and international travel control (Stringency). (d) COVID-19 tests per thousand of population (Tests). (e) Trust in the national government (Trust), from the OECD. As trust is based on a positive perception of the government, it is measured by surveys. In this case, the variable pulls data from the Gallup World Poll.

There is no hard norm set regarding how extreme skew or kurtosis values must be to indicate non-normality. Hair Jr et al. (2010) suggests that ±2.0 for skewness and ±7.0 for kurtosis are moderate thresholds when assessing multivariate normality. As descriptive statistics and the conducted analysis reveal, the distributions of the dependent and some of the independent variables are skewed or display levels of kurtosis considered somewhat high. In fact, they were transformed — logarithm in the case of Gini and hospital beds and square-root to stringency and number of deaths (right skewness); trust was squared (left skewness). This procedure makes coefficients more challenging to interpret,³⁷ and imposes certain constraints on the rates of return but allows the dataset to better meet the normality assumptions with no alteration in the magnitudes at the point to distort the original relationships.

Running the regression, Step 1 includes all background variables. Step 2 adds government stringency. Step 3 adds the spending and income support variables. Step 4 adds tests. Finally, Step 5 incorporates trust in government. The analysis of the regression results will mainly focus on the more complete *fifth* step. The structure of hierarchical regression (comparison of nested regression models) points out which variables of interest explains a statistically significant amount of variance in the dependent variable after accounting for all other variables.³⁸

Analysis and Results

Table 1 reports the correlations of the five explanatory variables, controlled by the background factors, on the dependent variable, in this model deaths for COVID-19 per million of population (square-root).

In Step 1, the socio-economic variables, background indicators, are inserted primarily to control for countries' unobserved heterogeneity, that is, omitted factors. They often do not have correlational effects themselves.³⁹ Even though, it is worth mentioning that the element "Hospital Beds" was statistically significant (P = 0.039). This may highlight the importance of previous medical infrastructure in managing hospitalizations and reducing the mortality rate⁴⁰ and explains why thinkers like Merdardo Avila Vazquez have argued that the Coronavirus will open an opportunity window for countries to reshape their healthcare systems.⁴¹

Controlling for the background factors in Step 2, a weak positive association is observed between how strict governments' responses are and the number of deaths for coronavirus (P = 0.021). One question raised by such a finding is whether this is evidence against stricter government policies. Carrying an "inverse" bivariate regression by inserting government stringency (squared) as the dependent variable and deaths per million (square-root) as the independent variable, a positive association is returned ($\beta = 98.3417$; P = 0.009; R-squared = 0.2364; F = 8.05). Refuting claims of association in both directions, it might be argued that outbreaks lead countries to rigorousness and not the opposite. In any case, the "strictness of government policies does not measure or imply the appropriateness or effectiveness of a country's response". 42 Other elements, such as trust, as examined in this study, play a role in the ultimate impact that policies have on outcomes.

Holding "Government Stringency" constant, the background variable "Elderly" (population aged 65 and above) becomes statistically significant (P = 0.092). While control variables are not always informative, this result is in line with the existent empirical evidence showing that the mortality rate of COVID-19 is more than 62 times higher among those ages 65 or older.⁴³

The absence of statistical significance of the financial variables, "Spending per capita" on the federal level to address the virus (P = 0.859) and "Income Support" (P = 0.953), in Step 3 must not be interpreted as lack of correlation because in statistical models "we never declare the null hypothesis to be true (or 'accept' the null), because we simply do not know whether it's true or not." Yet, it is not possible to convey here the same level of evidence brought when government stringency was discussed – the "inverse" bivariate regressions, with "spending" (squared)

	Step 1	Step 2	Step 3	Step 4	Step 5
HDI	38.2954	33.4815	36.2502	27.6123	.8809
	(33.3623)	(30.2221)	(42.0788)	(45.7469)	(36.71)
	[0.263]	[0.280]	[0.399]	[0.553]	[0.981]
Gini (log)	17.6131	15.2833	15.9967	16.3825	-12.1584
	(12.2406)	(11.1054)	(12.3435)	(12.5889)	(12.71021)
	[0.164]	[0.183]	[0.210]	[0.209]	[0.351]
Elderly	.5830	.6683	.69772	.6572	.2744
	(.41772)	(.3791878)	(.43578)	(.4500)	(.3694)
	[0.176]	[0.092]	[0.125]	[0.161]	[0.467]
Hosp Beds (log)	-6.7768	-4.6736	-4.7001	-4.3161	-5.4778
	(3.0992)	(2.9274)	(3.0909)	(3.2270)	(2.5560)
	[0.039]	[0.125]	[0.144]	[0.197]	[0.046]
Stringency (sq)		.0023	.0022	.0020	.0019
		(.0009)	(.0010)	(.0011)	(.0008954)
		[0.021]	[0.043]	[0.093]	[0.045]
Spending (sqrt)			0137	0109	.0259
			(.07610)	(.0776)	(.0618)
			[0.859]	[0.889]	[0.680]
Income Support			.2284207	.1537	4.1247
			(3.8403)	(3.9127)	(3.2685)
			[0.953]	[0.969]	[0.223]
Tests				2.6099	1.3045
				(4.8438)	(3.8230)
				[0.596]	[0.737]
Trust (sqrt)					-4.4510
					(1.2450)
					[0.002]
R-sq	0.2503	0.4140	0.4149	0.4237	0.6630
R-sq adj	0.1199	0.2808	0.2101	0.1811	0.4945
F	1.92	3.11	2.03	1.75	3.94
N	28	28	28	28	28

Table 1: Results of OLS Regressions

Note: Beta coefficients; Standard errors in parentheses; P-values in brackets [P < 0.1 in italic].

Transformations: sq = squared; sqrt = square-root; log = natural logarithm.

and "income support" as the dependent variable and deaths per million (square-root) as the independent variable, returned P-values of 0.873 and 0.425 respectively. Thus, the data do not support the conclusion that countries spending the most are the ones hit hardest.

In Step 4, testing is brought into the analysis. Despite the absence of statistical significance in this sample (P = 0.596), it should be noted that to look at the number of tests in isolation is not informative. Tests must be evaluated in relation to the size of the outbreak and the moment when they are performed – the experience in South Korea suggests that early testing may be effective in limiting the number of cases; Brazil, Mexico, and the United States, in contrast, tested little relative to the size of the outbreak. Thus, further analysis and a larger sample would be necessary to draw more accurate conclusions about the effects of testing and tracing.

Finally, Step 5 inserts the variable of interest, "Trust in Government" (P = 0.002), statistically significant with an alpha of 0.01. It also makes the adjusted R-squared (coefficient of determination) rise steeply from 0.1811 to 0.4945 (an increase of 171 percent). The R-squared value

of 0.6630 reveals a good model fit. It is worth pointing out that there is no value that automatically determines that the regression is "good" enough. Data from scientific controlled experiments often have values of R-squared in the 80 to 90 percent range or even higher. Data from observational studies, though, often show relatively weak associations and an R-squared of 50 to 30 percent or even lower might be taken as evidence of a useful regression. ⁴⁶ The adjusted version here describes less of the variance due to the number of variables in the regression – without the background group, this metric would be higher.

Besides the jump in the R-squared, the strong effect of the variable Trust on the other variables reinforces its relevance. In the first four models, the inclusion of new variables led to only modest alterations in the magnitudes of the coefficients. However, when Trust comes to the regression, the coefficient on HDI falls from 27.6123 to .8809 and on Gini from 16.3825 to -12.1584. Among the explanatory variables, Tests moves from 2.6099 to 1.3045 and Spending from -.0109 to .0259. This suggests that Trust was an omitted variable kept in the error term until its inclusion in the model. Put differently, the regressor

Trust is a determinant of the dependent variable (number of deaths for coronavirus).

Though this association cannot be interpreted as causality, it arises strongly in the last step of the hierarchical regression, after the model was adjusted for known and plausible confounders. This series of analyses suggest that even controlling for economic, cultural, educational, and health background, policy stringency, spending, income support, and testing, "Trust in Government" is a key factor in determining the effectiveness of the government's responses to the coronavirus crisis. Figure 1 shows graphically the relationship between these two variables.

There seem to be two main clusters in the figure. The first, on the upper left of the graph, depicts countries with low trust and a higher number of deaths for COVID-19. The second, on the bottom right, represents countries with high trust and a lower number of deaths for the disease. Japan and Korea at the center bottom, and France, United States, and Belgium in the upper center, all sit in the middle on the trust spectrum but presented contrasting death tolls (similar trust but very high or very low number of deaths), which may be explained by other variables. For example, nations that were hit by previous epidemics (MERS/SARS) may have developed greater individual preparedness or public familiarity with social distancing practices.⁴⁷

Culture, human interactions, and social processes, which are often subtle, indirect, and outside of awareness, can also determine the level of efficiency of public policies. Anthropological research shows that North American and many Western European cultures tend to positively value acts like kissing and hugging. This expressivity of the self is much less common in Asian cultures, a relevant issue to be considered in policy implementation and that can define the likelihood of interpersonal transmission of the

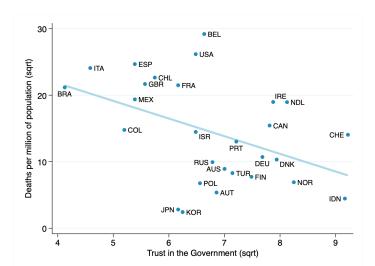


Figure 1: Trust in Government and Deaths from Coronavirus (Source: WHO and OECD)

virus.48 Another, related, dimension of cultural variance refers to "tightness" and "looseness." Sociological research has pointed out differences between cultures that are "tight," that is, have many strong norms, versus cultures that are "loose," or present higher tolerance of deviant behavior.49 Thus, cultures considered "tight," such as Singapore, Japan, and China may have more means to enforce sanitary measures during a pandemic than cultures that ordinary have weaker social norms, such as those of the United States, Italy, and Brazil.⁵⁰ Philosophical investigations, in their turn, reveal that nations that ordinarily prioritize individual freedom over security might face extra difficulties with coordination in the course of a pandemic. Policy instruments that include social control are predicted to be more effective in places like South Korea, Taiwan, and Hong Kong, where the cultural traits are believed to induce higher levels of public cooperation and voluntary compliance.51

At this point, one may question whether an analysis of the number of cases of COVID-19 would return similar results. The number of deaths relative to the size of the population seems to be a better indicator for the effectiveness of the country's response to the pandemic, given the approximation between limiting the spread of the disease and preventing deaths. All the same, to strengthen its results, this analysis presents a second regression set using the number of confirmed cases as the dependent variable. It maintains the hierarchical structure but drops two variables related to health conditions, which are by nature uncorrelated with the number of cases. The results are reported in Table 2.

The additional regression confirms the results of the first model. When trust in government is added in the fifth step, the adjusted R-squared jumps from 0.2484 to 0.3261 (an increase of 31.28 percent). The effect of trust

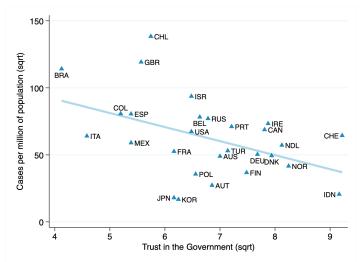


Figure 2: Trust in Government and Cases of Coronavirus (Source: WHO and OECD)

	Step 1	Step 2	Step 3	Step 4	Step 5
HDI	150.0042	163.4276	141.2936	53.7108	-33.3090
	(113.5905)	(107.4139)	(156.3819)	(161.8088)	(160.2683)
	[0.199]	[0.141]	[0.376]	[0.743]	[0.837]
Gini (log)	114.034	98.0500	96.0216	101.2607	51.5213
	(43.3182)	(41.6454)	(44.4768)	(43.2556)	(48.9924)
	[0.014]	[0.027]	[0.042]	[0.029]	[0.306]
Stringency (sq)		.0067	.0069	.0042	.0044
		(.0033)	(.0039)	(.0042)	(.0039)
		[0.055]	[0.092]	[0.322]	[0.283]
Spending (sqrt)			.0606	.0695	.0846
			(.2736)	(.2653)	(.2514)
			[0.827]	[0.796]	[0.740]
Income Support			.0832	4502	11.4070
			(13.9702)	(13.5494)	(14.3412)
			[0.995]	[0.974]	[0.436]
Tests				27.0057	24.0592
				(17.4224)	(16.5733)
				[0.136]	[0.162]
Trust (sqrt)					-9.5287
					(5.1503)
					[0.079]
R-sq	0.2363	0.3470	0.3485	0.4154	0.5008
R-sq adj	0.1752	0.2653	0.2004	0.2484	0.3261
F	3.87	4.25	2.35	2.49	2.87
N	28	28	28	28	28

Table 2: Results of OLS Regressions

Note: Beta coefficients; Standard errors in parentheses; P-values in brackets [P < 0.1] in italic.

Transformations: sq = squared; sqrt = square-root; log = natural logarithm.

over other correlations is also strong. For instance, the correlation with the background variable Gini decreases by almost a half and loses its statistical significance. In the last step, trust in government is the only explanatory variable that remains significant to explain the variation in the number of cases per million of population (alpha level of 0.1). This association is exhibited graphically in Figure 2.

Comparing Figures 1 and 2, it is possible to see that in the regression with the number of cases serving as the dependent variable (Figure 2), countries aligned even closer to the trendline, with smaller residuals, and better fit. The negative association can be interpreted as the correlation between trust in government and the capacity of countries to implement policies with efficiency to control or curb the spread of the virus. Overall, these findings support those of the regression analyses previously presented. Though the model has limitations (N=28 and a lack of more relevant elements: cultural features, biological characteristics, population density, regional differentiation, etc.) and may be considered oversimplified (given there are no interaction terms). Nonetheless it uses creditable data to clarify how trust in government is important in practical terms. Follow-up studies that apply more

complex modeling and additional factors are needed to adequately manage issues beyond those accomplished in this article.

Discussion

This research provides empirical support to the hypothesis that trust is a critical factor in the effectiveness of public policies intended to fight the COVID-19 pandemic. A statistically significant negative association was found between trust in government and both the number of cases and deaths from the disease.

These findings are in line with previous research asserting that authorities' trustworthiness is a major factor shaping citizens' willingness to accept their decisions, and thus consistently influences their feelings of obligation to obey.⁵² More than that, in a low-trust climate, citizens will not only prioritize immediate and short-term benefits, but also induce politicians to seek opportunistic gains through populism,⁵³ creating a vicious cycle. Trust, therefore, has the power to broadly shape political institutions, policy design, and their outcomes. In the case of the coronavirus, it may have been an underappreciated concept in

policy debates. Given that in democracies it is impossible to monitor the entire population all the time without sacrificing civil rights, reaching voluntary compliance of public health policies is crucial to stop the spread of disease.

Building partially on Albert Hirschamn's framework, many public policies, including ones designed to fight the coronavirus, may produce one of three common reactions: skepticism, opportunistic behavior, and adherence. When skepticism arises, mostly due to a lack of trust in authorities, a citizen might choose not to comply with a policy because he questions its importance or efficacy. In this context, one could ignore the mandate to use a facemask believing that masks are ineffective or unnecessary. In turn, opportunistic behavior might emerge when each person, individually considered, offers only a small contribution to the collective goal and there is not enough trust to agglutinate their actions. For example, a citizen can reason that if she does not stay at home but everyone else does, the spread of the disease will be curbed, a social benefit from which she cannot be excluded — a form of free-riding. If others, thinking along similar lines, also do not stay at home, then the goal will not be achieved. Either way, rational thinking in the context of a lack of trust in government concludes that it is better not to comply with public policies. Finally, adherence results from fear or from trust. The problem with fear is that democratic countries rely on individual rights and typically refute police state schemes — such as those based on invasive surveillance. In this framework, especially when the necessary degree of social adhesion to reach success is high, coercive control and enforcement upon every citizen becomes difficult if not impossible. Voluntary compliance and social pressure are ways around this problem, but they depend on trust.

It is possible to assert, by gathering the extensive literature mentioned thus far, that a citizen is likely to comply with social orders and even forgo short-term gains to experience a greater benefit in the future, if he has positive expectations of the outcome of the policy and a feeling of duty to abide by it. This should lead to a discussion about the critical role that trust plays in public governance and how crises may be best handled through collaboration with citizens (network-type mechanisms) rather than pure command-and-control (hierarchy-type mechanisms). Nevertheless, little has been said about it.

Part of that reluctance to speak openly about the impact of trust-building and trust-keeping in the outcomes of public policy may relate to the fact that declining trust is often seen as a major factor to spark reforms in the public sector.⁵⁵ Indeed, trust in government is falling across almost all advanced industrial democracies. In the United States, the Watergate scandal left a lasting stain, revived

by Edward Snowden in 2013. Personal scandals involving politicians also strained British faith in their political institutions in the mid-1990s. Even Germany saw support for its political process sink after reunification, and Sweden, a country responsible for shaping a model of social democracy that other states ought to emulate, has dealt with diminishing trust due to economic crises within its own welfare system.⁵⁶ In Latin America, repetitive cases of corruption have led to historical levels of distrust.⁵⁷ Similar situations have already stimulated electoral reforms in Japan, New Zealand and Italy.⁵⁸ Politicians from nations where these reforms are still under discussion certainly do not want to add another brick to this wall. The reason is that the processes of change in the political and economic systems typically induce winners and losers, representing a risk to those in power.⁵⁹

It is also worth noting that despite the apparent "consensus in the academic literature that trust influences the relationship between citizens and governments, and has an impact on the outcomes of public policy,"60 its subjective aspect raises some criticism. As it relies on personal expectations and what citizens perceive as correct, clientelist relations may lead to high levels of trust. However, low trust can be regarded as an expression of a healthy democratic attitude, linked to freedom of speech, criticism, and popular oversight, ensuring that the government will not become autocratic and meet the expectation that policy must correspond to the people's wishes.⁶¹ Such analysis, though, weighs the linkage between trust (as an indicator) and "good governance." Here, the focus is on the relationship between trust and the effectiveness of public policies.

Naturally, this discussion is vital when the entire world is dealing with a pandemic, but citizen trust in government is essential for efficient policy-making both in times of hardship and of relative stability. Investing in trust should be considered a central piece of improving the relationship between governments and citizens and reinforcing social cohesion, as "a sign that governments are learning the lessons of the crisis." In the words of Senator Ed Muskie of Maine, quoted by Al Gore, "There are only two kinds of politics. They're not radical and reactionary or conservative and liberal or even Democratic and Republican. There are only the politics of fear and the politics of trust."

At the efficiency level, the politics of trust surpasses the politics of fear by far. Both the literature (Hawkins 1990⁶⁴; Ayres and Braithwaite 1992⁶⁵; Bardach and Kagan 2002⁶⁶) and empirical studies (Tyler and Degoey 1996⁶⁷; Scholz and Lubell 1998⁶⁸; Amoah et al. 2017⁶⁹) have shown that the use of threat and legal coercion is more expensive to implement and less effective than willing compliance.

Murphy emphasizes that to shape desired behavior, policymakers need to move beyond "motivation linked purely to deterrence." Strategies directed at increasing trust between the *two sides* (government ↔ citizens) may prove "particularly effective in gaining voluntary compliance."⁷⁰

Trust operates in multiple directions. A complementary set of trusts (citizens in government; government in citizens; within-government; between citizens) determines the performance of public governance. Therefore, shifting to a "co-design," "co-decision," "co-implementation" model of governance requires a higher level than if there is a deliberate choice not to shift to this model of collaboration.⁷¹

The socio-political costs of a non-collaborative political system might be extensive. If members of society think their opinions are ignored and their wants unful-filled, they will not put their trust in the government – the authorities and the regime they operate represent only a political force powerful enough to control or dominate. With no "we-feeling", there is no social cohesion, and the result is a reduced compliance with public policies, leading to unimaginable costs for all involved.

Conclusion

The importance of coordinated action amid a pandemic is beyond debate. If different actors, from neighbors to local and federal governors, adopt compatible policies, everyone benefits from the effective fight against the spread of disease and the timely safe return. Should they adopt conflicting strategies, everybody loses — both the public health and the economy are harmed and the recovery delayed. Coordination problems like this are normally solved through a mechanism that guides actions and interactions,⁷³ and this might lend empirical support for propositions to address these issues through strong central management. Still, the number of deaths from the novel coronavirus in several developed countries casts doubt on the ability of governments, without the cooperation of citizens, to offer efficient responses to the challenges presented by the pandemic.

This stresses the critical role that trust plays in public governance and how crises may be best handled through network-type mechanisms (rooted in collaboration with citizens) rather than pure hierarchy-type mechanisms (based on command-and-control). As a consequence, the results of this study have implications not only for the policymaking process but also for the recognition of the nature of the relationships between civilians and the government in democracies, which must be seen as relationships of cooperation, not subjection.

Within this renewed perspective, (a) governments

should be able to better shape their policies, improving outcomes for all; (b) the role of the citizens in public governance can be enhanced; (c) the notion of a social contract between citizens and the state is reinforced – residents contribute not only by obeying the law but also by co-operating in the design and implementation of public policies.⁷⁴ High levels of trust, however, do not come effortlessly and governments need to be more open, transparent, and responsive in their interactions with citizens.⁷⁵

Further research is needed to discuss the drivers of trust in governments and to build objective policy recommendations. In any case, recognizing and better understanding the impacts of trust in policymaking already provides a distinctive lens through which analysts and rulers may see the relationship between governments and citizens from a more horizontal perspective – verticalization will not always work, even when people are harmed by the lack of compliance to the public policies.

Appendix A

To confirm that the analysis carried in this study is reliable regarding the cross-country comparisons, it is useful to cluster countries according to the apex of the pandemic (7-day moving average) in the first wave (March, April, May, or July) and then check, in each group, the coefficients of correlation between the trust in government and the number of cases and deaths for COVID-19 per million of population. The results are reported in Table 2, corroborating the existence of correlation in all groups.

Appendix B

Since preliminary analyses did not show statistical significance of interactions between the explanatory variables, except for a small effect on spending and stringency, they were not included in the final model presented above. Interaction effects occur when the effect of one independent variable is contingent on the value of another variable. Table 4 displays the effects on the dependent variable (number of deaths from coronavirus reported per million people of each country's population) of the interaction between the variables government stringency and spending per capita to address the virus. It was the only interaction that returned statistically significant results in the dataset.

Spending and government stringency, therefore,

MARCH		Deaths - Trust	Cases - Trust	
Austria France Germany Italy	Norway South Korea* Spain Switzerland	-0.6314	-0.2085*	
itury	APRIL			
Belgium Denmark Finland Ireland Israel	Japan** Netherlands Portugal Turkey United Kingdom	-0.1875**	-0.1869**	
	MAY			
Chile*** Canada	Poland Russia	-0.4312	-0.5834	
_	JULY			
Colombia Australia Brazil	Indonesia Mexico United States	-0.7857	-0.6844	

Table 3: Coefficients of Correlation by Month when the infection peaked * South Korea, with low trust and low cases, drives the correlation down in March. Excluding South Korea, the coefficient jumps to -0.4042.

seem to be connected — the relationship between the number of deaths for coronavirus and spending probably depends on the government stringency and vice versa. The inclusion of the interaction variable in Step 2 of this regression boosted the R-squared adjusted by 43.19 percent (from 0.2132 to 0.3053). Nonetheless, as the independent variables used in this study contributed individually to the variance on the dependent variables (cases of and deaths from COVID-19), and spending and stringency were not the focus of the analysis, unnecessary complexity was avoided by maintaining the main model with no interaction terms.

Notes

- 1. Vernon J. Lee, Calvin J. Chiew, and Wei Xin Khong, "Interrupting transmission of COVID-19: lessons from containment efforts in Singapore," *Journal of Travel Medicine* 27, no. 3 (2020).
- 2. Max Roser et al., "Coronavirus Pandemic (COVID-19)," *Our World in Data*, January 8, 2021. https://ourworldindata.org/coronavirus#coronavirus-country-profiles.
- 3. Geert Bouckaert, "Trust and public administration," *Administration* 60, no. 1 (2012): 94.
- 4. David Easton, *A Systems Analysis of Political Life* (New York: John Wiley & Sons, 1965): 184-85.
- 5. "Trust in government, policy effectiveness and the governance agenda," in *Government at a Glance* 2013, (Paris: OECD Publishing, 2013), 20-21.
- 6. Kristina Murphy, "The Role of Trust in Nurturing Compliance: A Study of Accused Tax Avoiders," *Law and Human Behavior* 28, no. 2

	Step 1	Step 2
Stringency (sq)	.00270	.00003
	(.00089)	(.00153)
	[0.005]	[0.985]
Spending (sqrt)	.05275	26544
	(.04804)	(.15973)
	[0.283]	[0.110]
Interaction		.00006
Stringency &		(.00003)
Spending		[0.049]
R-sq	0.2715	0.3825
R-sq adj	0.2132	0.3053
F	4.66	4.95
N	28	28

Table 4: Results of OLS Regressions Note: Beta coefficients; Standard errors in parentheses; P-values in brackets [P < 0.1]in italic].

Transformations: sq = squared; sqrt = square-root; log = natural logarithm.

^{**} Japan, with low trust and low cases and deaths, drives both correlations down in April. Excluding Japan, the coefficients would be -0.4312 (deaths) and -0.5834 (cases). *** Chile is the only nation in the dataset where the pandemic peaked in June. It was then nested in May, once the spread of the disease decreased rapidly in the country after middle-June.

(2004): 187.

- 7. "Trust in government, policy effectiveness and the governance agenda," in *Government at a Glance* 2013, (Paris: OECD Publishing, 2013), 22.
- 8. Jay J. Van Bavel et al., "Using social and behavioural science to support COVID-19 pandemic response," *Natural Human Behavior* 4, (2020), 463.
- 9. "Trust in government, policy effectiveness and the governance agenda," in *Government at a Glance* 2013, (Paris: OECD Publishing, 2013), 20.
- 10. Albert O. Hirschman, *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States* (Cambridge: Harvard University Press, 1970).
- 11. "Cumulative Cases by Days Since 50th Confirmed Case," Johns Hopkins University & Medicine. Accessed January 5, 2021. https://coronavirus.jhu.edu/data/cumulative-cases.
- 12. Thomas Hale et al., "Coronavirus Government Response Tracker," *University of Oxford*, January 7, 2021. https://www.bsg.ox.ac.uk/research/research-projects/coronavirus-government-response-tracker#data.
- 13. Roser et al., "Coronavirus Pandemic (COVID-19)".
- 14. "Policy Responses to COVID-19," IMF. Accessed January 9, 2021. https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19
- 15. United Nations, *World Population Ageing 2019: Highlights*. https://www.un.org/en/development/desa/population/publications/pdf/ageing/WorldPopulationAgeing2019-Highlights.pdf
- 16. "Hospital beds (per 1,000 people)," the World Bank. Accessed January 9, 2021. https://data.worldbank.org/indicator/SH.MED. BEDS.ZS
- 17. "United Nations Development Report 2020," UNDP. http://hdr. undp.org/sites/default/files/2020_statistical_annex_all.xlsx.
- 18. "Gini index (World Bank estimate)," World Bank, accessed January 9, 2021. https://data.worldbank.org/indicator/SI.POV. GINI?end=2018&start=1972.
- 19. "Government at a Glance 2019," (Paris: OECD Publishing, 2019): 158-162.
- 20. "Coronavirus disease (COVID-19) advice for the public, 2020," WHO. 6 January 2021. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public
- 21. James Lopez Bernal, Steven Cummins, and Antonio Gasparrini, "Interrupted time series regression for the evaluation of public health interventions: a tutorial," *International Journal of Epidemiology* 46, no. 1 (Feb 1, 2017): 348-355. doi: 10.1093/ije/dyw098.
- 22. Nazrul Islam et al., "Physical distancing interventions and incidence of coronavirus disease 2019: natural experiment in 149 countries," BMJ 2020 (July 15, 2020). doi: https://doi.org/10.1136/bmj.m2743.
- 23. Jonas Dehning, "Inferring change points in the spread of COVID-19 reveals the effectiveness of interventions," *Science* 369 no. 6500, eabb9789 (July, 10 2020). doi: 10.1126/science.abb9789.
- 24. Ji Hoon Baang et al., "Prolonged Severe Acute Respiratory Syndrome Coronavirus 2 Replication in an Immunocompromised Patient," *The Journal of Infectious Diseases* 223, no. 1 (Jan 1, 2021): 23–27. https://doi.org/10.1093/infdis/jiaa666.
- 25. Katherine A. Auger et al., "Association Between Statewide School Closure and COVID-19 Incidence and Mortality in the US," *JAMA* 324, no. 9 (2020). doi:10.1001/jama.2020.14348. 859-870.
- 26. Noah A Haber et al., Policy evaluation in COVID-19: A guide to common design issues, Cornell University (31 Dec 2020). arXiv:2009.01940.
- 27. DEU, POL, CHE, ISR, CZE, KOR, JPN, HUN, ISL, PRT, GBR, NZL, LTU, DNK, FRA, NOR, EST, NLD, IRL, AUT, CAN, TUR, AUS,

- LUX, SWE, USA, LVA, ITA, CHL, MEX, BEL, ESP, FIN, GRC, SVN, IDN, RUS, CRI, IND, ZAF, BRA, COL.
- 28. The removal of outliers was proceeded only in the comparative tests. All countries with complete data available were included in the final analysis presented in this study.
- 29. Roser et al., "Coronavirus (COVID-19) Deaths," Our World in Data. Accessed January 8, 2021. https://ourworldindata.org/covid-deaths.
- 30. Richard D. De Veaux, Paul F. Velleman, David E. Bock, *Stats: Data and Models* (Pearson, Hoboken, 2020).
- 31. Roser et al., "Coronavirus (COVID-19) Deaths," Our World in Data. Accessed January 8, 2021. https://ourworldindata.org/covid-deaths.
- 32. Roser et al., "Coronavirus (COVID-19) Deaths," Our World in Data. Accessed January 8, 2021. https://ourworldindata.org/covid-deaths
- 33. Jerry Z. Muller, *The Tyranny of Metrics* (Princeton: Princeton University Press, 2018).
- 34. James Stock and Mark Watson, *Introduction to econometrics* (Boston: Pearson, 2015).
- 35. Neva Goodwin et al., *Macroeconomics in Context* (Taylor and Francis, New York, 2019), 213.
- 36. Neva Goodwin et al., *Macroeconomics in Context* (Taylor and Francis, New York, 2019), 16.
- 37. The percentage rate of return of the coefficient on Trust is given by the following formula: $d\ln(y)/dx=0.5$ *ßtrust*trust_sqrt^(-0.5)
- 38. Bommae Kim, "Hierarchical Linear Regression," *University of Virginia*, May 20, 2016. https://data.library.virginia.edu/hierarchical-linear-regression/.
- 39. James H. Stock and Mark W. Watson, *Introduction to econometrics* (Boston: Pearson Addison Wesley, 2006), 234.
- 40. Kali Barrett et al., "Estimation of COVID-19-induced depletion of hospital resources in Ontario, Canada," CMAJ 192, no. 24 (2020): 640-46.
- 41. Medardo Avila Vazquez, "Coronavirus ¿y después?" Tricontinental (Jun, 22, 2020). https://www.thetricontinental.org/es/ba-research/fp-avilavazquez/?fbclid=IwAR2VOD1VQv9DjNXiG4Y3EPy-vDRn0Jjjmvp0_o4NSMPwSvKKiGC2TFeON0eQ
- 42. Roser et al., "Policy Responses to the Coronavirus Pandemic," Our World in Data, January 5, 2021. https://ourworldindata.org/policy-responses-covid.
- 43. David Yanez, "COVID-19 mortality risk for older men and women," *BMC Public Health* 20, no. 1742 (2020).
- 44. Richard D. De Veaux, Paul F. Velleman, and David E. Bock, *Stats: Data and Models*. (Boston: Pearson/Addison Wesley, 2005).
- 45. Joe Hasell, "Testing early, testing late: four countries' approaches to COVID-19 testing compared," Our World in Data. May 19, 2020. https://ourworldindata.org/covid-testing-us-uk-korea-italy.
- 46. Richard D. De Veaux, Paul F. Velleman, and David E. Bock, *Stats: Data and Models.* (Boston: Pearson/Addison Wesley, 2005).
- 47. Emma Graham-Harrison, "Experience of Sars a key factor in countries' response to coronavirus," The Guardian, March 15, 2020. https://www.theguardian.com/world/2020/mar/15/experience-of-sars-key-factor-in-response-to-coronavirus.
- 48. Jay J. Van Bavel et al., "Using social and behavioural science to support COVID-19 pandemic response," *Natural Human Behavior* 4, (2020), 463.
- 49. Michele J. Gelfand et al., "Differences between tight and loose cultures: a 33-nation study," Science 332, 1100–1104 (2011). 50. Michele J Gelfand, Jesse R Harrington, and Joshua Conrad Jackson, "The Strength of Social Norms Across Human Groups," *Perspectives on Psychological Science* 12, no. 5 (2017): 800–809. doi:10.1177/1745691617708631.

- 51. Brian Y. An and Shui-Yan Tang, "Lessons From COVID-19 Responses in East Asia: Institutional Infrastructure and Enduring Policy Instruments," *American Review of Public Administration* 50, no. 6-7 (2020): 790–800.
- 52. Tom R. Tyler and Peter Degoey, "Trust in organizational authorities: The influence of motive attributions
- on willingness to accept decisions", In Roderick M. Kramer and Tom R. Tyler (Eds.), *Trust in organizations*:
- Frontiers of theory and research (London: Sage, 1996): 331–356.
- 53. Dora Gyorffy, *Institutional trust and Economic Policy: Lessons from the History of the Euro* (Central European University Press, Budapest, 2013).
- 54. Geert Bouckaert, B. Guy Peters and Koen Verhoest, *The Coordination of Public Sector Organizations Shifting Patterns of Public Management* (Basingstoke: Palgrave Macmillan, 2010).
- 55. Geert Bouckaert, "Trust and public administration," *Administration* 60, no. 1 (2012):100.
- 56. Russell J. Dalton, "The Social Transformation of Trust in Government," *International Review of Sociology* 15, no. 1 (2015), 133.
- 57. German Petersen, "Latin Americans are protesting and throwing out corrupt regimes. Why now?", *The Washington Post* (June 1, 2018). https://www.washingtonpost.com/news/monkey-cage/wp/2018/06/01/in-a-wave-latin-americans-are-protesting-and-throwing-out-corrupt-regimes-why-now.
- 58. Russell J. Dalton, "The Social Transformation of Trust in Government," *International Review of Sociology* 15, no. 1 (2015), 150.
- 59. Daren Acemoglu and James Robinson, Why Nations Fail (New York: Crown Publishers, 2012).
- 60. "Government at a Glance 2019," OECD, 158.
- 61. Geert Bouckaert and Steven Van de Walle, "Comparing Measures of Citizen Trust and User Satisfaction as Indicators of 'Good Governance': Difficulties in Linking Trust and Satisfaction Indicators". *International Review of Administrative Sciences* 69, no. 3 (2003): 333-34. 62. "Trust in government, policy effectiveness and the government."
- agenda," in *Government at a Glance 2013*, (Paris: OECD Publishing, 2013), 20.
 63. Al Gore, "The politics of fear" *Social Research* 71, no. 4 (2004):
- 63. Al Gore, "The politics of fear" *Social Research* 71, no. 4 (2004): 792.
- 64. Keith Hawkins, "Compliance strategy, prosecution policy and Aunt Sally: A comment on Pearce and
- Tombs," British Journal of Criminology 30, no. 4 (1990): 444-66.
- 65. Ian Ayres and John Braithwaite, *Responsive Regulation: Transcending the Deregulation Debate* (New York: Oxford University Press, 1992).
- 66. Eugene Bardach and Robert A. Kagan, *Going by the book: The problem of regulatory unreasonableness.* (London: Routledge, 2002).
- 67. Tom R. Tyler and Peter Degoey, "Trust in organizational authorities: The influence of motive attributions
- on willingness to accept decisions", In Roderick M. Kramer and Tom R. Tyler (Eds.), *Trust in organizations:*
- Frontiers of theory and research (London: Sage, 1996): 331–356.
- 68. John T. Scholz and Mark Lubell, "Trust and taxpaying: Testing the heuristic approach to collective action," *American Journal of Political Science* 42, no. 2 (1998): 398-417.
- 69. Anthony Amoah et al., "In gov we trust: the less we pay for improved electricity supply in Ghana." *Energy, Sustainability and Society* 7, no. 29 (2017).
- 70. Kristina Murphy, "The Role of Trust in Nurturing Compliance: A Study of Accused Tax Avoiders," *Law and Human Behavior* 28, no. 2 (2004): 187.
- 71. Geert Bouckaert, "Trust and public administration," *Administration* 60, no. 1 (2012): 97.
- 72. David Easton, A Systems Analysis of Political Life (New York: John

- Wiley & Sons, 1965): 311
- 73. Jean Vilbert, "Game Theory and the Politics of Coronavirus," *Areo Magazine*, May 15, 2020. https://areomagazine.com/2020/05/19/game-theory-and-the-politics-of-coronavirus.
- 74. "Trust in government, policy effectiveness and the governance agenda," in *Government at a Glance* 2013, (Paris: OECD Publishing, 2013), 36.
- 75. Geert Bouckaert, "Trust and public administration," *Administration* 60, no. 1 (2012):106.