
1997–2014

DEA–Malmquist

GMM

20 70

TFP

Total Factor Productivity

TFP

TFP

TFP

TFP

King et al. 1993

Beck et al. 2000 Buera et al. 2011

TFP

TFP

3.

1

TFP

TFP

DEA - Malmquist

DEA - Malmquist

TFP

DEA - Malmquist

Fare et al.

1998

TFP

DEA - Malmquist

1997- 2014

30

DEA - Malmquist

TFP

GDP

1997

DEAP 21

1997- 2014

30

TFP

TFP

TP

TE

1

3

1997- 2014

TFP

6.6%

TFP

6.4%

0.2%

TFP

2

2012 2010 GDP

2013

1997 INF NF GDP
1

Andreas 2014
3 HUM 6 =16
6 =9 =12 6 =0

EX
FDI
DISA
CUL
URBAN

TFP

no 2005

2012

EX
5%
FDI

TFP
TFP

HUM
TFP
10%

TFP

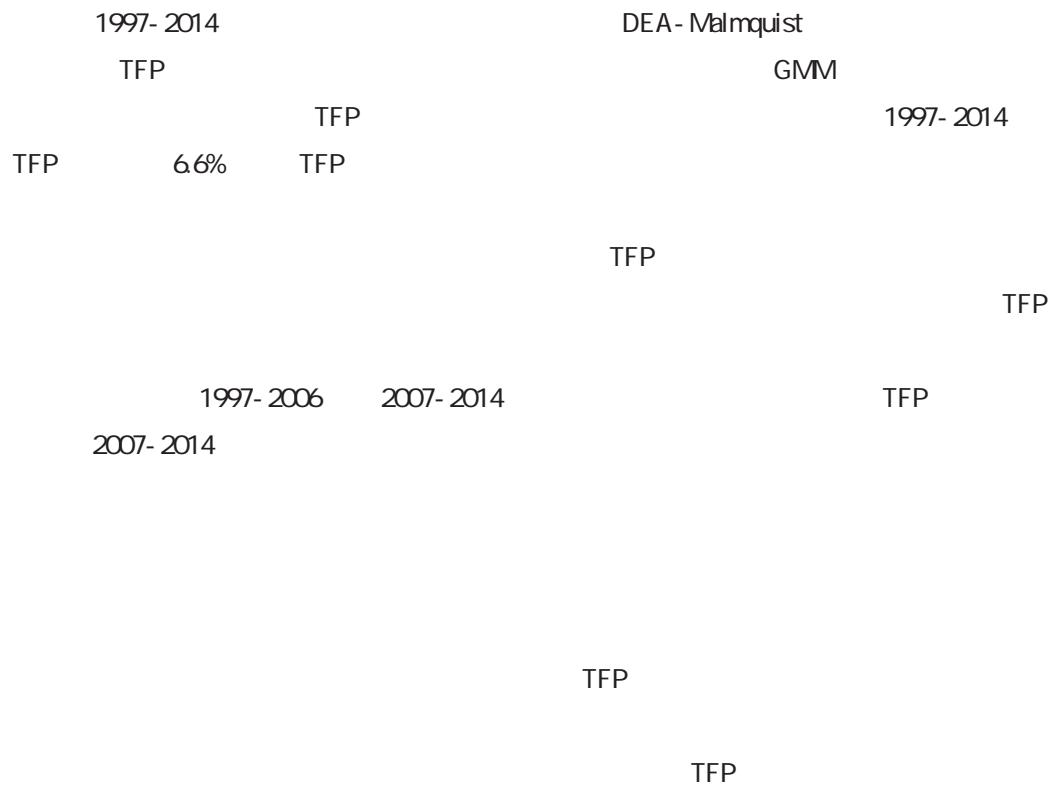
TFP
Kai

TFP

2006

2005

1997



1.

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Based on China's provincial panel data from 1997 to 2014, this paper measures the agricultural total factor productivity of China and the developmental level of rural formal and informal finance by use the DEA- Malmquist index method and the Indirect Estimation Method. Then the paper analyzes the influences of the rural formal and informal financial development to the agricultural Total Factor Productivity growth and identifies its intermediate channel. The results show that from 1997 to 2014, the agricultural Total Factor Productivity is mainly driven by the agricultural technology progress; rural formal and informal financial development both has a significant role in promoting for the agricultural Total Factor Productivity growth, but the intermediate channel is different. Formal finance mainly through the channel of technical progress to promote the agricultural Total Factor Productivity growth, and informal finance mainly through the technical efficiency channel. The auxiliary action of rural formal and informal finance development to the agricultural Total Factor Productivity growth in the period 2007- 2014 is significantly larger than during 1997- 2006. This research conclusion to a certain extent supports the point of view that complementary relationship exists between rural formal and informal finance.

formal finance; informal finance; agricultural total factor productivity; system GMM