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Mission Statement: In Berkeley Economic Review, we envision a platform for the recognition of quality undergraduate research and writing. Our organization exists to provide a forum for students to voice their views on current economic issues and ultimately to foster a community of aspiring economists.

FROM THE EDITORS' DESK

Dear BER Reader,

The field of economics is being reshaped by the times we are living through, and we understand that you may be looking to better grasp the world as it stands today. This year is a testament to the fact that the populace is willing to change and uproot outdated systems and that the world is not as static as economic theory assumes. Therefore, Berkeley Economic Review strives to help people understand the changing economic landscape by covering topics that are informative, relevant, and relatable. Our hope for our magazine, Equilibrium, is to engage in defining current economic thought and serve as a platform for young economists to define this new chapter in the study of economics.

We have curated a selection of articles spanning a diverse set of fields, from health and development economics to politics and international relations. These articles are divergent in thought, defy geographical boundaries, and represent the experiences of different cultures. As we continue to live through unprecedented times, we believe that these articles will empower our readers to play an active role in shaping the world around them.

The 77 staff members of Berkeley Economic Review's six departments and executive team have come together to produce this timely and illuminating edition of our magazine, and we hope you enjoy reading our work as much as we enjoyed producing it.

With great gratitude and pride, we present to you the 5th issue of Berkeley Economic Review's magazine, Equilibrium.

Selena Zhang & Parmita Das
Editors-in-Chief
Berkeley Economic Review

THE CASE OF THE MISSING JAPANTOWN

BY ANI BANERJEE

At the turn of the 20th century, Salt Lake City, Utah was doing well. Utah had recently passed the population cap for statehood in 1896, going from a simple territory to a federally-recognized state, and it had a massive mining boom to thank for its good fortunes. People were flooding into Utah, most of whom were "New Immigrants" from Eastern and Southern Europe. There were also already settled communities of Chinese-Americans in the state's urban areas, many of whom had either worked on the railroads that connected Utah to the rest of the US or were the children of those who did. And, while Asian immigration into Utah wouldn't reach a peak until the 1970s, there was a sizable and growing contingent of Japanese Americans who called the state capitol of Salt Lake City home in the late 19th century. In fact, by 1910, Salt Lake City boasted one of the largest Japantowns in North America.

Salt Lake City's Japantown was a thriving—if small—community: 2,000 residents strong, with established businesses, places of worship, and community centers taking up 16 square miles between South Temple and State Street in Salt Lake City's downtown area. However, of the original 32 blocks of Japantown, today only two buildings remain. Salt Lake's lost Japantown is not alone. Of the dozens of Japantowns that existed at the beginning of the 20th century across the United States, only three survived to see the 21st. Why did these Japantowns disappear, and what happened to the residents of America's lost Japantowns?c

GOLD DUST ON A GILDED AGE

In the middle of the 19th century, gold dust from California, transported over newly constructed railroads, was processed into ore by Utah's most famous minority group: the Mormons. However, by the 1860s, Utah began turning its attention away from middle-man production and towards investing in mining for natural resources in its own borders. This was a fortuitous decision, and the state ended up striking gold itself, along with rich veins of silver, copper, lead, and zinc. By the 1870s, the quarries and mines established in the mountains and flats of Utah had begun attracting attention from British and other foreign investors, and the individual efforts of frontiersmen miners were slowly overcome by well-dressed capitalists managing massive mining operations from the comfort of offices with newly invented air conditioning.

Of those mines, the most productive in the state was the Bingham Canyon Mine, established in the southwest corner of Salt Lake County. Over the next five decades, the mine would produce a combined 420 million USD ore, mostly mined copper. Adjusted for inflation, that was roughly 8.5 billion USD produced by the 15,000 residents of Salt Lake City over the course of just 50 years.

Mines needed people to work them, and America in the late Gilded Age had no shortage of immigrants willing to work for low wages. Between the 1890 and the 1920 censuses, the population of Salt Lake City nearly tripled to about 120,000 residents by the beginning of the Jazz Age. By 1900, nearly 20% of the population of the city was also foreign-born, with 8.3% of those foreign-born residents being Japanese-Americans. Despite our modernconception of an American "melting pot" of harmoniously multicultural society, there were significant ethnic tensions under the surface of Gilded Age America.

Anti-Asian racism would come to a head with the first ever restriction on immigration in federal history: the Chinese Exclusion Act of 1882. This happened after the In re Ah Yup ruling of 1878, which denied naturalization rights to all people of Chinese ethnicity—and later, all people of Asian descent—on the basis of race, laying the foundation for another event inspired by anti-Asian sentiment, a half-century later. Salt Lake City's Chinese population, brought to the city by the aforementioned railroads and clustered around Plum Alley, slowly dwindled away in the face of legislation meant to make life difficult for Chinese immigrants like the Geary Act or Mcreary Amendment. This story that would later reprise itself again in Salt Lake City.

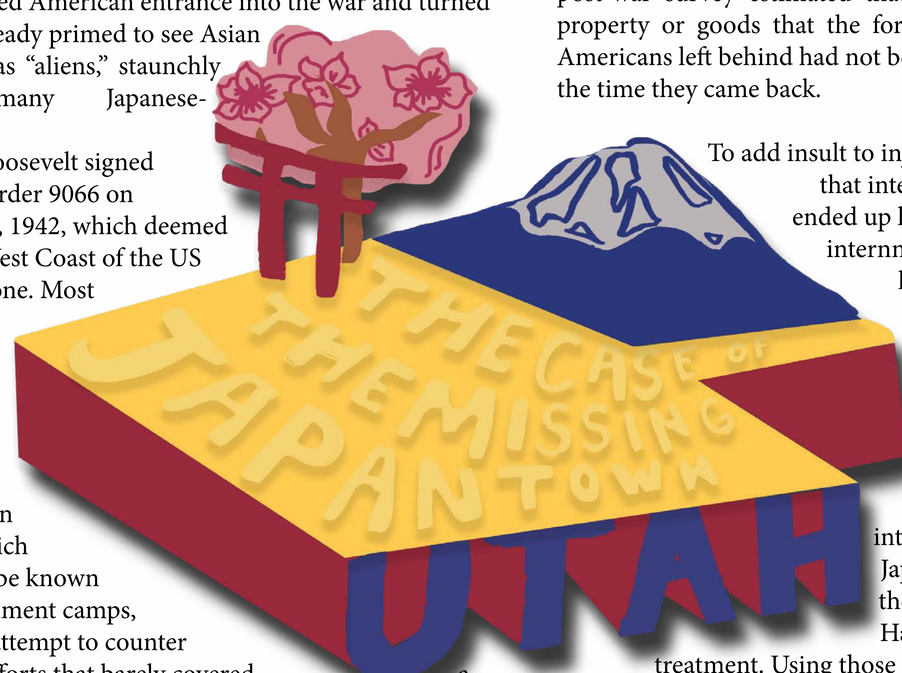
After the flow of Chinese laborers was stopped, Japanese immigrants came to the US and filled in many of the gaps left in railroad companies and factories on the West Coast. The same pattern of disgruntlement over perceived "stolen" wages and distrust of foreigners led to another set of ethnic tensions and in 1916, the Anti-Japanese League was founded in Seattle. Wherever there were significant populations of Japanese-Americans, the Anti-Japanese League found a home as well, and on July 27, 1920, the Seattle Star ran an inflammatory headline that read:

EXCLUSION! The Solution That Means Peace.

THE ELEPHANT IN THE ROOM: INTERNMENT

The 1940s were tumultuous years for Americans. The dominant narrative goes like this: after a decade-long economic depression, combated by FDR's financial reforms and public works projects, the outbreak of World War II meant salvation for the American economy, which enjoyed a manufacturing boom concentrated in cities. Like many dominant narratives, however, this story isn't necessarily universal.

Key to the story of Japantowns is how America joined the war. The surprise bombing of Pearl Harbor in December, 1941 triggered American entrance into the war and turned a public, already primed to see Asian Americans as "aliens," staunchly against many Japanese-Americans. President Roosevelt signed Executive Order 9066 on February 19, 1942, which deemed the entire West Coast of the US a military zone. Most famously, it ordered "all persons of Japanese descent" to be sent to "relocation centers," which later would be known as the internment camps, in an overt attempt to counter espionage efforts that barely covered a racist expression of anti-Japanese sentiment. Over the next six months, over 100,000 Japanese-Americans would be sent to the internment camps, about two-thirds of whom were American citizens.



Throughout the three years of internment, the Topaz internment camp was the fifth-largest "city" in Utah. The widespread sentiment among Utah officials was resentment: almost all of the interned Japanese in Topaz came from the San Francisco Bay Area, and, as state officials from the Salt Lake City governor's meeting remarked: they would not "stand for being California's dumping ground." Widespread sentiment in Utah regarding the Topaz camp mostly fell along the lines of wishing to keep the US a "white man's country," and the belief that all Japanese-Americans in the camps were "enemy aliens," despite the fact that the majority of them were citizens. This belief may have carried over even after the dismantlement of the camps, into a widespread sentiment towards all Japanese-Americans after the war.

As for the Japanese residents, they were informed that they had a week to take care of their loose ends before they would be sent to the camps. With only a week to sell homes and businesses, many were forced to sell at below-market prices. Those who did keep their homes or businesses would return three years later to farms in disrepair and ransacked homes and businesses. Recent calculations put the economic damage to Japanese-Americans due to internment at between 1-3 billion USD during just 1942, or anywhere from 2-5 billion USD in today's money. One post-war survey estimated that only about 20% of the property or goods that the formerly interned Japanese-Americans left behind had not been ransacked or stolen by the time they came back.

To add insult to injury, there is also evidence that interned Japanese-Americans ended up having lower income post-internment than they would have had they remained free for the interim three years. Economist Aimee Chin took advantage of the natural experiment afforded by the fact that while 97% of West Coast Japanese-Americans were interned, only one percent of Japanese-Americans outside the West Coast, almost all in Hawaii, were given the same treatment. Using those non-West Coast Japanese-Americans as a control, she estimated that, for up to 25 years after internment, the income of male interned Japanese-Americans was anywhere from 9-13% lower than their free counterparts.

If the economic effects of internment persisted well into the 1960s, that would explain why the Japantown of Salt Lake City disappeared in that decade as well. This was what happened to the vast majority of Californian Japantowns; Japanese populations returned to neighborhoods undergoing gentrification that would push out any recalcitrant Japanese residents over the latter half of the 20th century. Denver, Colorado and Portland, Oregon shared similar fates. Here, Japanese-Americans came back from internment to face increased prejudice and few job opportunities, forcing them to relocate elsewhere.

The only problem? Utah-born Japanese-Americans belonged to the control group of Japanese people in America who were not subject to Order 9066: the vast majority of them were never interned. Salt Lake's Japantown would not be a direct victim of internment, then, but of geopolitical circumstances and urban planning choices beyond residents' control.

THE SWINGING SIXTIES AND THE SALT PALACE

Salt Lake City's Japantown is unique amongst lost Japantowns for having a single year to point to as the community's turning point. In 1966, all but two buildings in the heart of Japantown were demolished to make space for an ambitious citywide project.

The population of Salt Lake City had begun stagnating early in the 20th century, as more and more residents settled in the suburbs and nearby towns at the outskirts of the city. By 1960, as suburbanization reached an all time high in the United States, Salt Lake City was actively losing its population across all demographic groups but with a majority focus on white flight. Like the Gilded Age, the 1960s were also a period of mixed economic outcomes, but, unlike the 1890s, this economic variability did not favor Salt Lake City. As its inner city downtown experienced commercial decline, the city began looking for a quick fix for their fiscal woes. The solution they hit upon? Hosting the Winter Olympics.

There are already several articles addressing the costs and benefits of hosting an Olympics (many of which popped up during Rio de Janeiro's turn to host in 2016), though in the 1960s, the debate was less about damaging underprivileged communities and more about the creation of several thousand jobs to add to a flagging economy. As a result, in 1964, Salt Lake City added their name to the bid for the 1972 Winter Olympics and began working on a suitable opening arena.

The first problem with hosting the Olympics in a city with no Olympic stadium was finding a suitable place to build one, and Rio de Janeiro hardly started the tradition of displacing minority communities in favor of construction for a one-time event. After a bond was approved to finance the building of the so-called "Salt Palace," city developers set their sights on redeveloping one downtown corridor—conveniently located in the city center and surrounded by cafes, restaurants, commerce. It also happened to be in the heart of the Salt Lake City Japantown. The city used eminent domain laws to acquire the land, displacing businesses, homes, and the people who owned and operated them. It then destroyed the majority of Japantown and constructed the Salt Palace in its place.

"SALT LAKE'S JAPANTOWN WOULD NOT BE A DIRECT VICTIM OF INTERNMENT, THEN, BUT OF GEOPOLITICAL CIRCUMSTANCES AND URBAN PLANNING CHOICES BEYOND RESIDENTS' CONTROL."

Despite preservation committees being formed in defense of the corridor of Japantown, the committees couldn't muster the support necessary to get the developers of the Salt Palace to pick another neighborhood. Because the Salt Palace was constructed as a public works project, and because of previously established antipathy towards Japanese-Americans, combined with a history of Asian-American's rights to owning property being invalidated, the people were kicked out of their businesses and off their land without too much fuss on the city's part. As for Japantown, it did what all living things do when their heart is pierced: it died.

IN CONCLUSION

Salt Lake City failed to win the bid for the 1972 Olympics, and ironically, the 1972 Winter Olympics ended up being hosted in Sapporo, Japan. Furthermore, in the summer of 1972, Denver, Colorado became the first city in history to refuse a winning bid to host the Olympics, citing the exorbitant costs of the games compared with their low economic benefits.

Salt Lake's fortunes would decline through the 60s and 70s until a reverse at the end of the 80s, when companies like WordPerfect, Novell, and Unisys made the state capital their headquarters. They successfully diversified the Salt Lake economy and turned the Salt Lake Valley into a center for medical services, but only after the city had weathered two decades of recession.

As for the Japanese-Americans who called the blocks between South Temple and State Street home, many of them started over in other parts of Salt Lake City, though others closed their businesses permanently and left for other parts of the country. When they did settle elsewhere, most Japanese-Americans followed the patterns of 50s and 60s suburbanization rather than settling in primarily Japanese neighborhoods in downtown areas. As for Salt Lake City's Japantown, two buildings remain today as a testament to what once was a living, breathing, community: The Japanese Church of Christ and the Salt Lake Buddhist Temple.

THE FINCEN FILES: TWO FAILURES IN INTERNATIONAL BANKING

BY VASANTH KUMAR

On September 20, BuzzFeed News published the FinCEN Files: an analysis of over 2,100 leaked Suspicious Activity Reports (SARs) submitted to the Financial Crimes Enforcement Network (FinCEN) Division of the Treasury Department. The SARs detailed over $2 trillion in suspect transactions and deals between international banking corporations—including JP Morgan Chase, HSBC, Deutsche Bank, and Standard Charter—and illicit organizations over the period from 2011–2017. The bank's clientele covered a broad range of illegal business ventures, from investments in drug cartels and terrorists to Russian oligarchs and corrupt government officials. Even still, the leaked SARs reported by Buzzfeed include just 0.02% of the 2 million SARs submitted by banks to FinCEN over the same period.

The report's publication and subsequent public backlash delineate two colossal failures in the financial system. The clearest fault lies with the banks who neglected to terminate many of these deals even after discovering them to be illegal. Less obvious, but just as pernicious, is the failure of the government, which did little to mitigate widespread financial crime despite possessing a wealth of wrongdoing information from the past nine years. The BuzzFeed report is just the latest glimpse into the underworld of international finance that reveals the complex and often poorly managed relationship between governments, banks, and the underground economy.

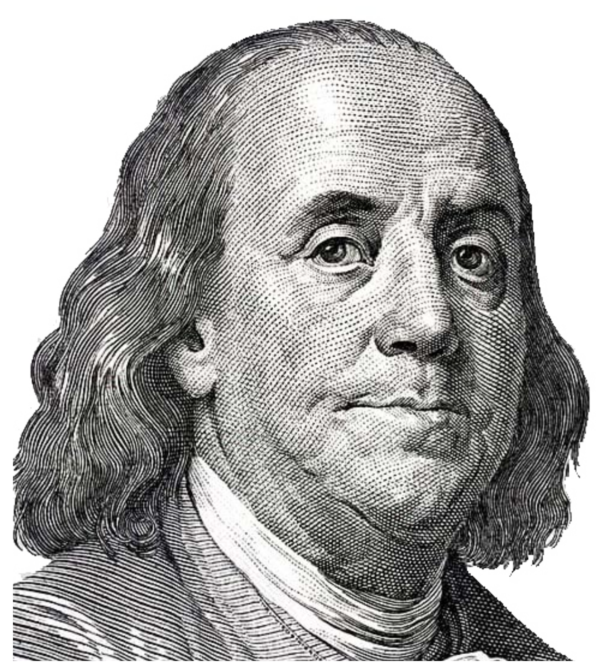
MONEY LAUNDERING AND THE UNDERGROUND ECONOMY

The "underground" economy constitutes the set of all illegal economic activities that go unreported to governments and regulators. Such activities include drug trafficking and terrorist financing, but more frequently take the form of illegal work in unregulated labor markets, which allows employers to escape payroll taxes and minimum wage regulations. The FinCEN Files scrutinized a particular activity within the underground economy: money laundering, or the process of removing and obscuring traces of economic activities from illegally obtained money for use in the legitimate economy. This process varies greatly, but generally includes three steps: placement, when illicit actors introduce "dirty money" into the financial system by depositing it in a bank account or fund; layering, where these funds are "shuffled," or passed through a series of investments, shell companies, and bank accounts to create an untraceable path to the original deposit; and finally, integration, where the funds are stored in a legitimate asset, such as real estate, a business investment, or luxury asset.

One of the most infamous money laundering schemes was the Russian Laundromat Case: from 2010–2014, Russian oligarchs successfully laundered at least $20 billion in embezzled government money. Exploiting lax regulations and ill-informed Moldovan courts, the launderers succeeded in funneling the money through shell companies and banks, including Deutsche Bank and Standard Charter, and stored the money in a Latvian bank for use in the EU. This example illustrates the critical role of international banks in "layering" laundered money: by facilitating business-to-business (B2B) transactions with anonymous shell companies, they allow actors to transfer money without using their identity.

A SHORT HISTORY OF INTERNATIONAL BANKING

The FinCEN report comes at the twilight of international finance's golden era of the early 2000s, revealing the widespread flaws of today's immense and poorly regulated international monetary infrastructure. The growth of cross-border trade and finance, particularly in the period between the Asian Financial Crisis (1997–1998) and the Great Recession (2007–2008), was accelerated by the shift in emerging markets' trade policy towards a current account surplus, which proved to be a more reliable source of money than foreign capital investment from rich countries. This unprecedented glut of exports significantly raised the level of international trade and necessitated a similar surge in the quantity of international transactions.



"TODAY, THIS SYSTEM HAS SWELLED AND MATURED INTO A COMPLEX NETWORK OF FINANCIAL STRUCTURES. BUT, IN THE AFTERMATH OF THE GREAT RECESSION, ITS VOLATILITY AND VULNERABILITY TO ILLICIT ACTORS HAVE BECOME MUCH MORE APPARENT."

Today, this system has swelled and matured into a complex network of financial structures. But, in the aftermath of the Great Recession, its volatility and vulnerability to illicit actors have become much more apparent. This is clearest in correspondent banking: a financial sector involving international money exchanges and cross-border deals between banks. The growth of correspondent banking has become the perfect environment for quick and anonymous money transfers, legitimate or otherwise. This trend has been driven by demand for foreign currencies, and the improvement of money transfer technologies such as SWIFT (a messaging system that securely confirms the transfer of money between international banks). In July 2020, SWIFT alone recorded an average of 37.5 million transfers per day, an 11% year-over-year growth. With millions of dollars in assets, deals, and daily international payments being made, the operations of a single bank are practically untraceable; their scale is the greatest protection for hiding illicit transactions.

National (FinCEN) and international (Financial Action Task Force, or FATF) law enforcement agencies were established with the intent of curbing such financial crimes and transactions with illicit actors. Created by the Bank Secrecy Act in 1970, FinCEN was tasked with addressing money laundering. However, the key motivation behind the act was actually to facilitate cooperation between federal law enforcement and the banks themselves: banks are required to report cash transactions, suspicious activities, and—after the passage of the Patriot Act—customer identities in the form of SARs to the Department of the Treasury.

THE FAILURE OF REGULATION

Why then, despite this regulatory framework, did BuzzFeed's exposé reveal a failure on the part of both banks and the government? Insufficient self-regulation of banks can largely be explained by perverse incentives offered to many banking executives. The same compensation system that encourages financial misrepresentation is also likely to discourage the honest reporting of potentially illegal transactions. However, the most significant failure is in the government's seeming inability and unwillingness to inflict penalties on banks, a prime example of which has been its handling of HSBC's financial crimes. In 2012, an investigation by the Senate's Subcommittee on Investigations revealed that billions of dollars in HSBC transactions were with drug cartels and US-sanctioned countries, the reporting of which was actively discouraged by bank executives. The Justice Department agreed to settle for $1.62 billion and a deferred prosecution agreement, which monitored a restructuring of HSBC's compliance division. No executives were charged as a result of the investigation. In Buzzfeed's report, the small fraction of HSBC's submitted SARs that were leaked revealed $4.4 billion in suspect transactions even after the 2012 agreement and noted that compliance officers' requests for client information were "ignored or rebuffed."

The case of HSBC is emblematic of the DOJ's attitude towards financial crime in general, motivated by a simple guiding principle: "too big to jail." Aversion to harsher penalties for banks or executives is justified by the potential effects a financial shock—such as executive prosecution, restructuring, or charter suspension—could have on the overall economy.

Former Assistant-Attorney General Lanny Brueur justified the DOJ's decision not to end HSBC's US charter, stating, "Our goal here is not to bring HSBC down, it's not to cause a systemic effect on the economy, it's not for people to lose thousands of jobs."

But this preference for mild deterrence can also devastate the economy by allowing money laundering and financial crime to flourish. Beyond the direct effects financing drug cartels and terrorists can have on social stability and well-being, money laundering increases corruption within financial institutions themselves. This corruption decreases domestic public trust in financial institutions and hinders domestic market growth. Abroad, the appearance of shaky financial institutions can contribute to capital flight from international investors. Frequently, money laundering itself can take the form of domestic investors seeking to move their capital abroad; about $20-40 billion in laundered capital is funneled into the US and Europe each year. And, with regard to the economy, laundering confines money into "sterile" investments, such as real estate and luxury goods, that tend to contribute little to economic growth.

The complicity of international banks and the DOJ in maintaining illegal activities within major enterprises degrades the reputation of financial institutions as reliable arbiters in the real economy. The indifferent and pessimistic public response to the recent BuzzFeed exposé confirms to banks like HSBC that the public does not expect reform or honesty in its financial institutions.

A NEW PERSPECTIVE

The government boxes itself into a lose-lose situation when it accepts complicity in bank malfeasance. Currently, legislators and prosecutors have two options in designing and executing regulation: light deterrence (e.g. SARs and fines) or harsh penalties (e.g. executive prosecutions and corporate restructuring). Under the former, immunity provides large incentives for banks to report illegal deals but no incentive to voluntarily end them. In the latter, fear of personal accountability provides incentives for executives to end illegal deals but a disincentive to report them. In either option, FinCEN fails to optimize cooperation and mitigate financial crimes. Addressing this dilemma requires the government to rethink its strategy with banks, and to rethink how banks ought to be structured.

The Ending Too Big to Jail Act offers a potential solution. Proposed by Senator Elizabeth Warren, the act would raise the stakes of participating in financial crime for banks' C-Suite executives by requiring them to annually certify that no criminal conduct had occurred under their management. Certification expands the grounds under which the DOJ can charge executives by removing the option to plead ignorance. The act would also re-christen the Special Inspector General for the Troubled Asset Relief Program (SIGTARP) as the Special Inspector General for Financial Institution Crime (SIGFIC), making it a permanent agency. In the aftermath of the Great Recession, SIGTARP was successful in prosecuting bank executives on criminal charges; as a permanent agency, it would add more firepower to the DOJ's investigations into financial crime.

However, the Act still fails to address the most fundamental problem in the triangular relationship between government, banks, and illicit actors. Banks, and specifically executives, do not have an incentive to thoroughly report suspect activity. Although compliance officers have submitted hundreds of SARs since the Bank Secrecy Act was passed, paltry information—encouraged by executives seeking to mitigate damages—limits direct government action against illicit actors. A meaningful proposal would require banks to include much more comprehensive records of their transactions and clients; this would also require B2B transaction records to include the name and location of the individual(s) behind the deal, rather than just the company. Such a provision would make SARs much more potent for FinCEN, and more importantly, target the greatest vulnerability in the international financial system: anonymity.

PEGGING PHARMACEUTICAL PRICES:
TRUMP'S PLAN TO BRING DOWN DRUG COSTS

BY PETER ZHANG

On September 20, BuzzFeed News published the FinCEN Files: Soaring costs are a recurring headline in American healthcare, and the centerpiece is the rising price of drugs. A GoodRx report from this September found that the cost of prescription drugs has increased by 33% since 2014. Compare this to the cost of home nursing or dental services, which have increased by 23% and 19%, respectively.

Pharmaceutical companies have continued to raise prices amid the COVID-19 pandemic. A report from Patients for Affordable Drugs, an organization dedicated to lowering the cost of prescription drugs, found that of "the 245 drugs with price increases, 61 are being used to treat COVID-19, 30 are in use in coronavirus-related clinical trials, and 20 are commonly administered in hospital ICUs." One company, Astrazenika, hiked prices by an average of 6% this year, despite receiving over $1 billion in federal funding to develop a coronavirus vaccine.

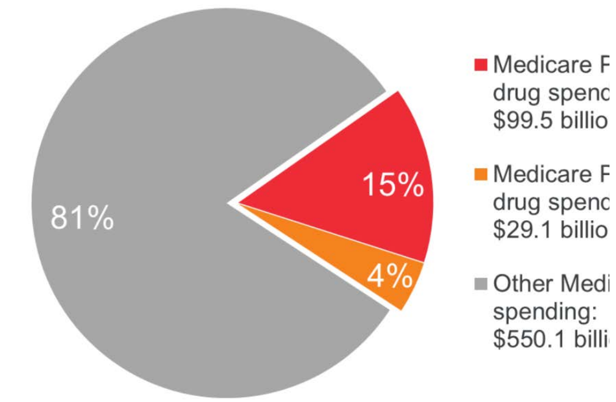
Price hikes are felt hardest by Medicare, the federally funded insurance program for the elderly. Medicare Part B provides coverage for inpatient drugs while Part D subsidizes prescription drugs. While both parts face high drug costs, Part B prices are 1.8 times higher than other countries. In fact, the Centers for Medicare and Medicaid Services attributed a 7% increase in 2020 Part B costs to physician-administered drugs. Together, Parts B and D consistently spend over $100 billion a year on pharmaceuticals.

Medicare costs are high because the program is unable to negotiate prices with drug manufacturers. The noninterference clause in the Medicare Modernization Act of 2003 stipulates that the government may not "institute a price structure for the reimbursement of covered part D drugs." Instead, the prices of Medicare drugs are calculated from the prices negotiated by private insurance companies. However, no single insurer represents more than a quarter of Part D participants, so private insurance companies have less individual leverage to bring down prices. As a result, manufacturers can charge unjustified high prices, particularly in the absence of competitors.

In 2016, President Trump made a campaign promise to bring down drug prices. For the past several years, Trump has advocated for using drug prices in other countries as a benchmark for Medicare prices. In July of this year, Trump signed an executive order that included his drug reference policy. He initially stalled on enforcing it, leveraging the policy in an attempt to gain concessions from the pharmaceutical industry. As these talks soured, Trump decided to move ahead.

On September 13th, President Trump scrapped the July order and issued a new executive order directing the Department of Health and Human Services to launch a demo of the policy. The underlying idea is captured by the "favored-nation" clause: for a given drug, Medicare will only pay the lowest price, adjusted for volume and GDP, offered to a comparable country.

Beyond this, most of the details are in the air. Trump has not specified which countries would be considered, although



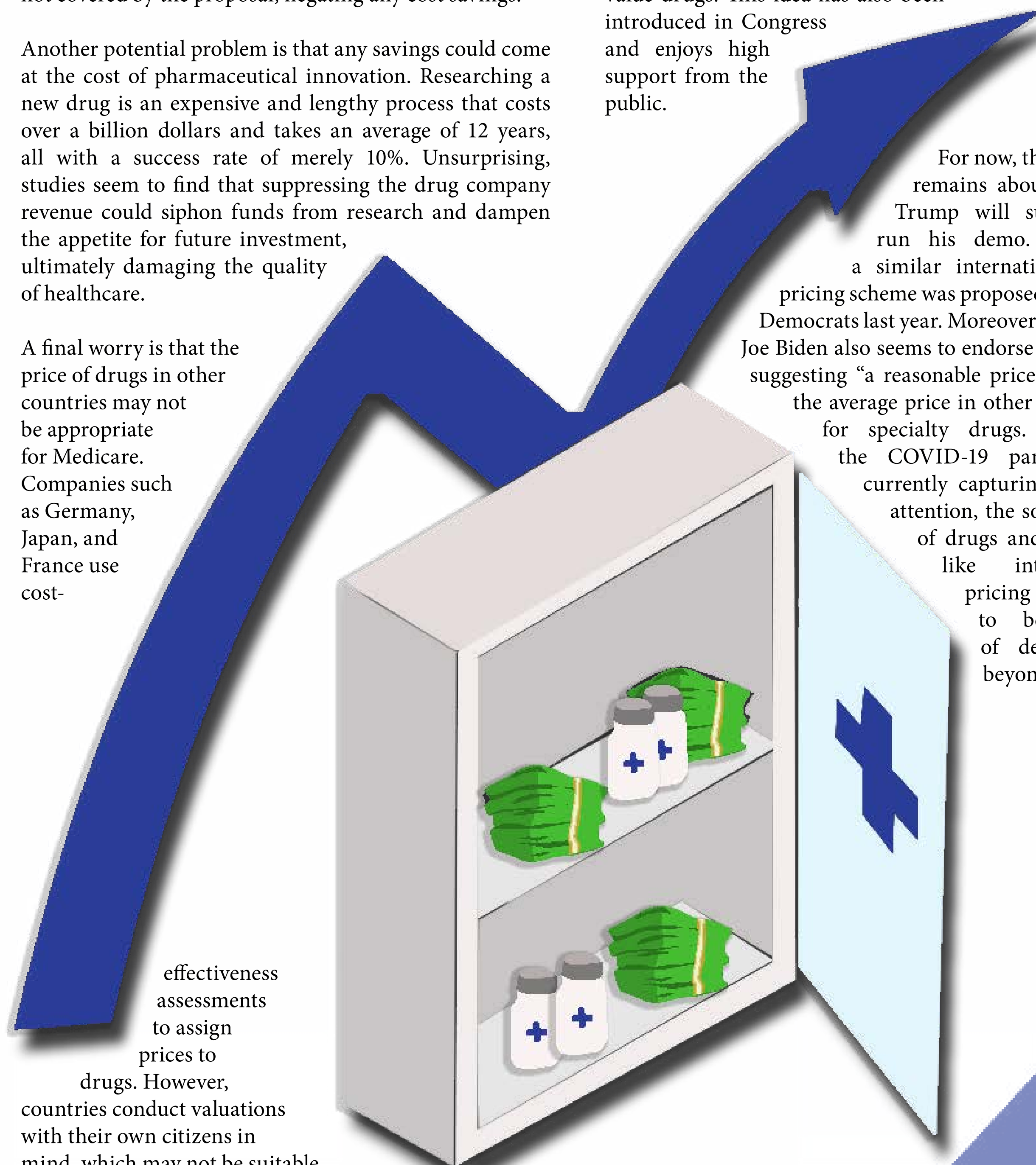
Total Medicare Drug Spending in 2016 = $128.6 billion
Total Medicare Spending in 2016 = $678.7 billion

Image Source: MedPAC

potential candidates include Canada, Japan, and a host of European countries. The order also leaves it open to the Secretary of the Department of Human Services, Alex Azar, to establish a payment model.

A litany of concerns have been brought up about the proposal. One worry is that the policy could simply induce cost-shifting, where companies recoup losses in one market by raising prices in another. Foreign countries face a collective action problem, where each sees strict price controls as in their own interest. If other countries aren't willing to raise prices, drug companies may resort to raising prices in the United States' private market. These downstream effects could not only hurt Americans with private insurance, but could also inadvertently raise prices for Medicare drugs not covered by the proposal, negating any cost savings.

Another potential problem is that any savings could come at the cost of pharmaceutical innovation. Researching a new drug is an expensive and lengthy process that costs over a billion dollars and takes an average of 12 years, all with a success rate of merely 10%. Unsurprising, studies seem to find that suppressing the drug company revenue could siphon funds from research and dampen the appetite for future investment, ultimately damaging the quality of healthcare.



A final worry is that the price of drugs in other countries may not be appropriate for Medicare. Companies such as Germany, Japan, and France use cost-effectiveness assessments to assign prices to drugs. However, countries conduct valuations with their own citizens in mind, which may not be suitable for Americans. For example, some commentators have suggested that valuation methodologies of countries like the UK and Canada tend to undervalue treatments for the elderly, chronically ill, and people with disabilities—not a great fit for Medicare.

One remedy for these shortfalls is to empower Medicare to directly negotiate prices. Instead of outsourcing negotiations to other countries, a government office dedicated to conducting cost-effectiveness assessments could help identify the proper cost of drugs for American consumers while encouraging the development of high-value drugs. This idea has also been introduced in Congress and enjoys high support from the public.

For now, the question remains about whether Trump will successfully run his demo. However, a similar international drug pricing scheme was proposed by House Democrats last year. Moreover, candidate Joe Biden also seems to endorse the policy, suggesting "a reasonable price, based on the average price in other countries" for specialty drugs. Although the COVID-19 pandemic is currently capturing national attention, the soaring cost of drugs and solutions like international pricing promise to be subject of debate well beyond 2020.

DANCING WITH THE DRAGON:
AN ECONOMIC HISTORY OF TAIWAN'S CHINA POLICY

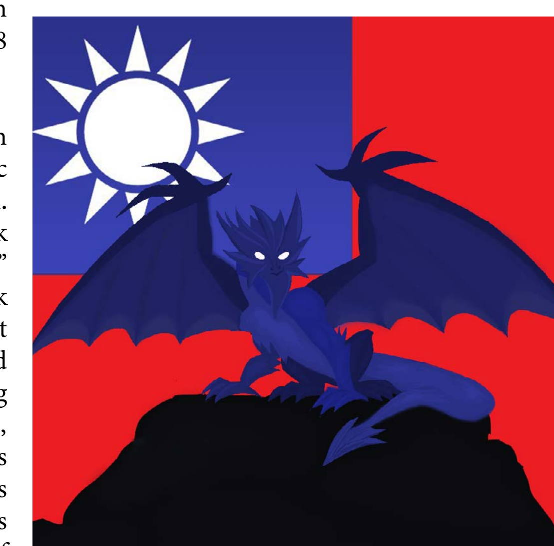
BY SZE YU WANG

We live in a time where politicians and entire governments group themselves based on their stance on Chinese trade. Emerging markets have welcomed China's economic cooperation, while more protectionist countries such as the US seem to be distancing themselves further and further away. Most are stuck trying to find a compromise in the rapidly widening gulf between the world's two superpowers. Over the past 70 years, the evolution of Taiwan's intricate relationship with China has shown a combination of all three trends—cooperation, decoupling, and compromise.

THE POST-WAR PERIOD

In 1949, the Chinese Civil War ended with the retreat of the Kuomintang (KMT) to the island of Taiwan. Both Taipei and Beijing claimed to be the only legitimate government of China, and what ensued was four long decades of "unremitting hostility." Cross-strait relations were essentially non-existent during this time.

Before the war, Taiwan was an importer of manufactured goods and an exporter of primary products, mainly sugar and rice. By the 1970s, Taiwan had reversed the situation, transforming into a major exporter of textiles, electronics, and other manufactured products. This export-driven growth miraculously turned the insignificant island economy into one of the biggest markets in Asia. In 1974, Taiwan's population was only 16 million, but its import numbers were 40% greater than India's (population of 596 million), and 80% greater than Indonesia's (population of 128 million).



This rapid economic expansion was accompanied by diplomatic and international isolation. President Chiang-kai Shek adhered to a "One China" principle: Taiwan would break off relations with any country that established ties with Mainland China. This led to a shrinking number of international allies, and in 1971, the United Nations voted to declare the People's Republic of China (PRC) as the rightful representative of China. The ROC (Taiwan) government was subsequently expelled.

HESITANT RAPPROCHEMENT AND PRAGMATIC DIPLOMACY

In the 1980s, Taiwan-China contact grew as a new generation of Taiwanese leaders sought to enhance Taiwan's international status while stabilizing relations with China. Politicians began developing the argument that since Taiwan was already independent, there was no need to provoke China by officially declaring independence. This new perspective paved the way for the next two decades of "strategic ambiguity." During this time, policy-makers emphasized domestic issues appealing to Taiwanese nationalism, while publicly assuring that Taiwan would not challenge the cross-strait status quo. Taiwan's China policy had shifted from an era of outright confrontation, to one of cautious and calculated compromise. Building on this new relationship, Taiwan relaxed restrictions on cross-strait economic interactions, setting off an explosion of Taiwanese entrepreneurs entering China, known as the Taishang ("Taiwanese businessman").

EMERGENCE OF THE TAISHANG

Taishang first emerged in the late 1980s and increased steadily through the 1990s. The democratization of Taiwan had led to stricter environmental and labor regulations, contributing to rising production costs. Taiwanese manufacturers saw Mainland China, with its cheap labor and lax regulations, as a better alternative. In 1989, the Tiananmen Square Massacre resulted in foreign investors pulling out of China, which created a window of opportunity for Taishang to enter and fill the void. They brought with them global connections, business know-how, and 30+ years of experience as a global manufacturing hub.

In the early 1990s, as the growth of Taiwanese investment to Mainland China greatly outpaced investment in Southeast Asia, the government introduced a series of "Go South" policies. These aimed to prevent excessive economic integration between Taiwan and

Mainland China, instead encouraging firms to relocate to Southeast Asia. Though initially successful, the "Go South" policies were in the end ineffective. Businesses were reluctant to leave the cheap, close, and culturally-familiar investment climate of China.

Consequently, cross-strait investment continued to grow at a fast rate. Local Chinese government officials, eager to attract the employment, economic growth, and tax revenue created by Taishang investment, introduced a plethora of incentives and concessions for Taiwanese businesses. Entire manufacturing supply chains had already moved en-masse to the mainland, and now technology-intensive industry also began entering on a large scale. From 1987 to 2008, Taishang brought more than $166 billion USD in investment, and from 1998 to 2008, Taishang were responsible for 14% of China's foreign trade.

CLOSER TIES, ECONOMIC INTEGRATION, AND A NEW "TAIWANESE" IDENTITY

In 2008, president Ma Ying-jheo took office with the intention of creating a more cooperative relationship with the mainland. Ma further liberalized cross-strait relations, and signed more than twenty economic and technical agreements. Most notable was the Economic Cooperation Framework Agreement (ECFA), a preferential trade agreement between Taiwan and China.

From 2009 to 2015, Taiwanese investment in China grew from $7 billion, to nearly $11 billion USD. Improved China relations also made further economic interaction between Taiwan and Southeast Asia possible, something Ma's China-wary predecessors had failed to achieve. ASTEP, a free trade agreement between Singapore and Taiwan, was signed without objection from Beijing because the ECFA had already been agreed. However, rising tensions in the South China Sea undermined Beijing's credibility in the region, and a potential triangular relationship between Taiwan, Southeast Asia, and China instead tilted towards a Taiwan-China partnership. At the time, Taiwan's economic integration into the mainland seemed inevitable and irreversible.

Unfortunately for him, Ma's China-friendly policies coincided with the consolidation of Taiwanese national identity. People now viewed themselves as uniquely "Taiwanese," as opposed to "Chinese." Combined with concerns over inequality and job losses, this led to widespread unease about Taiwan's increasing economic dependence on the mainland.

At the same time, Taishang were beginning to lose their once-favorable position. As more and more foreign manufacturers swarmed into China, Taiwanese businesses faced reduced profits due to the rollback of government incentives and the rising price of land and facilities. The advantages Taishang held over Chinese firms in global connections and business know-how were also quickly eroding. Taishang had fallen from a dominant role to an increasingly marginalized one.

A NEW COLD WAR

In 2016, presidential candidate Tsai-Ing Wen rode a wave of democracy support and anti-China sentiment to a landslide win. Tsai's victory brought Taiwan-China relations to their lowest point since the Cold War. Days after the election, China's People's Liberation Army held televised military drills in the coastal city of Xiamen, only 10 km away from the Taiwanese outpost of Quemoy. To punish Tsai's pro-independence leanings, China also began actively reducing group tours to Taiwan in an attempt to cripple its important tourism industry. This renewed hostility fueled worries of further economic retribution, spurring Taiwanese policy-makers to accelerate Taiwan's decoupling from the mainland.

President Tsai launched her New Southbound Policy (NSP) in late 2016, which, similar to previous "Go South" policies, aims to enhance ties with countries in Australasia and Southeast Asia. After the US-China trade war began in 2018, Taiwan also offered a three-year incentive plan for Taiwanese companies to move back across the strait. In November 2019, the UN Conference on Trade and Development listed Taiwan as the biggest beneficiary of the US-China trade war, after experiencing an increase of $4.2 billion in exports to the US in the first half of 2019.

These measures have made a marked impact on the structure of Taiwanese trade. Last year, outbound investment to NSP countries grew by 16%, while investment to China fell by 51%. In addition, despite China's efforts, Taiwan's tourist numbers have continued to grow. In 2019, the number of foreign visitors hit an all-time high, thanks in large part to an increase of 2.7 million visitors from NSP countries.

LOOKING TO THE FUTURE

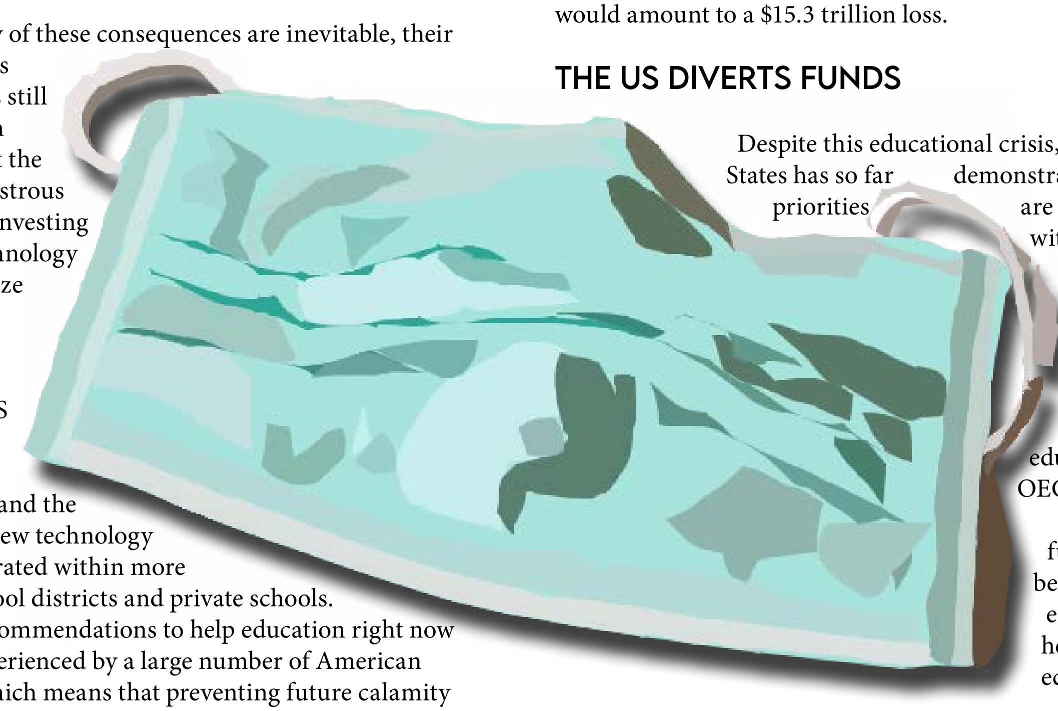
Taiwan's current situation demonstrates China's willingness to use economic and military tools to advance political objectives. As a result, a major concern for potential trade partners are the implications that Taiwanese economic cooperation could have on Chinese relations. As the Chinese economy grows in size and influence, the question remains if, like the "Go South" policies of the 1990s, Taiwan's trajectory of expanding away from the mainland will prove ultimately unsustainable. It will be intriguing to watch whether the small, isolated East Asian economy will be able to step out of China's shadow in an increasingly China-centric world.

A VACCINE WON'T CURE COVID-19'S EFFECT ON EDUCATION INEQUALITY

BY RIA BHANDARKAR

The coronavirus pandemic has forced people from all stages of life to transition to a more digital world. Although some groups of people have adjusted with few complications, it is America's youngest population who may be suffering the most. A recent report from the Organisation for Economic Co-operation and Development revealed that recent efforts to move students to remote learning have not been sufficient to make up for the lack of class time and personalized attention. At best, remote learning will delay students' abilities to learn critical skills on the same timeline as previous generations. At worst, it would amplify the already massive achievement gap between higher income, majority-white communities and lower income, minority ones while also creating a GDP decline that could last for decades.

While many of these consequences are inevitable, their magnitude is not. There is still time to push back against the current disastrous forecast by investing more in technology to standardize curriculum around the country. However, US education spending is decreasing, and the benefits of new technology are concentrated within more affluent school districts and private schools. The best recommendations to help education right now can't be experienced by a large number of American students, which means that preventing future calamity requires reorienting the entire education system. Right now, the United States is doing the opposite.



EDUCATION'S EFFECT ON THE ECONOMY

The coronavirus has manifested one of the worst recessions in American history, and the government's current response to the disruption in its public education system won't make the transition back to normalcy any easier. Although most students are still back in school, their curriculums are being cut in half and school days are being shortened. This can lead to a loss of skills which will impact the nation's long-term productivity.

On an individual level, students who take an abbreviated year of school could lose a chance to develop competency in areas that are built on in later years, lowering the chances that the average student would seek higher education, especially in technical fields. That could increase unemployment and decrease innovation in the long-term, meaning that the projected GDP loss would not be ameliorated in the near future.

According to the OECD, even if students this year lose only a tenth of a standard deviation of academic ability, the United States could face a 1.5% loss in GDP, even if later classes return to previous skill levels. That 1.5% baseline would amount to a $15.3 trillion loss.

THE US DIVERTS FUNDS

Despite this educational crisis, the United States has so far demonstrated that its priorities are not aligned with students. Although it is still too early to see the long-term plan for education, the OECD predicts that most funding will be diverted to either public health or the economy.

Governments decreasing education funding is not uncommon in a time of economic instability. In fact, the United States originally increased education funding in 2008 and 2009 before reducing it in 2010. Current forecasts suggest that education budgets will continue to decrease in the 2020s as public revenues decline, according to the World Bank Group.

The United States' main initiative in education funding so far has been the elementary and secondary school emergency relief aid provided through the CARES Act. At the same time, however, Secretary of Education Betsy DeVos chose to give private schools a disproportionate amount of aid. These measures exemplify the contradictory response the Department of Education has shown this past year.

THE MOST VULNERABLE SUFFER THE MOST

For all of the drawbacks mentioned above, some students will face little to no impairment during the crisis. School districts with excess funding and access to technology can more easily transition students to online school. Likewise, students who go to these schools can most likely afford tutors, subscriptions to education websites, and extra materials. Some very wealthy families have even created small learning pods to provide their children with some routine.

> "BUT STUDENTS IN POORER AREAS WITH LARGER MINORITY POPULATIONS COULD HAVE THEIR EDUCATIONAL EXPERIENCES UPENDED."

But students in poorer areas with larger minority populations could have their educational experiences upended. Majority white districts receive about $23 billion more in funding than majority non-white districts. Since most public school funding comes from local property taxes, this funding gap is at the foundation of the American education system.

The achievement gap is more than an impediment to students on an individual level. It slows economic growth and burdens governments and economies on a macro level. In 2009, McKinsey estimated that if the achievement gap between Black and Hispanic students and their white counterparts had been closed, US GDP would have been $426 to $705 billion higher. Furthermore, if the income achievement gap had also closed, US GDP would have been $332 to $550 billion higher.

The American achievement gap can only worsen during this time, and some students may not be able to recover from the recent disturbance to their education. The loss of revenue for states and towns during the pandemic won't be made up for in the near future. For example, New York state is expected to lose $62 billion over the next four years. Even emergency funds being set aside for education haven't been used to the fullest extent, with Governor Andrew Cuomo being accused of withholding funds.

NOT EVERY RESPONSE IS EQUAL

Areas that are affected the most by the achievement gap are unsurprisingly struggling. While no school district is "back-to-normal," some have been more successful in creating plans to continue on with the 2020-21 school year. These responses vary from district to district, and in some cases from state to state.

In fact, 28 states delayed re-opening for weeks beyond the standard first day of school, leading to nearly half of all American K-12 students unsure of when they'd receive instruction. Although starting later in the year may seem insignificant, it indicates that half of American students are attending school in districts which are figuring out their approach as the year progresses, creating more disorder in their learning environment and decreasing the chances that their teachers will be prepared for their new conditions.

And the resources for students to adjust to education during an epidemic are not distributed equally. According to data from Curriculum Associates, only 60% of low-income students were participating in digital instruction at the end of the 2020 school year while 90% of higher income students were. Unequal access to devices and Internet access could be the main factors, but students in higher income districts are also more likely to receive a more organized solution from their school administration.

Remote learning will lead to lifelong disadvantages for students in conflicting situations. The average K-12 students in the United States could lose between $61 and $82 thousand in lifetime earnings, equivalent to more than a full year's average salary. For Black and Hispanic Americans, that number is even more dire; they are expected to earn about $1 thousand a year less over their lifetimes than white students due to the pandemic.

Schools closing could also decrease the chance that students continue their education. It is expected that drop-out rates will decrease by 6.5 percent for Hispanic students, 5.5 percent for Black students, and 3.9 percent for White students.

ACCESSIBILITY IS KEY

The most obvious solution is an investment in technological solutions, specifically one which can bring students together without having to physically be in the same area. According to CNBC, the coronavirus epidemic has sparked an increase in investments and innovation in education technology. The market is projected to increase from $107 billion in 2015 to $350 billion in 2025. The recent reliance on remote learning has encouraged school districts to look into web-based learning initiatives. School administrators are expected to increase spending on education-related technology by 12%.

Still, education software depends on students having existing devices. According to Education Week, 64% of district leaders who worked in majority low-income areas stated that the lack of technology access would harm their ability to teach remotely. In fact, one-third of Black, Latino and Indigenous families do not have the high-speed Internet access required for online learning. Higher poverty schools are also less likely to track attendance or offer live instruction, meaning that students could be completely checked out of learning.

The Yale School of Medicine concurs that stronger investment in technology and increased support for families are necessary to minimize the effects of COVID on education. Unfortunately, neither seems likely in the current state of education.

CONCLUSION

Current initiatives to transition to remote learning will serve some students as well, or even better, than in-person schooling. However, for millions of students across the country, online learning will be equivalent to an extended vacation. And even after this pandemic ends, the loss of skills during this time period will harm these students' abilities to find educational and employment opportunities as adults.

Transitioning to remote learning means providing students with a completely different set of resources from normal. However, those investments will not be easy for districts struggling to accommodate their students' lack of access to technology. An entire generation of lower income and minority students may face increased difficulty when it comes to entering the workforce or pursuing higher education. That costs the government since the number of citizens requiring welfare would decrease while innovation would increase.

> "THE CLEAR SOLUTION WOULD BE TO INCREASE FUNDING FOR THOSE DISTRICTS SO THEY CAN PROVIDE DEVICES FOR STUDENTS AND TRAINING FOR TEACHERS."

The clear solution would be to increase funding for those districts so they can provide devices for students and training for teachers. The United States has shown no signs of moving toward more equitable funding. Until that path is reversed, it's unlikely that the country can avoid a massive increase in poverty and structural inequality.

DOES MICROFINANCE WORK? A NEOLIBERAL APPROACH TO POVERTY REDUCTION

BY ALLY MINTZER

The most famous microloan innovator and founder of the Bangladesh Grameen Bank, Muhammad Yunus, received the Nobel Peace Prize in 2006 for his work. Microfinance has been incredibly popular; in 2015, it was estimated that over 125 million people, 80% women, had received $100 billion worth of microloans.

> "1.9 BILLION PEOPLE THROUGHOUT THE WORLD LIVE IN EXTREME POVERTY, MAKING UNDER $3.20 A DAY."

The rationale behind why microfinance should work is fairly simple. 1.9 billion people throughout the world live in extreme poverty, making under $3.20 a day. Either because of a lack of property, formal credit history, collateral, or consistent income, it is often incredibly difficult for those in poverty to obtain loans, particularly if they live in communities with little access to formal financial institutions. This is where for-profit and non-profit microfinance institutions step in, eliminating barriers like the requirement of a formal credit history and providing small loans at theoretically much lower interest rates. Lenders often attempt to avoid default by implementing repayment schemes with high frequency or spreading risk over a larger number of borrowers with group lending. For borrowers, the newfound capital provided by a microloan can be used to launch their own business and lift themselves and their families out of poverty.

Eliminating poverty is incredibly complex. Although microcredit has surely helped many people, it has proven to be far from the silver bullet to end poverty. 2019 Nobel Prize Winners Esther Duflo and Abhijit Banerjee found that for those who started their own businesses upon receiving a microloan, profit increases were insignificant, and there were no significant changes in women's empowerment, health, or education. The economists point to monthly consumption, a good indicator for overall welfare, which did not increase for most microloan recipients in the short and long run. However, it is important to note that the few entrepreneurs who already ran businesses and had access to capital with high fixed costs realized profit gains.

One reason why microloans have not proven to be as universally effective at spurring entrepreneurship as imagined is because they rest on a flawed assumption: individuals will use the money from loans to become entrepreneurs. Some may indeed found their own business, but as World Bank economics Robert Cull and NYU economist Jonathan Morduch point out, many will not, preferring to spend the money on day-to-day expenses like food or to finance more expensive household durables like refrigerators, computers, and silver and gold. As the economists assert, microfinance institutions that solely target those interested in creating new business exclude billions of people who are not interested in nor have the time to do so.

Information asymmetries between lenders and borrowers also limits microcredit's effectiveness. For borrowers, information asymmetry arises when predatory microfinance institutions do not adequately inform clients about the scope of loans. For lenders, lack of information like a formal credit history leads to issues of adverse selection, making it difficult to distinguish those more or less likely to default. Many microfinance institutions created restructured payment plans to increase interaction between the loan officer and the payee and reduce the likelihood of default. Yet, these increased interactions increase transaction costs, ultimately creating market distortions and decreasing both lenders' and borrowers' willingness to participate. Banks are scarcer in developing countries, and most impoverished people in the Global South rely on a cash economy rather than a digital one, making repayment more difficult.

Those to the right often advocate for an approach that includes market liberalization, while those on the left highlight the importance of strengthening a welfare state. As Cull and Morduch explain, "microfinance demonstrates a new mode of development intervention, one that displaces governments as central actors and turns to market-mechanisms to deliver services through a range of institutions that integrate social and financial goals." When analyzing tools for development, it is necessary to question whether it is the role of for-profit microfinance institutions, who also have their own profit-maximizing interests, to be responsible for such a construction. With the rise of neoliberalism since the 1980's, placing supreme emphasis on "free markets" and privatization, are these institutions, some of which are responsible to shareholders, best-equipped to solve systemic problems?

> "HOWEVER, FOR MOST PEOPLE, MICROFINANCE HAS LED TO NO SIGNIFICANT IMPROVEMENTS IN WOMEN'S HEALTH, EDUCATION, ECONOMIC EMPOWERMENT, AND SOCIAL OUTCOMES."

Expectations for microfinance were undoubtedly high. Some people have surely benefitted from greater access to financial liquidity, especially those who already had businesses. However, for most people, microfinance has led to no significant improvements in women's health, education, economic empowerment, and social outcomes. Microfinance has proven not to be the miracle many lauded it to be, and alternative approaches to poverty alleviation should be considered.

COVID-19: THE ROLE OF CULTURE IN SOCIAL DISTANCING AND INFECTION RATE

BY GRACE JANG

BACKGROUND

Since the first outbreak of COVID-19 in Wuhan, China, the pandemic has reached and spread across other countries at different speeds. Some countries like South Korea and Germany have fared better than others, suffering lower transmission and mortality rates and smaller economic downturn. In popular opinion, these countries' success stories are commonly attributed to the government's actions such as strict enforcement of social distancing measures, introduction of contact tracing programs, and the presence of a robust public healthcare system. However, there is a growing body of literature that links cultural variables like altruistic beliefs and generalized trust with national performance during the pandemic. Building on these studies, we examine the role of national cultural values in the society's adherence to social distancing measures and their effect on COVID-19 infection rates. Specifically, we investigate whether the practice of social distancing mediates the relation between cultural biases and the spread of COVID-19 when controlling for various possible confounds.

METHOD

Our initial sample is the top 80 countries by confirmed COVID-19 case counts as of October 1st. As a measure of the spread of COVID-19, we use the total number of COVID-19 cases per 1 million inhabitants. For social distancing, we use the Model-Inferred Distancing (MIDIS) data, developed by M. Aykut Attar and Ayça Tekin-Koru, to identify average physical distancing on the first day after the 500th case has been confirmed in that country. MIDIS is a model-based measure of unobserved distancing across countries and time, and its validity is supported by its strong correlation with Google and Apple mobility indicators. As shown in Figure 1 below, the Chinese case is used as the benchmark for the MIDIS data, so the day-1 MIDIS values are normalized relative to China's value of 0.5. As Figure 2 illustrates, South Korea and the USA have the highest and lowest 30-day average MIDIS values among the sample countries, respectively. Since South Korea is well-known for its low transmission rate and the USA for its high transmission rate, these examples seem to add plausibility to the theory that social distancing is associated with less severe spread of the virus.

FIGURE 1. MIDIS: SUMMARY STATISTICS

Country	init. val.
South Africa	0.835
Japan	0.821
Denmark	0.813
Singapore	0.794
Dominican Rep.	0.768
Sweden	0.766
Qatar	0.762
Saudi Arabia	0.761
Pakistan	0.757
Colombia	0.755
Indonesia	0.746
Ecuador	0.746
Ukraine	0.740
Serbia	0.728
Mexico	0.726
Poland	0.718
Ireland	0.711
Romania	0.707
Chile	0.697
Philippines	0.694
Belarus	0.692
Bangladesh	0.690
UAE	0.678
Brazil	0.670
South Korea	0.669
Portugal	0.665
Israel	0.649
India	0.645
Netherlands	0.637
Belgium	0.635
Austria	0.633
Russia	0.633
Canada	0.623
Peru	0.622
Switzerland	0.620
Italy	0.602
Iran	0.600
France	0.596
United Kingdom	0.586
Turkey	0.563
Germany	0.503
China	0.500
Spain	0.499
USA	0.401

Image source: The MIDIS Project

FIGURE 2. MIDIS: SOUTH KOREA AND THE USA

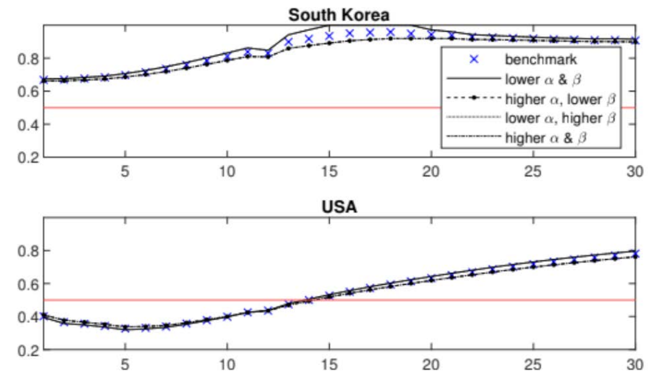


Image source: The MIDIS Project

Next, for cultural variables, we use the World Values Survey data aggregated by the Association of Religion Data Archives and take the average of the Wave 3 and Wave 4 values, which span the years 1995 to 2004. Specifically, we focus on altruistic beliefs, generalized trust, and political leaning because individuals who care about the utilities of others and trust that others comply with social distancing may be more likely to partake in the communal efforts for minimizing the COVID-19 transmission through the practice of social distancing. The variable Altruism is the percentage of respondents who chose 'unselfishness' among important child qualities; Trust is the percentage who answered 'yes' to the question whether they trusted most people; and Left is the percentage who placed themselves to the left on the political spectrum. In addition, we control for the country's total population as of October 1st, number of hospital beds per 10,000 population in the year 2015, Purchasing Power Parity (PPP) GDP in international dollars in the year 2019, and median age in the year 2020. After dropping countries with missing data, our sample size is reduced to 49 countries.

To measure the mediation effect of social distancing on the association between culture and COVID-19 case counts, we conduct three OLS regressions:

MODEL 1.

MIDIS = β0 + β1 * Altruism + β2 * Trust + β3 * Left + β4 * Population + β5 * Hospital Beds + β6 * GDP + β7 * Age + ε

MODEL 2.

COVID = β0 + β1 * Altruism + β2 * Trust + β3 * Left + β4 * Population + β5 * Hospital Beds + β6 * GDP + β7 * Age + ε

MODEL 3.

COVID = β0 + β1 * MIDIS + β2 * Altruism + β3 * Trust + β4 * Left + β5 * Population + β6 * Hospital Beds + β7 * GDP + β8 * Age + ε

We adopt the mediation analysis suggested by Baron & Kenny (1986) consisting of three sets of regression: X → M, X → Y, and X + M → Y. In our study, the three sets of regression can be expressed as: Culture → MIDIS, Culture → COVID, and Culture + MIDIS → COVID. If a mediation effect exists, the effect of the cultural variables on COVID will weaken when the mediator MIDIS is included in the regression. In other words, the coefficient estimates for the cultural variables in Model 3 will be smaller than in Model 2. If so, this would signify that social distancing is a mechanism by which cultural values affect the COVID-19 spread.

FIGURE 3. MEDIATION ANALYSIS

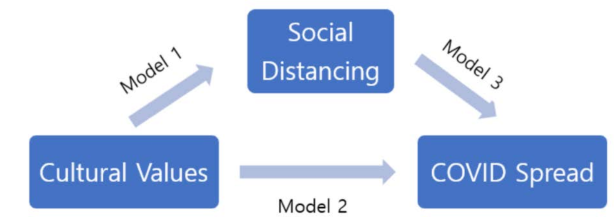


FIGURE 4. REGRESSION RESULTS

	(1) Social Distancing	(2) COVID per 1M	(3) COVID per 1M
Distancing	--	--	10.18
			(21.27)
Altruism	0.0003	0.2296	0.2269
	(0.0011)	(0.1537)	(0.1553)
Trust	-0.0004	0.1519	0.1557
	(0.0010)	(0.1355)	(0.1370)
Left	-0.0031**	0.2552	0.2867
	(0.0014)	(0.1897)	(0.2025)
Population	-9.88E-11	1.47E-10	1.15E-9
	(7.16E-11)	(9.66E-9)	(9.98E-9)
Hospital Beds per 10K	3.38E-5	0.0150**	0.0147**
	(5.10E-5)	(0.0069)	(0.0070)
GDP	-0.0018*	0.1884	0.2068
	(0.0010)	(0.1341)	(0.1407)
Median Age	2.64E-5	0.0359	0.0356
	(0.0010)	(0.1337)	(0.1350)
Observations	49	49	49
Adjusted R^2	0.1065	0.1891	0.1736

Note: *p < 0.10, **p < 0.05, ***p < 0.01

In Model 1, the coefficient estimates on Left and GDP are statistically significant. Specifically, as the proportion of left-leaning inhabitants increases by 1%, MIDIS decreases by 0.0031, and as GDP increases by 1 international dollar (PPP), MIDIS decreases by 0.0018. Simply put, countries that have a larger proportion of left-leaning inhabitants and higher GDP tend to have lower average social distancing.

In Models 2 and 3, only Hospital Beds has a statistically significant coefficient. As hospital bed count per 10,000 inhabitants increases by 1 bed, COVID-19 case count per 1 million inhabitants increases by 0.015 case when excluding MIDIS from the regression and increases by 0.0147 case when including MIDIS in the regression. Thus, regardless of whether social distancing is included or excluded, countries that have more hospital beds per capita tend to have more COVID-19 cases per capita. Furthermore, coefficient estimates in Model 3 do not seem much smaller in their magnitude than those in Model 2, suggesting that social distancing has no meaningful mediating effect on the correlation between the independent variables and COVID-19 case count per capita.

DISCUSSION

Of the three cultural variables, only political leaning has a statistically significant association with social distancing. Of the control variables, GDP is negatively correlated with social distancing, and hospital bed count per capita is positively correlated with the COVID-19 spread.

Our results can be interpreted in three ways. The first scenario is that all three models are specified correctly. This would imply that societies that are more left-biased and wealthier practice less social distancing than other societies. There may exist multiple reasons for this, but one possible explanation is that liberal individuals tend to value personal autonomy more than conservatives do, so they may be more predisposed to freely engage in their daily activities rather than strictly adhere to social distancing rules. In addition, individuals in wealthier societies may have more complex social relations and daily lifestyles than those in less developed societies, so they may find it harder to abruptly discontinue their normal activities and interactions in the face of the pandemic.

The first scenario also necessarily means that countries with more hospital beds per capita have wider COVID-19 spread. Perhaps this is because people are less careful with minimizing transmission when they have a better healthcare system available, leading to a higher COVID-19 infection rate but also better treatment and recovery rates. Another plausible explanation is that countries with a better healthcare system may test for COVID-19 cases more rigorously, resulting in a greater number of confirmed COVID-19 cases. Furthermore, under the first scenario, neither altruism nor generalized trust has explanatory power for social distancing or for the COVID-19 spread, and social distancing does not link the cultural and control variables with the COVID-19 spread.

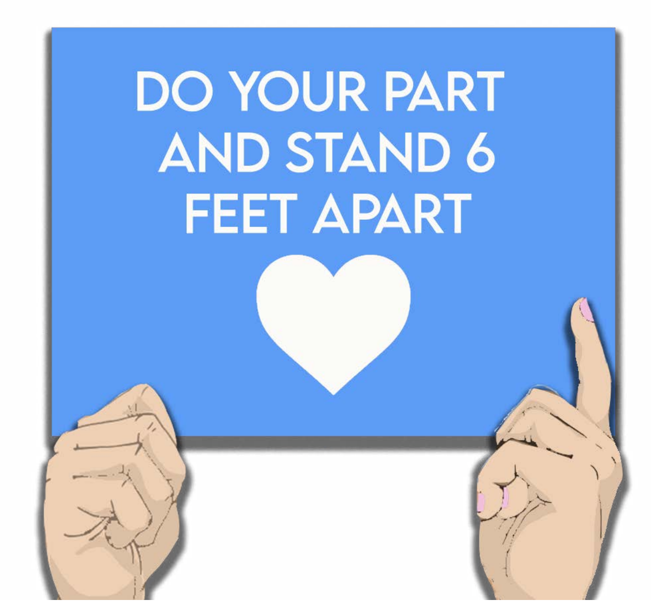
Secondly, the models could be mis-specified and suffer omitted-variable bias. To capture the true relationship among culture, social distancing, and the COVID-19 spread, more cultural variables like attitude towards hygiene and communal embeddedness, as well as control variables like government policies, would need to be included in the regression.

Lastly, it is also probable that the limitation in data collection has diminished the accuracy of our models. Our small sample size is highly likely to have inflated standard errors, and the outdated World Values Survey data probably resulted in inaccurate values for our cultural variables.

CONCLUSION

Our analysis suggests that countries with more left-leaning inhabitants and higher GDP tend to practice less social distancing; countries with more hospital beds per capita are likely to have more COVID-19 cases per capita; and social distancing may not mediate the effect of cultural biases on the pandemic's spread. However, our models may not accurately reflect the reality in that they utilize partly outdated data and omit important cultural and control variables such as attitude towards hygiene and government actions. Therefore, through more recent and relevant data, future studies can draw better insight into the relationship between cultural values, social distancing, and the COVID-19 spread.

Despite the weak evidence, our models lend support to the possibility that social distancing might not depend significantly on the cultural values of a country. Such possibility has not only a descriptive but also a normative implication. Indeed, in these times of difficulty, we must all act with the same values of consideration for each other's well-being and trust in those around us in order to overcome the crisis collectively and effectively.



ESSAY CONTEST: COVID-19'S LONG TERM IMPACTS ON ECONOMIC INEQUALITY IN THE UNITED STATES

BY ALLEN MAO

I worry for my friend, Curtis, because he lost his job as a janitor after the International House closed due to COVID-19. However, even before the onslaught of the pandemic, I felt guilty when I thought about how the rest of the International House janitorial staff were primarily members of underrepresented groups, groups that comprised a mere 18% and 11% of UC Berkeley's undergraduate and graduate student populations respectively. Although I never got the courage to discuss these thoughts with him, I did ask him whom he'd support in the California primary election in March. "Nobody," he responded cynically. "I think people should rely on themselves regardless of who's president." That very month, California went into lockdown and as the nation plunged into one of its worst recessions, direct cash payments from the CARES Act became a lifeline for many Americans.

Over the succeeding months, COVID-19 has killed more Americans than World War I and the Vietnam War combined, and economic inequality has reached unprecedented levels. While American billionaires gained almost $1 trillion in wealth, the US unemployment rate reached 14.4% in April. Although I was lucky enough to telework as a software engineer and invest my earnings in the stock market, Curtis lost his job. However, the roots of the structural inequities that benefitted me and hurt Curtis date to decades prior to the pandemic. Whether it's that essential workers like Curtis are disproportionately people of color, that more people of color like Curtis have been out of work, or that they have lesser access to quality health care and therefore higher COVID-19 fatality rates, the structural issues in our economy behind long-term inequality have not changed much. As such, long-term economic inequality is unlikely to worsen significantly. Furthermore, the pandemic magnified those behind-the-scenes problems in time for this year's election and brought the necessity for structural improvements that combat long-term inequality to the forefront of policy conversations.

These conversations, unfortunately, lately have not lived up to any expectation of progress. Whereas crises like Pearl Harbor or 9/11 united Americans, the pandemic instead produced anti-mask movements in defiance of public health recommendations by the Centers for Disease Control and Prevention (CDC). But this partisanship is not new. For the past few decades, every congress consistently reminded Americans like Curtis that they cannot expect action from the government, as recent congresses constantly sought to outcompete each other for record legislative unproductivity. Moreover, these divisions spilled into the American electorate, as polls have found Americans to be most divided since the Civil War.

In spite of these divisions, there is a glimmer of hope. First, the passage of the CARES Act represents a shift away from austerity despite still-prominent fiscal conservatives in the GOP and places new ideas like universal basic income into the mainstream conversation. Second, despite the contentious election, there remains a bipartisan consensus on numerous issues among the American public. As Caitlin Oprysko of POLITICO writes, "a majority of Americans are fed up with polarization and [are] looking for ways to reimagine the values they have in common". Finally, these crises did not discourage Americans at all as they turned out in record numbers to the polls.

Although the United States' disastrous approach to the pandemic discourages optimism for solutions to these underlying problems, the United States already has the financial resources and technological know-how to solve these problems as the world's richest and most powerful country. As an analogy, the techniques that other countries such as South Korea and New Zealand employed to control the COVID-19 pandemic began as US CDC protocols. By extension, what the United States lacks is not money, ideas, or technology, but effective governance. As such, record turnout in the 2020 election offers a reason for hope: Americans have responded to COVID-19's emergency warning with record levels of civic engagement. As a result of the pandemic, Americans are frustrated with the status quo and want policies that foster greater economic equality in the long term.

Record civic engagement underlines how momentously Americans viewed this election; the next administration will determine the trajectory of the country vis-à-vis the structural problems that led to the economic inequality we witness today. Although the path is yet unknown, it will also determine how we face impending crises such as climate change. Moreover, as democracies around the world face a growing tide of authoritarianism, Americans now must demonstrate whether the democratic will of the people can actually resolve these problems.

HIGH SCHOOL CONTEST: WHAT LESSONS CAN WE LEARN FROM SOCIAL MOVEMENTS STEMMING FROM ECONOMIC INEQUALITIES?

BY TAHMEED KHALED CHOWDHURY

"No matter how big a nation is, it is no stronger than its weakest people." – Marian Anderson

This quote, spoken by an influential Black singer rings as true today as it originally did in the 1960s. It speaks to the most vulnerable in society and their struggles. One of the most pertinent struggles they face is something every government has tried to rectify: economic inequality. The term, in its most basic sense, is defined as disparities among the income and wealth of individuals. This inequality can be exacerbated due to many factors, including: urbanization, differences in education levels, and perhaps most critically, wealth concentration- the idea that wealth (savings, dividends, property, etc.) creates more wealth. The last factor is particularly the harshest for those who aspire to escape the vicious cycle of poverty, as they are set behind by circumstances beyond their control; the system leaving them while uplifting those in privilege. One of the most impactful weapons in aiding the economically oppressed to break the wheel of inequality has been social movements, like Black Lives Matter and Occupy Wall Street. These movements, alongside several others from around the world, have given a voice to the voiceless, providing them with invaluable political and social capital which they otherwise would not have had, thus enabling them to enact changes at the highest levels of legislation.

The COVID-19 pandemic illustrates more than ever the need for social movements to address economic inequality, with the poorest of the poor being hit the hardest. African-Americans, comprising 13% of the overall population, made up 30% of all US COVID-19 patients. In May 2020, unemployment amongst African Americans rose to 16.8%, even though the overall unemployment fell from 14.7% to 13.3%. . Movements like Black Lives Matter, have sought to hold governments accountable for this by making use of mass social mobilization, which further enables demonstrations, marches (which are usually peaceful), blockades, legal activism, etc. These movements can often be even more effective due to a combination of grassroots activism, which energizes protesters on the ground level, and by communicating with political officials- who lend political capital, and can further increase the legitimacy of the movement.

Over the last two decades, social movements in numerous countries have come to the forefront of policy discussion. Numerous citizen groups have been compelled to negotiate with the state to implement their own necessary vision of development- an example of this was when the Landless Rural Workers' movement in Brazil gained significant traction, and won land for impoverished families who continue to farm it sustainably.

Social movements are unique in that they derive strength from numbers, which allow them to be uniquely inclusive. This also allows for a plethora of approaches and perspectives from a diverse group of individuals who have been hit hard by economic injustice, and empowers them to collectively rise up against it. A powerful instance of the effectiveness of such a multifaceted approach was illustrated famously when the tribal people of Odisha, India were able to mobilize legal rights that stemmed from their religious beliefs. This allowed them to successfully push back against the Vedanta (a mining company from the UK) project, which would have endangered the safety and livelihoods of the indigenous Kutia and Dongria Kodh tribes that lived there.

Another factor to consider is that while social movements may not bring drastic changes immediately, they can set the foundation for organic change to gradually happen within communities. Movements comprising entirely of peasants and indigenous people were able to bring down precedents previously established within the Brazilian and Ecuadorian governments, in order to embed certain social rights (food sovereignty and environmental sustainability) in the constitution. However, what is important to note is that in order for progressive policies to be enacted, the movement must not stagnate; continuous political pressure from social movements, civil society organizations, and progressive political actors was required to get the Brazilian government to comply with the new constitution. This may have required 15 years of concerted efforts, but this proved to be fruitful- not just for the protesters, but for future generations.

Social movements have proven, time and again, to be perhaps the epitome of the democratic ideal. The people of these nations have made their voices heard against economic inequality, and through continuous effort, collaboration and diversity, have shown the ability to make real change in both the short-term and the long-term.

PROFESSOR INTERVIEW PREVIEWS

Every semester, Berkeley Economic Review's Research & Editorial team interviews economics professors and researchers from UC Berkeley and around the world to publish in our journal. Below are highlights from interviews we have published in the Fall 2020 cycle. Read the full journal at econreview.berkeley.edu.

INTERVIEW WITH PROFESSOR FERNANDO HOCES DE LA GUARDIA

BY PETER ZHANG

"In the unfortunate equilibrium we're in, those who produce credible policy analysis have little individual incentives to go with a fully open, transparent and reproducible analysis, because locally they are perceived as credible. The tough part is that the larger community—particularly policy analysts that have different ideologies—is less likely to view them as credible. We end up having parallel worlds, where we have a think tank on the left and a think tank on the right who address the same empirical question and conduct the same analysis to address the same quantitative issues and they get radically different answers."

INTERVIEW WITH PROFESSOR GERARD ROLAND

BY DAVIS KEDROSKY

"I've been also looking at their effects on political institutions and their effects on trades, organization of firms. And then, what I've been doing more recently is trying to understand the deep historical origins of these cultural systems, which has brought me to really, study, compare what I would call comparative economic history. That is to try to first, kind of quantify what were the different institutions in different countries in the antiquity. That is, as soon as states emerged. So I look at the difference between institutions in countries like ancient China, ancient Egypt, ancient Mesopotamia, the Incas, in Peru, the Aztecs in Mexico, et cetera, et cetera."

INTERVIEW WITH PROFESSOR HYUNCHEOL BRYANT KIM

BY SZE YU WANG

"How many lives can I save as a medical doctor in one lifetime? At most 200, maybe 300. But as an economic policy-maker, the number of lives I can help is much bigger than one single doctor."

INTERVIEW WITH PROFESSOR STEVEN VOGEL

BY ALLY MINTZER

"Markets are inherently governed; they don't work without rules. It sounds pretty simple, but it's amazing how much both intellectuals and policymakers just ignore that and say that we need less government and more markets—as if those two came together."

Thank you for reading Berkeley Economic Review's

equilibrium

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