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China's Success Unraveled

In the midst of a civil war over 70 years ago, China was on the brink of collapse. Now it is the second most powerful and economically stable country in the world even when compared to other socialist nations in Asia that also sprouted up 50 to 70 years ago. China's exponential economic growth in a short time span is partly explained by the country's intense focus on education, economic planning, and the allocation of natural resources.

China's education system, both primary and secondary, is not known for its prestige. However, in recent years, China managed to surpass educational institutions across the world including those located in neighboring countries, Vietnam and Lao PDR. This success is partly attributed to China's integration of science, technology, engineering, and math (STEM) as early as kindergarten (Ying 2). Introducing children to STEM education early on creates familiarity with STEM topics and puts children at a higher chance of going into a STEM career, thus supporting Chinese corporations and industries.

Although it has yet to be fully researched, a study conducted across China from east China to western China with roughly 430 teachers found that teachers with more experience within the field were open to the idea of implementing a statewide STEM kindergarten program with funding (Ying 9). The teachers' willingness to spend more time planning work, setting lessons, and grading for a STEM program reveals that the attitude towards STEM from kindergarten teachers is very positive. These teachers believe that STEM integration in the curriculum benefits children in the long run by focusing on critical thinking skills, creativity and collaboration.

China undoubtedly is the biggest exporter of manufactured goods in the world, specifically technology which requires a large workforce of educated individuals. Through STEM education they are able to create such a workforce. The creation of a large, young, white-collared

workforce, which China has lacked extensively due to the one-child policy, has bolstered China's economy further than most nations. The growth is most evidently seen as early as the 1970s and 1980s when China switched to an industrialized nation, accelerating their economic growth by nearly 1300% compared to 2000 (WorldBank). In comparison Vietnam and Laos do not prioritize educational reform and advancement because their economy does not require many white-collar workers. Instead, these countries prioritize the development of factories and growth of the blue-collar working class to increase the production of raw goods.

China has also been able to build a strong economy due to its small student-teacher ratio. Beginning in the early 70s, China reduced its class sizes by roughly 30% from 29 students to roughly 16 students in 2020 (World Bank 1). This model adopted from the Soviet Union, provides a more meaningful education for students given the increased interaction between teachers and students. Creating a space in which students interact more closely with the teacher builds connections and fosters pupils' ability to learn. The enhanced quality of education enables China to produce a much stronger, well-educated workforce that helps its economy. Although Vietnam and Laos have reduced their classroom sizes, China's early sponsorship from the Soviet Union in its prime years allowed its educational system to ameliorate over the course of many decades.

China's hold and leverage on the global economy are tremendously large, more so than other socialist nations due to its impressive and strategic planning of the economy. In more recent years this drastic reach became even more prominent with the One Belt One Road Policy in 2013. The One Belt One Road policy aims to create a countrywide road for both land and maritime trade. It stemmed from mainland China to eastern Europe (Geoff 1). This initiative created a multi-country trade route that China oversaw, allowing them to dominate the regions along the trade routes. Dominance and control over trade enabled the Chinese government to control their economy whilst suppressing the economies of other nations such as Vietnam and Laos. The One Belt One Road policy not only dominates the region but also attracts foreign investors from neighboring nations and across the world due to lower costs (Bihua 3). With more foreign investors, businesses, and employment, China's economy continuously expanded. In comparison, Vietnam and Laos lost their foreign investors, crippling their power in the global economy.

Although global economic dominance is a key foreign policy issue area for China, policymakers also recognize the saliency of developing the internal markets of the country before expanding outward. Chinese officials understood this concept and thus began one of the several 5-Year plans that were centered around shifting the Chinese economy from agrarian to industrial (CGTN 1). The shift indicated a rise in China's global presence in the economy. As China industrialized, they embraced technological innovations, increased the quality of life, and foreign businesses. In the later 5 year plans, China embarked on fixing its infrastructure, industry, and educational systems allowing for further economic growth. China reformed drastically over the course of 50 years, whereas Vietnam and Laos lacked the extensive economic planning needed to produce and maintain growth comparable to what is seen in China today.

China's economic growth was even more pronounced after its impressive allocation and use of natural resources. shifting from producing raw natural goods to producing finished goods, such as technological devices. (Kahm 1). This shift showcased the importance of coupling natural resource production with highly valued manufactured products. A case study of China on natural resource abundance and technological innovation suggests that although natural resources are important, being able to create goods from those initial resources is vital to a country's economic growth and maintenance (Kahm 3). Take in, for example, Vietnam and Laos who primarily ship out raw goods like coffee beans, gold, coal, etc. Even though these two nations produce many high valued goods, their economy cannot compete with the manufactured goods created by China which has more intrinsic value.

China's technological innovations combined with natural resources to create manufactured goods outweighs most nations. China sits on a giant natural gas reserve that has remained untapped for decades. Natural gas has become more vital to countries and their futures as oil becomes more scarce. Soon enough oil and coal will deplete and switching to natural gas will be essential (Kolb 1). China, like many other industrialized nations, has relied on fossil fuels such as coal and oil for energy. However, not many nations have made use of natural gas due to its lack of efficiency to be converted into energy. As technology improves and oil resources diminish, reliance on natural gas will shift the global market in favor of China. As nations across the world like the United States, Vietnam, Laos, and Russia, become more reliant on China's exports, China will have more leverage in negotiations during trades.

China's intuitive combination of these three principles, education, planning of the economy, and the allocation of resources allowed its economy to grow exponentially over the course of fifty years. Although China grew exponentially in recent years, their lack of environmental preservation severely threatens the sustainability of their current economic policies. Much like China, the United States, India, and Russia all face environmental problems that might outweigh their own economic growth. It is only a matter of time until these industrial giants begin to slow down. However, the concern is when will these giants reverse the effects of their industry on the environment before it is irreversible.

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