An Updated Ranking of the Economic Research Institutions in China (2000-2009)

Abstract:

This paper ranks the economic research institutions in China based on publications in the SSCI economics journals from 2000 through 2009 and finds that the gap in the research capacity of economic research institutions between the mainland and Hong Kong is very large, even though the difference in overall quality is not so significant. This paper can reflect successes and failures of the reform of the economics education in China over the past decade and give important implications for the ongoing reforms as well.

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Key Words: Rankings, China, Economic Institutions, 2000-2009

JEL: A20

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1. Introduction

Publications in economics journals can be regarded as the main output of economic research. Recently, many researches ranked economic research institutions by their publications in English-language economics journals. Representative studies include Kalaitzidakis, Mamuneas, and Stengos (hereafter as "KMS") (2003) and Coupé (2003). These two papers ranked the major international economics journals, economic research institutions and economists by different methods after reviewing the current existing rankings. Regardless of the different methods or the dissimilar results (Coupé 2003), a common finding was that there were still certain gaps in the capability of publishing English-language economics papers between the economic research institutions in mainland China and Hong Kong, as well as the world. None of the research institutions in mainland China has been favored by the above-mentioned international rankings (KMS, 2003; Coupé, 2003). However, some universities in Hong Kong rank high with respect to their research activities. In KMS' (2003) World Top 200, The Hong Kong University of Science and Technology is ranked No. 37, The Chinese University of Hong Kong No.84, and The University of Hong Kong No.166. In Coupé's (2003) World Top 100, The Hong Kong University of Science and Technology and The Chinese University of Hong Kong are ranked No.76 and No.85 respectively. There are also some rankings of US economic research institutions, including Dusansky and Clayton (1998), Rupp and McKinney (2002), Tschirhart (1989) and Hirsch, Austin, Brooks, and Moore (1984) (henceforth referred to as HABM).

Even in the East Asian rankings, the publications of mainland China were relatively weak. None of the institutions in mainland China is among the Top 10

according to a ranking of economics departments in East Asia by Jin and Yau (1999). It has also been noted that the existing rankings are characterized by discrimination with respect to language, region and institution (Coupé, 2003), with non-English-language countries being disadvantaged in these rankings.

EconLit and SSCI (Social Science Citation Index, SSCI) are the two databases used most frequently in the present rankings. EconLit is a searchable electronic bibliographic database provided by the American Economic Association and currently contains more than 1400 economics journals after a recent rapid expansion. SSCI is an index provided by Thomson Reuters and includes world leading journals in social sciences including economics. The rankings of KMS (2003) and Coupé (2003) used EconLit. In particular, the rankings of KMS (2003) are based on the pages and adjusted pages (including the Notes but excluding reviews and proceedings) published in the Top 30 economics journals from 1995 through 1999. Coupé's rankings (2003) employ 4 approaches: 1) the page-counts in Top 10 journals by the method of KMS; 2) the page-counts in 71 journals; 3) the impact factor ranking, using article counts and including 233 journals and 4) the HABM ranking (1984), using page counts and including 24 journals, which is comparable to a ranking for the period from 1978 until 1982.

Some current researches including Kodrzycki and Yu (2006), Ritzberger (2008), and Engemann and Wall (2009) use the database of the SSCI because the impact factors, published each year for journals included in the SSCI, are essential for journal rankings due to the fact that they can be regarded to be good measures for journal quality. For instance, a most recent study by Ritzberger (2008) considers 261 journals for the years 2003-2005, which are all from the SSCI.

This article also uses economics journals in the SSCI database to rank the economic research institutions in China. In the past a few years, the SSCI database

has experienced a rapid expansion and currently includes 2141 journals out of which 215 are economics journals while the rest includes anthropology, business, history, sociology, and other subjects in social sciences. The reasons for choosing the SSCI database are 1) the SSCI is more popular and more available in mainland China, so that it is easier for this research to be updated in the future. This is further supported by the facts that the database provides more detailed information about the publications and is well maintained by Thomson Reuters; 2) the SSCI currently includes 215 economics journals including the Top 50 economics journals. Consequently, the ranking results of the SSCI and EconLit should be identical when ranking only the publications in the top journals; 3) EconLit is a database particularly focusing on economics journals, while the SSCI includes other social sciences, such as business, sociology, psychology, and political science, so that we can study the impacts of economics papers on other closely-related fields. In particular, the impact factors used in this study reflect the citations from other closely-related subjects. Furthermore, the methods of ranking in economics discussed in this article can also be transferred to other subjects in the SSCI.

The above-mentioned rankings of institutions are out of date because they only reflect the status before 2000. With the reform and opening-up, China has experienced rapid economic growth over the past three decades. Along with the transition from a planned economy to a market economy, China has also been reforming its system of economics education, switching quickly from the traditional Marxian political economics to modern western economics. After that, Chinese economists started to increasingly publish their research in international journals and to communicate with their international peers. Figure 1 shows the development of the quantity of economics papers published by Chinese economists, which have been indexed by the SSCI from1980 until December of 2009. It should be noted however

that we only considered research papers and excluded notes, proceedings, book reviews and editorial documents.

The statistics indicate that the number of publications before 1997 is very low, and that after 1997 the number is substantially increasing. Based on the statistics, the number of total publications in China during the period from 1980 through 2009 is 2179. However, the total number before 1997 is only 206, which is perhaps less than the one-year output of a leading university in the US, whereas after 1997 the number of publications in China increased explosively. In the year 2008 alone, the total number of publications reached 339, which is significantly more than has been published during the whole period from 1980 through 1997. The reasons for the explosive increase might be (1) the return of Hong Kong to China, which now contributes significantly to China's number of publications; (2) the expansion of the economics journals in the SSCI; and (3) undeniably the increase in the research ability of Chinese economists. Figure 1 also shows the trend of publications in Hong Kong. The number of publications there is also increasing after 1997, but not as significantly as with respect to the whole of China, which indicates that the research ability of the mainland is substantially increasing after 1997.

Given the recent dramatic changes in economics education and research in China, we need an updated study on the ranking of economic research institutions in China to reflect these changes. Although there are some recent rankings of Chinese economics research institutions as well as of other subjects, such as the rankings by Shuping Wu[1], they do not conduct systematic research or rankings to specifically analyze the quantity and quality of publications by Chinese institutions. Laffont (1999) argues that a generally acknowledged method of ranking is desired as economics is now an international science. Because a main product of economic research should be

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[1] Please see http://learning.sohu.com/20090428/n263674445.shtml.

publications of high-level academic papers contributing to the knowledge of the human society, we can say that a proper evaluation of the publications in high-level economics journals is an important aspect of the correct evaluation of economic researches.

Although Yu (2008) ranks Chinese research institutions by their English-language publications during the period 1998-2007, he does not reflect the changes in the publications during the past decade. Given the fact that many universities in China are implementing radical reforms of their economics education systems, an updated research is needed to measure the effects of those actions. Following Yu (2008), the main objective of this paper is to provide a systematical and updated analysis of the publications in English-language economics journals by the research institutions in China (including mainland China, Hong Kong and Macao, but without Taiwan). However, we also realize that this study cannot reflect the overall research abilities of a research institution because the publications in other languages, such as Chinese language, are not counted.

In the current literature there are a lot of rankings of economists, economic institutions and economics journals with different approaches. However, this study will focus on the rankings of the research institutions. The ranking of journals is neither the interest of this paper, nor necessary because there are plenty of papers ranking the economics journals (KMS 2003; Coupé, 2003; Kodrzycki and Yu 2006; Ritzberger 2008; and Engemann and Wall 2009). Furthermore, it is difficult to rank Chinese economists based on their English-language publications because of the difficulty of precisely defining a Chinese economist, which can be done either based on affiliation or on nationality. The economists who can publish high-quality papers in English-language journals are highly mobile and they often change their affiliations from one institution to another and also from one country to another. Moreover, some

well-known economists were born in China but have given up the Chinese nationality and obtained other nationalities. Furthermore, it is also not necessary to rank Chinese economists. A good economist should compete with his peers from all over the world as economics is an international science. There are already a lot of rankings of economists in the world. For instance, Coupé (2003) provides a good ranking of economists and an excellent review of the existing rankings as well.

Following Yu (2008), the rest of the paper will be devoted to developing an approach to systematically rank the Chinese economic research institutions by their publications in English-language economics journals, using the database of the SSCI (2000-2009). Since some universities, such as Xiamen University and Shanghai University of Finance and Economics, took radical measures to reform their economics education around the year 2004, we split the ten years into the two periods 2000-2004 and 2005- 2009 and rank them separately in order to have a comparative study of the two periods, which also allows to assess the impacts of the reforms.

2. Data and methodology

The rankings in this study are based on the publications in SSCI economics journals from January 2000 through October 2009. We only include the research papers and exclude the notes, proceedings, book reviews and editorial documents. Totally there are 1889 publications[2] distributed across 191 out of 215 economics journal in the SSCI.

Table 1 lists the 20 most published journals, which almost account for half (49.13%) of the total publications. The 4 most published journals are China & World Economy (5.35%), Insurance Mathematics & Economics (5.03%), China Economic

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[2] There are 1920 economics papers from China (as a region) in the SSCI.. We exclude 31 papers, which are not really from China, so that we have 1889 papers.

Review (4.50%), and Economics Letters (4.34%). The C4 index (Concentration of the 4 most published journals) is 19.22%. There are only 22 papers (1.2%) published in the well-known Top 4 economics journals: 9 in AER, 9 in Econometrica, 4 in JPE and zero in QJE.

As aforementioned, we will split the 1889 publications from 2000 through 2009 into two periods: 2000-2004 and 2005-2009. The statistic shows that 619 papers have been published in the period 2000-2004 (about 1/3 of total publications) by a total of 82 Chinese institutions. The remaining 2/3 of all publications have been published during the period 2005-2009 by 169 Chinese institutions[3]. In order to reduce errors, this paper only ranks institutions with more than 2 publications.

In addition, the quality of economics publications is very important. Some famous economists obtained their reputations from just one or two classical publications. Usually, high quality papers appear in high quality journals, because the reputation of journals and the peer-review process can ensure a certain quality of papers and thereby maintain the quality of the journals. In practice, the impact factor, the ratio of the number of citations of a given journal to the number of articles published in this journal for a fixed period, for instance two years in SSCI, is used for measuring the quality of a journal. This indicator depends on field size, citation intensity and turnover rate (Jemec, 2001). It may however favor certain fields and also cannot distinguish the citations of an important journal from those of a less important journal.

So far, many approaches have been developed for correcting the above-mentioned biases, including the *H-index method* (Hirsch, 2004), the *BT-method* (Brandley and Terry, 1952), the *LP-method* (Liebowitz and Palmer, 1984), the

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[3] We considered the fact that some institutions have different English names, such as the Peking University, which is also called Beijing University. In these cases, we subsumed the different versions under a common name.

tournament method (Koczy and Strobel, 2007), and the *invariant method* (Palacio-Huerta and Volij, 2004).

Coupé (2003), KMS (2003) and Kodrzycki and Yu (2006) ranked the journals by the LP-method, while Ritzberger (2008) ranked the journals by the invariant method. Ritzberger (2008) also provides a good review of the different methods and results. Although the ranking methods might be different, the ranking results are very similar, which is true in particular for top journals. Therefore, we follow Ritzberger (2008) and rank the institutions by the number of publications in the Top 50 economics journals.

We include 8 indexes from different aspects to reflect the research ability of the Chinese economic research institutions.

1). Indexed Publications (P)

This is a statistic directly obtained from the SSCI database. Any publication shows an affiliation with an institution. This institution will be counted only once. In particular, if an institution is indexed more than once in one paper, the institution is still only accounted once. The Number of Indexed Papers (P) of an institution j can be expressed as

$$P_j = \sum_{i=1}^{n} C_{ij} \ , \tag{1}$$

where C_{ij} is an index. If a paper i has an affiliation to institution j at least once, $C_{ij} = 1$, otherwise $C_{ij} = 0$.

2). Real Publications (RP)

The number of indexed papers (P) cannot truly reflect the number of publications by an institution. For instance, if there are many institutions contributing

to one paper, each institution will be counted once towards P. This is unfair towards an institution, which publishes a paper independently by itself. We therefore have to develop another index, the index of real papers (RP) in order to adjust for the number of institutions in a paper.

If a paper i has a_i authors and a certain author m_i is affiliated to k_{mi} institutions, each institution the author is affiliated to actually contributes only $\dfrac{1}{a_i k_{mi}}$ of the paper. Consequently, the contribution of institution j to the paper is $\sum\limits_{m=1}^{a_i} B_{imj} \dfrac{1}{a_i k_{mi}}$, where B_{imj} is also an index and $B_{imj}=1$ means that author m_i of paper i is affiliated to institution j, otherwise $B_{imj}=0$. Then the real publications (RP) of the institution j are

$$RP_j = \sum_{i=1}^{n} \sum_{m_i=1}^{a_i} B_{im_i j} \frac{1}{a_i k_{m_i i}} \quad . \qquad (2)$$

However, the relationship between authors and institutions in the database of the SSCI is not clear in the case of the years before 2007, and we only have the information of the institutions, so that we cannot use Equation (2) to precisely adjust the institutions. In this case, we assume that each institution has contributed equally to a paper published before 2007. Since the relationship between authors and institutions is clear for the years 2008 and 2009, we can use the equation (2) to adjust institutions for the publications.

3). Impact-Factor adjusted papers (ARP)

The quality of a publication is very important. However, the above two indexes P and RP do not consider the quality of the publications. For instance, a paper published in the *American Economic Review* may have a much greater

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contribution in terms of academic standard than a paper published in *China and World Economy*. Therefore, we should use the Impact Factors to adjust for the quality of publications. This leads to a third index, the Impact-Factor adjusted papers (ARP):

$$ARP_j = \sum_{i=1}^{n} \sum_{m_i=1}^{a_i} F_i B_{im_i j} \frac{1}{a_i k_{m_i i}}, \tag{3}$$

where F_i is the impact factor of the journal in which paper i is published. Although the SSCI provides the impact factors of journals, which are defined as the ratios of the number of citations to the number of articles published in the past 2 years, it cannot reflect the long-term impact and reputation of a journal (KMS 2003). Consequently, KMS (2003) provided a journal ranking, which takes into account reputation, history and self-citation in order to adjust the ranking. However, KMS' rankings only reflect the journals for the period 1994-1998.

Recently, Ritzberger (2008) presented an updated ranking of economics journals (2003-2005) using the invariant method drawing on a broader sample of journals, particularly including the closely related social sciences journals. The ranking results are very similar to those of KMS (2003) for top journals and somewhat different for the remaining journals. In this paper, we will use the impact factors of Ritzberger to adjust for the quality of publications to reflect the recent changes in journal rankings.

Both Ritzberger's (2008) and KMS' (2003) rankings set the value of a journal between 0.00 and 100. If we use the original values from Ritzberger (2008) to directly adjust for quality, it will make the differences of quality among journals too large. Coupé (2003) sets the values of impact factors between 0 and 1, which, on the contrary, makes the differences too small.

In this study, we change the lowest value in Ritzberger (2008) from 0.00 to 0.01 and then project the impact factors to the range between 1 to 5 using the following equation:

$$F_i = [(100 * RF_i)^{1/4} - 1] * \frac{4}{9} + 1 , \tag{4}$$

where RF_i represents the values of the impact factors in Ritzberger (2008).

Ritzberger (2008) does not include all current economics journals due to the recent quick expansion of journals in the SSCI. The impact factors of some journals, such as *China and World Economy*, are stated in the 2008 ISI citation report. For those journals we can estimate the RF_i based on the ratio of their impact factors relative to the impact factor of the *China Economic Review* in 2008 because the *China Economic Review* is considered a major journal in Chinese economics research. Then,

$$RF_i = \frac{F_i^{2008}}{F_{CER}^{2008}} RF_{CER} , \tag{5}$$

where F_i^{2008} and F_{CER}^{2008} are the impact factors of journal i and the *China Economic Review* respectively in the 2008 ISI report. RF_{CER} in turn is the impact factor of the *China Economic Review* in Ritzberger (2008).

If the journals are newly selected into the SSCI, such as the *Annals of Finance and Economics*, we set $RF_i = 1$.

4). Real pages of publications (RPG)

The above ranking indexes do not consider the length of papers. For instance, Chinese institutions published 82 papers in *Economics Letters*, which amounts to about 4.34% of the total publications, but the papers published in *Economics Letters* are usually no longer than 6 pages. Short papers usually have less content, so that we have to adjust for the content of the publications. Some current

rankings are based on the number of pages, such as Coupé (2003). Similarly, we consider the real pages of publications (RPG) index:

$$RPG_j = \sum_{i=1}^{n} \sum_{m_i=1}^{a_i} G_i B_{im_i j} \frac{1}{a_i k_{m_i i}} \quad, \tag{6}$$

where G_i is the number of pages in publication i.

5). Impact-factor-adjusted pages (ARPG)

Considering the quality of papers is different. In this case, we can use Ritzberger's impact factors to adjust for the number of pages of publications. Then we have an index representing the impact-factor-adjusted pages (ARPG):

$$ARPG_j = \sum_{i=1}^{n} \sum_{m_i=1}^{a_i} G_i F_i B_{im_i j} \frac{1}{a_i k_{m_i i}}. \tag{7}$$

The impact-factor-adjusted pages (ARPG) index should be seen as an overall indicator, which reflects the counts, quality and content of papers. However, as aforementioned, the number of SSCI journals has recently experienced a rapid expansion. In order to have a robust check, we dropped the publications in *China & World Economy* and *Annals of Finance & Economics*[4], which are China-based journals and have only recently been accepted for the SSCI, which allows for a comparison. The index is then called ARPG-R in the final rankings.

After having the above five ranking indexes, we can use some basic calculations to obtain 3 more indexes, which sometimes are particularly important when ranking Chinese research institutions in the field of economics. Many Chinese institutions or researchers opt for the tactic of publishing "short and low-quality" papers to increase the counts in the short-run. Some institutions even buy authorships from other institutions. The following 3 indexes can somehow reflect these behaviors.

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[4] The robust check is suggested by an associate editor, and we thank the associate editor for it.

6). Average pages of publications (AVPG)

We can obtain the average pages of publications of an institution by dividing the real pages of publications (RPG) by the number of real publications (RP).

$$AVPG_j = RPG_j / RP_j \qquad (8)$$

This index can reflect the average content of one publication of an institution. If an institution tries to publish a lot of short papers to increase its counts, this index will be low.

7). The quality of papers (Q)

Dividing the impact-factor-adjusted publications (ARP) by the real number of publications (RP), we can get the average impact factor (Q) of the publications by an institution, which can also be interpreted as the quality of publications by an institution.

$$Q_j = ARP_j / RP_j \qquad (9)$$

Many institutions in China decide for the tactic of publishing papers in low-quality journals. However, the quality of publications is sometimes more important than the quantity in terms of academic standard. Many well-known scholars established their academic fames by only one or two classic high-quality papers. Therefore, this index might be extremely important for ranking the research institutions in present-day China.

8). Independent ability (IA)

We also can get an indicator of independent ability (IA) regarding an institution by dividing the real publications (RP) by the indexed publications (P),

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which reflects the ability of an institution to independently complete an English-language publication.

$$IA_j = RP_j / P_j \tag{10}$$

The lower the indicator, the more cooperation an institution needs to complete such a publication. Its inverse is exactly the number of affiliations an institution needs to complete an entire paper independently.

Many universities in mainland China also resort to the tactic of "Borrowing chicken to lay eggs" to increase their number of publications in the short-run. They try to hire some short-term visiting scholars from other universities, to buy co-authorships from good economists, or to encourage their own scholars to coauthor with high-level scholars from abroad in order to increase the counts of publications. In those cases, the index of independent ability will be low.

It is worth to point out that the 8 indexes are not independent of each other, and they can reflect different sides of the research ability of an institution. It is also very difficult to incorporate them into one index or assign weights to them to get one index. However, the index of Impact-factor-adjusted pages (ARPG) is a comprehensive one, which reflects both the quantity and the quality.

3. Rankings and Discussions

Table 2 and Table 3 present the rankings of the Chinese Institutions with more than 2 publications in the SSCI for the period 2005-2009 and for the period 2000-2004, respectively. There are 75 institutions in the 2005-2009 ranking, while the number is only 33 with respect to the period 2000-2004.

We find the Top 5 institutions in terms of quantity to be identical in both periods: Hong Kong University of Science and Technology, Chinese University of

Hong Kong, Peking University, University of Hong Kong, and City University of Hong Kong. However, the order is slightly different. The Top 2 institutions in both periods are the Hong Kong University of Science and Technology and the Chinese University of Hong Kong, which is consistent with the current rankings by KMS (2003) and Coupé (2003) as well as with the most recent rankings by Yu (2008). This indicates that the research capacity of the institutions in mainland China is weaker than that of Hong Kong. This may be caused by the language bias, a difference in cultural tradition, and gaps in the education system.

However, comparing the two periods, we find that the publications in mainland China are increasing substantially and that mainland China is thus catching up. During the period 2000-2004, there are only three institutions (Peking University (5), Chinese Academy of Science (8) and Wuhan University (10)) from mainland China ranked in the Top 10, while during the period 2005-2009 there are five institutions in the Top 10 (Peking University (3), Tsinghua University (6), Chinese Academy of Sciences (8), Chinese Academy of Social Sciences (9) and Shanghai University of Finance and Economics (10)). In particular, the gap between Peking University and the two leading universities (Hong Kong University of Science and Technology and Chinese University of Hong Kong) is very small in the period 2005-2009. The indexed papers (P) index even ranks Peking University as the No. 1, although the impact-factor-adjusted pages (ARPG) of the publications of Peking University during the period 2000-2004 only amounted to less than 1/3 of those of the Chinese University of Hong Kong..

There is a big gap between No. 4 (University of Hong Kong) and No. 5 (City University of Hong Kong) in the 2005-2009 ranking. The Top 4 institutions in turn are very close to each other in terms of research capability. Except for Peking University, the gaps between the mainland institutions and top Hong Kong institutions

are still very large. For instance, the No. 10 (Shanghai University of Finance and Economics) reaches less than ¼ of the publications of the Hong Kong University of Science and Technology.

If we drop the publications in the two China-based journals: *China & World Economy* and *Annals of Finance and Economics*, we find that there are some changes in the ranking order, in particular for the Chinese Academy of Social Sciences and Renmin University of China, which fell from No. 9 to No. 14 and from No. 12 to No. 16 respectively. This is not surprising as *China & World Economy* is published by the Chinese Academy of Social Sciences.

As we pointed out earlier, the quality of publications is very important in terms of the academic standard. The Top 5 institutions during the period 2005-2009 in terms of quality are Cheung Kong Grad School of Business, Shanghai University of Finance and Economics, Guizhou University, Hong Kong University of Science and Technology, and Xiamen University; while the Top 5 during the period 2000-2004 are Hong Kong University of Science and Technology, Tsinghua University, Wuhan University, University of Hong Kong, and Hong Kong Monetary Authority. This indicates that the overall quality of the publications by mainland China is not lower than Hong Kong. It should be pointed out that some institutions perform very well in quantity rankings but not so good in quality rankings, which indicates that these institutions published a large amount of papers in low-quality journals. For instance, the China Academy of Social Sciences ranks No. 9 in terms of quantity but only No. 35 in terms of quality. Another extreme example is Renmin University of China, which ranks No. 12 and No. 42 in terms of quantity and quality respectively.

The strategy of some institutions in China of "borrowing chicken to lay eggs" to increase the quantity of publications in a short-run will certainly increase their publication counts through more co-authorships. However, as a result, their index of

independent ability (IA) will be very low. Some top institutions from mainland China, which perform badly in this index, are Tsinghua University (40), Shanghai University of Finance and Economics (40), Zhejiang University (35), Central University of Finance and Economics (42), and Xiamen University (46). These institutions are taking radical measures to reform their economics education systems. In the short-run, they do increase their publications at least in terms of quantity (Counts of publications). However, they still have a long way to go to increase their independent ability of research.

Tables 4 and 5 contain the rankings of the Chinese Institutions with more than two publications in Top 50 economics journals in Ritzberger (2008) for the period 2005-2009 and for the period 2000-2004, respectively. There are 25 institutions ranked for the period 2005-2009 and only 13 for the period 2000-2004. The No. 1 in the ranking is Hong Kong University of Science and Technology in both periods. In total, there are five institutions from Hong Kong in the Top 10 during the period 2005-2009, same result with the ranking of all SSCI publications. The other five institutions are from mainland China and include Peking University (3), Tsinghua University (7), Shanghai University of Finance and Economics (8), Xiamen University (9) and Shanghai Jiaotong University (10). Now we find a huge gap between the mainland and Hong Kong in terms of publications in top journals. For instance, Peking University only published 54% of the amount of Hong Kong University of Science and Technology during the period 2005-2009 in Top 50 economics journals. Shanghai Jiaotong University even published only about 9% of Hong Kong University of Science and Technology. However, the quality in mainland institutions in general is not significantly lower than in Hong Kong institutions. Rather, the quality is somehow higher in the mainland. The Top 5 institutions in terms of quality are Shanghai Jiaotong University, Shanghai University of Finance and

Economics, City University of Hong Kong, Tsinghua University, and Hong Kong University of Science and Technology.

If we look at the ranking of Independent Ability (IA) for the Top 50 economics journals, similar with the rankings considering all SSCI publication, we also find a huge gap between the mainland and Hong Kong. The IA ranks of the five mainland institutions in the Top 10 of the quantity rankings are No. 8 (Peking University), No. 14 (Tsinghua University), No.10 (Shanghai University of Finance and Economics), No. 13 (Xiamen University), and No.9 (Shanghai Jiaotong University), which are significantly lower than those of their counterparts in Hong Kong.

4. Conclusion

Using the SSCI economics journals (2000-2009), this paper ranks the economic research institutions in China by their publications and finds the Top 5 institutions in terms of quantity to be the Hong Kong University of Science and Technology, the Chinese University of Hong Kong, Peking University, the University of Hong Kong, and the City University of Hong Kong. This is true both in the period 2000-2004 and in the period 2005-2009. The fact that four of these institutions are from Hong Kong indicates that the gap of the research ability between the mainland and Hong Kong is still very large. This gap is even much more pronounced in the ranking of Top 50 economics journals.

Some universities in mainland China are dramatically reforming their economics education systems, which is also reflected by the rankings. Compared with the period 2000-2004, some mainland universities such as Peking University, Tsinghua University, the Shanghai University of Finance and Economics, and Xiamen University have quickly improved their publications. In addition, the overall quality

difference between the mainland institutions and Hong Kong institutions is not so significant.

In order to quickly improve their publications, some institutions opt for the strategy of publishing short and low-quality papers or for the strategy of "borrowing chicken to lay eggs", which involves hiring short-term visiting scholars from other universities, buying some co-authorships from good economists, or encouraging their own scholars to coauthor with high-level scholars from abroad in order to increase the counts of the publications. These strategies water a lot in the publications. The rankings have revealed that the independent ability of the mainland institutions is still very low compared with that of their counterparts in Hong Kong.

It should be mentioned that the rankings in this paper only consider English-language economics publications, not including the publications in Chinese language. Therefore, this research only reflects one dimension of the research abilities of Chinese economic research institutions. The ranking methods provided by this paper can be extended to the ranking of economics publications in Chinese language, which may be a promising research topic for the future.

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Figure 1   Publications of Economics Papers in China (1980-2009)
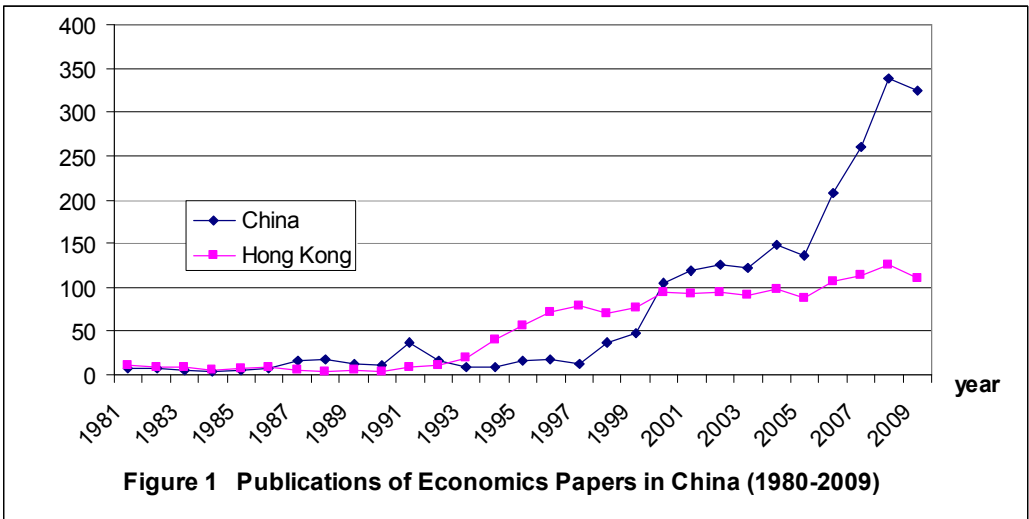
Table 1 The 20 Most Published Journals by Chinese Institutions (2000-2009)

	Journal Name	Number of Publications	Percent (%)
1	CHINA & WORLD ECONOMY	101	5.35
2	INSURANCE MATHEMATICS & ECONOMICS	95	5.03
3	CHINA ECONOMIC REVIEW	85	4.50
4	ECONOMICS LETTERS	82	4.34
5	JOURNAL OF BANKING & FINANCE	74	3.92
6	APPLIED ECONOMICS LETTERS	53	2.81
7	JOURNAL OF COMPARATIVE ECONOMICS	47	2.49
8	JOURNAL OF ECONOMETRICS	46	2.44
9	ECOLOGICAL ECONOMICS	38	2.01
10	APPLIED ECONOMICS	36	1.91
11	JOURNAL OF FINANCIAL ECONOMICS	36	1.91
12	JOURNAL OF ECONOMIC DYNAMICS & CONTROL	34	1.80
13	HEALTH ECONOMICS	29	1.54
14	JOURNAL OF DEVELOPMENT ECONOMICS	26	1.38
15	ECONOMIC MODELLING	25	1.32
16	WORLD ECONOMY	25	1.32
17	ECONOMIC THEORY	24	1.27
18	JOURNAL OF ECONOMIC BEHAVIOR & ORGANIZATION	24	1.27
19	PACIFIC ECONOMIC REVIEW	24	1.27
20	WORLD DEVELOPMENT	24	1.27
	Summary	928	49.13

Note: The total number of the publication is 1889.

Table 2 2005-2009 Ranking by the Total Publications in the SSCI

Institutions	P		RP		ARP		RPG		ARPG		ARPG-R		AVPG		Q		IA	
Hong Kong Univ. Sci. & Tech.	110	4	64.97	4	170.86	2	1250.65	3	3411.71	1	3392.47	1	19.25	4	2.63	4	0.59	17
Chinese Univ. Hong Kong	127	2	71.44	3	165.65	4	1339.3	1	3147.61	2	3147.61	2	18.75	6	2.32	9	0.56	24
Peking University	149	1	81.31	1	182.9	1	1298.51	2	3056.73	3	2868.91	3	15.97	21	2.25	16	0.55	26
University Hong Kong	120	3	73.71	2	168.34	3	1202.78	4	2780.14	4	2758.7	4	16.32	19	2.28	10	0.61	14
City Univ. Hong Kong	84	5	39.45	5	86.45	5	705.09	5	1585.76	5	1585.76	5	17.87	9	2.19	18	0.47	39
Tsinghua Univ.	81	6	37.58	6	85.04	6	667.36	6	1548.62	6	1442.21	6	17.76	10	2.26	14	0.46	40
Lingnan University	54	7	34.21	7	77.81	7	526.15	7	1252.05	7	1252.05	7	15.38	24	2.27	12	0.63	10
Shanghai Univ. Fiance & Econ.	33	14	17.17	14	47.55	10	291.58	13	830.1	10	830.1	8	16.99	13	2.77	2	0.52	32
Chinese Academy of Sci.	50	8	29.49	9	59.01	9	464.5	9	970.45	8	812.94	9	15.75	23	2	26	0.59	19
Hong Kong Polytech Univ.	34	13	19.04	11	42.02	11	300.71	12	691.82	11	691.82	10	15.79	22	2.21	17	0.56	25
Xiamen Univ.	29	15	10.48	22	26.04	18	204.77	18	524.67	15	509	11	19.53	3	2.48	5	0.36	46
Zhejiang Univ.	36	12	18.37	13	34.5	13	304.42	11	576.01	13	492.99	12	16.57	16	1.88	31	0.51	35
Cent Univ Finance & Econ	41	10	18.49	12	34.44	14	280.83	14	538.37	14	436.32	13	15.19	27	1.86	32	0.45	42
Chinese Academy of Social Sci.	42	9	32.48	8	59.64	8	489.3	8	948.77	9	425.11	14	15.06	29	1.84	35	0.77	3
Shanghai Jiaotong Univ.	25	17	13.17	18	32.54	15	179.33	22	482.14	16	421.66	15	13.62	32	2.47	6	0.53	29
Renmin Univ. China	37	11	20.44	10	34.85	12	337.72	10	576.81	12	369.69	16	16.52	17	1.7	42	0.55	28
Hong Kong Baptist Univ.	19	21	11.83	20	23.46	20	189.17	19	350.25	22	350.25	17	15.99	20	1.98	27	0.62	13
Nankai Univ.	20	18	14	15	30.67	16	185.25	20	399.26	19	337.68	18	13.23	34	2.19	19	0.7	6
Macau Univ.	19	21	10	24	20.39	23	152.33	23	321.51	23	307.49	19	15.23	26	2.04	22	0.53	30
Fudan Univ.	29	15	13.9	16	27.97	17	213.63	17	423.49	17	302.81	20	15.37	25	2.01	24	0.48	38
Beijing Normal Univ.	18	22	10.65	21	21.55	21	184.47	21	361.6	21	298.56	21	17.32	11	2.02	23	0.59	18
Univ Int Busines & Econ	20	18	13.42	17	23.93	19	225.25	15	402.71	18	293.85	22	16.79	14	1.78	39	0.67	7
Hong Kong Monetary Authority	20	18	12	19	21.51	22	218.67	16	393	20	275.9	23	18.22	8	1.79	37	0.6	16
Sun Yat Sen Univ.	17	23	10.11	23	18.68	24	124.44	25	235.2	24	198.64	24	12.31	36	1.85	34	0.59	20
China Agr. Univ.	15	24	7.42	27	14.94	25	109.92	27	218.86	26	171.03	25	14.82	30	2.01	25	0.49	36
SW Univ. Econ & Finance,	13	26	8.75	26	14.21	26	146.5	24	233.58	25	166.78	26	16.74	15	1.62	44	0.67	8

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Hunan Univ.	13	26	9.58	25	11.48	28	109.42	28	134.03	28	134.03	27	11.42	37	1.2	49	0.74	4
Cheung Kong Grad Sch Business,	4	39	1.5	49	4.4	42	43.75	36	130.71	29	130.71	28	29.17	1	2.93	1	0.38	45
Xi An Jiao Tong Univ.	10	28	5.83	30	11.38	29	61.83	30	119.5	30	119.5	29	10.6	40	1.95	29	0.58	22
World Bank, Beijing Office	4	39	2.5	41	4.74	40	58	34	112.49	31	100.94	30	23.2	2	1.89	30	0.63	11
Jinan Univ. Guangzhou	8	31	4.39	33	7.8	36	59.01	32	109.08	32	100.28	31	13.43	33	1.78	40	0.55	27
Nanjing Univ.	9	29	7.13	28	11.58	27	60.13	31	100.19	35	100.19	32	8.43	46	1.62	45	0.79	2
E China Normal Univ.	9	29	4.33	34	9.86	32	41	37	90.73	36	90.73	33	9.46	42	2.28	11	0.48	37
National Bur Stat	3	49	2.5	40	6.15	38	36.5	40	87.98	37	87.98	34	14.6		2.46		0.83	
Wuhan Univ.	15	24	6.97	29	10.22	31	119.75	26	169.8	27	87.47	35	17.18	12	1.47	46	0.46	41
Beijing Univ Aeronaut & Astronaut	4	39	2.08	47	4.38	43	39.67	39	79.87	38	79.87	36	19.04	5	2.1	21	0.52	34
Univ. Sci & Tech, China	7	33	4.48	32	10.65	30	31.87	42	77.29	39	77.29	37	7.11	47	2.38	8	0.64	9
N China Elct Power Univ.	4	39	4	35	8.52	34	35	41	75.78	40	75.78	38	8.75	44	2.13	20	1	1
China Europe Int Business Sch.	5	35	3.17	37	5.53	39	58.33	33	103.04	34	73.35	39	18.42	7	1.75	41	0.63	12
Suzhou Univ.	7	33	3.67	36	8.3	35	31	43	70.25	41	70.25	40	8.45	45	2.26	15	0.52	33
Shandong Univ.	8	31	4.89	31	8.77	33	61.93	29	108.47	33	57.34	41	12.66	35	1.79	38	0.61	15
Northwestern Univ. Xi An	5	35	2.67	39	3.91	46	40.5	38	53.78	42	53.78	42	15.19	28	1.47	47	0.53	31
China Acad Ag Sci	3	49	1.17	61	2.42	58	22.17	49	48.5	45	48.5	43	19		2.07		0.39	
Tongji Univ.	3	49	1.5	50	3.22	51	21.25	50	46.2	46	46.2	44	14.17		2.15		0.5	
Huazhong Univ. ST	4	39	2.33	44	4.59	41	23.33	48	43.64	47	43.64	45	10	41	1.97	28	0.58	21
Chongqing Univ.	3	49	2.5	43	4.24	45	26	45	39.83	48	39.83	46	10.4		1.7		0.83	
Harbin Inst Tech.	3	49	1.25	59	3.05	52	16.5	56	39.5	49	39.5	47	13.2		2.44		0.42	
Guizhou Univ.	4	39	1.28	58	3.51	49	14.44	58	38.65	50	38.65	48	11.3	38	2.74	3	0.32	47
Lanzhou Univ.	4	39	2.33	45	3.38	50	25.17	46	36.78	51	36.78	49	10.79	39	1.45	48	0.58	23
E China Univ. Sci& Tech	3	49	0.8	69	1.64	64	18.2	55	36.03	52	36.03	50	22.75		2.04		0.27	
Hebei Univ. Tech	3	49	1.33	55	2.42	57	20.17	51	32.09	54	32.09	51	15.13		1.81		0.44	
Southeast Univ.	2	58	1	62	2.08	59	15	57	31.39	55	31.39	52	15		2.08		0.5	
S China Normal Univ.	4	39	2.83	38	6.84	37	12.67	61	29.66	56	29.66	53	4.47	49	2.41	7	0.71	5
Hong Kong Shue Yan Univ.	3	49	2.5	42	4.28	44	20	52	27.13	58	27.13	54	8		1.71		0.83	

Institution	Pub	Rk		Rk		Rk		Rk		Rk		Rk		Rk		Rk		Rk
Henan Agr Univ.	4	39	0.88	65	1.62	65	14.38	59	26.77	59	26.77	55	16.43	18	1.85	33	0.22	49
State Informat Ctr,	2	58	1.25	60	1.38	70	24.5	47	25.82	60	25.82	56	19.6		1.11		0.63	
Northwestern Polytech Univ.	2	58	0.83	67	1.51	66	13.67	60	25.82	61	25.82	57	16.4		1.81		0.42	
Cent S Uni Tech	2	58	1.33	54	2.8	53	11.67	65	24.95	62	24.95	58	8.75		2.1		0.67	
Nanjing Agr Univ.	5	35	2.17	46	3.63	48	29.83	44	49.93	43	24.37	59	13.77	31	1.68	43	0.43	43
Zhongnan Univ. Econ& Law	2	58	0.63	72	1.42	69	10.5	68	23.72	63	23.72	60	16.8		2.27		0.31	
Sichuan Univ.	4	39	1.69	48	3.85	47	10.53	67	23.46	64	23.46	61	6.21	48	2.27	13	0.42	44
Inner Mongolia Univ.	2	58	0.67	71	1.18	72	12.33	63	22.01	66	22.01	62	18.5		1.77		0.33	
Qingdao Univ.	2	58	0.83	66	2.02	61	8.17	73	21.92	68	21.92	63	9.8		2.42		0.42	
Univ Elect Sci & Technol China, Chengdu	2	58	0.92	64	1.79	63	11	66	21.54	69	21.54	64	12		1.96		0.46	
Shanghai Acad Agr Sci	2	58	1.5	52	2.6	55	12	64	20.84	70	20.84	65	8		1.74		0.75	
Northwestern Normal Univ.	2	58	0.83	68	1.47	68	9.17	71	16.82	72	16.82	66	11		1.76		0.42	
Bank china	2	58	1.5	51	2.63	54	19.5	53	34.87	53	16.73	67	13		1.76		0.75	
S China Univ. Tech	2	58	0.67	70	1.32	71	8.33	72	16.11	73	16.11	68	12.5		1.97		0.33	
Beijing Forestry Univ.	3	49	0.92	63	2.06	60	10	69	21.96	67	15.36	69	10.91		2.24		0.31	
Guizhou Normal Univ.	2	58	0.46	74	1.17	73	4.67	75	11.69	74	11.69	70	10.18		2.55		0.23	
State Environmen Protect Adm China	2	58	0.45	75	0.73	75	7.05	74	11.43	75	11.43	71	15.67		1.62		0.23	
Jiangxi Univ. Finance & Econ.	5	35	1.38	53	2.51	56	12.54	62	22.91	65	11.36	72	9.12	43	1.82	36	0.28	48
Zhejiang Gongshang Univ	2	58	0.53	73	0.93	74	10	70	17.82	71	9.02	73	18.75		1.75		0.27	
BBVA, Hong Kong,	2	58	1.33	56	1.98	62	19.33	54	27.77	57	6.33	74	14.5		1.49		0.67	
Fuzhou Univ.	2	58	1.33	57	1.48	67	47.33	35	48.81	44	4.81	75	35.5		1.11		0.67	

Note: (1) We only rank institutions with 2 or more publications;

(2) We only calculate the AVPG, the Quality, and the IA for institutions with 4 or more publications;

(3) The publications of the CCAP (Center for Chinese Agricultural Policy), Chinese Academy of Sciences, can be ranked in No. 18 in 2005-2009 by the ARPG index.

Table 3 2000-2004 Ranking by the Total Publications in the SSCI

Institutions	P Value	Rank	RP Value	Rank	ARP Value	Rank	RPG Value	Rank	ARPG Value	Rank	AVPG Value	Rank	Q Value	Rank	IA Value	Rank
Chinese Univ. Hong Kong	125	1	79.03	1	195.71	1	1361.08	2	4259.39	1	17.22	8	2.48	6	0.63	7
Hong Kong Univ. Sci. & Tech.	119	2	66.04	2	194.03	2	1396.97	1	3547.01	2	21.15	2	2.94	1	0.55	10
University Hong Kong	85	3	55.48	3	146.83	3	975.57	3	2697.7	3	17.58	6	2.65	4	0.65	6
City Univ. Hong Kong	65	4	37.58	4	92.72	4	627.17	4	1641.75	4	16.69	11	2.47	8	0.58	9
Peking University	52	5	31	5	76.62	5	521.67	5	1333.19	5	16.83	9	2.47	7	0.6	8
Hong Kong Polytech Univ.	37	6	25.33	6	59.66	6	514.17	6	1252.13	6	20.3	4	2.35	9	0.68	4
Lingnan University	34	7	24.83	7	58.05	7	369.33	7	891.35	7	14.87	13	2.34	10	0.73	3
Chinese Academy of Sci.	31	8	14.83	8	33.55	8	256.33	8	598.51	8	17.28	7	2.26	12	0.48	13
Hong Kong Baptist Univ.	21	9	14	9	30.56	9	234.33	9	523.95	9	16.74	10	2.18	14	0.67	5
Wuhan Univ.	13	11	5.33	11	14.21	11	110.17	10	303.97	10	20.66	3	2.67	3	0.41	16
Tsinghua Univ.	14	10	5.7	10	15.4	10	102.25	11	287.35	11	17.94	5	2.7	2	0.41	15
Xiamen Univ.	3	19	2.33	18	7	15	78	12	153.42	12	33.43		3		0.78	
Zhejiang Univ.	5	15	4	12	7.01	14	45.33	15	143.28	13	11.33	15	1.75	17	0.8	2
HK Monetary Authority	7	13	3	15	7.73	12	63.98	13	128.03	14	21.33	1	2.58	5	0.43	14
Tongji Univ.	3	19	1.5	23	2.45	25	21.5	24	111.82	15	14.33		1.63		0.5	
Shanghai Univ. Fiance & Econ.	2	24	1.25	26	2.17	26	36	18	94.11	16	28.8		1.73		0.63	
National Bur Stat	4	18	3.33	13	7.43	13	49.83	14	94.02	17	14.95	12	2.23	13	0.83	1
Goldman Sachs Co Beijing	2	24	1.5	24	4.73	18	45.33	16	76.3	18	30.22		3.15		0.75	
Chinese Acad Agr Sci	6	14	3.17	14	6.5	16	36	17	64.43	19	11.37	14	2.05	15	0.53	11
Chinese Academy of Social Sci.	8	12	2.95	16	4.24	20	33	19	55.23	20	11.19	17	1.44	18	0.37	18
Nanjing Agr Univ.	2	24	1.5	25	3.29	24	32.5	20	52.04	21	21.67		2.19		0.75	
Renmin Univ. China	2	24	0.83	30	1.44	30	17.75	25	46.31	22	21.3		1.72		0.42	
Nankai Univ.	5	15	2.5	17	5.75	17	28	21	45.68	23	11.2	16	2.3	11	0.5	12
Fudan Univ.	3	19	1.08	28	1.92	28	16.5	26	39.03	24	15.23		1.78		0.36	
State Council DRC	2	24	0.75	32	1.89	29	15	27	38.37	25	20		2.52		0.38	

Institution																
Chongqing Univ.	5	15	2	19	3.57	22	14	28	38.13	26	7	18	1.79	16	0.4	17
Nanjing Univ.	3	19	2	20	3.89	21	27.5	22	35.46	27	13.75		1.95		0.67	
Suzhou Univ.	3	19	2	21	4.6	19	24	23	28.74	28	12		2.3		0.67	
SW Univ Econ & Finance,	2	24	1.25	27	2.12	27	13.75	29	21.23	29	11		1.69		0.63	
Open Univ. Hong Kong	2	24	2	22	3.29	23	13.25	30	19.06	30	6.63		1.64		1	
Sun Yat Sen Univ.	2	24	1	29	1.42	31	11	31	17.75	31	11		1.42		0.5	
E china Normal Univ.	2	24	0.83	31	1.38	32	11	32	16.62	32	13.2		1.65		0.42	
Sichuan Univ.	2	24	0.33	33	0.66	33	5	33	9.84	33	15		1.97		0.17	

Note: (1) We only rank institutions with 2 or more publications;

(2) We only calculate the AVPG, the Quality, and the IA for institutions with 4 or more publications;

(3) The publications of CCAP (Center for Chinese Agricultural Policy), Chinese Academy of Sciences, can be ranked in No. 10 in 2000-2004 by the ARPG index.

Table 4 2005-2009 Ranking by the Publications in Top 50 Economics Journals

Institutions	P		RP		ARP		RPG		ARPG		AVPG		Q		IA	
	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank
Hong Kong Univ. Of Sci. & Tech.	58	1	32.91	1	112.42	1	713.18	1	2445.61	1	21.67	6	3.42	5	0.57	6
Chinese Univ. Hong Kong	47	2	24.66	2	80.14	2	494.99	2	1614.86	2	20.07	11	3.25	10	0.52	7
Peking University	37	3	17.36	4	68.53	3	438.24	3	1322.93	3	19.96	12	3.36	7	0.47	8
University Hong Kong	33	4	21.95	3	58.29	4	395.88	4	1367.32	4	22.81	2	3.12	12	0.67	1
Lingnan University	17	7	10.75	5	31.70	6	200.69	5	732.21	5	22.01	4	3.12	13	0.63	2
City Univ. Hong Kong	19	6	7.61	7	33.55	5	198.83	6	577.98	6	18.50	15	3.55	3	0.40	12
Tsinghua Univ.	28	5	9.12	6	27.01	7	157.84	7	622.43	7	20.75	9	3.48	4	0.33	14
Shanghai Univ Finance & Econ.	16	8	7.42	8	26.35	8	154.00	8	550.21	8	20.76	8	3.55	2	0.46	10
Xiamen Univ.	14	9	5.32	9	17.36	9	116.02	9	385.73	9	21.82	5	3.27	9	0.38	13
Shanghai Jiaotong Univ.	8	11	3.67	11	15.28	10	88.00	10	220.39	10	19.26	14	3.83	1	0.46	9
Chinese Academy of Sci.	6	13	3.58	13	12.04	12	76.05	11	275.27	11	22.11	3	3.30	8	0.61	4
Chinese Academy of Social Sci.	6	13	3.65	12	14.03	11	70.67	12	274.99	12	17.60	16	3.13	11	0.60	5
Central Univ. Fiance & Econ.	9	10	2.69	14	11.20	13	69.00	13	251.14	13	19.27	13	3.39	6	0.30	15
Hong Kong Polytech Univ.	8	11	5.00	10	9.12	14	59.58	14	231.21	14	20.84	7	3.06	14	0.62	3
Macau Univ.	4	15	1.83	15	5.30	15	35.83	15	101.38	15	20.29	10	3.02	15	0.29	16
Fudan Univ.	3	17	1.25	17	3.42	20	29.25	16	71.84	16	23.67		3.25		0.28	
China Agri. Univ.	2	21	1.17	19	3.69	17	27.50	17	102.27	17	19.55		2.95		0.75	
Beijing Normal Univ	3	17	0.90	21	4.43	16	26.50	18	85.10	18	29.25		3.42		0.33	
Zhejiang Univ.	4	15	1.17	18	2.70	22	25.75	19	81.91	19	30.90	1	2.89	16	0.46	11
Nankai Univ.	2	21	1.50	16	3.52	19	23.67	20	69.49	20	17.67		3.15		0.22	
Cheung Kong Grad Sch of Business	3	17	1.00	20	2.90	21	21.30	21	75.89	21	22.00		2.95		0.42	
Renmin Univ. China	3	17	0.83	22	3.65	18	13.17	23	36.43	22	19.33		3.23		0.30	
Guizhou Univ.	2	21	0.61	23	1.40	25	11.67	25	17.69	23	19.00		3.12		0.58	
Wuhan Univ.	2	21	0.44	25	1.54	24	5.50	35	17.71	24	13.00		3.08		0.25	
Hong Kong Baptist Univ.	2	21	0.50	24	1.95	23	5.44	37	16.92	25	11.00		3.19		0.31	

Note: (1) We only rank institutions with 2 or more publications;   (2) We only calculate the AVPG, the Quality, and the IA for institutions with 4 or more publications

(3) The publications of Chinese Academy of Sciences include the publications of CCAP (Center for Chinese Agricultural Policy), Chinese Academy of Sciences.

Table 5　2000-2004 Ranking by the Publications in Top 50 Economics Journals

Institutions	P		RP		ARP		RPG		ARPG		AVPG		Q		IA	
	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank	Value	Rank
Hong Kong Univ. Sci. & Tech.	81	1	43.01	1	143.06	1	992.24	1	3349.69	1	23.07	3	3.33	3	0.53	5
Chinese Univ. Hong Kong	47	2	28.92	2	93.80	2	621.75	2	2019.04	2	21.50	5	3.33	3	0.48	6
University Hong Kong	41	3	24.92	3	81.34	3	508.67	3	1680.02	3	20.41	6	3.16	8	0.34	9
City Univ. Hong Kong	25	4	12.67	4	43.65	4	248.42	4	870.69	4	19.61	9	3.19	7	0.54	4
Peking University	21	5	10.08	5	31.56	5	201.25	5	636.91	5	19.96	7	3.48	1	0.62	2
Hong Kong Polytech Univ.	6	9	4.33	7	14.44	7	104.83	7	373.19	6	15.93	10	2.87	10	0.27	10
Lingnan University	10	6	6.83	6	21.02	6	108.83	6	344.81	7	24.19	1	3.26	5	0.68	1
Wuhan University	7	7	3.00	8	9.48	8	59.17	8	185.68	8	19.72	8	3.19	6	0.43	7
Chinese Academy of Sci.	4	10	2.17	9	7.35	9	47.17	10	181.84	9	21.77	4	3.08	9	0.42	8
Tsinghua u	6	8	2.03	10	7.07	10	48.75	9	157.49	10	23.98	2	3.45	2	0.61	3
HK Baptist	3	11	2.00	11	6.37	11	44.00	11	146.16	11	22.00		3.13		0.67	
CCAP, Chinese Academy of Sci.	2	13	0.83	12	2.66	12	16.83	12	52.37	12	20.20		3.39		0.51	
Chinese Academy of Social Sci.	2	12	0.53	13	1.53	13	13.07	13	37.55	13	24.50		3.24		0.72	

Note: (1) We only rank institutions with 2 or more publications;　　(2) We only calculate the AVPG, the Quality, and the IA for institutions with 4 or more publications;

(3) The publications of Chinese Academy of Sciences include the publications of CCAP (Center for Chinese Agricultural Policy), Chinese Academy of Sciences.