

An Innovation Study for Proceeding Five Permanent Member Longevity Analysis & Chinese Top Cities' GDP Changes through Sustainability

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Article History	Abstract
Original Research Article	<p><i>The high-technology product is to change our life big due to its owning the humanoid-like mind with artificial intelligence technique designed by software engineers according to its meeting occasions. With using the neural network techniques those robots enable to drive themselves to complete the 3D task like dirty difficult dangerous different adding the video model chip into controlled by themselves and human outsides for the sake of completing the impossible-man task. For example about Fukushima nuclear matter using small robots entered cabin to investigate the internal construction in the blast reaction-pile, which may be our pride & pleasure. At the same time, the technique of electronic field will become an important factor to wield its influence in many aspects within agriculture manufacture tertiary industry that may help us to sense the automatic procedures now with adding the relevant computer and electronic communication will complete the blank page, maybe the artificial intelligence product will dominate the future promise business and industry definitely in light of trending situation. So that a lot of employees recruited from the university and institute might occupy more and more position in maker and colleges. So with some technique staffs will be more prevalent in research & development department at maker teams. They will complete the soft-program design and development besides some of them proceed the hardware cultivation continuously from earth surface to space experiment with little gravity. Thereby, the high-technique experience and capacity will change the GDP three aspects largely in future which may boost GDP content with highness refinement edge sharpness etc. innovation techniques. On the other hand, the decreasing unemployment rate through erecting more makers in the society will be providing more work-opportunity for the sake of declining leisure labors and raising service quality and efficiency. So that the more graduates from universities may become important human resource to work for their designing process which could improve our economy increasing status in the end.</i></p> <p>Keywords: an innovation study, five permanent member longevity tendency analysis, Chinese top cities GDP changes, sustainability.</p>
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1. Introduction

The high-technique product and skill will become more significant than ever because AI (artificial intelligence) technique replaces the automatic and man-work flow-lines in a maker largely according to News report. So that those

high-tech skill will transform into the product making ability may occupy a more important task for our scientist and engineers to deal with. Therein, the many AI Robots have to enter the maker workshop to efficient work for men

will be prevalent and low cost. At the same time, the AI Robot making makers will stand in the mount peak to proceed all kinds of experiment trials and expand those function software and hardware that may be instructed collaboratively by the university PhD who grasped some important message. Through contacting those cooperation experiment with parameters like temperature, time and deviation scope grasping conditions might be exhibited between them which may play an important effectiveness on how to produce the new product more precisely and having low-cost features. Another one will erect the product equipment like processing machine, automatic flow-equipment which may be depending on the out-source-enterprise with the demand condition. Then the scientists will give his opinions to the deviation endurance which makes the possible making capacity upwards and looks forwards to enduring more time without main error.

The tertiary industry would involve on service business like high-technique-service office for enterprises influence in one region whose making purchase order and complaint so as to request more orders from the maker in neighbor maker and sale centers. They will transfer message from the ultimate customer to factory for improving their some function continuously as a consultation company. On the other hand, the whole GDP increasement might influence the tertiary one reversely due to enough income could raise our consumption capacity, special in service business. However the which business we could proceed the GDP factors will be enhanced from their physical & brain labors. Thereby, whatever you pursued the certain dedication to our society progression at all.

At the end the tertiary one role is made strong more and more when seeing the GDP value, therefore more and more stores and offices will be allocated in city for the sake of acquiring more information about their products. Meantime, the special sale stores will be much than ever like Huawei handphone and i-pad even portable computer which is a high-light in a department lobby. Their aim at increasing sale amount is one aspect firstly, then sell EV etc. new concept electric auto is two one. As we knew the price difference between them might attain more than 50 times. So that the perspective will be watched special in the tertiary industry which may create more profitable mediate-life consumption less than ten years. Maybe after decade the humanoid robots would enter our life like family, coffee store & canteen in light of present tendency and development, so we might share the automatic time in advance. [1~22]

2. Discussions

The scientist who could be trained by university would have capability to finish the important task within

defined experiment and theoretic explanation for his pursuit of research theme. So there would be some experiences and methods to process those difficult somewhat with independence and cooperation for both of occasions. Thereby, from their achievement papers published in high-impact journal and famous one the feasibility could be seen for us to make him to process the sophisticated item and projects. There might be so many chances to keep up with presently searching advanced theme that may have influence the high-technique making field in advance. So that the high-technology product will increase continually through the scientists judgment in terms of observing relevant material of GDP value in different regions within a certain period because the high-tech products amount affects the whole industrial chain for the sake of improving our total GDP amount. In near future, robots in workshops and family is about to increase largely due to enhancing the mature performance of new functional one expose with lower cost and high efficiency and high-quality continuously. [23~27]

2.1 Five permanent member longevity analysis

The five permanent member longevity analysis might show 74.6~74.1 by Britain~France correspondingly in terms of Figure 1 in 1996 to indicate China longer lifetime than Russia. The y-y per year value might attain 0.27%~-0.32% by them respectively expressed their mediate population longevity.

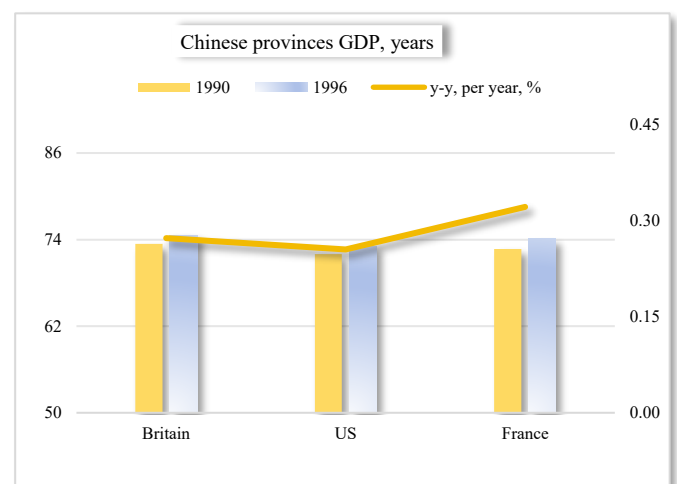


Figure 1 The five permanent member longevity analysis. [1]

On the other side, the five permanent member longevity analysis might show 68.3 & 59.7 by China & Russia correspondingly in terms of Figure 2 in 1996 to indicate China longer lifetime than Russia. The y-y per year value might attain 0.5% & -0.5% by them respectively expressed China higher population longevity than the later.

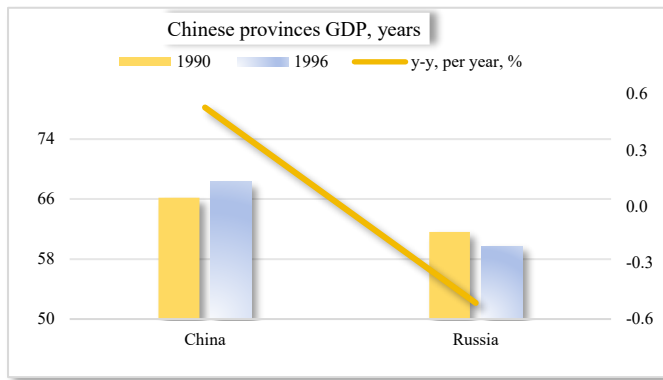


Figure 2 The five permanent member longevity analysis I. [1]

2.2 Four dragons & Guangdong GDP

The four dragons GDP analysis might show 273 & 79 billion dollars by Taipei & Guangdong cities in 1994 correspondingly in terms of Figure 5 to record Taipei higher economy level. The y-y value would show 8% & 27% by them accordingly realized the Guangdong province most forwards developed steps.

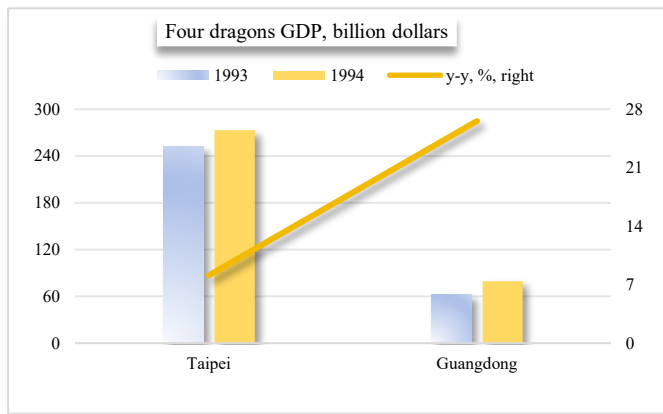


Figure 3 The four dragons & Guangdong province GDP analysis. [2]

On the other hand, the four dragons GDP analysis might show 84 & 142 billion dollars by Singapore & HongKong cities in 1994 correspondingly in terms of Figure 4 to record HK higher economy level. The y-y value would show 18% & 7% by them accordingly realized their forwards developed steps.

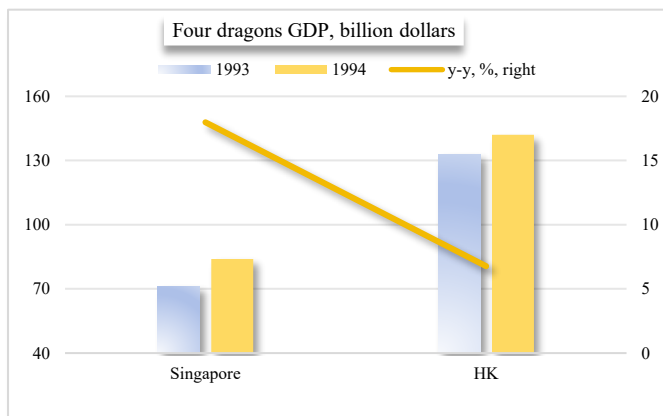


Figure 4 The four dragons GDP analysis I. [2]

2.3 Chinese top cities GDP changes

The Chinese cities GDP analysis might show 5.2 & 3.6 trillion yuan by Shanghai & Shenzhen cities in 2023 correspondingly in terms of Figure 5 to record Shanghai high economy level. The y-y value would show 10% & 8% by them accordingly realized their forwards developed steps.

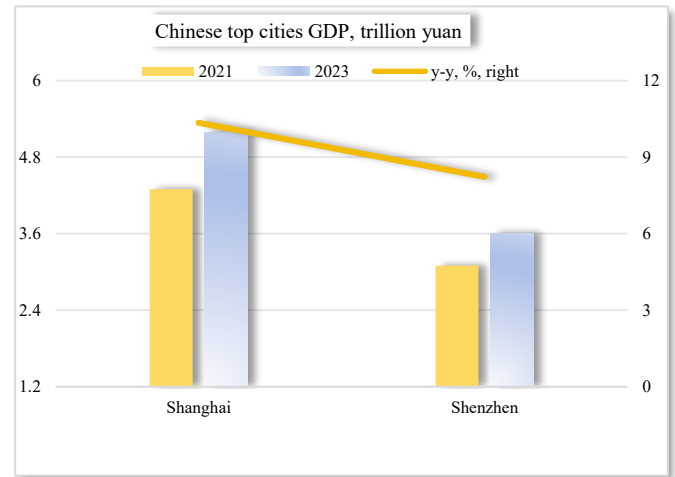


Figure 5 The Chinese cities GDP analysis. [3]

On the other side, the Chinese cities GDP analysis might show 5 trillion yuan & 3 trillion yuan by Beijing & Chongqing cities in 2023 correspondingly in terms of Figure 6 to record Beijing high economy level. The y-y value would show 10% & 5.3% by them accordingly realized their forwards developed steps.

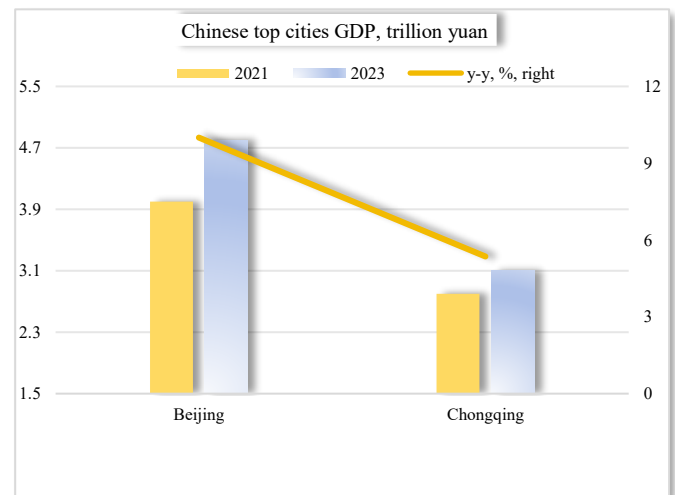


Figure 6 The Chinese cities GDP analysis I. [3]

At final, the Chinese cities GDP analysis might show 5.2 & 3.6 trillion yuan by Guangzhou & Chengdu cities in 2023 correspondingly in terms of Figure 7 to record Guangzhou city high economy level. The y-y value would show 4.4% & 7.5% nominal GDP by them accordingly realized their forwards developed steps.

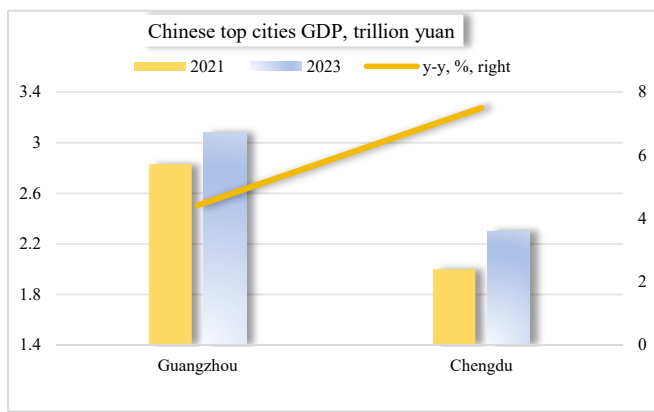


Figure 7 The Chinese cities GDP analysis II. [3]

2.3 Subject for Electrical Electronics Engineering

Hoping this message finds you well. I recently came across your preprint work “The Dynamics on Hammer with Three Freedoms and Friction Vibration by Lagrange Equation in Robotic Arm” and was very impressed by the quality and significance of your research. Your contribution to the field is truly noteworthy and aligns closely with the scope of our journal. I would like to inquire whether this work has been published in a peer-reviewed journal. If it has not yet been published, we would be honored to consider it for publication in *Electrical Electronics Engineering* with open access (ISSN: 3071-0774). Alternatively, if you are currently working on any new or upcoming research, we would be delighted to invite you to submit your manuscript to our journal. We believe your work would be of great interest to our readership. Please feel free to let us know your thoughts. [4] We would be happy to provide any additional information regarding the submission or review process. Thereby, we are hopeful that you submit your cherish paper to our journal for commonly benefit with rapidness and cheapness. Thank you for your time and consideration. We look forward to hearing from you.

Summarily, the technique of electronic field will become an important factor to wield its influence in many aspects within agriculture manufacture tertiary industry that may help us to sense the automatic procedures now with adding the relevant computer and electronic communication will complete the blank page, maybe the artificial intelligence product will dominate the future promise business and industry definitely in light of trending situation. So that a lot of employees recruited from the university and institute might occupy more and more position in maker and colleges. So with some technique staffs will be more prevalent in research & development department at maker teams. They will complete the soft-program design and development besides some of them proceed the hardware cultivation continuously from earth surface to space experiment with little gravity. Thereby, the high-technique experience and capacity will change the GDP three aspects

largely in future which may boost GDP content with highness refinement edge, tip etc. innovation techniques. On the other hand, the decreasing unemployment rate through erecting more makers in the society will be providing more work-opportunity for the sake of declining leisure labors and raising service quality and efficiency. So that the more graduates from universities may become important human resource to work for their designing process which could improve our economy increasing status in the end. [28~30]

3. Conclusions

The many population may make us to promote new high-tech skill & product even capacity with rapid development speed that help to improve our GDP amount. On the other side, due to developing emerging products the high-technique skill and capacity would become more important presently, so the research to it has to be urgent and critical now than ever because the increasing GDP (gross domestic product) task in front of our modernization & industrialization. Our university now searches for innovation experiment data for the sake of acquiring the practically substantial phenomena for one or two procedures and resolution method as for a defining experimental progress within three months or less than that. Thereby, the scientist and scholars may propose their experimental data and achievement in famous journals continuously and sustainably that might push the cutting-edge-field experience and practical process conditions. Then the high-technology skill will be transformed into the sample and launch products so as to deduce those emerging equipment and goods for public market with the convenience & precision like AI (artificial intelligence) humanoid robot producing and with constant update and fix the wrong operation etc. problems for us to solve. With regards to sustainable high-tech product making factors they should be low-cost and high-quality at final for entry to market as early as possible as a period trial and judgement. So that the whole industrial-chain would emerge in the up-stream and down-stream involved many factories request many opportunities for solving many employments problem that might raise the GDP enhancement directly. Another one will indicate the EV (electric vehicle), PHEV (plug-in hybrid electric vehicle) that might represent the presently making industry mainly as an important second industry one to mean the main tide for us to drive more and more special in several years later. Thereby, the solid chargeable-battery will indicate a promise one replaced traditional liquid battery that is to high-electric-capacity, high-efficiency and low chargeable-time for our experts to consideration like rocket engine used that one to implement its launch into the space for finishing surrounding earth-orbit-track. So that

laboratory experiment so as to develop those new substances with high-efficiency and high mass-ratio to push the technique completing from simple to advancement course. Therefore, the government institution should enhance more the new emerging industrial programme with capital support largely for the sake of progressing the new one continual development and extension.

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References

1. Five permanent member longevity, Apr 20, 2026
2. Four dragons & Guangdong GDP changes, May 2, 2026
3. The Chinese cities GDP analysis, May 2, 2026
4. Subject for Electrical Electronics Engineering, E-Mail, May 1, 2026
5. Run Xu, An Innovation Searching for Prospering Financial Reformation like Stock's Sectors Increasing Amount and Economy GDP & its Per Capita Enhancement on Scientists Sustainably, UKR Journal of Economics, Business and Management, Volume 1, Issue 10, 2025, 153~157 **Impact factor 4.33**
6. Run Xu, An Innovation Searching for Prospering Economy GDP Enhancement with Different Regions on Scientists with Sustainability, UKR Journal of Economics, Business and Management, Volume 1, Issue 10, 2025, 148~152 **Impact factor 4.33**
7. Run Xu, An Innovation Searching for Prospering Financial Reformation like ETF and Economy GDP Enhancement on Scientists by Sustainability, UKR Journal of Economics, Business and Management, Volume 1, Issue 10, 2025, 143~147
8. Run Xu, Changfu Jin, An Innovation Searching for Prospering Financial Reformation like ETF and Economy GDP with Different Regions Enhancement on Scientists by Sustainability, UKR Journal of Economics, Business and Management, Volume 1, Issue 10, 2025, 139~142
9. Run Xu, Changfu Jin, Xianglan Piao, Yonggen Wu, Jing Yu, Jiagunag Liu, Tianyi Yan, Wanhao Wu, An Innovation Searching for Prospering Financial Reformation e.g. the ETF and Economy GDP Continual Enhancement on Scientists by Sustainability, UKR Journal of Economics, Business and Management, Volume 1, Issue 10, 2025, 194~198
10. Run Xu, An Innovation Searching for Prospering Financial Reformation e.g. ETF and Economy GDP Enhancement on Scientists Publishing their Achievements at High Impact Factor Journals by Sustainability, UKR Journal of Economics, Business and Management, Volume 1, Issue 10, 2025, 189~193
11. Run Xu, An Innovation Searching for Prospering Financial Reformation e.g. ETF and Economy GDP Enhancement with G20 Group etc. on Scientists' Behavior and Judgement with Sustainability, UKR Journal of Economics, Business and Management, Volume 1, Issue 10, 2025, 184~188 **Impact factor 4.33**
12. Run Xu, An Innovation Searching for Prospering Financial Reformation like ETF and Economy GDP Enhancement with Some Various Regions on Scientists by Sustainability, UKR Journal of Economics, Business and Management, Volume 1, Issue 10, 2025, 178~183 **Impact factor 4.33**
13. Run Xu, Changfu Jin, Yonggen Wu, Wanhao Wu, Tianyi Yan, An Innovation Searching for Boosting Financial Reformation e.g. ETF and Economy GDP Enhancement on Scientists' Behavior and Judgement Writing Papers by Sustainability, UKR Journal of Economics, Business and Management, Volume 1, Issue 10, 2025, 199~203 **Impact factor 4.33**
14. Run Xu, An Innovation Searching for Prospering Financial Reformation e.g. ETF and Economy GDP Enhancement with Hubei & Hunan Provinces on Scientists' Published Behavior and Judgement by Sustainability, UKR Journal of Economics, Business and Management, Volume 1, Issue 10, 2025, 204~208 **Impact factor 4.33**
15. Run Xu, An Innovation Searching for Prospering Economy GDP Enhancement with Osaka & Shanghai and Hong Kong Cities & Shandong and Fujian Provinces on Scientists' Analysizing Behavior and Judgement by Sustainability, UKR Journal of Economics, Business and Management, Volume 1, Issue 10, 2025, 303~307 **Impact factor 4.33**
16. Run Xu, An Innovation Searching for Prospering Financial Reformation e.g. ETF and Economy GDP Enhancement with Indian Cities & Shandong and Fujian Provinces on Scientists' Analysizing Behavior and Judgement by Sustainability, UKR Journal of Economics, Business and Management, Volume 1, Issue 10, 2025, 308~313 **Impact factor 4.33**
17. Run Xu, Changfu Jin, Wanhao Wu, Yonggen Wu, Tao Yu, Tianyi Yan, Zhenguo Li, An Innovation Searching for Prospering Financial Reformation e.g. ETF and Economy GDP Enhancement with Various Cities on Scientists' Published Behavior and Judgement by Sustainability, UKR Journal of Economics, Business and Management, Volume 1, Issue 10, 2025, 314~319 **Impact factor 4.33**

18. Run Xu, Changfu Jin, Wanhao Wu, Yonggen Wu, Tao Yu, Tianyi Yan, Zhenguo Li, An Innovation Searching for Prospering Financial Reformation e.g. ETF and Economy GDP Enhancement with High-Speed Train Milage on Scientists' Published Behavior and Judgement through Sustainability, UKR Journal of Economics, Business and Management, Volume 1, Issue 10, 2025, 320~325 **Impact factor 4.33**
19. Run Xu, An Innovation Searching for Prospering Economy GDP Enhancement with the India & Taipei on Scientists' Analyzing Behavior and Judgement by Sustainability, UKR Journal of Economics, Business and Management, Volume 2, Issue 1, 2026, 10~13 **Impact factor 4.33**
20. Run Xu, An Innovation Searching for Prospering High-Technique Product and Economy GDP Enhancement with Indian Maharashtra State & Beijing City and Nobel Laureates on Scientists' Analyzing Behavior and Judgement by Sustainability, UKR Journal of Economics, Business and Management, Volume 2, Issue 1, 2026, 14~18 **Impact factor 4.33**
21. Run Xu, Changfu Jin, Wanhao Wu, Yonggen Wu, Tianyi Yan, An Innovation Searching for Prospering Economy GDP Enhancement with the Indian & Chinese North-Eastern Three Provinces and Nobel Prize Amount Ranking Analysis on Scientists' Writing Behavior and Judgement by Sustainability, UKR Journal of Economics, Business and Management, Volume 2, Issue 1, 2026, 24~28 **Impact factor 4.33**
22. Run Xu, Changfu Jin, An Innovation Searching for Prospering Economy GDP Enhancement with the Holland & China Provinces and Forecasting Global Ranking Analysis on Scientists' Behavior and Judgement by Sustainability, UKR Journal of Economics, Business and Management, Volume 2, Issue 1, 2026, 19~23 **Impact factor 4.33**
23. Run Xu, Changfu Jin, Yonggen Wu, Tianyi Yan, An Innovation Searching for Prospering Economy GDP Enhancement with the Holland & China Jiangsu etc. Provinces and Forecasting Global Ranking Analysis on Scientists' Behavior and Judgement by Sustainability, UKR Journal of Economics, Business and Management, Volume 2, Issue 1, 2026, 29~32 **Impact factor 4.33**
24. Run Xu, Changfu Jin, Xianglan Piao, Yonggen Wu, Tao Yu, Boyong Hur, Hyojun Ahn, An Innovation Searching for Prospering Economy GDP Enhancement with the Venezuela vs Shanghai City & Anhui Province etc. vs the Global Average Level etc. Analysis on Scientists' Behavior and Judgement by Sustainability, UKR Journal of Economics, Business and Management, Volume 2, Issue 1, 2026, 33~37 **Impact factor 4.33**
25. Run Xu, Changfu Jin, Yonggen Wu, Tianyi Yan, An Innovative Research about Thriving Chinese New-Power Auto-Makers Sale numbers in 2025 & GDP Enhancement with Venezuela and Chinese Cities etc. Additionally Hubei & Hunan Provinces on Scientists Sustainably, UKR Journal of Economics, Business and Management, Volume 2, Issue 1, 2026, 38~42
26. Run Xu, Changfu Jin, Yonggen Wu, Tianyi Yan, An Innovative Research about Thriving GDP Enhancement with Chinese North-Eastern Three Provinces and Indian States, Additionally Nobel Prize Amount Variations on Scientists Sustainably, UKR Journal of Economics, Business and Management, Volume 2, Issue 1, 2026, 43~47
27. Run Xu, An Innovative Research about Booming GDP Enhancement with Chinese Hubei & Hunan Provinces, Additionally Stocks Sector Variations on Scientists by Sustainability, UAI J Mult Cul Stu., Volume-2 Issue-1 (January~February) 2026, 29~32
28. Run Xu, Changfu Jin, Yonggen Wu, An Innovation Research about Booming GDP Enhancement with Tokyo Korea Holland & Chinese Top Provinces on Scientist by Sustainability, UAI J Mult Cul Stu., Volume-2 Issue-1 (January~February) 2026, 25~28
29. Run Xu, Xianglan piao, Changfu Jin, Boyong Hur, Sugun Lim, Wanhao Wu, Guanghui Yu, Enji Li, An Innovation Searching for Retrieving Anhui & Hong Kong City and New Energy Vehicle Sale Amount and Singapore & Shan'xi Province's GDP Enhancements by Sustainability, UAI J Mult Cul Stu., Volume-2 Issue-1 (January~February) 2026, 33~36
30. Run Xu, Boyong Hur, Sugun Lim, Wanhao Wu, Guanghui Yu, Xianglan piao, Enji Li, An Innovation Searching for Retrieving Singapore & Shan'xi Province and Tokyo & Hong Kong City's GDP Enhancements and Nuclear-Energy Generating Electricity Amount by Sustainability, UAI J Mult Cul Stu., Volume-2 Issue-1 (January~February) 2026, 37~40