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Space has been a source of curiosity as well as fascination to people for a long time. From centuries ago, intellects around the world have attempted to figure out about space and have developed numerous theories, but they still only know very little about space. As a result, people began to conduct space travels using spaceships and spacesuits that require sophisticated technology, advanced scientific theories, and a tremendous amount of money. Notably, the United States and the Soviet Union each spent more than \$20 billion during the “space race” in the late 20th century. Due to these boundaries, space exploration was only conducted by the government even until recent days. However, as modern technology and economy both developed significantly compared to the past, space explorations started to be privatized by companies like SpaceX and Blue Origin, leading some critics to oppose privatizing space exploration for several reasons. Although privatizing space exploration has some drawbacks, it is significantly beneficial because it contributes to economic development as well as technological advancement, which enhances people’s lives.

To begin with, privatizing space exploration is significantly beneficial because it contributes to economic development, improving people’s lives. According to Source A, adopting innovative public-private partnerships offer substantial benefits to the government as space services could be provided at nearly 1/10th the cost of traditional contracting methods. This makes the government spend less budget in space technology and eventually benefits the taxpayers (Source A). This statement indicates that the government could obtain experiment

results, innovation, technological advancement, and risk-sharing while saving a significant amount of its budget. It means that the saved money could be spent more efficiently in other areas, such as social security programs, which would eventually enhance people's lives in various ways. Moreover, according to Source A, as entrepreneurs and investors would follow the space projects conducted by public-private partnerships, the private sector would spend their own money, creating new industries (Source A). The new industries developed by the private sector would create a lot of high-paying, value-added jobs within the nation because space exploration technology requires various advanced industries, such as aerospace manufacturing, telecommunications, robotics, material science, and engineering. The creation of new jobs in these industries would become a new motivation for economic growth, increasing employment and stimulating the market. Al-Rodhan Nayef, the author of Source F, might argue that space exploration companies might have issues keeping secure contracts with NASA, as the companies have to bear the burden of addressing multiple high-stakes shareholders and be ready to take risks if things go wrong (Source F). However, these issues could be managed well as long as public-private space exploration partnerships are maintained fairly with proper financial and legal oversight. Also, since privatizing space exploration benefits both the public and the private sector, the issues that could be compromised would not be a primary issue that damages the benefits it provides. Therefore, privatizing space exploration is significantly beneficial because it contributes to economic development, enhancing people's lives.

Furthermore, privatizing space exploration is significantly beneficial because it contributes to technological advancement. According to Source C, Musk and SpaceX have changed the trajectory of spaceflight not just in the United States but across the world. The technological advancements achieved by private companies enabled unique, efficient spaceship

designs and dropped launch prices (Source C). This statement depicts that privatizing space exploration spurred innovations that were originally undeveloped when only NASA conducted space expeditions. The participation of private companies like SpaceX, Blue Origin, and Virgin Galactic caused competition between those firms and made them strive for advanced technologies, resulting in a “revolution” in space travel technology. The most notable innovation was the development of “reusable” spaceships. Conventionally, spaceships were mostly single-launch vehicles, which made NASA spend billions of dollars within several decades – even the space shuttle had extremely high maintenance costs every time it flew a mission. However, reusable spaceships such as the Falcon 9 enabled saving a significant amount of money and resources as they were “reusable.” Nevertheless, there are also concerns regarding the spaceships constructed by private companies. Al-Rodhan Nayef, the author of Source F, might express concern regarding the spaceships built by private companies. According to Source F, SpaceX’s Falcon 9 rocket carrying an unmanned Dragon capsule destined for the International Space Station (ISS) exploded by a failed strut in 2015. Also, in 2014, Orbital Sciences’ rocket destined for the ISS exploded by unknown causes (Source F). The source indicates that there might be possible technical risks in space exploration involving the private sector in state-sponsored space programs. However, considering the fact that there were many incidents in government-run space explorations, such as the case of *Challenger* in 1986 and *Columbia* in 2003, technical risks always exist in space explorations, whether it is conducted by a private company or the government. Moreover, as the public and private sectors cooperate in multiple projects, there would be mutual development of new technologies in both the public and private sectors, which would eventually lead to addressing the potential technical risks that could occur

together. Therefore, privatizing space exploration is significantly beneficial because it contributes to crucial technological advancement.

In conclusion, privatizing space exploration is significantly beneficial as it contributes to economic development as well as technological advancement, which eventually improves people's lives. As the public and private sectors continue to cooperate with each other to make space travel more affordable, profitable, and safe, substantial benefits will be provided to the people. In the distant future, people might travel through the planets and stars they always looked upon just for a family trip.