

# An Innovation Study for Hebei Cities GDP Analysis & 2020~2024 Universities Staff & Faculty on Scientist by Sustainability

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Article History	Abstract
Original Research Article	
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<p>Copyright © 2026 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.</p>	
<p><b>Citation:</b> Run Xu, Boyong Huir, Sugun Lim, Sangshik Kim, Hyojun Ahn, &amp; Zhenguo Li. (2026). An innovation study for Hebei cities GDP analysis &amp; 2020~2024 universities staff &amp; faculty on scientist by sustainability. UKR Journal of Economics, Business and Management (UKRJEBM), 2(4), 29-33.</p>	<p><i>The cities GDP (gross domestic product) will reflect and monitor the cities economy situation within one periodic time precisely and objectively. So that the value variations between it and others may be found after the GDP value is to be published that can result our scientists to judge and measure with advanced mathematical knowledge for erecting the simulation course for us to search continuously. Meanwhile, the objectivity will be verified through others consideration and measuring data relevantly for the sake of erecting other method to verify continuously so as to prove the controlling scope and other information like deducing other more advanced models frequently for us to see and consider carefully. We can use the least two squares method for the sake of seeking the deviation between calculation and proposed one. On the other hand, the new functional high-technique product may be sought by professor and researcher, scientist from the presently found some ones in order to diversify ones continually. Thereby, the lab and R &amp;D(research &amp; development) department will be connected well through government agreement, then push into launch product and market circulation. Those high-technology ones may prevail in near futural market to change the present status from traditional products into reformative ones that will cause the entire industrial chain innovation and finally improve the GDP value increasing eventually. Due to the population enhances continually by now, the resource lack in earth phenomena will happen according to recent situation investigation. Thereby, the selling resource for foreign trade will not adaptive to develop for a long period development through using those traditional source. So that the industry, learning, research &amp; usefulness etc. procedures will be boosting that combines into university, institution, factory &amp; office four aspects cooperative spirits and culture for the sake of building a good future. Thereby, the certain high-level experts and scientists will help us to realize early the comprehensive and expertise knowledge about searching for some difficult projects that may increase the high-technique contained amount with their deductive models with mathematical knowledge and experience ones. So there will be so many achievement for us to proceed and make mature products within the technique transformation from base to application eventually dedicated to the demands of this society.</i></p> <p><b>Keyword:</b> Innovation Studies, Hebei Cities GDP Analysis &amp; 2020~2024 Universities Staff &amp; Faculty, Scientist by Sustainability.</p>

## 1. Introduction

The nations & regions GDP will represent their comprehensive strength in views of economy level and quality, so searching it may have an important effectiveness for us to process statistic with the national producing

amount every month, season and year. In the meantime, the value with y-y has also a significant meaning that reflects the economy growth step because we should clarify the increasing change so as to evaluate the increasement and

declination value precisely. The positive y-y value may mean the good and rapid economy developing status whilst the minus one may state the bad and slow economy step. So we judge the economy developing enhancement and decrease through that y-y value for a certain period. Thereby, the detail discussion will include in the following aspects. The GDP 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 medicine making disease diagnosis AI (artificial intelligence), ocean source space exploration nuclear generator etc. other ones. Low population enables 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 wielding our 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 precisely and correctly according to the near past years experience and variation. [1~16]

## 2. Discussions

In this paper the detail GDP value is going to be discussed as above parts through comparing the various regions for the sake of enhancing corresponding tactic in next year and future several years. Eventually the regional GDP will be compared with their variation and then confidently make a strategic plan for concluding the past years and erecting new target that we pay much attention to raise our predicting value all the time. It is clarified that with

regulating our aim the good achievement will be finishing in future that makes us to be more confident year by year for the sake of realizing the plan at present and in certain future. On the other side, we should learn and develop relevant project and subject to reveal the core one after their phenomena. Then we master that technique to apply to that kind of substance making ability through the engineers and scientists transformed to the R & D (research & development) department in makers. Therein, a sample will change into launch product by us to search for which may bring out new functional precise and quick responding to our request up to now. We should go on developing our similar functional equipment continually. At the same time, the scientists could complete defined projects through expending several years in universities and institutions for the sake of acquiring their high degree and some experiences for them continuously to process those cutting-edge-field projects independently and cooperatively. Thereby, we should foster and find them from the relevant activities like contest and achieved papers in high-impact-factor journal etc. we should need many of those experts level talents from universities' activity and mathematical contest who may occupy the top ten ones with excellent level score. [17~18]

### 2.1 Hebei cities GDP analysis

The Hebei cities GDP changes might show 78~38 billion yuan by them Xingtai~Chengde cities respectively in 1997 in terms of Figure 1 to exhibit Xingtai & Langfang cities strong economy strength. The y-y value might exhibit 7%~13% by them accordingly explained their faster development steps.

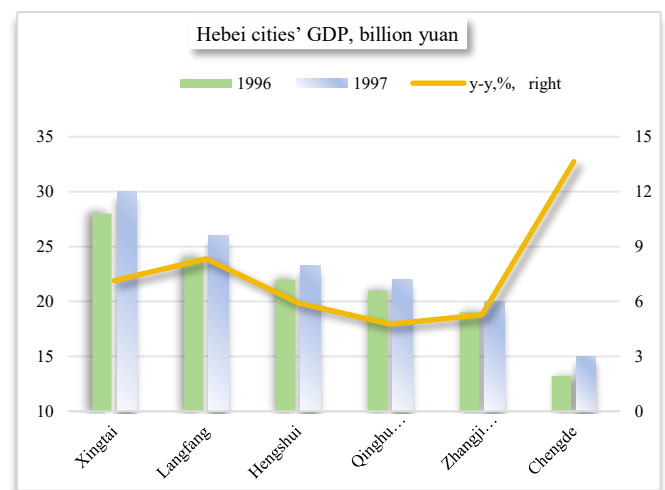


Figure 1 The Hebei cities GDP changes. [1]

The Hebei cities GDP changes might show 195~106 billion yuan by them Shijiazhuang~Cangzhou cities respectively in 2004 in terms of Figure 2 to exhibit Tangshan & Shijiazhuang cities strong economy strength. The y-y value might exhibit 17%~26% by them accordingly explained their most forwards development steps.

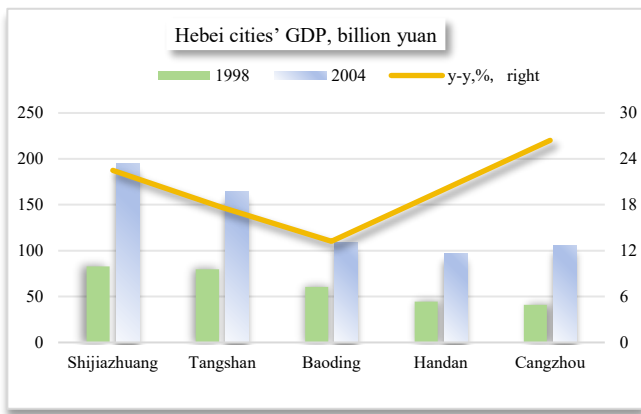


Figure 2 The Hebei cities GDP changes I. [1]

At the end, the Hebei cities GDP changes might show 78~38 billion yuan by them Xingtai~Chengde cities respectively in 2004 in terms of Figure 3 to exhibit Langfang & Hengshui cities strong economy strength. The y-y value might exhibit 17.5%~18% by them accordingly explained their forwards development steps.

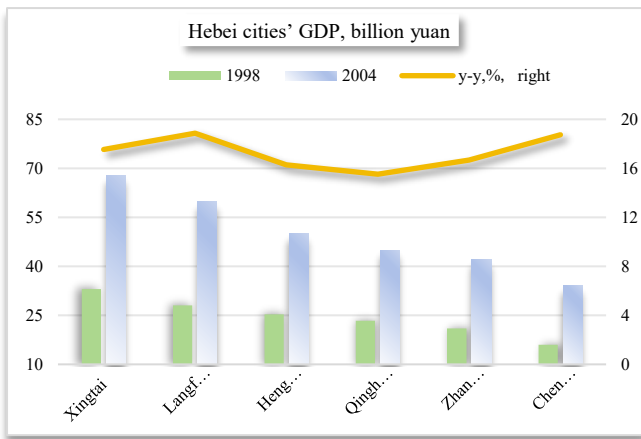


Figure 3 The Hebei cities GDP changes II. [1]

## 2.2 2020~2024 universities staff & faculty

The 2021~2024 universities staff change might show 3~2.6 million in China accordingly in terms of Figure 4 to indicate increasing trend within those years. The times between 2020 & 2024 might attain 1.17 between 2020 and 2024 with a little changes.

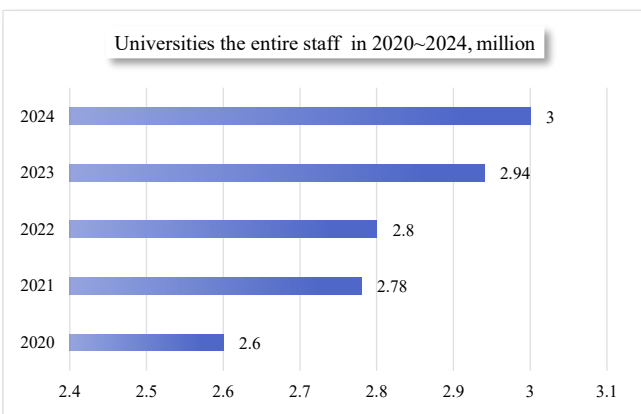


Figure 4 The 2021~2024 universities staff changes. [2]

Meanwhile, the 2021~2024 universities faculty change might show 2.2~1.8 million in China accordingly in terms of Figure 5 to indicate increasing trend within those years. The times might attain 1.18 between 2020 and 2024 with a little changes.

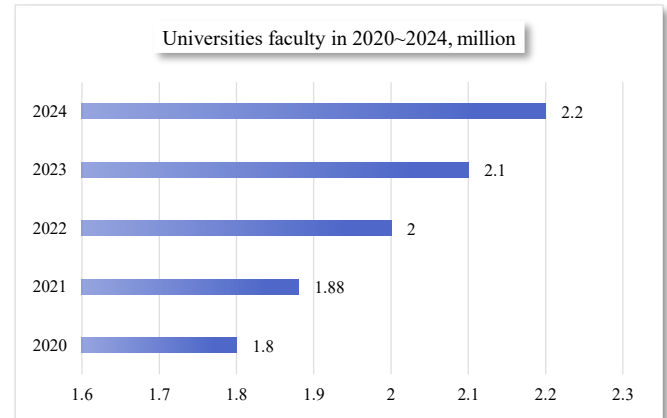


Figure 5 The 2021~2024 universities faculty changes. [2]

Meanwhile, the 2021~2024 universities staffs relative rate change might show 6.9%~2% in China accordingly in terms of Figure 6 to indicate increasing trend within those years. The times might attain 0.28 between 2020 and 2024 with declining changes. In contrast, the minimum one might indicate 0.7% in 2022. On the other hand, the increasing rate might attain 9.5 times between 2021 and 2022 with largely variation. That may be considered to proceed more teachers in 2021 due to dealing with low activity in COVID-19 which might be caused a panic psychosis.

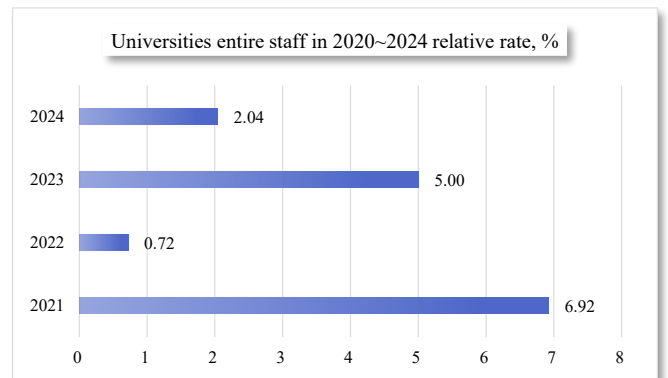


Figure 6 The 2021~2024 universities entire staff relative rate changes. [2]

Meanwhile, the 2021~2024 universities faculty relative rate change might show 4.7%~4.4% accordingly in terms of Figure 7 to indicate increasing trend within those years. The times might attain 1.106 between 2020 and 2024 with a little changes. In contrast, the maximum one might indicate 6.3 in 2022. So that there were more faculties recruitment relatively than entire staffs in 2022 and the times might attain 9 between faculty & staff exhibited the more teachers increasing to be entry than the staffs. Whether there are more staffs rate to be recruited? The average faculty relative

rate might indicate 5.1% higher than the staff one with 3.67% that means the less entire staffs has been employed in the views of expertise.

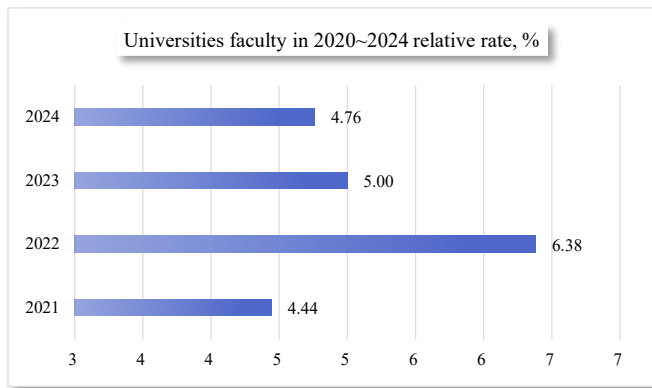


Figure 7 The 2021~2024 universities faculty relative rate changes. [2]

Summarily the certain high-level experts and scientists will help us to realize early the comprehensive and expertise knowledge about searching for some difficult projects that may increase the high-technique contained amount with their deductive models with mathematical knowledge and experience ones. So there will be so many achievement for us to proceed and make mature products within the technique transformation from base to application eventually dedicated to the demands of this society. Making scientist and professors continue to utilize their experience and knowledge for the sake of erecting one product model to simulate the reliability and stability for one defining character. So that the trial people and times may be reduced largely to save the research cost, which may be an important destination to us. Thereby, the continual studies and publishing articles may be finished by us forwards the further broader and deepening direction eventually.

### 3. Conclusions

The nation's GDP will influence the one's economy development badness & goodness as an economic indicator. So that it can be simulated by economists in advance to forecast its approximation value according to the data mastered by us. An then, the detail and actual data may be published in accordance with each provinces and cities' actual value so as to correctly reflect the nation economy situation. With regards to developing of one nation the human live condition will be better and approaching a high level more and more under the higher GDP value exhibition. So that we should consider and calculate more carefully to indicate the correct value for the sake of promoting continuously economy status and building a comfortable society day by day by our experts and scientists. On the other hand, the high-tech product is able to increase the GDP ratio gradually according to developing situation presently. It is to believe that the ratio will raise a

certain one in near future because it has high-knowledge & high-science factor within knowing it to producing it from the transfer of laboratory to factory. So that the new product enables to exhibit in its market after it was made in a factory continuously through using our scientist and engineers behaviour positively. We must encourage the high-tech proceeding engineers etc. who will transform the idea stimulus into the searching behaviour in lab with other researchers through acquiring a certain project from the funding so as to erect the experience and knowledge after several years that makes the sample into product entering current market to complete the receiving the order and transiting the cuisine to customers. That will be said that automatic changing to artificial intelligence one in order to promote the time and efficiency at all through the huge change said "let it do" changed to "it can do". We should continuously enhance its function and upgrade it & make its stability that means it can undergo a long time to serve as a like humanoid robot that may sometimes exhibit in our canteen as an automatic and artificial intelligence one to save some money while promoting its quality and efficiency concept. Due to the population enhances continually by now, the resource lack in earth phenomena will happen according to recent situation investigation. Thereby, the selling resource for foreign trade will not adaptive to develop for a long period development through using those traditional source. So that the industry, learning, research & usefulness etc. procedures will be boosting that combines into university, institution, factory & office four aspects cooperative spirits and culture for the sake of building a good future.

### Ethic Declarations

The authors declared that there were not conflicts of interest.

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