

# *Recruit condition requirements and welfare of Ph.D. teachers in China's newly-built public undergraduate universities*

Tan Yonglin<sup>1,a</sup>, Yang Lan<sup>2,b,\*</sup>

<sup>1</sup>*School of Economics and Management, Guangxi University of Science and Technology, Liuzhou, Guangxi, 545006, China*

<sup>2</sup>*School of Foreign Studies, Guangxi University of Science and Technology, Liuzhou, Guangxi, 545006, China*

*<sup>a</sup>2021022@gxust.edu.cn, <sup>b</sup>2021023@gxust.edu.cn*

*\*Corresponding author*

**Keywords:** Ph. D, research start-up fees, salary, welfare

**Abstract:** Taken through random selection from China's second-tier and above cities, third and fourth-tier cities, fifth-tier and below cities, thirty newly-built public undergraduate universities', recruit condition requirements and welfare for newly Ph.D. teachers of universities are investigated and studied. The research considers the first degree, majors, age, scientific research ability, agreed service period, and scientific research tasks of the service period, the settling-in allowance(including housing subsidies), "Enjoy the Welfare" of associate professors and so on of newly Ph.D. teachers, to compare different newly-built public undergraduate universities in the recruit condition requirements and welfare from the different cities. The result of the study shows that due to city differences, the ratio of Ph.D. teachers in the universities of China's second-tier cities and above, third and fourth-tier cities, fifth-tier cities and below differ. Moreover, in recruit condition requirements and welfare of Ph.D. teachers, regional differences are also relatively evident. The overall trend reveals that some universities for the second-tier and above cities put forward higher requirements in the first degree, consistency of undergraduate, master's and Ph.D. majors, scientific research ability, and service-term scientific research tasks.

## 1. Introduction

The recruit condition requirements and welfare of Ph.D. teachers in China's newly-built public undergraduate universities is mainly based on the following three considerations: First, a greater demand of Ph.D. teachers for the newly-built undergraduate universities. From 2000 to 2015, the ministry of education of the People's Republic of China learned that in the span of 16 years, 403 newly-built undergraduate universities reached almost half of the country's general undergraduate universities (China News Network.2016) <sup>[1]</sup>. In addition, there are nearly 300 independent private universities in China. These newly-built undergraduate universities are relatively lacking in the ability to run universities and are in need of high degree educated teachers. Hence, the demand for Ph.D.

teachers in newly-built undergraduate universities is greater. Second, the orientation of the universities for Ph.D. employment. Studies shows that teaching and scientific research are the preferred type of work for Ph.D. While universities and research institutions are the preferred units for Ph.D. employment. Third, the supply and demand of the Ph.D. market has been reduced, so that the employment situation of Ph.D. in universities is tightening year by year. From the point of view of supply and demand in recent years, the number of Chinese graduates has increased significantly. Data shows that in 2010, China's Ph.D. enrollment was 63,762 people, and in 2019 China's Ph.D. enrollment of 105,200 people. This resulted to an oversupply of Ph.D. degree holders in the market (China Education Online. 2020) <sup>[2]</sup>. Consequently, this paper focuses on the recruit condition requirement and welfare of Ph.D. teachers in China's newly-built public undergraduate universities.

The Ph.D. referred to in this article refers to the “general” Ph.D. who has obtained a Ph.D. through a scientific research level at home or abroad.

However, the current demand calls for “excellent Ph.D.” not the “general Ph.D.” Thus, creating a surplus on the count of “general Ph.D.”. To be able to cope with China’s higher education expansion and quality improvement transformation, employment standards for the newly built public undergraduate universities is a must. Hence, this research focus on the recruit condition requirements and welfare of Ph.D. teachers in newly built public undergraduate universities. This paper would be beneficial in providing reference for their employment standards. Moreover, this research aims to take the recruitment announcement of the 30 newly-built public undergraduate universities in 2019 and 2020 to analyze the conditions and welfare characteristics, to explore the general law of introducing Ph.D. teachers, and to put forward relevant policy recommendations. However, it should be pointed out that this study only relies on the given application materials of the Ph.D. teachers to judge their competence and to know their corresponding level of welfare. Due to lack of relevant supporting data, this paper delimits the definition of “welfare” as the welfare of talent corresponding to the apparent strength of the candidates.

## **2. Sample university overview**

### **2.1 Regional distribution of sample universities**

Through random selection of thirty (30) newly-built public undergraduate universities among the different city-tiers in the country, the researchers were able to collect and organize their 2019 and 2020 annual recruitment of Ph.D. teachers’ announcements as an aid for proper results of the study. The researchers also made us of an article on city classification level based on: May 24, 2019, the first financial new first-tier city-level city institute held a "new first-tier city summit" as a reference for the city-tiers used in this paper. The theme of the summit is "Ten thousand possibilities of the city" <sup>[3]</sup>, the summit released the "2019 city business charm leaderboard" of the city grade classification (First Finance. 2019). Please refer to Table 1 below for details.

Table 1: City Classification of Universities&List of existing Ph.D teachers in each University

Regional classification	Number	Name of the University	NO. of Ph.D teachers	Percentage
Second-tier cities and above	10	(1)Guangdong University of Education,	203	40.36
		(2)Hui Zhou University,	352	38.34
		(3)Dongguan University of Technology,	740	71.67
		(4)Jiaxing University,	600	54.55
		(5)Chongqing University of Arts and Sciences,	380	32.56
		(6)Changjiang Normal University,	384	30.93
		(7)Guizhou Institute of Technology,	234	39.73
		(8)Shijiazhuang University,	169	21.12
		(9)Xiamen University of Technology,	561	51.25
		(10) Xuzhou Engineering University	210	21.23
Third and fourth-tier cities	10	(11)Yancheng Normal University,	300	21.27
		(12)Huzhou Normal University,	438	39.83
		(13)Tangshan Normal University,	104	14.09
		(14)Zunyi Normal University,	221	26.49
		(15)Shangrao Normal University,	260	28.89
		(16)Xianyang Normal University,	180	19.76
		(17)Jiujiang University,	317	17.27
		(18)Xingtai University,	73	9.00
		(19)Tongren University,	161	30.38
		(20)Yibin University	175	25.38
Five-tier and below cities	10	(21)Neijiang Normal University,	150	15.94
		(22)Xinyu University,	36	7.32
		(23)Xingyi National Normal University,	51	12.56
		(24)Hechi University,	28	4.63
		(25)Xichang University,	41	5.47
		(26)Guangxi Science and Technology Normal University,	9	1.3
		(27) Guangxi National Normal University,	30	4.00
		(28)Pingxiang University,	55	11.45
		(29)Hezhou University,	98	11.93
		(30)Ankang University	69	12.73

## 2.2 The status quo of the talent pool in the sample universities- Ph.D. teacher

Reflected above are the ratios of the number of Ph.D. teachers to the total number of full-time teachers in the whole university (the main source of the data is the recruit of the university's official website and the 2019 undergraduate teaching quality report). Among the 30 sample universities, the highest ratio of Ph.D. teachers in Dongguan University of Technology with 71.67 percent, the lowest ratio of Ph.D. teachers is at Guangxi Science and Technology Normal University with 1.3%. The top five universities with the number of Ph.D. teachers in thirty (30) universities are: Dongguan University of Technology (71.67%), Jiaxing University (54.55%), Xiamen University of Technology (51.25%), Guangdong University of Education (40.36%), Guizhou Institute of Technology (39.73%). The bottom five universities in 30 universities with the number of Ph.D. teachers are: Xinyu University (7.32%), Xichang University (5.47%), Hechi University (4.63%), Guangxi National Normal University (4%) Guangxi Science and Technology Normal University (1.3%). By region, the average Ph.D. teachers' ratio of ten (10) universities in Second-tier cities and above was 40.12%; of which the highest Ph.D. teachers ratio was 71.67% in Dongguan University of Technology, and 21.12 % lowest at Shijiazhuang University, for third and fourth-tier cities' average Ph.D. teacher ratio in 10

universities was 23.24%; of which the highest Ph.D. teacher ratio was 39.83% in Huzhou Normal University and 9% percent lowest at Xingtai University, the Five-tier and below cities' 10 universities has average Ph.D. teacher ratio of 8.73%; of which the highest Ph.D. teacher ratio was 15.94% in Neijiang Normal University and 1.3 % lowest at Guangxi Science and Technology. Comparing the different city-tiers, it can be seen that there is a gradient gap between the average Ph.D. teacher compared to the region. Please refer to Table 2 below for details.

Table 2: Recruit condition requirements for each university

Name of University	First degree	Consistency of undergraduate, master's and Ph.D majors	Age limit (≤)	Scientific research ability	Agreed service period (year)	scientific research task
(1)	/	Some majors requirements	35	/	5	Yes
(2)	/	Some majors requirements	40	Yes	/	Yes
(3)	Yes	Yes	35	Yes	5	Yes
(4)	/	/	40	/	10	Yes
(5)	Yes	Yes	35	/	8	Yes
(6)	/	/	35	Yes	8	Yes
(7)	/	/	35	Yes	8	Yes
(8)	/	/	35	/	8	Yes
(9)	Yes	/	35	Yes	8	Yes
(10)	/	/	40	Yes	6	Yes
(11)	/	/	40	Yes	8	Yes
(12)	/	/	35	Yes	8	Yes
(13)	/	/	45	/	10	Yes
(14)	/	/	50	/	3-8	Yes
(15)	/	/	45	/	8	Yes
(16)	Yes	Yes	35	/	8	Yes
(17)	/	/	35	/	8	Yes
(18)	/	/	40	/	5	Yes
(19)	/	/	45	/	5	Yes
(20)	/	/	45	/	8	Yes
(21)	/	/	/	/	6	Yes
(22)	/	/	40	/	/	Yes
(23)	/	/	45	/	5	Yes
(24)	/	/	/	/	8	Yes
(25)	/	/	45	/	8	Yes
(26)	/	/	40	/	6	Yes
(27)	/	/	45	/	8	Yes
(28)	/	/	40	/	8	Yes
(29)	/	/	50	/	6	Yes
(30)	/	/	40	/	8	Yes

### 3. The Ph.D. teachers recruit condition requirements analysis

Table 3: Welfare of Ph.D. teachers for each university

Name of University	Settling-in allowance, purchase house subsidy (Ten thousand	Temporary house	Research start-up fee (Ten thousand RMB)	Degree allowance (including living allowance)	Spouse placement	Enjoy the Welfare of associate professors (year)
--------------------	---	-----------------	--	---	------------------	--

	RMB)					
(1)	30	3 years	$\geq 10$	/	/	/
(2)	24	2 years	$\geq 5$	5000/month	/	/
(3)	6	/	10	/	/	/
(4)	75	2 years	$\geq 4$	1000/month	/	3
(5)	$\geq 30$	Subsidies 3000/M	$\geq 6$	/	/	3
(6)	30	Subsidy 12,000	$\geq 8$	/	/	3
(7)	50	Subsidies	5	Yes	/	3
(8)	25	/	5	/	Yes	/
(9)	19.2	Apartment	$\geq 3$	50,000	/	/
(10)	$\geq 30$	2 years	5	82,200	Yes	/
(11)	$\geq 22$	3 years	$\geq 6$	/		3
(12)	$\geq 73$	1 year	2	1000/month	Yes	/
(13)	45	/	/	1500/month	Yes	/
(14)	$\geq 30$	/	$\geq 6$	1200/month	Yes	3
(15)	$\geq 25$	5 years	4	1200/month	/	3
(16)	20	Public rental housing	15	/	/	/
(17)	$\geq 25$	Apartment	$\geq 3$	1000/month	/	3
(18)	10	Apartment	/	1500/month	/	/
(19)	50	/	10	/	Yes	3
(20)	60	Subsidies	$\geq 15$	20,000/year	Yes	3
(21)	50	Subsidies	5	500/month	Yes	3
(22)	65	3 years	$\geq 15$	2300/month	Yes	3
(23)	50	Subsidies	10	800/month	Yes	/
(24)	40	8 years	10	/	Yes	/
(25)	85	/	15	/	Yes	3
(26)	80	/	8	500/month	Yes	/
(27)	35	8 years	5	1000/month	Yes	3
(28)	65	3 years	6	1000/month	Yes	3
(29)	33	/	4	5000/month	Yes	/
(30)	25	Subsidies	5	600/month	Yes	3

(1) The requirements for the first degree

Among the 30 sample universities, 4 universities require a full-time undergraduate degree, namely: Dongguan University of Technology, Chongqing University of Arts and Sciences, Xiamen University of Technology, Xianyang Normal University. Results revealed that the requirements of second-tier and above cities universities are higher than other cities.

(2) The requirements of consistency of undergraduate, master's and Ph.D. majors

Base from the 30 sample universities, 5 universities explicitly require the recruit of new Ph.D. teachers when the majors is consistent or similar, with a total of 16.67 percent. The remaining 25 universities in the recruitment plan are not clear in requirements in this regard which is more than 80% of the newly-built public undergraduate universities in the recruit of new Ph.D. teachers. Hence, major as a requirement of Ph.D. graduates is not the focus.

(3) Age limit

For the Second-tier cities and above, there are 7 universities with age requirements under 35 years, and 3 universities with age requirements of less than 40 years. Among the Third and Fourth-tier cities, there are 3 universities with an age requirement of less than 35 years, 2 universities with an age requirement of less than 40 years, and 4 universities with an age requirement of less than 50 years. For the Five-tier and below cities, there are 0 university with an age requirement of less than 35 years,

4 universities have age requirement of 40 years or less, 4 universities have age requirement of 45 years or less, and 1 university for the age requirement of 50 years or less. Only 1 university did not specify age requirement. Thus, the second-tier and above cities' age requirement of 35 is on point. Third and fourth-tier cities' ease age requirement for Ph.D. graduates. Five-tier and below cities have a wider age for PhD graduates.

(4) Requirements for scientific research ability.

There are 6 universities for Ph.D. graduates which requires scientific research results and 4 universities have no observable requirements for the second-tier and above cities. In the third and fourth-tier cities, 2 universities have obvious requirements for scientific research results, and 4 universities have no observable requirements. For the Five-tier and below cities, all the sample universities have no obvious scientific research requirements for Ph.D. graduates.

(5) The agreed service period requirements

Among the 30 sample universities, 28 universities have clear requirements for the service period (between 5-10 years), and 2 universities have no observable requirements, but there is specific negotiable service period for the two sides to negotiate.

(6) Scientific research task requirements

All universities require Ph.D. graduates to have corresponding scientific research assessment, generally three-year assessment, such as the non-completion of the entry agreement of scientific research requirements, there are corresponding penalties, such as cannot get the full amount of settling-in allowance, deduction of a certain performance bonus, etc., specifically to the agreement between the two sides. Please refer to Table 3 above for details.

#### 4. The recruit of welfare analysis

(1) Settling-in allowance、 purchase house subsidy

In 30 sample universities, all provide a certain amount of Settling-in allowance, purchase house subsidy, between 60,000-850,000 RMB (according to the lowest level general Ph.D. graduates statistics) with an average of 402,400 RMB. Among them, the average number of second-tier and above cities universities is 319,200 RMB. For third and fourth-tier cities the average is 360,000 RMB. Five-tier and below cities showed an average of 528,000 RMB.

Consequently, Five-tier and below city's universities, Settling-in allowance, purchase house subsidy are significantly higher than the third and fourth-tier city's universities in the middle and second-tier and above city's universities which is the lowest. This is because China's university's Ph.D. graduates are more interested to find employment in the second-tier and above city's universities, resulting to a higher settling-in allowance, purchase house subsidy to attract Ph.D. graduates.

(2) Temporary housing

Among the 30 sample universities, 22 universities have adopted different ways to provide corresponding temporary housing, such as providing apartments, public rental housing, rental subsidies, etc.

(3) Research start-up fee

Base from the 30 sample universities, 28 universities have made it clear that they will provide research start-up fees, ranging from 20,000-150,000 RMB (according the lowest level of ordinary liberal arts Ph.D. graduates for statistics), and 2 universities do not specify the amount of research start-up fees, which needs negotiation between the two sides.

(4) Degree allowance (including living allowance)

Among the 30 sample universities, 19 universities have explicit degree allowance (including living allowance and may vary), and 11 universities do not explicitly provide degree allowance (including

living allowance). The overall proportion of universities which explicitly provide degree allowance is about 63.33%.

#### (5) Spouse placement

Base from the 30 sample universities, 17 universities have made clear commitment to solve the work of their Ph.D. spouses according to their spouse's degree qualifications, have State-official teacher, casual workers, contract workers and so on. Some cities' universities may be coordinated by the corresponding part of the municipal government. Thirteen (13) universities do not mention the placement of Ph.D. spouses in the recruitment brief, which certainly does not mean that they are not resolved. Statistically speaking, 56.67 percent of universities solve the problem of Ph.D. spouses work, and 43.33 percent of universities do not mention the placement of Ph.D. spouses in their work. By region, 20% of second-tier and above city's universities solve the problem of Ph.D. spouse's works, 50% in third and fourth-tier city's universities, and 100% in the fifth-tier and below cities' universities. It can be seen that the Five-tier and below cities' universities for the Ph.D. spouse work placement is the strongest.

#### (6) Enjoy the welfare of associate professors

Among the 30 sample university, 16 university made it clear that new Ph.D. teachers could enjoy three years of associate professorship. Of the 16 universities, four universities are from the second-tier and above cities, 6 universities from the third and fourth-tier cities, and 6 universities from the Five-tier and below cities. The regional proportion of 25%, 37.5% and 37.5% of the second-tier and above city's universities, third and fourth-tier city's universities, fifth-tier and below city's universities, respectively. Thus, third and fourth-tier cities' universities have better welfare in this regard. The remaining 14 universities have not publicly committed to giving new Ph.D. teachers to enjoy the welfare of associate professors. The number of universities with "enjoy the welfare of associate professors" has an overall percentage of 53.33%.

## 5. Conclusions and recommendations

### 5.1 Conclusions

(1) There is a significant gap between the full-time teachers in the whole university and Ph.D. teachers in the newly-built public undergraduate universities. Also, gaps between the average Ph.D. teacher ratio index shows that China's second-tier cities and above, third and fourth-tier cities, fifth-tier and below-city universities is larger.

(2) Most of the newly-built public undergraduate universities do not have clear-cut requirements in recruiting Ph.D. teachers for the first degree, the consistency of undergraduate, master's and Ph.D. majors, Scientific research ability and the scientific research task. On the other hand, the age and service period of the new Ph.D. teachers are clearly defined.

(3) Some universities have some access restrictions for the recruitment of new Ph.D. teachers, the second-tier and above city's universities generally have higher requirements for the scientific research achievements and service-time scientific research tasks of new Ph.D. teachers. As compared to the Five-tier and below city's universities have lower requirements in this regard.

(4) Most newly-built public undergraduate universities solve the housing problem of new Ph.D. teachers in various ways. One way would be giving them a Settling-in allowance and research start-up fees. Comparing all regions, the five-tier and below-the-city's universities do better in this aspect.

(5) First of all, in accordance with the resolution of the 33rd meeting of the Degree Committee of the State Council and the document of the Degree Committee of the State Council on the Issuance of the Measures for the Authorization and Review of The Master's Degree (Degree (2017 No. 9) <sup>[4]</sup>, the application of new master's degree grant units for newly-built undergraduate universities requires that the proportion of full-time teachers with Ph.D. teachers should not be less than 25% (the proportion

of art and physical education universities is not less than 5%). This prompts new undergraduate university to actively recruit Ph.D. teachers to meet their standards when applying for the right to grant a master's degree. At present, the five-tier and below city's universities in the recruit of talent Welfare is almost at par with the second-tier and above cities, which shows that the Five-tier and below city's universities in the recruit of talent exerts greater efforts. However, five tiers and the following cities has a very low percentage of Ph.D. teachers due to lack of related support to keep up to the new master's degree grant units to apply for the basic conditions. Secondly, the recruit of university talents is a systematic project, the recruit of some talent welfare is also subject to the higher management rules and regulations. For example, in the placement of Ph.D. spouses, some provinces and cities require spouses must have full-time master's degree or above in order to solve the State-official teacher, similar provisions in this regard are unilaterally difficult for universities to break through.

## 5.2 Recommendations

(1) The ministry of education of the People's Republic of China may grant higher target for Ph.D. teacher of universities with new master's degree, from the current 25% to 40%, in the basic conditions. Thus, prompting the newly-built undergraduate universities more efforts in the recruit of talent. Under the role of rigid pressure, the newly-built undergraduate university Ph.D. teacher recruitment will have the motivation to recruit Ph.D. teacher with talent in the market will have vitality. Thereby enhancing the market value of our Ph.D. The improvement of the market value of Ph.D. is helpful to the ratio of input and output of individual higher education, and it also helps to stimulate the desire of citizens of the lower-level society to move to higher social strata.

(2) Newly-built public undergraduate universities should actively eliminate administrative interference, brainstorm, democratic decision-making, from the actual start of the University teachers, the formulation of scientific and feasible, competitive Ph.D. recruitment policy<sup>[5]</sup>. For example, the welfare of new Ph.D. teacher can go beyond previous years and can surpass the surrounding similar universities. Because of the additional high-end talent, it can enhance the University's talent, scientific research, service social and cultural heritage and innovation in the reputation and level.

(3) The state should effectively increase the financial support for the new public undergraduate universities in the less developed areas, and constantly consolidate the economic foundation for the development of universities in backward areas. With financial security, the backward areas of newly-built public undergraduate universities have sufficient background to improve the recruit of talent welfare so as to highlight its competitiveness and attractiveness in the recruitment of talent. Relevant research shows that the professional orientation of Ph.D. graduates shows a clear regional aggregation. Second-tier cities and above are the most preferred places for most Ph.D. graduates<sup>[6]</sup>, especially in Beijing, Shanghai, Guangzhou, Shenzhen and other large cities, while third and fourth-tier cities or five-tier and below cities are less popular.

(4) Less developed cities can establish a joint and innovative mechanism for university development policies, so that policies can adapt to the development needs of universities, so as to provide necessary institutional support for the healthy development of newly-built undergraduate universities in the region<sup>[7]</sup>. For example, in the placement of Ph.D. spouses, some provinces and cities require spouses must have full-time master's degree or above in order to solve the spouse's academic qualifications who were not qualified for the Ph.D. refused other areas. The need for the relevant provincial and office departments to actively cooperate with the development strategy of universities, timely personnel policy linkage and innovation, are unilateral solutions so as to avoid certain aspects of policy constraints and put outstanding talents out of the door.

(5) Newly-built undergraduate universities need to clarify the terms of breach and compensation



when issuing the announcement of the recruit of talents. The survey found that among the 30 sample university, few universities identified the responsibility for Ph.D. teachers' departure from universities in the recruitment brief. It can be seen that the current details of the recruitment of talents in universities still need to be perfected. Otherwise it is not conducive to the smooth recruit of Ph.D. teachers and its later use of management.

## References

- [1] <http://edu.sina.com.cn/l/2016-04-08/doc-ifxrcizu3789809.shtml> More than 400 new undergraduate institutions in China in 16 years.
- [2] <https://baijiahao.baidu.com/s?id=1663714139887893372&wfr=spider&for=pc> Universities announce expansion of enrollment, PhDs will reach 100,000.
- [3] [https://www.sohu.com/a/316490225\\_167028](https://www.sohu.com/a/316490225_167028) 2019 City Business Glamour Rankings.
- [4] [http://www.moe.gov.cn/s78/A22/A22\\_gggs/A22\\_sjhj/201703/t20170330\\_301555.html](http://www.moe.gov.cn/s78/A22/A22_gggs/A22_sjhj/201703/t20170330_301555.html) The State Council of the People's Republic of China's Degree Committee's Notice on the Conduct of the 2017 Ph.D Master's Degree Authorization Review.
- [5] Wang Fang, Hu Zhengyi. Reflections on the construction of the teaching staff of the new undergraduate university. *Human Resource management*, 2010 (6): 54.
- [6] Zhao Yandong, Deng Dasheng, Ma Wei, etc. What is the employment orientation of Ph.D graduates Chinese, 2010 (4): 73-74.
- [7] Zhu Zhenya, Wang Yangchun. *Chongqing Higher Education Research Recruit of Ph.D. Students and Welfare Studies* Jul, 2014 Volume 2, No. 4.