TAF

Journal of Administrative and Business Studies

JABS

2020, **6**(6): 236-245

PRIMARY RESEARCH

Why have USA firms been more effective than the UK firms in the market since the industrial revolution?

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Keywords

Industrial revolution
United States
United Kingdom
Global Competitiveness Index (GCI)

Received: 26 July 2020
Accepted: 13 October 2020
Published: 15 December 2020

Abstract

Even though the Industrial Revolution started in Britain, American firms overtake British firms so spectacularly, and the US has become the world's leading economic power. The purpose of the present article is to explore Some Historical Events During the Industrial Revolution and try to find the reasons behind the advance of the US-based on reliable data and numbers. In this study, we used secondary data from the previous literature review of the effectiveness of US Firms and UK Firms in the market since the Industrial Revolution. After examining numerous articles, books, blogs, and data related to the subject, we find that natural sources like America's large landmass, the diversity of US population, the availability of mineral sources followed by numerous reasons as technological innovation capability, dynamic financial system, well-spread infrastructure, transportation stand behind the superpower economy of the United States.

INTRODUCTION

One of the most distinctive turning points in human culture is the First Industrial Revolution. It occurred in England in the late eighteenth and early nineteenth centuries (1760-1840) and it is generally agreed that Arnold Toynbee was the first who conducted a systematic study of it (Wilson, 2014). There are several definitions of the industrial revolution. Fernihough and O'Rourke (2014) stated that many economic historians consider it as a shift to coal. Allen (2011) described the Industrial Revolution as a systematic transformation of a large proportion of the population from agriculture to manufacturing and mining, which contributed to the growth of the manufacturing sector and, ultimately, to a rise in national income. Also, Mohajan (2019) pointed out the industrial revolution as an important social and economic revolution in England. He stated that the Industrial Revolution marked the transition from the technology of human and animal labor to the world of machines.

In history, many revolutions have occurred, some for social reasons, some for political reasons, and some for natural reasons. But what were the factors that led to the occurrence of the First Industrial Revolution? This is a matter of debate. In this light, Sugden and Cockerill (2017) emphasized that the development of textiles was a major factor that contributed to the economic development in Britain. Fernihough and O'Rourke (2014) also argued that the use of coal as a source of energy in steam engines could account for about 60% of European urban development between 1750 and 1900. Besides, innovations are also a critical factor. Montagna (1981) indicated that British businessmen invested a large sum for new inventions in manufacturing and there was a growing interest in scientific research and invention in England. Other factors mentioned by Patrick O'Brien include productive and responsive agriculture in England, along with its abundant inaccessible wealth of coal and other minerals, foreign trade, important technological discoveries, and innovation are the causes or origins of the industrial revolution in England (O'Brien, 2017; Onegi, Eser, & Korkmaz, 2019). For more, steam engines were used for transportation with the invention of railways and steamships. It is evident that transportation is the backbone of any economic, cultural, social, and industrial de-

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velopment (Ayuningrat, Noermijati., & Hadiwidjojo, 2016; Choudhary & Rao, 2018). As it is the basis for the import, export, and transportation of goods.

There is no specific cause for the leadership of Britain in the Industrial Revolution. Instead, there are many causes, such as technology, economics, politics, and culture, which gathered in the mid-eighteenth century to stimulate industrial advancement. However, the Europeans, specifically the British, have two enormous advantages. "Coal" is the first favor. When you follow the story of enhanced transport, communication, and industrial efficiency. It's always going to go back to coal. Because the industrial revolution was all about using different types of energy to automate manufacturing. And, therefore, England had large supplies of coal near the surface, which meant that it was cuddly to extract so that it quickly replaced wood for heating, cooking, etc. This inspired the British to search for more coal. The second favor is "wages", Humphries and Schneider (2019) argue that the high wage economy interpretation implies that the costs of hand spinning in Britain rise from the late seventeenth to the mid-eighteenth century, leading to the industrial revolution. Higher salaries combined with lower fuel prices have prompted manufacturers to initiate automation. The ideological factor must also be mentioned. Hartwell (2017) believe that a change in economic policy, from mercantilism to “Laissez-faire”, is a major source of the Industrial Revolution. Thereby, Britain was a market-oriented and open society as opposed to its competitors in the economy. This was fundamental for the country to cultivate useful knowledge which led to the first Industrial Revolution.

At the end of the first industrial revolution, technology and skilled workers migrated from Britain to some other countries, such as Belgium, France, Sweden, Germany, and the USA (Mohajan, 2019; Srisangkaew, 2017). As a result, global economic development began. From here, what features did the USA have to be the nation of the Second Industrial Revolution? And what advantages the USA. has had to make it an industrial power zone. Actually, the effectiveness of each country's businesses has been investigated on a country or sector basis in previous studies, but there have been no studies comparing country businesses in terms of the effectiveness of businesses since the industrial revolution and that’s what makes this study original. In this article, although the Industrial Revolution started in the UK and the USA met such developments very soon, the question in focus is why the USA companies were more effective than the UK companies and had a bigger share in the global market. The following section presents the research methodology.

RESEARCH METHODOLOGY

In this study, we used secondary data from the previous literature review of the effectiveness of U.S. Firms and U.K. Firms in the market since the Industrial Revolution. The findings were searched online using keywords in English, such as: "first industrial revolution," "second industrial revolution," the impact of US/American firms in the market " the impact of British firms in the market”, “comparison between American and British firms", “the economic superpower of America”, “the effectiveness of American firms”, “the effective of British firms” and etc.

For this paper only the pertinent researches which concerned why US firms have had more impact than UK firms were included. In order to find the answer to the mentioned question we addressed some historical events during the Industrial Revolution and an attempt was made to answer the title of How America became an economic superpower? Also, a quantitative comparison was made. We used the data presented in all editions of the Global Competitiveness Report published by World Economic Forum since 2004 and related to America and Britain. we adopted the GCI (the Global Competitiveness Report) as a reference and We displayed, compared, and analyzed the Competitiveness of the United States and the United Kingdom in terms of their economic and market effectiveness.

SOME HISTORICAL EVENTS DURING INDUSTRIAL REVOLUTION

Indeed, the beginning of the American Industrial Revolution is often credited to the English immigrant Samuel Slater, who in 1790 opened the first American industrial mill. In New England, he also built several cotton mills and became known as the "Father of the American Industrial Revolution" (Smith, 2016). The catalyst for American industrialization was the War of 1812. It was a martial conflict between Great Britain and the United States. Great Britain had been battling the French in the Napoleonic Wars at the beginning of the 19th century (Irwin & Davis, 2003). These Napoleonic Wars (1799–1815) forced Great Britain to take action that left the United States deeply outraged. The United States formally declared war on 18 June. Northeast citizens rejected the idea but, many others were ardent about the nation's war of independence from British oppression. The War of 1812, a focal point in North American history, is a conflict that differs from other conflicts in which the Americans and British had participated during the 18th and 19th centuries, being fought over trade disputes and American desire for expansion and territorial rule (Inohara, Hipel, & Walker, 2007). The war went on from 1812 until

ISSN: 2414-309X
DOI: https://doi.org/10.20474/jabs-6.6.2

1814. However, peace talks began by the end of 1814 and after the war, the people realized that the country was too dependent on foreign goods. They felt the U.S. needed to make their goods and build better transports.

In addition, the infrastructure that drives economic growth. An improved transport system is crucial to reaching consumers with raw materials to the factories and manufactured goods. Historically the Erie Canal, 363-mile long, was the most powerful canal (Cain, 1997). The 363-mile man-made waterway, which began in 1817, flowed between Albany on the Hudson River and Buffalo on Lake Erie. The canal linked the Old Northwest and the eastern seaboard. The Erie Canal's great success set off a canal frenzy that created a new and complete national water transportation network by 1840, along with steamboat development. Also, the "FACTORY SYSTEM" in which work is carried out on a large scale in a single centralized location as the most famous mill towns of LOWELL, MASSACHUSETTS, opened in 1823, was an important boost for the industrialization of the USA. Since it was part of a more fundamental economic development, the growth of new business companies in the American industry between the 1880s and World War I was little influenced by public policy, financial markets, or entrepreneurial talents. New entrepreneurship. The organizational response to fundamental changes in the production and distribution processes was made possible by the emergence of new energy sources and the use of scientific expertise in industrial technology (Montagna, 1981).

Industrialization in the United States rebounded after the Civil War (1861-1865). This period was called the Second Industrial Revolution or the American Industrial Revolution, covering most of the second half of the nineteenth century. The nation expanded considerably during the first half of the century, and the new territory was rich in natural resources. Completing the first transcontinental railroad in 1869 is an important event. Changes in transport, connectivity, and demand have brought about a revolution in the distribution processes. So, where the new retail marketers were having difficulty managing the performance of modern manufacturing technologies, the manufacturers merged mass production with mass distribution. The result was the giant industrial enterprise that remains today in modern consumer economies the most dominant private-owned and controlled economic entity (Montagna, 1981).

The U.S. has massive human capital, too. More than 10 million immigrants came to the US between 1860 and 1900. Andrew Carnegie set up the first steel mills in the USA and became the steel industry's leader. He acquired commercial interests in the mines which produced the steel raw material. American inventors such as Alexander Graham Bell and Thomas Alva Edison have created a long list of new technologies that have improved communication, transport, and industrial production. Edison has made improvements to existing technologies, including the telegraph, while also creating revolutionary new technologies such as light bulbs, phonographs, kinetographs, and electric dynamo. Meanwhile, Bell invented new techniques for speech and hearing and became known as the telephone inventor. The arrival of the railroad and the telegraph and the invention of modern high-volume technologies in the food, oil, rubber, glass, chemicals, machinery, and metals manufacturing made possible a historically unparalleled production rate (Montagna, 1981), and never forget the financial institutions and the expanded credit network.

Otherwise, the U.S. government implemented policies that encouraged economic growth, such as providing land for railroad building and holding high tariffs to shield the U.S. industry from international competition. The tariff protected the US industry from foreign competition and thus helped the northern manufacturing belt expand rapidly. However, the US moved into the front ranks of the world economy in the last decades of the nineteenth century (Greasley & Oxley, 1998).

How Did US become an Economic Superpower?

Historically, there has been a significant series of economic and political events that have pushed America to be the world's most powerful house of industry. The determination to avoid the loss of post-World War I coordination, and the subsequent political turmoil, caused the United States to lead the way to a whole new level of global governance agreements and institutions.

The story starts in the year 1944. At the time World War 2 was winding up, the U.S. was the only nation emerging from the war in a good economic position, and was thus in a unique position to shape the terms of peace. The result was a global system of finance, called the Bretton Woods system. Bretton Woods is also bridged with the International Peace and Security Organization's Washington Conversations, better known as the Dumbarton Oaks Conference, which lasted from August-October 1944. The conference was held at the Mount Washington Hotel in Bretton Woods, New Hampshire, and was attended by delegates from forty-four nations. The Bretton Woods program was forged as a result of the Meeting. This new system replaced the gold standard as the global currency, with the U.S. dollar. The conference laid the groundwork for the International Monetary Fund (IMF), the International Bank for Reconstruction

ISSN: 2414-309X
DOI: https://doi.org/10.20474/jabs-6.6.2

and Development (World Bank) and what would eventually become the GTA (Eichengreen, 2000).

The Bretton Woods agreement was an unprecedented cooperative effort for nations that had for more than a decade put in place barriers between their economies. The Bretton Woods system became fully functional in 1958 with currencies becoming exchangeable. Countries settled international dollar balances, and US dollars were exchangeable for gold at a fixed rate of $35 an ounce. Nations also agreed to buy and sell U.S. dollars in order to maintain their currencies within 1% of the fixed rate. By doing so, America was established as the world economy's predominant power.

No doubt the system operated relatively well until mid-1960, but the increase in US inflation that started in 1965, the growing cost of the Vietnam War and Lyndon Johnson's Great Society, and President Richard Nixon's decision on 15 August 1971 to suspend gold convertibility contributed to the failure of the Bretton Woods program. Rofe (2017) points out that the country emerged from World War II in a position of unrivaled strength, and the 1950s had posed no challenges to the balance of payments; at the beginning of 1958, U.S. monetary gold reserves were even greater than ten years before. U.S. gold stocks, once seemingly all but unlimited, had dropped to dangerously low levels by the late 1960s. The dollar shortage had become a glut of dollars, overvaluing the currency (Eichengreen, 2000).

By 1973, most of the world's major economies had let their currencies float freely against the dollar. Amid the failure of the gold standard of Bretton Woods in the early 1970s. The US needed a strategy of keeping the world's demand for the US dollar strong. As a result, the US concluded an agreement with Saudi Arabia beginning in 1974 to standardize oil prices in dollar terms. The pegging of oil prices to US dollars keeps the US dollar high and the US dollar weak on inflation. The petrodollar system was, however, born with this contract, along with unbacked currencies and floating rate regimes. The petrodollar scheme also offers a source of liquidity for US financial markets and international capital inflows by "recycling" petrodollars (Nunan, 2004).

As well as the aforementioned financial systems, geography, demography, expansion of education, and technological development were among the major drivers of the economic expansion of the united states. The period between 1945 and 1970 was called global expansion, allowing businesses to enter more distant markets in the years of global expansion, and eliminating the problem of communication. In these years, the US companies, which passed the European companies in technological advancement and became the most moving industry in the world, tried to combine their scientific, marketing, management, and financial advantages with the low-wage labor force in the overseas countries and achieved great success and profits.

The geography of the United States has given it an edge. Land availability contributed to the rapid industrialization of America. Under one nation the large landmass of America allows economies of scale in government and business. This advantage lowers service and product provisioning costs. The EU has a comparable scale but not a single national government. In addition, the eastern seaboard of the United States, with a large number of rivers and streams along the Atlantic coast, provided many potential sites for the construction of textile mills necessary for early industrialization. In addition, one of the essential drivers was the diverse population of American cultures, which brings fresh ideas and innovation to business ventures. These advantages have made it possible for America to become a significant global economic power. The relative lack of workers kept the wages of the United States almost always higher than the corresponding British and European workers and provided an incentive to mechanize certain tasks. The United States population had some semi-unique advantages in that they were former British subjects, had high English literacy skills, for that period (over 80 percent in New England), had strong British institutions, with some minor American modifications, courts, laws, the right to vote, the protection of property rights and, in many cases, personal contacts between British innovators of the Indus. They had a good basic structure on which to build (Schwab & Sala-i Martin, 2010).

In addition, the growth of higher education in the 20th century underpins the inequalities in economic economies, by fostering American industrial efficiency in particular. Recent studies by economic historians turn focus to the role of higher education in 20th-century American economic growth. Less than 2 percent of American 23-year-olds earned bachelor's degrees in 1900, compared to 18.2 percent and 22.3 percent respectively in 1960 and 1970, peak years of American industrial productivity advantage explained in Statistical History of 1976.

Allen (2011) notes the industrialization of the US also depended on four supporting policies that constituted the 19th century 'standard model' for economic development. The first was mass education…" On the other hand, the early technological and industrial development in the United States was facilitated by a unique confluence of geographical, social, and economic factors. Greasley and Oxley (1998) and Wilson (2014) illustrate the increase in total productiv-

ISSN: 2414-309X
DOI: https://doi.org/10.20474/jabs-6.6.2

ity of American factors from around the turn of the 20th century. Choudhary and Rao (2018) attributes this to modern enterprise business and flow technology. Mohajan (2019) recorded that about 4.4% and 6.9% of British men aged 23 held bachelor's degrees in 1960 and 1970, respectively, and the rates were lower for women. British higher education has increased since 1970, and by 1989 17% of the population had degrees in working-age classes, compared with 35 percent in the United States OECD in 1993. For example, Humphries and Schneider (2019) present a number of metrics, patents, research and development activity, and Nobel laureates, indicating that higher education was important for economic success and productivity in the 20th century. Humphries and Schneider (2019) also stress the role of research and development, which they suggest rests on the expansion of higher education in the 20th century, in sustaining American industrial leadership after 1900 (Greasley & Oxley, 1998).

Competitiveness of United State and United Kingdom

According to The Global Competitiveness Report written by Professor Klaus Schwab and published by the World Economic Forum in 2013. GCI is a comprehensive tool that measures the microeconomic and macroeconomic foundations of national competitiveness. The World Economic Forum, which has been measuring competitiveness among countries since 1979, defines competitiveness as a set of institutions, policies and factors that determine the level of productivity of a country (weforum.org).

The GCR is an annual report which the World Economic Forum publishes. Since 2004, the Global Competitiveness Report ranks countries based on the Global Competitiveness Index, developed by Xavier Sala-i-Martin and Elsa V. Artadi. The following data are taken from the World Economic Forum published from 2004 to 2019 and from the Statistical History of 1976. To anticipate, productivity levels in the United States were higher than in the UK. US industrialization, even though it occurred later than in Britain was far more efficient. Many determinants drive productivity and competitiveness. Klaus organized these Indicators into 12 pillars of competitiveness (Schwab & Sala-i Martin, 2010).

1. Institutions
2. Infrastructure
3. Information and communications technology adoption (ICT Adoption)
4. Macroeconomic stability
5. Health
6. Skills
7. Product market
8. Labor market
9. Financial system
10. Market size
11. Business dynamism
12. Innovation capability.

In order to find out why US firms have had more impact than UK firms, we adopt the GCI as a reference and use the data presented in all editions of the Global Competitiveness Report published since 2004. Note that the Global Competitiveness Index score ranges from 1 to 7 since 2004. Published editions since 2004 cover between 104 and 141 countries, but we only took data from them concerning the United States and the United Kingdom, built a graph and table using Microsoft Excel then analyzed them in order to compare the competitiveness of the two countries mentioned above. The GCR published in 2019 adopted a new range of score. the Global Competitiveness Index score ranged from 0 to 100.

Graph 1 below shows the progress of GCI scores of US and UK since 2004 to 2017. According to the GCR we notice that in 2004, the United States ranked 2nd while the United Kingdom ranked 11th. In 2005 the US kept the same ranking (2nd) while UK decrease to become at the 13th rank. In 2007 the US regained the first ranking and UK attend the 9th rank. in 2008 the US kept the first ranking while UK fell to 12th rank. From 2009 to 2013 we notice a fell in the score of US and a simple advance in the score of UK. In 2009 US scored 5.59(2nd rank) and UK scored 5.19 (13th rank) While In 2013 US scored 5.48(5th rank) and UK scored 5.37 (10th rank). From 2014 to 2017 we notice that US started to regain its ranking with a simple advance in the score of the UK. In 2014 US scored 5.54 (3rd rank) and UK scored 5.41 (9th rank). While In 2017 US scored 5.85 (3rd rank) and UK scored 5.51 (7th rank).

ISSN: 2414-309X
DOI: https://doi.org/10.20474/jabs-6.6.2

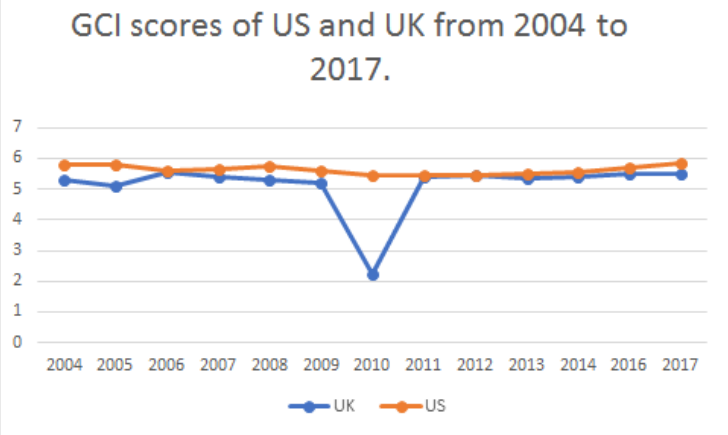

FIGURE 1. The progress of GCI scores of US and UK from 2004 to 2017.

To compare particularly the competitiveness of USA and UK we must compare the pillars/determinants that drive productivity and competitiveness in the US and UK. Actually, in 2004 and 2005 there was no pillars. there were three sub-indexes which are Public Institutions Index, Macroeconomic Environment Index and Technology Index. Table 1 below illustrate the detailed performance overview of the United States and the United Kingdom in 2004 and 2005. In 2004 and 2005, We notice an excellence for United Kingdome in Public Institutions Index and Macroeconomic Environment Index While US overtook Britain in the technology index. US overtook UK in 1 sub-index which was technology index. In particular, the technology index scored (6.24/ 2004, 6.19/ 2005) for the US and (4.92 /2004, 4.66/2005) for the UK. in contrast, UK overtook the US in 2 sub-indexes which are public institutions index and macroeconomic environment index. Furthermore, public institutions index scored (6.23/2004, 5.98/2005) for UK and (5.74/2004 ,5.77/2005) for US and macroeconomic environment index scored (5.11/2004 ,5.13/2005) for UK and (5.04/2004, 5.07/2005) for US.

TABLE 1. GCI, 2004 and 2005 Scores

		GCI Score	(Rank)	Public Institutions Index	Macroeconomic Environment Index	Technology Index
2004	UK	5.30	(11)	6.23	5.11	4.92
	US	5.82	(2)	5.74	5.04	6.24
2005	UK	5.11	(13)	5.98	5.13	4.66
	US	5.81	(2)	5.77	5.07	6.19

World Economic Forum, 2004-2005

In 2006, 9 pillars under three sub-indexes were established. Table 2 below shows the detailed performance overview of the United States and the United Kingdom from 2006 to 2017. We notice that in 2006, US overtook UK in 4 pillars which are infrastructure, higher education and training, market efficiency and innovation. In 2007, US overtook UK in infrastructure, higher education and training, market efficiency, technological readiness, business sophistication and innovation. In 2008 we observe that US attended the first rank and excelled on Britain in the three sub-indexes (Basic requirements, efficiency enhancers and innovation sophistication factors). In 2009 and 2010, we notice that Britain regained its rank in term of basic requirements especially in health field but America exceeded Britain in term of efficiency enhancers and innovation sophistication factors. In 2011 we observe that Britain continued its advance in terms of basic requirement and we remark that efficiency enhancers index scores for UK and US were close in 2011. As we mentioned above, there was a remarkable drop in the rank of US in 2012. The GCI score of US and UK were too close. in 2013 US overtook UK in higher education and training, business sophistication and innovation. in 2014 US overtakes UK in higher education and training, business sophistication and innovation. in 2014, US overtakes UK in higher education and training, business sophistication and innovation. in 2015, US overtakes UK in Macroeconomic environment, higher education and training, business sophistication and innovation. In 2016, US overtakes UK in Macroeconomic environment, Higher education and training and innovation.

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TABLE 2. GCI from 2006 to 2017

Subindexes													
	GCI Score (Rank)		Basic Requirements				Efficiency Enhancers				Innovation and Sophistication Factors		
			Score	Institutions	Infrastructure	Macroeconomy	Health and Primary Education	Score	Higher Education and Training	Market Efficiency	Technological Readiness	Score	Business Sophistication	Innovation
2006	UK	5.54 (10)	5.67	5.38	5.74	4.67	6.89	5.59	5.57	5.63	5.56	5.36	5.82	4.89
	US	5.61 (6)	5.41	4.84	5.82	4.37	6.60	5.66	5.82	5.67	5.49	5.75	5.78	5.72
2007	UK	5.41 (9)	5.59	5.31	5.71	5.18	6.16	5.53	5.42	5.30	5.27	5.62	5.41	4.79
	US	5.67 (1)	5.41	4.76	6.10	4.78	6.00	5.77	5.68	5.32	5.43	5.68	5.60	5.77
2008	UK	5.30 (12)	5.46	4.99	5.52	5.15	6.17	5.45	5.27	5.05	5.62	4.93	5.20	4.66
	US	5.74 (1)	5.50	4.93	6.10	4.99	5.97	5.81	5.67	5.32	5.57	5.80	5.75	5.84
2009	UK	5.19 (13)	5.29	5.07	5.43	4.60	6.07	5.31	5.17	4.97	5.79	4.92	5.24	4.60
	US	5.59 (2)	5.23	4.81	5.92	4.31	5.88	5.66	5.57	5.13	5.61	5.71	5.65	5.77
2010	UK	5.25 (12)	5.58	5.28	5.88	4.76	6.40	5.28	5.34	4.96	4.73	4.98	5.32	4.65
	US	5.43 (4)	5.21	4.67	5.65	4.39	6.12	5.46	5.64	4.81	4.67	5.53	5.40	5.65
2011	UK	5.39 (10)	5.60	5.34	6.09	4.54	6.42	5.43	5.47	4.97	6.08	5.17	5.41	4.94
	US	5.43 (5)	5.21	4.64	5.68	4.49	6.05	5.49	5.57	4.80	5.23	5.46	5.35	5.57
2012	UK	5.45 (8)	5.51	5.41	6.22	4.01	6.39	5.50	5.57	5.09	6.00	5.32	5.48	5.17
	US	5.47 (7)	5.12	4.59	5.81	3.97	6.11	5.63	5.72	4.88	5.84	5.42	5.34	5.50
2013	UK	5.4 10	5.5	5.4	6.1	4.0	6.4	5.5	5.5	5.1	6.1	5.2	5.4	4.9
	US	5.5 5	5.1	4.6	5.8	4.0	6.1	5.7	5.8	4.9	5.7	5.4	5.5	5.4
2014	UK	5.4 9	5.5	5.4	6.0	4.1	6.4	5.5	5.5	5.2	6.3	5.2	5.5	5.0
	US	5.5 3	5.1	4.7	5.8	4.0	6.1	5.7	5.8	5.1	5.8	5.5	5.6	5.5
2015	UK	5.4 10	5.5	5.5	6.0	4.2	6.4	5.5	5.6	5.5	6.3	5.3	5.5	5.0
	US	5.6 3	5.3	4.8	5.9	4.3	6.1	5.8	5.9	5.1	5.8	5.6	5.6	5.6
2016	UK	5.5 7	5.6	5.5	6.0	4.4	6.5	5.6	5.5	5.3	6.3	5.3	5.6	5.0
	US	5.7 3	5.4	5.0	5.9	4.6	6.2	5.8	5.9	5.2	6.0	5.6	5.6	5.6
2017	UK	5.5 8	5.6	5.5	6.0	4.6	6.5	5.6	5.5	5.3	6.3	5.3	5.6	5.1
	US	5.9 2	5.5	5.3	6.0	4.5	6.3	6.0	6.1	5.5	6.2	5.8	5.8	5.8

World Economic Forum, 2006-2017

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In 2017, US overtakes UK in higher education and training, market efficiency, business sophistication and innovation. In 2019, The United States ranked 2nd with a score 0f 83.7 while The United Kingdom ranked 9th with a score of 81.2 (Schwab & Sala-i Martin, 2010). Figure 2 and 3 illustrate the detailed performance overview of the United States and the United Kingdom in 2019 respectively.

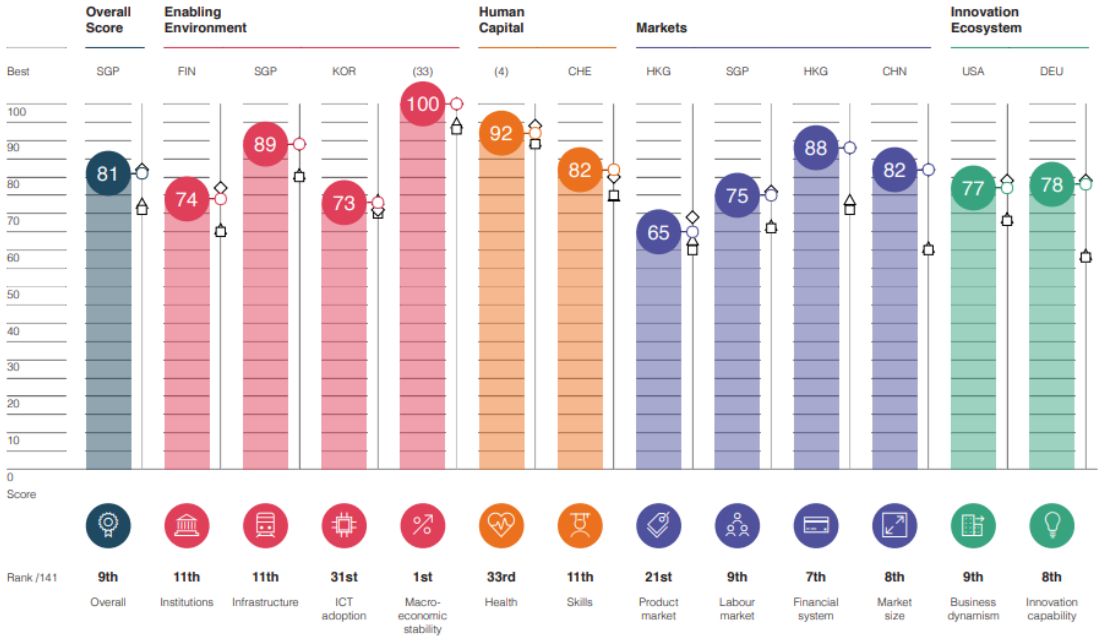

FIGURE 2. GCI 4, the performance overview 2019 of the UK (Taken from World Economic Forum 2019)

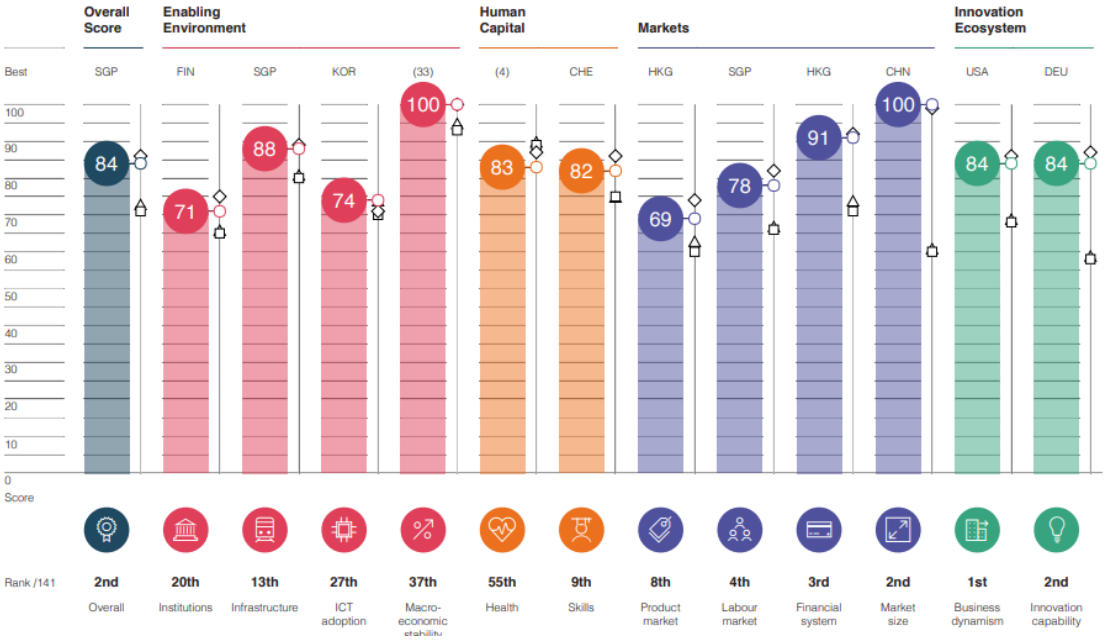

FIGURE 3. GCI 4, the performance overview 2019 of the US (Taken from World Economic Forum 2019)

We notice that in 2019, US overtakes UK in 8 pillars which are ICT adoption, skills, product market, labor market, financial system, market size, business dynamism, and innovation capability. In particular, the ICT adoption pillar ranks (27th) for the US and (31th) for the UK, The skills pillar ranks (9th) for US and (11th) for UK, the product market pillar ranks (8th) for US and (21th) for UK, the labor market pillar ranks (4th) for US and (9th) for UK, the financial

ISSN: 2414-309X
DOI: https://doi.org/10.20474/jabs-6.6.2

system pillar ranks (3th) for US and (7th) for UK, the market size pillar (2nd) for US and (8th) for UK, the business dynamism pillar ranks (1st) for US and (9th) for UK and finally the innovation capability pillar ranks (2nd) for US and (8th) for UK. In contrast, UK overtakes the US just in 4 pillars which are the institution, infrastructure, Macroeconomic stability, and health. Furthermore, the institution pillar ranks (11th) for UK and (20th) for US, the infrastructure pillar ranks (11th) for UK and (13th) for US, the macroeconomic stability ranks (1st) for UK and (37th) for US and lastly the health pillar ranks (33th) for UK and (55th) for US.

CONCLUSION

Within a jiffy, the US hasn't been the world's leading market, it's a cycle that has been going on for long. From the War of 1812 that stimulated the construction of better infrastructure (1817-1840) to the factory system (1790), the expansion of education, the series of technological innovations (1790-20th), and the expanded credit system, the large landmass of America, and the diversity of the population of America. Each of these factors played a significant part in the rise of the American Industrial Revolution. Even though the industrial revolution started in Britain and then spread to the proclaimed united, US firms were more affected than British firms. Numerous determinants drive US efficiency and competition and the story goes back to World War 2 (WW2) (1939-1945). After WW2, an economic deficit suffered the major of countries. The Bretton Wood Process (1944) and the replacement of the gold standard with the US dollar turned the latter into a global currency. The petrodollar scheme (1974) preserved the interest of the US dollar even after the collapse of the Bretton scheme (1971). The pegging of oil prices to US dollars has kept the US dollar strong and American inflation low. In addition, we noted the role of R&D and the importance of higher education in maintaining American industrial leadership after 1900.

To conclude, based on the data existed in the world economic forum published since 2004 to 2019. The united kingdom's strengths include macroeconomic stability where it achieves the maximum score of 100 on the related pillar in 2019, infrastructure (88.9, 11th in 2019) and financial system development (88.1, 7th in 2019). Also, the country performs very well on technological readiness and the sophistication of its business sector (4th and 7th overall).

While the United States remains one of the most competitive economies in the world, displaying a constant improvement in score since 2010. The strength of the United States comes from its performance in efficiency enhancers and innovation and sophistication factors, where it comes in at 1st and 2nd respectively. It is still an innovation powerhouse and 1st in terms of Business dynamism, boasting the second-largest market, and home to one of the most dynamic financial systems in the world (score 91.0, 3rd in 2019).

As we mentioned before we adopted the global competitiveness reports published by the world economic forum to compare the effectiveness of Britain and America. The accreditation of GCI Reports in this study has both positive and negative sides. The advantage lies in the availability of the reports online, which made it easier for us to access the data. As for the downside, it is the absence of some reports on the Internet, such as the 2018 report. The data presentation model is not the same for all years, which makes the data analysis process not easy, and therefore the change in the adopted index contributed to making the analysis a little more difficult. However, In 2020, China began a year of unprecedented GDP decrease of 6.8% due to the effects of the COVID-19 pandemic. Since re-opening its factories, China's growth has rebounded dramatically; the International Monetary Fund (IMF) expects that China will be the last big global economy to witness growth in 2020. China's economic development in 2020 is due to its willingness to satisfy the global demand for medical devices, appliances, and other products expected during the pandemic. What is the effect on the US and the global economy of China's accelerated ability to restart its economic engines?

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ISSN: 2414-309X
DOI: https://doi.org/10.20474/jabs-6.6.2