

Can Foreign Remittances Accelerate Economic Growth? An Empirical Analysis for China

Jie Zhang¹ Yong Lin²*

1. Jie Zhang, Associate Professor, Fujian Academy of Social Sciences, 18 Liuhe Road,Fuzhou, Fujian,China,350001

 Yong Lin, Professor, Ph.D, Fujian Academy of Social Sciences, , 18 Liuhe Road, Fuzhou, Fujian, China, 350001

* E-mail of the corresponding author: linyongsky@139.com

Abstract

Using Johansen's co-integration test, this paper is conducted to investigate the effect of foreign remittances on economic growth by collecting time series data from 1982 to 2015 from the world data bank. Results indicate that there is a long run relationship between foreign remittances and economic development. Furthermore study applies error correction model ECM to detect the short run adjustment in variables to attain equilibrium in the long run. The results show that remittances have a significant positive impact on China economic growth both in the long run and in the short run, indicating that remittances can accelerate China economic growth. The conclusion suggests that remittances in China are currently profit- driven and a considerable share of remittances has already entered production investment.

Keywords: Foreign remittances, Economic growth, Time Series Analysis

1. Introduction

Foreign remittances by migrant abroad are now an important source of funds for many developing countries and their inflows have been rapidly growing. Since the late 1970s China economy has enjoyed sustained and rapid economic growth and also has become the second largest recipient of foreign remittances in the world. In 1982, the amount of foreign remittance inflows to China were only \$ 616 million and increased to 63.9 billion U.S. dollars by 2015. Currently foreign remittances are one of the most important international capitals for China. Although the total amount of foreign remittances to China is very large, but their ratio to the gross domestic product (GDP) is relatively small. From 1982 to 1996, the ratio was no more than 0.5%, with a peak of 0.52% in 1997; from 1998 to 2004, it continued to rise, reaching a peak of 1.01% in 2004. Afterwards, the ratio declined to around 0.6%., 0.9% in 2006, 0.6% in 2011, 0.8% in 2012 and 0.6% in 2015, and reached 1% in the early 1990s, nearly 3% in 1992 and more than 6% in 1993 and 1994. Since then, although this ratio has declined, it has remained basically between 2.0% and 4.8% in the past 10 years, and 2.30% in 2015. Obviously the total amount of foreign remittances are far less than that of FDI or export (see Figure 1), and correspondingly the ratio of foreign remittances to GDP is much lower than that of FDI and Export to GDP.

Foreign remittances received in China are characterized by two outstanding features. One is that the volatility of foreign remittances is relatively unstable. By calculating the coefficient of variation of foreign remittances and other capital flows from 1982 to 2012 (Table 1), we find that the volatility of foreign remittances are higher than that of FDI, showing a high degree of instability. From 1982 to 1995, the volatility of foreign remittances was lower than that of FDI, and from 1998 to 2012, the volatility of foreign remittances was higher than that of FDI, indicating that the stability of foreign remittances has decreased significantly. This finding indirectly shows that foreign remittances may begin to be profit-driven in China (Yu Zhang 2013).



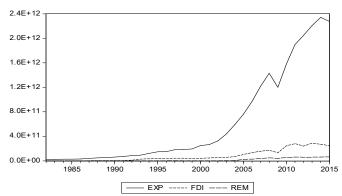


Figure 1. Foreign Remittances and Export, Foreign Direct Investment During 1982-2015 in China (US\$)

The other is that remittances are strongly profit-oriented. Foreign remittances were once used more for domestic consumption than for productive investment, but now are one of the powers to take advantage of exchange rates and earn profit. Before the 1990s, foreign remittances were led by altruistic motives and helped stabilize domestic macroeconomics. However, in the late 1990s, the selfish motives for remittances were prevailing (Quan Yang 2013; Yong Lin 2017). The exchange rate fluctuations have intensified and some of the remittances have been more prominent in their search for investment opportunities and have shown very strong investment-seeking behavior. As a result more than 60% of FDI in China comes from overseas Chinese, which shows that the foreign remittances is profit-driven in China.

Table 1: Volatility of foreign remittances and other capital inflows received in China

Time	Foreign FDI		Portfolio
	remittances	rDi	Investment
1982—2012	1.36	1.24	1.78
1982—1995	0.49	1.29	1.18
1998—2012	0.72	0.71	1.54

Remittances have both welfare and growth effects and can directly alleviate poverty levels by increasing recipients' living standards(Adams & Page 2005; Siddiqui 2003). At the same time remittances have significant indirect and direct macroeconomic effects. The main channels through which remittances can indirectly affect economic growth are the following. Firstly, the remittances in most countries are counter-cyclical and can stabilize the macro-economy through the channel of counter-cyclicality. Secondly, the financial sector is found to be a efficient indirect channel for remittances to increases economic growth(Gupta et al. 2007; Giuliano et al. 2009). Some economists have also found that these growth effects of remittances are higher in countries with relatively underdeveloped financial sectors, since in such countries remittances are a source of funds for investment(Lucas et al. 1985). A third indirect growth effect of remittances is the real exchange rate, which is found to appreciate by remittances and has a negative effect on economic growth(Amuedo-Dorantes & Pozo 2004; Lartev et al. 2009).

In addition, large inflows of remittances may undermine economic growth by causing access to real exchange rates, leading to "Dutch disease" and reducing labor supply(Acosta et al. 2009). Another indirect effect of remittances is its effects on human capital. Human capital generally has positive effects on economic growth. However, high remittances are often related with skill shortages and human capital decrement. So if the remittance-receiving family members substitute leisure for work, remittances may have a negative effect on economic growth. At the same time, remittances may also reduce the enthusiasm and motivation of the migrant family members through moral hazard channels, resulting in a decrement in labor supply, which may have a negative impact on economic growth(Ralph Chami et al. 2005).

Currently China is the second largest recipient of foreign remittances in the world just next to India. Generally in developing countries most of these inflows are altruistic to support daily consumption of family members, only a few are motivated by pecuniary gains. Compared with other countries, at present in China the most outstanding



feature of foreign remittances is that they are increasingly for-profit, that is, more and more foreign remittances are motivated by pecuniary gains(Quan Yang & Yu Zhang 2013; Yong Lin 2017).

2.Literature Survey

There are abundance of literature highlighting the impact of foreign remittances on economic growth, in which there are two opposite views-points. Some found that remittances have a significantly positive impact on the economic growth of recipient countries. According to Dilip Ratha (2003) of the World Bank, the positive impact of remittances on the economy of low-income countries is even more pronounced(Ratha 2003). In 2003, remittances accounted for 3.3% of GDP and 18.5% of imports, accounting for 1.3% of GDP and 4% of imports respectively in low-income countries. Mim et al. (2012) studied the relationship between migration and economic growth in the Middle East and North Africa between 1980 and 2009 and found that remittances can stimulate economic growth by promoting human capital development. Najid Ahmad et al. (2013)also found that there is a positive correlation between international migration and Pakistani GDP. Using the ARDL-ECM method, Uddin et al.(2012) analyzed the causal relationship between migration, financial development and economic growth in developing countries during the period 1971-2010. The results show that there is a long-term bi-directional causal relationship between remittances and economic growth in Bangladesh, a short-term unidirectional causal relationship from remittances to economic growth in India, and a reverse causal relationship in Mexico and the Philippines.

In addition to the above findings, there are many other studies that consider the negative impact of remittances on economic growth of recipient countries. According to a time series study by Karagoz (2009) from 1970 to 2005, remittances had a negative impact on Turkey economic growth(Karagoz, K. 2009). A study by Edward (2010) selected panel data for 22 Latin American and Caribbean countries during the period 1979-2008 and showed that remittances were negatively correlated with the economic growth (Edwards 2010). Kapur (2004) pointed out that a negative impact of remittances on economic growth is due to the moral hazard posed by remittances. In Sorensen's study (2004), national economy would deteriorate because remittances were used to destabilize the country. Collier et al. (2000) found that remittances could also be an important mechanism to support terrorism and the civil war. Chami et al. (2003) argued that remittances could adversely affect economic growth by reducing labor supply, and that the negative impact would be even more pronounced if the emigrants were educated. Amuedo-Dorantes et al. (2004)argued that the continued inflow of large numbers of remittances may also lead to an appreciation of the real exchange rate, while a real appreciation of the real exchange rate would retard economic growth for a long period of time. By analyzing the time series data of twenty nine years of China and Korea, Jawaid & Raza (2012) conducted a study on the relationship between remittance and economic growth and concluded that remittances have a significant relationship with economic growth.

Overall, the results of the aforementioned research are inconclusive. The results vary depending on the selected variables, country, and time series. The Chinese scholars also have done a great deal of work on the contribution of overseas Chinese in China domestic social and economic development, but they have done little on remittances. The study by Jawaid et al. (2012)) on the time series between 1980 and 2009 found that in North Korea remittances had a positive but in China they had a negative impact on economic growth. Quan Yang & Yu Zhang (2013) also found that remittances impeded economic growth by promoting the real exchange rate appreciation of the RMB. We do not agree with them and try to identify again the relationship between remittances and economic growth in China.

On the data basis of annual observations over the period 1982-2015, our empirical analysis is done by using Johansen's co-integration test and error correction model (ECM). The dependent variable is economic growth (GDP) and the independent variables are foreign remittances (REM), FDI, export (EXP), import (IMP) and exchange rate (EXCH). The remaining portion of the study has been organized as; the second section discusses literature review; the third section presents data, methodology and variable description; the fourth section shows empirical findings and interpretations; the fifth section concludes.

3. Empirical Methodology and Results

The following model is specified for the empirical analysis and foreign remittances, FDI, export, imports and exchange rate are considered in the analysis:

 $LNGDP_{t=}\beta_{0}+\beta_{1}LNREM_{t}+\beta_{2}LNFDI_{t}+\beta_{3}LNEXP_{t}+\beta_{4}LNIMP_{t}+\beta_{5}LNEXCH_{t}+\mu_{t} \quad (1)$ Where



LNGDP=Log of real GDP (Gross Domestic Product)

LNREM=Log of foreign remittances

LNFDI= Log of foreign direct investment

LNEXP= Log of export

LNIMP=Log of imports

LNEXCH= Log of exchange rate

LN= Natural Logarithm

 μ = random disturbance term.

There is no one common definition for foreign remittances among policymakers and academics, but in general we can define foreign remittances as the sum of three elements in the IMF's Balance of Payment Statistics Yearbook (BOPSY): migrant transfers, compensation of employees, and workers' remittances. This is also used as the standard definition in the World Development Indicators (WDI) and the WB's Global Development Finance data-bases. All the data are expressed in USD terms at a constant price of 2005 and sourced from the World Bank's World Development Indicators database. In equation (1), GDP is used as a dependent variable on behalf of economic growth, REM on behalf of foreign remittances , FDI on behalf of foreign direct investment, IMP on behalf of imports, EXP on behalf of exports and EXCH on behalf of the real exchange rate, and μ is a random disturbance items.. The current paper uses the natural log forms to stabilize the variance of time-series variables. Regression and testing are done through econometric software Eviews 8.0.

3.1.Estimating Methodology

Before further analyzing, we must take special care of the time series data. These data are often non-stationary in nature, and thus, it is necessary to check the unit-root first and to check the order of integration of each variable (Table 2). Akeay & Demirhan (2005) argued that stationary variables can be modeled in levels and granger causality tests can be used, while in the case of non-stationary variables, co-integration techniques can be used for detecting the long-run relationship. We use the econometric tools of Johansen co-integration test for analyzing time series data.

Variable ADF Values Critical Critical Decision Values(5%) 1.819129/ -2.998064/ LN GDP/△LN GDP I(1)/I(0)-3.311593 -2.967767 -2.963972/ -0.264225/ LN REM/\(\triangle LN REM\) I(1)/I(0)5.908391 -2.967767 2.009323/ -2.991878/ LN EXP/\(\triangle LN EXP\) I(1)/I(0)-2.967767 -5.540032 -1.981433/ -2.991878/ LN FDI/\(\triangle LN FDI\) I(1)/I(0)-3.561563 -2.967767 -2.963972/ -0.002091/ LN IMP/\(\triangle LNIMP\) I(1)/I(0)-4.967632 -2.967767 -1.621610/ -2.981038/ LNEXCH/\(\Delta\)LN EXCH I(1)/I(0)-3.783571 -2.967767

Table 2: ADF unit root test results

3.2. Johansen Co-integration Test

The stationary time series that are integrated of the same order are co-integrated. This implies that there exists a long run equilibrium relationship between these time series. Our study employs Johansen's co-integration technique for the existence of a long run relationship between real GDP growth and the explanatory variables in the model. The results of Johansen's co-integration model are shown in the Table 3.



Table 3. Johansen Co-integration Test Results

Eigen-value	Likelihood	Critical Value (5%)	Null Hypothesis
0.979880	265.0305	95.75366	none **
0.912781	155.6620	69.81889	At most1 **
0.800533	87.36057	47.85613	At most 2**
0.571266	42.22154	29.79707	At most 3*
0.478134	18.50784	15.49471	At most 4
0.010593	0.298186	3.841466	At most 5

Note: 1.*(**) indicates that the hypothesis is rejected at 5% (1%).

2. L.R. Test indicates 4 co-integrating equations at 5% significance level.

Johansen's co-integration test is applied on the assumption that there is not deterministic trend in the data. The appropriate lag length of 1 for the co-integration is selected on the basis of Akaike & Schwarz information criteria by using vector autoregressive model. The variable included in the equation is significant at 5 percent level. Normalized equation is as follows:

LNGDP=0.025458LNREM+0.750640LNFDI+0.655031LNEXP-0.498508LNIMP-1.628716EXCH

The results show that the economic growth of China benefited significantly from foreign remittances, FDI and export, and foreign remittances in the context of China economy, FDI and export have played a positive role in the growth process of China economy. The volume of foreign remittances received in China through official channels has significantly increased in recent years and foreign remittances can increase foreign exchange reserves which in turn help to stabilize the domestic economy. In addition, the results also show that in the long run, imports and exchange rate have a negative impact on China economic growth.

3.3.Error correction model (ECM)

In order to identify the short-run relationships and check the stability of the long-run parameters, an error correction model shall be estimated. The error correction term is calculated by using the normalized long-run coefficients. Results for the error correction model are reported in the following. Table 4 reproduced the results of short-run estimate by using Error Correction Model (ECM). The ECM is employed when all variables become stationery after being converted into first differenced. ECM (-1) means residual of the regression model one period lag of residuals. The estimated coefficient of the error correction vector is -0.31. This means ECM (-1) is the speed of adjustment correcting back disequilibrium at the rate of 0.31 percent annually. This shows that approximately 31% of the previous year's disequilibrium in the economy is corrected in the long-run.

The negative sign and the significant probability signify the existence of co-integration among variables. Also, all the diagnostic tests reported in Table 3 confirm that the estimated error correction model does not have any notable econometric problem. It is found that in the short-run foreign remittances influence economic growth positively while FDI impact economic growth adversely. This implies that foreign remittances inflows can promote economic growth in China. Further, the results show that exports and imports are insignificantly related with economic growth in the short-run.

In most developing countries foreign remittances are generally spent on daily living, health care, education, real estate acquisitions, which led to a insignificant impact on short term growth, and the multiplier effects arising through these channels can spur economic growth in the long run (De Haas H. 2003). Meanwhile the impact of foreign remittances on China economic growth is positive both in the short and long term, which means that foreign remittances received in China are no longer so much targeted at daily consumption and a considerable part of foreign remittances have already been put into the productive investment field and have produced positive impacts on economic growth in the short run.



Table 4. Error correction model

Variables	DLNGDP	DLNGDP	DLNREM	DLNEXP	DLNIMP	DLNEXCH
DLNGDPt-1	-0.006380	2.145764	0.176853	-0.381907	-0.805876	-0.605835
	(0.23619)	(2.96762)	(0.84587)	(0.50924)	(0.36563)	(0.26785)
DLNREMt-1	0.016211	-0.196935	0.044058	0.007639	0.055566	-0.006865
	(0.01919)	(0.24114)	(0.06873)	(0.04138)	(0.02971)	(0.02176)
DLNFDIt-1	-0.157169	-0.206564	1.091216	0.138002	-0.118486	-0.012405
	(0.09984)	(1.25449)	(0.35757)	(0.21527)	(0.15456)	(0.11323)
DLN EXPt-1	0.195658	-0.824563	-0.661995	-0.056415	-0.148249	-0.439086
	(0.13897)	(1.74616)	(0.49771)	(0.29964)	(0.21514)	(0.15761)
DLNIMPt-1	0.089490	1.301969	-0.710562	0.031293	0.300109	0.343342
	(0.15799)	(1.98507)	(0.56581)	(0.34063)	(0.24457)	(0.17917)
DLNEXCHt-1	0.041349	-0.394322	-0.297055	-0.028180	0.096720	0.359835
	(0.13436)	(1.68816)	(0.48118)	(0.28968)	(0.20799)	(0.15237)
ECM (-1)	-0.310657	0.560295	0.870847	0.094130	-0.098205	-0.230876
	(0.10680)	(1.34188)	(0.38248)	(0.23026)	(0.16533)	(0.12112)
С	0.112180	-0.087439	0.156360	0.173616	0.245843	0.117954
	(0.03705)	(0.46551)	(0.13269)	(0.07988)	(0.05735)	(0.04202)
R-squared	0.506523	0.138775	0.443692	0.120654	0.281921	0.618408
Adj. R-squared	0.342031	-0.148300	0.258256	-0.172461	0.042561	0.491210

Note: The numbers in parentheses are p values and CointEq1 is the error correction term.

3.4. Stability test

Interpretation of ECM models requires that stability condition be met. If the specified model is stable, it is invertible. If right number of lags is selected, then ECM should be stable. Figure 4 depicts the stability of ECM. All the inverse roots of characteristic polynomial lie inside the unit circle.

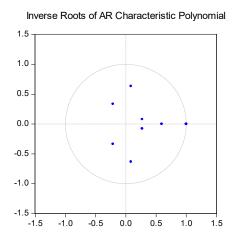


Figure 2. Inverse Roots of Characteristic Polynomial

4. Conclusion And Recommendations

This study sets out to evaluate the relationship between remittance flows and other macroeconomic variables Chinese economy. The final result shows that foreign remittances have a significant positive impact on China economic growth both in the long run and in the short run, indicating that foreign remittances can accelerate China economic growth. This conclusion indicates that foreign remittances can overcome the defects of the capital market, enable the remaining migrant families to effectively gather assets, promote the investment and engage in entrepreneurial activities. This result also reflects that China relevant policies have achieved good



results in tapping foreign remittances to boost economic growth. This argument does not support the conclusions of Jawaid & Raza (2012), Quan Yang & Yu Zhang (2013)'s study.

Our conclusion also reflects the pro-profit features of current foreign remittances in China. The changes in the motives of migrants' remitting behavior reflect that increasing shares of foreign remittances have been put into investment from consumption and their impact on China economic growth begins to change too.

But as is known to us, the relatively high cost of remitting money to China from abroad has created some impediment to inflow of foreign remittances. World Bank data shows that the cost of foreign remittances to China is much higher than that to India. An average of 11.57 U.S. dollars per reimbursement for 200 U.S. dollars for China, including handling fees, currency exchange fees, etc. Compared with China, a verage cost is much lower for India with the average of just 7.56 U.S. dollars, that is, the cost for China is 53% higher than that for India. In addition, a large influx of foreign remittances leads some family members of overseas Chinese to overrely on foreign remittances resulting in a decrease in the supply of local labor and ultimately jeopardizing economic growth (Yong Lin 2016).

To give full play to the positive impact of foreign remittances on economic growth, we recommend the following measures: introduce more attractive incentives to reduce the remitting costs; regulate the channels and means of remittance statistics to improve the statistics quality; take effective measures to guide more foreign remittances into productive investment. It is believed that with the implementation of the above-mentioned measures the positive impacts of foreign remittances on China economic growth will be further highlighted.

Meanwhile this conclusion also finds that FDI significantly influences the long-term growth of China economy, indicating FDI is very important in boosting China economic growth. This result also suggests that relying on FDI will inevitably result in excessive dependence on international market, which is harmful to the stable development of China economy. In this sense, it is of positive significance to properly encourage the inflow of foreign remittances and guide them into the investment field, which can effectively reduce the dependence on foreign capital. In addition, from the analysis conclusions, we can see that import(-0.50) and export(+0.66) have strong impact on economic growth.

This conclusion shows that China economic growth is heavily dependent on foreign market in the past decades, and adverse changes in the external economic environment will have an adverse impact on China macro economy. Therefore blindly pursuing imports or exports will inevitably lead to over-reliance on the international market, weaken the country's macro-control capabilities and destabilize the country's economy. Thus the government should strengthen the importance of the domestic market in boosting economic growth. Our study also finds that the exchange rate has a long-term important negative impact on China economic growth. In view of this, we can give full play to the role of the RMB exchange rate in promoting China economic growth.

REFERENCES

- Adams R. H. Jr. & J. Page (2005). Do International Migration and Remittances Reduce Poverty in Developing Countries? *World Development*. 33(10), 1645-1669.
- Tasneem Siddiqui & Choudhury R. Abrar (2003). Migrant Worker Remittances and Micro-Finance inBangladesh. *ILO Social Finance Program, Working Paper 38*. September 2003, [Online] Available:http://www.ilo.org/public/english/employment/finance/download/wp38.pdf
- Gupta, Sanjeev, Catherine A. Pattillo & Smita Wagh (2009). Impact of Remittances on Poverty and Financial Development in Sub-Saharan Africa. *World Development*.37 (1),104–15.
- Catalina Amuedo-Dorantes & Susan Pozo (2004) .Workers' Remittances and the Real Exchange Rate: A Paradox of Gift. *World Development*.32(8), 1407-1417.
- Acosta, Pablo, Emmanuel Lartey & Federico Mandelman (2009). Remittances and the Dutch Disease. *Journal of International Economics*. 79 (1),102-116.
- Catalina Amuedo-Dorantes & Susan Pozo (2004) .Workers' Remittances and the Real Exchange Rate: A Paradox of Gifts. *World Development*.32(8), 1407-1417.
- De Haas H. (2003). Migration and Development in Southern Morocco: The Disparate Socio-Economic Impacts of Out-Migration on the Todgha Oasis Valley. Unpublished PhD Thesis. Radboud University, Unpublished PhD Thesis.
- Devesh Kapur (2004) . Remittances: The New Development Man-tra? G-24 Discussion Paper Series. New York: United Nations Publication.
- Dilip Ratha (2003). Worker's Remittances: An Important and Stable Source of External Development Finance. *Global Development Finance*. Washington, DC: World Bank, (Chapter 7), 157–75.



- Garcia-Fuentes, P. A. & Kennedy, P. L. (2009) . Remittances and Economic Growth in Latin America and the Caribbean: The Impact of Human Capital Development. Southern Agricultural Economics Association Annual Meeting, Atlanta, Georgia, 31 January-3 February 2009,1-32.
- Jawaid, S. T., & Raza, S. A. (2012) . Workers' remittances and economic growth in China and Korea: an empirical analysis. Journal of Chinese Economic and Foreign Trade Studies, 5(3), 185–193.
- Jawaid, S. T. & Raza, S. A. (2012). Workers' Remittances and Economic Growth in South Asia. MPRA Paper, No. 39001.
- Karagoz, K. (2009) . Workers' Remittances and Economic Growth: Evidence from Turkey. Journal of Yasar University. 4(13), 1891-1908.
- Lucas, Robert E. B. & Oded Stark (1985). Motivations to Remit: Evidence from Botswana. *Journal of Political Economy*. 93 (5), 901–918.
- Najid Ahmad ,Arslan Ahmad & Muhammad Farhat Hayat (2013) . Foreign Remittances and EconomicGrowth in Pakistan: An empirical investigation. *Munich Personal RePEc Archive*, *MPRA Paper* No. 49132, posted 19. August 2013 UTC, [Online] Available: http://mpra.ub.uni-muenchen.de/49132/
- Quan Yang & Yu Zhang (2013). An Empirical Study on Remittance, Real Exchange Rate Appreciation and Dutch Disease based on Chinese Data. *World Economy Study.* 9, 30—36.
- Ralph Chami , Connel Fullenkamp & Samir Jahjah (2005) . Are Immigrant Remittance Flows a Source of Capital for Development? . Washington DC: IMF Staff Papers. 52(1),55—81.
- Sorensen, Ninna Nyberg (2004). Migrant Remittances as a Development Tool: The Case of Morocco. *Working Paper* 2, International Organization for Migration, Geneva. [Online] Available: http://www.belgium.iom.int/pan-europeandialogue/documents/remittances_morocco.pdf
- Thurl Edwards (2010). Do Remittances Promote More Economic Growth than Foreign Aid in Latin American and Caribbean Countries? . Submitted to the Economics Faculty in partial fulfillment of the requirements for the degree of Bachelor of Science in Business Administration, December 2010.
- Uddin GS, Kyophilavong & P, Sydee N. (2012). The casual nexus of banking sector development and poverty reduction. *International Journal of Economy and Finance Issues*. 2(3),304–311.
- World Bank (2006) . Global Economic Prospects 2006: Economic Implications of Migration and Remittances. New York: World Bank.
- World Bank (2012). Migration and Remittances Factbook 2011. World Development Indicators, Washington, DC: World Bank, 31.
- Yong Lin (2016) . Overseas Chinese Businessmen and International Remittance. New York: World Book Publishing Company, 255.
- Yu Zhang (2013) . Research on the Impact of Overseas Chinese Remittance on Home Economic Growth. 2013 Master's Dissertation, Xiamen University, 26.

First A. Author Jie zhang

Birthplace:Jianou, Fujian, China Master of Science of Economic Geography, Fujian Normal University, Fuzhou, Fujian, China, 1995

Major field of study: migration economy, regional economy

Second A. Author Yong Lin

Birthplace:Enshi,Hubei,China

PhD. of History, Xiamen University, Xiamen, Fujian, China, 2006 Major field of study: migration economy, overseas Chinese economy