# Academic Productivity and Congeniality in State and Market Driven Systems of Mass Higher Education

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**Changing Conditions and Changing Approaches of Academic Work**
**Berlin, Germany, June 5, 2012**

# Higher Education System

| Country | Mass higher education | Model |
|---|---|---|
| CHINA | Emergent | State driven |
| USA | Mature | Market driven |

# China

- Ascending research productivity
- Resistance to market driven personnel reforms
- IRB residue, FT’ers dominant, rising salaries

# USA

- Plateau-ing research productivity
- Market driven personnel system
- Significant trends toward adjunct faculty

# Hong Kong system

- State funded but market driven
- Ascending levels of research productivity
- Little  resistance to performance driven personnel reforms

# Research productivity (D4)

- Books authored
- Books edited
- Articles in journals/books
- Funded research report
- Conference papers
- Newspaper/mag. articles
- Patents on inventions
- Computer programs
- Artistic works
- Videos or films
- Other

# Congeniality

- Career perspective (B5[4])
- Commitment to the profession (D5[5])
- Job strain (D5[6])
- Job Satisfaction (B6)
- Working conditions (B7)
- Restrictions (D6[1&2])
- Academic freedom (E5)
- Organizational culture E4 (2,4,6)

# China data

- Paper survey questionnaire
- Sampled 60 scholars in 70 institutions
  - 10 under central & 60 under local
- About 4200 faculty members
- About 85% response rate

# USA data

- 5, 065 e-mail surveys
- 1,048 completed
- 20.7% response rate

# Hong Kong SAR

- All 11 degree granting institutions
    - 7 + are research universities
- 811 completed surveys
- 13% response rate

# Results (self-reported productivity)

- China academics report higher levels than USA
  - Except conference paper + artistic works
- HK academics report higher levels than both
  - on Articles, research reports, conference papers & newspaper/magazine articles

# Results - congeniality

- US academics report higher levels than China
- HK academics fall between China&US on all
  - except
    - good communication between management and academics
    - cumbersome administrative process
    - Support for academic freedom

# Significant results
# Congeniality > Productivity

- China
  - job satisfaction (positive)
  - Increased restrictions on publication of results from publically funded projects (negative)
- USA
  - Poor time for a young academic to begin a career (Negative)
- Hong Kong
  - Job satisfaction (positive)
  - Collegiality (negative)
  - Poor time for a young academic (negative)
  - Increased restrictions on publication of results from publically funded projects (negative)

# Congeniality > Productivity

- **job satisfaction**
  - (positive) CHINA&US
- **Increased restrictions on publication of results from publically funded projects**
  - (negative) CHINA&HK
- **Poor time for young academic to begin career**
  - (Negative) HK&US
- **Collegiality**
  - (negative) HK

Table 1: Self-Reported Research Productivity (Hong Kong, Mainland China, & the United States)

| | Country | N | Mean | S.D. | F | df |
|---|---|---|---|---|---|---|
| Scholarly books you authored or co-authored | China | 1826 | .85[HH] | 2.08 | 52.98*** | 2,3542 |
| | Hong Kong | 676 | **.48[H]** | 1.01 | | |
| | U.S. | 1043 | .23 | .56 | | |
| Scholarly books you edited or co-edited | China | 1826 | .84[HH] | 1.82 | 62.60*** | 2,3542 |
| | Hong Kong | 676 | **.44[H]** | .85 | | |
| | U.S. | 1043 | .23 | .92 | | |
| Articles published in an academic book or journal | China | 1826 | 8.54[H] | 10.15 | 78.12*** | 2,3542 |
| | Hong Kong | 676 | **9.55[H]** | 12.55 | | |
| | U.S. | 1043 | 4.30 | 7.38 | | |
| Research report/monograph written for a funded project | China | 1826 | 1.43 | 4.23 | 2.32 | 2,3542 |
| | Hong Kong | 676 | **1.61** | 3.00 | | |
| | U.S | 1043 | 1.21 | 3.69 | | |
| Paper presented at a scholarly conference | China | 1826 | 2.58 | 4.87 | 105.79*** | 2,3542 |
| | Hong Kong | 676 | **7.50[HH]** | 9.86 | | |
| | U.S. | 1043 | 5.69[H] | 11.18 | | |
| Professional article written for a newspaper or magazine | China | 1826 | .97 | 5.00 | 4.09* | 2,3542 |
| | Hong Kong | 676 | **2.25[H]** | 8.35 | | |
| | U.S. | 1043 | 1.49 | 15.99 | | |
| Patent secured on a process or invention | China | 1826 | .30[H] | 1.19 | 15.60*** | 2,3542 |
| | Hong Kong | 676 | **.19** | 1.10 | | |
| | U.S. | 1043 | 7.67E-02 | .53 | | |
| Computer program written for public use | China | 1826 | .33[HH] | 1.64 | 16.68*** | 2,3542 |
| | Hong Kong | 676 | **8.14E-02** | .53 | | |
| | U.S. | 1043 | .10 | .55 | | |
| Artistic work performed or exhibited | China | 1826 | .13 | 1.60 | 11.30*** | 2,3542 |
| | Hong Kong | 676 | **.24** | 1.43 | | |
| | U.S. | 1043 | 1.73[HH] | 16.39 | | |
| Video or film produced | China | 1826 | 6.96E-02 | 1.66 | 1.31 | 2,3542 |
| | Hong Kong | 676 | **.12** | .61 | | |
| | U.S. | 1043 | .15 | 1.13 | | |
| Others | China | 1826 | 5.64E-02 | .84 | 8.71*** | 2,3542 |
| | Hong Kong | 676 | **.63[H]** | 8.70 | | |
| | U.S. | 1043 | .87[H] | 6.57 | | |

Notes: [HH] = Research productivity is higher than that of two other system; [H] = Research productivity is higher than that of one other system; * p<.05; ***p<.001.

Table 2: Perceived Congeniality of Work Environment (Hong Kong, Mainland China, & the United States)

| | Country | N | Mean | S.D. | F | df |
|---|---|---|---|---|---|---|
| This is a poor time for any young person to begin an academic career in my field | China | 3403 | 2.86 | 1.25 | 123.28*** | 2,5333 |
| | Hong Kong | 787 | **3.00$^{C}$** | 1.38 | | |
| | U.S. | 1146 | 3.53$^{CC}$ | 1.23 | | |
| If I had it to do over again, I would not become an academic | China | 3416 | 3.69 | 1.35 | 61.12*** | 2,5350 |
| | Hong Kong | 793 | **3.78** | 1.23 | | |
| | U.S. | 1144 | 4.18$^{CC}$ | 1.10 | | |
| My job is a source of considerable personal strain | China | 3436 | 2.41 | 1.17 | 142.76*** | 2,5367 |
| | Hong Kong | 788 | **2.84$^{C}$** | 1.22 | | |
| | U.S. | 1146 | 3.06$^{CC}$ | 1.24 | | |
| How would you rate your overall satisfaction with your current job? | China | 3515 | 2.47 | .73 | 18.87*** | 2,5458 |
| | Hong Kong | 800 | **2.35$^{C}$** | .94 | | |
| | U.S | 1146 | 2.31$^{C}$ | .97 | | |
| Working conditions in higher education | China | 3565 | 2.29$^{CC}$ | 1.04 | 308.23*** | 2,5507 |
| | Hong Kong | 799 | **3.22** | 1.14 | | |
| | U.S. | 1146 | 2.82$^{C}$ | 1.03 | | |
| Restrictions on the publication of results from my publicly-funded research have increased since my first appointment | China | 2620 | 3.17 | 1.28 | 57.34*** | 2,3763 |
| | Hong Kong | 651 | **3.54$^{C}$** | 1.22 | | |
| | U.S. | 495 | 3.75$^{CC}$ | 1.22 | | |
| Restrictions on the publication of results from my privately-funded research have increased since my first appointment | China | 2436 | 3.32 | 1.24 | 28.37*** | 2,3503 |
| | Hong Kong | 618 | **3.59$^{C}$** | 1.06 | | |
| | U.S. | 452 | 3.71$^{C}$ | 1.20 | | |
| Good communication between management and academics | China | 3339 | 3.04$^{CC}$ | 1.24 | 23.60*** | 2,5238 |
| | Hong Kong | 775 | **3.34** | 1.18 | | |
| | U.S. | 1127 | 3.21 | 1.18 | | |
| Collegiality in decision-making processes | China | 3287 | 2.95$^{CC}$ | 1.23 | 24.45*** | 2,5172 |
| | Hong Kong | 766 | **3.26** | 1.06 | | |
| | U.S. | 1122 | 3.09$^{C}$ | 1.09 | | |
| A cumbersome administrative process | China | 3289 | 2.41$^{C}$ | 1.18 | 10.04*** | 2,5172 |
| | Hong Kong | 766 | **2.20** | 1.01 | | |
| | U.S. | 1120 | 2.35$^{C}$ | 1.16 | | |
| The administration supports academic freedom | China | 3344 | 2.50 | 1.15 | 5.97** | 2,5231 |
| | Hong Kong | 780 | **2.51** | 1.04 | | |
| | U.S. | 1110 | 2.37$^{CC}$ | 1.02 | | |

Notes: $^{CC}$ = Perceived level of congeniality is higher than that of two other systems; $^{C}$ = Perceived level of congeniality is higher than that of one other system; **p<.01; ***p<.001.

Table 3: Predicting Research Productivity from Perceived Congeniality

($N_{\text{Mainland China}} = 1{,}862$; $N_{\text{Hong Kong}} = 676$; $N_{\text{U.S.}} = 1043$)

| Research Productivity | China | Hong Kong | U.S. |
|---|---|---|---|
| $R^2$ | .02 | .05 | .02 |
| F | 10.34*** | 7.74*** | 5.36* |
| $Df^L$ | 2, 1338 | 4, 552 | 1,356 |
| $\beta_{\text{restrictions\_publicly}}$ | .10*** | .13** | - |
| $\beta_{\text{collegiality}}$ | - | .12** | - |
| $\beta_{\text{satisfaction}}$ | -.06* | -.15*** | - |
| $\beta_{\text{poor time}}$ | - | -.11* | -.12* |

Notes: $^L$ = Listwise cases exclusion was used;

restrictions_publicly = restrictions on the publication of results from my publicly-funded research have increased since my first appointment;

collegiality = collegiality in decision-making processes;

satisfaction = how would you rate your overall satisfaction with your current job;

poor time = this is a poor time for any young person to begin an academic career in my field;

*=p.<.05; **=p<.01; ***=p<.001.

# Conclusion