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# Forty Years of Constructing Development: How China Adopted GDP Measurement

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Exactly forty years ago in 1978, Chinese policymakers introduced the famous opening up and reform policy which was the fundamental starting point for 'the rise of China'. Within these forty years China has become a major international player, both in political and economic terms. To understand China's experience from 1978 onwards scholars and the media have been making use of macroeconomic statistics. China's impressive economic development has come to be defined almost exclusively through the lens of Gross Domestic Product (GDP) growth figures. The GDP indicator inherently shapes the image we have of China. It is the world's second largest economy in terms of GDP, and about to overtake the US as the sole leader by 2030 (Scott & Sam, 2016). GDP figures not only give the country allure and status in the global political economy, but they also give rise to debates within International Relations about China's 'peaceful rise' (Buzan, 2010; Yue, 2008; Ikenberry, 2008). Additionally, the indicator gained enormous political and social significance for governance by the Chinese Communist Party, most prominently through the use of official GDP-targets. It is almost unthinkable to talk about China's economic development without making reference to the measure of GDP.

The ubiquity of the measure makes it easy to forget that it did not always exist. Especially in the Chinese case, measuring the economy in terms of GDP is only a relatively recent phenomenon: China's first official measure of GDP was produced in 1985. Moreover, China was the last major holdout to adopting GDP measurement and its concomitant internationally harmonized framework for national accounts, the System of National Accounts (SNA), which it officially adopted in 1993. The Chinese statistical system has gone through major reforms and improvements since it started to include GDP measurement in its official work. With the forty-year anniversary of the reform and opening up policy, it is time to shed light on the measure that has fundamentally shaped our image of China's rise. Tracing how China adopted GDP measurement in the early reform period (1978-1993) tells us more about how GDP has shaped China's current powerful status.

### Putting on the Spectacles of GDP – China and International Organizations

The spectacles of GDP were taken up first by Chinese policymakers themselves. Deng Xiaoping stated already in 1978, early on in the opening up and reform period, China's development goals in terms of GDP. For him, achieving a \$1.000 GNP per capita by the year 2000 was China's primary goal which could be achieved starting with the opening up and reform policy (Deng, 1979). At this time GDP had not even been officially measured by the Chinese statisticians. Nevertheless, it already set ground in China's politics.

The actual measurement of GDP figures came somewhat later, with the first official GDP measurement in 1985 (World Bank, 1992: 17). The move of the opening up and reform policy contributed to the adoption of GDP measurement in China. The new policies encouraged China's policymakers, economists and statisticians to look abroad and study foreign concepts, ideas and tools that could help China develop (Gewirtz, 2017: 52, 54, 56, 62). Among others, experts also considered new ways of measuring the Chinese economy and developing its statistical system. They undertook effort to study the GDP indicator. Especially the interactions between Chinese experts and international organizations contributed to an increase in knowledge about the GDP indicator from the Chinese side. The State Statistical Bureau (SSB) reached out to the UN Statistical Office to learn more about alternative statistical

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practices and methodology. Additionally, they visited international conferences to gather knowledge about international statistical practices (World Bank, 1983: Annex A: 4.14). Furthermore, China's membership of the World Bank in 1980 spurred knowledge exchange about macroeconomic measurements, specifically GDP. The World Bank report of the first mission of the World Bank in China describes in a detailed fashion how GDP figures could be derived from the Chinese statistical measure of national income, Net Material Product (NMP) (World Bank, 1983: 220-263). Based on the knowledge taken up in these interactions, China's statisticians made the first official GDP estimate in 1985. This estimate was merely derived from China's communist measure of national income, the NMP. To come to an estimation of GDP, statisticians had to overcome conceptual differences between the indicators and added 13% of the NMP aggregate to the NMP figure to account for the service sector (World Bank, 1992: 17). Thereby, the first official estimate of Chinese GDP was made.

## **China's Agency – Supportive, Not Coercive Adoption of GDP**

International organizations certainly played a role regarding the adoption of GDP measurement in China. They were key actors in the socialization process of Chinese statisticians to gain knowledge about GDP measurement. However, the adoption of GDP and concomitant international statistical standards of the SNA were by no means coerced onto China. The World Bank took a different approach on China than it did with other developing countries (Lewis, Webb and Kapur 1993: 15). It supported the pragmatic reform process of the Chinese government and refrained from pushing for a rapid adoption of capitalist free market policies through the implementation of structural adjustment plans. In fact, the Chinese policymakers, even though they relied on loans from international organizations, possessed the agency vis-à-vis IOs to make decisions about statistical development on their own terms. They proved to be able to resist pressures on the issue of statistics. Chinese statisticians, for example, did not accept World Bank calculations with regards to the estimated GDP per capita and negotiated a compromise to set the number around \$180-190 GDP per capita instead of the proposed \$250 from the World Bank side (Interview 04). Additionally, unlike many other developing countries, China refused to take part in the World Bank's International Comparison Program (ICP) until 2002 (World Bank, 2018; Wade, 2012: 18). This big international price survey was important for measuring purchasing power parity income (ppp), a key measure used by the World Bank.

## **Incremental Adoption of International Standards – A Hybrid System and the Legacy of Communist Measurement**

The Chinese agency over the adoption of GDP measurement is also reflected in the adoption of the concomitant national accounts framework, SNA. Between 1987 and 1993 China experimented with a mix of two different national account frameworks, the communist Material Product System (MPS) and the Western, UN-developed SNA. In this hybrid system Chinese statisticians tried to produce SNA aggregates, most prominently GDP, while retaining many of the MPS data collection methods. By introducing the hybrid system, China deviated from adopting international standards, but tried to find a local solution and appropriate way of measuring the Chinese economy in transition. While the reasons for choosing this solution lay primarily on the domestic political level, the crucial point is that the agency of the Chinese leadership vis-à-vis IOs was an important factor that allowed China to deviate from international standards – or at least postpone the adoption thereof.

Retaining to the old communist framework MPS in the early reform period is important to highlight, because it sheds light on discussions about GDP measurement in China that we still see today. China's GDP has been a widely discussed topic in- and outside of academia. Due to a number of statements, i.e. by premier Li Keqiang who called Chinese GDP statistics “man-made” and cases pointing to the manipulation of data, China's GDP statistics have come under increased criticism. Many in- and outsiders to the Chinese political system have doubts about the trustworthiness of the figures. The core of the debate therefore points at the accuracy and reliability of Chinese GDP figures. Many articles try to deconstruct Chinese GDP figures according to official measurement methods, or compare available numbers with alternative measures of GDP (Holz, 2004; Rawksi, 2001; Wu, 2000; 2007). Others demonstrated the political manipulation of GDP statistics and thereby question China's GDP figures (Wallace, 2013). The distortion of China's GDP figures cannot only be understood in light of data falsification practices, but they are also the result of the legacy of the communist MPS. The incremental adoption of the SNA in the early period of measuring GDP has left structural obstacles within the statistical system that still impact GDP figures today. The

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MPS-framework on which the Chinese statistical system was based did well at collecting information of centrally planned material outputs, but left the service sector unaccounted (Rosen & Bao, 2015: 15). Because the switch from MPS to SNA happened quite incrementally, many MPS data collection methods were kept in place, which created a bias in the system towards measuring output and material production over income and intangibles. Due to this bias, GDP revisions are until today mostly driven by the discrepancies within the Chinese statistical system to accurately measure the service sector. In 2004, 2008 and 2013, GDP was revised up by respectively 16.8%, 4.4% and 3.4% (Rosen & Bao, 2015: 24). Each time the service sector accounted for the largest changes. The MPS legacy that was able to keep its place due to the incremental process of statistical reform in the 1980s and early 1990s therefore still influences our assessment of China's GDP figures.

## From Experiment to Innovation: The Future of GDP Measurement in (and Outside) China

This article argued that not only GDP figures, but also the process of adopting GDP measurement can and does shape our understanding of the Chinese political economy. The legacies of the communist statistical system are still relevant to today's discussion about distorted GDP figures, while the early adoption of GDP measurement shows that also in adopting statistical standards China has a history of 'doing things on its own terms'. Statistical measurement of GDP is thereby not different from other issue areas such as RMB internationalization (McNally & Gruin, 2017), financial services (Collins & Gottwald, 2014) or China's telecommunications sector (Hsueh, 2015). This acknowledges that China's integration into the world economy happened in pair with a quite distinct institutional and sectoral set-up of China's political economy (McNally, 2012). The development of the hybrid system and concomitant legacies that are still visible in its statistical system point out the distinct pathway China followed in the case of GDP adoption.

Eventually, and after an experimentalist period, China conformed to the adoption of international standards of GDP measurement in 1993, albeit with the mentioned MPS legacies. However, Chinese policymakers have been experimenting with GDP measurement on the domestic level, although now not holding on to old frameworks, but pushing GDP forward. There have been experiments with the development of alternative conceptions of GDP, such as Green GDP and among others proposed to include the 'sharing economy' into the GDP. The core question is whether China's increased involvement and engagement in international organizations will also imply such innovative proposals on the international level. It remains to be seen whether Chinese policymakers will provide us with a new lens through which we can assess the country's development for the upcoming forty years.

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**Joan van Heijster** is a PhD Candidate at the Political Science Department of the University of Amsterdam. In her project she researches the politics behind the GDP indicator in China and India. The aim of the research is to unpack the (political) choices behind the measurement process of GDP and the practical uses of the indicator in the Chinese and Indian governance system. She has a background in International Relations, with a specific focus on the political economy of China and the BRICS countries. More information can be found on her university profile or on the Fickle Formulas project (funded by ERC Starting Grant) of which Joan's project is part.