FDI, Fiscal Decentralization and Income Inequality in China. Evidence from 1996-2012 provincial panel data

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Abstract - This article uses the Chinese provincial panel data from 1996 to 2012 to evaluate the effects of fiscal decentralization on FDI effect of income distribution. Our estimation results shows, in the study period, fiscal decentralization can promote the local economic development, which in general has the effects of income distribute onto.

Keywords - FDI; Capital Effect; The Technical Effect; Fiscal Decentralization; Income Inequality

I. INTRODUCTION

As of 2013, China has attracted foreign investment more than $1.3 trillion, continue to maintain the status of attracting foreign investment in developing countries. The important role of FDI in China's economic growth has been widely confirmed, but more or less ignored the FDI "distribution of the cake" the income distribution effect. In fact, as an important mode of China's entry into the international division of labor, FDI also has a profound impact on China's income distribution.

In view of China's FDI income distribution effect, the existing literature had been discussed, Wang Xiaolu, Fang Gang (2004), Zhang Guangsheng and Zhou Juan (2009), Teng Yangyang, Liu Yulin and Li Houjian (2010), Yuan Dongmei, Wei Houkai and Yang Huan (2010), Yuan Hai Fu, Tang Weibing, Zhan Xiang Wang, (2010). By this incentive, the local government is easy to form the "investment tendency" behavior pattern, the implementation of the capital to the owner of the policy, which leads to the income distribution to the capital, including FDI, and ultimately expand the income gap. However, the behavior of local government may narrow the income gap. Such as Tsai (1995) believes that the host government in response to the influx of FDI, it is possible to take two kinds of attitude: first, in order to pursue industrialization, the government increased fiscal spending, to provide the corresponding domestic capital, to cooperate with FDI to play a role. Thus narrowing the income gap between domestic and foreign capital; two, in the market access and other aspects of domestic enterprises or interest groups to take the attitude of protection, which will ensure that domestic enterprises in the domestic market to obtain the proceeds, which will ease the income from the other side to the FDI inflow of income inequality. Therefore, the role of local government in the FDI income distribution effect is still to be verified, this article is going to make a try in this aspect.

The structure of this paper is as follows: second data, variables and models; the third part, the empirical results; the last part is the conclusion.

II. DATA, VARIABLE AND MODELS

This paper studies the panel data of provinces, municipalities and autonomous regions outside, Tibet and autonomous region, and the data of Chongqing city are merged into the Sichuan province. We will be explained by the descriptive statistics of the variables and the main explanatory variables in Table 1:
TABLE I DESCRIPTIVE STATISTICS OF THE MAIN VARIABLE

<table>
<thead>
<tr>
<th></th>
<th>Min</th>
<th>Max</th>
<th>Average</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cityrate</td>
<td>16.77</td>
<td>89.30</td>
<td>44.6435</td>
<td>16.82328</td>
</tr>
<tr>
<td>Gap</td>
<td>1.5929</td>
<td>4.7585</td>
<td>2.8490</td>
<td>0.6620</td>
</tr>
<tr>
<td>FD2</td>
<td>0.9239</td>
<td>0.9935</td>
<td>0.9621</td>
<td>0.01461</td>
</tr>
<tr>
<td>fdi</td>
<td>5.1189</td>
<td>12748</td>
<td>1208</td>
<td>1889</td>
</tr>
<tr>
<td>t</td>
<td>0.003</td>
<td>3.001</td>
<td>1.110</td>
<td>0.383</td>
</tr>
</tbody>
</table>

In summary, we will estimate the basic equation as shown in (1):

(1)

The meaning of the variables in the equations described above, which lnfdi*FD as fiscal decentralization and FDI constitutes interaction term explanatory variables, gamma is not varying with time in individual characteristics, I epsilon is residual, the subscript i indicates that the corresponding area, the subscript t said the year.

III. EMPIRICAL RESULTS

A. The Impact of FDI on China's Income Gap

We use fixed effects (FE), random effects (RE) and generalized moment estimation (GMM) to estimate the impact of FDI on China's income gap. (Length limit, only the important variables).

TABLE II THE IMPACT OF FDI ON CHINA'S INCOME GAP

<table>
<thead>
<tr>
<th></th>
<th>FE (1)</th>
<th>RE (2)</th>
<th>GMM (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>0.4432***</td>
<td>0.4432***</td>
<td>(0.0406)</td>
</tr>
<tr>
<td>lnfdi</td>
<td>-0.0950***</td>
<td>-0.0976***</td>
<td>(0.0207)</td>
</tr>
<tr>
<td>FD2</td>
<td>-0.5279***</td>
<td>-0.8379***</td>
<td>(0.0820)</td>
</tr>
<tr>
<td>lnfdi2</td>
<td>0.0104***</td>
<td>0.0089***</td>
<td>(0.0026)</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>_cons</td>
<td>-0.5014*</td>
<td>0.4027</td>
<td>0.5342*</td>
</tr>
</tbody>
</table>

Note: * * * indicated that the significant levels of 10%, 5% and 1% were significant, and the standard error was within the brackets.

As shown in Table 2, FE and RE test results show that the inflow of FDI has narrowed the income gap. After Hausman test, the P value is 0, so we reject the original Being tested.

B. Does FDI Through Fiscal Decentralization Affect the Income Gap?

Now, by introducing the interaction term between FDI and fiscal decentralization, we test the conclusions of the above, and the results are reported in Table 3 (length limit, only the important variables).

TABLE III THE RESULTS OF FDI AND FISCAL DECENTRALIZATION AFTER INTERACTION

<table>
<thead>
<tr>
<th></th>
<th>FE</th>
<th>RE</th>
<th>GMM</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>0.4617***</td>
<td>(0.0437)</td>
<td></td>
</tr>
<tr>
<td>lnfdi</td>
<td>-0.0805***</td>
<td>(0.0205)</td>
<td></td>
</tr>
<tr>
<td>FD2</td>
<td>-0.1415</td>
<td>(0.2135)</td>
<td></td>
</tr>
<tr>
<td>lnfdi2</td>
<td>0.0131***</td>
<td>(0.0028)</td>
<td></td>
</tr>
<tr>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>_cons</td>
<td>-0.5887**</td>
<td>(0.2639)</td>
<td></td>
</tr>
</tbody>
</table>

Note: * * * indicated that the significant levels of 10%, 5% and 1% were significant, and the standard error was within the brackets.

After the introduction of FDI and fiscal decentralization, the test results show that the interaction between FDI and fiscal decentralization is significantly negative. However, this result is not supported by the GMM test. GMM test results show that the interaction of FDI and fiscal decentralization is positive, but not significant. This shows that, after taking into account the internal nature, the overall level of fiscal decentralization does not effectively improve the income distribution effect of FDI, so the relevant conclusions need to be further tested.
IV. CONCLUSIONS

In this paper, we find that FDI can influence the income inequality through fiscal decentralization in the 1996-2012 years of China’s inter provincial panel data. In general, the FDI and the fiscal decentralization can ease the income inequality. This study from the perspective of the literature supporting the inflows of FDI will eventually help to improve income distribution pattern of the host country perspective, the results obtained depends on the host country with strong economic development as a support.

This paper has important policy implications for the future development of China’s economy. At present, the Chinese economy is undergoing structural adjustment and industrial upgrading, one of the important content is to guide the manufacturing industry to the central and western regions of the central and western regions of the central and western regions, which also includes FDI related industries. According to the above research conclusion, we expect this strategy not only can bring more good economic development opportunities, but also improve the income distribution pattern of these regions, and narrow the income gap between regions and regions. During this period, the maintenance of the healthy competition between local governments will play an important role, which means that in the transformation of government functions and to maintain local economic activity to find a good balance point.

This paper also has some shortcomings: first, it is limited by the available data, the use of urban and rural resident’s income ratio as the overall income gap measurement is not accurate; second, only use the inter provincial level data to analyze, will lead to FDI for the same province, the impact of the income gap can not be tested. The above problems depend on further analysis to solve.

REFERENCES