Economic Growth

Lower Sixth student Grace Isaacs has written a brilliant essay for history on economic growth. Read this for an example of excellence!

Technological innovation was the most significant factor in explaining economic growth in America between 1865 and 1877.
How far do you agree with this statement?
25 marks

The economic growth and boom in America between 1865 and 1877 stemmed from the Technological innovation of individuals, such as Andrew Carnegie who brought about changes in technology and business methods, which transformed industry. Large-scale industrial production — accompanied by massive technological change, expanding international communication networks, and pro-growth government policies — generated rapid economic development and business consolidation. Technological innovation is the element that links all of the factors. Technological advancements both aided and stimulated all the other factors effecting the economic growth, and was instrumental in forming a stable economy, and sustaining it through it's essential interactions and aid for industry, society and culture.

Technological innovation was an integral catalyst in the growth of the economy, as it facilitated advancements in industry and businesses, which sustained the economy. A general trend of mass production, standardized parts, and assembly-line production, transformed industry and labor and increased the availability of consumer goods, and encouraged the rise of industrial capitalism in the United States. This is seen in the revolutionary process of the Bessemer Converter which made the process of making steel cheaper. It was introduced by Andrew Carnegie, and was used in his steel mills, making his business expand rapidly. Carnegie dominated the US steel industry as he kept prices as low as possible and constantly re-invested in new manufacturing plants and equipment. Furthermore, he refused to allow unions to be set up in his factories, and had armed body guards to deal with union activities. He did this to maximise profit, manipulating the demand for jobs, to provide for a cheap labour force. Not only did Carnegie become an extremely successful businessperson, controlling the most extensive integrated iron and steel operations ever owned by an individual in the United States, but his innovation also helped other industries and businesses to establish more efficient production techniques, to meet demand and maximise profit. The cheap mass production of steel made possible through Carnegie's Bessemer converter, enabled the railroad industry, to be established, which opened up new markets, which increased demand for mass production. This cycle of demand and production, integral in cultivating successful businesses was generated by the ability to meet higher demand through the innovations. The innovation of communication such as Christopher Sholes invention of the 'Sholes and Glidden Type writer' in 1874, helped typists increase their typing speed, thus increasing the efficiency of clerical workers. Equally Alexander G. Bell's invention of the telephone, further improves business communications. These enabled businesses to be more efficient, as the needs of the entire company were communicated and addressed. This was especially essential if it was a 'trust' spread across the country, who previously would of run, like a segregated business under the same name but not necessarily under the same operation. Businesses established through technological innovation, like Carnegie's were further protected and thrived under the Government's laissez-faire policies and sought increased profits by consolidating cooperation's into large trusts and holding companies.

Government policy allowed businesses to thrive, and therefore maximise profit, which fed the economy. Businesses were further abetted by the emersion of cooperation's and trusts. Business success was achieved through the government's policy of minimal intervention, also known as lasseiz faire. This was backed by the fact the constitution gave the federal government virtually no role in the management of the economy. This meant that Businessmen had substantial freedom in how they ran their business, for example, there was no laws that restricted hours of labour, and there was no taxes on profits. Furthermore, there was no tradition of trade unions and those that existed were generally weak and divided, this gave employers freedom to manage their work force any way they wanted. Consequently, the business thrived under the government policy, and congress and state governments were therefore dominated by business interests. Little local or national legislation was passed that interfered with industry and business, as it's success, however immoral it was in achieving it, was evident. Commercial policy of the federal government further helped expansion, as congress was willing to impose protective tariffs to ensure foreign manufactured goods were more expensive then American produced goods. This made American goods as high as 50% of the cost of the imported goods. This created an attraction of consumer interest towards American goods, which fed the economy and established the cycle of prosperity, as demand was established. It also eliminated industry competition from European countries; however, in retaliation those countries placed high tariffs on American goods, so imports decreased significantly during this period, restricting their foreign market. Business leaders achieved increased profits by converting corporations into large trusts and holding companies, which further concentrated wealth. Cooperation's and trusts both emerged due to a lack of government control and regulations. It allowed big business owners to become more successful, avoiding state law (which stopped people from owning shares in more than one state or more then one company) and form a monopoly in a certain market. A prominent example of this is standard Oil company formed in 1870, by John. D Rockefeller, who told three employees to act as trustees for all the property and assets of the company outside of the state. Due to this technique he dominated the oil industry and became America's first Billionaire. Other companies followed suit setting up trusts, avoiding state law, and monopolising industries. This created powerhouses of industry that fuelled the economy. However, this would not have been made possible without the already available capital, which was established due to the impact of the Civil War and spurred on through technical innovation.

The Civil War is closely linked to the essential availability of capital, as it provided necessary financial infrastructure for an economic growth. The Civil War provided the initial momentum for great expansion in US industry as it stimulated the demand for manufactured goods as the army needed guns, clothing and transport. The need to raise money for the War, led to a development of a sophisticated capital raising system. This was aided by the introduction of paper notes as currency, which allowed for a constant creation and influx of money, the banks had to adapt and evolve to cope with the increasing amount of capital. Further capital was raised through increased Tariffs on foreign products, which decreased competition. The huge profits generated by the Civil War had encouraged the emergence of a highly developed stock market in which these profits were invested which provoked the establishment of the economy. This investment was essential to entrepreneurs as the need to borrow money in order to develop their business was vital. Evidence of the Stock Market success is seen in the fact that by 1865 an annual turnover of the New York stock exchange was over $6 million, and by 1890, it had become the second largest money market in the world. This allowed entrepreneurs to raise the necessary funds for their businesses to thrive, creating a cycle of economic prosperity. This strong establishment of the American economy, although it is to go through several depressions in the coming history, was what provoked America's superpower status, and infamous reputation of success, under the 'American dream'. It is a prime example of the actual growth of the economy during this period. However, the success of businesses, that had invested in the stock market, using the availability of capital, would not have been successful if there was not many consumers. As seen in further economic depressions and crashes, without the consumers, industry and the economy suffers, and cannot thrive.

The increase in population was essential in the protection of economic growth, as it sustained the needs of the economy in order for it to prosper. The size of the population of the USA increased from 31-50 million by the end of reconstruction. In 1860, the population of the USA was 31.5 million but this had increased to 50 million by 1880. The increase in population was partially due to increased incomes which led to more comfortable and healthy living, such as better housing, food, as well as progress in healthcare and medical knowledge resulting in lower death rates, and higher life expectancy. Furthermore immigration with 2.8 million moving to USA in the 1880s, was also significant in population increase and it's effect on the economy. People came from all over Europe and Asia for better standards of living, the majority headed to cities. Therefore, the industrial workforce expanded and became more diverse through internal and international migration; child labor also increased. The immigrants became a source of cheap labour, which was necessary for industrial revolution. Furthermore, they had essential roles, as consumers, they stimulated further demand for coal, clothes and food. This facilitated the boom in industry, such as the development of railroads, which many worked on. Due to mass production the prices of many goods decreased, so worker's real wages increased, providing new access to a variety of goods and services; many Americans standards of living improved, while the gap between rich and poor grew. Overall increases in the population supported industry, and therefore helped grow the economy, as they were an essential component in the cycle of economic prosperity. However, the availability of land, as well as the boom of transport (created by technical innovation) were contributory towards the growth of the economy, and were also instrumental in facilitating needs of a larger population, generally serving the efficiency of the economy, industry, and society.

The USA experienced a revolution in transport as well as a season of great westward expansion and higher availability of land which revived and created industries that grew the economy. The land expanse stimulated economic growth as it created a wider market for manufactured goods as well as encouraged transport revolution in particular in the railroad industry. Furthermore, much of the land was very fertile, which led to the production of wheat, which in turn ensured that farming expanded to the north, providing plenty of food for the growing population especially in cities. Greater demand for food, both at home and in new states, and for a rapidly expanding export market, also encouraged greater mechanisation in agriculture. Improvements in mechanization helped agricultural production increase substantially and contributed to declines in food prices. Many farmers responded to the increasing consolidation in agricultural markets and their dependence on the evolving railroad system by creating local and regional cooperative organizations, such as the Granger's movement. Hence expansion of land, created an expansion of farming and transport industries that were crucial in stabilising the economy. The first Transcontinental Railroad opened up in the far west mining regions, such as the coalfields in New England, as well as near the meatpacking industry of Texas and Chicago. This allowed for more markets to be opened up for these products as distribution was made easier and more efficient. The industry created thousands of jobs, by the 1900s there was 1 million railroad workers, all consumers of the railroad system in some way. There was a massive boost in steel production as the growth of the railroads meant more tracks needed to be laid This was aided by Carnegie's new efficient, innovative way of producing steel, through the Bessemer converter. Between 1868 and 1873, 53,000km of railroad track was laid across the country, evidence of the success of the steel industry, and other industries such as the coal industry, which were vital fr the transport revolution to occur. The building of Infrastructure such as stations, alongside the production of locomotives encouraged competition and provided thousands of jobs. Manufacturers were encouraged to produce the trains needed to work the railroad, and rolling stock. Not only did the train industry and expansion of land aid industry directly, but also indirectly through improving the efficiency of individual's work. The trains got people from A to point B quickly and efficiently, which helped the economy as people could spend a significant amount of more time working- the travel time from New York to San Francisco now took 6 days instead of 6 months. However such successes in the transport revolution relied on the innovative mass production techniques of steel, formed prior to the Boom, from which also stems the ability for America to expand westward quicker, through more efficient transport.

Overall, technical innovation was a significant factor, as it helped establish and sustain the other influences towards economic growth. Businesses made use of technological innovations, greater access to natural resources, redesigned financial and management structures, advances in marketing, and a growing labor force to dramatically increase the production of goods. Technical innovation is linked to all the other factors: seen predominantly in how it fed the economy (which is arguably a financial new technology itself). By 1865 the annual turnover of the New York Stock exchange was over $6 billion a year. It provided the availability of capital, which in turn caused the need for cooperation's and trusts further supporting businesses. With businesses thriving from advancement's in technology and the support of a stable, thriving economy, the government reacted by adopting it's lassiez faire policy, in order to protect businesses. Without technological advancements in the efficiency of the production of steel, the boom in the railroad transportation market and industry would not of occurred. Not only would this of eliminated the thousands of jobs made available through the other industries that thrived, stemming from their necessity in the transportation boom (coal, building of stations, and competition created).It also would of cut of the new states formed in the Westward expansion, making the availability of land void of use, and unprofitable. Furthermore the growing population wouldn't of had transport to establish life in different states. Although population growth is definitely a catalyst for the economy as it provided the consumers who demanded for new products and mass production. Without technological innovation, the mass production demanded of merchandises and foods for them to consume would not have been met, or made available to distribute across the country. Furthermore, just because there is an increase in a population doesn't guarantee an increase in economic intuitive, and innovative individuals, it was the chance presence of these, and the inspiration and example they stimulated, that caused areas of industry to thrive, and therefore the economy to grow.