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The internationalization of Chinese social sciences research: publication, collaboration, and citation patterns in economics, education, and political science

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ABSTRACT

Despite recent Chinese government policies aiming to balance international and national publishing patterns, the enduring impact on China's global engagements, publications, and collaborations remains uncertain. Analyzing 8,962 publications from Scopus between 2016 and 2020, the paper assesses publication, collaboration, and citation patterns among the top 500 productive China-affiliated scholars within Economics, Education, and Political Science. Results indicate that publications are primarily in Western journals, with Political Science often focusing on China-specific issues, suggesting potential 'silos'. Co-authorship patterns show Western dominance, with diverse international collaborations in Education and Economics, but more national-focused in Political Science. The paper concludes with discussions on practical implications and study limitations.

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Introduction

China, the second-largest contributor to global R&D expenditures, accounts for 21% of global science and engineering publications (U.S. National Science Board 2022). A recent study (Zhu and Liu 2020) predicted that China, having already surpassed the USA in the production of original research articles, might also overtake the USA in total SCI-indexed publications. However, its output in the social sciences and humanities (SSH) lags in global influence compared to natural sciences, a disparity influenced by several factors, including historical traditions and cultural influences (Xu 2022). This gap is further compounded by contemporary challenges such as language barriers and the complexities of academic governance in China.

While China's knowledge capability has grown impressively over the past four decades, this growth has been partially inflated by the inclusion of Chinese language journals in

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international indices, and the country remains in a 'catching-up' phase rather than being a fully developed scientific superpower (Horta and Shen 2020). This specialized focus on STEM disciplines has resulted in underperforming and neglected SSH areas, where research funding is sparse and competitiveness has stagnated. Moreover, the dominance of English in global academic publishing presents significant barriers for Chinese social science and humanities (SSH) scholars. While this language barrier affects non-native English speakers across disciplines, SSH researchers in China may face additional challenges due to the field's strong orientation toward local issues and the prevailing use of Chinese as the primary language of domestic scholarship (Flowerdew and Li 2009). This tension between local and global academic practices reflects broader dilemmas faced by Chinese SSH academics, who operate within a highly centralized higher education system, and often neet to navigate complex demands between international publishing and engagements, as well as national and sometimes ideological agendas (Gao and Zheng 2020).

Despite China's significant contributions to global R&D and its increasing volume of publications, there remains a notable gap in our understanding of the publication, collaboration, and citation patterns within international research. This gap is particularly striking in the social sciences, where, in contrast to the natural sciences, China's research has not yet garnered the same level of global visibility or influence (Liu et al. 2015; U.S. National Science Foundation 2020; Zhang et al. 2021). To address this, it is essential to deepen our understanding of the current global impact of Chinese social sciences research, as this will provide critical insights into the evolution of these fields and their growing influence on international academic and policy debates.

This paper seeks to address the knowledge gap by exploring the global impact of Chinese social sciences research, with a focus on the disciplines of Economics, Education, and Political Science. These three disciplines were selected for several reasons that underscore their unique significance within China's social sciences research landscape. On one hand, Economics, Education, and Political Science are fields that have a profound impact on global policy-making, governance, and socioeconomic development. As China continues to rise as a global power, research outputs in these areas are particularly influential in shaping international perceptions and policies related to China's economic strategies, educational reforms, and political governance. On the other hand, while Economics and Education are ranked first in the Chinese Social Sciences Citation Index (CSSCI) and therefore hold significant importance, Political Science, despite being fifth, was chosen due to its critical role in understanding the ideological and governance-related aspects of China's development (Reny 2016; Wang and Guo 2019). The selection of these fields allows for a balanced exploration of strategically critical disciplines within the SSH landscape in China.

Using scientometric methods, our study analyzes publication, collaboration, and citation patterns among leading China-affiliated scholars through network analysis. The primary research question guiding this study is: How do the publication, collaboration, and citation patterns of top China-affiliated scholars in Economics, Education, and Political Science compare across these fields? Analyzing prolific scholars offers insights into research trends and influential figures, but it is important to recognize the biases and inequalities in scientific productivity, citation patterns, and impact related to factors like gender, race, and career stages (Astegiano, Sebastián-González, and Castanho 2019; Brown and Leigh 2020; Kozlowski et al. 2022; Way et al. 2019). This research acknowledges these caveats, avoiding the assumption that 'prolific' equates to 'better'

or 'more valuable' scholars. The study discusses practical implications and limitations, acknowledging uncertainties about the long-term impacts of Chinese government policies aiming to balance international and national publishing patterns (Shu, Liu, and Larivière 2022; Zhang and Sivertsen 2020).

Challenges in global social sciences research

While international collaboration and the number of co-authored articles have increased across disciplines (Henriksen 2016; Kwiek 2021; Lee and Haupt 2021b), there is notable variation in pluralization levels. Social sciences and humanities exhibit slower and smaller-scale international collaboration compared to natural sciences, attributed to factors such as dominant single-author publishing habits and various linguistic, cultural, epistemological, and structural challenges (Larivière, Gingras, and Archambault 2006; Weidemann 2010).

Overall, global social sciences and humanities research encounters greater difficulties in incorporating diverse and peripheral perspectives compared to the natural sciences. Social sciences and humanities often engage with more context-specific, locally grounded issues that are less likely to align with global research priorities driven by dominant Anglo-European perspectives. This leads to challenges in gaining international recognition. Despite the expansion of social sciences and humanities research in non-dominant systems, the global research space remains largely dominated by Anglo-European hegemony (Connell 2007). This dominance is further reflected in the phenomenon of 'English imperialism' (Phillipson 1992), where the overwhelming prevalence of English in scientific writing not only influences research agendas, paradigms, and theories but also marginalizes research from non-Western traditions. While English is critical for international publication across all disciplines, social sciences and humanities scholars face additional challenges due to the ideological and disciplinary structures that prioritize Western knowledge production frameworks. As a result, scholars from non-dominant regions, particularly in the social sciences and humanities, encounter significant barriers in having their work recognized or valued within global academic discourse (Dübgen 2020; Santos 2014).

Social sciences research in China

China is now a prominent player in global research, holding the position of the second-largest country in terms of R&D expenditures, just after the United States. Together, the two countries account for approximately half of the global R&D expenditure (U.S. National Science Board 2022). China also leads in global science and engineering publications, contributing 21% to the total and ranking first in publication volume and second in the top 1% of cited publications (U.S. National Science Board 2022).

In recent decades, global research systems have grappled with the tension between 'scientific nationalism' and 'scientific globalism,' trending towards globalization and diversification (Lee and Haupt 2021b; Sá and Sabzalieva 2018). Wen, Zhou, and Hu (2022) explored the evolving role of China in the global science system, highlighting the tensions within its national science framework as the country advances to a more central position in global knowledge production. Their study examined publishing and international co-authorship patterns from Chinese universities, revealing that China's scientific activities

are intricately linked to the 'centre-periphery' model of global science. These findings illustrate a conflict between China's rapid adoption of English-language publishing and the need to foster and sustain local endogenous research. As China transitions from a 'peripheral' to a more 'central' role in global science, this integration is predominantly driven by a few leading research universities and disciplines in the natural sciences and engineering.

Notwithstanding, the global/national synergy and de-politicization of research, which facilitated the rapid growth of Chinese science (Marginson 2018), did not happen to the same extent in the social sciences and humanities. While social sciences and humanities research in China is gradually enhancing its global visibility, it is still not as influential as the natural science disciplines (Liu et al. 2015; U.S. National Science Foundation 2020; Zhang et al. 2021). For instance, the world share of China's SSCI (Social Sciences Citation Index) articles was around 5% in 2018, whereas the United States has maintained a 25–30% world share over the past decades (Zhang et al. 2021).

Recent studies illustrate the evolution of Chinese social sciences. Zhang et al. (2021) highlight a noticeable increase in the number of social science articles published by Chinese authors in international journals over the past four decades. This growth is accompanied by broader collaboration networks and an increase in publications in higher impact journals. However, there remains significant variation in internationalization across different social scientific disciplines. Similarly, Liu et al. (2015) reveal that while China's volume and global ranking of SSCI publications have risen, it remains a minor player in the global social sciences landscape, marked by an imbalance at regional and institutional levels.

In China, factors influencing social sciences and humanities research include the Imperial governance tradition with its emphasis on stability and unity, Sinic traditions and particularly Confucianism, ideological contexts like Marxism-Leninism and 'socialism with Chinese characteristics', and Western cultures imported by colonization and diffused through globalization (Xu 2022). Social sciences and humanities research is so culturally rooted and ideologically-attached that it can hardly detach from these influences; therefore, such research in China constantly encounters tensions between endogenous knowledge, national orientations, political agenda, global influences, and Western imprints (Gao and Zheng 2020; Xu 2021; Yang, Xie, and Wen 2019).

Additionally, the evolution of coauthorship patterns in China's humanities and social sciences, as examined by Li and Li (2015), reveals a significant shift from national to increasingly international collaborations. Despite the Chinese government's initiatives to boost the international presence of its research, challenges persist. For example, Zhou, Thijs, and Glänzel (2009) note that while China's scientific production is growing, social sciences have not kept pace with this growth in terms of global impact and citation patterns.

While Chinese social sciences and humanities researchers have received encouragement and incentives to publish internationally for many years, tensions between internationalization and endogenization have been a key issue for debate (Xu, Oancea, and Rose 2021). Since the early 2000s, the Chinese government has issued policies to balance international and national publishing patterns. Xu (2020) examined China's growing emphasis on English-language publishing, accompanied with national and institutional policies that offer incentives for scholars to publish internationally. This push was part of a broader

internationalization strategy that has evolved from merely learning from Western practices to actively enhancing domestic research capabilities and expanding China's global influence. Despite these efforts, Xu highlights that this 'going out' strategy reveals inherent contradictions within the global academic landscape, which mirrors the centre-periphery dynamic of world systems theory. Her study, based on an analysis of 172 institutional incentive documents and interviews with 75 academics, administrators, and journal editors, finds that the focus on international publications may marginalize Chinese-language research and impose Western standards on domestic knowledge production. This dynamic risks reducing Chinese contributions to the global conversation to Western frameworks, while the study also pointed out emerging practices that challenge existing global power structures and emphasize the need for a more pluralistic approach to knowledge production.

In 2020, the central government issued a series of policies to firmly abolish the 'supremacy of SCI' (*SCI zhi shang*, SCI 至上). These highlight domestic research and its impact on Chinese society, and bars universities from using metrics related to SCI (Science Citation Index), SSCI or CSSCI (Chinese Social Sciences Citation Index) as the direct basis for research evaluation (Ministry of Education 2020; Ministry of Education & Ministry of Science and Technology 2020). While some studies have discussed the preliminary influences of the policy shift (Shu, Liu, and Larivière 2022; Zhang and Sivertsen 2020), the long-term impacts on China's international engagements, publications and collaborations remain to be traced.

Education, economics and political sciences research in China

While social sciences and humanities share some common cultures and characteristics, they are not homogenous (Kagan 2009; Ochsner, Hug, and Daniel 2016). This study chose to focus on three social sciences disciplines in China – Economics, Education, and Political Science due to their substantial influence on global policy-making and governance, with Economics and Education leading in the Chinese Social Sciences Citation Index (CSSCI) and Political Science (fifth) providing critical insights into China's ideological and governance frameworks.

In terms of publication volume in the Chinese language, Economics, Education and Political Science ranked, respectively, first, second and fifth among all CSSCI publications between 1998 and 2013 (Gong et al. 2019). The developments of three disciplines in contemporary China were all influenced by 'foreign' theories and approaches, including from the Soviet Union and 'the West' (Feng 2019; Hao 2020; Wang and Guo 2019). All had a growing volume of international publications, mostly published in English (Shen, Li, and Sun 2022; Wang and Guo 2019; Zhou, Qin, and Lan 2017). Their international co-authors are mostly from 'the West', particularly the United States, the United Kingdom, Canada, Western Europe and Australia (Shen, Li, and Sun 2022; Zhou, Qin, and Lan 2017). Patterns of using 'Western' conceptual frameworks to investigate local issues, and relatively low citation rates for international publications were identified in all disciplines (Hao 2020; Shen, Li, and Sun 2022; Wang and Guo 2019; Zhou, Qin, and Lan 2017). Finding a balance between internationalization, Westernization and endogenization was one of the key challenges for each discipline (Hao 2020; Shen, Li, and Sun 2022; Wang and Guo 2019; Zhou, Qin, and Lan 2017).

However, the extent of internationalization (in most cases 'Westernization') differs across the three disciplines. Economics was found to be the most internationalized field, followed by Education and Political Science. For instance, Economics has a comparatively higher world share of international publications from China (Hao 2020) and a higher percentage of articles citing foreign language (mainly English) references (Gong et al. 2019). While all social sciences in China are subject to political and ideological influence, Political Science faces a more complicated situation with regards to internationalization, as compared to the other two disciplines (Reny 2016; Wang and Guo 2019). Notwithstanding, we still lack a comprehensive understanding of the publication, collaboration, as well as the citation patterns of international publications within these social scientific fields.

It is therefore important to understand the present global impact of Chinese social sciences research. To fill this knowledge gap, we selected Economics, Education, and Political Science as our research focuses, and formulated the following, diverse set of research question:

RQ1: How do citation counts in a) Economics, b) Education, and c) Political Science differ across countries when compared to China?

RQ2: How do view counts in a) Economics, b) Education, and c) Political Science differ across countries when compared to China?

The case of the most prolific scholars

Analyzing prolific scholars in a field provides insights into research trends, policies, and influential figures, offering a snapshot of knowledge production (Kwiek 2018). Prolific scholars are often at the forefront of new developments, their work highly cited and influential (Aggarwal, Schirm, and Zhao 2006; Bolkan et al. 2012; Cucari et al. 2023; Hunter and Kuh 1987). However, studies reveal biases and inequalities in scientific productivity, citation patterns, and impact related to factors like gender, race, research fields, career stages, affiliations, and disabilities (Astegiano, Sebastián-González, and Castanho 2019; Brown and Leigh 2020; Kozlowski et al. 2022; Way et al. 2019). This research recognizes these caveats, refraining from equating 'prolific scholars' with 'better' or 'valuable' scholars.

Considering the total volume of publications, it was also a practical choice for our research to analyse this selected volume of literature. We then formulated further four research questions:

RQ4: Where do the most productive Chinese scholars publish in a) Economics, b) Education, and c) Political Science?

RQ5: Which countries do the most productive Chinese scholars collaborate with in publishing in a) Economics, b) Education, and c) Political Science?

RQ6: Which institutions do the most productive Chinese scholars collaborate with in publishing in a) Economics, b) Education, and c) Political Science?

RQ7: Which countries cite the most productive Chinese scholars in a) Economics, b) Education, and c) Political Science?

We must emphasize that, while focusing on prolific scholars provides valuable insights, it also highlights the privileges they possess due to their advanced career stages, extensive

networks, and institutional affiliations. These privileges often reinforce existing hierarchies in knowledge production, perpetuating disparities in visibility and influence. Prolific scholars often have access to more research funding, prestigious positions, and collaboration opportunities, which, in turn, increase their visibility and citation impact. However, such advantages can obscure the contributions of scholars from marginalized or underrepresented groups, whose work may not receive the same level of recognition despite being equally valuable. Moreover, these privileges intersect with other factors such as gender, race, and institutional ranking, compounding inequalities in academic recognition and the distribution of influence within the field.

Methods

This study collected and analysed 8,962 publications from Scopus, using SciVal and Scopus for data collection, SPSS for statistical analysis and Gephi for network analysis and visualization. The following section explains the variables and data analysis.

Variables

Dependent and independent variables

Citation. Citation Count in SciVal indicates the total citation impact of an entity: how many citations have this entity's publications received? SciVal works with Scopus data.

Views (usage). Views Count measures the overall usage impact of an entity, reflecting the total views received by its publications. In SciVal, Views Counts are derived from Scopus usage data, comprising abstract views and clicks to view full-text on the publisher's website. Although this metric is Scopus-based and does not account for usage across various databases or journal platforms, it is reasonable to assume that, while numerical variations may exist, the primary usage trends remain consistent across different platforms.

Country: Dummy variable: China serves as the reference. Throughout the paper, 'China' specifically refers to mainland China. Although Scopus categorizes Hong Kong and Macau as countries in its datasets, they are Special Administrative Regions of China. While 'system level' might be a more accurate term, we have retained 'country level' for consistency with the dataset, with clarifications provided for Hong Kong and Macau. For indicative comparisons, we selected the United Kingdom, the United States, and Germany, considering their frequent mention among the most prolific Western countries in academic knowledge production (Demeter 2020; Rajkó et al. 2023).

To add more granularity to our analysis, we conducted a series of complementary regressions using citations per document and views per document as dependent variables (see. Appendix I).

Control variable

Research output (number of published papers): Scholarly output indexed in Scopus. We controlled for scholarly output to account for the influence of publication volume on citation counts (Larivière and Costas 2016) and to mitigate potential bias due to differences in academic seniority (Rajkó et al. 2023).

Statistical analysis

To address the research questions, we employed Ordinary Least Squares (OLS) regressions with citation and view counts as dependent variables. We controlled for research output in all models across the three fields (Economics, Education, and Political Science) to account for the influence of publication volume on citations and view counts. Given the study's focus on Chinese scholars' research outputs, China was used as the baseline country. This methodological approach was chosen to ensure rigorous analysis while accounting for potential biases related to publication volume.

Network analysis

Data collection

To assess network-like characteristics of journal frequency and co-occurrence, international collaboration, as well as citation patterns, we applied network analysis. Gephi was selected for this study due to its robust capabilities in network analysis and visualization. All data were derived from the Scopus/Scival database. Specifically, we collected data regarding the top 500 most productive scholars affiliated in China within the fields of Education, Political Science, and Economics, between 2016 and 2020 (in Scopus: *Education*, *Political Science and International Relations*, and *Economics and Econometrics*).

In our first analysis, we measured scholar-level publication counts per journal, focusing solely on journal articles. We constructed a network for each field, with vertices representing journals and edges indicating co-occurrences of journals at the scholar level. If a scholar published in both journals A and B from 2016 to 2020, an edge was drawn between A and B. Multiple edges were combined into weighted single edges. To account for individual journal frequencies, scholar-level occurrences of journals were included as weighted loops based on publication counts per journal. Multiple loops were then aggregated into weighted single loops for each node in the network.

In the second analysis of international collaboration patterns, we measured scholar-level publication counts per country and institution, including the scholars' own country (China) and institutional affiliations. We considered only journal articles. Two networks were constructed for each field – country-level and institution-level – with vertices representing countries and institutions and edges indicating co-occurrences of co-authors' countries or institutions at the scholar level. If a scholar co-authored publications with authors affiliated with both countries A and B from 2016 to 2020, an edge was added between A and B. Multiple edges were combined into weighted single edges. To account for individual country and institution frequencies in collaborations, scholar-level co-author affiliations were included as weighted loops based on publication counts per country and institution. Multiple loops were then aggregated into weighted single loops for each node in the network.

In the third analysis of citation patterns, we measured scholar-level citation counts based on the countries of authors citing the documents. We constructed a network for each field, where vertices represented countries and edges denoted co-occurrences of citing authors' countries at the scholar level. An edge was added between countries A and B if a scholar was cited by authors from both. Multiple edges were consolidated

into weighted single edges. To account for individual country frequencies in citations, we included scholar-level country occurrences of citations as loops, weighted by citation counts per country of the citing authors. Multiple loops were then combined into weighted single loops for each node in the network. Note that while the citing documents were from 2016–2020, Scopus/Scival includes older publications, and citing documents were not restricted to journal articles to facilitate data collection.

Findings

RQ1a and RQ2a asked whether there are country differences in citation and view counts in the field of Economics. In Table 1 we report the results of the regression analysis for citation counts. After controlling for research output (β = .49; p = >.001), results of the regression analysis indicate that the United Kingdom (β = -.10; p = >.001), United States (β = -.09; p = >.001), and Germany (β = -.18; p = >.001) have less citations than China.

However, when it comes to view counts, Table 2 reveals that after controlling for research output (β = .50; p = >.001), the United Kingdom (β = .04; p = >.05) has statistically significant more views than China, while Germany (β = -.04; p = >.05) has statistically significant less views than China. There are not statistically significant differences between the United States and China.

RQ1b and RQ2b asked whether there are country differences in citation and view counts in the field of Education. In Table 3, we report the results of the regression analysis for citation counts. After controlling for research output (β = .42; p = >.001), results of the regression analysis indicate that the United Kingdom (β = .15; p = >.001), the United States (β = .10; p = >.01), and Germany (β = .07; p = >.01) have more citation counts than China.

However, when it comes to view counts, Table 4 reveals that after controlling for research output (β = .82; p = >.001), the United States (β = -.14; p = >.001) has statistically significant more views than China. There are no statistically significant differences between the United Kingdom and China, and between Germany and China.

RQ1c and RQ2c asked whether there are country differences in citation and view counts in the field of Political Science. In Table 5, we report the results of the regression analysis for citation counts. After controlling for research output (β = .29; p = >.001), results of the regression analysis indicate that United Kingdom (β = .14; p = >.001), United States (β = .24; p = >.001), and Germany (β = .10; p = >.001), have more citation counts than China.

Table 1. OLS-Regression predicting citation counts in Economics.

	β	SE	Lower Bound CI	Upper Bound CI
Block 1				
Research Output	.49***	1.58	14.69	21.01
ΔR^2	25.9%			
Block 2				
United Kingdom	−.10***	10.18	−74.50	−33.88
United States	−.09***	15.83	−77.29	−16.44
Germany	−.18***	8.94	−111.64	−75.92
ΔR^2	2.1%			
Total R^2	28%			

Sample size = 2,000. Cell entries are final-entry standardized Beta (β) coefficients. Coefficients effects accounted for robust standard errors test based on bootstrapping to 1,000 resamples with biased corrected confidence (95%) to assess statistical significance. *p < .05; **p < .01; ***p < .001.

Table 2. OLS-Regression predicting view counts in Economics.

	β	SE	Lower Bound CI	Upper Bound CI
Block 1				
Research Output	.58***	2.38	34.37	43.23
ΔR^2	33.5%			
Block 2				
United Kingdom	.04*	17.03	2.90	71.60
United States	−.01	23.58	−56.85	32.73
Germany	−.04*	16.71	−68.53	−4.08
ΔR^2	0.4%			
Total R^2	33.9%			

Sample size = 2,000. Cell entries are final-entry standardized Beta (β) coefficients. Coefficients effects accounted for robust standard errors test based on bootstrapping to 1,000 resamples with biased corrected confidence (95%) to assess statistical significance. *$p < .05$; **$p < .01$; ***$p < .001$.

Table 3. OLS-Regression predicting citation counts in Education.

	β	SE	Lower Bound CI	Upper Bound CI
Block 1				
Research Output	.42***	.62	8.17	11.50
ΔR^2	21.2%			
Block 2				
United Kingdom	.15***	12.83	54.72	112.78
United States	.10**	16.60	23.13	93.16
Germany	.07**	12.75	26.20	51.44
ΔR^2	1.5%			
Total R^2	22.7%			

Sample size = 2,000. Cell entries are final-entry standardized Beta (β) coefficients. Coefficients effects accounted for robust standard errors test based on bootstrapping to 1,000 resamples with biased corrected confidence (95%) to assess statistical significance. *$p < .05$; **$p < .01$; ***$p < .001$.

However, when it comes to view counts, Table 6 reveals that after controlling for research output (β = .61; $p = >.001$), there are no statistically significant difference between countries.

RQ4 Asked where the most productive Chinese scholars published in each discipline. Figures 1–3 show that, especially in Political Science but also in Economics, journals with an Asian focus are more prevalent amongst the most prolific scholars than journals with a broader focus.

Table 4. OLS-Regression predicting views counts in Education.

	β	SE	Lower Bound CI	Upper Bound CI
Block 1				
Research Output	.82***	1.42	25.16	30.88
ΔR^2	52.5%			
Block 2				
United Kingdom	.03	13.03	−4.21	47.14
United States	−.14***	28.06	−163.55	−53.26
Germany	.00	12.62	−25.67	25.64
ΔR^2	1.3%			
Total R^2	53.8%			

Sample size = 2,000. Cell entries are final-entry standardized Beta (β) coefficients. Coefficients effects accounted for robust standard errors test based on bootstrapping to 1,000 resamples with biased corrected confidence (95%) to assess statistical significance. *$p < .05$; **$p < .01$; ***$p < .001$.

Table 5. OLS-Regression predicting citation counts in Political Science.

	β	SE	Lower Bound CI	Upper Bound CI
Block 1				
Research Output	.29***	.82	4.21	7.49
ΔR^2	16.6%			
Block 2				
United Kingdom	.14***	3.97	11.65	27.52
United States	.24***	5.37	22.66	44.75
Germany	.10***	2.22	10.22	19.22
ΔR^2	2.3%			
Total R^2	18.8%			

Sample size = 2,000. Cell entries are final-entry standardized Beta (β) coefficients. Coefficients effects accounted for robust standard errors test based on bootstrapping to 1,000 resamples with biased corrected confidence (95%) to assess statistical significance. *$p < .05$; **$p < .01$; ***$p < .001$.

Table 6. OLS-Regression predicting view counts in Political Science.

	β	SE	Lower Bound CI	Upper Bound CI
Block 1				
Research Output	.61***	1.01s	15.11	18.95
ΔR^2	37%			
Block 2				
United Kingdom	.02	4.87	−5.68	12.82
United States	−.03	6.12	−17.96	5.84
Germany	−.03	3.00	−11.36	0.17
ΔR^2	0.2%			
Total R^2	37.2%			

Sample size = 2,000. Cell entries are final-entry standardized Beta (β) coefficients. Coefficients effects accounted for robust standard errors test based on bootstrapping to 1,000 resamples with biased corrected confidence (95%) to assess statistical significance. *$p < .05$; **$p < .01$; ***$p < .001$.

RQ5 asked with whom the most productive Chinese scholars published between 2016 and 2020 at country level in each discipline. Figures 4–6 show that the United States and the United Kingdom are the strongest partners for collaboration, but there are significant ties to Asian partners x such as Taiwan, Malaysia, India or Vietnam.

RQ6 asked with whom the most productive Chinese scholars published between 2016 and 2020 on an institution level in each discipline. Figures 7–9 shows that Chinese institutions have the most substantial ties to other Chinese or other Asian institutions in each discipline.

Finally, RQ7 asked who cited the most productive Chinese scholars on country level in each discipline. Figures 10–12 and Table 7 shows that, in each discipline, the vast majority of citations come from other Chinese researchers so, as we will argue in the discussion section, Chinese impact (in terms of citations) is not yet largely international.

Discussion

With regards to country-level comparison of citation counts within the examined fields, this study found that in the field of Economics, publications by the most productive scholars from China had more citations than those published from the United States, the United Kingdom and Germany (RQ1a). In Education (RQ1b) and Political Science (RQ1c), publications from the United States, the United Kingdom and Germany had more citations than those from China. The fewer citation rates in Chinese Education and Political

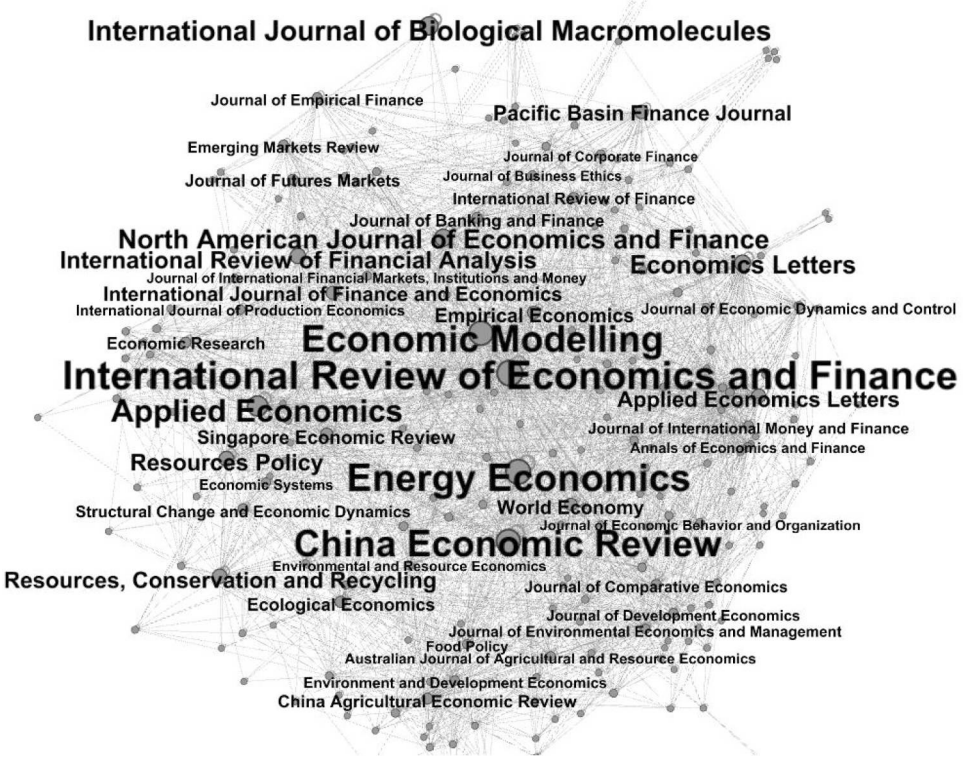


Figure 1. The most popular journals amongst the most productive Chinese scholars in Economics.

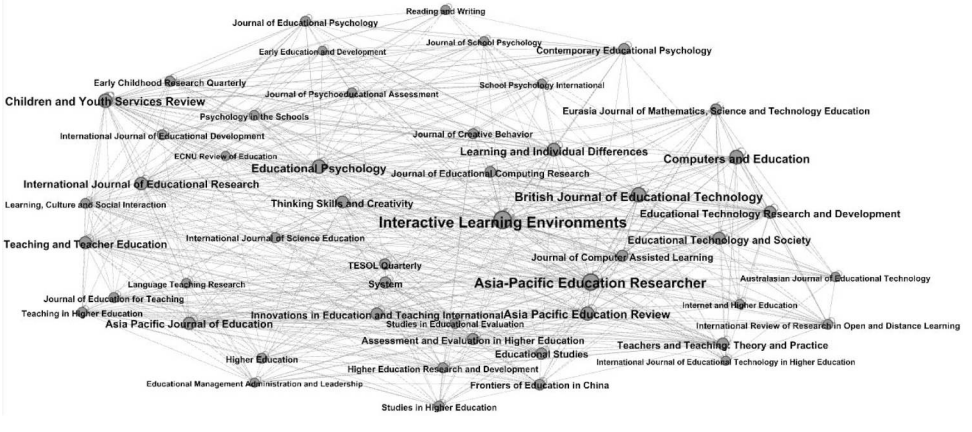


Figure 2. The most popular journals amongst the most productive Chinese scholars in Education.

Science international publications echo previous research (Shen, Li, and Sun 2022; Wang and Guo 2019). But the higher citation rates in Economics differ from findings from previous research on publications in the past decade (Zhou, Qin, and Lan 2017), showcasing the increased international research influence (if measured by citations) of Economic research in China.



Figure 3. The most popular journals amongst the most productive Chinese scholars in Political Science.

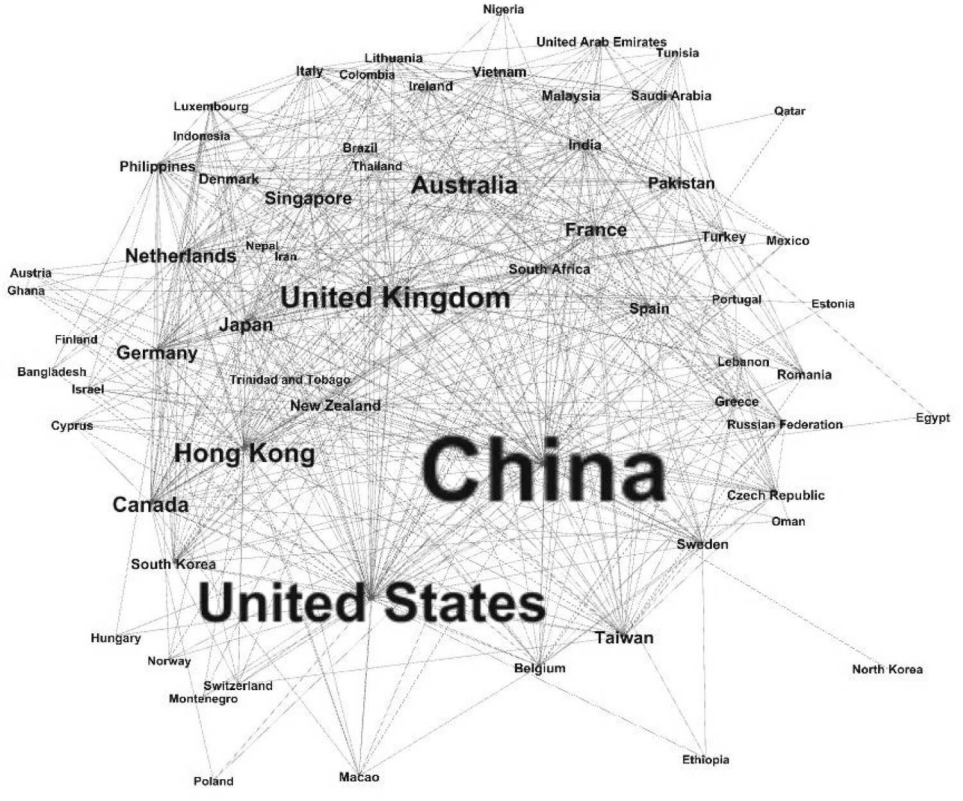


Figure 4. Country-level collaboration network of the most productive Chinese scholars in Economics.

The country-level view count comparison presented a nuanced picture (RQ2a, RQ2b, RQ2c). No significant difference was observed between the United States and China in Economics, the United Kingdom, Germany, and China in Education, and the United States, the United Kingdom, Germany, and China in Political Sciences. There are two exceptions: in Economics, publications from the United Kingdom had higher view counts than China, while Germany had fewer view counts than China. In Education, publications from the United States received more view counts than China. Overall, publications from China in Economics garnered comparable research attention to those from the United States, the United Kingdom, and Germany. However, research in Education and Political Science from China may attract less attention compared to the United Kingdom and the United States, respectively, underscoring the higher international research influence of Economics research from China.

The increased citations and visibility in Economics may reflect the field's global integration and its emphasis on empirical, data-driven studies that often align well with international research priorities. Economics research tends to address globally relevant issues such as market dynamics, economic policy, and financial crises, which may enhance its visibility and citation across diverse research communities. Additionally, the substantial funding and resources allocated to Economics research in China might contribute to its



Figure 5. Country-level collaboration network of the most productive Chinese scholars in Education.

higher impact. In contrast, for education, the less international visibility could be due to a focus on region-specific educational practices and policies that may not resonate as strongly with the global research community. Similarly, Political Science research may be constrained by political sensitivities and restrictions, leading to fewer collaborative opportunities and reduced impact on the international stage.

Regarding publication channels (RQ4), this study revealed that the majority of popular journals are Western-based and edited. Education and Economics publications showed more diverse channels in terms of scope, bases, and themes compared to Political Science. The most popular Political Science journals that Chinese researchers publish in predominantly focus on China-related issues. Notably, some popular journals in all three fields have editors-in-chief from Chinese institutions or, if outside mainland China, may be part of the Chinese diaspora or ethnic scholars, indicated by their names.

Interpretations of these findings are twofold. Firstly, they exemplify the increased global research engagement, influence and contributions by Chinese scholars, based in or outside mainland China and especially in Economics and Political Science. Secondly, the domination of China-focused journals for Political Science, however, suggests possible 'silos' of international publications by Chinese scholars in this field – that although such

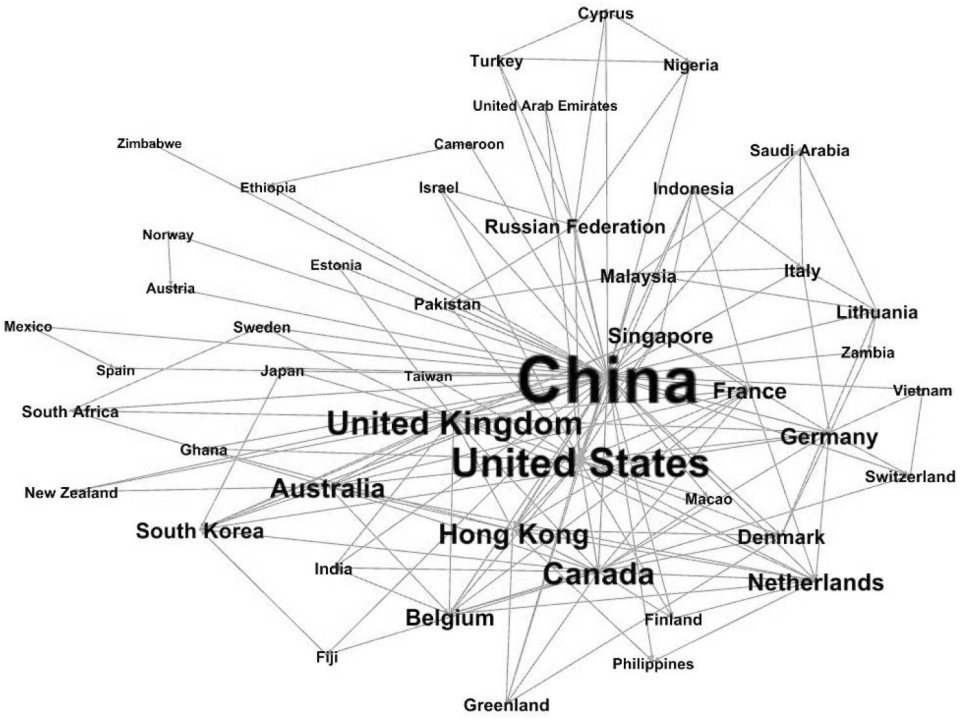


Figure 6. Country-level collaboration network of the most productive Chinese scholars in Political Science.

publications are published in English and considered as 'international', they are located within more specialized China-focused communities, rather than within global Political Science research. Such publications could be 'international' in format, yet 'national' in essence.

For international co-authorship patterns (RQ5), findings about all disciplines align with previous research, that the top collaborators (excluding Hong Kong SAR and Macao SAR) are from 'the West' (Feng 2019; Hao 2020; Wang and Guo 2019). International collaborators in Education and Economics appear to be more diversified than those in Political Science, including collaborators from Asian countries. For each discipline, the United States is the top collaborator regarding the number of co-authored publications.

The institutional-level co-authorship analysis (RQ6), which included domestic collaborations, revealed a widely diversified picture, with the hybridity of national and international collaborations in each discipline. Co-authorship was among institutions based in and outside mainland China. However, the field of Political Science again displays a more nationally-oriented collaboration pattern, with most of the institutions based in mainland China.

These co-authorship patterns have notable implications for the global visibility and influence of Chinese research. The extensive collaboration with Western institutions, particularly in Education and Economics, enhances the international profile and

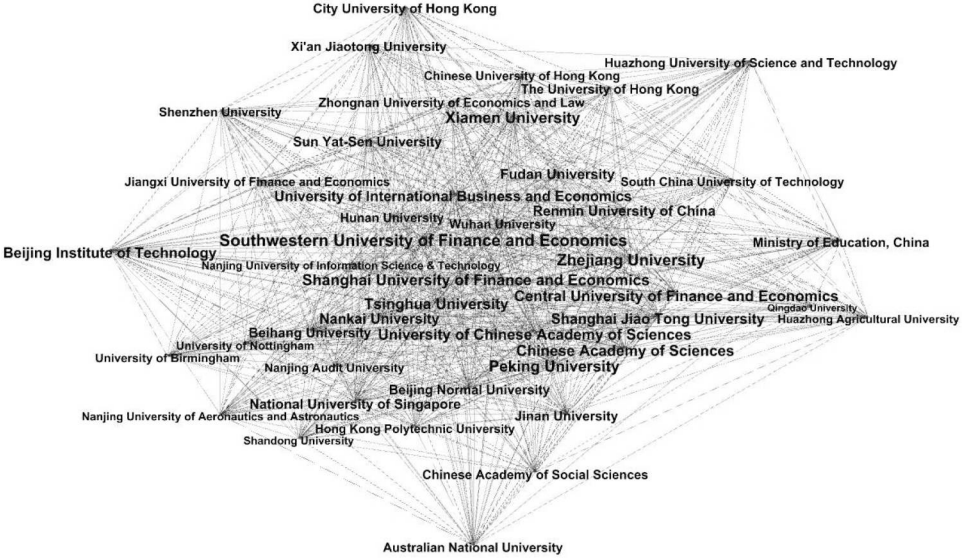


Figure 7. Institution-level collaboration network of the most productive Chinese scholars in Economics.

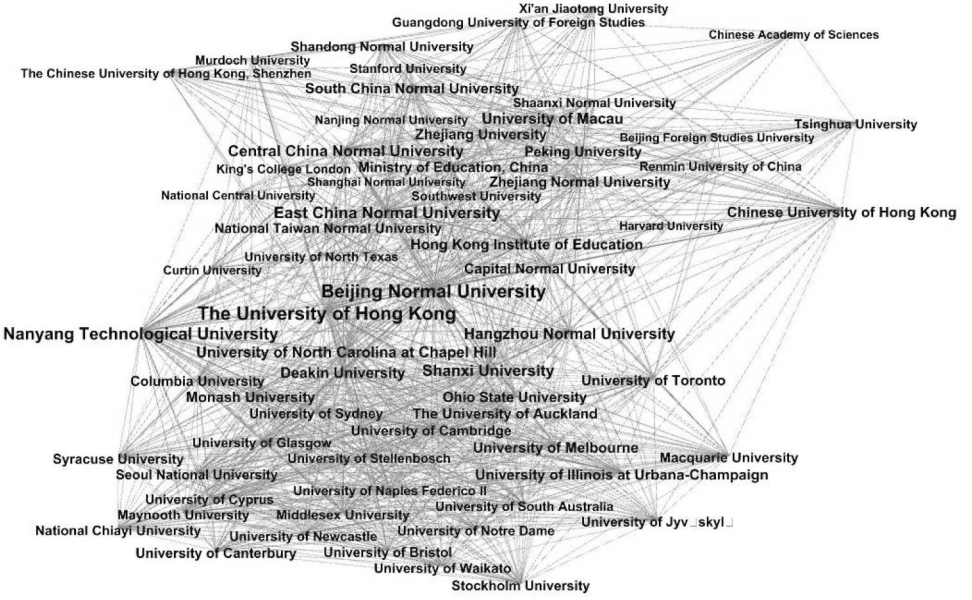


Figure 8. Institution-level collaboration network of the most productive Chinese scholars in Education.



Figure 9. Institution-level collaboration network of the most productive Chinese scholars in Political Science.



Figure 10. Country-level in-citation counts to the most productive Chinese scholars in Economics.

dissemination of Chinese research in these fields, facilitating greater global engagement and impact. In contrast, the more localized collaboration in Political Science may restrict its global visibility and influence, as these networks are less integrated into broader international academic conversations. This insularity could limit the field's ability to affect global research agendas and trends, underscoring the need for broader international collaboration to elevate the global presence of Chinese Political Science research.

Table 7. In-cites counts to the most productive Chinese scholars in each discipline.

Position	Education		Economics		Political Science	
	Country	*Citations*	*Country*	*Citations*	*Country*	*Citations*
1	China	30,426	China	264,997	China	15,294
2	Australia	371	United Kingdom	510	United States	314
3	Hong Kong	361	Unites States	506	United Kingdom	297
4	United Kingdom	361	Australia	499	Australia	274
5	United States	360	Germany	491	Hong Kong	271
6	Spain	359	Canada	488	Germany	254
7	Malaysia	333	Spain	487	Canada	249
8	Taiwan	332	South Korea	487	Taiwan	230
9	Canada	330	France	485	Italy	225
10	Indonesia	324	India	483	South Korea	222
11	India	313	Italy	483	Netherlands	218
12	Turkey	311	Japan	481	India	215
13	South Korea	309	Hong Kong	473	Russian Federation	214
14	Germany	295	Taiwan	470	Spain	214
15	Italy	284	Malaysia	465	Malaysia	200
16	Japan	274	Russian Federation	462	France	198
17	Russian Federation	265	Brazil	455	Singapore	195
18	Iran	264	Poland	453	Japan	190
19	Singapore	259	Pakistan	452	Turkey	184
20	France	249	Iran	450	Sweden	183
21	Saudi Arabia	249	Turkey	447	Sweden	174
22	Brazil	248	Netherlands	435	Norway	170
23	Netherlands	247	Thailand	428	South Africa	167
24	Finland	238	Saudi Arabia	427	Poland	166
25	Portugal	233	Indonesia	425	Pakistan	159
26	Sweden	222	Singapore	424	Indonesia	155
27	Pakistan	217	Portugal	423	Belgium	152
28	Poland	212	Vietnam	416	Denmark	152
29	South Africa	210	South Africa	415	Brazil	143
30	Belgium	209	New Zealand	415	Switzerland	142
31	Thailand	209	Sweden	413	Vietnam	141
32	Mexico	203	Romania	412	New Zealand	131
33	Greece	203	Mexico	407	Czech Republic	129
34	New Zealand	201	Egypt	400	Portugal	126
35	Norway	197	Czech Republic	396	Finland	125
36	Colombia	187	Belgium	390	Thailand	123
37	Israel	185	Greece	385	Greece	118
38	Macao	182	Finland	382	Mexico	118
39	United Arab Emirates	179	Nigeria	378	Iran	117
40	Vietnam	175	Tunisia	374	Austria	111
41	Switzerland	166	Finland	368	Ireland	111
42	Chile	164	Colombia	367	Saudi Arabia	104
43	Ireland	161	Denmark	365	Bangladesh	104
44	Egypt	160	Ireland	361	Macao	102
45	Czech Republic	155	Austria	356	Romania	97
46	Romania	149	Norway	352	United Arab Emirates	95
47	Austria	147	Chile	349	Chile	92
48	Denmark	141	Bangladesh	338	Nigeria	89
49	Nigeria	134	United Arab Emirates	314	Lithuania	88
50	Ecuador	133	Philippines	303	Israel	83

The citations for publications from China revealed that in each discipline, most of such research had been cited by publications from the same country (RQ7). This again suggests possible 'silos' of China's social sciences international publications, that while they are published 'internationally', the communities engaging with the research are mostly 'national'. In terms of international communities, Western and Asian countries appear as the most active communities citing the publications from China.

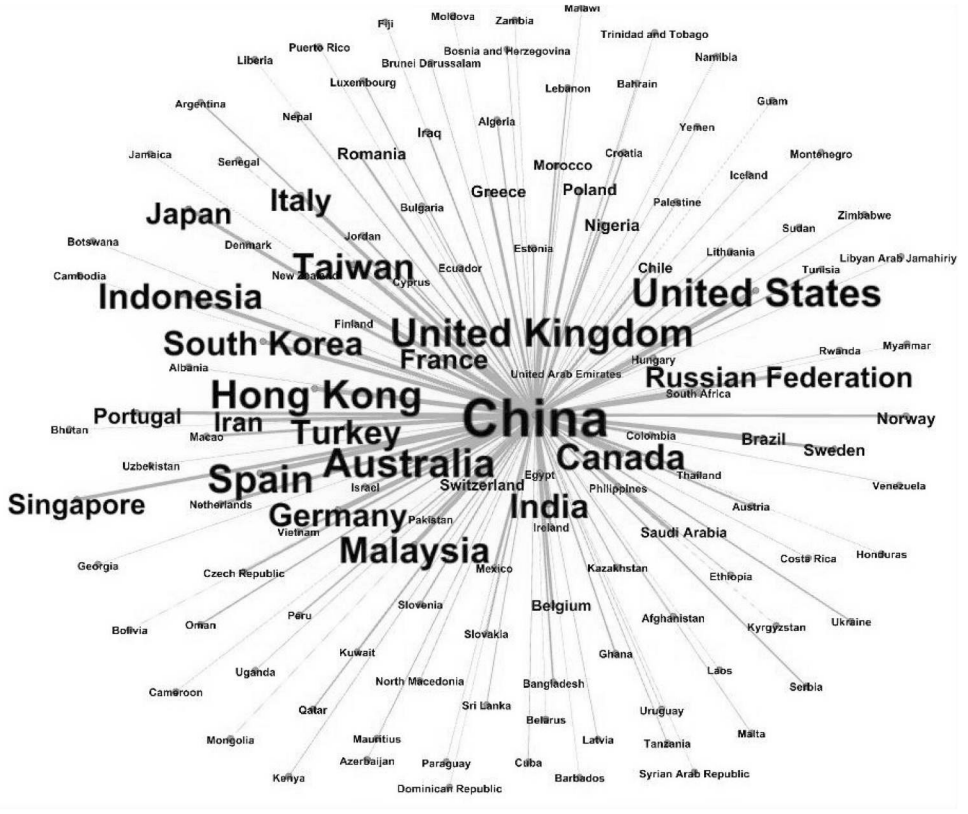


Figure 11. Country-level in-citation counts to the most productive Chinese scholars in Education.

Conclusions

This study contributes significantly to the literature on the internationalization processes of Chinese research, with a focus on social sciences. It highlights the growing international engagement, influence, and contribution of social sciences research in China, particularly in the fields of Education, Economics, and Political Science. This is evidenced by higher citations in Economics and the presence of international journals edited by Chinese scholars both within and outside mainland China.

In terms of disciplinary differences, the findings of the study are in line with previous research, that among Economics, Education and Political Science research in China, Economics has the greatest extent of internationalization, followed by Education. The field of Political Science is the least internationalized, in terms of publication channels and co-authorship patterns. The status of Political Science echoes previous research that the field faces extra layers of political and ideological 'research constraints' when engaging with international research communities (Reny 2016; Wang and Guo 2019).

The research findings underscore the significant influence of 'Western' connections in China's social sciences research, evident in Western-dominated publication channels, co-authorship patterns, and citation patterns. This emphasizes that the internationalization of research in China remains intertwined with 'Westernization' (Marginson and Xu



Figure 12. Country-level in-citation counts to the most productive Chinese scholars in Political Science.

2022). Notably, the United States plays a prominent role in international collaborations across each discipline, aligning with the fact that the United States and China are each other's top collaborators in science. According to the Nature Index, the United States contributes to 45% of China's collaborative scientific publications, while China contributes to 30% of the collaborative publications from the United States (Nature 2022). Despite existing U.S. – China research collaborations amid geopolitical tensions (Lee and Haupt 2021a), the long-term impacts of these collaborations are yet to be fully explored.

Furthermore, Asian countries appear as the next significant communities actively collaborating with and citing publications from China. Factors contributing to the research ties within Asia could be geographical proximity, cultural similarities and historical connectivity (Marginson and Xu 2022). With the development of China's Belt and Road Initiative, which focuses to expand collaborations, particularly with Asia-Pacific, Africa and Eastern Europe, the landscape of research collaboration and connections may also see changes in the future (Gui, Liu, and Du 2019).

This research highlights a duality of 'international in format and national in essence' in certain Chinese social sciences fields. Notably, in Political Science, popular journals have a predominant China-centered scope. While these publications are classified as 'international,' they might be confined to 'silos' of China-related research, limiting engagement with broader global discussions in the field. This poses a risk of not being widely recognized or utilized beyond national borders. Despite being rooted in the ideals of scientific globalism, these international publications could regress into scientific nationalism concerning the communities they address and the contributions they make (Sá and Sabzalieva 2018).

Therefore, this research underscores a balancing act faced by Chinese social sciences: to make peripheral voices heard, these fields must first prioritize visibility. This delicate balance reflects a broader challenge within the global academic community. To ensure peripheral perspectives are acknowledged, these scholars often need to align with established standards of international visibility, even as the responsibility also lies with the global community to embrace diverse knowledge systems and topics that go beyond Western paradigms.

The findings also have important policy implications for promoting a more equitable global knowledge production system. Chinese policymakers and academic institutions could aim to diversify collaborations, strengthening ties with underrepresented regions and emerging economies beyond the dominant 'Western' centers of knowledge. This approach can both reduce overreliance on Western frameworks whilst also aiding a genuinely global scientific landscape. Similarly, global academic networks should work to decenter dominant paradigms and create platforms that promote equal participation. In a period of increasing geopolitical tensions, sustaining open academic collaborations is crucial as scientific diplomacy can serve as a channel for mutual understanding and international trust. Building mechanisms to protect research partnerships from political pressures and creating incentives for international exchange can, therefore, help safeguard the global academic community's commitment to shared knowledge while also alleviating political tensions within the academic sphere. Accordingly, our study advocates for a deliberate effort to uphold equity and mutual respect in international research ecosystems.

Limitations

Concerns have escalated regarding the reliance on publication and citation metrics for evaluating researchers, as evident in initiatives such as the San Francisco Declaration on Research Assessment (DORA) and the Leiden manifesto (Hicks et al. 2015). This study recognizes these concerns and refrains from equating 'productive scholars' with 'better' or 'valuable' scholars. Furthermore, we acknowledge the inherent biases in focusing on prolific scholars, as it may overlook the contributions of less-cited researchers and perpetuate inequalities related to gender, race, career stages, and other factors in scientific productivity and impact. Moreover, we chose to focus on the top 500 most productive scholars primarily due to data availability. Although using this threshold allowed us to create a comprehensive and manageable dataset while ensuring consistency across the fields of interest, future research could benefit from a dual approach, comparing findings from both leading scholars and the broader academic community to better understand the nuances and disparities within these fields in China. The limitations and potential biases of data sources like Scopus and SciVal, such as their partial coverage, emphasis on English-language and Western publications, and citation metric limitations, should be acknowledged as they may affect the comprehensiveness and representativeness of the research findings (Marginson and Xu 2023; Mongeon and Paul-Hus 2016). Furthermore, our analysis does not account for self-citations due to dataset limitations.

Disclosure statement

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References

Aggarwal, R., D. Schirm, and X. Zhao. 2006. "Role Models in Finance: Lessons from Life Cycle Productivity of Prolific Scholars." *Review of Quantitative Finance and Accounting* 28 (1): 79–100. https://doi.org/10.1007/s11156-006-0004-9.

Astegiano, J., E. Sebastián-González, and C. D. T. Castanho. 2019. "Unravelling the Gender Productivity gap in Science: A Meta-Analytical Review." *Royal Society Open Science* 6:181566.

Bolkan, S., D. J. Griffin, J. L. Holmgren, and M. Hickson. 2012. "Prolific Scholarship in Communication Studies." *Five Years in Review. Communication Education* 61 (4): 380–394. https://doi.org/10.1080/03634523.2012.699080.

Brown, N., and J. Leigh. 2020. *Ableism in Academia: Theorising Experiences of Disabilities and Chronic Illnesses in Higher Education*. London: UCL Press.

Connell, R. 2007. *Southern Theory: Social Science and the Global Dynamics of Knowledge*. Cambridge: Polity Press.

Cucari, N., I. Tutore, R. Montera, and S. Profita. 2023. "A Bibliometric Performance Analysis of Publication Productivity in the Corporate Social Responsibility Field: Outcomes of SciVal

Analytics." *Corporate Social Responsibility and Environmental Management* 30 (1): 1–16. https://doi.org/10.1002/csr.2346.

Demeter, M. 2020. *Academic Knowledge Production and the Global South: Questioning Inequality and Under-Representation*. London: Springer International Publishing. https://doi.org/10.1007/978-3-030-52701-3.

Dübgen, F. 2020. "Scientific Ghettos and Beyond. Epistemic Injustice in Academia and Its Effects on Researching Poverty." In *Dimensions of Poverty: Measurement, Epistemic Injustices, Activism*, edited by V. Beck, H. Hahn, and R. Lepenies, 77–95. New York: Springer International Publishing. https://doi.org/10.1007/978-3-030-31711-9_5.

Feng, J. 2019. "The Development of Chinese Pedagogy Over the Past 70 Years: From Sinicization to Subject Construction - the Analysis Based on Pedagogical Texts in Different Periods 中国教育学70年从中国化到主体建构——基于不同时期教育学文本的分析." *Curriculum, Teaching Material and Method* 39 (12): 4–11.

Flowerdew, J., and Y. Li. 2009. "English or Chinese? The Trade-off Between Local and International Publication among Chinese Academics in the Humanities and Social Sciences." *Journal of Second Language Writing* 18 (1): 1–16. https://doi.org/10.1016/j.jslw.2008.09.005.

Gao, X. (Andy), and Y. Zheng. 2020. "Heavy Mountains' for Chinese Humanities and Social Science Academics in the Quest for World-Class Universities." *Compare: A Journal of Comparative and International Education* 50 (4): 554–572. https://doi.org/10.1080/03057925.2018.1538770.

Gong, K., J. Xie, Y. Cheng, V. Larivière, and C. R. Sugimoto. 2019. "The Citation Advantage of Foreign Language References for Chinese Social Science Papers." *Scientometrics* 120 (3): 1439–1460. https://doi.org/10.1007/s11192-019-03146-4.

Gui, Q., C. Liu, and D. Bin Du. 2019. "The Structure and Dynamic of Scientific Collaboration Network among Countries Along the Belt and Road." *Sustainability Journal* 11 (19): 1–17.

Hao, X. 2020. "International Publications and Their Academic Influence of China's Economics: Based on Bibliometric Analysis of SSCI Publications 中国经济学研究的国际发表及学术影响——基于SSCI的文献计量分析." *Fujian Forum: Humanities and Social Sciences Edition* 10:144–158.

Henriksen, D. 2016. "The Rise in co-Authorship in the Social Sciences (1980–2013)." *Scientometrics* 107 (2): 455–476. https://doi.org/10.1007/s11192-016-1849-x.

Hicks, D., P. Wouters, L. Waltman, S. de Rijcke, and I. Rafols. 2015. "Bibliometrics: The Leiden Manifesto for Research Metrics." *Nature* 520 (7548): 429–431. http://doi.org/10.1038/520429a.

Horta, H., and W. Shen. 2020. "Current and Future Challenges of the Chinese Research System." *Journal of Higher Education Policy and Management* 42 (2): 157–177. https://doi.org/10.1080/1360080X.2019.1632162.

Hunter, D. E., and G. D. Kuh. 1987. "The "Write Wing": Characteristics of Prolific Contributors to the Higher Education Literature." *The Journal of Higher Education* 58 (4): 443–462. https://doi.org/10.1080/00221546.1987.11778265.

Kagan, J. 2009. *The Three Cultures: Natural Sciences, Social Sciences and the Humanities in the 21st Century*. Cambridge: Cambridge University Press.

Kozlowski, D., V. Larivière, C. R. Sugimoto, and T. Monroe-White. 2022. "Intersectional Inequalities in Science." *Proceedings of the National Academy of Sciences* 119 (2): e2113067119.

Kwiek, M. 2018. "High Research Productivity in Vertically Undifferentiated Higher Education Systems: Who are the top Performers?" *Scientometrics* 115 (1): 415–462. https://doi.org/10.1007/s11192-018-2644-7.

Kwiek, M. 2021. "What Large-Scale Publication and Citation Data Tell us About International Research Collaboration in Europe: Changing National Patterns in Global Contexts." *Studies in Higher Education* 46 (12): 2629–2649. https://doi.org/10.1080/03075079.2020.1749254.

Larivière, V., and R. Costas. 2016. "How Many is Too Many? On the Relationship Between Research Productivity and Impact." *PLoS One* 11 (9): 0162709. https://doi.org/10.1371/journal.pone.0162709.

Larivière, V., Y. Gingras, and É Archambault. 2006. "Canadian Collaboration Networks: A Comparative Analysis of the Natural Sciences, Social Sciences and the Humanities." *Scientometrics* 68 (3): 519–533. https://doi.org/10.1007/s11192-006-0127-8.

Lee, J. J., and J. P. Haupt. 2021a. "Scientific Collaboration on COVID-19 Amidst Geopolitical Tensions Between the US and China." *Journal of Higher Education* 92 (2): 303–329. https://doi.org/10.1080/00221546.2020.1827924.

Lee, J. J., and J. P. Haupt. 2021b. "Scientific Globalism During a Global Crisis: Research Collaboration and Open Access Publications on COVID-19." *Higher Education* 81 (5): 949–966. https://doi.org/10.1007/s10734-020-00589-0.

Li, J., and Y. Li. 2015. "Patterns and Evolution of Coauthorship in China's Humanities and Social Sciences." *Scientometrics* 102 (3): 1997–2010. https://doi.org/10.1007/s11192-014-1471-8.

Liu, W., G. Hu, L. Tang, and Y. Wang. 2015. "China's Global Growth in Social Science Research: Uncovering Evidence from Bibliometric Analyses of SSCI Publications (1978–2013)." *Journal of Informetrics* 9 (3): 555–569. https://doi.org/10.1016/j.joi.2015.05.007.

Marginson, S. 2018. "National/Global Synergy in the Development of Higher Education and Science in China Since 1978." *Frontiers of Education in China* 13 (4): 486–512.

Marginson, S., and X. Xu. 2022. "The Ensemble of Diverse Music: Internationalisation Strategies and Endogenous Agendas in East Asian Higher Education." In *Changing Higher Education in East Asia*, edited by S. Marginson, and X. Xu, 1–30. New York: Bloomsbury.

Marginson, S., and X. Xu. 2023. "Hegemony and Inequality in Global Science: Problems of the Center-Periphery Model." *Comparative Education Review* 67 (1).

Ministry of Education. 2020. *Opinions on Eliminating the Unhealthy "Paper-Only" Orientation in the Evaluation of Humanities and Social Sciences Research in Higher Education Institutions [Guanyu pochu gaoxiao zhexueshehuikexueyanjiu pingjia zhong "wei lunwen" buliangdaoxiang de ruo ga*. http://www.moe.gov.cn/srcsite/A13/moe_2557/s3103/202012/t20201215_505588.html.

Ministry of Education, & Ministry of Science and Technology. 2020. *Opinions on Regulating the Use of SCI Indicators by Higher Education Institutions and Establishing the Correct Evaluation Orientations [Guanyu guifan gaodengxuexiao SCI lunwen xiangguanzhibiao shiyong shuli zhengque pingjiadaoxiang de ruogan yijian]*. http://www.moe.gov.cn/srcsite/A16/moe_784/202002/t20200223_423334.html.

Mongeon, P., and A. Paul-Hus. 2016. "The Journal Coverage of Web of Science and Scopus: A Comparative Analysis." *Scientometrics* 106 (1): 213–228. https://doi.org/10.1007/s11192-015-1765-5.

Nature. 2022. *Nature Index*. http://www.nature.com/nature-index/.

Ochsner, M., S. E. Hug, and H. D. Daniel. 2016. "Research Assessment in the Humanities: Towards Criteria and Procedures." *Research Assessment in the Humanities: Towards Criteria and Procedures*, https://doi.org/10.1007/978-3-319-29016-4.

Phillipson, R. 1992. *Linguistic Imperialism*. Oxford: Oxford University Press. https://doi.org/10.2307/3587447.

Rajkó, A., C. Herendy, M. Goyanes, and M. Demeter. 2023. "The Matilda Effect in Communication Research: The Effects of Gender and Geography on Usage and Citations Across 11 Countries." *Communication Research* 0 (0), https://doi.org/10.1177/00936502221124389.

Reny, M. E. 2016. "Authoritarianism as a Research Constraint: Political Scientists in China." *Social Science Quarterly* 97 (4): 909–922. https://doi.org/10.1111/ssqu.12345.

Sá, C., and E. Sabzalieva. 2018. "Scientific Nationalism in a Globalizing World." *Handbook on the Politics of Higher Education*, 149–166. https://doi.org/10.4337/9781786435026.00017.

Santos, B. de S. 2014. *Epistemologies of the South: Justice Against Epistemicide*. Boulder: Paradigm Publishers.

Shen, W., L. L. Li, and T. C. Sun. 2022. "The Global Contribution of China's Eduational Research: Frontier Hotspots and Participation Paths Based on an Analysis of English Journal of Education (2013-2019) 中国教育研究的世界贡献: 前沿热点与参与路径——基于教育学英文期刊论文 (2013—2019 年) 的分析." *Journal of Soochow University Educational Science Edition* 2:61–72.

Shu, F., S. Liu, and V. Larivière. 2022. "China's Research Evaluation Reform: What are the Consequences for Global Science?" *Minerva* 60 (3): 329–347. https://doi.org/10.1007/s11024-022-09468-7.

U.S. National Science Board, N. S. F. 2022. *Science and Engineering Indicators 2022: The State of U.S. Science and Engineering*. https://ncses.nsf.gov/pubs/nsb20221.

US National Science Foundation. 2020. *The State of U.S. Science and Engineering* 2020. https://ncses.nsf.gov/indicators.

Wang, Z., and S. Guo. 2019. "The State of the Field of Chinese Political Science: "glocalising" Political Science in China?" *European Political Science* 18 (3): 456–472. https://doi.org/10.1057/s41304-018-0179-2.

Way, S. F., A. C. Morgan, D. B. Larremore, and A. Clauset. 2019. "Productivity, Prominence, and the Effects of Academic Environment." *Proceedings of the National Academy of Sciences* 116 (22): 10729–10733.

Weidemann, D. 2010. "Challenges of International Collaboration." In *Internationalization of the Social Sciences Asia - Latin America - Middle East - Africa - Eurasia*, edited by M. Kuhn, and D. Weidemann, 353–378. Berlin: Verlag.

Wen, W., L. Zhou, and D. Hu. 2022. "Navigating and Negotiating Global Science: Tensions in China's National Science System." *Studies in Higher Education* 47 (12): 2473–2486. https://doi.org/10.1080/03075079.2022.2081680.

Xu, X. 2020. "China 'Goes Out' in a Centre–Periphery World: Incentivizing International Publications in the Humanities and Social Sciences." *Higher Education* 80 (1): 157–172. https://doi.org/10.1007/s10734-019-00470-9.

Xu, X. 2021. "A Policy Trajectory Analysis of the Internationalisation of Chinese Humanities and Social Sciences Research (1978–2020)." *International Journal of Educational Development* 84), https://doi.org/10.1016/j.ijedudev.2021.102425.

Xu, X. 2022. "Internationalization of Chinese Humanities and Social Sciences." In *Changing Higher Education in East Asia*, edited by S. Marginson, and X. Xu. Bloomsbury. https://doi.org/10.5040/9781350216273.ch-007.

Xu, X., A. Oancea, and H. Rose. 2021. "The Impacts of Incentives for International Publications on Research Cultures in Chinese Humanities and Social Sciences." *Minerva*, https://doi.org/10.1007/s11024-021-09441-w.

Yang, R., M. Xie, and W. Wen. 2019. "Pilgrimage to the West: Modern Transformations of Chinese Intellectual Formation in Social Sciences." *Higher Education* 77 (5): 815–829. https://doi.org/10.1007/s10734-018-0303-9.

Zhang, L., Y. Shang, Y. Huang, and G. Sivertsen. 2021. "Toward Internationalization: A Bibliometric Analysis of the Social Sciences in Mainland China from 1979 to 2018." *Quantitative Science Studies* 2 (1): 376–408. https://doi.org/10.1162/qss_a_00102.

Zhang, L., and G. Sivertsen. 2020. "The new Research Assessment Reform in China and its Implementation." *Scholarly Assessment Reports* 2 (1): 1–7. https://doi.org/10.29024/sar.15.

Zhou, S., H. Qin, and Z. Lan. 2017. "International Influence Changes of China's Economic Research: Based on the Publsihed Articles and Citation Index of SSCI Economic Journals (2001-2014) 我国经济学研究国际影响力变化分析——基于 2001年~2014年SSCI 经济学期刊发表论文数量与引证指标." *Economic Survey* 34 (2): 80–86. https://doi.org/10.15931/j.cnki.1006-1096.2017.02.014.

Zhou, P., B. Thijs, and W. Glänzel. 2009. "Is China Also Becoming a Giant in Social Sciences?" *Scientometrics* 79 (3): 593–621. https://doi.org/10.1007/s11192-007-2068-x.

Zhu, J., and W. Liu. 2020. "Comparing Like with Like: China Ranks First in SCI-Indexed Research Articles Since 2018." *Scientometrics* 124 (2): 1691–1700. https://doi.org/10.1007/s11192-020-03525-2.