

CROSS-CULTURAL COMMUNICATION
Vol. 6, No. 3, 2010, pp. 72-82

ISSN1712-8358
www.cscanada.net
www.cscanada.org

Causal Relationship Among the National Wealth, the Consumption and Shanghai Composite Index¹

LIENS DE CAUSALITÉ ENTRE LA RICHESSE NATIONALE, LA CONSOMMATION ET L'INDICE COMPOSITE DE SHANGHAI

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Abstract: Based on data between the December 1990 to July 2009 of the industrial added value, retail sales and the Shanghai composite index, Cointegration and Granger Causality test have been done and found that: a) An stable cointegration relationship exists among the industrial added value, retail sales and Shanghai composite index, and they are positively correlated. b) The total industrial added value and retail sales Granger cause the Shanghai composite index, but the reverse affect did not observed, which explain China's stock market is not yet a mature market. c) Compared to the total retail sales, the impact of industrial added value on the Shanghai composite index delayed a little longer.

Keywords: cointegration test; Granger causality test; industrial added value; total retail sales; the Shanghai Composite Index

Resumé: Sur la base de données de décembre 1990 à juillet 2009 de la valeur ajoutée industrielle, des ventes au détail et de l'indice composite de Shanghai, le test de la cointégration et le test de la causalité de Granger ont été réalisés et ont constaté que: (1) une relation de cointégration stable existe entre la valeur ajoutée industrielle, les ventes au détail et l'indice composite de Shanghai, et ils sont corrélés positivement. (2) La valeur totale ajoutée industrielle et les ventes au détail ont une influence sur l' indice composite de Shanghai, mais l'effet inverse n'a pas été observé, ce qui explique que le marché boursier de la Chine n'est pas encore un marché mature. (3) Par rapport au total

¹ This work is supported by the National Science Foundation under Grant No. 70772087; the funds project under the Ministry of Education of the PRC for young people who are devoted to the researches of humanities and social sciences under Grant No. 09YJC790025; the Fundamental Research Funds for the Central Universities under Grant No. DUT10ZD107; software + X research of Dalian University of Technology under Grant No. 842301.

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*Received 29 May 2010; accepted 19 August 20

des ventes au détail, l'impact de la valeur ajoutée industrielle sur l'indice composite de Shanghai est un peu retardé.

Mots-clés: test de cointégration; test de causalité de Granger ; valeur ajoutée industrielle; ventes au détail totales ; l'indice composite de Shanghai

1. INTRODUCTION

The core in the development of financial theory is the mutual promotion of financial development and economic growth, financial markets were established when the real economy developed into a certain stage, and its formation and development was designed to promote macroeconomic development. As an important part of the financial markets, the initial purpose of the stock market is to finance for enterprises so that enterprises has adequate fund to promote a better development. Since December 19, 1990 when the Shanghai Stock Exchange was established, China stock market has achieved rapid development. Until December 25, 2009, the A shares in Shanghai and Shenzhen stock markets has accounts for a total of 1,375,881 thousand, B shares accounts are 2460.3 thousand and the effective accounts are 12,013.86 million. The entire market from scratch, from small to large, developed rapidly, and its market institutions, transaction mechanisms, and supervision and management perfected gradually. The Chinese stock market's boom owes much to China's economic prosperities, moreover, the stock market development and growth has also enhanced the capital markets, which will also react to the real economy to some degree. Macroeconomic variables, is an important factor making stock price fluctuate, especially since 2007, the global financial crisis induced by the U.S. sub-prime crisis , first of all have had a tremendous impact around the world, including China's stock markets , and now has been seriously affected most countries' real economy. So the macroeconomic variables are affected, and the macroeconomic variables also affect the stock market, which produced the cyclical effects. The macro-economic controlling measurements on the economy taken by the government, is also based on this mechanism to adjust the capital markets and the real economy.

In short, because of the stock market's "wealth effect", investors take some stock proceeds for consumption, and the increasing consumption promotes the growth of the real economy, which in return support the stock market's rising. However, as for the stock prices, consumption and economic growth in China, the question of whether there is mutually promotion is worth studying.

1.1 The correlation research between macro-economic growth and stock price

Macroeconomic performance has important implications to the behaviors and earnings of the stock price. In the multi-factor asset pricing model, any economic variable which has effect on future investment opportunities or level of consumption should be reflected. As the macroeconomic development has a direct or indirect effect to the listed company's future cash flows and its risk adjusted discount rate, therefore, macroeconomic information directly affect the behaviors of the stock market's price. Based on this knowledge, many scholars began to study the impact of macroeconomic variables on the stock market returns, in order to find the extent, channels and transmission mechanism how different types of macroeconomic variables have impact on stock market gain.

1.1.1 Main study abroad

Some foreign experts and scholars advocate that the stock market is associated with economic growth and could significantly contribute to economic growth. They mainly research how the stock market play the role in capital formation from the perspectives of stock market's financing capacity, mobility, size and information accessing, and get the results that the stock market helps to speed up capital formation, which is conducive to economic growth.

Gurley and Shaw (1967) (John & Shaw, 1967) found that the value of the outstanding shares of the United States in the 19th century is more than half of national income. The most widely used theory is the arbitrage pricing theory (APT) founded in 1976 by Ross. The core content of APT is that the stock market is not only affected by the risk alone, but also affected by macroeconomic variables. The empirical studies based on APT of Chen et al (1986) (CHEN et al., 1986) have shown that economic variables have an impact on the stock market returns, because economic forces affect the discount rate (ie the ability of the company to create cash flow and future dividend), through which macro economy become one of the stock market risk factors. The study also showed that there is a long-term equilibrium relationship between macro economy and stock prices. Granger (1986) (Granger, 1986) by using cointegration analysis showed that there is a long-term equilibrium relationship between macroeconomic variables and stock price. Eugene Fama (1981,1990,1991) (Eugene, 1981) in University of Chicago, had regression analysis of the monthly, quarterly and annual data of the United States from 1953 to 1987, and found that stock market returns and future output growth significantly positively correlated. Johansen (1990) (Johansen & Katarina, 1990) proposed using vector error correction model (VECM) to test relationship between the level of stock market returns and the macroeconomic variables, and empirical studies show that there is a long-term equilibrium relationship between the securities prices in U.S. stock market and the national economy status indicators. Atje and Jovanovic(1993) (Raymond & Boyan, 1993) believed that there is a dual effect in stock market development, one is growth effect (the impact on economic growth rate) and level effect (the impact on the level of economic activity). Kent and Levine (1996) (Demirguc & Levine, 1996) through empirical study found that there is a corresponding relationship between per-capita real GDP and the stock market. In general, the higher the per-capita real GDP is in one country, the higher the development degree of the stock market in this country is. Christis Hassapis and Sarantis Kalyvitis (2002) (Christis & Sarantis, 2002) by using the method of vector auto regression tested the stock price changes and output growth rate in seven industrialized countries in Asia and proved their highly positive correlation.

Chung S. Kwon and Tai S. Shin (1999) (Kwon & Shin, 1999) through the error correction model tested cointegration and causality between the output index, exchange rate, trade balance, money supply such macroeconomic variables and South Korea's stock index, and found that stock index and macroeconomic variables have a long-term cointegration relationship. Humpe and Macmillan (2005) (Andreas & Peter, 2005) had a comparative research between U.S. and Japan on relationship between macroeconomic variables and stock market the over the past 45 years, and the results found that industrial production and consumer price index has an impact on stock prices of both countries, but U.S. stock-market was more significantly affected by industrial production (through the positive impact of current and future cash flows) and long-term interest rate (negative correlated, short-term interest rate is positively related); Japan's share price was more significantly affected by the consumer price index (positive correlated) than the United States was.

From above we can know that the foreign research about the relationship between the macroeconomic growth and stock prices originated very early, and with a wide range of research not limiting to analyze the single index of GDP, the main conclusion is that economic growth and stock prices are mutually reinforcing. However, studies abroad, mainly focused on the developed countries. At home, with the stock market in China continue to develop and standardize, practitioners and theorists gradually conducted a study thinking from different angles on the relationship between China's macro-economic and stock market, and by using the econometric method did empirical research about how the macroeconomic variables affect stock market returns.

1.1.2 Major domestic study

Jin Yunhui and Yu Cungao (1998) (JIN & YU, 1998) believed that before 1996 the size of China stock market was arising the same as the national economy growth, and inflation does not significantly impede the expansion of market scale. Zheng Jianghuai, Yuan Guoliang and Hu Zhiqian (2000) (ZHENG et al., 2000) believe that China's stock market development and saving significant are positively correlated, which means there is mechanism of the stock market boosting the economic growth, with the size of the stock market step by step expanding, the stock market attract more and more savings, its impacts on the economic growth will continue to appear, and gradually its degree of contribution to economic will increase.

Wang and Tian (2002) (WANG & TIAN, 2002) have come to the conclusion that China's stock market return and GDP growth rate correlate to each other to a certain extent, reflecting the economic growth in advance. M2 money supply is closely associated with the Shanghai Stock Index, reflecting the strong positive correlation between them. And the one-year deposit rate and the stock price were negatively correlated. Ran et al (2002) (RAN & ZHANG, 2002) from empirical test get that the two are weakly positively correlated.

Compared to foreign research, the relative research at home is less, and the results are got mostly based on the data before 2004. But after 2004, in China the exchange rate reform began and with the Chinese stock market has become more mature, so how the stock market relate to macro economy changes, therefore, an empirical study by re-updating the data is of immediate significance.

1.2 Non-correlation between the macro-economic growth and stock price

Those scholars who believe that the stock market and weak economic growth are little relevant or irrelevant or not significant negative correlation, and evaluate the role of stock market from the perspectives of the stock market size and the number of equity financing are: Meyer (1988) thought that the stock market do not help the enterprise growth, and therefore the entire stock market economy is not important (Mayer, 1988); Harris' (1997) study showed that the effect of the stock market on economic growth in developing countries is weak, but the level of stock markets activity in developed countries actually helps to explain the growth rate of per-capita real GDP (Richard, 1997); Tan (1999) found that the development of China's stock market had the limited effect on economic growth (TAN, 1999).

Whether economic growth and stock market are related are not conclusive, the above non-correlation results were got from the initial stages, during which the stock market was not mature and did not play a large role in the economy. However, most scholars believe that the two are related, because the conclusion be studied is influenced by development of the country's capital market, especially level of development of the stock market, the country's economic development level, whether the country's stock market match its level to the level of economic development, and even the world economic situation.

2. THEORETICAL ANALYSIS

2.1 The national wealth and consumption's impact on the stock market

2.1.1 National wealth indicator: GDP

Gross domestic product, GDP, is the most important variable reflecting a country's economic situation and economic growth. Good when the economic situation is, the country's industries have been benefited from rapid development of the real economy, and GDP growth rate is higher. When the economic situation is serious, such as the 2008 financial crisis, businesses will be affected, and lower economic growth comes along. Stock market is the virtual reflection of the real economy, and the operation of the stock market inevitably is closely linked with the real economy. Development of the real economy will also influent the stock market.

The real economy impact the stock market from the following two aspects: first, the real economy will affect consumer's income. Prosperity and economic growth will bring in the rising of overall national income and per-capita income, and increasing investment people can put into the stock market. The increasing funds directly make secondary stock market mare active, and the stock index and share price index rising. Second, the real economy affects the stock market through influent psychological expectations of consumers. The stock price is a direct reflection of future economic expectations of investors. In theory, stock markets and investors' expectation on the real economy is related closely, while investors' expectation about future economy is built on the basis of historical data. Therefore, if a country's real economy is in a period of prosperity and upward, most people would believe that stock market is stable. And just because of this kind of optimistic expectations will boost the stock price arising. On the contrary, if

the real economy is stagnant, people will have a pessimistic market expectation. Pessimism make money leave the stock market, and exacerbate price falling.

2.1.2 Consumption

According to western economic relations among total economy: $Y = C + I + G + (XM)$, it can be seen that the national income is the composition of consumption, investment, government purchases and net export. Consumption is one of the important supplies of national income. The impact of consumption on the stock market is divided into two areas:

First, the consumption has impact on the stock market through national income. Increase in consumption shows the economy is in good performance and national income increases. Consumption influents the stock market through national income. When spending increases, national income increases and the stock market is well-developed. When consumption declines, the national income decreased, and the stock market falls down.

Second, the consumption impacts the stock market through business performance. When consumption increases, it means greater demand for the product of society and the more of the supply of enterprise products. Under the same conditions, the higher the profits of enterprises is, the better business performance is, and the better the performance of the stock price also is. As a result, the initial assumption is made that consumption will positively impact the stock.

2.2 The impact of the stock market on the national wealth and consumption

2.2.1 The channel of economic growth

From the perspective of qualitative analysis, the stock market affects economic growth mainly from two channels. (1) Stock financing. The role of the stock market is mainly reflected in financing and providing adequate funding for enterprises. In the endogenous growth model, we can see the scale of capital is very important for economic growth. By the capital scale the stock market influent economic growth, thereby affecting macro economy. (2) The resources allocation. The stock market has the function of optimizing the allocation of resource. Macro economy redistributes resources through the stock market in order to improve production efficiency. Stock market by optimizing resource allocation enhances economic growth, and impact macro economy. In the real economy, the stock market's affection on economic growth is controversial for a long time.

2.2.2 Consumption channels

the consumption channels through which the stock market impacts the macro economy are mainly wealth effects and liquidity effects.

(1) The wealth effect

Stiglitz in *economic* said "wealth effect refers to the capital gains or changes in the value of assets change a person's wealth, when the stock or real estate prices rising, and expected long-term duration of this change, those who have these wealth will increase their consumption. This is because their total wealth increases, even though they did not immediately get any revenue from the increased value of wealth. " In theory, the wealth effect can be explained by the life cycle theory put forward by 1985 Nobel Prize winner in Economics F. Modigliani's. The theory holds that the consumption of people does not depend on current income, but on the life cycle income. When the stock market is relatively in steady growth, the stock market not only brings more rich dividends, but also directly increases shareholders' wealth. Also, in such a good demonstration effect, the public continues to hold shares, consumers have the psychological expectation of turning share revenue from the temporary income into permanent income, and the certainty about future economic developments is also expected to increase. Result is two-fold: (1) consumer confidence index continued rising. That is, under the same income, favorable income expectations encourage consumer to

spend more; (2) Increasing durable goods consumption. Good expectations not only increase consumption at this stage, but also increasing buying durable goods.

(2) Liquidity effect

Stock Market affects on durable goods and housing consumption expenditure. If consumers have a lot of durable goods and housing, once encountering the financial problems, the consumer should be forced to sell their durable goods or housing to increase the money. Durable goods and housing are extremely illiquid assets, and will be devaluated when forced to sell. If the consumers expect the possibility of their financial distress is higher, he will reduce to hold illiquid assets such as durable goods and housing and hold more liquid assets. When the shares rise in value, the value of financial assets held by consumer will also increase, the consumer's financial situation will be more secure, and the probability of the financial difficulties suffered will be very low, which encourage consumer increase expenditure on durable goods and new homes. All of these keep the economy developing in a stable and sustainable way. When the stock value falls, the value of financial assets held depreciates, and probability of the financial crisis increases, which triggers the economic slowdown.

This paper is focused on relationship between national wealth, national consumption and the stock index, research since the establishment of Chinese stock market is to find whether there is the interaction in China's economic growth.

3. EMPIRICAL PROCESS AND RESULTS ANALYSIS

3.1 Variables selection and procession

The national wealth is usually represent by GDP, but it must be explained that the GDP data is annual and is difficult to obtain monthly data. In the empirical analysis the added value would take place of GDP. Because GDP itself is the accumulated value added by each sector, and the service industry in China is not very well developed, accounting for a relatively small proportion of the gross domestic product. Therefore, the industrial added value and gross domestic product are highly correlated to each other. Industrial value added (pp) to replace gross domestic product is theoretically feasible. Consumption is represented by the total social retail sales (cc). The stock price is the closing price of the Shanghai Composite Index (sz). The sample is the monthly data from December 1990 to July 2009. As the industrial added value, retail sales and stock prices are priced with current price, there is no need to use the price index deflator in the empirical analysis.

3.1.1 The Shanghai Composite Index

The nominal Shanghai Composite Index and the real Shanghai Composite Index, shown in Figure 1, can be seen that after the data is processed with the fixed-base CPI deflator index, the real price is lower than the nominal price, but the two series had similar trend, even the real price variation is less than nominal price variation.

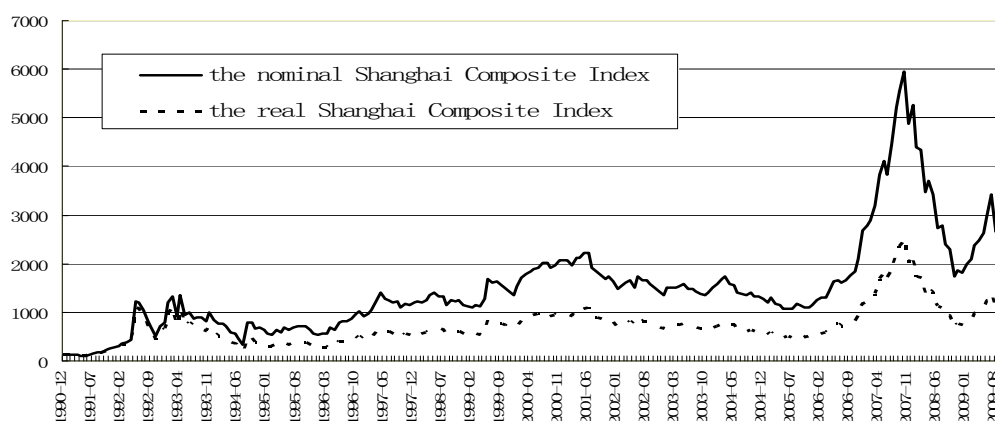


Figure 1: The nominal and the real Shanghai Composite Index

3.1.2 Industrial added value and Total retail sales

with a line chart the industrial added value (pp) and retail sales (cc) from 1990 to 2009 are shown; we can clearly see that two of the original series are both with obvious seasonal trend. To avoid seasonal factors interfere the empirical analysis later, X12 seasonal adjustment method is used to adjust the series, and the corresponding sequence pp_sa and cc_sa are got. Shown in Figure 2, it can be seen that seasonally adjusted series become smooth.

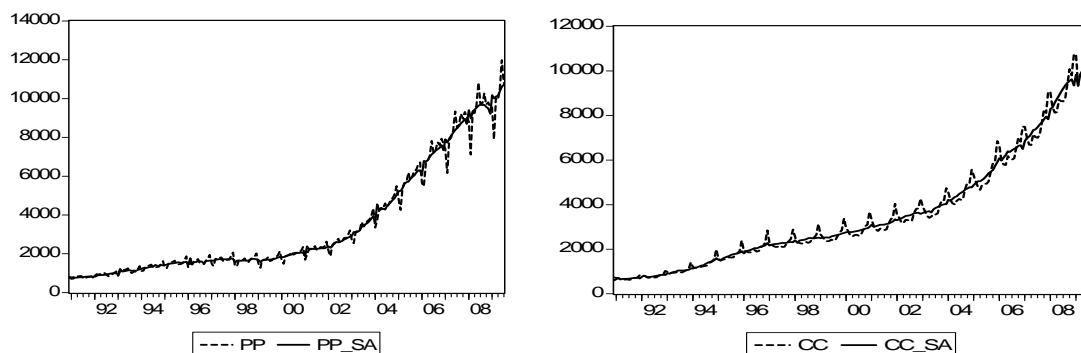


Figure 2: Seasonal Adjusted Series

3.2 The unit root test

To ensure the validity of the model to avoid "spurious regression" phenomenon, we must verify whether the sequence is stationary or not. Firstly, ADF (Augmented Dickey-Fuller) test is applied on the seven variables to do the stationarity test.

Table 1: Stationarity Test

variables	ADF-value	(c, t, p)	1%critical value	5% critical value	results
<i>Lnccsa</i>	-1.551189	(c, t, 1)	-3.999930	-3.430196	non-stationary
<i>Dlnccsa</i>	-20.22150	(c, t, 0)	-3.999930	-3.430196	stationary
<i>Lnppsa</i>	-0.683857	(c, t, 2)	-4.000122	-3.430289	non-stationary
<i>Dlnppsa</i>	-16.97645	(c, t, 1)	-4.000122	-3.430289	stationary
<i>Lnsz</i>	-3.271077	(c, t, 0)	-3.999740	-3.430104	non-stationary
<i>Dlnsz</i>	-15.50605	(c, t, 0)	-3.999930	-3.430196	stationary

From Table 1 we can see that the ADF value of the three variables in level are greater than 1% critical value, the null hypothesis is accepted and there is unit root, which means the sequences are not stable. As for the first order difference sequences, we can see that the ADF value is less than 1% critical value, the null hypothesis is rejected and there is no unit root, which means that the sequences are stationary.

3.3 Cointegration test

Winner of 2003 Nobel Prize for Economics Granger and Engel first proposed the concept of cointegration, that although sometimes the two variables are random walks, but they might be a linear combination that can be smooth, in this case, that these two variables are cointegrated. This combination reflects that there is a long-term stable proportional relationship between the two variables. The specific methods of cointegration test of are two: one is EG testing and CROW test; the other is the Johansen test. Generally speaking, EG test only suitable for two variables, namely, one single cointegration system. In this paper Johansen cointegration test is chosen. Johansen test is set up based on VAR model; the first was to determine the optimal lag order of VAR model.

The results shown in Table 2:

Table 2: The optimal lag order determination

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-282.4174	NA	0.002820	2.642754	2.689633	2.661693
1	1008.039	2533.118	1.98e-08	-9.222584	-9.035069	-9.146827
2	1058.959	98.54030	1.34e-08	-9.610736	-9.282583	-9.478161
3	1084.885	49.45100	1.15e-08*	-9.767456*	-9.298667*	-9.578064*
4	1089.650	8.956746	1.20e-08	-9.728244	-9.118819	-9.482035
5	1095.537	10.90073	1.23e-08	-9.699414	-8.949353	-9.396388
6	1100.443	8.950104	1.28e-08	-9.661513	-8.770815	-9.301669
7	1105.047	8.269318	1.33e-08	-9.620805	-8.589470	-9.204143
8	1118.292	23.42426*	1.28e-08	-9.660112	-8.488140	-9.186633

*denotes that this order of the lag in the corresponding test criteria is optimal.

As can be seen from Table 2, according to FPE, AIC, SC, and HQ criteria, fourth order lag is the best. According to fourth-order lag, the test results Johansen of cointegration test is shown in Table 3:

Table 3: Cointegration test results

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	5%Critical Value	Max-Eigen Statistic	5% Critical Value
None *	0.321903	104.6893	35.19275	85.46220	22.29962
At most 1	0.061291	19.22706	20.26184	13.91495	15.89210
At most 2	0.023857	5.312106	9.164546	5.312106	9.164546

Shown in the table are two test methods: the max-eigenvalue test and trace test, when the trace statistic value and max-eigen value are greater than 5% corresponding critical values, then the null hypothesis is rejected; when the trace statistic value and max-eigen value are less than 5% corresponding critical values, then the null hypothesis is accepted. From the two tests it can be drawn that a cointegration relationship exists in these three variables. And standardized cointegration equations of $Lnccsa$ and $Lnpsz$, $Lnppsa$ and $Lnpsz$ are got:

$$Lnppsa = 1.892403Lnpsz + 6.673643 \quad Lnccsa = 1.790178Lnpsz + 5.142392$$

From these two standardized cointegration equation, it can be seen that there exists a long-term stable relationship between the industrial added value and the Shanghai Composite Stock Index, and the two are positively correlated. That the Shanghai stock increase by 1% will bring 1.9% rising of the industrial added value; similarly the long-term stable positive correlation exists between the total retail sales and the

Shanghai index, and also when the stock price rise by 1%, total retail sales rise about 1.8%. In short, Note the increase of stock prices and industrial production cause consumption increase.

3.4 The Granger causality test

Granger causality test is actually testing whether the lag variables can be introduced in the equation of other variables. If a variable is affected by the lagged other variables, they were with the Granger causality. For Granger causality test, the results shown in Table 4:

Table 4: Granger Causality Test Results

Null Hypothesis	F-Statistic	Probability	results
<i>Lnppsa</i> does not Granger Cause <i>lnccsa</i>	5.99439	0.00061	reject
<i>lnccsa</i> does not Granger Cause <i>lnppsa</i>	1.45055	0.22911	accept
<i>lnsz</i> does not Granger Cause <i>lnccsa</i>	0.72765	0.53650	accept
<i>lnccsa</i> does not Granger Cause <i>lnsz</i>	7.37936	0.00010	reject
<i>lnsz</i> does not Granger Cause <i>lnppsa</i>	0.46512	0.70692	accept
<i>Lnppsa</i> does not Granger Cause <i>lnsz</i>	2.38928	0.06980	accept

From the table, only the industrial added value is the reason of total retail sales, and total retail sales is the reason of the Shanghai Composite index. The result is got when the lagged order is 3. it is well known that Granger causality test is very sensitive to the lagged order, when more lagged order is taken, the sixth null assumption is rejected from the early acceptance, which means with a larger lagged order, industrial added value is also the reason of Shanghai Composite index, such as Table 5 said:

Table 5: Granger Causality Test Results

Null Hypothesis	F-Statistic	Probability	results
<i>Lnppsa</i> does not Granger Cause <i>lnccsa</i>	3.11497	0.00383	reject
<i>lnccsa</i> does not Granger Cause <i>lnppsa</i>	0.83577	0.55876	accept
<i>lnsz</i> does not Granger Cause <i>lnccsa</i>	1.43557	0.19272	accept
<i>lnccsa</i> does not Granger Cause <i>lnsz</i>	5.03512	2.8E-05	reject
<i>lnsz</i> does not Granger Cause <i>lnppsa</i>	0.54514	0.79948	accept
<i>Lnppsa</i> does not Granger Cause <i>lnsz</i>	2.22855	0.03339	reject

3.5 Results Analysis

Through the stationarity test, Cointegration test and Granger Causality test, the results are there is a long-term equilibrium between the industrial added value, retail sales and the Shanghai Composite index, and they are positively correlated, the direction is the industrial added value and retail sales Granger cause the Shanghai Composite index. Compared to the retail sales, industrial added value affect the Shanghai Composite index with a longer lagged order. It shows that through the growth of industrial added value and total retail sales, national wealth and national consumption increase, which leads a good expectation of public to the nation's economic situation, is expected, increasing the demand for investment, so more investment in the stock market contributes to the rising of stock prices.

No influence from the stock index to the total industrial added value and the retail sales is observed, which indicates the stock market in China is not mature enough to impact macroeconomic growth and consumption, and there is a "gap" from this way. From China's macroeconomic development and stock market trends it can be seen that they are out of touch or even deviate to each other. In recent years the Chinese economy has maintained good momentum of high growth: in 2001, 7.5% of CDP growth rate is

achieved; in 2002, 8% is achieved; in 2003, 9.1% is achieved; in 2004, 9.5% is achieved; in 2005, 9.5 % is achieved. The stock market was deviated from the macroeconomic performance, taking Shanghai Composite Index for example, on June 13, 2001 it records a historical high, closing at 2242.42 points, after that 4 years of long-term bear market starts; on June 6, 2005 after hitting a recorded lowest of 998.23 points for eight year since 1997.

The reasons why the "barometer" of the Chinese stock market is out of function and is not consistent with macroeconomic performance are many. First, China's stock market is an emerging market and with transitional characteristics, and from the current quantity and quality of listed companies, there is not a representative coverage of the most dynamic private enterprises and foreign-funded enterprises in China's economic growth progress, but the main are the leading state-owned enterprises; Second, the stock split of tradable shares and non-tradable shares, which lead that the total market value accumulated by outstanding shares is hard to reflect the value of listed companies, the stock market is difficult to reveal the accurate and comprehensive price information, and stock price information is of failure; Third, China's current stock market is also exactly not a value-driven mature market, but the policies and funding-driven emerging markets in developing countries. The empirical evidence shows that China's stock market and economic growth is not strongly correlated; fourth, the reasons is lacking of other system constraints. Such as equity issuance behavior is of non-market, issuance pricing is in lack of investor interest protection, information disclosure is not standardized and false, as well as the existence of related party transaction and insider trading, all of these affect the normal healthy development of the stock market, and affect the accuracy and authenticity of stock price during information transmission, which thereby causing the lack of the basic functions of the Chinese stock market, and stock market returns and macroeconomic performance deviate from each other; Five, non-market factors cause excessive volatility of stock index. This volatility in the market causes more speculation, distorts the market price, and deficits resource allocation of the stock market, so the stock market is out of touch with the national economy and become an "independent" secondary market. Excessive market volatility brings excessive speculation and it is difficult for public to form a mature and rational investment philosophy. The bear market Up to 4 years not only greatly frustrated the confidence of major investor, but also set a number of brokers in a difficult situation of survival, only the first half of 2005 alone, 14 brokerages were closed, including the Southern Securities and Dapeng securities that caused great repercussions in the society.

4. CONCLUSION

Based on the stationarity test, cointegration test and Granger causality test results of the industrial added value, the total retail sales and the Shanghai Composite , the following conclusions are got:

- 1) There is stable cointegration between the industrial added value, retail sales and the Shanghai Composite index, and they are positively correlated. It shows that there is a wealth effect, as economic growth makes people's incomes increase, raising stock prices, leading to an increased consumption, and then further promote economic growth.
- 2) The total industrial value added and retail sales only Granger cause the Shanghai Composite Index, which means the China stock market is not mature enough to the impact macroeconomic growth and consumption. The main reason is lack of the sound system and the excessive intervention by the government.
- 3) Compared to the total retail sales, industrial added value impact the Shanghai index with a longer delay.

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