Establishing World Class Universities in China: the Effects of Research Assessment Policies on the Academic Publishing Landscape

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Research Domain: Higher education policy (HEP)

Abstract: This study is the first to investigate the quantity and quality patterns of research outputs produced in mainland China between 2003 and 2019, and to trace the policy origins that shape the publishing landscape. We draw on isomorphism theory, and on secondary and documentary data from the Academic Ranking of World Universities, the Essential Science Indicators datasets, state government, and 35 universities. The results confirm the discrepancy between quantity and quality patterns of research outputs produced in China. This is not unique to China but it is in the extent of the disparity where China stands out from the comparable countries analysed. Furthermore, there was nonalignment between institutional professor promotion criteria and the RAF in terms of the choice of publication-quality measures. We evidence that the coercive factor exerts the greatest explanatory power in the scholarly publishing landscape, followed by mimetic and normative pressures.

Paper: Whilst China’s overall publication and citation performance are remarkable, researchers and journalists have documented concerns over the quality of research outputs. Marginson’s (2017) analysis of the Leiden ranking 2011-2014, for example, confirmed levels of citation for Chinese authored papers are less impressive than the total number of publications. It is against the different representations of the Chinese publishing landscape that this paper aims at a novel examination of patterns and trends in the quantity and quality of scholarly publications, and the underlying factors that shape the publishing landscape. The works of DiMaggio and Powell (1983) explore three dimensions of isomorphism: coercive, mimetic, and normative isomorphism. China’s range of initiatives for creating WCU operate through both coercive and mimetic processes of isomorphism. Normative isomorphism is the periphery of various excellence schemes so has received inadequate scholarly attention. This paper also aims to illustrate normative isomorphism in exploring the role of a government think tank. We ask the following research questions:

1. What characterises the quantity and quality of research outputs produced in China between 2003 and 2019?
2. What central policy direction and university strategies underpin China’s academic publishing landscape?

The study employs a two-stage explanatory sequential mixed-methods design by combining secondary evidence and documentary data. Stage I is descriptive and exploratory, examining the latest available time series and international comparative data extracted from two publicly accessible datasets: The Academic Ranking of World Universities (ARWU) and the Essential Science Indicators (ESI) to locate the problem of quantification (RQ1). We built a time series through the ARWU ranking records over the period 2003-2019. Stage II is explanatory, investigating how the quality and quantity measures of China’s research assessment framework (RAF) evolved and developed and how DFC institutions implemented the RAF relating to professorial promotion criteria (RQ 2). Our conceptual framework is based on three dimensions of isomorphism and the theoretical proposition of normative isomorphism drills down for further data collection from the website of the China Association of Higher Education (CAHE) so that the complete research design embodies the full range of topics being studied. Documentary analysis was used exclusively in this stage, including the national RAF and research criteria for promotion to professor. We worked primarily from documents in the public domain: the RAF data were collected from the CDGDC website; and institutional documents from universities’ websites between May and August 2019. 35 (32 government defined ‘Category A’ and three ‘Category B’ universities) out of 42 DFC institutions’ websites displayed a complete set of promotion criteria for professors. Equivalent documentation was unavailable on the websites of the remaining seven universities. When reporting the research, universities were not named but classified into broad groups to respect the reputations of HEIs/people.

In stage I, the ARWU time-series confirm what has already been reported in the literature that the Chinese research system is weaker in quality and world-leading scholars as distinct from quantity (Marginson 2011). ESI results are further evidence of a discrepancy between quantity and quality patterns of research outputs produced in China. This is not unique to China but it is in the extent of the disparity where China stands out from the comparable countries analysed.

Stage II findings offer a framework for understanding nuances underlying the equilibrium between publication quality and quantity. This is driven primarily by established features in national thinking manifested in the RAF and the 35 university professor promotion requirements which falsely associate academic quality with JIF and CDGDC’s arbitrary tiered journal classification. There was a non-alignment between institutional professor promotion criteria and the RAF in terms of universities’ choice of JIF as the dominant determinant to publication quality. Despite CDGDC’s explicit endeavours to embrace quality into the RAF since 2012, nowhere in the promotion criteria were the ‘peer review and citation’ measures addressed.

The CAHE’s far-reaching professional networks function as sources of normative influence by capturing HE policy implementation experiences that lead to the structural homogenisation of
China’s HE system. This sharpens the argument that both the normative and mimetic factors of isomorphism illustrate the extent to which China’s HEIs are embedded in coercive pressure, which exerts the greatest explanatory power on how the patterns of academic publication have responded to the national regulatory framework. Our analysis further raises timely policy recommendations, including reforming the RAF that expands quality measures to embrace citations, peer review, and institutional diversity; formulating clearly defined quality metrics and concrete guidelines to facilitate policy institutionalisation. Future studies should explore the implementation difficulties encountered by university leaders, and contextual narratives from the academic community to foster a culture of quality.

