

[A] Businesses are the driving force of any successful economy. Surprisingly, the UK and the USA's investment on infrastructure stood at very low rates in comparison to China (0.89% and 0.55% respectively) whereas countries such as Oman and other GCC countries did not even appear in the list. According to Statista (2022)[1], during the period 2013–2019, China invested 5.8% of its GDP on constructing and maintaining its infrastructure followed by Georgia (3.1%) and Belarus (2.42%). Scientific research is systematic work that studies a global or local phenomenon or problem and recommends solutions. IP fosters an environment where creativity and innovation can flourish by enabling people to earn recognition and financial benefit from what they create<sup>2</sup>.

[C] Small and medium sized enterprises (SME) can be as innovative as larger businesses. Infrastructure chiefly refers to the provision of the fundamental services and facilities necessary for a society to function satisfactorily. The solutions that scientific research puts forward can be in the form of a product that a country can make into a commodity to export and generate revenue. For example, Airbus, which is the world's largest airliner, generated about 79 billion USD in revenue in 2019. The law that protects these products is known as Intellectual Property (IP), which is recognised internationally. IP includes giving patents, copyrights and trademarks to physical or non-physical products. For example, collaboration and benchmarking with larger businesses can help SMEs identify production gaps. Shake Shack Restaurant is one example of how small businesses can innovate and expand locally and globally. Then as it continued gaining popularity, Shake Shack was awarded a permanent contract to open in the park and expand further. This does not only include concrete facilities such as roads, hospitals and schools, but also other intangible ones like regulations as well as technology. For instance, China, the fastest growing economy in the world, spends significantly more on its infrastructure than anywhere else in the world<sup>3</sup>. This is a cyclic process that starts with research leading to products or services that solve societal problems and contribute to the country's income, and eventually becoming self-dependent. This amount is almost three times larger than Oman's revenue which stood at 26.3 billion USD in 2019. Governments can boost innovation in those SMEs to reach the production level required. Another way to innovate is through applying new technologies and scientific research which will help them stay in demand and scale up very quickly. Developing the necessary skills of the leaders and staff of those businesses will also support innovation and growth.

[D] For a country to create an environment in which innovation thrives, a minimum level of infrastructure needs to be achieved. There is a correlation between the rate of a country's growth in economy and how much it spends on infrastructure. Turkey is witnessing a flourishing economy and its share of investment in this sector was 1.04% in 2017. A key factor to achieve this lies in innovation. However, innovation requires an environment where certain essentials are in place.

[B] Scientific research comes out on top towards achieving innovation. Such products need to be protected in order to ensure the full financial benefits. It was born as a hot dog cart in Madison Square Park in New York where it was a success and people queued daily to buy its products. For businesses to grow and continue to be in demand, their products and services must meet the ever-changing market's needs. This can be done by building an innovation system within those businesses. It did not take Shake Shack long to add two more carts in the park. Now Shake Shack has over 275 branches around the world. While costly, spending on infrastructure is a valuable investment.