

Economic Complexity

Are we entering in a winner-takes-all economy? Why and what can we do about it?"

Economies all over the world are comprised of adopted systems which have impacted their Gross Domestic Product (GDP) and their economy's ranking in the world. Today's world is run by technological advancements and innovations as well as financial incentives. First-world countries (such as America and China) have exploited this trend to benefit their economies, leading them to having the best economies in the world while third-world countries lag behind. The industrial revolution saw first-world countries such as the United Kingdom and the U.S soaring economically due to their investment into this industry while other nations kept their primitive economic structures. This begs the question of whether or not these third-world countries can join their first-world counterparts at the top or are the top spots limited to only the current first-world nations? To answer this question, one has to look at the impact the four main economic systems have had on countries through the perspective of economy writer and founder of Intelligent Economist, Prateek Agarwal's. One also has to look at how countries have adapted to the technological world and what could be done to help countries whose economies are lagging behind.

Firstly, the prosperity of an economy is determined by its economic structure. According to economist Prateek Agarwal, most third world countries (such as Bhutan, and Haiti) and rural areas still use the traditional economic system or primitive methods. These countries rarely have surplus and they "lack access to technology and advanced medicine" and have a low GDP compared to first-world countries.ⁱ To put this into numbers, according to an economic rank done in 2019, Bhutan was ranked 166th with a very low nominal GDP of \$2,842 while America was (and still is) ranked number one with a nominal GDP of \$21,427,700.ⁱⁱ This is partly because the United States not only invests in its technological industry, it encourages foreign investments as safely as it possibly can. According to Michèle Flournoy, Gabrielle Chefitz, this year "U.S. President Donald Trump signed a new executive order on artificial intelligence, directing federal agencies to prioritize AI investment, research, and development". In August last year, he also signed the Foreign Investment Risk Review Modernization Act, to allow certain non-restricted foreign investments into the U.S. ⁱⁱⁱ This is one of the many reasons America has stayed on top in regards to its economic ranking in the world. Technology has resulted in what economists call a "skill-biased system technological change". Those who are equipped to work in the technology industry and advance it thrive while the rest are left behind thus widening the economic gap between the poor nations and the rich ones. Although Bhutan has a sustained growth due to the development of its hydroelectric sector, its economy is still significantly low compared to its first-world counterparts because of its lack of technological advancements and foreign investments which it desperately needs given its minute workforce with its small population of 754,394.^{iv}

Furthermore, Agarwal argues that countries who use the command economic system, such as North Korea, limit their economic prosperity such centralised governance results in a lack of innovation because they do not take any risks and workers are forced to undertake jobs the government deems fit. In addition, it is hard for central planners to provide for everyone's

needs. This challenge forces the government to ration because it cannot calculate demand since it sets prices, thus making it hard to compete with foreign markets and attract many investors. North Korea portrays this challenge through its ranking. Surveys show that North Korea's economy is ranked 42 among 42 countries in the Asia-Pacific region^v its tactic of isolating itself from technologically advanced western countries is an addition to its problems.

Agarwal goes on to describe what has led nations such as the U.S.'s thriving economies by describing the commonly known market economic system. This system is favoured by famous economists such as Milton Friedman and Adam Smith who believe government intervention in a country's economy should be limited to allow for natural competition within the market. This allows companies and individuals to "act in self-interest to determine how resources get allocated, what goods get produced and who buys the goods". A good example of this would-be Amazon which one could say is the biggest and most successful company in history. This is partly due to its control over its company's sales and competition. Amazon exploits its users' data to compete with other retailers. It avoids taking the risk of randomly investing in new products by capturing its "lion shares" of the transactions made in order to choose its prices. This has resulted in its immense growth and increased ability to invest in other businesses, technological advances and the like to boost the American economy. Such a market creates more space for businesses to open and grow and allows them to produce services and goods that are profitable, thus allowing consumers to pay high prices and attracting investors.^{vi} China is another economically prosperous nation who demonstrates this regardless of its mixed system. Although its government has more control over its economy than its western allies, it still makes room for immense trade and investments in its technological sector, making its GDP rank second in the world, right below America.

France's mixed economy has helped in its GDP of 2,715,520 ranking 7th in the world. This structure allows for its government to resolve any market failures and prevent extreme lobbying and abuse of monopoly of power. In addition, its economic structure has allowed for it to implement an effective healthcare system and social security which can attract useful labour from foreign countries. This in turn allows it to redistribute wealth and prevent inequality.

Although there is a huge gap between first-world countries developing ones, this gap can be narrowed through economic changes. Third-world countries could leave behind primitive or traditional methods by embracing the technological era. According to economists César A. Hidalgo and Ricardo Hausmann, countries lagging behind economically should invest in their non-tradable attributes and resources. African nations, for example, could put more financial focus on their highly competitive minerals to finance their technologies and better compete with western countries. Adaptation is extremely essential in economic growth. People could take advantage of the current global pandemic (which has resulted in a sharp increase in online shopping) by investing in drop shipping where anyone can win through cautious strategies. In addition, EU members could take advantage of the Smart Specialisation Platform (S3P) formed in 2011 to help member states "develop, implement and review their Research and Innovation strategy for Smart Specialisation Strategy (RIS3)". This platform can help European capitalist nations to focus more on their strengths and efficiently invest in research thus becoming a better competitor with America. Investments are financial risks nations should take to achieve economic prosperity. The bigger the risk, the higher the profit

or gain but high risks can also result in large losses which is why the S3P platform could greatly assist member states making the right financial moves to increase their chances of profiting.

On the other hand, one could argue that economic inequality is natural and cannot be made equal. Economist Milton Friedman argues that no one is made equal and competition is what keeps economies running. In a competition there can only be one winner. In addition, third-world countries cannot compete with first-world countries as they don't have as much exposure to the new technologies as their western counterparts. Although the somewhat free-market economic structure and technologic advancements has put the U.S. at the top, it has widened the gap between the rich and the poor in its society. The poor might have better living conditions but the rich have become way richer than before. America's economic structure allows for exploitations of small firms to their detriment (as seen with Amazon which is facing allegations from the European Unions for its exploitations of individual retailers. Furthermore, one could say that France's mixed economy could discourage businesses from starting up as its tax rates are quite high compared to the U.S. According to the French government site, people earning an income in France can expect to be taxed a minimum of 20% compared to America where workers are taxed a minimum of 10% of their earnings.^{vii} This is one of the reasons America sees an influx of businessmen.

In conclusion, the prosperity of a nation is governed by its economic structure and its technological industry in today's world. Nations lagging behind could focus on their non-tradable or unique attributes to increase their economic wealth without necessarily importing skills from foreign nations. African countries have a plethora of resources they can immensely profit from through trade and careful investment. Although every nation can have a prosperous economy through its adaptation to global trends and patterns, there will always be a gap in the economic sector as long as there is a competitive market. As technology becomes more advanced and people's expertise narrower, inequality will increase.

References:

1. Agarwal, P., 2020. *Economic Systems*. [online] Intelligent Economist. Available at: <<https://www.intelligenteconomist.com/economic-systems/>>
2. Heritage.org. 2020. *North Korea Economy: Population, GDP, Inflation, Business, Trade, FDI, Corruption*. [online] Available at: <<https://www.heritage.org/index/country/northkorea#:~:text=North%20Korea%20is%20ranked%2042nd,of%20the%20Index%20in%201995.>>>
3. Import-export.societegenerale.fr. n.d. *Country Risk Of Bhutan : Economy*. [online] Available at: <https://import-export.societegenerale.fr/en/country/bhutan/economy-country-risk?accepter_cookies=oui> Hidalgo, C. and Hausmann, R., 2009. *The Building Blocks Of Economic Complexity*. [online] PNAS. Available at: <<https://www.pnas.org/content/106/26/10570>>
4. Meakem, Jacobs, Gupta, Ganguly, Ashford, Kroenig, Flournoy, Chefitz, Babones, Hadavas, Schneier, Wanless, Cook, Babones and Alden, 2020. *Here'S How The United States Can Keep Its Technological Edge*. [online] Foreign Policy. Available at: <<https://foreignpolicy.com/2019/02/25/heres-how-the-united-states-can-keep-its-technological-edge-trump/>>

5. EU Science Hub - European Commission. n.d. *Smart Specialisation - EU Science Hub - European Commission*. [online] Available at: <<https://ec.europa.eu/jrc/en/research-topic/smart-specialisation>>
6. Wells, L., 2020. *2020-2021 Tax Brackets | Bankrate*. [online] Bankrate. Available at: <<https://www.bankrate.com/finance/taxes/tax-brackets.aspx#:~:text=The%20tax%20code%20has%20seven,highest%20earners%20pay%2037%20percent.>>
7. Statisticstimes.com. 2020. *World GDP Ranking 2019 - Statisticstimes.Com*. [online] Available at: <<http://statisticstimes.com/economy/world-gdp-ranking.php>>

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1. ⁱ Agarwal, P., 2020. *Economic Systems*. [online] Intelligent Economist. Available at: <<https://www.intelligenteconomist.com/economic-systems/>>
 1. ⁱⁱ Statisticstimes.com. 2020. *World GDP Ranking 2019 - Statisticstimes.Com*. [online] Available at: <<http://statisticstimes.com/economy/world-gdp-ranking.php>>
 1. ⁱⁱⁱ Meakem, Jacobs, Gupta, Ganguly, Ashford, Kroenig, Flournoy, Chefitz, Babones, Hadavas, Schneier, Wanless, Cook, Babones and Alden, 2020. *Here'S How The United States Can Keep Its Technological Edge*. [online] Foreign Policy. Available at: <<https://foreignpolicy.com/2019/02/25/heres-how-the-united-states-can-keep-its-technological-edge-trump/>>
 1. ^{iv} Import-export.societegenerale.fr. n.d. *Country Risk Of Bhutan : Economy*. [online] Available at: <https://import-export.societegenerale.fr/en/country/bhutan/economy-country-risk?accepter_cookies=oui> Hidalgo, C. and Hausmann, R., 2009. *The Building Blocks Of Economic Complexity*. [online] PNAS. Available at: <<https://www.pnas.org/content/106/26/10570>>
 1. ^v Heritage.org. 2020. *North Korea Economy: Population, GDP, Inflation, Business, Trade, FDI, Corruption*. [online] Available at: <<https://www.heritage.org/index/country/northkorea#:~:text=North%20Korea%20is%20ranked%2042nd,of%20the%20Index%20in%201995.>>
 1. ^{vi} Agarwal, P., 2020. *Economic Systems*. [online] Intelligent Economist. Available at: <<https://www.intelligenteconomist.com/economic-systems/>>
 1. ^{vii} Wells, L., 2020. *2020-2021 Tax Brackets | Bankrate*. [online] Bankrate. Available at: <<https://www.bankrate.com/finance/taxes/tax-brackets.aspx#:~:text=The%20tax%20code%20has%20seven,highest%20earners%20pay%2037%20percent.>>