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Pandemics and Globalization: Economics, Culture and Policy

1. Globalization - definitions, history and institutions

1.1 What is Globalization?

National Geographic defines globalization as a term to describe how trade and technology have made the world into a more connected and interdependent place (National Geographic 17). This definition, while covering the bare bones of the term, does not do much justice to the sheer magnitude of the term. Globalization is the culmination of the advances in technology, in both transportation and communication, that has allowed the world to become a smaller place, a place where travel across the globe is now commercially available and a bank based in Washington DC can make loans to developing countries in Africa. It is the process by which the world has started to become more tight-knit since the end of World War II. Globalization is one of the main reasons why the Oxford Martin School writes that global exports are more than 40 times larger than they were in 1913. It is the continual increasing connection of all the nations and people on the planet.

1.2 History

There is quite a bit of debate and discussion as to when Globalization started in earnest, with wildly varying dates and events given for the start. YaleGlobal writes that globalization began at the very start of human civilization, when humans first began to emigrate from Africa. The World Economic Forum (Vanham 19) writes that globalization could be argued to have begun with the Chinese Silk Road, or the Age of Discovery in which European powers began to discover and colonize the western world, bringing trading practices with them. However, the article later says that the true beginning of Globalization was actually in 1914 due to large innovations of the Industrial Revolution such as the steam engine and industrial weaving machines. All of this culminated in an average 3 percent increase in trade per year over an entire century, which was unprecedented entirely. Yet, all bubbles burst and globalization was almost halted a mere year later following the tragedy that was World War 1, which laid waste to trade between continents, populations, and labor forces. All of this resulted in greatly decreased trade at the time. Unfortunately, the backspin was not yet under control, as the Great Depression in the United States sent ripples across the global economy, leading to recessions in other parts of the world. Yet another catastrophe shocked the world during World War Two, another war between the great powers of the age that sent economies into free fall. After six grueling years, World War II officially ended in 1945. All of these setbacks led to trade falling as a percent of world GDP to 5 percent, which was its lowest level in over a century. There was, however, a bright dawn upon this dark age of human history as global powers began to realize wars and isolationism led to nothing but conflicts, which were growing increasingly costly as military technology improved. Due to this increased realization of the need for a more stable world order that, depending on your view, either the second wave of globalization happened, or the globalization truly began in earnest. Investopedia (Investopedia 20) corroborates that globalization started directly after World War II when the United States took its role as a global hegemon and travel and communication technology started to become advanced to the point where communication across the globe became a neareffortless thing. It furthers that after World War II was when nations started to ease trade restrictions and construct global institutions, with the Bretton Woods Conference in 1944 creating the World Banks and the International Monetary Fund (IMF). This view is shared by Pioneer Academics who confirms that globalization truly began at the end of World War II. Since then, it has continued to develop and grow, with the largest spike in global connectivity happening with the advent of the internet, which was able to connect the globe in an unprecedented way. Now, messages, documents, data and information could be sent to the other side of the world in fractions of a second. This has allowed for global production chains, with the need for production and research centers to be in the same country being all but eliminated. In the modern world, many corporations have different parts produced in different nations. All of these advances have been facilitated by the advent of the internet. This led to globalization exploding yet again in the 2000s, as, according to the World Economic Forum global exports rose to about a quarter of global GDP. Due to all of these advances in trade and technology, ife for a lot of the global population got significantly better, with hundreds of millions of people being lifted from poverty into the middle class due to the burgeoning global GDP.

This, however, was not the latest significant “wave” of globalization, as the rise in e-commerce giants, such as Amazon, Alibaba, and eBay has continued to make life easier for consumers, as now even items from across the world are never more than a few clicks away. This has led to more goods moving around the world, with globalization increasing even more in recent times, prior to the very recent COVID-19 pandemic which has once again led to an increase in barriers to travel and trade, temporarily rolling back globalization to levels not seen since the mid-2000s. The Harvard Business quantifies that estimates right now predict that merchandise trade could fall as much as 32 percent, and that foreign direct investment could drop around 40% (Altman 20).

1.3 Institutions

One of the main contributors to the inexorable spread of globalization is the many organizations that have been established by the international community to increase connectivity among other, more niche tasks. Following the end of World War II, some of the most prominent organizations until this day were created.

One of the largest of these was the United Nations, an organization that was created to promote peaceful relations between nations and forestall another large, global conflict like the brutal World War which the globe had just endured from ever happening again. It was founded in San Francisco, California on October 24, 1945, and to this day continues to provide a variety of services. The United Nations themselves state that the goals of the organization are to maintain international peace and security through peacekeeping efforts, creating a place for diplomacy and the efforts of the UN Security Council, which is the body they put in charge of maintaining peace. Another goal is to preserve human rights through legal instruments, such as sanctions, and on the ground activities, like field offices. Their third goal supports this, as it is to deliver humanitarian aid to those in need. This was one of their original functions, as the UN delivered aid to support the war-ravaged European continent rebuild in the wake of World War II. Their penultimate goal is to promote sustainable development in nations, and growing the economies of nations in need, although it does not have that many vehicles with which to do this. Their final goal, and the reason they were founded, is to create, uphold, and enforce international laws (UN 18). Whether or not they have been successful in upholding all of these tenets is largely up for debate, but what cannot be disputed is the simple fact that the United Nations was an incredibly large step forward for globalization, as it provided countries from all across the world a united, accessible forum with the rest of the world, where they could air grievances or request military aid. It also established international laws that determine conduct in all nations, and was a pioneer of all of these new developments. The United Nations was key to globalization as a whole, and even nearly eight decades after it's founding continues to be a cornerstone of globalization.

Another global institution established following World War II was the International Monetary Fund, or the IMF. It was established on December 27th, 1945 at the now famous Bretton Woods conference. The IMF states that it's primary purpose is to ensure the stability of international monetary and financial systems by resolving crises and alleviating poverty in member countries. The IMF was created because of the growing globalization, not to promote it, unlike the UN. This is because as global economies became more interdependent, the global community realized that a financial crash in one nation could lead to a chain reaction that would spark an economic catastrophe for the entire world. The IMF attempts to assuage the fears of this risk with three main tools: surveillance, technical assistance and training, and lending money. Surveillance is used to monitor the economic developments of its member countries, releasing an annual report on the economic situation of each member nation. It also looks at wider global trends with the data collected from the individual countries. This is key because the IMF is one of the few organizations with access to the economic data of so many nations and can provide a unique insight, as well as in a position to monitor the health of the global economy. Technical assistance and training are rather self-explanatory, as the IMF can step in to help lagging economies. The largest mechanism to maintain the stability of the global economy, however, is also the most controversial one, and that is the IMF policy on lending. If a nation's economy were to falter, the IMF can provide a loan to the member nation, however, this has come under scrutiny as the IMF will only give out the loan if the nation receiving the money agrees to follow the plan that the IMF proposes, and their website states "continued financial support is conditional on the effective implementation of this program (IMF 18)." This, while providing a vehicle for at-risk countries to grow, also cedes a large amount of economic autonomy to the IMF. The IMF is in charge of ensuring the globalized economy does not all crash down due to crises in member nations, and has, along with the United Nations, promoted globalization greatly by doing so.

Another major institution that was created due to World War II was the World Bank, which was created in July 1944. The World Bank differs from the IMF primarily due to their focus on reducing poverty and helping support growth in the Developing world. They offer low-interest loans, low-interest credits, and grants to developing countries. It also provides policy advice to the leaders of developing nations, but, unlike the IMF, will not withhold funding and support if leaders do not follow that advice. Their main goal is to end extreme poverty in the world by decreasing the percentage of people living on less than 1.90 per day to less than 3%. This is because due to the interconnected nature of the global economy, poverty in one nation weighs down the rest of the world, along with extreme poverty being one of the largest causes of deaths in the world right now (World Bank 19).

Another vital organization is the World Trade Organization, which was created rather recently, on January 1, 1995. It has roots reaching back to 1948, when the General Agreement on Trade and Tariffs was created to help regulate global trade, but as globalization increased, so did the flow of goods between countries and continents, and the global community decided it was time to create a global organization to help oversee all of that. It is run by the member governments, and decisions are made by ministers. It provides a forum to negotiate trade agreements, as well as a place to settle international trade disputes that have grown far more common due to the greatly increasing volume of global trade. The World Trade organization also predicts how global trade fluctuates and releases statements that disclose how much global trade has changed. It has played an important and unique role in global trade, as it has worked to decrease barriers, such as tariffs and quota, up to the point where placing harsh tariffs is now seen as irregular, and the World Trade Organization reports that from 1996 to 2013, the average tariffs applied by their members fell by around 15 percent, showing that it has played a large role in spurring on globalization (WTO 15).

Another key global institution, one which is absolutely essential to global pandemics, is the World Health Organization. The WHO was founded on April 7th, 1948 in order to combat the spread of diseases, while also attempting to improve global life expectancies. They state that their role is to direct and coordinate health within members of the United Nations. It has had many success stories, such as it's widespread distribution of vaccines, which led to the complete eradication of smallpox in 1979 and a 99% decline in polio globally, along with a decisive response to the 2003 SARS epidemic. The way the WHO responds to global health emergencies is that in extreme cases, they can declare a public health emergency of international concern, of PHEIC. During a PHEIC, such as the 2009 swine flu outbreak, the 2016 Zika virus, and, more recently, the COVID-19 pandemic. In a PHEIC, the WHO issues guidance, which is not mandatory, to try and prevent overreactions and panic. It also sends scientific data and experts to where they are needed most. It has come under scrutiny due to the deference it showed to Beijing during the COVID-19 pandemic, as well as at times having slow responses to emergencies, such as the 2014 Ebola outbreak. Despite this, the majority of experts agree that the WHO is of the utmost importance when it comes to global responses to illnesses, as it is the only organization with the information and capacity to act as a conductor of a global response (CFR 20).

2. Trade and Labor Repercussions - economic and policy impact of pandemics, disruption and transformation

2.1 Trade in a Pre- Pandemic World

Global Trade is the exchange of goods and services from one country to another. This exchange from country to country has served as a primary way to expand globalization and connect the world, despite their geographic differences. Indeed, according to Esteban Ortiz-Opsina of Our World in Data, in an article titled “Trade and Globalization,” (Beltekian n.d.) it is concluded that the second and largest wave of globalization following World War II and continuing even today was due to a rise in intra industry trade, meaning that the same industry is responsible for making the primary goods all the way to the final product. Rather than the previous inter industry trade, where exports were very different from imports, this way instead lowered the trade costs by having similar goods to import and export, which allowed certain industries to flourish more. This more efficient way of trading paved the way for a decrease in trade transportation costs of over 75% from 1931-2005, this number includes freight cargo shipping, passenger air exports, and communication costs for trade. As the trade costs have decreased since World War II, the second wave of globalization has been increasing to never before seen levels.

Liam O’Connell of Statista in 2019 in an article titled “Trends in global export volume of trade in goods from 1950 to 2018” (O'Connell 19) explains that the global international trade value was 19.5 trillion dollars worldwide. O’Connell then compares this amount of money to the trade value in 2000, which stood at 6.45 trillion dollars. This data supports the findings of Opsina, since it reflects how trade is increasing due to it constantly becoming less expensive.

2.2 Trade Discrepancies in a Pre- Pandemic World

Due to US President Donald Trump's accusations about China's unfair trade practices and intellectual theft, conflict between the two countries have recently emerged, resulting in a trade war before the pandemic. Both countries have imposed tariffs onto the other's products. According to BBC news in January 2020 in an article titled "A Guide to the US-China trade war," (BBC 20) The US has placed tariffs on more than $360 billion of Chinese goods, and China has placed tariffs worth $110 billion on US products. This sent shockwaves through the global economy and has had a noticeable negative impact on the pre-pandemic trade environment. The World Trade Organization in 2019 in a press release (ILO 20) shows that due to the trade conflicts occurring in 2019, the global economy saw a .4% decrease in gdp, down from 3% in 2018 to 2.6% in 2019. WTO Director General Roberto Azevêdo directly cited the high global trade tensions causing this noticeable drop. This means that despite the pre-pandemic record levels of trade increase since WWII, there was a high amount of tension leading into the pandemic, which resulted in a decrease in trade.

2.3 Labor in a Pre- Pandemic World

The international labor organization (ILO) indicates in January 2020 (ILO 20), before the pandemic's global stranglehold on the world, that the ILO predicts that in 2020, unemployment was expected to increase by 2.5 million people worldwide. This is because of the slowing growth of the global economy, which means that when the labor force increases in number, there won't be sufficient job opportunities to support the now expanded labor market. Further supporting the grim pre-pandemic economic outlook for 2020 is the unemployment statistics, which show that 188 million people are unemployed worldwide (WTO n.d.). The ILO evidence shows an outlook for the labor market that is uncertain at best. Although the world wasn't in a crisis such as the pandemic, the pre-pandemic data clearly supports a downturn in the labor market without the pandemic.

2.4 Trade In a Post Pandemic World

According to the World Trade organization in 2020 (WTO n.d.), they have outlined two priorities in the face of the COVID-19 pandemic. The first is to keep the public informed about the pandemic's effect on trade through enacting policies of transparency. The reason is that when the public is informed about situations, they will be better able to combat and adapt to the situation. The second priority is to keep trade flowing as normally as possible. The reasoning for this is that keeping consistent trade globally is crucial to protecting jobs, preventing meltdowns in supply chains, and to ensure that imported goods remain at an affordable price to keep the global markets in order.

It cannot be overstated how important trade is in the global economy. The reasoning for this becomes apparent with a comparison of growth in 2 sections. The first is the linear increases of the global GDP as time goes by. This can be compared to the world exports of goods and services, and the trend in both of these is the same: as time increases, trade and gdp both increase at nearly identical paces. This supports the conclusion that international trade has been an important factor in promoting growth in the economy and reducing poverty levels.

COVID-19 has led to a trade crisis. Social distancing measures and quarantine globally have caused the efficiencies of trade to be greatly decreased. Most employer's act of prioritizing worker's safety has led to a decline in trade. Not only this, but the virus thriving in population centers, where there is the most trade, has also crippled global trade prospects. The cost of trade has also increased, because of the risk of the virus spreading, tariffs increasing, and moving across an international border from their point of origin. All these reasons contribute to why the WTO concludes in a 2020 report titled “WTO Contributions to the 2020 HLPF” (WTO n.d.) that they expect global trade to fall by between 13% and 32%. The regions hit the hardest will be the Americas and Asia, and will likely surpass the slump caused by the 2008-09 economic crisis.

2.5 Implications

2.5.1 Economic Decline

Trade is a critical factor in economic growth, which is needed to advance as a country and as a global society. A decline in trade will hurt the economy greatly. Indeed, according to Maureen Ware of the Journal of African trade, in an article titled “Differential effects of trade on economic growth and investment: A cross-country empirical investigation“ (Were 15) she states that due to the beneficial effects of trade, for every one percent rise in trade to GDP ratio, GDP per capita grows by .47%. This means that whenever the world’s trade increases by 1% in relation to their GDP, each person’s income increases by .47 percentage points. Unfortunately, when trade decreases, there can be an adverse effect. Below are the calculations when applied to the WTO projected model of 2020.

$$-13(.47) = -6.11 \quad \textbf{or} \quad -32(.47) = -15.07$$

When cross applied to the WTO study, due to the 13% decline in trade, there will be a 6.11% decline in GDP per capita globally. This is unfortunately the minimum, and according to the WTO’s worst-case scenario, due to the 32% decline in trade, there will be a 15.07% decline in per capita GDP. This negative GDP growth has detrimental results. According to Juan Sanchez of the St. Louis Federal Reserve Bank in an article titled “The relationship among changes in GDP, employment” (Sanchez 12) he finds that a 1% decrease in GDP leads to an almost 2% increase in unemployment. This means that along with the GDP drop, there will also be a decrease in unemployment. Unfortunately, David Roelfs of the Local Science and Medicine journal finds in an article titled “Losing life and Livelihood” (SLF n.d.) that unemployment leads to a 63% higher chance of mortality. A mortality rate like this will only escalate due to COVID-19, hence when trade drops due to the virus, we could see an increase in deaths.

2.6 Labor in a Post- Pandemic World

According to the St Louis Federal Reserve Bank in 2017, (SLF 17) labor is one of the most important contributors to the economy. Indeed, without labor, employees wouldn’t be able to be paid, and the employers wouldn’t gain any money because of no laborers supporting their business. This cycle has been defined in America since it’s creation.

Due to COVID-19 restricting when people can come to work, the proximity of workers between customers and each other, and the amount of people willing to buy products in public spaces, the labor market has taken a considerable blow worldwide. According to Stephanie Nebahay of Reuters in 2020 in an article titled “No return to pre-pandemic job levels in 2020: ILO” (Nebehay 20) there was a 14% decline in working hours worldwide, which is equivalent to 400 million jobs being lost. The fourth-quarter predictions for this year appear grim as well, since there is expected to be at worst 11.9% of working hours still lost. Although the measuring of hours does not account for jobs permanently lost, it does show the number of families that are lacking resources and constant income. Furthermore, it also reflects the job uncertainties of millions of people. Looking at this in a comparative lense, this pandemic is already impacting the world in a way never before seen, perhaps since the Great Depression. Indeed, in the 2008 recession, no country reached above 10% unemployment, meanwhile, in this crisis, the world as a whole has lost almost 14% of jobs.

2.6.1 Implications

In an article by Investopedia in 2019 titled "The Cost of Unemployment to the Economy" (Simpson 20) there are many costs of unemployment outlined. Among these losses is the loss of skill. This means that when people are unemployed, they forget the skills that make them valuable to the economy. This ends up hurting the economy because of a loss of skilled workers. Furthermore, a lack of employment can harm the individual who has lost the job, including a shortened life span and a decrease in mental health. Perhaps the most important impact of losing jobs is that the economy loses a tremendous amount of money because of their people not having enough money to put back into the economy.

2.7 Conclusion

Overall, the COVID-19 pandemic has taken a heavy toll on both the trade and labor market. Due to policies such as social distancing and stay at home policies, both trade and labor are reaching low points. The impact of the virus has been significant, and there are expected to be long term repercussions. As the virus sweeps the globe, people's health isn't the only thing that is expected to be impacted negatively. Indeed, due to the virus, the global economy is being sent into turmoil.

3. Financial markets and global flows of capital

3.1 The Implications of Pandemics on Financial Markets

Overall, the extent of pandemics reaches further into the economy than disruption of trade. The COVID-19 Pandemic has plunged the world's financial markets into a deep recession. According to World Bank forecasts (World Bank 20), the global economy is on track to shrink a massive 5.2% this year, as the International Monetary Fund (Gaetano 20) suggests that the pandemic's economic downturn could be far worse than that of the Great Recession in 2008 and on track to be the most severe economic downturn since the Great Depression. Even six months after the beginning of the outbreak, the macroeconomic landscape of global financial markets has only become more confusing, not less. Firstly, economic forecasts varied highly at the beginning of the crisis. The Harvard Business Review (Carlsson-Szlezak 20) explains that the median broker forecast for US growth in the second quarter was still around 0% in mid-March, before collapsing 30% over the next 20 days. The spread of the median forecast of the implications of the pandemic continued to vary wildly. Second, the intensity of the crisis created fears of a total systemic meltdown, driven by liquidity and solvency problems presenting themselves in the financial economy. Though fears have somewhat normalized due to unprecedented monetary and fiscal policies, concerns of a new great depression and high inflation still present themselves in the current outlook.

Globally, many stock markets saw huge losses. In March 2020, the US stock market triggered its circuit breaker mechanism four times in ten days. The breaker mechanism was intended to temporarily halt trading on an exchange when certain criteria are met. In this case, the breakers were triggered as a result of the S&P 500 index falling over 30% in one month, from its all-time peak in February 2020. As Dayong Zhang, Min Hu, and Qiang Ji implicate in their paper "Financial markets under the global pandemic of COVID-19," (Zhang 20) the breaker mechanism had only been triggered once previous after its inception in 1987. The outlook is much the same in other markets. The UK's FTSE index dropped 10%, on its worst day since 1987. Japan's stock market plunged more than 20% from its December 2019 peak.

3.2 Regional Outlooks

In East Asia and the Pacific, a region in which unprecedented economic progress has taken place this decade, growth is projected to fall to 0.5% in 2020, the lowest rate since 1967 (World Bank 20). As the World Bank shows, these numbers reflect disruptions caused by the pandemic and don't represent outside influences. In China, highly restrictive measures led to an almost complete halt in many sectors and regions. Although industrial production had started to rebound around April, companies are still facing funding shortages and falling external demand, as recovery in services lags. The overall economic outlook is predicated on China and other major countries avoiding a second wave of outbreaks, and the assumption is that the region as a whole will see gradual and sustained recovery in the future. In smaller export and tourism driven economies, like Cambodia, Laos, and Fiji, economic activity is expected to shrink quite considerably, as policy to mitigate the impacts of the outbreak is limited.

In Europe and Central Asia, the economy is expected to contract 4.7%, with no countries being spared from harsh recessions (World Bank 20). The pandemic adversely affected commodity prices, disrupted regional supply chains, and heightened risk aversion in markets. Economies in the region experienced high outflows, and many weaker currencies have contributed to higher borrowing costs, as pressures have been exacerbated by a collapse in exports. The region is also highly susceptible to global spillovers due to its openness to trade and financial flows, as well as remittances. Continued oil price crashes negatively affected the economies of large energy exporters, such as Russia, Kazakhstan, and Azerbaijan. Indeed, as economic activity is expected to contract in every sub-region as a result of the outbreak, consumption and private investment continue to be constrained.

In the Middle East and North Africa, a contraction of 4.2% is projected (World Bank 20), as a result of the pandemic and oil price crashes. Among oil importers, activity is decelerating as well, as tourism prospects fade and exports fall. While inflation has generally been contained in the region, which has allowed large economies like Egypt to cut policy rates in response to the outbreak, the financial sector of the region has been adversely impacted by erosion in investor sentiment towards emerging/developing economies. As a result, investment is expected to be weak amid low global and domestic confidence, while consumption and consumer spending is curtailed by pandemic mitigation measures. High public debt further compounds the challenges faced by the region, especially in oil-importing countries.

Economic activity in South Asia is projected to contract by 2.7% this year (World Bank 20), as, similarly to other regions, pandemic mitigation policy hinders consumer spending and consumption, which in turn scares away private investors. Although South Asia has witnessed a smaller number of COVID-19 cases relative to other regions, the aforementioned mitigation policies are weighing heavily on short-term economic activity. Export related industries in advanced economies and emerging markets are also hurt by deteriorating market conditions. As Industrial markets and services plummet, trade activity is also falling. Tourism has also been severely constrained, leading to sharp declines in Bhutan, Nepal, Sri Lanka, and the Maldives.

Latin America and the Caribbean were hit especially hard, as shocks stemming from the pandemic will cause economic activity to fall 7.2% in 2020 (World Bank 20). Slowdowns in the US and China have disrupted supply chains for Mexico and Brazil and sharp drops in exports from commodity-producing Chile and Peru. The severe contraction in North America also affected Central America through trade and remittance decreases. Tourism rich industries, like the Caribbean and Mexico, have taken large hits. Central America is especially held back by mobility restrictions and lower agricultural prices.

Overall, These circumstances are compounded by the fact that in many countries, businesses have become highly indebted amidst a period of accommodative monetary policy and low-interest rates (OECD 20). Currently, many corporations are now vulnerable to deteriorating economic and market conditions, increasing unemployment rates. As many businesses turn to sell off their debt through high-yield bonds and leveraged loans, their cost of financing is continuously rising.

3.3 Global Flows of Capital

Overall, the COVID-19 Crisis has triggered major disruption in exchange markets as well as global capital flows. As cross border portfolio investment stopped in many emerging markets as well as in some advanced economies in March, sharp swings have occurred in foreign exchange markets (OECD 20). Accompanied by plummeting oil prices, exchange rates of key emerging market economies considerably dropped, including those of the Mexican Peso, Russian rouble, Brazillian Real, and Indonesian Rupiah. Global financing conditions tightened significantly, especially in global US dollar funding markets. As the OECD (OECD 20) writes, "Economies that had entered the crisis with weaker positions have already experienced massive outflows of portfolio investments." This represents a recurring pattern in which international investors transfer capital home or deal with safer investments, during periods where the safety of their capital is uncertain.

Specifically, both Japan and the US faced large drops in investment. Moreover, inflows to Italy declined by more than $60 billion in March (OECD 20). Overall, Foreign Direct Investment (FDI) flows are expected to fall by more than 30% in 2020, even in the most optimistic public health scenarios (OECD 20). FDI flows to developing countries are expected to drop even more, as manufacturing sectors have been the most hard-hit overall. This could mean disaster for emerging and developing economies - as the OECD reports, such economies rely heavily on FDI, as other sources of international financing, like portfolio investment, flee these economies. However, there are some reasons to be skeptical about the role that FDI can play. Even before the pandemic hit, FDI flows were at the second-lowest level since 2010, and corporate debt was at an all-time high at the end of 2019. However, only time will tell how such impacts to global flows of capital would affect countries who rely on it the most, especially since high levels of debt could limit the ability of companies to survive the impending crisis, let alone support their foreign affiliates or pursue new investments. In the end, the OECD concludes that the impact on FDI flows ultimately depends on the success of public health and economic policy measures taken by governments.

3.4 Conclusion

In essence, the COVID-19 pandemic has shown just how dangerous mitigatory policies as well as economic downturns can be to a country's financial markets. A lack of investor confidence as well as indebted companies creates a dangerous equation for stock markets and countries who rely on outside flows of capital.

4. Cultural and educational and technological context of globalization - exchange of ideas and information during and after pandemics.

COVID-19 has been known to spread rapidly, especially through prolonged, close contact with others. A majority of countries either have or are currently responding to this through a series of quarantine measures, which restricts intranational travel, but also international travel. In a global economy that is so interconnected, this can be detrimental. Many, especially those in economically developed and largely tertiary sector economies, have had the ability to continue work online. However, many workers, as well as a large part of those in developing countries, are not able to complete work online. In this section, we explore the implications of global travel restrictions on students, foreign workers, and other cross-border people.

Throughout, it is important to keep in mind that outside the realm of the COVID-19 era, the severity and specifics of a pandemic can vary greatly.

4.1 Education in a disconnected world

With a rapid spread of globalization, education is becoming more and more of a necessity. Markets are shifting and education requirements are becoming more and more demanding.

Especially in a pandemic, the nature of how globalization works with education is changing rapidly. Nutsa Kobakhidze, a professor of comparative and international education at the University of Hong Kong explains in May of 2020 that emergencies like that of pandemics lead countries to invest more in the diversification of education. Countries often realize the importance of education, which engenders more investment into current curriculum innovation as well as more integration with online environments.

As a result of limited travel and face-to-face contact, it is easy to see that education would be negatively impacted. The extent to which, however, is what will be covered here.

Historically, pandemics have had enormous long-term effects on the quality of education. In much of Sub-Saharan Africa, specifically in Zimbabwe, the HIV/AIDS pandemic was found to have a large negative impact on education (Magudu 02). Of course, Sub-Saharan Africa likely will not be as impacted currently as a result of its low COVID-19 infection rates, but it, and other developing countries, generally are the ones most susceptible to disease spread as a result of a general lack of health infrastructure and resources. This will become all the worse in future pandemics. With globalization promoting higher incomes and more ease of travel, disease-spread becomes increasingly possible.

COVID-19 has made it clear that preventing disease spread necessitates a lack of face-to-face contact, which means not going to school. This can be especially problematic in low-income or developing countries, which might have a lack of resources to lessen the impact on education.

However, there are far more issues that some might not realize. A report on the impact of the HIV/AIDS pandemic highlights a few: (Coombe 04).

The first relates to socioeconomic conditions. Looking at the HIV/AIDS pandemic, the financial burden was extremely high. Families often couldn't afford to work or pay for necessities, which, especially in southern Africa, led to children taking over work responsibilities, thus barring them from going to school. With less money, resources for getting a good education like that of school supplies or an internet connection also become more difficult.

The second is social stress. Disease, especially in the high magnitudes that occur during pandemics, has been found to cause an immense amount of stress. The burden of friends and family dying, as well as the stress behind the possibility of becoming sick, leads to a "fear of contagion", which creates an immense amount of grief and stress that can prohibit an environment that is conducive to a good education.

The third is the impact on educators. With teachers often being in the upper quartile of life expectancy in their respective countries, they tend to be at a higher risk of disease. This can be especially preventative of education, as curriculum often can't be taught without personnel.

The impacts of this are being seen with COVID-19 as well. Of the nearly 190 countries impacted, 1.5 billion children have missed a significant period of education. This is awful for children already in vulnerable situations, as Kirsty Burrows reports in July of 2020 that a minimum of 42 million children will be in extreme poverty as a result of the pandemic. Having a lack of education will only prevent what is necessary for children to have the economic mobility to pull themselves out of poverty post-pandemic.

Although often on the backburners of policy-making, education is and should be one of the most important things to consider during a pandemic. Especially for developing countries, having an educated workforce is one of the most important parts of long-term socioeconomic development and a higher quality of life.

4.2 Technological responses to pandemics

Currently, technology isn't impacted much by pandemics. Most innovation already comes out of countries that have the ability to adjust to the difficulties of a pandemic.

But - when there is a widespread issue, especially one that is so severe as a pandemic, investors and innovators always rush to find solutions. Although pandemics can have awful consequences, they can often jump-start looming innovation by presenting them as a necessity.

Indeed, pharmaceutical companies have historically improved during pandemics, having an extremely high incentive to be the first to bring a drug to market (Begley 13). Pandemics also tend to lead to spikes in research. After SARS in 2002, there was a 52% increase in clinical studies. Following this, the magnitude of COVID-19 led to an almost 800% increase in studies relating to respiratory infections. However, the authors of the study do note that this increase in research isn't completely coming from nowhere. Although there is an overall increase in research, studies in one area tend to draw resources from other research areas (Jurkauskas 20).

This has been clear, with small biopharmaceutical startups being at a record high in 2020. Further, with more people needing to work from home, platforms like Zoom and Teams have risen in popularity, with fierce competition. Indeed, the 2002 SARS pandemic halted business in the short term but led to crucial eCommerce innovations in the long-term (Mehta 20).

5. Post Crisis Policy Implications

In this section we explore the post crisis policy implications of COVID-19 and what it may mean for the future.

5.1 Recent Changes and Trajectory of COVID-19

Since the start of COVID-19, many countries have decided to open up their economies. Whether or not this is a good idea completely depends on the specific country's initial response to

COVID. As such, there were generally two types of responses seen to COVID throughout the world.

The first type of response came from countries that prioritized their economy and made decisions based on immediate economic recovery. In order to curb rising unemployment and a weakened economy from the initial shock of COVID, certain countries, specifically the Americas, tried to open up their economies early to compensate for losses. However, opening up too early has already seen its consequences with a resurgence of COVID already hitting places that had initially recovered, leading to more medical instability across all industries (Crump 20). This turbulent process will be detrimental in dictating short term policy as the medical instability will deeply impact the economic aspect of trade and other industries. Thus, prioritization of the economy has only prolonged the recovery time (Hoffower 20).

The second type of response came from countries that prioritized the pandemic and realized that economic impacts could be recovered from and thus shifted their focus towards long term stability. Specifically in Europe, Asia and Australia, reactionary policies were implemented such as contact tracing, rapid testing, and mandated face masks in combination with social distancing. As a result of these measures, those specific countries have been able to fully recover from COVID and are back to a functioning economy (Schneider 20).

5.2 Issues of Technology

One of the longest lasting issues that has plagued the world was made even more apparent by the pandemic; there is a discrepancy between who accesses technology and who does not. This gap is largely due to economic inequalities on all social levels. Whether it be between countries or income levels, wealth inequality affects who is able to access online working and learning and who is not. This is important because the wealth gap increased during the pandemic as those with resources were able to work their way around the new obstacles posed by COVID while those who didn't have the means to do so were left to struggle to stay productive (Thorbecke 20).

Besides access to technology, another topic of discussion arose when analyzing responses to the pandemic. The use of a country's existing technology and resources greatly speeds up the recovery process. This management of resources can be combined with clear and open communication and industry specialties to respond rapidly and effectively. A good way to use technology and communications, and economic specialization can be seen in italy. All textile and tire industries were made to manufacture masks (Turra 20). By utilizing what a country already has, massive efficiency gains can lead to huge payoffs for the future.

5.3 Socioeconomic Factors

Understanding the socioeconomic impact of COVID-19 requires understanding how the global economy affects society and what those changes might mean for future pandemics.

On the economic side, the US is facing an economic contraction, which is characterized by a decline in economic activity and output. The US GDP has contracted 32% in the last quarter (Cox 20). It was assumed in the worst case situation that the US would grow by 2% but projections reveal that it will be 1.4% at best. Similarly, the EU projected growth was around 1.3% but now it is barely 1%. A decline in US economic growth is detrimental not only to Americans, but the rest of the world. Due to the nature of how interconnected the world's economy is with the US, the possibility of a global economic contraction is growing (Vamvakidis 01). This domino effect will be very important in developing different models of recovery.

Interestingly, a trend that was observed was rapid short term decisions on the part of financial institutions. The IMF immediate short term policy was to cut off debt obligation for the poorest countries (Georgieva 20). This was done to allow these countries to channel their financial resources to better respond to emergency situations. Moreover, the Federal Reserve and European Central Bank provided an enormous amount of money as injections into their respective economies (Cox 20, McHugh 20). Many other central banks followed suit and made immediate short term policy decisions as well. The purpose in doing so is two-fold; first, mitigate the economic impact of the pandemic and second, stabilize the economy to the point where it could start growing again. The focus moving forward, however, should be long term factors such as currency. A global currency is key to maintaining trade and promoting cooperation between countries (Amadeo 20). That is important to consider, as the US dollar is still 65% of the Federal Bank Reserve (Novosti 20). Thus, most future global economic policies will involve the US in some way or another.

In order to help determine future policy recommendations it is important to analyze what was done previously about similar problems that are prevalent now. The 2008-09 financial crisis serves as the best precedent for country-wide reforms. After 2008-09, many monetary policies that promoted consumer protection and increased competition were passed. For example, the Dodd-Frank Act placed many restrictions on large corporations that were considered too big to fail because if they did manage to collapse one day, another financial crisis like that of '08 might occur again. Thus, more power was given to smaller businesses. Another aspect of this act made banks more fiscally responsible. The Volcker Rule limited the amount of risk banks were willing to take on, which was one of the main reasons why the housing market crashed (Hayes 20). On a general analysis, the 2008-09 reforms added protections for the most vulnerable and implemented proactive policies to prevent another crisis in the future. Applying the same principles to this pandemic, countries should pass policies that provide a safety net for the general public and vastly improve disease research and responses.

On the social side, the humans have faced the most damage. Within this pandemic, there has been mass unemployment, loss of life, and loss of consumer confidence. The difference between previous crises and COVID is that the previous financial crises hit particular sectors of the economy in different countries while COVID has hit almost every industry in every country around the world. This is very important to understand as an economic crisis, health crisis, political crisis are intersectional at the same time (Simon 20). This complicates the policymaking process, especially in the US with elections being right around the corner. Thus, future policies should be broad and have a wide-range of benefits that can properly cover all aspects of a country that was impacted by COVID. On a more specific level, another focus of policy should be "retraining" employees with the new skills they need for their industries. After any major global event, many industries change their practices and goals to better reflect the current situation. As such, COVID-19 will undoubtedly bring up new challenges and problems in the workplace (Gibbons 20). Besides industries, the inner-workings of human interaction have been disrupted as well. This can be observed in multiple ways; social distancing, racism, curfew etc. Some specific policies that might be valuable for the future are trade and labor protection, increased security for the unemployed, providing more grants to small and medium business, and providing grants to cultural institutions. This ensures that all facets of society have the ability to recover and prosper.

All in all, once the short term crises are under control and resolved, the medium term policies are what will lead countries toward stability. The mid term policies followed by nations will dictate how globalized the world will be post the pandemic (Rogoff 06).

Epidemiology has proven these past few months to be something that should never be overlooked in the future and the only way to show growth from this mistake would be to implement proactive policies such as strengthening the health sector and providing protection for the most vulnerable people.

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