# Classification of Chinese Higher Education Institutions

December 5, 2006

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### **Outline**

- ♦ Overview of Chinese HE
- Differentiation of Chinese HEI
- ♦ Classification of Chinese HEI
- Concluding Remarks

#### --- Rapid Growth of Undergraduate Enrolment

- ♦ Chinese higher education has experienced rapid developments since 1978, particularly in the past 10 years.
- China now has 1,700 universities and colleges, about 40% of them have the power of awarding bachelor degrees.
- ❖ The total number of undergraduate admission in 2005 was about 5 million, more than four times that in 1998.
- ❖ The total number of undergraduate enrolment in 2005 was more than 20 million, with a gross enrolment ratio of about 21% of the same age population.

#### --- Fast Development in Graduate Education

- Graduate education in modern China was started in 1981.
- ❖ The total number of doctoral degrees awarded has increased from 19 in 1983 to 18,625 in 2003.
- ♦ The annual admission of new doctoral and Master's students in 2006 are about 56,000 and 350,000 respectively.
- Most top universities enroll several thousands of doctoral students.
- About one third of all doctoral degrees has been awarded in engineering fields.

#### --- Private Higher Education

- ♦ The first private (MinBan) college of modern China was founded in 1982.
- **♦** The number of private universities and colleges is now about 500.
- **♦** The number of students enrolled in private higher education institutions reached 1.4 million in 2005.
- ♦ Almost all of the private universities and colleges focus on undergraduate education.
- ♦ The quality of private higher education needs improvement.

#### --- Merging of Universities

- China has followed the Soviet model of establishing specialized universities in 1950s.
- Since 1992, about 300 specialized institutions have been merged into multi-disciplinary universities.
- Most top research universities acquired a top medical university or other specialized institutions.
- ❖ For example, Beijing Medical University has been merged into Peking University.

-- As a result of government policy

- **✓** Specialization: the Soviet Model
- ✓ "Graduate School"
- "Ministerial Universities"

-- "Graduate School"

- ✓ Among the more than 400 universities offering graduate programs, 53 have been approved to receive the status of "Graduate School" by the central government; other universities are not allowed to use the name of "Graduate School".
- "Graduate School" not only represents the status and reputation of a university but also results in more power and flexibility to establish new programs and curricula.

-- As a result of government support

- **✓** National Key Universities
- **✓** National Key Projects
- "211 Project" and "985 Project"

-- 985 Project (1999-2001)

Institution	Extra Funding (Billion Yuan)		
Total (34)	28.3		
Top 9 for WCU	11.5		
Peking Univ.	1.8		
Tsinghua Univ.			
Zhejiang Univ.			
Fudan Univ.	1214		
Nanjing Univ.	1.2-1.4		
Shanghai Jiao Tong Univ.			
Univ. Sci. Tech. China (CAS)			
Xi'an Jiao Tong Univ. (Shanxi)	0.9-1.0		
Harbin Inst. Tech. (Heilongjiang)			

-- As a result of ranking

There are more than a dozen of university rankings.

Four of them have significant impact on Chinese.

# Average Ranks in Major Rankings

Institution	Average Ranks
Peking Univ.	1
Tsinghua Univ.	2
Fudan Univ.	3
Zhejiang Univ.	4
Nanjing Univ.	5
Shanghai Jiao Tong Univ.	6
Univ. Sci. Tech. China	9
Xi'an Jiao Tong Univ.	12
Harbin Inst. Tech.	14

## Classification of HEI

- Classification may be used in statistics, evaluation and resource allocations, etc. It could be helpful to encourage quality and promote diversity.
- ❖ Institutions may be classified according to their functions, disciplinary characteristics, the number of students, the amount of operating budget, etc.
- Classification methodology must be relatively simple.

## Classification of Chinese HEI

- ❖ In China, there have been studies on classification of Chinese HEI. However, most of them are theoretical studies.
- ♦ Until now, there has been no widely recognized classifications of Chinese HEI.

## Design of Classification Criteria

- ❖ By considering the criteria of the Carnegie classification in the United States, as well as the Chinese reality, four criteria were selected to classify Chinese higher education institutions:
- **♦ Total number of degrees awarded at various levels**
- The ratio between doctoral and baccalaureate degrees
- **Annual research income from governments**
- **♦** Per capita articles indexed in the SCIE and SSC.

## Design of Classification Criteria (Cont'ed)

- ❖ The criterion of per capita articles indexed in the SCIE and SSCI was introduced to reflect the growing phenomenon of international competition, and put Chinese research universities in the international context.
- ❖ The lowest number of per capita articles indexed in SCIE and SSCI among the 60 US members of the Association of American Universities was chosen as the standard in China, which was determined to be about 0.7.

## Definition of Research Universities

- These institutions offer a wide range of baccalaureate programs.
- ♦ They are committed to graduate education through the doctorate.
- They emphasize fundamental research, and are able to compete for government research funding.

## Quantitative Criteria for Research Universities

Criteria	Research I	Resea	rch II
Number of doctoral degrees	> 193	> 193	> 193
Ratio between doctoral and baccalaureate degrees	> 0.09	> 0.09	> 0.06
Amount of government research funding (million Yuan)	> 44		> 44
Number of SCIE and SSCI articles per capita	> 0.7		

# Distribution of Chinese HEI

<b>Institutions</b> Ca	tegory	Number	Percentage
Research	I	7	0.4
universities	II	48	2.8
Doctoral	I	74	4.3
universities	II	116	6.8
Master's	I	83	4.9
universities	II	126	7.4
Baccalaureate colleges	s I & II	201	11.8
Associate colleges		1,047	61.5
Total		1,702	100.0

## List of Research Universities I

- **♦ Tsinghua University**
- Peking University
- **♦ Zhejiang University**
- **♦ Fudan University**
- **♦** Nanjing University
- **♦ Shanghai Jiao Tong University**
- ♦ University of Sci. & Tech. China

# Average Research Income (in millions of Yuan)

Indicator	Research I	Research II
Average research income from all sources	578	269
Average research income from governmental funding	290	133

# **Concluding Remarks**

- University ranking and classification have become more and more popular in the world.
- Diversity of ranking and classification is necessary for their continuous improvement.
- ♦ The large variety of HE systems in various countries requires understanding and international cooperation.

# Thank You Very Much!

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