

# Research on the Influence of Universities on Regional Economic Development and Consumption Structure

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**Abstract:** *With the development of higher education, universities are playing an increasingly important role in economic and social development. Taking Anji Campus of Zhejiang University of Science and Technology as an example, this paper discusses the specific role of universities in promoting regional economic growth and optimizing consumption structure through questionnaires, interviews and field investigations. It is found that universities, as an important place to train talents, are of great significance to the sustainable development of regional economy. The purpose of this paper is to provide theoretical support and practical reference for universities and local governments to realize the sustainable development of regional economy.*

**Keywords:** *Universities; Regional economy; Consumption structure; Sustainable development*

## 1. Introduction

The relationship between university and economy changes dynamically with the changes of The Times. In the era of knowledge economy, university has moved from the edge to the center of economy and society, and plays a key role<sup>[1]</sup>. As an important part of local higher education, Zhejiang University of Science and Technology Anji Campus not only trains a large number of high-quality talents for the local area, but also has a profound impact on the economic structure and consumption pattern of Anji.

Through empirical research and case analysis, this paper probes into the effective ways of university and local economy growing together. It will provide theoretical support and practical guidance for promoting sustainable regional economic growth and optimizing and upgrading the consumption structure.

The theoretical contribution of this paper has three aspects: First, taking Anji Campus of Zhejiang University of Science and Technology as an example, it can strengthen and improve the theoretical framework of university-local economic interaction, and provide a new perspective for related research<sup>[2]</sup>. Secondly, the research results can help universities and local governments achieve more harmonious cooperation, promote deeper links between the two economies, and achieve mutual benefit and win-win results. Finally, by upgrading the consumption structure, we will promote high-quality and efficient regional economic growth, create local employment opportunities and better living conditions, and promote social harmony and stability.

## 2. Interview content and analysis

During the research of this project, our team members conducted a series of interviews to understand students' views on this issue. The following are some of the interviews we collected:

### 2.1 Student Pan (Computer Science major)

Pan believes that the university has a positive impact on the economic development of the surrounding area. He pointed out that the Anji campus of ZUST has a large number of students and faculty, who have strong purchasing power. They have become an important source of customers for local shopping malls and dining establishments. In addition, ZUST has attracted a number of technology companies and

entrepreneurs to set up business in Anji, thus promoting technological innovation and economic prosperity in the region.

### 2.2 Student Zhang (*Economics major*)

Zhang believes that the university's impact on the economic development of the surrounding areas is not significant. She noted that while there is a lot of daily spending for students and teachers in schools, most of it is still confined to the campus. In addition, she believes that the influence of universities in scientific and technological innovation and enterprise cooperation is limited, and there is still a certain gap with the level of local economic development.

### 2.3 Student Cai (*Financial Management major*)

Cai believes that universities have a certain pulling effect on the economic development of surrounding areas. She pointed out that universities provide a large number of job opportunities for the surrounding areas, such as part-time jobs, internships, and school-enterprise cooperation, adding vitality to the local labor market. The second phase of Anji Campus will provide more job opportunities.

### 2.4 Student Xu (*Software Engineering major*)

Xu believes that the scientific research achievements and innovative industries of ZUST have also injected new impetus into the economic development of surrounding areas. In addition, the school has organized various academic conferences and cultural activities, attracting participants from all over the world, and the influx of talents has promoted the development of the local hotel and tourism industry.

It can be seen from the above interview that students have different views on the impact of universities on the economic development of surrounding regions.

On the whole, the influence of universities on the economic development of surrounding regions is complicated. Universities provide consumption and employment opportunities, along with innovation and collaboration possibilities for local businesses and the technology sector. However, the economic ties between universities and their surrounding regions vary based on factors such as university size, subject offerings, research strength, and the level of cooperation with local industries and enterprises. Additionally, the economic development of universities and their surrounding areas requires cooperation from both sides.

## 3. Research design

### 3.1 Questionnaire design and method

The questionnaire used stratified random sampling to categorize survey participants into three groups: students, faculty and staff, nearby residents, and business owners. This approach ensures data is comprehensive and accurate. The questionnaire focuses on investment, consumption, employment, sustainable development, and other topics. It collects detailed, in-depth information using a mix of multiple-choice and open-ended questions. Furthermore, the questionnaire considers both relevant and irrelevant factors to maintain survey results' objectivity and reliability.

### 3.2 Data Sources and sample characteristics

Table 1: Distribution table of sample characteristics

Variable	Categorization	Numbers	Percentage (%)
Occupation	Student	70	67.31
	Educator	13	12.5
	Service worker	13	12.5
	Financial practitioner	5	4.81
	Others	3	2.88

In this paper, students of ZUST were the main subjects of the survey. A total of 128 questionnaires were collected during the study, 104 of which were valid, with an effective rate of 81.25%. The statistical result distribution is shown in Table 1.

### 3.3 Empirical analyses

The distribution of some questions is shown in Table 2.

Table 2: Distribution table of some questions

Variable	Categorization	Numbers	Percentage (%)
Ways in which universities raised consumption levels in surrounding areas	Promoting innovation and entrepreneurship	14	13.46
	Consumer needs of students and faculty	49	47.12
	The improvement of commercial facilities around campus	37	35.38
	The holding of academic events and conferences	20	19.23
	Others	3	2.88
The impact of universities on local consumption structure	Promote consumption upgrading	28	26.92
	Drive the surrounding business development	46	44.23
	Increase the diversity of consumption	38	36.54
	Affect the consumption structure	30	28.85
	Others	3	2.88
The role of universities in promoting local sustainable development	Promote the development and application of green technology	41	39.42
	Promote the sharing of resources between the community and the campus	44	42.31
	Cultivate talents with environmental awareness	21	20.19
	Improve the local culture and education level	28	26.92
	Others	3	3
Ways in which universities improve the local business environment	Creating an atmosphere for innovation and entrepreneurship	86	82.69
	Trained professional personnel	24	23.08
	Research support and collaboration opportunities are provided	50	48.08
	Enhance the visibility and attractiveness of the region	38	36.54
	Policy and resource support	31	29.81
	Others	8	7.69
The role of the Anji campus of ZUST in attracting local investment	Greatly increased investment opportunities	70	67.31
	It has a certain attraction effect	30	28.85
	No significant effect	4	3.84
Participants identified the Anji campus of ZUST as a major business opportunity for the local area	Catering	57	54.81
	Accommodation	14	13.46
	Educational training	28	26.92
	Leisure and entertainment	57	54.81
	Journey	41	39.42
	Others	3	2.88

## 4. Results

After analyzing the tabular data and the interviews, several key insights emerged. The data is classified and quantified around how universities affect the level and structure of consumption in nearby areas, and how they contribute to local sustainable development.

### 4.1 Investment impact

67.31% of the respondents believe that the campus "greatly increases investment opportunities", which indicates that the majority of respondents believe that the presence of the campus has a significant positive impact on the local investment environment. This may be because the construction and

development of the campus attracts related industry and business activities, thus increasing investment opportunities. The construction investment of the campus not only includes the construction of infrastructure, the purchase of teaching and scientific research equipment, but also involves the construction and improvement of surrounding supporting facilities. These investments not only improve the local infrastructure conditions, but also inject new vitality into the local economic development.

In order to better play the role of campus investment attraction, it may be necessary to further understand the local economic environment and the actual operation of the campus, and take corresponding measures to optimize the investment environment.

#### ***4.2 Consumption structure change and consumption upgrading trend.***

In terms of the impact of universities on the local consumption structure, the two main factors are promoting the development of surrounding businesses (44.23%) and increasing the diversity of consumption (36.54%). This shows that universities not only stimulate the prosperity of local businesses, but also enhance the types of consumption and inject vitality into the local economy. In addition, the influence of universities on the consumption structure accounted for 28.85%, showing the key role of universities in leading the consumption trend and shaping the consumption culture.

College students, as a group of young consumer groups, have a stronger ability to accept new things. At the same time, the group consumption of college students has the characteristics of diversification. From the perspective of consumption structure, the monthly expenses of college students are mainly divided into basic living expenses, social expenses, entertainment expenses, learning expenses and so on<sup>[3]</sup>. The demand of students and staff has stimulated the growth of catering, accommodation, retail and other related industries, injected new vitality into the local consumer market, and is driving merchants to enhance their products and services, thereby contributing to the sustainable development of the local economy.

#### ***4.3 Matching degree analysis of talent supply and demand***

The proportion of the role of training professionals in improving the business environment is 23.08%, which is relatively low. This may mean that in the opinion of the respondents, Most students choose to work in Hangzhou, the main campus, while few stay in Anji. Talent is the first resource to promote and achieve development, and the core of the business environment is the talent environment, so vigorously optimize the talent development environment, actively implement the talent policy, and strive to improve supporting services, in order to provide a solid guarantee for creating a good business environment<sup>[4]</sup>.

As an important base for talent training, Anji Campus of ZUST can jointly establish development bases and laboratories according to the needs of enterprises for high-end talents, and jointly cultivate compound talents with high and new technologies that meet the needs of society<sup>[5]</sup>. These talents not only provide strong support for the development of local leading industries, but also provide intellectual guarantee for the cultivation and development of local emerging industries.

Judging from the construction of the second phase of the Anji Campus of ZUST and the four years of some majors in Anji Campus, the school and the local government have made great efforts in this regard.

#### ***4.4 The role of scientific and technological innovation and achievement transformation in promoting industrial upgrading***

The findings also show that universities have become a crucial player in promoting local sustainable development. Among them, promoting the development and application of green technology is the most prominent, accounting for 39.42%. Universities transform their intellectual capital into scientific and technological productivity through industrial management methods, such as technological innovation, product research and development, transformation of scientific and technological achievements, patent transfer, joint training and so on<sup>[6]</sup>. The transformation and application of these achievements have not only driven the technological upgrading and product innovation of local industries, but also provided strong scientific and technological support for the sustainable development of local economy.

#### ***4.5 Assessment of the school district's contribution to the local job market***

The daily affairs of the Anji campus of ZUST require a large number of logistics personnel, such as

cleaning personnel, campus sanitation workers, landscaping workers, cafeteria workers and so on. The construction of the Anji campus will not only make a significant contribution to the local job market, but also create a lot of business opportunities for college students by serving their consumer groups. In addition, catering, cultural entertainment, sports and leisure, supermarkets, mobile phone business halls, etc. which are closely related to the needs of students, will naturally attract a large number of businesses to enter the university town to engage in these jobs, and these industries are concentrated together to drive the development of regional service industry and stimulate economic growth<sup>[7]</sup>.

#### **4.6 The role of the campus in improving the local business environment**

The Anji Campus of ZUST has played an important role in improving the local business environment. The creation of innovation and entrepreneurship atmosphere is considered to be the most important way for universities to improve the local business environment, with a proportion as high as 82.69%. This shows that most respondents value the role of universities in creating an atmosphere of innovation and entrepreneurship. Providing research support and collaboration opportunities came a close second at 48.08%. Strong government support and policy tendencies have accelerated campus construction and enhanced the attractiveness of the business environment.

At the same time, the school promotes the improvement of surrounding infrastructure, improves the quality of life, and supports industrial development. In terms of cooperation mode, the school works closely with local governments and enterprises to achieve resource sharing and complementary advantages, and inject new vitality into economic development. In addition, the campus has created a strong atmosphere of innovation and entrepreneurship, and the innovative achievements and entrepreneurial projects of teachers and students have driven local innovation and entrepreneurial activities.

### **5. Conclusion and Prospect**

This study takes Anji Campus of ZUST as an example to deeply analyze the specific impact of universities on regional economic development and consumption structure. It is found that university, as a gathering place of knowledge and talents, is of great significance to the sustainable development of regional economy. With the changes of The Times, universities have responded to the needs of the economy and society through the continuous extension of functional boundaries, and also tried to play a more important role in the development of regional economy. Universities have changed from simple institutions of higher education to multi-functional organizations, and their links with the economy and society have become increasingly complex<sup>[8]</sup>.

Therefore, this paper suggests that universities and local governments further strengthen cooperation and exchanges to jointly promote the sustainable development of regional economy. Strengthen the links between universities and enterprises in the university town, so as to integrate higher education, scientific research and high-tech industries. From the perspective of colleges and universities, teaching and practice can be combined according to the characteristics of surrounding enterprises to improve the radiation effect of scientific research results on surrounding enterprises, and then transform into productive forces to bring real economic benefits to enterprises. From the perspective of enterprises, we attach importance to the cooperation with talents in colleges and universities to provide practical opportunities for college students and obtain high-quality human resources<sup>[3]</sup>.

### **References**

- [1] Li Ligu. Give full play to the leading role of higher education and accelerate the construction of education power. [OL]. *Guangming Daily*, 2023
- [2] Niu Ben. Interaction between Higher Education and Regional Economy: Theoretical framework and empirical inspiration [J]. *Administrative Reform*, 2022, (05):74.
- [3] Shi Xiangchen, Gu Xiaohui. A study on the impact of university town on regional economy: A case study of Yangzhou University Town [J]. *Modern Business*, 2015, (18):119-120
- [4] Yangzhou City Committee of Jiusan Academy. Some suggestions on further optimizing the environment for talent development and creating the most attractive business environment in the region [OL]. *Yangzhou City Committee of Jiusan Academy*, 2021
- [5] Deng Huali. Research on the Cultivation of interdisciplinary talents for International Finance Major in Higher Vocational Colleges based on bilingual Project Teaching. [J]. *Journal of Higher Education*,

2015, (24):202-204

[6] Gao Shan, Wang Jingmei. *Rational Thinking on Sustainable Development of University Towns*. [J]. *Educational Development Research*, 2007, (3):18-22

[7] He Chunxia, Xu Jinlian, Zeng Hong et al. *The influence of university town construction on regional economic and cultural development and consumption structure: A case study of Yibin University Town* [J]. *China Business Theory*, 2022, (01):17

[8] Jiang En, Yang Zhenhua, Guan Jinghua. *Strengthening the Cultivation Function of Innovative and Entrepreneurial Talents to Promote the Sustainable Development of University Science Park*. [J]. *Chinese University science and technology and industrialization*. 2009, (3):39-40