

**AN SCIENTIFIC ANALYSIS ON JAPAN'S TECHNOLOGY PROGRESS AND SUCCESS
AND HOW COVID -19 HAS AFFECTED THE ECONOMIC GROWTH OF THE THIRD
LARGEST ECONOMY**

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ABSTRACT

Japan - the third largest economy in the world has shrank due to the COVID-19 pandemic , the first financial crisis ever since 2009 , Japan economy is heavily depended on export and foreign demand , along with tourism . The sudden lockdown brought the economy of Japan a stand still. On the other hand the decreasing population of Japan has an impact on the economic growth , it is believed that the country would soon become an home for old men and women. Japan has a low birth rate and people avoid marriages . Japan leads the world when it comes to technology. Japan has the fastest train in the world , with excellent rail and road connectivity , there have a good and healthy lifestyle where we find a massive ageing population exiting in Japan where above 90% of the population live in the urban area . Japan is also working towards renewable energy and aims to product zero emission energy by 2050 . It has also emerged as a powerful superpower in Japan . The country is prone to earthquake and experiences 3 to 4 earthquake small and minor per day . However with its technology advancement it has been able construct earthquake tolerant buildings .Japan is regarded as the future of the world with its innovative ideas and techniques . it is far ahead of other countries when it comes to innovation and development .

Keywords : Japan , third largest economy , technology , population , financial crisis , superpower

INTRODUCTION

Japan is an island country which has emerged as one of the powerful leader in Asia and across the world .It has a population of 127 million which has remained same since 2015 , in fact we have seen a decrease in the population where 92% of the population live in Urban area and 8% live in Rural area . It has been 49 years of its growth . Majority of the people belong to the aging population as the birth rate in this country is very low .The people don't establish a family fast as they are career orientated and don't have time .It is one of the safest country in the world where the crime rate is zero . It is one of the most educated country in the world which is one of the reason why crime is very less . It is considered to be most developed country and way modern than the rest of the world ..There are around 6800 island in Japan small and big , four of the island are so big that it covers 97% of the land .The country is prone to earthquake and experiences 1500 Earthquake per year maximum are of small scale. Japan has all together a very different Education system , where children are taught all the works for cleaning to vocational training , Students clean their own Schools and Japan is considered to be one of the cleanest country . The Culture of Japan is very similar to India .Japan because of its advance in Technology has the third largest economy after USA and China at 6 Trillion USD .From 1650 to 1850 Japan was an isolated country where the Business happened only in the country , there was no legal system , foreign policy , cross border Trade and no democracy didn't exist. During the Shogun Era and Meiji Era starting in Japan Parliament and Democracy was formed , the new government introduced the common tax system , common army along with the infrastructure , education , management development .It also started increasing their Business relation with other Western Countries and increased their industrial production for which they required resources and they entered into a battle filed with Russia in 1904-05 and from 1894-95 with China . In this first world war Japan fought against China and during the second world war Japan attacked the Pearl Harbor in America . America responded to this by throwing atomic bomb in Japan which ultimately resulted in the surrender of Japan , at the end a treaty was signed by Japan that they couldn't enlarge their army . Now Japan started working on its Business and Technology Development .In Japan because of strict rules and regulation , there is no act of crime and moreover because of their education . In 2018 , Japan stood at the ninth position in the Global Peace Index .Here for the safety of people there are 6600 Koban , out of all the places in the world , there is minimum use of weapon and people from the very beginning are taught about Moral Build up patriotism to maintain peace among its people and live in Harmony.

RESEARCH METHODOLOGY

For the purpose of this exploration , I have used a amalgamation of two of the archetypical social sciences research tools application –as they are authentic and brilliant method to assemble statistics from multiple appellants in a methodical and convenient way . Question were asked to the parents and their children , survey , interviews –consisting of several interrogation which were dispersed among representative of each contender group.

OBJECTIVE OF RESEARCH

In this Research paper the main area of studies include

1. A study on the economic development of Japan since the second world war.
2. Japan emerging as the third most powerful economy .
3. Japan growth and development in Technology and renewable energy .
4. Japan's decrease population and its consequence in the economic growth .
5. Japan's present economic crisis .

LITERATURE REVIEW

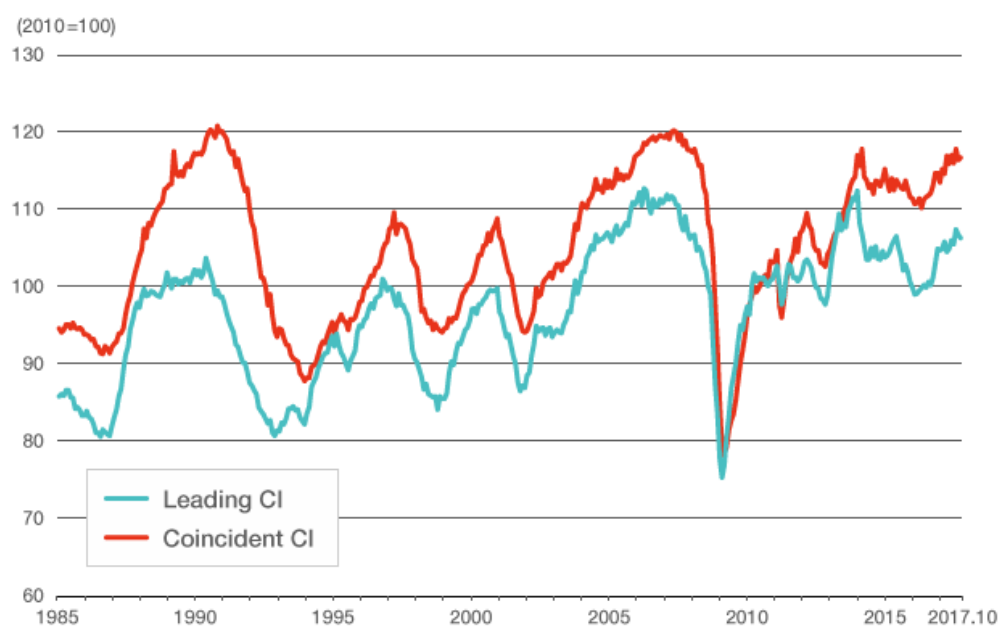
The biggest innovation was Japan has been the Bullet train which was first formed in Japan and today it has 6 different types of bullet trains ,Japanese has the fastest train , it is also the largest automobile maker , ISUZU , Mitsubishi Motors , TOYOTA top brand cars are made here , even countries like China and Germany uses Japan technology and their quality is outstanding . The literacy rate of Japan is 100% .Japan also 55 million vending machines using which you can purchase vegetables and other necessary products .As mentioned earlier Japan is prone to Earthquake , in a day Japan experiences 3 to 4 minor earthquakes , the worst earthquake has been of 2011 , taking that into consideration Japan makes earthquake tolerant houses . Muslim are not allowed in Japan . Apart from that Japan is covered by 76.2% mountains and 13.4% of the land is used for agricultural ,3.55 water area and 4.6% land area . With that Japan is very clean , a fact about Japan is when it comes to Technology , 90% of their mobile phones are water proof .27% of the fish are imported from other countries .Japan because of their healthy lifestyle has less death which around 50,000 people who are above 100 years living happily. Only 4% of the people in Japan are unemployed .Japan also has the lowest immigrant rate which is less than 2% because of their strict rules and regulation and they don't accept refugee .One country , one race , one culture . Japan is economically and politically powerful , the GDP value of Japan is 6 trillion dollar , they product the finest machineries , they provide 11% to the UN Budget second to US . We see a decrease in Japan Population , Japan birth rate has declined drastically , there is low immigration and it has the highest life expectancy rate in the world . Less people are born , more people live 75% of the land is covered with mountains and 68.5% forest covered range , it is estimated that Japan population will be decreasing by 1 million per year .Japan said to become a country for old men and women , required birth rate to sustain the population growth 2.1 , current birth rate is 1.4 . In a survey it was found that one third of Japanese think marriage is pointless . 33.5% don't find any merit in marrying. The traditional Model has changed in Japan and women have their career .Moreover Japan work more than other countries , they hardly take any leave in the corporate sector which has contributed to an increase in Suicide cases in the country and some die because of stroke caused by work load , the people hardly take office leave and its maximum for a better of 20 days a year . However we see a decline in the economy development of the country .

FINDINGS

Japan economy is vanishing , the economic has faced several ups and downs in History , the country is known for his extra ordinary growth in the economic structure especially after

several decades of second world war , just a boost emerged from its advancement in industrial market growth , the trade policy of the country also paid an important role in boosting the economy . The economy is a mixed one depending upon capitalism , the government of Japan is closely attached to its industries , central banks even . Japan is the second most powerful economy in the world after US in terms of Gross national Product .The country is the leading producer of high aim technology , the service sector is dominating its GDP which overall helps in boosting the economy of the country . After 1945 rose to become world's second largest economy in the world . It saw 10% growth 60s , 5% during the 70s and 4% during the 80-90s .Till then people were enjoying the economy of Japan .In 1990 Japan stock market crash , the shares value fell down by 80% focusing the banks to lower the interest rate . The government introduced a fiscal policy by which they invest much on infrastructure of the country resulting in high debt GDP ratio . From 2005 the country started to maintain balance sheet and by 2007 the economy of Japan was getting back into the right track , after the worst phrase of 20 years the country also showed recovery of 2.1% in 2007 and 3.2% in 2008 in economy .The Financial crisis of 2008 again GDP clash growth it was the biggest drop in Japan economy just 1974 .

Business Conditions Composite Indexes

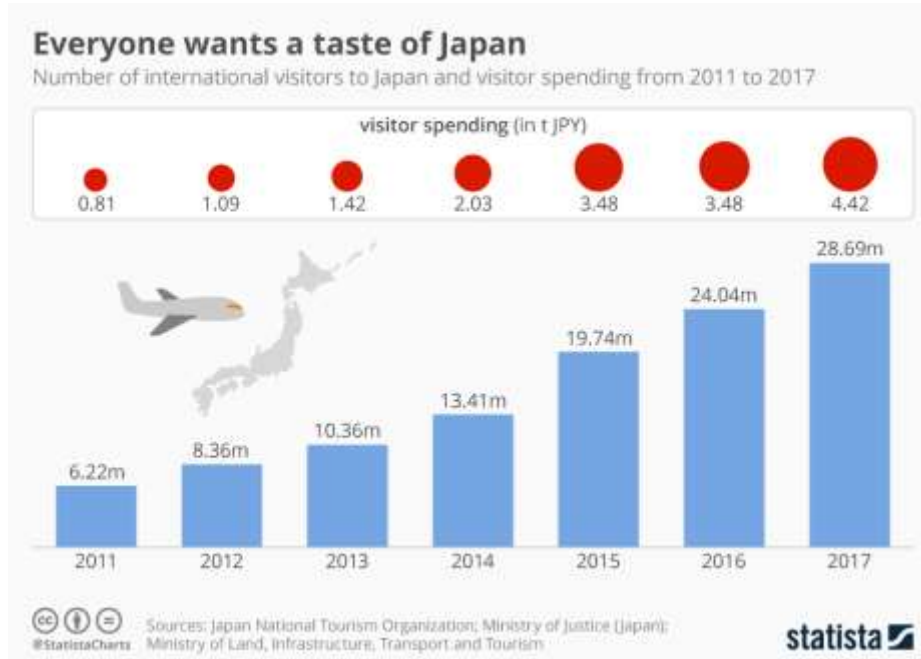


Source: Cabinet Office

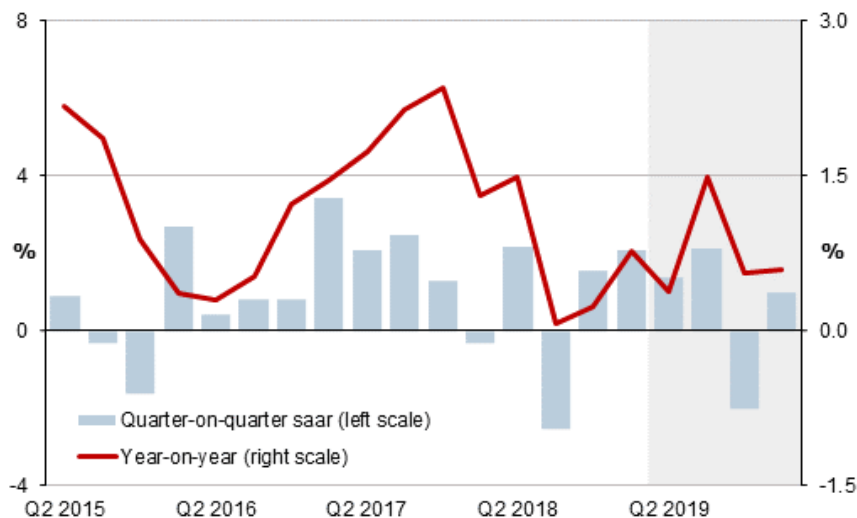
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Japan signed a trade agreement with EU in July 2018 , it is the world's largest bilateral trade agreement covering almost 152 billion dollar which came as a shock to US . Most western countries are still finding reasons behind Japan's puzzle and impressive economic growth after second world war , the reason is simple and measurable , the Japanese are concerned about their dependents on imports for energy , raw materials and food deposit to the rest of the world .These consideration does not have large impact but every interested firm in Japan takes it seriously . In 2018 , Japan position was fifth logistic performance Index and second in the infrastructure category . Japan was known to product half of its energy from petroleum in 2005 one-fifth energy from coal and other 14 % from natural gas . Japan exports around 84% of the

energy to other countries making it the largest liquefied natural gas supplier and second largest coal producer .In 2012 Japan was among the top five visited countries in Asia with 8.3 million tourist . In 2013 , the country attracted 11.20 million tourist ,Japan continue to increase its tourism industry by 40 million per year so as to enhance the county economy .



Three economy challenges that Japan is facing today , three structural challenges which it is facing after the recession since the world war II .Sales Tax Hike: Japan has been subjected to sales tax hike by the government from 8% to 10% .The government has done so to fund the social welfare program which also incorporates pre school education and paying down the nation’s huge public debt load .The government has also introduced measures and rebates on e-payments for certain goods . Consumers are eligible for 5% rebates on products where payment is done through electronic medium. This electronic payment might lessen nation’s dependence on cash .



Dwindling Exports - Japan is heavily demand on foreign export . for instance electronic equipment and car parts and many of its biggest brands such as Honda and Toyota have seen global sales slump . Global consumer demand has reduced due to COVID-19 worldwide .

Japanese production is dropping as they are depended on foreign demand and production in Japan is correspond . In may the good exports fell by 23.8% .Tourism is also an important part of Japan economy which has reduced due to COVID-19 . There is geopolitical tension that further increases the threat of Japan export and foreign business.

Japan renewable energy -it is very difficult to install solar panels on the land as maximum part of the country is covered by island .The amount of sunlight the country receives is outstanding, there have tremendous opportunity of floating solar panels . Japan's renewable energy market is still in its infancy , to help curb global warming and boost the nation's energy self-sufficiency , the Japanese government has unveiled plans to double the supply of renewable energies to 85GW by 2030 and make renewable energies the nations main power source by 2050 and become a leading force for social change through the delivery of zero-emission energies while showing careful attention to the needs of individual communities .Japan has already posted growth by building power plants that harness solar , on-shore wind and biomass energy, in the coming years strive to develop a more-diversified energy mix and also includes offshore wind and hydro power .From the very first exploratory stages Japan engaged in dialogue with local communities including residents , public offices and other local stakeholders to build a common understanding and consensus before project development and power plant construction .Even after a power plant commences operation JRE puts down roots as a member of the local community working hard to run a power plant in harmony with and for the joint prosperity of the community . Solar power , on shore wind power , offshore wind power , biomass power , small hydropower possessing the expertise and experience required for renewable energy project coupled with JRE's ample capital stock and unsurpassed fund-raising capabilities is a reliable partner for projects large and small from development through to long term operation.

CONCLUSION

Japan has the best technology according to many survey .With the advance in technology there have been able to construct building and houses earthquake tolerant .Japan is regarded as the future .Japan is innovative and find new technique and technology decades before the counties find it . Japan is also isolated from our countries , there are things which make them superior from other countries like Bullet Trains which is the fastest in the world and other countries are also joining hands with Japan for the construction of Bullet Trains like India . Their advancement in robots and it is believed that in future they might be even driving cars .Video games , 90% of the videos games are launched in Japan , it is filled with gamers ,Arcade gaming.Vendor machine is something very unique in Japan which has made very easy . The Public Transportation facility of Japan , there have an excellent metro and railway system serving 38 million people in the city of Tokyo . They even have automatic car parking , to save place .

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