Policies for Higher Education Development in the People's Republic of China

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Abstract

This research reviews the higher education legal system of China, including laws and bylaw documents promulgated since 1978 as the Chinese government decided on opening up to the outside world. The development of China's higher education system and significant policies on universities' governance since the 1980s are discussed. At the system level, this research reviews policies on the development of China's public and non-government higher education institutions. At the institutional level, this article reviews policies on China's university autonomy in the context of the essential components of the Soviet model being undamaged and Chinese unique characteristics have been supplemented to China's higher education institutions. This article concludes that higher education governance in China has been reformed, and the state supervising model has been adopted.

Keywords: Higher education system; policies; university governance.

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1. Introduction

Higher education systems include public and private institutions around the world with the exception of United Kingdom (UK) and Ireland, where universities are still private institutions (Mora, 2001). These institutions not only are responsible for the transmission and production of knowledge but also make a positive contribution to the economic development as well as the welfare of mankind (Thorens, 2006). Although the State manages higher education development through the state control model or the state supervising model (Vught, 1989), the expansion and improvement of the quality of higher education varies across countries, depending on individual national mechanisms. At the time of the founding of the People's Republic of China, 'all private and missionary universities and colleges were turned into public ones' (Liu, 2016, p.50) and over-specialized institutions dominated throughout the higher education system as the Soviet model of higher education was copied, 'Not only was the system of institutions of higher learning, subjects, and specialties modeled on Soviet practice, but also the syllabus, teaching methods, textbooks, and even the institutional and discipline names' (Yang, 2000, p.327). At that time, all China's universities were owned and directly administered by the Ministry of Education (MOE) and other ministries. Higher education had been developing in accordance with the planning and administration of the Chinese government (Zhu and Lou, 2011). With the establishment of China's economic reform and opening-up policy to the world in 1978, China's higher education opened out 'towards the future and towards modernization' (Deng, 1993, p.35) as well as to 'better serve the socialist construction' (Deng, 1994, p.103). To solve the shortage of talent caused by the Cultural Revolution and to meet the requirements of social development, a rapid development and comprehensive reform in the higher education sector was conducted, private universities were reintroduced (Morgan and Wu, 2011), the objective of massification of higher education was established (Chen, 2004), comprehensive public universities were encouraged to be launched through mergers, world-class universities and world-renowned universities were targeted (Wang et al., 2011), autonomy was granted to public universities (Zhu and Lou, 2011) and local governments and the central government shared the roles and responsibilities in higher education development (Mok, 1999). Generally, to enhance the development of China's higher education, a series of policies were promulgated by Deng Xiaoping and his successors. Although the policies on Chinese higher education development, including the Law on Higher Education, the Law on Non-government Education Promotion Law, by-law documents and their outputs have been discussed among Chinese and international scholars (Huang, 2003; Chen, 2004; Wang et al., 2011; Mohrman et al., 2011; Su et al., 2015; Liu, 2017; Jia and Ericson, 2017), the studies will never be out of date, and previous papers that reviewed policies on China's higher education system development, both at the system and institutional levels, are limited. This study particularly addresses four research questions:

(i) What are the significant policies on the development of China's higher education system since the 1980s?

(ii) How have Chinese students been sup-

ported to access higher education via student loan schemes?

(iii) What are the policies on China's higher education quality assurance?

(iv) How are these policies influenced in the development of China's higher education sector at the system and the institutional levels?

2. Overview of policies on the development of the higher education system in the People's Republic of China

The development of the higher education sector in China since 1978 and up to now can be divided into three phases, including, in the first phase (1978-1985): recovery and reconstruction, in the second phase (1985-1998): the stable development of higher education, and in the third phase (1999-present): leaps and bounds in higher education. The achievements in each of these phases were strongly influenced by China's policies on higher education development. Policies on China's higher education system development, supporting Chinese students to access higher education via a student loans' scheme, and China's higher education quality assurance have been reviewed in this sub-section.

Firstly, policies on China's higher education system development

After the *Cultural Revolution*, China's public higher education institutions were incapable of satisfying the urgent demands of qualified talent for economic development. Under these circumstances, non-government higher education institutions (HEIs) were an inevitable choice to mitigate the present undergraduates' enrollment pressure. The restrictions on the participation of the private sector had been released, and the first Minban College, namely China's Social University, was established in 1982 (Higher Education Evaluation Centre - HEEC, 2017c). In 1998, the State Council issued the Action plan for vitalizing for the 21st century. The Action plan emphasized that massification of higher education was a tangible goal and the enrollment rate in higher education was expected to reach over 15 percent of the appropriate age cohort in 2010. This Plan provided strong legal support for the development of non-government HEIs. Independent colleges, which combined the advantages of public HEIs, including brand and teaching experiences, and the advantages of private funds and operating systems, came into existence in 1999. After the MOE's promulgation of the Document on standardizing and strengthening the administration on the experiment of regular HEIs running independent institutes with the new mechanism and mode in 2003, some independent colleges began to be transformed to regular private HEIs within a 5 years schedule. Another form of non-government HEIs was established, namely Chinese-foreign cooperative schools, as soon as the MOE issued the Regulations of the People's Republic of China on Chinese-foreign cooperation in school running in 2003. Three main principles of Chinese-foreign cooperation in school running were: 'First, regulations should conform to the rules of the World Trade Organization (WTO) and the education commitment made by the Chinese government, and the introduction of advanced education resources from aboard should be encouraged. Second, national education sovereignty must

be guaranteed to ensure the implementation and execution of education guidance principles. Third, a more complete admittance and supervision system should be made to enhance Chinese-foreign cooperation in School running' (Zhu and Lou, 2011, p.125). Before 2016, all of the private higher education institutions were non-profit-seeking schools. Non-government higher education institutions received government subsidies in the form of cheap land and tax benefits. However, non-government higher education institutions found that it was difficult to give their shareholders any form of financial return, according to the China's Non-Government Education Promotion Law passed in 2002 (National Congress of the People's Republic of China, 2002). The 2016 China's Non-Government Education Promotion Amendment Law (National Congress of the People's Republic of China, 2016) indicates that both for-profit and not-for-profit institutions have coexisted in the private higher education market. In the case of for-profit higher education institutions, subsidies and other incentives from government were reduced. In return, they had more autonomy to adjust tuition fees at their discretion; particularly a "reasonable rate of return" policy has been removed from non-public higher education institutions seeking for profit.

To solve the insufficient allocation of higher education resources, the Central committee of the Communist Party of China issued the *Decision on the reform of educational structure* in 1985. The decision making-power of the central government was transferred to local government and public higher education institutions. The Ministry of Education was in charge of higher education across the country and directly supervised universities affiliated with it; local government was allowed to adjust the structure of higher education according to the demand of local economic and social development (Liu, 2017). Higher education institutions were allowed to obtain fees from a small number of student in public higher education institutions in 1986, a dual-track enrollment system was formed, of which one was publicly supported and the remainder were self-supported by (tuition paying) students (Shen and Li, 2003); the role and responsibility of the president and the Committee of the Communist Party in China's public universities were re-determined. The 1993 Outlines of educational reform and development in China reaffirmed the 1985 Decision (Li and Yang, 2014). The document stressed that 'planning power of local government should be expanded, so as to establish a new education system going along with the reforms of the socialist market economic system' (Zhu and Lou, 2011, p.5). Public universities were encouraged to obtain income from non-state budget sources such as through school-run industry, social donations, financial contributions from students and fund raising (Mok, 2002; Chen, 2004).

China's Higher Education Law, approved in 1998, (National Congress of the People's Republic of China, 1998), not only institutionalized the previous policies on university governance at the system and institutional levels (Wang, 2010), but also legalized the eight basic principles of autonomy of HEIs in running schools, namely civil rights, admission rights, discipline-setting rights, teaching rights, scien-

tific research development and social service rights, international exchange and cooperation rights, and property management and application rights. Although the promulgation of the 1998 China's Higher Education Law increased the autonomy of HEIs in personnel employment, enrollment, financing and the use of funds to a greater extent, the substance of the autonomy of HEIs was still very slow (Zhu and Lou, 2011). In 2015, China's Higher Education Amendment Law was approved (National Congress of the People's Republic of China, 2015). It reaffirms the roles and responsibilities of the central government and local governments in their relationships with higher education institutions: 'The state formulates higher education development planning, establishes institutions of higher learning and adopts various forms to actively develop the cause of higher education in accordance with the requirements of economic construction and social development' (Article 6); 'Establishment of institutions of higher learning shall be subject to the examination and approval of the department of education administration under the State Council. The establishment of institutions of higher learning imparting specialty education may be subject to the examination and approval of the people's governments of the provinces and autonomous regions' (Article 29); 'Specific standards for the establishment of institutions of higher learning shall be formulated by the State Council, ... Specific standards for the establishment of other institutions of higher education shall be formulated by the departments concerned authorized by the State Council or people's governments of the provinces, autonomous regions and municipalities directly under the Central Government in accordance with the principles prescribed by the State Council' (Article 25). In the 2015 China's Higher Education Amendment Law, National Congress of the People's Republic of China (2015) also asserts that 'The president of the institution of higher learning shall be the legal representative of the institution of higher learning' (Article 30). According to this Law, a university president takes overall responsibility for the university's operation under the leadership of the Committee of the Communist Party in Chinese public universities. By-law documents indicate that the presidents of universities affiliated with the ministries are appointed by the relevant ministers, the municipal government nominates the presidents of universities affiliated with them, including Minban, independent colleges, and private HEIs (Hong, 2018). The requirement for university council establishment has not been legislated through China's Higher Education Amendment Law. Therefore, in some public universities, the university council has been found to take a role as a consulting body for the university president (Liu, 2017).

Regarding the public higher education institutions' budget and personnel management, *China's Higher Education Amendment Law* reaffirms that public universities are allowed to raise funds through various channels, including running enterprise universities and renting out universities' lands with the purpose of enhancing the services for students, etc. They are also allowed to decide on setting up their personnel 'in the light of actual requirements and in accordance with the principle of streamlining and efficiency; assess the positions of teachers and other specialized technical personnel, adjust the allocation of subsidies and salary in accordance with the relevant provisions of the state' (Article 37).

Improving China's higher education and nurturing high-level professional manpower to meet the requirements of socio-economy, science and technology development was raised in the 1993 Outline. Key universities were selected to participate in the 211 Project and the selection principle was 'one ministry, one university and one province - one university, except high-level, key universities directly attached to the Ministry of Education' (Zhang, 2011, p.356). In May 1998, President Jiang Zemin declared that 'universities should play a critical role in implementing the strategy of invigorating the country through science, technology and education' and 'China should have several world-class universities of international standard' (Wang et al., 2011, p.35). The 985 Project, therefore, was launched in 1998 to promote the formation of a group of worldclass universities. At the beginning, the top nine universities in China (Chinese Ivy league) were selected: Fudan University, Harbin Institute of Technology, Nanjing University, Peking University, SJTU, Tsinghua University, University of Science and Technology of China, Xi'an Jiatong University and Zhejiang University. The Chinese Ivy league universities were designated to be developed into world-class universities. At the second phase of this Project, 30 other public universities were supplemented and expected to become world-known universities. In general, this Project selected universities

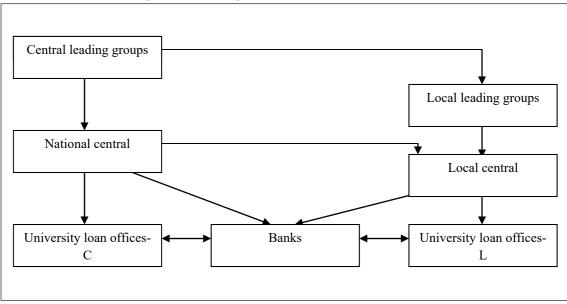
affiliated with the *211 Project*, suggesting that *Project 985* was more selective and of a higher status than *Project 211* (Wang et al., 2011).

The Outline of China's national plan for medium and long-term education reform and development, 2010-2020 asserted that by 2020 China's higher education will have vastly sharpened its global competitiveness. The Double first class plan, therefore, has been initiated since 2015, as soon as the 985 Project and the 211 Project terminated. The aims of this Plan are to make the nation strong and with powerful education. In order to achieve the objectives of the Plan, the Chinese government has promoted the overall and coordinated development of (i) first class universities, (ii) first class discipline, (iii) first class programs, and (iv) first class undergraduate education, in which, undergraduate education is inevitably the most important part and plays a crucial role in the construction progress (HEEC, 2017a). Forty-two of China's universities have been chosen from 985 universities, plus three additional 211 universities. The discipline list of this plan is mainly composed of the former "985" and "211" universities, with an additional 25 disciplines from non-211 universities (Australian Government, 2017).

Although newly-built undergraduate universities had been supported by the Chinese government, the newly built undergraduate universities were in a dilemma, 'On the one hand, they could not compete with the old universities on scientific research resources if they wanted to become academic research universities. On the other, they had no competitive advantage compared to higher vocational colleges in the aspect of training vocational talents' (HEEC, 2017b, p.7). In addition, it was difficult for enterprises to find application-oriented talent before 2009. Newly built undergraduate universities, therefore, have been guided to construct and develop into local and application oriented types since 2009, and policies on these universities have been shifted towards (i) industry-education integration and university-enterprise cooperation, (ii) application-oriented programs connected with regional economy and society, (iii) training application-oriented talent with industry-university-research collaboration, (iv) well-constructed high quality double qualified teaching staff, (v) practical teaching resources and conditions for application-oriented talent training. The Chinese government has emphasized the ideal of the establishment of 'a Chinese model of application-oriented universities in 2020' (HEEC, 2017b, p.119), as application type universities and research type universities are important pillars of the Chinese higher education system.

Secondly, policies on supporting Chinese students to access higher education via a student loans' scheme

Since 1997, the dual-track system was abolished as all students began to be charged tuition fees. Nowadays, tuition fees are the second largest source of funding, and are just lower than the state expenditure for HEIs, including a basic expenditure budget and a project expenditure budget (Liu, 2017). To support students





Notes:

University loan offices-C: University loan offices of the higher education institutions affiliated to the central ministries. University loan offices-L: University loan offices of the higher education institutions affiliated to the local government. Banks: The whole banking system involved in the GSSLS. Source: Shen and Li (2003, p.51).

from poor families to access higher education, the central government has established subsidy funding for special groups of students (Mok, 2002). In 1999 the Government Subsidized Student Loans Scheme was piloted in several institutions in several cities such as: Beijing, Shanghai, Tianjin, Chongqing, Wuhan and Shenyang. The students who applied for loans were subsidized up to 50% of the interest rate by the government, and the repayment period was four years after graduation. Since 2002, government subsidized student loan scheme (GSSLS) has officially been released by the People's Bank of China and the MOE and Ministry of Finance. In 2000, another student loans scheme was introduced, namely the general commercial student loans scheme (GCSL). The GCSL has targeted all students over 18 years old in higher education institutions. Participating in the GCSL, students could borrow money from local banks with their families' registration with the guarantee of their parents' assets. They have to pay the market interest rate without any subsidy from the government (Shen and Li, 2003).

Thirdly, policies on China's higher education quality assurance

As soon as the 1985 Decision was promulgated, the Ministry of Education issued *The higher education evaluation research and experiment in engineering programs*. This pilot evaluation was carried out in 87 HEIs. In 1994, 4 years after the promulgation of China's first regulation of higher education evaluation – the *Draft regulation of higher education institution evaluation*, China's Ministry of Education decided on implementing higher education evaluation on a large scale with different forms and different stages. Qualified evaluation (1994) was only applied to institutions established after 1976 with the purpose of promoting standards of teaching and administration in these HEIs. Excellence evaluation (1996) was applied to the institutions with already well-established histories and reputations, such as the 211 universities. Randomized evaluation (1998) targeted institutions established between the post-1976 institutions and those of Project 211. In 2002, three forms of evaluation were integrated into one, entitled Undergraduate teaching quality evaluation. This was revised again into the current one in operation, with four resultant categories: excellent, good, pass and fail (Li, 2010). The Higher Education Evaluation Centre (HEEC) has been established to conduct quality evaluation of undergraduate programs since 2004 (Li, 2010). The education evaluation network in China has been based on evaluation agencies at both national and regional levels (Ding, 2008). The evaluation procedures have been standardized and a stratified and categorized evaluation system has been set up: (i) the HEEC of the MOE is in charge of the implementation of the evaluation of HEIs directly affiliated with the Ministry of Education and other Ministries of the central government and newly-built HEIs; (ii) the evaluation of other HEIs at provincial and municipal levels will be conducted by quality assurance agencies in the relative provinces.

Besides China's Higher Education Evaluation Centre of the Ministry of Education, another national quality assessment agency, focusing on postgraduate education, has been founded in China, namely the China Academic Degrees and Graduate Education Development

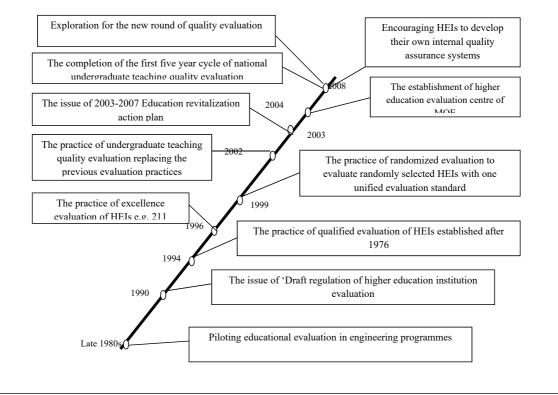


Figure 2: The development of China's higher education quality evaluation system

Source: Li (2010, p.62).

Centre. Non-governmental agencies have also engaged in higher education quality assessment in China with the delegation from the local governments since the 1990 (HEEC, 2017a). The 2015 Higher Education Amendment Law reaffirms that 'education quality of higher education institutions should be subject to the supervision and evaluation by the departments of educational administration' (Article 44). It is, therefore, governmental agencies that have been in charge of most types of higher education evaluation. Non-governmental agencies have had little chance to take part in any official evaluation schemes (Liu, 2017).

3. Overview of higher education system development in the People's Republic of China

In 1985, the number of China's universities was nearly double compared to 1980. With the principles of "co-construction, adjustment, collaboration, and combination" during the period of 1990-1997, the number of higher education institutions reduced slightly as 384 HEIs merged into 146 comprehensive universities. At that time, the governance structure of China's higher education had dramatically changed. The Ministry of Education managed 71 HEIs, and other ministries managed 50 higher educa-

	Ta	Table 1: Higher education quality assurance schemes in China	nce schemes in China
	Ownership	Actors	Evaluation programmes
	The central government	Higher Education Evaluation Centre	Quality assessment of undergraduate education
External		China Academic Degrees and Graduate Education Development Centre	 Accreditation of degree granting units Approval of national key subjects Excellence evaluation of dissertations Subject Evaluation
	The local governments	Provincial accreditation committees	 Quality assessment of vocational/professional education Quality assessment of private higher education institutions
	Non-government organizations	Independent evaluation organizations	Entrusted quality evaluation
	Market	Educational companies and research institutes	University rankings
Internal			Institutional teaching evaluation centres Teaching supervision groups
	institutions		 Peer review Student feedback
Source: Liu	Source: Liu (2016, p.70).		

tion institutions; more than 400 central-ministries-owned universities had been transformed into local government management at that time (Zhu and Lou, 2011).

By 2015, there were more than 2595 higher education institutions in 31 provincial administrative regions on China's mainland, of which 118 HEIs were managed by the central government, the remainder - approximately 1709 public higher education institutions and 733 private institutions - were managed by local governments (Zhang, 2011). The number of regular HEIs offering undergraduate education and above was 1219, and the number of regular tertiary vocational colleges was 1341 in 2015. In the period 2005-2015, while the proportion occupied by the regular HEIs under Central Ministries and local government decreased from 14.8% to 9.3%, and from 81.3% to 56% respectively, the proportion occupied by the non-government HEIs increased from 3.9% to 34.7% (HEEC, 2017a).

The development of China's non-government higher education institutions can be divided into 3 stages. In the initial stage, from 1982 to the late 1980s, the number of non-government higher education institutions established was 9, and most of them could only provide specialized education. In the prime stage, from 1991 to 1998, 23 non-government HEIs were established. The non-government HEIs established in this period of time paid more attention to improving their educational facilities, building their faculties and enhancing their teaching and learning quality. In the high rate growth stage, as the objective of massification of higher education in China had been set, non-government HEIs took the golden opportunity to

	Number of China's HEIs								
_	Total	East	Middle	West					
1980	675	306	191	178					
1985	1016	470	310	236					
2000	1041	467	325	325					

Table 2: The development of China's higher education institutions in three regions

grow. Up to 2009, more than 1000 Chinese-foreign cooperation projects had been approved by the Chinese government. Chinese-foreign cooperative schools were distributed across more than 20 provinces, autonomous regions and municipalities.

From 2000 to 2015, 90 non-government HEIs had been newly established. Up to now, China's non-government higher education institutions have penetrated into 30 provinces, autonomous regions and municipalities, directly under the control of the central government. The number of HEIs differentiates across 3 regions as well as in each region. The number of HEIs in the Western region is the lowest compared to the Middle and Eastern regions. There were 91 non-government HEIs in 12 provinces of the West of China, accounting for 21.8% of the total number of China's non-government HEIs in 2015. Most of the provinces in the Western region did not have more than 9 non-government HEIs, with the exception of Shaanxi, and Yunna. China's non-government undergraduate institutions have not been established in the Tibet autonomous region (see Table 4).

Newly-built undergraduate universities have been established in 29 provinces, cities and municipalities. Up to 2015, 679 newly-built undergraduate universities were established, accounting for 55.6% of the regular universities in the whole country, of which 58.7% universities were newly-built in non-provincial capital cities. In terms of the programs newly set, undergraduate programs of newly-built undergraduate universities increased rapidly during the 10th Five Year Plan. Before 2001, there were 56 undergraduate disciplines, which were newly set. The number reached 856 in newly-built undergraduate universities in 2005. From 2006 to 2011, the number of undergraduate disciplines decreased slightly in newly-built un-

Table 3: The number of higher	education institutions in	China in the	period of 2005-2015

	2005	2010	2015
The number of regular universities	701	1112	1219
In which: the number of non-government regular HEIs offering undergraduate education & above	27	371	423
The number of tertiary vocational colleges	1091	1246	1341
Source: HEEC (2017a).			

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	-		-	-	
Provinces in the Eastern region	No. of non- government HEIs	in the Middle government the W		Provinces in the Western region	No. of non- government HEIs
Beijing	7	Henan	17	Guangxi	12
Jangsu	29	Shanxi	10	Shaanxi	21
Zhejiang	25	Anhui	15	Chongqing	8
Liaoning	24	Hunan	20	Guizhou	8
Tianjin	11	Jiangxi	19	Yunna	9
Quangdong	23	Hebei 24 Ga		Gansu	5
Shandong	23	Hubei	32	Xinjiang	5
Sichuan	16			Ningxia	4
Fujian	15			Hainam	2
Jilin	12			Inner Mongolia	2
Heilongjian	12			Qinghai	1
Shanghai	6			Tibet	0
G LIEFC (20	17 22				

Table 4: Geographic distribution of China's non-government undergraduate institutions

Source: HEEC (2017c, p.33).

dergraduate universities, but it increased again and reached 1156 disciplines in 2015. By 2015, 159 national level characteristic programs, 704 provincial level brand programs and characteristic programs, 444 key programs in construction and 212 local superior programs were set up by newly-built undergraduate universities. The number of students in newly-built undergraduate universities reached 3267 thousand, accounting for 24% of the undergraduates in 2015. Most of the newly-built undergraduate universities have set English programs (HEEC, 2017b).

The Chinese government not only pays attention to increasing the number of HEIs for the massification of higher education, but also to develop their best universities into 'worldclass' universities. So far, 112 and 40 public universities have been chosen and supported by the *211 Project*, the *985 Project* respectively. No new university has been added to the list since 2011. The original objective of the 211 project aimed to improve the capabilities and competitiveness of some 100 universities in education, research and management. As a consequence, the 211 universities accounted for four-fifths of doctoral students, two-thirds of graduate students, and one-third of undergraduates in China (Serger et al., 2015). The Project 985 targeted a small group of elite universities with the aim of turning them into world class universities. With the huge investment of public funds into a small fraction of the universities, 2 universities have been ranked in the top 50, 10 universities have been ranked in the top 200, and 19 universities have been ranked in the top 300 universities all over the world (Reddy et al., 2016).

The stratification of China's higher education institutions has been largely intensified since the government's initiative of establishing the 211 project and 985 projects. There was

			(01111. 70)			
Туре	985 HEIs	211 HEIs	Regular HEIs	Newly- built HEIs	Independent colleges	Total
Doctor's degree	69.0	57.4	29.0	11.1	13.9	26.9
Master's degree	21.6	30.9	47.0	60.3	58.9	49.2
Bachelor's degree	8.0	10.4	21.5	22.9	24.2	20.7
No degree	1.4	1.2	2.5	5.7	3.0	3.2

Table 5: Structure of academic degree of HEI teachers of specialized courses in 2015 (Unit: %)

Source: HEEC (2017a, p.171).

a striking gap in resources and prestige not only between 211/985 universities and the rest, but also among 985 universities, as only Peking University and Tsinghua University were exclusively funded by the central government, while the rest were funded both by the Ministry of Education and the local governments (Zha, 2009). The number of 211/985 universities distributed among three regions was another disparity indicator (see Table 6).

From 1998 to 2010, student enrolments in higher education institutions multiplied almost 36 times from 1.08 million to 38.7 million. The 1993 Outline's goal, related to the massification of higher education, had achieved an advance since 2002. In the period 2005-2015, the number of in-school undergraduate and college students increased from 15.62 to 26.25 million, of which the number of in-school regular undergraduate students was 15.77 million, accounting for 60% of the total number of students, and the number of in-school college students was 10.48 million, accounting for 40% of the total number of students in 2015. In 2015, more than 43 million students were enrolled in HEIs, of which, the number of undergraduates annually

The Eastern region	universities region 211/985 universities region 211/985		211/985	The Western region	Number of 211/985 universities
Beijing	26/8	Henan	1/0	Guangxi	1/0
Jiangsu	11/2	Shanxi	1/0	Shaanxi	7/3
Zhejiang	1/1 Anhui		3/1	Chongqing	2/1
Liaoning	4/2	Hunan	3/3	Guizhou	
Tianjin	3/2	Jiangxi	1/0	Yunna	1/0
Quangdong	4/2	Hebei	2/0	Gansu	1/1
Shandong	3/2	Hubei	7/2	Xinjiang	2/0
Sichuan	5/2			Ningxia	1/0
Fujian	2/1			Hainam	1/0
Jilin	3/1			Inner Mongolia	1/0
Heilongjian	4/1			Qinghai	1/0
Shanghai	9/4			Tibet	1/0

Table 6: Regional layout of 211/985 universities

Source: Zhu and Lou (2011).

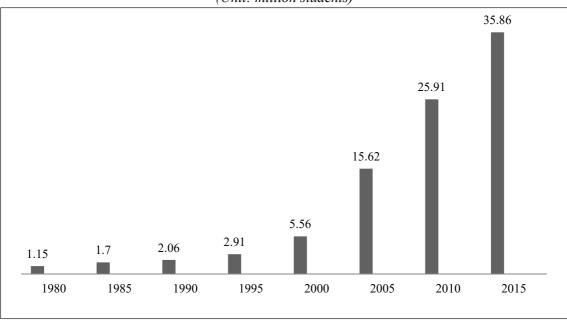


Figure 3: The number of students enrolled by China's HEIs in the period of 1980-2015 (Unit: million students)

Source: Zhu and Lou (2011), HEEC (2017a).

enrolled by regular HEIs was 5.66 million; the number of students enrolled by colleges was 6.12 million and the number of HEI graduates was 5.20 million in 2015. The gross enrollment rate in higher education reached 42.7% by 2016 (HEEC, 2017a). 'Over the decades, the higher education of China has achieved the historical leap from elite education to popularization education, and it will be further universalized in the near future' (HEEC, 2017b, p.4).

At the beginning of the economic reforms, there were 1,039 accumulative majors in HEIs, 229 higher education institutions were allowed to grant master's degrees in the whole nation and eight academic institutions were chosen as pilot universities granting doctorate degrees. To meet the requirements of social-economic development, the MOE began to re-organize the undergraduate program catalogs. A new catalog was formed and covered 10 categories of disciplines. Up to now Art and Management has been added to the categories of disciplines in the higher education of China, and 506 academic programs offering in 2012 (Zhong, 2015). The accumulative number of undergraduate majors in the National Database of Basic Educational Status distributed in 924 HEIs in 2015 was 32243. In 2015, 9947 new majors were set, accounting for 30.8% of total number of undergraduate majors of 924 HEIs.

According to the report of the HEEC (2017a), at the undergraduate level, majors related to science, engineering, agriculture and medicine accounted for about 50%, literature, history and philosophy related majors accounted for 20%, and economics, business, law and

	98 Unive	-	211 Univ	versities	Regi Univer		Newly Univer		Indepe colle	
	No. of majors	%	No. of majors	%	No. of majors	%	No. of majors	%	No. of majors	%
Engineering	846	43.79	970	35.35	5110	30.32	1794	27.23	1319	31.96
Management	262	13.56	423	15.42	2632	15.62	1219	18.50	1025	24.84
Literature	158	8.18	247	9.00	1637	9.71	856	12.99	559	13.54
Arts	64	3.31	179	6.52	1834	10.88	898	13.63	456	11.05
Science	257	13.30	345	12.57	1876	11.13	669	10.15	180	4.36
Economics	97	5.02	149	5.43	708	4.20	310	4.71	227	5.50
Medicine	94	4.87	55	2.00	911	5.41	104	1.58	134	3.25
Education	13	0.67	68	2.48	803	4.77	333	5.05	65	1.57
Law	70	3.62	138	5.03	664	3.94	266	4.04	120	2.91
Agriculture	35	1.81	124	4.52	519	3.08	89	1.35	35	0.85
History	23	1.19	32	1.17	133	0.79	50	0.76	7	0.17
Philosophy	13	0.67	14	0.51	25	0.15		0.00		0.00
Total	1932	100	2744	100	16852	100	6588	100	4127	100

Table 7: Undergraduate majors in different types of China's HEIs in 2015

Source: HEEC (2017a, p.320-321).

education related majors accounted for 30% of the total enrollment of undergraduates in China. At the graduate level, the proportion of different categories was 50%, 20% and 30% respectively in 2015.

Before 1985, the curriculum of academic programs in higher education covered general courses, and specialized courses. The curriculums were set by the MOE and there were no optional courses in most universities. Today, the curriculum in China's higher education institutions covers both compulsory courses and elective courses. In all higher education institutions, the compulsory courses include principles of Marxism, general theories of Mao Zedong's thoughts, Deng Xiaoping's thoughts and "Three representatives", morality and law, outline of chinese recent history, military theory, physical education, English and the fundament of computer science. The elective courses are also applied to general education. They are divided into 6 fields. The fields vary across universities, and students have to complete minimum requirement credits in general education. In some universities, arbitrary optional courses are provided for students to select according to their interests, but the minimum credits should be no less than 4 in the case of Wu Han University (Hui-min and Mei, 2007).

In HEIs, the average total credits are 164, but are differentiated among 985 universities, 211 universities, regular HEIs and independent colleges. The total credits cover both compulsory and selective courses, with the average proportion being 79.54%, and 20.46% respectively. Public compulsory courses, particularly political courses such as Marxism and Maoism, are strictly controlled by the state because 'The task of China's higher education is to cultivate high-level specialized personnel with social responsibility, innovative spirit and practical ability, develop scientific and technological culture and promote the construction of socialist modernization' (HEEC, 2017a, p.7).

With the change of the internal and external

	2005	2010	2015
Total	258.6	387.2	423.7
Subtotal of literature, history and philosophy	41.5	68.8	76.3
Subtotal of students majoring in Economics, Management, Law & Education	71.2	108.9	121.5
Subtotal of students majoring in Science, Engineering, Agriculture & Medicine	120.1	173.6	191.6
Subtotal of students majoring in Teaching training	25.8	35.9	34.3

Table 8: Changes in the number of undergraduate students enrolled by the regular HEIsaccording to the disciplines in 2005-2015

Unit: 10000 persons

Source: HEEC (2017a).

environment of higher education, the quality assurance of higher education in China has experienced a development process. At the national level, the HEEC had completed the first five-year cycle of nationwide undergraduate teaching quality evaluation. More than 925 completed the filling in and entered the newly updated 2.0 version of the database in 2015. At the provincial level, Jiangsu Provincial Department of Education issued The implementation method of undergraduate teaching and evaluation of Regular HEIs and Fujian Provincial Department of Education introduced the Fujian province higher education evaluation method (pilot), Heilongjiang Provincial Department of Education promulgated The implementation Plan of undergraduate teaching evaluation in Heilongjiang province...The construction of an internal quality assurance system is differentiated across provinces. In Henan, HEIs have established the construction of a daily monitoring and guarantee system for teaching quality as follows: (i) assurance system, (ii) teaching inspection system, (iii) teaching supervision system, (iv) course evaluation system, (v) experimental teaching evaluation, (vi) internship teaching evaluation, (vii) practical teaching

evaluation system, (viii) graduation training evaluation system, (ix) evaluation of professional undergraduate teaching of colleges, (x) annual teaching analysis report, (xi) students' teaching evaluation system. In Hunan, the HEIs have established 3 systems: (i) teaching supervision system, (ii) student information system, and (iii) students' teaching evaluation system.

4. Discussion

At the beginning of 1980, China's higher education system became increasingly inefficient, and could not meet the requirements of human resources for social development. Policies on the higher education system development therefore have been adjusted not only at the system level, but also the institutional level. The adjustments of China's policies on higher education not only improve the quality and quantity of HEIs but also increase the autonomous rights of HEIs. The centrally prescribed higher education system that existed in China before 1978 has been abolished and a state supervising model with the Chinese characteristics supplemented has been adopted.

At a system level, the development of higher education in both quantity and quality has been influenced by policies on China's higher education. The goal of 'the gross enrollment of higher education reaching 40% by 2020' was achieved in 2016; Peking and Tsinghua universities have been ranked in the top 50 world class universities and 8 other universities have been ranked in the top 200 universities all over the world. However, the lack of programs with distinctive characteristics has become a big problem of China's universities (Wang et al., 2011) and the higher education sector in China is described as a pyramid (Liu, 2017). China's application type universities and China's research type universities have a lot of room for adjustment, particularly in talent training objectives.

In general, when higher education is changed from elite to mass education, the objectives of undergraduate talent training have to change from professional education to general education. However, the talent training objective of China's research type universities basically follows the standard of traditional elite education, which makes people become useful machines instead of dynamic and adaptable people. The talent training objectives in many foreign firstclass universities, therefore, could be applied to China's research type universities. Talent training objectives in China's research type universities in the coming years should concentrate on promoting 'students' self-liberation, self-development, and self-growth with the goals of people's self-improvement and free and comprehensive development' (HEEC, 2017a, p.370).

Although non-government HEIs are inevitable for cultivating the applied talents, they are confronting a dilemma. On the one hand, the number of HEIs has been expanding annually, both the public and non-government HEIs. On the other hand, the number of candidates for the higher education entrance examination has been decreasing. The sharp structural contradictions between decreasing student sources and expanding educational higher education institutions have intensified the industry competition. The non-government HEIs confront challenges in admitting new students as they have not only established similar low-cost majors, but also imitated the setting models of the public HEIs. However 'most faculty members of the non-government HEIs are elderly and have lower educational backgrounds' (HEEC, 2017c, p.273). In addition, only in public universities, students are being financially supported about 12000 Yuan per student per year. In non-government HEIs, students have to pay their tuition fees by themselves and the tuition fees increase annually. Significant adjustments and reforms should be implemented for the development of this sector. Instead of taking an impractical educational direction, China's non-government HEIs have been guided to concentrate on the applied talents development road. Because non-government HEIs, including newly built undergraduate universities, are being managed directly by the local governments, guiding quality standards in compliance with actual local educational conditions would be therefore, essential; strengthening the regular monitoring of institutional quality, separately establishing the mechanism in management, operation and evaluation would be necessary.

In addition, although public universities have been granted the freedom to decide on numbers of student enrollments, the administrative-academic staff ratio and the student-staff ratio promulgated by the government is the criteria for universities' student admission (Zha, 2009). Although the admission process has been more transparent, hidden unfairness still exists as local residents are reserved more seats than non-residents and 'Knowing how to respond when a file is rejected from the first college you select, and when you can get that information, can be very tricky' (Ja and Ericson, 2016, p.103).

At an institutional level, institutional governance is also influenced by policies on university autonomy promulgated by the Chinese government. After the Decision of the National Education Commission on implementation of the university principal's responsibilities issued in 1988, several university councils were re-established in some of China's public higher education institutions. The nature of the university council does not exist in China's universities. Instead of identifying the university development strategy and nominating the university president, university councils in China's public HEIs only present advisories for the university's president and take responsibilities in fund raising for the university's extra budget, as the Committee of the Communist Party in China's universities is known as the governing body.

Although the pressure of government budget cutting on higher education from Western countries has spread to China, tuition fees have been charged to all students since 1997. Although upfront tuition fee policies are being deployed in China (Marcucci and Usher, 2012), the Chinese government does not push all financial burdens onto students in public HEIs and their families (Serger, Benner and Liu, 2015). The remaining gaps are provided by the government as "Training those talents to be builders of Socialism with Chinese characteristics".

In the personnel management of public universities, as public HEIs are the rational instruments employed to meet national priorities (Christensen, 2010), universities' staff in China's public higher education institutions are, therefore, civic/public servants. The number of personnel in each of China's public universities is determined by the State Council. To improve the quality of universities' staff, instead of using full granted quotas, public universities in China are using a dual track system, both permanent and 3-year-contract faculty members, of which the 3-year-contract faculty members who exceed the requirement in teaching and researching would be enrolled as permanent faculty members.

By reviewing China's policies on higher education that have been enacted since the 1980s, and analyzing data related to higher education system development, the 4 research questions have been clarified. This paper indicates that, both public and private HEIs are considered as significant actors for the development of the higher education sector by the Chinese government. These institutions have been positively supported by both local government and the central government. While non-government HEIs have been encouraged for the mass higher education objective as well as to meet the requirements of applied talents for provincial development, key public universities are being oriented to shift the talent training model from professional education to general education in accordance with Chinese characteristics. The quality assurance of higher education is being comprehensively controlled by public authorities. Although autonomous rights have been transferred to public HEIs, it is conditional autonomy as the state expenditure accounts for 2/3 of the portion of the public HEIs' budget. Permanent employees in public HEIs are set by the State Council, and the change of tuition fees of public HEIs must be approved by the relevant government. With policies on higher education development having been promulgated, the centrally prescribed higher education

system that existed in China before 1978 has been replaced by the state supervising model with Chinese characteristics. Some elite Chinese universities have turned into world-class universities, and China's higher education already is developing into universalized higher education.

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References

- Chen, D.Y. (2004), 'China's mass higher education: Problem, analysis, and solutions', Asia Pacific Education Review, 5(1), 23-33.
- Christensen, T. (2011), 'University governance reforms: potential problems of more autonomy?', *The International Journal of Higher Education Research*, 62(4), 503-517.
- Deng, Xiaoping (1993), Selected works of Deng Xiaoping Vol 3, People's Publishing House, Beijing.
- Deng, Xiaoping (1994), Selected works of Deng Xiaoping, 2nd edition Vol. 2, People's Publishing House, Beijing.
- Ding, X. (2008), Study of higher education quality assurance systems, Jiangsu Education Press, Nanjing.
- HEEC (2017a), Annual quality report of undergraduate education in China 2016, Beijing.
- HEEC (2017b), Annual quality report of non-government higher education institutions in China 2016, Beijing.
- HEEC (2017c), Annual quality report of newly-built higher education institutions in China 2016, Beijing.
- Hong, M. (2018), 'Public university governance in China and Australia: a comparative study', *Higher Education: The International Journal of Higher Education Research*, 76(4), 717-733.
- Huang, F. (2003), 'Policy and practice of the internationalization of higher education in China', *Journal of Studies in International Education*, 7(3), 225-240.
- Hui-min, F. and Mei, G. (2007), 'General education curriculum reforming advance in the universities of China mainland', US-China Education Review, 4(7), 23-25.
- Jia, Q. and Ericson, D. (2017), 'Equity and access to higher education in China: Lessons from Hunan province for university admissions policy', *International Journal of Educational Development*, 52, 97-110.
- Li, M. and Yang, R. (2014), Governance reforms in higher education: A study of China, International Institute for Educational Planning, retrieved on July 15th 2018, from http://unesdoc.unesco.org/images/0023/002318/231858e.pdf>.
- Li, Yuan (2010), 'Quality assurance in Chinese higher education', *Research in Comparative and International Education*, 5(1), 58-75, retrieved on July 15th 2018, from http://dx.doi.org/10.2304/rcie.2010.5.1.58>.

- Liu, S. (2016), *Quality assurance and institutional transformation. The Chinese experience*, Spinger, Switzerland.
- Liu, X. (2017), 'The governance in the development of public universities in China', *Journal of Higher Education Policy and Management*, 39(3), 266-281.
- Marcucci, P. and Usher, A. (2012), *Global changes in tuition fee policies and student assistance*, retrieved on July 15th 2018, from http://higheredstrategy.com/wp-content/uploads/2012/03/YIR2012.pdf>.
- Mohrman, K., Geng, Y. and Wang, Y. (2011), *Faculty life in China. The NEA 2011 almanac of higher education*, retrieved on July 15th 2018, from <www.nea.org/assets/docs/HE/H-Mohrman_28Feb11_ p83-100.pdf>.
- Mok, K. (1999), 'Education and the market place in Hong Kong and Mainland China', *Higher Education*, 37, 133-158.
- Mok, K. (2002), 'Policy of decentralization and changing governance of higher education in Post-Mao China', *Public Administration and Development*, 22, 261-273.
- Mora, J. (2001), 'Governance and management in the new university', *Tertiary education and management*, 7(2), 95-110.
- Morgan, W.J. and Wu, B. (2011), Higher education reform in China beyond the expansion, Routledge, UK.
- National Congress of the People's Republic of China (1998), *China's Higher Education Law*, enacted on January 1st, 1999.
- National Congress of the People's Republic of China (2002), *China's Non-Government Education Promotion Law*, enacted on September 1st, 2003.
- National Congress of the People's Republic of China (2015), *China's Higher Education Amendment Law*, enacted on September 1st, 2016.
- National Congress of the People's Republic of China (2016), *China's Non-Government Education Promotion Amendment Law*, enacted on September 1st, 2017.
- Reddy, K.S., Xie, E. and Tang, Q. (2016), 'Higher education, high-impact research, and world university rankings: A case of India and comparison with China', *Pacific Science Review B: Humanities and Social Sciences*, 2, 1-21, retrieved on May 20th 2018, from http://dx.doi.org/10.1016/j.psrb.2016.09.004>.
- Serger, S., Benner, M. and Liu, L. (2015), 'Chinese university governance: Tensions and reforms', Science and Public Policy, 42(6), 871-886.
- Shen, H. and Li, W. (2003), A review of the student loans scheme in China, UNESCO, Bangkok.
- Su, D., Zhou, D., Liu, C. and Kong, L. (2015), 'Government-driven university-industry linkages in an emerging country: the case of China', *Journal of Science and Technology Policy management*, 6(3), 263-282.
- Vught, F. (1989), Governmental strategies and innovation in higher education, Jessica Kingsley, London.
- Wang, Q.H., Wang, H. and Liu, N.C. (2011), 'Building world-class universities in China: Shanghai Jiao Tong university', in *The road to academic excellence: The making of world-class research universities*, Altbach, P.G. and Salmi, J. (Eds.), retrieved on May 20th 2018, from https://doi.org/10.1596/978-0-8213-8805-1>.
- Yang, R. (2000), 'Tensions between the global and the local: A comparative illustration of the reorganization of China's higher education in the 1950s and 1990s', *Higher education*, 39(3), 319-337.
- Zha, Q. (2009), 'Diversification or homogenization: How government and markets have combined to (re) shape Chinese higher education in its recent massification process', *Higher education*, 58(1), 41-58.
- Zhang, X. (2011), China's education development and policy, 1978-2008, Leiden, Netherlands.
- Zhong, H. (2015), 'University governance and undergraduate program establishment A multi-case study of two Chinese Universities', Master of philosophy in higher education department of education, Faculty of Educational Sciences, University of Oslo.
- Zhu, H. and Lou, S. (2011), *Development and reform of higher education in China*, Chandos Publishing, USA.

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