

Team 3 Government Impact in Promoting Technological Progress Executive Summary

Some of the greatest technological improvements in the modern age have come as the result of government led research programs. Grand achievements, such as landing a man on the moon, was only possible through large government projects. Likewise, some of the most pressing social issues today, like climate change and hunger, require innovative technological solutions, and society is looking increasingly to governments to fund and run such large research efforts. In this report, we will study the effectiveness of government in driving technological progress through large publicly sponsored programs. We will investigate three case studies from history - The Race to the Moon, Nuclear Energy, and The Longitude Problem. From these case studies, we will extract lessons about what some of the most common pitfalls are in government run research programs, and give recommendations about how these can be avoided. We will find that government programs are often motivated by political incentives, rather than the greater benefit of mankind. Also, power struggles for recognition and funding within these programs, and ideological dogma, rather than economic success, often slows these programs down and leads to technically inferior solutions. Finally, we will also show how the uses of prizes can be one way that governments can encourage innovation, but that they must be carefully administered to avoid bias in judgement, which stifles innovation rather than encourages it.