

# An Innovation Research of Promoting Economic GDP & Population Increasing Rate & Global Motor Producing on Scientists' Behavior & Judgement Continually

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## Abstract

The high-technology products like rechargeable battery used in the EV (electric vehicle) and robot will be prevalent currently and in the future which may provide continuous power for it to drive longer like more than 400 kilometers per charge, so its usefulness will be more searchable and searching item for us to process later. New one like the solid state battery as a new innovation will be used in EV in the future widely, which may become a high-light for our scientists to process continuously. At the same time, the scientist needs to publish their achievements continually to some journals with high impact factor for the readers like graduates to know the reasonability and feasibility. The author like scientists in college would complete the investigation content and form the formal achievement for the sake of communicating with readers with using English writing skills effectively. Thereby the correct and clarified information might transfer into the readers acknowledgement who has an interest to know the meaning from papers with mail. Therein the published one will overview from the authors into readers through editor helpfulness. We should pay more attention to the innovation aspects which may take up some new idea and paths. As for scientist he needs to continue searching for new projects for the sake of further searching for the deeper and wider field all the time. Therein the high-tech product like solid state battery will have occupied promise future as known by now because its sale and expected amount can attain an achievement with total 180GWh expectation explained that battery to have a large market requirement. On the other side, others like BC (back contact) battery has also some searchable value in future since its advantage has evident proofs. There will be another one which was reported that the electric battery in north area will meet the contracted efficiency certain degree due to the cool atmosphere, so there will be a problem entering into that area currently.

## Original Research Article

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## 1. Introduction

The GDP (gross domestic product) which indicates national economic status has provided an important role in every aspect in the world. So that the population increasing rate would be maintained for the sake of raising high-technique product with the entire industrial chain constantly which might enhance our new-quality productivity. Hence we should consider the effective factors for example the population quantity, new quality productivity with high-technique etc. Like big plane electric vehicle battery AI robot quantum computer pharmaceutical production disease diagnosis AI (artificial intelligence) ocean source space exploration etc. other ones. Low population is enable to offer high life quality with improving GDP per capita value.

Meanwhile, it can enhance the national whole GDP value and help us to boost the economic recovery and many things to do. So the certain population is about to improve our national confidence some degree and make us to become priority one as early as possible even the super-country to lead the world to leadership right.

In contrast, the GDP increasing rate may play a significant role with regulating population increasing rate mutually and cooperatively. Hence the two aspects may be emphasized and paid attention to in thriving the whole national economic developed degree through enough utilizing younger generations positively and efficiently by

our government institution endeavor and evaluation. For the sake of making relevant policies and allocating capital into the necessary industries the corresponding strategic plan needs to be made under various background and entities. Then the according monitor and estimation will be followed and estimated periodically and frequently by the observer in government's institution. At last as to the developed speed in one nation the corresponding population increasing quantity and high-technique product producing will be discussed and considered more accurately and correctly according to the near past years experience and variation. [1~12]

2. Discussions

2.1 Global motor producing amount

The global motor producing amount in 2014 &2021 showed 26~1.7 million by China~France in 2021 respectively in light of Figure 1 to show the former ie. China, America, Japan, India, Germany etc. strong motor producing capability. In contrast, they indicated the y-y value 2021with 1%~ -7% accordingly to exhibit China, India rapidly developed speed and the most ones recorded minus growth speed then whilst the Brazil remained the lowest -7.2%. Moreover, the China America Japan those three nations amount exceeded 5million in 2021.

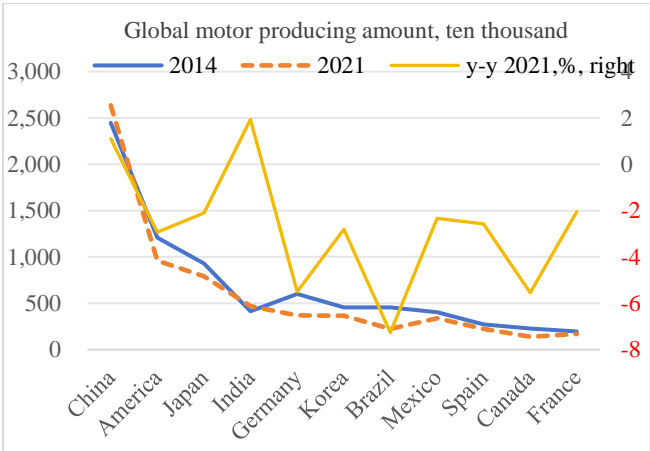


Figure 1 The global motor producing amount in 2014 &2021. [1]

Furthermore, the global motor producing amount in 2017 &2019 showed 25.5~1.8 million by China~Canada in 2019 respectively to show the former ie. China, America, Japan, Germany etc. strong motor producing capability in light of Figure 2. In contrast, they indicated the y-y value 2019 with -5.6%~ -7.6% accordingly to exhibit they minus developed speed and the ones most recorded minus growth speed would indicate the Germany & Brazil remained the lowest -11%. Moreover, the China America Japan those three nations amount exceeded 5million in 2019. At last the distinguished phenomenon was that the latter part from Korea to France might record the relevantly better tendency than the former one as for the y-y rate to express their potential making capacities.

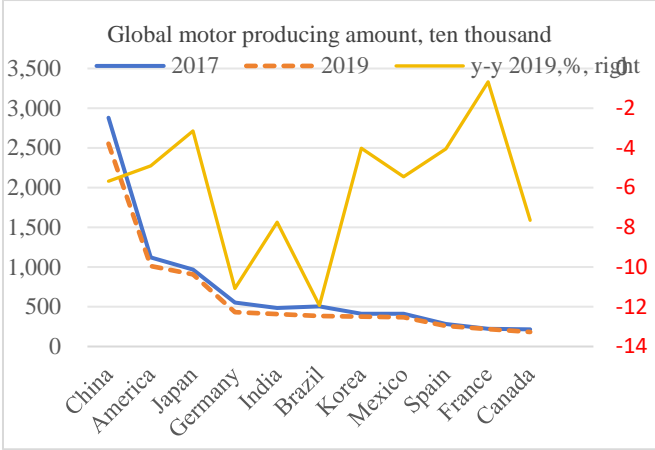


Figure 2 The global motor producing amount in 2017 &2019. [1]

Meanwhile, the global motor producing amount in 2022 &2024 showed 31~2.3 million by China~Spain in 2024 respectively to show the former ie. China, America, Japan, India, Mexico etc. strong motor producing capability in light of Figure 3. In contrast, they indicated the y-y value 2024 with 3.6%~ 0 accordingly to exhibit they recovery developed speed and the ones most recorded minus growth speed would indicate the Mexico provided 4.7% speed with quickest one on the contrary, the Germany remained the lowest -26% to exhibit hugely distinguished speed. In contrast, the China America Japan India those four nations amount exceeded 5million in 2024. At last the distinguished phenomenon was that the latter part from India to Spain might record the relevantly better tendency than the former one as for the y-y rate to express their potential making capacities.

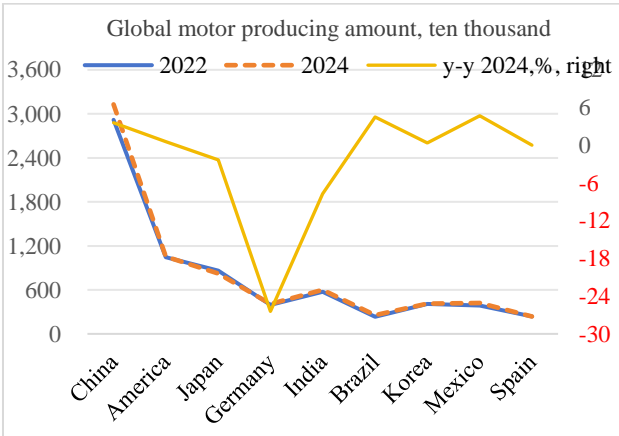


Figure 3 The global motor producing amount in 2022 &2024. [1]

On the other side, the global motor producing amount in 1922 &1923 showed 3.02~0.0018 million by America~Soviet Union in 1923 respectively to show the former ie. America, Canada, Britain, France, Mexico etc. strong motor producing capability in light of Figure 4. In contrast, they indicated the y-y value 1923 with 5.5%~19% accordingly to exhibit they thrived developed speed and the ones most would indicate the Germany, Mexico, Britain, France provided 29%, 27%, 16%, 14% speed with quicker one accordingly, on the contrary the

America, Italy, Czechoslovakia remained the lower 5.5%~6.2% to exhibit some distinguished speeds. Moreover, the America was beyond 3 million, on the contrary, America Canada Britain France three nations amount exceeded 10 ten thousand only in 1923. So that the former ie. America would be 30 times to compare with the latter three. At last the distinguished phenomenon was that the middle part from Britain to Germany might record the relevantly better tendency than the former and latter ones as for the y-y rate to express their potential making capacities about more than one hundred years ago.

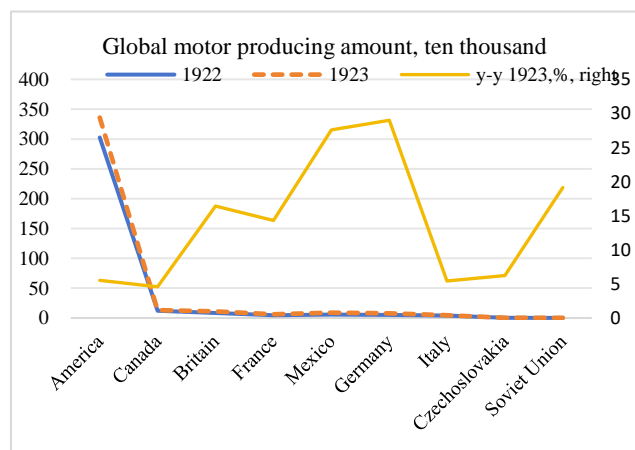


Figure 4 The global motor producing amount in 1922 & 1923.

## 2.2 GDP increasing rate analysis in nations [2]

The GDP increasing rate analysis in nations in 1971 & 1972 showed 5.5%~7% by America~China respectively in Figure 5 in 1972 while the y-y value in 1972 attained 37%~24% accordingly by them to afford general same speed with higher its value. So that the America indicated middle increasing rate to exhibit its second position in economic development, meantime the China maintained highest increasing rate in 1972 with relevant low speed.

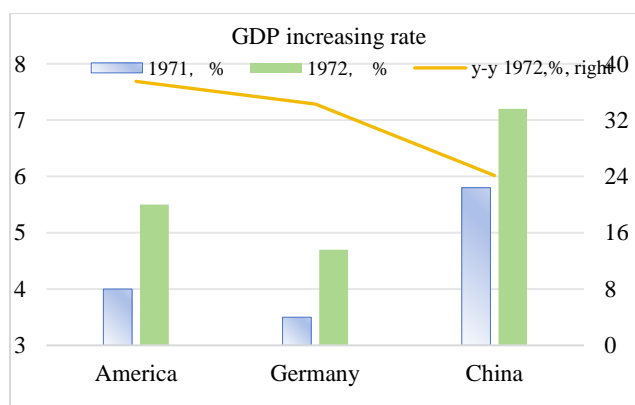


Figure 5 The GDP increasing rate analysis in nations in 1971 & 1972. [2]

## 2.3 Population increasing rate in China US India

The population increasing rate in India China US showed 0.9% 0.4% 0.2% in 2020 respectively in light of Figure 6 shown their lower growth rate. On the other side, they recorded -3.5% -5.2% -5% y-y 2020 per year accordingly then to exhibit the whole minus growth there.[3]

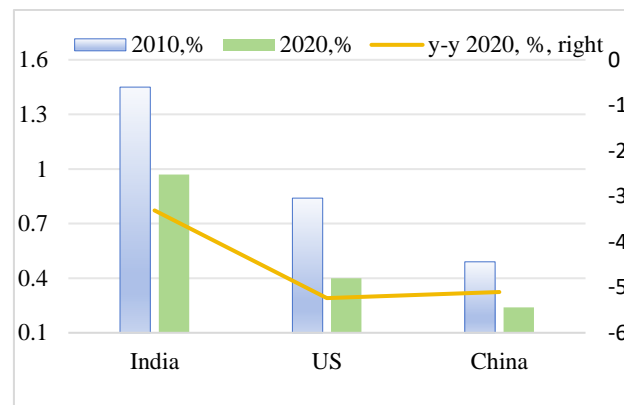


Figure 6 The population increasing rate in three countries II. [3]

In short, the qualified one may be appointed as an associate professor and senior researcher to take a burden to educate the MS (Master of Science) & PhD (Philosophy of Doctor) degree continuously. Because they had some and much opportunities to complete the relevant projects singly and collaboratively which belongs to the high-tech product experimental and theoretical deduction. Thereby those ones includes many innovative methods and calculations correspondingly. At the same time, the reports and papers will be submitted to the Fund commission which may be speared through the relevant scientists. Meanwhile, the data with GDP and sale number would be analyzed for the sake of requesting according behavior & its following judgment by our scientist and fellows sustainably because they can grasp the economic phenomenon and its following explanation definitely and absolutely in advance through their endeavour in post-doctorate and after work-stations.

## 3. Conclusions

The high-technique skill and product will become more important than ever because it is an innovation time with exponentially raising cutting-edge-field product with large researcher and engineers. Hence the motor etc. modern product may be searched towards more advanced directions like no contamination EV(electric vehicle) and driver-less technology and new energy battery one continually for us to drive freely. Thereby the motor producing amount represents the innovation reformation especially in its battery technology which can last more kilometers with short charging time and low cost and high efficiency etc. new quality product. On the other hand, the GDP(gross domestic product) factors might be thought carefully like new-quality product included vehicle, highway, big plan, space exploration etc. a series of directions that may produce more product and force. On the other hand, the population increasing rate might explain the relevant economic level and quality which represents more populating labors and the whole economy GDP status. We should control the excess population and wield its to create more new one. Meanwhile, the relief of excessive ones will make our burden lightly and acquire more benefit and GDP value per capita. The fitting population will be advocated under controlling by government because the excessive population will make the natural source lacked later that may cause the climate change

and public sanitation a series of matter probably. Hence the difficulty will be considered in advance and adopt so as to forecast the possibility for us to pursue with wisdom. So that from now on the policy needs to be made in case of happening the disaster in future, which will be a wisdom way. Hence the qualified scientists who proceed their achieved one continually as for the future prediction and procedure parameters with assembly flow line. Therefore, the more research items can be produced to forecast probable product producing like humanoid robot in assembly workshop to do their like-human work constantly.

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### Ethic Declarations

The authors declared that there were not conflicts of interest.

### References

1. Global motor producing amount in nations, Wechat, Dec. 1, 2025
2. GDP increasing rate analysis, News, Wechat, Dec. 1, 2025
3. Population increasing rate, News, Wechat, Dec, 1, 2025
4. Run Xu, Hyojun Ahn, N. Subba Reddy, Wanhao Wu, Gunaghui Yu, An Innovation Research of Promoting Economic GDP & Global Competition Force on Scientists' Behavior & Judgement Continually, UKR Journal of Economics, Business and Management, Volume 1, Issue 10, 2025, 21~25
5. Run Xu, Xiangying Zhu, Zhekui Quan, Huiling Jin, Zhe Piao, Wanhao Wu, Yonggen Wu, Guanghui Yu, Jinsong Zhang, Tianyi Yan, Yanjie Mu, Gonghai Yu, Qinghua Qu, Yinglan Li, Yinghua Li, Hua Li, Changfu Jin, Xianglan Piao, Junhao Xu, Xiangyu Qi, The Research of Economic GDP and High-Technique Products' Behavior & its Judgment on Scientists Sustainably & Continually, Edu Rekha International Journal of Arts, Law and Social Science, Volume-1 Issue-4 (November-December) 2025, 06~09
6. Run Xu, Wanhao Wu, A Innovation Research of Promoting Economic GDP Value & High-Tech Product Factors like New Electric Auto and Publishing Academic Papers in Famed Journal on Scientists' Behavior & Judgement Sustainably I, Isrg j. multidiscip. Stud. Volume-III, Issue-XI (November) 2025, 49~53
7. Run Xu, etc. A Innovation Searching for Thriving Economic GDP Enhancement Factors & High Technique Product & Publishing Academic Papers on Scientist Judgement with Sustainability, UAI J Mult Cul Stu., 2025, 1(6): 54~57
8. Run Xu, The Innovation Research of Boosting Economy GDP and High-Technology Product on Scientist Judgement with Publishing High-Quality Academic Papers in Journal Sustainably I, UAI J Mult Cul Stu., 2025, 1(6): 58~61
9. The Innovation Research of Boosting Economy GDP and High-Technology Product on Scientist Judgement with Publishing Academy Papers in Journal Sustainably II, UAI J Mult Cul Stu., 2025, 1(6): 62~65
10. Run Xu, An Innovation Research of Educating High-Tech Talents and Economy Developing State on Senior Scientist Behavior & Judgement Publishing High-Quality Papers with Sustainability, Isrg j. multidiscip. Stud. Volume -III, Issue-XI (November) 2025, 32~35 **Impact Factor 4.26**
11. Run Xu, A Innovation Research of Promoting Economic GDP & High-Tech Product Factors and Publishing Papers in Famed Journal on Scientists' Behavior & Judgement Sustainably, Isrg j. multidiscip. Stud. Volume-III, Issue-XI (November) 2025, 45~48
12. Run Xu, An Innovation Research of Educating High-Tech Talents and Economy Developing State on Senior Scientist Behavior & Judgement Publishing High-Quality Papers with Sustainability, Isrg j. multidiscip. Stud. Volume-III, Issue-XI (November) 2025, 32~35