

# Chinese Higher Education: The role of the economy and Projects 211/985 for system expansion

Danilo de Melo Costa <sup>a</sup>  
Qiang Zha <sup>b</sup>

## Abstract

China has experienced a significant economic growth in recent years. In addition, the country has also built the largest system of Higher Education in the world. However, was the economy that stimulated the advancement of Higher Education? Or was Higher Education that stimulated the advancement of the economy? To answer these questions, this research aimed to understand the role of economy and Projects 211 and 985 for the expansion of Chinese Higher Education. For that, an exploratory and qualitative research was developed, based on interviews with Chinese government managers and questionnaires applied to professors/specialists and to a student leadership. The results showed that investments in Higher Education were preponderant for the country's economic growth, which was representative from a quantitative perspective. However, also aiming at qualitative growth, projects 211 and 985 were created, allocating a significant amount of resources to the selected institutions. Such positioning makes China an example of benchmarking for other countries that wish to progress economically and intellectually.

**Keywords:** China. Higher Education. Public Policies. Public Funding. Economy growth.

## 1 Introduction

China has always seen Education as important to its development. Min (2004) recounts that, from the time of Confucianism, it was already emphasized that Education was essential for the progress of a nation. Peters and Besley (2018)

---

<sup>a</sup> Centro Universitário Una, Belo Horizonte, MG / Universidade da Fundação de Educação e Cultura de Minas Gerais, Belo Horizonte, MG, Brazil.

<sup>b</sup> York University, Toronto, ON, Canada.

Received: Dec 28. 2019  
Accepted: Apr 01. 2020

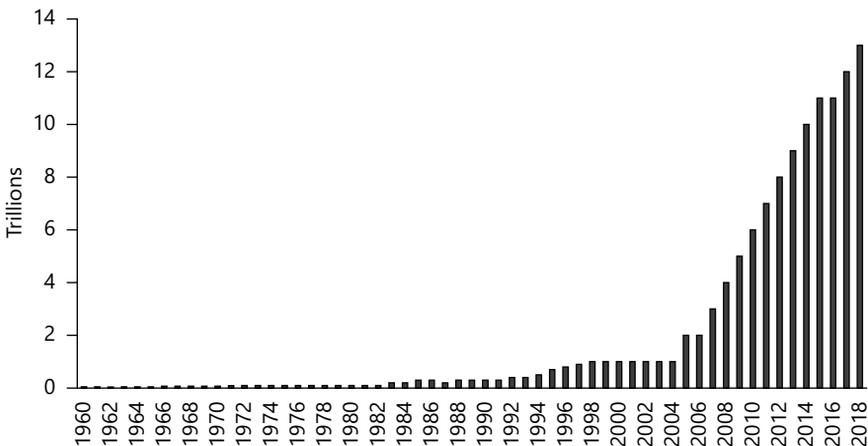
add that China have an ancient tradition in Education, something that can be seen in the classic works of the Confucianism, since the Xia dynasty (2070–1600 BC). They explain that Education has always played a crucial role in Chinese civilisation, mainly to the administration of kingdoms.

According to Hayhoe and Zha (2004), Higher Education has taken on even more force in the last decades, when China decided to open up to the world. Since then, Chinese leaders have become aware of the importance of Higher Education in order to ensure a higher quality workforce and also the development of high-level research. Min (2008) adds that this prioritization received by Education, with emphasis on Higher Education, was predominant for the formation of more prepared human resources, as well as for the development of technological and scientific innovations absorbed by the country.

Over the last two decades, China’s government has invested heavily in the development of Higher Education and a knowledge economy. Massive state efforts have gone into building what President Xi Jinping called ‘China’s own world-class universities’ with ‘Chinese characteristics’ (SUM, 2018, p. 1460-1461).

The world witnessed a tremendous growth in China’s GDP over the last decades, something that had not happened in any country in the world. This growth is shown in the Graphic 1.

**Graphic 1** - Chinese GDP growth (1960-2018) in US constant dollars



Source: Prepared by the author with data from WORLD BANK (2020)

For Zhong (NAOE, 2012), professor in the Department of Education at Tsinghua University, the growth of the Chinese economy has one explanation: massive investment in Education.

On the other hand, Zha and Hayhoe (2008) understand that the growth of the economy motivated the success of Chinese Higher Education, because this economic miracle gave the government a more direct intervention, called “visible hand”. In this intervention, a series of instruments and policies were used to promote a mass enrollment.

The university model also becomes an emerging one, since it begins to be closely related to the national and local development plans of the country, encouraging institutions and researchers that stand out in terms of production that can meet the needs of the government. The resources applied by the government in qualitative expansion policies are also worth mentioning, such as Projects 211 and 985, which have applied a significant percentage of resources in the leading universities (AHMAD, SHAH, 2018; CHEN *et al.*, 2018, PETERS; BESLEY, 2018; SUM, 2018; WANG; XIE, 2018; ZHA; HAYHOE, 2008; ZONG; ZHANG, 2019).

Since then, there has been a debate about the expansion of Chinese Higher Education in recent decades. For this reason, an analysis of the economic context in which Higher Education in China has developed is necessary.

In addition, it is necessary to understand the role of Projects 211 and 985 to help in the expansion of Higher Education also in a qualitative way. To answer these questions, the present research involved key stakeholders in China’s Higher Education system: government managers, professors/researchers specializing in Higher Education, and student leadership, in order to clarify the remarkable Chinese growth.

## 2 The Chinese Higher Education after the socialist period

The situation faced by Education during the socialist period made China develop a complete change of the educational system from the 1980s (JOHNSTONE, 1986).

According to Zhang (1993), one of the changes was the establishment of a new mechanism for better distribution of funds, something that would be useful for Education reform. For this reason, the government defines the possibility of raising funds for Education through “multiple channels”, something applied not only

in Higher Education but also in other forms of Education. With this initiative, in 1986, local governments could charge surcharges primarily for compulsory Education, based on total agricultural sales and rural and municipal enterprises at levels previously set by provincial governments.

According to data from the World Bank (1997), Higher Education institutions were also allowed to admit students outside the state's enrollment plan once they financed themselves or were funded by a company. This change allowed the charge of a percentage for the registration and various other tuition fees to students who entered in Higher Education institutions. This multi-channel fund-raising helped diversify sources of funding for Education, as shown in Table 1.

**Table 1** - Dividends Sources for Education in China

	Amount (by 100 million yen)		Percentage (%)		
	1986	1991	1986	1991	Variation
Total	354.08	743.57	100.00	100.00	—
Budget Appropriations	264.97	459.73	74.83	61.83	-13.00
Collected Taxes by Local Governments for Educational Investments	17.15	76.64	4.84	10.31	5.47
Total Contributions and Community Donations	15.95	63.40	4.51	8.53	4.02
Money of Study Programs-Work and Social Services	22.15	40.61	6.26	5.46	-0.80
Registration and Miscellaneous Fees Collected for Schools	10.56	36.10	2.98	4.85	1.87
Money for Education Powered by Mines, Factories and Other Business	18.00	42.66	5.08	5.74	0.66
Other Dividends	5.30	24.43	1.50	3.28	1.78

Source: SEC (1992, p. 18) adapted by the author

The World Bank (1997) report showed that the results were satisfactory, indicating a growth in Higher Education from 2,335 million (1986) to 5,15 million (1994). When delimiting regular Higher Education, the increase was 1,207 million (1986) to 2,798 million (1994), with 77.0% of students enrolled in regular Higher Education institutions and 3.0% in polytechnics.

Although growth at this time was a highlight, Zha (2011a) shows that the actual process of massification of Chinese Higher Education begins in 1999, with a significant increase in enrollments. In order to strengthen Education for the new century, the goal was to increase gross enrollment in Higher Education to 11.0% in 2000. Despite the challenges of the past goal, the government then sets an even more audacious goal by seeking to reach the indicator of 15.0% of young people between the ages of 18 and 22 by 2010, since this is an internationally recognized threshold for mass Higher Education (STATE COUNCIL, 1999). According to Zha (2011a), the results were a jump of 47.2% in the number of new registrations, from 1,08 million new students (1998) to 1,59 million. Additionally, Wang, Liu and Lai (2012) explains that university enrollment increased exponentially, from 9.8% of the eligible age cohort in 1998 to 24.2% in 2009.

Cheng (2004) says that the results of these goals were promising, and in December 2003, China announced that it would promote the world's largest Higher Education system. Zha (2011a) reports that the rapid expansion continued until 2004, when enrollment in Higher Education reached 20 million students. Since then, growth has continued, but more moderately. There is also an increase in the number of Higher Education institutions, from 1,022 (1998) to 2,263 (2008), an increase of 121.4% in 10 years. With regard to the year 2008, China reaches the surprising rate of 30 million students enrolled in Higher Education, and of these, 24.2% were in the age group of 18 to 22 years, which makes the Chinese system the largest in the world in absolute numbers.

However, this growth in undergraduate enrollment presents a new challenge for the Chinese government's public policies, which is graduate performance. A research by Chen *et al.* (2018) showed that Chinese doctoral Education still has a quality gap in research compared to world-class universities, which is China's goal for its universities. This challenge is then dealt with by the government based on new policies and projects, and the increase in investment from the main universities in the country.

## 2.1 Higher Education in China nowadays

According to the last population demographic census (2010), considering the appropriate age for Higher Education between 18 and 24 years old (FAPESP, 2011, p. 12), China has 169,711,258 young people of educational age (JIANGLAN; JIE, 2016). This led the Government to structure Higher Education through public and private universities, the majority of which were public. Although public, universities are paid, through tuition fees (COSTA, 2015).

Since then, the government has defined a series of policies that aim to guarantee the access and permanence of these young people. One of them is the Government-Subsidized Student Loan Program (GSSLP), in which the student is subsidized by the government, but then needs to pay the amount back, in a period that varies from two to six years (SHEN; SHEN; ZIDERMAN, 2009).

The Green Passage policies, which are an institutional action to prevent the exclusion of economically disadvantaged students who are excluded from the system, are free to pay the fees and still receive assistance to stay at the university (MENGKUI, 2009). Another initiative is the Open University of China (OUC), the country's distance Education initiative, which is the largest open Education and at distance system in the world and the goal of the Chinese government is turning it into an open university of world reference (OUC, 2014).

Finally, Projects 211 and 985, whose purpose is to increase the resources of prominent institutions (HAYHOE; ZHA, 2010). In addition, universities are separated by Central and Local Institutions, so that Local Institutions are distributed to absorb the demands coming from more remote regions, and Central Institutions, with a role more focused on world-class research and development (ZHA, 2011b).

### **2.1.1 The contribution of projects 211/985 to the expansion of Chinese Higher Education**

As presented in the previous session, China's action to create a mass system of Higher Education has resulted in a rapid expansion of enrollment. The declining trend in quality in universities has led a debate to guide the whole process of expansion. For Zong and Zhang (2019), the desire to creating universities of international status in the People's Republic of China could be observed in national reforms and investment initiatives. For this reason, in 1993, the government announced a series of national initiatives aimed at providing financial support to China's top 100 universities to achieve "world-class" status (HAYHOE; ZHA, 2004; ZONG; ZHANG, 2019). This project was named "Project 211". Table 2 shows the percentage of additional funds received by these universities.

The result of Project 211 was so positive that in the commemoration of the 100th anniversary of Beijing University (May, 1998), another project, called "Project 985" was created to further support a special group of 9 universities (Tsinghua, Zhejiang, Shanghai Jiao Tong, Xi'an Jiao Tong, USTC, Harbin Institute of Technology, Beijing, Fudan and Nanjing).

**Table 2** - Proportion of Project 211, additional percentage beyond the national total

Resources	Additional Percentage via Project 211 (%)
Library books volume	25.65
Scientific equipment and instrumentation	38.70
Bachelor Enrollment and under-graduate	18.33
Master Enrolment	69.14
Doctoral enrollment	86.01
Enrollment of international students	58.19
Proportion of full-time professors (national average 9.77)	18.85
Research funds	70.10
National key laboratories	100.00
National key programs	83.61
Patents filing	72.81

Source: Hayhoe and Zha (2004, p. 89)

Hayhoe and Zha (2010) and Levin (2010) explain that these nine universities became part of the C9 League in 2009, which is a Chinese reference to the US Ivy League. The largest concentration of resources was inserted in the Beijing and Tsinghua Universities, with the aim of boosting them to the top 20 in the world (HAYHOE; ZHA, 2010; LEVIN, 2010). Marcovitch (2008) further explains that in the second phase of the project, 39 universities became part of Project 985.

Hayhoe and Zha (2010) and Levin (2010) also detail that the universities of Beijing and Tsinghua received each of them CN ¥ 1.8 billion, equivalent to US \$ 225 million. For other universities, there was a variation between CN ¥ 1.4 billion and CN ¥ 400 million.

As a result, Zong and Zhang (2019) show that the Times Higher Education (THE) World University Rankings 2016/17 reveal that two Chinese universities reaching the top 50 and 382 Chinese universities have joined in the world's top 800. "The rapid advances of China's universities in major international league tables are perceived to have been achieved through Project 985" (ZONG; ZHANG, 2019, p. 2).

However, Zong and Zhang (2019) observed some disparities between '985' and '211' universities after the implementation of Project 985, since this group of universities received more investment.

Finally, Zha (2012) reports that, in order to continue the expansion in Higher Education, the Chinese government has established the National Panorama for the Reform and Development of Secondary and Long-Term Education (2010-2020), popularly known as “Plan 2020”. The plan addresses the aspects of quality improvement and assurance and is designed to encourage creativity among students as well as to include a number of Chinese universities to be recognized around the world.

Inside the 2020 Plan, Zha (2012) demonstrates that there is a specific Strategic Plan for Higher Education, which sets the priority for ensuring the quality of Higher Education to be achieved through university development, curriculum development, creative Education for talented students, development programs for innovators, transformation of graduate programs and the development of projects “211” and “985”.

In addition, Levin (2010) and Iedi (2011) explain that the Chinese government set ambitious targets for R&D in the country in order to apply 2.5% of GDP by 2020 and increase the number of researchers to 4 million in the same year.

According to Peters and Besley (2018), China aims to double the number of world-class universities, and with an emphasis on the future, China has well-defined goals for the next 30 years. By 2020, develop several world class universities; by 2030, increase universities among the best in the world and have a significant improvement in the strength of Higher Education; by 2050, have a significant number of universities among the best in the world in terms of quality. In short, China wants to become, by 2050, a power of Higher Education. These policies and investments have brought interesting results to China on the international stage, according to studies by Ahmad and Shah (2018), which showed that China has become an important destination choice for international students for two reasons: economic growth and prominence of universities in the international context.

Finally, there is still a preliminary discussion on the continuity of the 211 and 985 projects. While some news reports that the projects will be replaced by a new plan, called the Double First Class University Plan, whose goals were quoted above (CHINA DAILY, 2017) other news highlights that the government has stated that projects 211 and 985 still remain active. According to the News Sina portal (2014) the lack of resources in recent years was due to the closure of the so-called “Phase III” projects; however, the government

issued an official note saying that the plans will not be abolished, and that they are part, along with other plans, of an important strategy for helping Chinese universities become world-class universities. In addition to that, the portal People's Daily Online (CHINA to develop..., 2017) highlight that "According to Chinese authorities, the new endeavor is not a replacement of the two previous projects, but a reshuffle of the countries' ranking of prestigious universities".

### 3 Methodology

This research was developed as an explanatory research of qualitative approach. This practice is intended to structure and define theoretical models, in addition to relating hypotheses in a more unitary view of the universe, in this case, to present the role of the economy and the Projects 211/985 for Chinese Higher Education in the view of the main stakeholders (MARCONI; LAKATOS, 1990).

Additionally, direct approach collection techniques were applied, by conducting semi-structured interviews and questionnaires. The target audience comprised the key stakeholders in the system:

- a) Government managers: Government service professionals in their respective countries, responsible for effective in Higher Education public policies;
- b) Specialists in Higher Education: Professors and researchers who have as one of their main fields of study the issue of Higher Education in some of the countries studied;
- c) Student Leaders: Leaders who are ahead of student unions that represent the student audience of each of the countries studied.

The interviewees and respondents were chosen due to the role they play in the research ecosystem, namely: government leaders who work directly with policies for Higher Education, professors, whose expertise is research on Chinese Higher Education, and a student leadership also involved in this environment. The access was via video conference (respondents) and online questionnaire (respondents).

In order to understand the perspectives of government managers, interviews were conducted. The list of interviewees is presented in Chart 1.

**Chart 1** - Interviewees: government managers

Denomination	Agency	City	Date	Schedule	Obs.
Interviewed 1	MOE/NCEDR	Beijing	31 Mar.	19:00 to 22:00	Video conference
Interviewed 2	MOE/NCEDR				
Interviewed 3	MOE/NIES		06 May	12:00 to 13:30	

Source: Prepared by the authors (2020)

To analyze the perception of experts in Higher Education and student leaders of the three countries we used questionnaires for data collection and unstructured not disguised instruments as there were only open questions and respondents who knew the purpose of the research. Questionnaires were developed through an online website dedicated exclusively to research and the questions were adapted according to the circumstances and the results observed in each country.

The relationship of Higher Education specialists who answered the questionnaire is shown in Chart 2.

**Chart 2** - Respondents: Higher Education specialists

Denomination	University	Day	Schedule	Obs.
Respondent 1	York University	02 Mar.	18:02	Email
Respondent 2	University of Tampere	17 Feb.	15:05	
Respondent 3	East China Normal University	19 Feb.	04:54 to 06:40	Online website
Respondent 4	University of Toronto	08 Feb.	08:22 to 08:34	
Respondent 5	East China Normal University	20 Feb.	22:59 to 23:31	
Respondent 6	Beijing Normal University	07 Feb.	02:05 to 02:55	
Respondent 7	Peking University	10 to Feb 11.	23:48 to 00:20	
Respondent 8	Tianjin University	28 Mar.	04:53 to 05:10	

Source: Prepared by the authors (2020)

The member of a student movement that responded to the questionnaires is presented in Chart 3.

**Chart 3** - Respondents: student leaders

Denomination	Organization	Day	Schedule	Obs.
Respondent 1	Academic and Scientific Department in the Graduate Association	12 Jan.	20:19 to 23:19	Online website

Source: Prepared by the authors (2020)

For the qualitative treatment, data collected through unstructured questionnaires and semi-structured interviews were treated using as reference the categorical content analysis technique (BARDIN, 2009).

## 4 Expansion of Higher Education vs. Economic Growth

In recent decades, the world observed the great Chinese economic growth. At the same time, from 1999, the growth of China's Higher Education was so big as to make it the world's largest educational system (with 33 million students enrolled in all types of Higher Education, in 2012).

From that point, this study sought to understand with government managers, experts in Higher Education and student leaders, the perception from the point of view of this relationship, investigating whether it was the expansion of Higher Education that helped in China's economic growth or furthermore, it was the economic growth that helped in the expansion of Higher Education, in order to understand the influence of each of these forces to the country.

### a) Government

In general, government managers believe that the influence of Higher Education helped more on economic development than the reverse situation, while also recognizing the important role played by the economy for the progress of Chinese Higher Education.

Interviewed 2 says that between 1998 and 1999, some economists suggested the Chinese government to invest more in Higher Education, because it would be very useful for the economy growth. Upon receiving these guidelines, China realized that Higher Education would have a crucial role to the economic performance, because the country would have more people trained to work in the job market, which could boost the economy. From this, policies were adopted to expand the Higher Education system.

Interviewed 3 also follows the same line of reasoning when analyzing this relationship. “The reason for the expansion of Higher Education was to stimulate economic growth. Our government thought that Higher Education could be useful to assist in economic growth, and indeed helped” (INTERVIEWED 3).

The government manager also adds that stressing this need led to both the people of China and the Chinese government investing a lot of money in Higher Education. He made a reflection and admits that the expansion of Higher Education had a positive effect, because it brought to more people the opportunity to receive a third degree. Even getting critical of this kind of Education that was being provided, the interviewee argues that regardless of the expanded Higher Education quality, at least those who received it got more skills and knowledge.

Anyway, the government manager does not eliminate completely the role that the brilliant economic performance had to boost Higher Education, recognizing the existence of a “two-way” to achieve some results. “Both the economy and Higher Education are important and are related. They have this relationship, one helps the other. The economy helps in the expansion of Higher Education and the expansion of Higher Education helps the economy” (INTERVIEWED 3).

This perception is also supported by Interviewed 1, who even recognizing the important role of Education in economic growth, recognizes that for some factors, such as the development of academic research, there was a two-way road in this relationship. He explains that initially both were stagnant, and then it could see major developments in both areas.

#### b) Specialists in Higher Education

For specialists in Higher Education, economy and expansion of the system are interrelated, because each has a characteristic that depends essentially on the other to supply it. Politically, there was a greater government incentive for the expansion of the educational system as a trigger for economic growth; however, the economy’s rise fostered further the system, causing it to hit the amazing current numbers.

Respondent 2 reports the decision of the Chinese government regarding the incentive for Higher Education.

As has been commonly understood, the driving force behind the rapid expansion of enrollment at the end of the 90’s is due to a

concern for the economy in response to the economic stagnation after the Asian economic crisis in 1997. It was expected that the increasing enrollment, along with the charging of tuition fees, would stimulate economic growth to not only solve the financial crisis of the universities, but also indirectly boost the consumer market, thereby stimulating the domestic economy (RESPONDENT 2).

For the Respondent 4, the two points are representative. He believes that the expansion of Higher Education has led to huge investments in new campuses, faculty hiring, among others, which stimulated consumption and employment. In addition, the expansion of Education was stimulated by the own Chinese citizens who have Education as one of the most valuable assets that an individual can achieve, as it opened more jobs, more jobs were filled.

The Responders 6 and 8 also share these thoughts, signaling that this relationship is a key issue in Higher Education, which is supported for the sake of mutual growth.

Respondent 3 defends the line of thought that there was a search for skilled labor, reason that made China open their eyes to Higher Education. For the specialist the great Chinese economic growth demands more skilled workers to be involved in the job market, and it makes governments have much more financial support to expand Higher Education. “Along with the massification of Higher Education, Higher Education institutions try to give more support to the social and economic development, however, most of them not found yet the best approaches to meet government requirements” (RESPONDENT 3).

Respondent 5 also supports the belief that economic growth influenced the development of Higher Education by reason of increasing the demand for skilled workers, which led to inevitable investments at this level of training; however, admits that after qualified, the new workers ultimately stimulate the economic results of the country. “Yes. I believe there is a bi-directional impact between the Higher Education sector and the economic sector. And of course that in China, the expansion of Higher Education has improved the quality and quantity of the labor force and thus stimulated economic growth” (RESPONDENT 5).

Unlike reported above, the Respondent 1 considers this a classic question and presents a different view of experts who believe that the need for labor force boosted Higher Education. Based on empirical studies, he says that while many believe the expansion of Higher Education should help improve the labor force, which in turn helps economic growth, some empirical studies show no or weak

correlations between the expansion of Higher Education and economic growth (for example, in Latin America and Africa). He believes that there is no definitive answer to this question, but personally suggests that it is economic growth that pushes up the social demand for Higher Education in the first place, but in the long run, a new and sustainable development of China's economy will be benefited from the improved quality of the country's labor force.

Finally, in order to find a middle ground in this relationship, the Respondent 7 reflects on the important role played by each of these forces. "I believe both directions help one another. On one side, economic growth helped the expansion of Higher Education in terms of taxes, affordability and employment. On the other hand, the HEI provide human resources that are vital for promoting economic growth" (RESPONDENT 7).

### c) Student Leadership

For the student leadership, the role of Higher Education is crucial to the amazing economic performance of China.

Respondent 9 demonstrates the importance of the Education variable in the success of a country, something even present in a Chinese saying. "Of course, the expansion of Higher Education helps in economic growth. It's like the saying goes: 'The development of a country should be through science and Education'. The main role of Education is to cultivate talents to serve society" (RESPONDENT 9).

The student leader argues that the expansion of Higher Education in economic growth helped by having as main objective promoting and helping people to become better and more capable. So a talented person goes devoting to social development and helps build the economy in the country. The respondent also presents a different perspective when analyzing the inverse relationship, the economy influencing Education. He believes that this influence can hinder the goals of Education, which must be greater than simply serve the economy. "We cannot say that in opposite would happen the same thing. The heated economy provides advanced devices and technology Education. However, with Education directed only to answer the economic needs of the country, it can deviate from the original intention" (RESPONDENT 9).

For the Respondent 9, as the economy continues to develop, new sciences and technologies grow rapidly, but Education moves away from its essential purpose, which is to help people become better.

The student leader concludes that, for sure, economic growth has an influence in Education, but this is far from effect what Education has in relation to economic growth, showing a slightly different view of government managers and experts.

#### d) Conclusion

The contributions of government managers, professors experts in Higher Education and student leadership corroborate what was stated by the authors Naoe (2012) and Zha and Hayhoe (2008), since they attested a bi-directional relationship between the economy and growth of Higher Education in China.

### 4.1 Effectiveness of public resources via Projects 211 and 985

As explained in previous sections, China has two projects to empower a select group of universities, in order to make them world-class universities: Project 211, which includes the participation of 118 universities and Project 985, which has with the participation of 39 universities, receives an amount of investment even more significant than intended in the project 211.

In order to investigate the effectiveness of these actions, it sought to understand initially if the resources from these projects fully meet the needs of the participating universities.

Because it is a considerable amount of investment, it was also examined the participants' perception towards a fairer division of that amount, including provincial and local universities, since they absorb 95.3% of all registrations.

#### a) Government

In overall, the government managers admitted that the purpose of funding from these projects is mostly to improve research development. Though it can be noticed a considerable improvement in the participating universities, the amount of investment could always be greater. Moreover, there is dissatisfaction with this allocation of funds that could focus more universities, rather than just a select group.

For Interviewed 3, the main focus of these projects is research and innovation, since the government's intention was to help the universities of these projects become world-class universities. However, these amounts are not enough to

all universities, which need a lot of investments. “In my opinion, the funds do not meet the needs of universities, because the funds allocation is not balanced and scientific. Several famous universities received an excessive amount of money while other lesser known universities received an insufficient amount” (INTERVIEWED 3).

According to Interviewed 2, the goals that the project participants universities receive are incompatible with the amount of funding received, even being a large sum. The interviewee explains that universities have different goals, and both projects 211 and 985 universities try to become world-class universities, which lacks a lot of investment. Once the goals are bold, money is not always enough.

The interviewee also explained that the government needs to carefully consider which are the goals to allocate the required amount for each university. Among all the specified goals, he says that the main one is to provide a good basis to assist in conducting research in all participating universities. Projects should then help universities in this regard.

Interviewed 1 believes that the projects have played an important role when reports the development observed in the participating universities, but admits that they have very ambitious goals, and will not be easy to achieve.

So, we can observe the benefits of these two projects in general and we can notice improvements individually at each university, which reached an expected level of development, but there is still a long way to go, because we want to have several world-class universities in China and we do not yet have, and we know it (INTERVIEWED 1).

Finally, the interviewee reinforces the important role of Education today and confirms that China will seek, in every way, to be one of the main references in the world in relation to this level of Education.

#### b) Specialists in Higher Education

According to most experts, the amount of public funding allocated by the government to universities through the projects 211 and 985 is very good, but is still unable to fully meet the needs of the participating universities. In some cases it was pointed out the need for more funding, in others the inevitability of the institutions applies more efficiently resources, which are plentiful.

According to the perception of the Respondent 3, the amount of investment allocated by the government for the participating universities can meet the same needs. He believes that for most institutions, the financing granted by governments makes them have enough money to improve their level of research and compete with their western counterparts.

This opinion is also shared by Respondent 8, who points out that 211/985 projects are not just about pure and simple financing, but on developing and boosting Chinese HEI. Although the expert considers difficult to say whether the funding meets or not the need of the participating universities in the 211/985 project, he believes that contributes to the development of these universities.

Unlike the above respondents, the Respondent 5 considers that the proceeds cannot meet the needs of the participating universities, the reason is they may need to diversify the sources of financing to successfully meet their goals. The same is defended by the Respondent 7, reporting that universities have many areas in need of investment. “I believe that the funds are significant but do not fully meet the needs of participating institutions. The funds are used in three major areas: infrastructure, academic programs, benefits and personnel compensation” (RESPONDENT 7).

For the Respondent 2, the amounts are significant, but they were not designed based on the needs of universities, which can be an obstacle. The expert considers both projects and national initiatives to meet development needs. For him, the rationale behind the project is that the government expects to concentrate public investment in a small number of prominent universities that provides knowledge and human resources for the country’s economic development needs. However, to do the transfer, the government does not consider that the participating institutions actually need but intended a default value. On the other hand, he admits that Chinese universities have difficulties to show their real needs. “It is very important to know what the needs of the participating universities are. This can be a problem in the Chinese Higher Education, since the HEI are not very clear in the way they need to be” (RESPONDENT 2).

This deviation from the transfer and the real needs of the institutions end up creating some problems, since there is a lack of resources to the misapplication by reason of receiving abundant resources, as explained by the Respondent 4. “There are always more needs, but funding was substantial, especially for 985, and there is a concern that some may have been wasted on equipment supplies and buildings that were not needed” (RESPONDENT 4).

Finally, the Respondent 1 understands as very good investments, noting that they are amounts that complement what would be received by the same institutions and believes it is a situation of efficiency of spending, something that needs to be enhanced by Chinese universities, which for many years faced certain scarce resources and now need to manage large amounts. “[...] to judge the performance of the participating universities of Project 211 and 985, it seems that they are not really efficient in terms of using such funding provided for university elite systems” (RESPONDENT 1).

### c) Student Leadership

For the Respondent 9, the amount of public funding allocated by the government to universities through the projects 211 and 985 is not sufficient to meet the real needs of the institutions, especially if you make a list of the amount invested on the basis of China’s GDP. “No, I do not agree. The resources proportion entering Education through these projects is not representative as in relation to the GDP” (RESPONDENT 9).

Disregarding the percentage of GDP and considering only the amount transferred, the student leadership still evaluates the amount of funds as inadequate to meet the needs of universities, which are over and beyond only in the research development. In addition to this specific area, universities also have various demands of infrastructure, personnel, students assistance, among many other issues that should also be considered as direct impact on access and in the provided educational quality.

### d) Conclusion

The contributions of government managers, professors expert in Higher Education and student leadership differ slightly from what was advocated by the authors. While Hayhoe and Zha (2010), Levin (2010), Zha (2012) and Zong and Zhang (2019) present that such projects were created with the intention of increasing the funds of universities to figure as world class, research participants reported that these resources are still not sufficient to fully meet all the needs of these universities.

## 5 Final Thoughts

From the results of this research, it was revealed that the application of resources in Higher Education has deepened the relationship with the expansion and system

improvement. This was understood with the main participants of the system (government managers, specialists/professors of Higher Education and student leaderships), as the benefits provided by investment in Higher Education can be evidenced positively.

It can be concluded that one of the main benefits observed by investment in Higher Education is economic growth. As China is the country that has experienced the greatest economic growth in all the countries of the world in recent decades, the role of Higher Education for the country's significant performance was evidenced among the participants of the research. Participants' perceptions showed that Higher Education led to economic growth because it was responsible for ensuring more skilled labor, which led to better results for the industry, helped reduce unemployment and thus warmed up the domestic economy.

Additionally, Project 211 and Project 985 policies showed to have a key role in the qualitative advances of Chinese Higher Education. For a country that just a few decades ago had no Higher Education as a key area, to define actions in order to transform their universities into institutions of "world class" confirms the nation's position in relation to this segment. These policies also deserve to be highlighted, since the traditional way universities seek to improve their position in international rankings is a continuous and, in most cases, slow process. However, China has established two policies with this explicit and clear objective, by applying large financial contributions to achieve this goal. The boldness of the country in this action should be emphasized.

The conclusion from the participants' perception is that these policies represent a new era in the expansion of the quality of Education provided by the participating universities, which are beginning to be recognized internationally. Participants also advocated the need to delimit investment for a select group in order to collect better results, as if it were a larger transfer distribution, the goals could not be achieved.

Finally, it was possible to see that China is experiencing a new era in Higher Education in the country. Investments in Higher Education were preponderant for the country's economic growth, which was representative from a quantitative perspective. However, also aiming at qualitative growth, projects 211 and 985 were created, allocating a significant amount of resources to the selected institutions. Such positioning makes China an example of benchmarking for other countries that wish to progress economically and intellectually.

## **Educação Superior chinesa: o papel da economia e dos projetos 211/985 para a expansão do sistema**

### **Resumo**

*A China vivenciou um significativo crescimento econômico nos últimos anos. Aliado a isso, o país também construiu o maior sistema de Educação Superior do mundo. No entanto, foi a economia que estimulou o avanço da Educação Superior? Ou foi a Educação Superior que estimulou o avanço da economia? Para responder estas perguntas, esta pesquisa teve como objetivo compreender o papel da economia e dos projetos 211 e 985 para a expansão da Educação Superior chinesa. Para tanto, foi desenvolvida uma pesquisa exploratória e qualitativa, a partir de entrevistas com gestores do governo chinês, questionários aplicados a professores especialistas em Educação Superior chinesa e a uma liderança estudantil. Os resultados mostraram que os investimentos em Educação Superior foram preponderantes para o crescimento econômico do país, que foi representativo sob a perspectiva quantitativa. No entanto, visando também o crescimento qualitativo, os projetos 211 e 985 foram criados, destinando uma quantidade significativa de recursos para as instituições selecionadas. Tal posicionamento faz com que a China seja hoje um exemplo de benchmarking para outros países que desejam progredir economicamente e intelectualmente.*

**Palavras-chave:** China. Educação Superior. Políticas Públicas. Financiamento Público. Crescimento da Economia.

## **Educación Superior china: el papel de la economía y de los proyectos 211/985 para la expansión del sistema**

### **Resumen**

*China ha experimentado un significativo crecimiento económico en los últimos años. Aliado a ello, el país también construyó el mayor sistema de Educación Superior del mundo. Pero, ¿fue la economía la que estimuló el avance de la Educación Superior? ¿O fue la Educación Superior la que estimuló el avance de la economía? Para responder a estas preguntas, esta investigación tuvo como objetivo comprender el papel de la economía y de los proyectos 211 y 985 para la expansión de la Educación Superior china. Para ello, se desarrolló una investigación exploratoria y cualitativa, a partir de entrevistas con gestores del gobierno chino, cuestionarios aplicados a profesores especialistas en Educación Superior china y al liderazgo estudiantil. Los resultados mostraron que las inversiones en Educación Superior fueron preponderantes para el crecimiento económico del país, que fue representativo bajo la perspectiva cuantitativa. Sin embargo, buscando el crecimiento cualitativo, los proyectos 211 y 985 fueron creados, destinando una cantidad significativa de recursos para las instituciones seleccionadas. Tal posicionamiento hace que China sea hoy un ejemplo de benchmarking para otros países que desean progresar económicamente e intelectualmente.*

**Palabras clave:** China. Educación Superior. Políticas Públicas. Financiamento Público. Crecimiento Económico.

## References

BARDIN, L. *Análise de conteúdo*. Lisboa: Edições 70, 2009.

AHMAD, A. B.; SHAH, M. International students' choice to study in China: an exploratory study. *Tertiary Education and Management*, London, v. 24, n. 4, p. 325-337, Apr. 2018.  
<https://doi.org/10.1080/13583883.2018.1458247>

CHEN, H. *et al.* The quality of Chinese PhDs: achievements, problems and responses. *Chinese Education & Society*, London, v. 51, n. 3, p. 158-168, Jul. 2018. <https://doi.org/10.1080/10611932.2018.1458572>

CHENG, K. Expansion of higher education in China: then what? *Harvard China Review*, Cambridge, v. 5, n. 1, p. 82-86, 2004.

CHINA DAILY. 双一流大学 (shuāngyīliú dàxué): double top university plan. *China Daily*, London, 2017 Sep 25. Available from: [https://www.chinadaily.com.cn/opinion/2017-09/25/content\\_32446664.htm](https://www.chinadaily.com.cn/opinion/2017-09/25/content_32446664.htm). Access in: 2020 Jan 11.

CHINA to develop 42 world-class universities. *People's Daily Online*, 2017 Sep 21. Disponível em: <<http://en.people.cn/n3/2017/0921/c90000-9272101.html>>. Acesso em 11 de janeiro de 2020.

COSTA, D. C. *Public funding of higher education: a comparative study between Brazil, Canada and China*. Tese (Doutorado em Administração). Centro de Estudos e Pesquisas em Administração, Universidade Federal de Minas Gerais, Belo Horizonte, 2015.

FUNDAÇÃO DE AMPARO A PESQUISA DO ESTADO DE SÃO PAULO – Fapesp. *Indicadores de ciência, tecnologia e inovação em São Paulo 2010*. São Paulo, 2011. v. 1.

HAYHOE, R.; ZHA, Q. Becoming world class: Chinese universities facing globalization and internationalization. *Harvard China Review*, Cambridge, v. 5, n. 1, p. 87-92, Sprign 2004. Available from: [https://www.researchgate.net/publication/285328259\\_Becoming\\_world-class\\_Chinese\\_universities\\_facing\\_globalization\\_and\\_internationalization](https://www.researchgate.net/publication/285328259_Becoming_world-class_Chinese_universities_facing_globalization_and_internationalization). Access in: 2019 May 8.

HAYHOE, R.; ZHA, Q. The polytechnic universities in China's transformation. *International Higher Education*, Boston, n. 60, p. 11-13, 2010.

INSTITUTO DE ESTUDOS PARA O DESENVOLVIMENTO INDUSTRIAL – IEDI. *A transformação da China em economia orientada à inovação*. São Paulo, 2011.

JIANGLAN, Y.; JIE, W. Análise da dinâmica demográfica da China. In: DWYER, T., et al. (orgs.). *Jovens universitários em um mundo em transformação: uma pesquisa sino-brasileira*. Brasília, DF: Instituto de Pesquisa Econômica Aplicada, 2016. p. 79-94.

JOHNSTONE, B. D. *Sharing the costs of higher education: student financial assistance in the United Kingdom, the Federal Republic of Germany, France, Sweden and the United States*. New York: The College Board, 1986.

LEVIN, R. C. A ascensão das universidades asiáticas: discurso proferido no dia 1º de fevereiro de 2010 na Royal Society, Londres. *Ensino Superior Unicamp*, Campinas, n. 2, p. 26-36, 2010. Available from: <https://www.revistaensinosuperior.gr.unicamp.br/artigos/a-ascensao-das-universidades-asiaticas>. Access in: 2019 Mar. 14

MARCONI, M. A.; LAKATOS, E.M. *Técnicas de pesquisa*. 2. ed. São Paulo: Atlas, 1990.

MARCOVITCH, J. A revolução acadêmica. *Revista USP*, São Paulo, v. 78, p. 6-13, ago. 2008. <https://doi.org/10.11606/issn.2316-9036.v0i78p6-13>

MENGKUI, W. *Good governance in China: a way towards social harmony: case studies by China's rising leaders*. New York: China Development Research Foundation, 2009.

MIN, W. Higher education financing in east Asia: policy implications for China. In: LIN, J. Y.; PLESKOVIC, B. (orgs.). *Annual World Bank Conference on development economics: Regional 2008: higher education and development*. Washington. DC: World Bank, 2008. p. 41-46.

MIN, W. The legacy of the past and the context of the future. In: ALTBACH, P.; UMAKOSHI, T. *Asian universities: historical perspectives and contemporary challenges*. Baltimore: Johns Hopkins University Press, 2004. p. 53-84.

NAOE, A. O desenho educacional que move a inovação na China. *ComCiência*, Campinas, n. 137, abr. 2012. Available from: [http://comciencia.scielo.br/scielo.php?script=sci\\_arttext&pid=S1519-76542012000300003&lng=pt&nrm=iso](http://comciencia.scielo.br/scielo.php?script=sci_arttext&pid=S1519-76542012000300003&lng=pt&nrm=iso). Access in: 2019 Apr. 13.

- NEWS SINA. 南京有高校称“211建设”已暂停 [Some universities in Nanjing say “211 Project” has been suspended]. News Sina, 2014. Available from: <http://news.sina.com.cn/c/2014-11-14/133531144878.shtml>. Access in: 2020 Jan. 11.
- OPEN UNIVERSITY OF CHINA – OUC. *Statistical bulletin on the status of the CRTVUs*. Pequim, 2014. China. Available from: <http://en.ouchn.edu.cn/index.php/about/annual-report>. Access in: 2014 Oct 6.
- PETERS, M. A.; BESLEY, T. China’s double first-class university strategy: 双一流. *Educational Philosophy and Theory*, London, v. 50, n. 12, p.1075-1079, Feb. 2018. <https://doi.org/10.1080/00131857.2018.1438822>
- SHEN, H.; SHEN, H; ZIDERMAN, A. Student loans repayment in China: designing a new model to ease the repayment burden. *Higher Education in Europe*, London, v. 34, n. 2, p. 281-290, Jul. 2009. <https://doi.org/10.1080/03797720902867641>
- STATE EDUCACION COMMISSION’S – SEC. *Annual report on educational expenditure in China*. Beijing: Higher Education; 1992.
- STATE COUNCIL. Action plan for vitalizing education for the twenty-first century. In: *CHINA Education Yearbook*. Pequim: Ministry of Education of China, 1999. p. 107-16.
- SUM, C.-Y. A great leap of faith: limits to China’s university cities. *Urban Studies*, Glasgow, v. 55, n. 7, p.1460-1476, Jul. 2018. <https://doi.org/10.1177/0042098017716845>
- WANG, D.; LIU, D.; LAI, C. Expansion of higher education and the employment crisis: Policy innovations in China. *On the Horizon*, Bingley, v. 20, n. 4, p.336-344, Sep. 2012. <https://doi.org/10.1108/10748121211272470>
- WANG, H.; XIE, D. Twenty years of general education in China: progress, problems, and solutions. *Chinese Education & Society*, London, v. 51, n. 1, p. 9-20, Mar. 2018. <https://doi.org/10.1080/10611932.2017.1411134>
- WORLD BANK. *China: higher education reform: a country study*. Washington, DC: The World Bank, 1997.
- WORLD BANK. The World Bank Database: China. Washington, DC, 2020. Available from: <http://www.worldbank.org/en/country/china>. Access in: 2020 Jan. 11.

ZHA, Q. China's move to mass higher education in a comparative perspective. *Compare: A Journal of Comparative and International Education*, [s. l.], v. 41, n. 6, p. 751-768, Jun. 2011a. <https://doi.org/10.1080/03057925.2011.590316>

ZHA, Q. The study-abroad fever among Chinese students. *International Higher Education*, Boston, n. 69, p. 15-17, Fall 2012.

ZHA, Q. Understanding China's move to mass higher education from a policy perspective. In: HAYHOE, R., et al. *Portraits of 21st Century Chinese universities: in the move to mass higher education*. Hong Kong: Comparative Education Research Centre, 2011b. p. 20-57.

ZHA, Q.; HAYHOE, R. The Beijing consensus and Chinese higher education: the successful stories and looming crisis. In: ENSINO SUPERIOR E DESENVOLVIMENTO: A EXPERIÊNCIA DOS BRICS, 2008, Campinas. *Anais[...]* Campinas: Unicamp; 2008.

ZHANG, B. Reforming education in China. *Higher Education Press*, [s. l.], v. 2, p. 158-60, 1993.

ZONG, X.; ZHANG, W. Establishing world-class universities in China: deploying a quasi-experimental design to evaluate the net effects of Project 985. *Studies in Higher Education*, London, v. 44, n. 3, p. 417-431, Aug. 2019. <https://doi.org/10.1080/03075079.2017.1368475>



---

## Information about authors

**Danilo de Melo Costa:** PhD in Business Administration from the Universidade Federal de Minas Gerais, with a period at York University, Canada. Professor of the Doctoral and Master's Program in Business Administration (PDMA) at Universidade da Fundação de Educação e Cultura de Minas Gerais (FUMEC). Professor at Centro Universitário Una. Contact: [danilomct@gmail.com](mailto:danilomct@gmail.com)

 <https://orcid.org/0000-0002-3001-0352>

**Qiang Zha:** PhD in Education from the Ontario Institute for Studies in Education of the University of Toronto, Canada. Associate professor at the Faculty of Education at York University, Canada. Contact: [qzha@edu.yorku.ca](mailto:qzha@edu.yorku.ca)

 <https://orcid.org/0000-0003-1366-0967>