Why Chinese Government Tended to Give More Transfers to High GDP Provinces?

-- The Anomalies of Central-to-Local Transfer Payments in China from 2002 to 2018

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Abstract. Transfer payments, as an important approach to regional fiscal balance in China, have an important impact on regional economic development. Using data on transfer payments and GDP in China from 2002 to 2018, this paper finds that the Chinese government is more inclined to give transfer payments to provinces with higher GDP, thus boosting the economies of these regions.

Keywords: Transfer Payments; GDP; China Government.

1. Introduction

With a macroeconomics background, scholars generally have the perception that cities with larger GDPs receive fewer government transfers. Since the governments are normally inclined to get mutual on their different jurisdictions, they may aid financially regions with lower GDP and lower GDP growth. However, the Chinese government does not conform to this law. The purpose of this research is to dig deeper into the causes and effects of this unconventional transfer arrangement by the Chinese government. This research holds two hypotheses. One is that the Chinese government gave more transfers to grow provinces' GDP potential. The other is that the Chinese government gave more transfers to protect financially struggling provinces.

Based on data analysis on GDP and government transfers between 2002 to 2018 of 32 provinces in China (excluding special administrative regions), the Chinese government gave up the trade-off among provinces. As a result, this research tests the hypothesis that the Chinese government preferred to promote big cities with the achievement of higher GDP growth from 2002 to 2018.

At present, there are three types of transfers from the Chinese central government to localities, namely, general purpose transfer, special transfer, and other transfer. The general-purpose transfer is to make up for the financial gap in areas of weak financial strength, central financial arrangements for local financial subsidies expenditure, and equalize basic public service capacity between regions. The special transfer payment is a subsidy fund set up by central finance to achieve specific macro policies and strategic goals of business development. Moreover, the regional governments need a certain proportional fund, or the central government would not arrange special transfer payments. Tax rebates are one of the most influential forms of special transfer in China, being an important source of regional fiscal revenue. For instance, with large-scale tax refund policies, the central government will support through the arrangement of special transfer payments to ensure that not because of the impact of local financial resources frustrates the tax rebate policy. Other transfers include the issuance of additional currency and the sale of bonds to pay welfare and relief payments.

2. Literature Review

According to Wu (2017), the direction of optimizing the transfer payment structure is to reduce the proportion of condition grants while increasing that of categorical grants or tax refunds, and increasing the proportion of tax refunds is conducive to improving the financial efficiency of local government. However, Henderson (1968) and Gramlich (1969) found that transfers lead to increasing financial spending for provincial government compared to local tax revenues, a phenomenon Arthur Okun was the first to call the flypaper effect, in which money seems to stick where it hits, rather than being reallocated according to the elasticity of receipts of public and private goods, and an increase

in transfers does not lead to a decrease in tax revenue, but an expansion of public sector spending (Inman, 2008).

Since tax refunds belong to special transfers and are accordingly the most significant among transfers, this research paper would explain how the special transfers show up in the sum of transfers reasons for Chinese central government transfer policies and the development of the regional economy.

The relationship between GDP and transfer payments has not received enough public attention and consistent answers in the past, and this paper provides a reference for subsequent research through detailed data analysis. In addition, this paper brings insights from the study that China's propensity to transfer payments between 2002 and 2018 leads to regional development imbalances.

3. Methodology

This research paper explains how the GDP of Chinese provinces affects their government transfers. To explore the regularity of phenomena, this research needs data analysis to establish mathematical models that relied on statistics. Thus, the employment of positivism and quantitative research is necessary.

To ensure the reliability of data, the research data was collected on the Central People's Government of the People's Republic of China website and the China Financial Yearbook. All the secondary data was public and approachable online. By picturing the amount of change in GDP per capita in each province and the amount of change in government transfers (including all three types of transfers) per capita between 2002 to 2018 in 32 provinces in China (excluding special administrative regions), a scatter plot expressing the relationship between the two is obtained. Although the units of GDP and government transfers are different, it does not affect the relationship between the graphs showing the number of their changes.

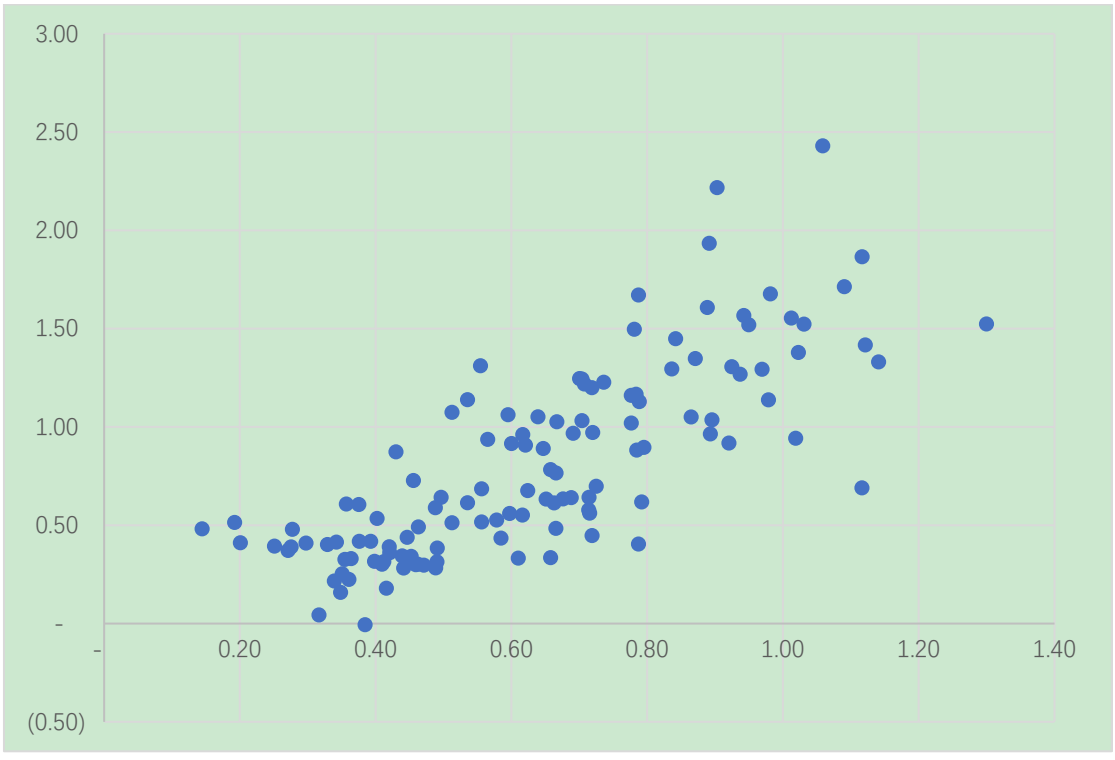


Fig 1. The relationship between GDP/capita change of the current year and transfer/capita change

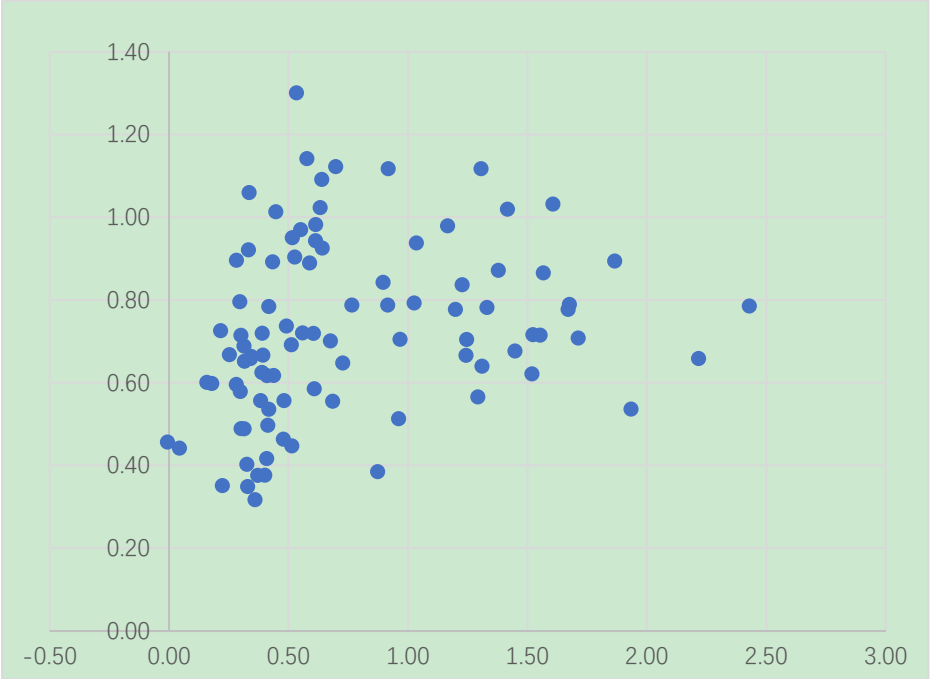


Fig 2. The relationship between GDP/capita change of the previous year and transfer/capita change

From the trend of the dots in these two graphs, researchers can get: regions with high GDP per capita changes do get more government transfers at first, but over time, the government tends to be more mutual to reach regional trade-offs.

In the early portion of the period 2002-2018, the central government needed to vigorously promote the development of municipalities and prosperous provinces (areas with high GDP), using them as leaders to lead the rapid economic development of neighboring provinces. And in the later period, after the public facilities and economic development in high GDP provinces gradually stabilized, the Chinese central government assisted in remote and poor provinces such as the central and western regions through fiscal transfers to lift these areas out of poverty that was not radiated by urban economic development.

To be more specific, based on the analysis of the data in the methodology, one of the hypotheses that the Chinese government gave more money to grow provinces' GDP potential from 2002 to 2018 was confirmed.

Firstly, according to definitions of transfers, there is information that special transfers play a big role in the confirmation of this hypothesis.

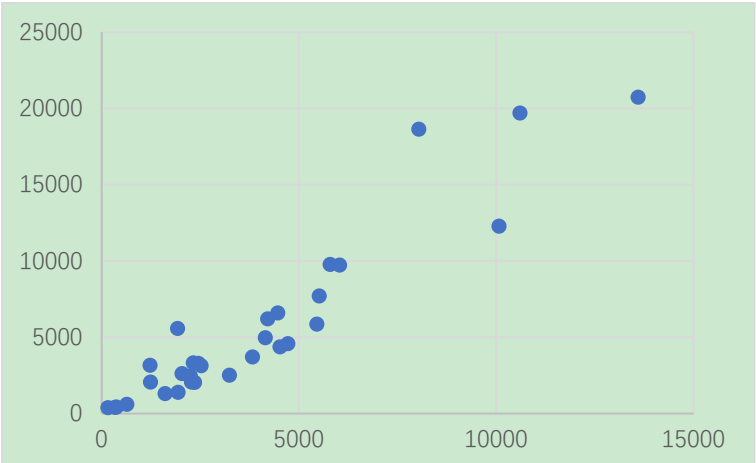


Fig 3. The relationship between GDP and enterprises number in 2002

Based on the graph above, since great amounts of small-sized enterprises and manufacturing enterprises were stationed in provinces with higher GDP in 2002, the Chinese central government was seeking an approach such as the tax rebate portion mentioned previously to give those enterprises more preferential policies by the cooperation with provincial governments, promoting the development of the regional economy. However, after some small enterprises were big enough to display a leading effect, the central government tended to give more special transfers to low GDP provinces to simultaneously give preferential tax credit refund policies and relieve local government funding pressure. That is the reason that transfers are inclined to be more mutual afterward.

Secondly, general-purpose transfers are the trade-off key to the regional economy. The Chinese government provided more general-purpose transfers to provinces with low GDP in 2022, but high-GDP provinces like Sichuan which has experienced huge natural disasters received long-term great amounts of general-purpose transfers.

Table 1. China Urban Statistical Yearbook

province	years	population (10thousand)	gdp（100million)	transfers（10thousand
Sichuan provinc	2002	8110	4725	4062020
Sichuan provinc	2006	8169	8494.7	7699223
Sichuan provinc	2010	8045	17224.8	26000600
Sichuan provinc	2014	8139	28891.3	35117900

Though general-purpose transfers may cause the free-rider effect, the central government still provides them with this kind of transfer to maintain the functioning of local government with low GDP and develop local public facilities. While most lower GDP provincial governments did receive higher general-purpose transfers in 2002-2018, the provincial governments with higher GDP did not receive so few general-purpose transfers that their combined transfers were lower than the former. Continuing with the example of the high-GDP province of Sichuan, the general-purpose transfers it received were not only to cover losses from natural disasters but also to promote the development of local public facilities to make it a tourist destination and to spur the development of some of the poorer areas in its mountainous regions. (China Urban Statistical Yearbook)

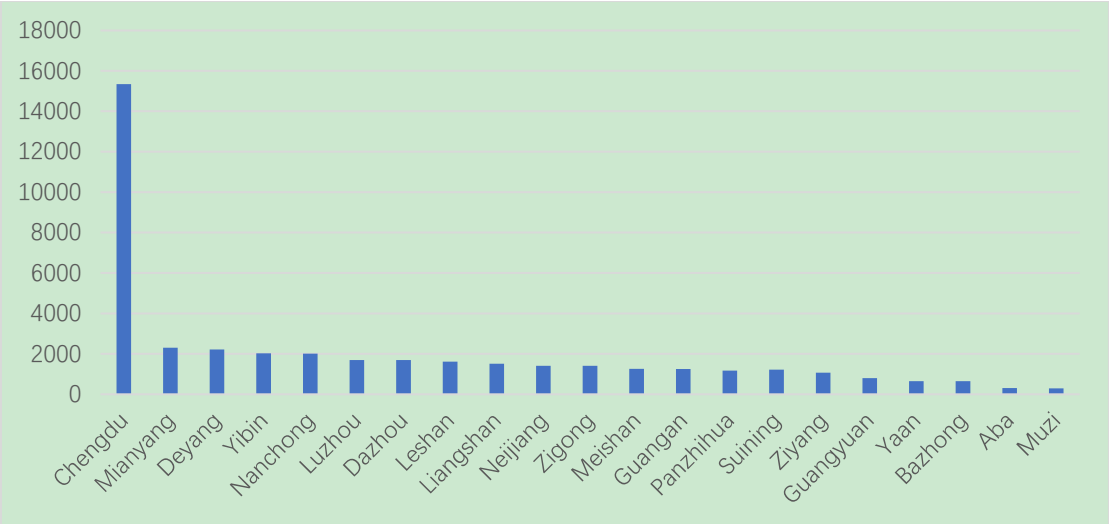


Fig 4. GDP of regions in Sichuan Province in 2018

There were a few high GDP provinces that had the same situation as Sichuan, owning high GDP city areas and extremely poor areas simultaneously. Review the data result again, those provinces' GDP per capita changes over transfers per capita would be relatively higher than low GDP provinces. Thus, the Chinese government tended to give more transfers to high-GDP provinces, promoting their economic potential.

4. Conclusion

Central–local transfers have been an important topic in the studies of macroeconomics. This topic did catch the attention of the literature on authoritarian publications, yet this paper figures out an unusual phenomenon to invite discussion from scholars of authoritarian publications as a step to stimulate more analysis of old data and policies as a reference to think about the reasons behind today's policy changes. This research paper presents two hypotheses and determines that the second hypothesis that the Chinese government gave more money to grow provinces' GDP potential is correct by analyzing data on GDP as well as total transfer payments for each Chinese province from 2002 to 2018. However, some limitations still exist. First, the three specific transfer data were not able to be found in current resources, causing the explanation to lack strong supporting evidence. It was concluded that this approach of the Chinese government would lead to unbalanced regional development. Thus, in the future, there should be a tendency to transfer payments from high GDP provinces to GDP provinces and shorten regional economic regions.

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