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GDP for the Water Subsystem based on Six Jiazi and Eight Palaces-Mathematical Reasoning of Economic Intervening Principle Based on Yin Yang Wu Xing Theory in Traditional Chinese Economics (V)

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***Abstract*— Theory of Sixty JiaZi (60甲子) is useful in understanding economic disease. By using mathematical reasoning based on Yin Yang Wu Xing Theory in Traditional Chinese Economics (TCE) , this paper demonstrates the treatment principle: "seize the momentum of development，hasten lucky avoids disaster" (顺势而为,趋吉避凶). It means that for the economic society, there is the mathematical structure of Sixty JiaZi as the second physiological system of a steady multilateral system. It is used to predict the development of the corresponding subsystem based on 60 Jiazi numbers. People should be according to its momentum of development, hasten lucky avoids disaster. Theory of Eight palaces is to determine both the root-cause and symptoms of the sick system based on the six indexes of comprehensive judgment. It is the base of Six Jiazi. The six indexes are PPI (the Producer Price Index), AAF (The total output value of Agriculture forestry Animal husbandry and Fishery), CPI(the Consumer Price Index), GBR(the General Budget Revenue), GDP (the Gross Domestic Product), and Finance (the right of making money), simple namely PACGGF. The first or second transfer law of economic society energies of Sixty JiaZi changes according to the different PACGGF inflation rates of economic society whether in the normal range or not. Assume that the range of one of PACGGF inflation rates is divided into four parts from small to large. Both second and third are for a healthy economy. The treating works are the treatment directly for a root-cause and the prevention indirectly for a more serious relation economic disease as symptoms. Both the root-cause and symptoms come from the first transfer law of economic society energies. And both first and fourth are for an unhealthy economy. The treating works are the treatment directly for a root-cause or the prevention indirectly for a more serious relation economic disease as symptoms. Both the root-cause and symptoms come from the second transfer law of economic society energies. An economic disease treatment should protect and maintain the balance of two incompatibility relations: the loving relationship and the killing relationship.As an application, the Chinese GDP inflation rate can be used for the water subsystem how to do works based on to predict the root-cause of steady multilateral systems by using Sixty Jiazi.**

***Index Terms*— Traditional Chinese Economics (TCE), Yin Yang Wu Xing Theory, steady multilateral systems, incompatibility relations, side effects, medical and drug resistance problem**

I. INTRODUCTION

Theory of Sixty JiaZi (60甲子) is useful in understanding economic disease. It is used to predict the development of the corresponding subsystem based on 60 Jiazi numbers. People should be according to the its momentum of development, hasten lucky avoids disaster. Theory of Eight palaces is to determine the root-cause of the sick system based on the six indexes of comprehensive judgment. It is the base of Six Jiazi.

Sixty JiaZi is the largest and earliest inventions of the Chinese nation. JiaZi 60 calendar, is the purpose of the oldest, ji-year, ji-month, ji-day and ji-two-hours. A cycle calendar of ji-year for 60 years, one period of ji-month for 5 years, a cycle of ji-day for 60 days, a cycle of ji-two-hour for five days. In the ancient Chinese calendar, the set of Jia(甲)、Yi(乙)、Bing(丙)、Ding(丁)、Wu(戊)、Ji(己)、Geng(庚)、Xin(辛)、Ren(壬)、Gui(癸) referred to as "the ten heavenly stems", the set of Zi(子)、Chou(丑)、Yin(寅)、Mao(卯)、Chen(辰)、Si(巳)、Wu(午)、Wei(未)、Shen(申)、You(酉)、Xu(戌)、Hai(亥) is called "the twelve earthly branches". By using "the ten heavenly stems" and "the twelve earthly branches", the ancients expressed in Chinese era to year, month, day, and two-hour, like four pillars hold up the building of "time", so called the four pillars.

The ten heavenly stems loop combination and the twelve earthly branches: JiaZi, YiChou, BingYin,..., until the Gui-Hai, received 60 combinations, known as sixty JiaZi, so the cycle, endless. Each cycle of year, month, day, and two-hour is 60. In the field of time is a wonderful digital 60.Ancient Chinese use 60 as a cycle, not only in western timing method, a minute is 60 seconds, an hour is 60 minutes. Don't just coincidence? Likewise, in 24 hours a day, and the Chinese traditional 12 two-hour periods of the day (two hours is a big hour, called a ShiChen (时辰)) corresponding to China for five days as a ShiChen of circulation, the so-called "5 a syndrome", is a total of 60 ShiChens. The *Taoist* belief in god's sixty stars, namely JiaZi 60 days on duty sixty gods.To match with heavenly and earthly branches circulation as calling the name of gods.

Eight-hexagram is one of the basic philosophical concepts, the ancient Chinese nationality is an ancient theory of Yin and Yang, the so-called Eight-hexagram is the eight diagrams, Eight-hexagram is by taeho bokhi (太昊伏羲氏) surname, namely fuxi (伏羲) painted, Eight-hexagram is one of the earliest text, text symbols. Eight-hexagram on behalf of the Yi-Jing (周易) culture, penetrating in the areas of east Asian cultures. According to the Chinese nationality folk legend, Eight-hexagram originated in the first of three sovereigns of the fuxi (伏羲), fuxi (伏羲) in tianshui (天水) taishan (台山) starting painting Eight-hexagram, a heaven. Changing system of Yin and Yang Eight-hexagram said thing itself, with "1" on

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behalf of Yang, with "-1" represents Yin, with two such symbols, according to the change of Yin and Yang of parallel combination of nature, composed of eight different forms, is called a Eight-hexagram. For Eight-hexagram don't have too much mystery, it in the Chinese nationality culture like Yin and Yang, Wu Xing used to exercise the world space time the tools of all kinds of things. Each of bodies represents a certain number of things. On behalf of the heaven, Qian (乾) represents, Kun (坤) on behalf the earth, Xun (巽) on behalf of the wind, Zhen (震) on behalf of the thunder, Kan (坎) on behalf of the water, Li (离) on behalf of the fire, Gen (艮) on behalf of the mountain, Dui(兑) on behalf of the marsh, the representative. Eight-hexagram like eight infinite invisible big pocket, put everything in the universe, and went in, Eight-hexagram match each other again into sixty-four hexagrams. The 64 hexagrams clustering get **eight palaces** according to the same disposition, used to symbolize various natural phenomena and human phenomenon, based on various things in today's society people. Eight-hexagram in the traditional Chinese medicine refers to the surrounding palm around the floorboard of the eight parts.

Eight Palaces is a general mathematical structure as the second physiological system of a steady multilateral system. It is to determine the root-cause of the sick system based on the six indexes of comprehensive judgment. The six indexes are the PPI(the Producer Price Index) in Su etc [1], AAF (The total output value of Agriculture forestry Animal husbandry and Fishery) in Wang etc [2], CPI (the Consumer Price Index) in Crone etc [3], GBR (the General Budget Revenue) in Boskin [4] , GDP (the Gross Domestic Product) in Ahmed etc [5], and Finance (the right of making money) in Temitope [6], simple namely PACGGF. There is also an index of the RPI (Retail Price Index) in Levell [7]. An example will be used: substitute RPI for PPI strange through eight veins of logical analysis, the analysis conclusion there will be no big changes.

The PACGGF of Eight Palaces or Eight Veins are six general parameters linking together the complexity of relations between subsystem pairs of an economic social system, an economic social system itself, the capabilities for intervention reaction and self-protection of the economic social system as an economy and mind as a whole, related to the environment, food, health and personal history, air, water, earth, climate, season, etc. The six parameters as PACGGF are as useful in understanding an economic disease as the average is in statistics, or as the expected value is in probability calculation.

An economic social system identifies an important indicator for an economic social system health: the value of finance inflation rate, which, under normal conditions, ranges from 3% to 6%.There are a lot of evidences (e.g., experimental identification for probability and real applications) to support this viewpoint, such as, Temitope [6], Gupta etc [8], Nicholas[9], Ouyang etc [10],Tom [11], and so on.

It is found that the normal range of the CPI inflation rate is from 2% to 5%. There are a lot of evidences (e.g., experimental identification for probability and real applications) to support this viewpoint, such as, Crone etc [3], Pauhofova etc [12],Funke etc [13], Formica etc [14], and so on.

All the normal ranges of other indexes can be found from the normal ranges of the CPI inflation rate by using the relations between the corresponding index and CPI. For example, Su, etc [1], Wang etc [2], Boskin [4], Ahmed etc [5], Levell [7], and so on.

Use of YIN YANG WU XING theory, the following results can be obtained.

The main purpose of PPI is in measuring all kinds of changes in price of goods in different of production. It belongs the "industry" of the subsystem wood($_X$). The normal range of the PPI inflation rate is $[a^1,b^1]=[0.7362\%,6.4920\%]$ nearly to $[a_0^1,b_0^1]=[1\%,6\%]$.

The values $\min=-0.1$ and $\max=0.65$ are the minimum and maximum acceptable the PPI inflation rate. And the center value is $t_0^1=3.1359\%$ nearly to $t_{0*}^1=3\%$. It is the target as the expectation of the PPI inflation rate.

Ecological-economic output of AAF refers to currency performance of farming, forestry, animal, husbandry and fisheries to the total volume of products, it reflects the total dimensions and total result of agricultural production during a given period. It belongs the "agriculture" of the subsystem xiang-fire($_S^X$). The normal range of the AAF inflation rate is $[a^2,b^2]=[7.7473\%,18.460\%]$ nearly to $[a_0^2,b_0^2]=[8\%,18\%]$. The values $\min=-0.1$ and $\max=0.81$ are the minimum and maximum acceptable the AAF inflation rate. And the center value is $t_0^2=12.269\%$ nearly to $t_{0*}^2=12\%$. It is the target as the expectation of the AFAHF inflation rate.

The main purpose of CPI is a measure of a fixed basket of consumer goods prices, mainly to reflect the price change of the consumers pay for goods and services, is also a kind of measuring the level of inflation tools, in the form of percentage change of expression. It belongs the "commerce" of the subsystem earth($_K$).The normal range of the CPI inflation rate is $[a^3,b^3]=[1.8828\%,5.2216\%]$ nearly to $[a_0^3,b_0^3]=[2\%,5\%]$. The values $\min=-0.05$ and $\max=0.6$ are the minimum and maximum acceptable the CPI inflation rate. And the center value is $t_0^3=3.2741\%$ nearly to $t_{0*}^3=3\%$. It is the target as the expectation of the CPI inflation rate.

The main purpose of GBR is a source of revenue, and planned and organized by the national budget and included in the budget management of funds. The general budget revenue is with the original "financial budget accounting system" in the corresponding concept of "budget". It belongs the "public facilities" of the subsystem metal($_{K_X}$). The normal range of the GBR inflation rate is $[a^4,b^4]=[8.956\%,20.079\%]$ nearly to $[a_0^4,b_0^4]=[9\%,20\%]$. The values $\min=-0.1$ and $\max=0.81$ are the minimum and maximum acceptable the GBR inflation rate. And the center value is $t_0^4=13.705\%$ nearly to $t_{0*}^4=13\%$. It is the target as the expectation of the GBR inflation rate.

The main purpose of GDP refers to in a certain period (a quarter or a year), the economy of a country or region to produce the value of all final goods and services, is often recognized as the best indicators of national economy. It not only can reflect a country's economic performance, also can reflect a country's national power and wealth. It belongs the "economics" of the subsystem water($_{S_X}$). The normal range

of the GDP inflation rate is $[a^5, b^5] = [8.956\%, 20.079\%]$ nearly to $[a_0^5, b_0^5] = [9\%, 20\%]$. The values $\min = -0.1$ and $\max = 0.81$ are the minimum and maximum acceptable the GDP inflation rate. And the center value is $t_0^5 = 10.208\%$ nearly to $t_{0*}^5 = 10\%$. It is the target as the expectation of the GDP inflation rate.

The main purpose of Finance is a measure of a money change or the ratio of money more part and the actual need of money, mainly to reflect the degree of inflation and currency depreciation. It belongs the "Governor, right of making money" of the subsystem jun-fire(x_S^j). The normal range of the Finance inflation rate is $[a^6, b^6] = [2.9515\%, 6.1002\%]$ nearly to $[a_0^6, b_0^6] = [3\%, 6\%]$. The values $\min = -0.03$ and $\max = 0.65$ are the minimum and maximum acceptable the Finance inflation rate. And the center value is $t_0^6 = 4.2359\%$ nearly to $t_{0*}^6 = 4\%$. It is the target as the expectation of the Finance inflation rate.

Teach of the RPI in retail prices of commodities is the last link in the process of the flow of goods in the price index, it covers all industrial, commercial, catering and other retail enterprise groups to the urban and rural residents, organ selling prices of consumer goods and office supplies, reflect a certain period retail price change trend and degree of index data. It also belongs the "industry" of the subsystem wood(x).The normal range of the RPI inflation rate is $[a^{1'}, b^{1'}] = [0.8789\%, 5.2241\%]$ nearly to $[a_0^{1'}, b_0^{1'}] = [1\%, 5\%]$. The values $\min = -0.08$ and $\max = 0.6$ are the minimum and maximum acceptable the RPI inflation rate. And the center value is $t_0^{1'} = 2.7047\%$ nearly to $t_{0*}^{1'} = 3\%$. It is the target as the expectation of the RPI inflation rate.

Thus the economic social system identifies some important indicators for an economic social system health: the value of one of PACGGF inflation rates, which, under normal conditions, ranges from a^i to b^i $(i = 1 \text{ or } 1', 2, \cdots, 6)$. Outside this range (low: Yin condition; high: Yang condition), an economic disease appears. Almost always, when there is an economic disease, the condition of inflation rate is a Yin condition, little is a Yang condition.

If the one of PACGGF rose is too large, it shows that the inflation has become the economic instability, the central bank will be a tight monetary policy and fiscal policy paying risk, resulting in the uncertain economic outlook. As a result, the index of high rise is often not welcome by the market. In the past 12 months, for example, the one of PACGGF roses 2.2%, that means, the cost of industry making rose by an average of 2.2% more than 12 months ago. When the cost of price increase, your money value drops. That is to say, a 100-yuan notes, only can buy the price $97.70 worth of foods. Generally for any given i, when one of the PACGGF inflation rates $> a_0^i$, it is called plus, is INFLATION. And when one of the PACGGF inflation rates $> b_0^i$, it is treated as a SERIOUS plus, is a SERIOUS INFLATION.

In this paper, the rate of inflation as the level rises can be considered rather than the currency quantity rises from the basic concept of one of six indexes PACGGF. It is because the six indexes PACGGF are the direct reflection of living standards, although the level increase is difficult to be controlled directly.

In this paper, the rate of inflation as the level rises can be considered rather than the currency quantity rises from the basic concept of one of six indexes PACGGF. It is because the six indexes PACGGF are the direct reflection of living standards, although the level increase is difficult to be controlled directly.

In this article, the main concern GDP index of theoretical analysis and practical application for the water(s_x) subsystem of steady multilateral systems.

GDP is refers to in a certain period (a quarter or a year), the economy of a country or region to produce the value of all final goods and services, is often recognized as the best indicators of national economy. It not only can reflect a country's economic performance, also can reflect a country's national power and wealth.

Through the growth rate of price index to calculate the rate of inflation, prices can be respectively by the consumer price index (CPI), the producer price index (PPI), the retail price index (RPI), the gross domestic product (GDP), and the gross national product (GNP) as conversion price index. In order to examine a country's national power and wealth, general use of GDP, its formula is as follows:

$$GDP = Q_{1t}P_{1t} + Q_{2t}P_{2t} + \ldots + Q_{nt}P_{nt}, \qquad (1)$$

where the type of digital and t, n is the number in the subscript, Q_* in (1) on behalf of the production of all kinds of the final product, P_* in (1) on behalf of all kinds of the price of the final product.

Both the rate of GDP inflation and the GDP are two different concepts. Calculation method of the rate of GDP inflation through the calculation of the GDP changes:

$$\text{The rate of GDP inflation (price rises)} = \frac{\text{current price level - base price level}}{\text{base price level}} \times 100\%, \qquad (2)$$

where the price rise level from low to high, to base the level of prices for base. One of the base period is selected one price level as a reference, so that you can put the other periods of price level with a comparison between base level to measure the current level of inflation.

Note on the type, the GDP inflation rate is not a price index, which is not a price rise, but the GDP price index to rise. In fact, what is said above is just one of the five methods (CPI,PPI,RPI,GDP,GNP) of measuring inflation index reduced living consumption laws, but it is the most commonly used for studying a country's national power and wealth, in addition to the gross national product (GNP), the consumer price index (CPI), the producer price index (PPI) and the retail price index (RPI) conversion method.

The GDP is the government measure of a country's national power and wealth inflation one of the data. Popular speaking, the GDP inflation rate is the value of all final goods and services on the market growth percentage. As an important indicator, observe the level of a country's national power and wealth inflation in China, much attention has been paid to also for such an important indicator, as a new era of youth, more objective view should be observed. First of all, let the GDP be met. The GDP is to reflect a country's national power and

wealth, related to all final goods and services calculated price, usually observed inflation as an important indicator.

In this paper, the GDP inflation rate can be considered as the wealth level rises rather than the currency quantity rises from the basic concept of GDP. It is because the GDP is the direct reflection of living standards, although the wealth level increase is difficult to be controlled directly.

The economic social system as an economy begins to activate the necessary mechanisms to restore this parameter to its appropriate range. If the economic social system as an economy is unable to restore optimal GDP levels, the economic disease may become chronic and lead to dire consequences.

Zhang etc [15-23] have started a great interest and admired works for Traditional Chinese Economics (TCE), where, through mathematical reasoning, they demonstrate the presence of incompatibility relations, which are predominant in daily life, yet absent in traditional Aristotelian Western logic.

Many people as Western persons are beyond all doubt the Yin Yang Wu Xing theory is superior to the traditional true-false logic, which does not contemplate incompatibility relations, which Zhang [19] has expertly explained from a mathematical standpoint.

The work Zhang [15,16] has started, allows many people like Western person to think of a true re-foundation of mathematical language, to make it a better suited tool for the needs of mankind economic social system and the environment. Although so doing, Zhang [18] also brings to light the difficulty of establishing the values of both the intervention reaction coefficients ρ_1, ρ_2 and the self-protection coefficient ρ_3 as parameters with due accuracy.

In this paper, the introduction of a parameter such as a GDP inflation rate will be suggested, in order to facilitate the understanding and the calculation of the values of both the intervention reaction coefficients ρ_1, ρ_2 and the self-protection coefficient ρ_3. This paper ventures to suggest this with all due to respect, because it be believed that the path Zhang [15,16] has started, in such an understandable way from the mathematical point of view, will be very useful for all mankind searching for tools to understand the mechanisms of an economic social system.

The article proceeds as follows. Section 2 contains a parameter model and basic theorems, in order to explain both the intervention reaction coefficients ρ_1, ρ_2 and the self-protection coefficient ρ_3 through the introduction of a parameter model to study the normal range of PACGGF inflation rates, while the first or second transfer law of economic society energies is demonstrated in Section 3, through the concept of both relation costs and a relationship analysis of the Sixty JiaZi and Eight Palaces. Furthermore, it will be done to predict the development of the corresponding water(S_X) subsystem based on 60 Jiazi numbers. If the range of the GDP inflation rate, as one of PACGGF inflation rates, is divided into four parts, for the economy in every part, the prevention or treatment method of economic diseases as the treatment principle of TCE is given in Section 4. As an application, the Chinese GDP inflation rate can be used for the water(S_X) subsystem how to do works based on to predict the root-cause of steady multilateral systems by using Sixty Jiazi in Section 5 and conclusions are drawn in Section 6.

II. Parameter Model and Basic Theorems

The concepts and notations in Zhang etc [21] are start and still used.

Let $\varphi = (\sqrt{5}-1)/2 = 0.61803399$ be the **gold number**. Denoted $\rho_0 = 0.5897545123$, namely **healthy number**. It is because the healthy number ρ_0 can make the healthy balance conditions $\rho_1 = \rho_3, \rho_2 = \rho_1\rho_3$ and $1-\rho_2\rho_3 = \rho_1 + \rho_2\rho_3$ hold if $\rho_1 = \rho_0, \rho_2 = \rho_0^2$ and $\rho_3 = \rho_0$. Assuming $\rho_0' = 0.68232780,$ namely **unhealthy number**. It is because under a poor self-protection ability, the unhealthy number ρ_0' can make the following poor healthy balance conditions holding:

$$\rho_1 - \rho_3 = \rho_3 = \rho_0'/2 = 0.34116390,$$
$$\rho_2 - \rho_1\rho_3 = \rho_1\rho_3 = (\rho_0')^2/2 = 0.23278561$$
$$1-\rho_2\rho_3 = \rho_1 + \rho_2\rho_3$$

if $\rho_1 = \rho_0', \rho_2 = (\rho_0')^2 = 0.46557123$ and $\rho_3 = \frac{1}{2}\rho_0'.$

Thus $\rho_0 < \varphi < \rho_0'.$

A parameter model of the one of six indexes PACGGF inflation rates in a mathematical sense based on Yin Yang Wu Xing Theory of TCE is reintroduced by using the functions $\lambda(x)$ and $\rho(x)$ of the one of PACGGF inflation rates x described as follows.

Let $x \in (\min, \max)$ be the one of six indexes PACGGF inflation rates, where the values $\min$ and $\max$ are the minimum and maximum acceptable the one of PACGGF inflation rates. Denoted the center value t_0 is the target as the expectation of the one of PACGGF inflation rates. Define a function $\lambda(x)$ of the one of PACGGF inflation rates x in below:

$$\lambda(x) = \frac{|x - t_0|}{(\max - x)(x - \min)}, \forall x \in (\min, \max)$$
$$= \begin{cases} \dfrac{x - t_0}{(\max - x)(x - \min)}, & \max > x \geq t_0; \\ \dfrac{t_0 - x}{(\max - x)(x - \min)}, & \min < x < t_0 \end{cases} \quad (3)$$

A parameter model is considered as

$$\rho(x) = \frac{1/2}{\lambda(x) + 1/2}, \forall x \in (\min, \max). \quad (4)$$

Theorem 2.1 *Under model (4), the following statements hold.*

(1) The one that $0 < \rho(x) = \dfrac{1/2}{\lambda(x)+1/2} \leq 1$ *is equivalent to the other that*

$$0 \leq \lambda(x) = \frac{1-\rho(x)}{2\rho(x)} < +\infty,$$

where $\lambda(x)$ *is a monotone decreasing function of* x *if* $x \in (\min, t_0]$ *or a monotone increasing function of* x *if* $x \in [t_0, \max)$ *; and* $\rho(x)$ *is a monotone decreasing function of* $\lambda(x)$ *if* $\lambda(x) \in [0, +\infty)$ *; and* $\lambda(x)$ *is a monotone decreasing function of* $\rho(x)$ *if* $\rho(x) \in (0,1]$.

(2) If $1 \geq \rho(x) \geq \rho_0$ *, then*

$$\lambda(x) = \frac{1-\rho(x)}{2\rho(x)} \leq \frac{1-\rho_0}{2\rho_0} = \rho_0^2 \leq \rho(x)^2 \leq 1;$$

$$\frac{\lambda(x)}{\rho(x)} = \frac{1-\rho(x)}{2\rho(x)^2} \leq \frac{1-\rho_0}{2\rho_0^2} = \rho_0 \leq \rho(x) \leq 1; \quad \textit{and}$$

$$\frac{\lambda(x)}{\rho(x)^2} = \frac{1-\rho(x)}{2\rho(x)^3} \leq \frac{1-\rho_0}{2\rho_0^3} = 1.$$

(3) If $0 < \rho(x) < \rho_0$ *, then*

$$\lambda(x) = \frac{1-\rho(x)}{2\rho(x)} > \frac{1-\rho_0}{2\rho_0} = \rho_0^2 > \rho(x)^2 > 0;$$

$$\frac{\lambda(x)}{\rho(x)} = \frac{1-\rho(x)}{2\rho(x)^2} > \frac{1-\rho_0}{2\rho_0^2} = \rho_0 > \rho(x) > 0; \quad \textit{and}$$

$$\frac{\lambda(x)}{\rho(x)^2} = \frac{1-\rho(x)}{2\rho(x)^3} > \frac{1-\rho_0}{2\rho_0^3} = 1.$$

(4) Taking $0 < \rho_1 = \rho(x) < \rho_0, \rho_2 = \rho(x)^2$ *and* $\rho_3 = c\rho(x)$ *where* $0 \leq c \leq 1$ *, there are*

$\rho_1 - \rho_3 = \rho(x)(1-c) \geq 0, \rho_2 - \rho_1\rho_3 = \rho(x)^2(1-c) \geq 0$,

and $(\rho_1 + \rho_2\rho_3) = \rho(x) + c\rho(x)^3 < 1 - \rho_2\rho_3 = 1 - c\rho(x)^3$,

where

$|(\rho_1 + \rho_2\rho_3) - (1-\rho_2\rho_3)| > 2(1-c)\rho_0^3 = (1-c)0.41024.$

(5) Taking $1 \geq \rho_1 = \rho(x) \geq \rho_0, \rho_2 = \rho(x)^2$ *and* $\rho_3 = c\rho(x)$ *where* $0 \leq c \leq 1$, *there are*

firstly,

$\rho_1 - \rho_3 = \rho(x)(1-c) \geq 0, \rho_2 - \rho_1\rho_3 = \rho(x)^2(1-c) \geq 0$ *and*

$(\rho_1 + \rho_2\rho_3) = \rho(x) + c\rho(x)^3 \geq 1 - \rho_2\rho_3 = 1 - c\rho(x)^3$ *if*

$1 \geq c \geq \frac{1-\rho(x)}{2\rho(x)^3} = \frac{\lambda(x)}{\rho(x)^2} \geq 0$;

secondly,

$\rho_1 - \rho_3 = \rho(x)(1-c) > \rho(x)/2, \rho_2 - \rho_1\rho_3 = \rho(x)^2(1-c) > \rho(x)^2/2$

and

$(\rho_1 + \rho_2\rho_3) = \rho(x) + c\rho(x)^3 < 1 - \rho_2\rho_3 = 1 - c\rho(x)^3$

where this inequality range to meet $|(\rho_1 + \rho_2\rho_3) - (1-\rho_2\rho_3)| \leq (\rho_0')^3 = 0.31767$ *if*

$0 \leq c < \frac{1-\rho(x)}{2\rho(x)^3} = \frac{\lambda(x)}{\rho(x)^2} \leq \frac{1}{2}$ *in which* $1 > \rho(x) \geq \rho_0'$;

thirdly,

$\rho_1 - \rho_3 = \rho(x)(1-c) \geq \rho(x)/2, \rho_2 - \rho_1\rho_3 = \rho(x)^2(1-c) \geq \rho(x)^2/2$

and

$(\rho_1 + \rho_2\rho_3) = \rho(x) + c\rho(x)^3 < 1 - \rho_2\rho_3 = 1 - c\rho(x)^3$

where this inequality range to meet $|(\rho_1 + \rho_2\rho_3) - (1-\rho_2\rho_3)| \leq 2\rho_0^3 = 0.41024$ *if*

$0 \leq c \leq \frac{1}{2} < \frac{1-\rho(x)}{2\rho(x)^3} = \frac{\lambda(x)}{\rho(x)^2} \leq 1$ *in which* $\rho_0 \leq \rho(x) < \rho_0'$;

finally, $\rho_1 - \rho_3 = \rho(x)(1-c) < \rho(x)/2, \rho_2 - \rho_1\rho_3 = \rho(x)^2(1-c) < \rho(x)^2/2$ *and* $(\rho_1 + \rho_2\rho_3) = \rho(x) + c\rho(x)^3 < 1 - \rho_2\rho_3 = 1 - c\rho(x)^3$

where this inequality range to meet $|(\rho_1 + \rho_2\rho_3) - (1-\rho_2\rho_3)| < (\rho_0')^3 = 0.31767$ *if*

$\frac{1}{2} < c < \frac{1-\rho(x)}{2\rho(x)^3} = \frac{\lambda(x)}{\rho(x)^2} \leq 1$ *in which* $\rho_0 \leq \rho(x) < \rho_0'$.

In particular, when c *is nearly to 1/2, there are* $\rho_1 - \rho_3 = \rho(x)(1-c) \to \rho(x)/2, \rho_2 - \rho_1\rho_3 = \rho(x)^2(1-c) \to \rho(x)^2/2$ *an d the following statements hold.*

(a). The absolute value $|(\rho_1 + \rho_2\rho_3) - (1-\rho_2\rho_3)|$ *is nearly to 0 if* $0 < c < \frac{1-\rho(x)}{2\rho(x)^3} = \frac{\lambda(x)}{\rho(x)^2} \leq \frac{1}{2}$ *in which* $1 > \rho(x) \geq \rho_0'$.

(b). The value $[(\rho_1 + \rho_2\rho_3) - (1-\rho_2\rho_3)]$ *is included in the interval* $[-\rho_0^3 = -0.20512, 0)$ *respectively if* $0 < c \leq \frac{1}{2} < \frac{1-\rho(x)}{2\rho(x)^3} = \frac{\lambda(x)}{\rho(x)^2} \leq 1$ *in which* $\rho_0 \leq \rho(x) < \rho_0'$.

(c).The value $[(\rho_1 + \rho_2\rho_3) - (1-\rho_2\rho_3)]$ *is included in the interval* $[-\rho_0^3 = -0.20512, 0)$ *respectively if* $\frac{1}{2} < c < \frac{1-\rho(x)}{2\rho(x)^3} = \frac{\lambda(x)}{\rho(x)^2} \leq 1$ *in which* $\rho_0 \leq \rho(x) < \rho_0'$. #

Corollary 2.1 *Under model (4), the following statements hold.*

(1) For any $0 < d < 1$ *, there is an unique solution* $u \in (\min, t_0)$ *and there is also an unique solution* $v \in (t_0, \max)$ *, such that*

$$\lambda(t_0) = 0 \leq \lambda(x) = \frac{1-\rho(x)}{2\rho(x)} \leq \lambda(u) = \lambda(v) = (1-d)/(2d),$$

$$\rho(u) = \rho(v) = d \leq \rho(x) = \frac{1/2}{\lambda(x) + 1/2} \leq 1 = \rho(t_0).$$

(2) The condition $x \in [a_0, b_0]$ *is equivalent to each of the following conditions:*

$$\lambda(t_0) = 0 \leq \lambda(x) = \frac{1-\rho(x)}{2\rho(x)} \leq \lambda(a_0) = \lambda(b_0),$$

$$\rho(a_0) = \rho(b_0) \leq \rho(x) = \frac{1/2}{\lambda(x) + 1/2} \leq 1 = \rho(t_0).$$

(3) The condition $x \in [a_\varphi, b_\varphi]$ *is equivalent to each of the following conditions:*

$$\lambda(t_0) = 0 \leq \lambda(x) = \frac{1-\rho(x)}{2\rho(x)} \leq \lambda(a_\varphi) = \lambda(b_\varphi) = \frac{1-\varphi}{2\varphi} = 0.30902,$$

$$\rho(a_\varphi) = \rho(b_\varphi) = \varphi \leq \rho(x) = \frac{1/2}{\lambda(x) + 1/2} \leq 1 = \rho(t_0).$$

(4) The condition $x \in [a, b]$ *is equivalent to each of the following conditions:*

$$\lambda(t_0) = 0 \leq \lambda(x) = \frac{1-\rho(x)}{2\rho(x)} \leq \lambda(a) = \lambda(b) = \rho_0^2 = 0.34781,$$

$$\rho(a) = \rho(b) = \rho_0 \leq \rho(x) = \frac{1/2}{\lambda(x) + 1/2} \leq 1 = \rho(t_0).$$

(5) The condition $x \in [a', b']$ *is equivalent to each of the following conditions:*

$$\lambda(t_0) = 0 \leq \lambda(x) \leq \lambda(a') = \lambda(b') = (\rho_0')^2/2 = 0.23279,$$

$$\rho(a')=\rho(b')=\rho_0'\le\rho(x)=\frac{1/2}{\lambda(x)+1/2}\le 1=\rho(t_0).\#$$

Theorem 2.1 and Corollary 2.1 can be found in Zhang [23].

Remark 1. In west, through experiment or through practice observation, many researchers [1-14] can obtain the normal range of the one of PACGGF inflation rates as $x\in[a_0,b_0]$. But in TCE, from Yin Yang Wu Xing Theory, Zhang etc [21] have already determined: $\rho_0\le\rho_1\le 1$ for the normal range of a healthy economy. Taking $\rho_1=\rho(x),\rho_2=\rho(x)^2$ and $\rho_3=c\rho(x)$ where $0\le c\le 1$ for an economic society which has the capabilities of both intervention reaction and self-protection. From Corollary **2.1**, the condition $\rho_0\le\rho_1\le 1$ is equivalent to that $x\in[a,b]$. In other words, in Theory of TCE, the normal range of the one of PACGGF inflation rates is considered as $x\in[a,b]$, nearly to $x\in[a_0,b_0]$. Of course, little difference of the two intervals which makes the diagnosis of disease as a result, there may be no much difference as a suspect. In fact, TCE uses the rule $\rho_0\le\rho_1\le 1$ from Yin Yang Wu Xing Theory instead of the normal range of the one of PACGGF inflation rates. The equivalence of Corollary **2.1** shows that TCE is The scientific which is from TCM (Traditional Chinese Medicine).

Zhang etc [21] have already determined: an economy is said a healthy economic complex system when the intervention reaction coefficient ρ_1 satisfies $1\ge\rho_1\ge\rho_0$. In logic and practice, it's reasonable that $\rho_1+\rho_2$ is near to 1 if the input and output in a complex system is balanced, since an economic output subsystem is absolutely necessary other subsystems of all consumption. In case: $\rho_1+\rho_2=1$, all the energy for intervening an economic complex subsystem can transmit to other economic complex subsystems which have neighboring relations or alternate relations with the intervening economic complex subsystem. The condition $\rho_1\ge\rho_0$ can be satisfied when $\rho_2=\rho_1\rho_3$ and $\rho_3=\rho_1$ for an economic complex system since $\rho_1+\rho_2=1$ implies $\rho_1=\varphi\approx 0.61803\ge\rho_0$. In this case, $\rho_2=\varphi^2\approx 0.38197$. If this assumptions is set up, then the intervening principle: "Real disease with a healthy economy is to rush down its son and virtual disease with a healthy economy is to fill its mother" based on "Yin Yang Wu Xing" theory in image mathematics [20], is quite reasonable. But, in general, the ability of self-protection often is insufficient for an usual economic complex system, i.e., ρ_3 is small. A common standard is $\rho_3=\frac{1-\rho_1}{2\rho_2}\approx\frac{1}{2}$ which comes from the balance condition $(1-\rho_2\rho_3)=(\rho_1+\rho_2\rho_3)$ of the loving relationship if $\rho_1+\rho_2\approx 1$. In other words, there is a principle which all losses are bear in an economic complex system. Thus the general condition is often

$$\rho_1\approx 0.61803\ge\rho_3\approx 0.5\ge\rho_2\approx 0.38197.$$

Interestingly, they are all near to the **golden numbers**.

It is the idea to consider the unhealthy number $\rho_0'=0.68232780$ since the poor condition of self-protection ability $\rho_3=\rho_1/2=\rho_0'/2=0.34116390$ can make the following unhealthy balance conditions hold

$$\rho_1-\rho_3=\rho_3=\rho_0'/2=0.34116390,$$
$$\rho_2-\rho_1\rho_3=\rho_1\rho_3=(\rho_0')^2/2=0.23278561$$
$$1-\rho_2\rho_3=\rho_1+\rho_2\rho_3$$

if $\rho_1=\rho_0'$ and $\rho_2=(\rho_0')^2=0.46557123$.

By Theorem 2.1 and Corollary 2.1, the interval $x\in[a_0,b_0]$ implies the following condition

$$1\ge\rho_1=\rho(x)\ge\ \rho(a_0)=\rho(b_0);$$

and the interval $x\in[a_\varphi,b_\varphi]$ implies the following condition

$$1\ge\rho_1=\rho(x)\ge\varphi=\rho(a_\varphi)=\rho(b_\varphi);$$

and the interval $x\in[a,b]$ implies the following condition

$$1\ge\rho_1=\rho(x)\ge\rho_0=\rho(a)=\rho(b),$$

where $\lambda(a)=\lambda(b)=\frac{1-\rho_0}{2\rho_0}=\rho_0^2$ since $(1-\rho_0^3)=(\rho_0+\rho_0^3)$;

and the interval $x\in[a',b']$ implies the following condition

$$1\ge\rho_1=\rho(x)\ge\rho_0'=\rho(a')=\rho(b'),$$

where $\lambda(a')=\lambda(b')=\frac{1-\rho_0'}{2\rho_0'}=\frac{(\rho_0')^2}{2}$ since $(\rho_0')^3=(1-\rho_0')$.

The last one is the healthy interval in an economic society's self-protection ability poor conditions. The interval range than the normal economic society health requirements is too strict. Only the first three interval ranges can be considered as a normal economic society health. If keep two decimal places, then first three intervals are the same as $x\in[a_0,b_0]$. This shows that range $x\in[a_0,b_0]$ is stable. The interval as the normal range of the one of PACGGF inflation rates may be also appropriate. To conservative estimates, one of the first three interval ranges with largest length is used, i.e., $x\in[a,b]$, as the theoretical analysis of the normal range in this paper. In fact, the range $x\in[a,b]$ is better than the range $x\in[a_0,b_0]$ because $\rho_0=\rho(a)=\rho(b)$ and $\lambda(a)=\lambda(b)=\frac{1-\rho_0}{2\rho_0}=\rho_0^2$, which satisfy the healthy balance conditions $\rho_1=\rho_3,\rho_2=\rho_1\rho_3$, and $(1-\rho_2\rho_3)\le(\rho_1+\rho_2\rho_3)$ at the same time if $\rho_1=\rho_0$, $\rho_2=\rho_0^2$ and $\rho_3=c\rho_0$ where $c\to 1$. In other words, the parameter $\rho_1=\rho(x)\ge\rho_0$ or the range $x\in[a,b]$ is the healthy condition of both the killing relationship and the loving relation at the same time. But neither are the others. The one of PACGGF inflation rates must be precise calculation to keep at least 6 decimal places can ensure correct because of its sensitivity to the diagnosis of disease.#

Remark 2. Western Economics is different from TCE because the TCE has a concept of *Chi or Qi* as a form of energy. From the energy concept, that one organ or subsystem of the economic society is **not running properly** (or **disease**, **abnormal**), is that the energy deviation from the average of the organ is too large, the high (**real disease**) or the low (**virtual disease**). But there do not exist these concepts of

both real diseases and virtual diseases in Western Economics. For the normal range of the one of PACGGF inflation rates of some economic society as $x \in [a,b]$, in TCE, if $x > b$, the economy is considered as a real disease since the one of PACGGF inflation rates is too high; if $x < a$, the economy is considered as a virtual disease since the one of PACGGF inflation rates is too low. Thus TCE identifies an important indicator for an economic society's health: the value of the one of PACGGF inflation rates, which, under normal conditions, ranges from a to b. Outside this range (too low: Yin condition; too high: Yang condition), disease appears. Almost always absolutely, when there is a virtual disease, the condition of the one of PACGGF inflation rates is a Yin condition; when there is a real disease, the condition of the one of PACGGF inflation rates is a Yang condition.#

III. Relations of Steady Multilateral Systems

3.1 Energy Changes of a Steady Multilateral System

In order to apply the reasoning to other fields rather than society's health, Zhang etc [21] have started a steady multilateral system imitating an economic society. A most basic steady multilateral system is as follows .

Theorem 3.1 [20] *For each element x in a steady multilateral system V with two incompatibility relations, there exist five equivalence classes below:*

$$X = \{y \in V \mid y \sim x\}, X_S = \{y \in V \mid x \to y\}, X_K = \{y \in V \mid x \Rightarrow y\},$$
$$K_X = \{y \in V \mid y \Rightarrow x\}, S_X = \{y \in V \mid y \to x\},$$

which the five equivalence classes have relations in Figure 1. #

The Yin Yang Wu Xing model can be written as follows:Define $V_0^5 = X, V_1^5 = X_S, V_2^5 = X_K, V_3^5 = K_X, V_4^5 = S_X$, corresponding to wood, fire, earth, metal, water, respectively, and assume $V^5 = V_0^5 + V_1^5 + V_2^5 + V_3^5 + V_4^5$ where $V_i^5 \cap V_j^5 = \varnothing, \forall i \neq j$ (hereinafter the same).

And take $\Re^5 = \{R_0^5, R_1^5, \cdots, R_4^5\}$ satisfying

$$R_r^5 = \sum_{i=0}^{4} V_i^5 \times V_{mod(i+r,5)}^5, r \in \{0,1,\cdots,4\}, R_i^5 * R_j^5 = R_{mod(i+r,5)}^5,$$

where $V_i^5 \times V_j^5 = \{(x,y) : x \in V_i^5, y \in V_j^5\}$ is the Descartes product in set theory and $R_i^5 * R_j^5 = \{(x,y) : \exists u \in V$ such that $(x,u) \in R_i^5, (u,y) \in R_j^5\}$ is the **multiplication relation operation**. The relation multiplication of $*$ is isomorphic to the addition of module 5. Then $(V^5, \Re^5)$ is a steady multilateral system with one equivalent relation R_0^5 and two incompatibility relations $R_1^5 = (R_4^5)^{-1}$ and $R_2^5 = (R_3^5)^{-1}$ where $(R_i^5)^{-1} = \{(x,y) : (y,x) \in R_i^5\}$ is the **inverse relation operation**. The Yin and Yang means the two incompatibility relations and the Wu Xing means the collection of five disjoint classification of $V^5 = V_0^5 + V_1^5 + V_2^5 + V_3^5 + V_4^5$. The model is called Yin Yang Wu Xing model, denoted simply by $V^5 = \{0,1,2,3,4\}$.

It can be proved by Theorem 3.2 in Zhang [23] that the steady multilateral system in Theorem **3.1** is the reasoning model of Yin Yang Wu Xing in TCE if there is an energy function $\varphi(*)$ satisfying

$$\frac{\Delta\varphi(X)}{\Delta} \to \frac{d\varphi(X)}{dX} = (1-\rho_2\rho_3) = (1-c\rho(x)^2) > 0;$$
$$\frac{\Delta\varphi(X_S)}{\Delta} \to \frac{d\varphi(X_S)}{dX} = (\rho_1+\rho_2\rho_3) = \rho(x)(1+c\rho(x)^2) > 0;$$
$$\frac{\Delta\varphi(X_K)}{\Delta} \to \frac{d\varphi(X_K)}{dX} = -(\rho_1-\rho_3) = -\rho(x)(1-c) < 0;$$
$$\frac{\Delta\varphi(K_X)}{\Delta} \to \frac{d\varphi(K_X)}{dX} = -(\rho_2-\rho_1\rho_3) = -\rho(x)^2(1-c) < 0;$$
$$\frac{\Delta\varphi(S_X)}{\Delta} \to \frac{d\varphi(S_X)}{dX} = (\rho_2-\rho_1\rho_3) = \rho(x)^2(1-c) > 0,$$
$$\text{if increase the energy of } X \ (\forall \Delta\varphi(X) = \Delta > 0).$$

The parameter $\rho_v = \rho_1 + \rho_2\rho_3$ is called the coefficient of the **vital** or righteousness energy. The parameter $\rho_e = 1-\rho_2\rho_3$ is called the coefficient of the **evil** energy. An economy is called **healthy** if the vital or righteousness coefficient $\rho_v = \rho_1 + \rho_2\rho_3$ is greater than or equal to the evil coefficient $\rho_e = 1-\rho_2\rho_3$. Otherwise, the economy is called **unhealthy**. For a healthy economy, the transfer law of the Yang vital or righteousness energy in the Yin Yang Wu Xing Model is

$$Wood(X) \to Fire(X_S) \to Earth(X_K)$$
$$\to Metal(K_X) \to Water(S_X) \to Wood(X).$$

Figure 1 in Theorem 3.1 is the figure of Yin Yang Wu Xing theory in Ancient China. The steady multilateral system V with two incompatibility relations is equivalent to the logic architecture of reasoning model of Yin Yang Wu Xing theory in Ancient China. What describes the general method of complex systems can be used in the economic society complex systems.

By non-authigenic logic of TCE, i.e., a logic which is similar to a group has nothing to do with the research object [20], in order to ensure the reproducibility such that the analysis conclusion can be applicable to any complex system, a logical analysis model can be chosen which has nothing to do with the object of study. The *Tao* model of Yin and Yang is a generalized one which means that two is basic. But the *Tao* model of Yin Yang is simple in which there is not incompatibility relation. The analysis conclusion of *Tao* model of Yin Yang cannot be applied to an incompatibility relation model. Thus the Yin Yang Wu Xing model with two incompatibility relations of Theorem 3.1 will be selected as the logic analysis model in this paper.

On the other hand, the steady multilateral system $(V^2, \Re^2) = (V_0^2 + V_1^2, \{R_0^2, R_1^2\})$ is called the *Tao* model, denoted simply by $V^2 = \{0,1\}$, if it satisfies the following conditions:

$$R_r^2 = \sum_{i=0}^{1} V_i^2 \times V_{mod(i+r,5)}^2, \forall r \in \{0,1\}, R_i^2 * R_j^2 = R_{mod(i+r,2)}^2,$$ T

$$R_0^2 = \{(0,0),(1,1)\}, R_1^2 = \{(0,1),(1,0)\}.$$

he relation multiplication of $*$ is isomorphic to the addition of module 2. The element $1, or\ 0$ is called a **Yang** force or a **Yin** force respectively. For a healthy economy, the transfer law of the *Tao* force in the *Tao* model is from Yang to Yin.

In TCE, any material can be found, not Yang is Yin. No matter of Yin and Yang are unable to see, known as **dark matter**, or **nonphysical**. Therefore, the *Tao* force is often exist in the physical world. Any steady multilateral system

only force under the action of the *Tao*, may be to be perceived.

In TCE, it is believed that any Yin Yang Wu Xing complex system is made up of three types of talent or material to combined changes. The three types come from the Yin energy in it's a layer Yin Yang Wu Xing system. It is because a lot of complex systems can be seen as a Yin Yang Wu Xing system. However, any Yin Yang Wu Xing system is an economy observation of the objective object in one logic level, it will be a layer of the Yin Yang Wu Xing system of restriction and generation. In the Yin Yang Wu Xing system, both wood and fire are Yang; both earth, metal and water are Yin. So any Yin Yang Wu Xing system is made by a layer of the Yin Yang Wu Xing system on its both earth, metal and water generated. For example, control on a layer of the Yin Yang Wu Xing system of economy is the nature, *Tao*, heaven, earth and people system, so the formation of the economy three materials are heaven (1), earth (2) and people (3).

The three *Tao* model can combine forming a steady multilateral system

$$(V^8, \Re^8) = (V_1^8 + \cdots + V_8^8, \{R_1^8, \cdots, R_8^8\})$$

is called the **Eight-Hexagram** (八卦) model, denoted simply by

$$V^8 = \{(1,1,1),(0,1,1),(1,0,1),(0,0,1),(1,1,0),(0,1,0),(1,0,0),(0,0,0)\}$$

which satisfies the following conditions:

$$R_r^8 = \sum_{i=1}^{8} V_i^8 \times V_{i*r}^8, \forall r \in \{1,2,\cdots,8\}, R_i^8 * R_j^8 = R_{i*r}^8,$$

$i*r$	1 = (111)	2 = (011)	3 = (101)	4 = (001)	5 = (110)	6 = (010)	7 = (100)	8 = (000)
1 = (111)	8 = (000)	7 = (100)	6 = (010)	5 = (001)	4 = (001)	3 = (010)	2 = (011)	1 = (111)
2 = (011)	7 = (100)	8 = (000)	5 = (110)	6 = (010)	3 = (101)	4 = (001)	1 = (111)	2 = (011)
3 = (101)	6 = (010)	5 = (110)	8 = (000)	7 = (100)	2 = (011)	1 = (111)	4 = (001)	3 = (101)
4 = (001)	5 = (001)	6 = (010)	7 = (100)	8 = (000)	1 = (111)	2 = (011)	3 = (101)	4 = (001)
5 = (110)	4 = (001)	3 = (101)	2 = (011)	1 = (111)	8 = (000)	7 = (100)	6 = (010)	5 = (110)
6 = (010)	3 = (010)	4 = (001)	1 = (111)	2 = (011)	7 = (100)	8 = (000)	5 = (110)	6 = (010)
7 = (100)	2 = (011)	1 = (111)	4 = (001)	3 = (101)	6 = (010)	5 = (110)	8 = (000)	7 = (100)
8 = (000)	1 = (111)	2 = (011)	3 = (101)	4 = (001)	5 = (110)	6 = (010)	7 = (100)	8 = (000)

The number $1,2,3,4,5,6,7,8$ is called the Qian (乾), Dui (兑), Li (离), Zhen (震), Xun (巽), Kan (坎), Gen (艮), Kun (坤), respectively. The set of $\{1,2,3,4,5,6,7,8\}$ is called the **Eight-Hexagram** (八卦) system.

On the other hand, the three types heaven (1), earth (2) and people (3) to any change combine forming the ***Telluric effluvium*** model as follows:

The steady multilateral system

$$(V^6, \Re^6) = (V_1^6 + \cdots + V_6^6, \{R_1^6, \cdots, R_6^6\})$$

is called the ***Telluric effluvium*** model, denoted simply by

$$V^6 = \{e,(12),(13),(23),(123),(132)\},$$

if it satisfies the following conditions:

$$R_r^6 = \sum_{i=1}^{6} V_i^6 \times V_{i*r}^6, \forall r \in \{1,2,\cdots,6\},$$

$$R_i^2 * R_j^2 = R_{i*r}^2,$$

$i*r$	1 = e	2 = (12)	3 = (13)	4 = (23)	5 = (123)	6 = (132)
1 = e	1 = e	2 = (12)	3 = (13)	4 = (23)	5 = (123)	6 = (132)
2 = (12)	2 = (12)	1 = e	5 = (123)	6 = (132)	3 = (13)	4 = (23)
3 = (13)	3 = (13)	6 = (132)	1 = e	5 = (123)	4 = (23)	2 = (12)
4 = (23)	4 = (23)	5 = (123)	6 = (132)	1 = e	2 = (12)	3 = (13)
5 = (123)	5 = (123)	4 = (23)	2 = (12)	3 = (13)	6 = (132)	1 = e
6 = (132)	6 = (132)	3 = (13)	4 = (23)	2 = (12)	1 = e	5 = (123)

The number $1, or\ 2, or\ 3$, is called the tengen (天元), the earth material (地元), the people ability (人元), respectively. The set of $\{1,2,3\}$ is called three types of talent or material. It is with elements, $e,(12),(13),(23),(123),(132)$. The each of elements, $e,(12),(13),(23),(123),(132)$, is called the primordial energy (元气), essence derived from food (谷气), defensive energy (卫气), essential substance circulating in the channels and blood vessels (营气), genuine energy (真气), pectoral energy (宗气), respectively. Another name is respectively

shaoyang (e)(少阳), yangming ((12)) (阳明), taiyang ((13)) (太阳), jueyin ((23)) (厥阴), shaoyin ((123)) (少阴), taiyin ((132)) (太阴).

Generally positive or Yang material, they are able to be perceived, but few can see the material itself, can only use signs. Therefore, the Yang energy symptoms of the set $M_1 = \{e,(12),(13)\}$ is call the marrow energy (髓); The Yin energy of the set $M_2 = \{(123)\}$ is call the blood energy (血); The Yin energy of the set $M_3 = \{(132)\}$ is call the saliva energy (津); The Yin energy of the set $M_4 = \{(23)\}$ is call the essence of water and grain (水谷精微).

Growth and conveyance in the six energies $e,(12),(13),(23),(123),(132)$, known as the **six roots** (根); As the fruit of these six energies $e,(12),(13),(23),(123),(132)$, known as the **six fruits** (结); Storage of these four energies M_1, M_2, M_3, M_4, known as the **four seas** (四海); Energy exchange of the four kinds of M_1, M_2, M_3, M_4, known as the **four streets** (四街). Of course, for a healthy Economy, the transfer law of each of the six energies $e,(12),(13),(23),(123),(132)$, is from its **root (root-causes)** (根) to its **fruit** (**symptoms**) (结).

Western Economy is different from TCE because the TCE has a concept of *Chi or Qi* (气) as a form of energy of steady multilateral systems. It is believed that this energy exists in all things of steady multilateral systems (living and non-living) including air, water, food and sunlight. *Chi* is said to be the unseen vital force that nourishes steady multilateral systems' Economy and sustains steady multilateral systems' life. It is also believed that an individual is born with an original amount of *Chi* at the beginning of steady multilateral systems' life and as a steady multilateral system grows and lives, the steady multilateral system acquires or attains *Chi* or energy from "eating" and "drinking", from "breathing" the surrounding "air" and also from living in its environment. The steady multilateral system having an energy is called **the anatomy system** or **the first physiological system**. And the first physiological system also affords *Chi* or energy for the

steady multilateral system's meridian system (*Zang Xiang* (藏象) and *Jing-Luo* (经络)) which forms a parasitic system of the steady multilateral system, called **the second physiological system** of the steady multilateral system. The second physiological system of the steady multilateral system controls the first physiological system of the steady multilateral system. A steady multilateral system would become ill or dies if the *Chi* or energy in the steady multilateral system is imbalanced or exhausted, which means that $\rho_1 = \rho(x) \to 0, \rho_2 = \rho(x)^2 \to 0$ and $\rho_3 = c\rho(x) \to 0$.

For example, in TCE, an economy as the first physiological system of the steady multilateral system following the Yin Yang Wu Xing theory was classified into five equivalence classes as follows:

wood(X)={industry, PPI (the Producer Price Index) or RPI (Retail Price Index) , liver, bravery, soul, ribs, sour, east, spring, birth};

xiang-fire(X_S^x)={agriculture, AAF (the total output value of Agriculture forestry Animal husbandry and Fishery) , pericardium, the triple energizer, nerve, the blood, bitter taste, the south, summer, growth};

earth(X_K)={commerce, CPI (the Consumer Price Index), spleen, stomach, willing, meat, sweetness, center, long summer, combined};

metal(K_X)={science-education, GBR (the General Budget Revenue), lung, large intestine, boldness, fur, spicy, west, autumn, accept};

water(S_X)={army-economic,GDP (the Gross Domestic Product), kidney, bladder, ambition, bone, salty, the north, winter, hiding};

jun-fire(X_S^j)={President or Governor, Finance (right of making money), heart, small intestine, bitter taste, whole economy, throughout the year, overall growth}.

fire(X_S)= xiang-fire(X_S^x) $\bigcup$ jun-fire(X_S^j).

There is only one of both loving and killing relations between every two classes. General close is loving, alternate is killing. In every category of internal, think that they are with an equivalent relationship, between each two of their elements there is a force of similar material accumulation of each other. It is because their pursuit of the goal is the same, i.e., follows the same "Axiom system". It can increase the energy of the class at low cost near to zero if they accumulate together. Any nature material activity follows the principle of maximizing so energy or minimizing the cost. In general, the size of the force of similar material accumulation of each other is smaller than the size of the loving force or the killing force in a stable complex system. The stability of any complex system first needs to maintain the equilibrium of the killing force and the loving force. The key is the killing force. For a stable complex system, if the killing force is large, i.e., $\rho_3 = c\rho(x)$ becomes larger by Theorems **3.2-3.5** below, which needs positive **exercise**, then the loving force is also large such that the force of similar material accumulation of each other is also large. They can make the complex system more stable. If the killing force is small, i.e., $\rho_3 = c\rho(x)$ becomes smaller by Theorems **3.2-3.5** below, which means little **exercise**, then the loving force is also small such that the force of similar material accumulation of each other is also small. They can make the complex system becoming unstable.The *Chi* or energy is also called the food hereafter for simply. In order to get the food, by Attaining Rule in Zhang [23], the second physiological system must make the first physiological system intervened, namely **exercise**. It is because only by intervention on the first physiological system, the second physiological system can be to get food.

The second physiological system of the steady multilateral system controls the first physiological system of the steady multilateral system, abiding by the following rules.

The laws of **Zangxiang, Six-fu, Ten stems hiden behind Twelve branches, Eight-Palaces or Eight Veins or Eight Extra Meridians** are summarized in Figures 2- 5.

Definition 3.1 (Sixty JiaZi) *Suppose that the ten heavenly stems model and the twelve earthly branches model are respectively*

$$V^2 \times V^5 = \{(i, j) \mid i \in V^2, j \in V^5\},$$
$$V^2 \times V^6 = \{(i, j) \mid i \in V^2, j \in V^6\}.$$

Then the following model in Table 1 is called ***the sixty JiaZi model****. #*

In Table 1, each of the elements (1,0), (0,0),..., (0,4) is that of group $V^2 \times V^5 = \{(i, j) \mid i \in V^2, j \in V^5\}$ as the ten heavenly stems model or Zangxiang Model in Figure 2.

In Table 1, each of the elements (0,e), (0,(23)),..., (1,e) is that of group $V^2 \times V^6 = \{(i, j) \mid i \in V^2, j \in V^6\}$ as the twelve earthly branches model or Jingluo Model Figure 3.

Definition 3.2 (Logic relation between Six JiaZi and the Eight-Palaces) *Logic relations of* ***Six JiaZi*** *hidden behind the* ***Eight-Palaces*** *must follow the relationship between the symmetry of the Eight-Hexagram elements.*

All logic relations of that the ***Six JiaZi*** *are hidden behind the Eight-Hexagram elements are summarized in Table 0. #*

See Table 0., all pure Yang: Ren-Jia, Wu, Bing, Geng of Ten Heavenly Stems are hidden behind all pure Yang: Qian, Kan, Gen, Zhen of the Eight-Hexagram;all pure Yin: Gui-Yi, Ji, Ding, Xin of Ten Heavenly Stems are hidden behind clockwise all pure Yin: Qun, Li, Gui, Xun of the Eight-Hexagram.

All pure Yang: Wu-Zi, Xu-Chen, Shen-Yin, Wu-Zi of twelve earthly branches are hidden behind all pure Yang: Qian, Kan, Gen, Zhen of the Eight-Hexagram;all pure Yin: Chou-Wei, Hai-Si, You-Mao,Wei-Chou of twelve earthly branches are hidden behind counterclockwise all pure Yin: Qun, Li, Gui, Xun of the Eight-Hexagram.

Example 2.1. The name of the primordial spirit of Qian Palace is

$$K_X^+(1,1) = K_X^+(\text{Outside of Qian, Inside of Qian}) =$$
(Qian Ren Xu, Qian Ren Shen, Qian Ren Wu;
Qian Jia Chen, Qian Jia Yin, Qian Jia Zi).

The name of the two generation of Dui Palace is

$$K_X^-(2,8) = K_X^-(\text{Outside of Dui, Inside of Qun}) =$$
(Dui Ding Si, Dui Ding Wei, Dui Ding You ;
Qun Yi Mao, Qun Yi Si, Qun Yi Wei).

All eight palace elements for naming can use the following formula.

Eight-Hexagram+Ten Stems+Twelve Branches.#

Property 3.1. **(***1). Sixty JiaZi meaning of ten heavenly stems of grow - strong - die - extinction state, good of lucky,*

general of flat and bad of fierce, and comprehensive name are stated in Table 2.

(2).Sixty JiaZi meaning of Philosophy, good of lucky, general of flat and bad of fierce, and comprehensive name are stated in Table 3.#

Energy concept is an important concept in Physics. Zhang etc [21] introduce this concept to the steady multilateral systems or image mathematics [20] and use these concepts to deal with the steady multilateral system diseases (economic index too high or too low). In mathematics, a steady multilateral system is said to have **Energy** (or **Dynamic**) if there is a non-negative function $\varphi(*)$ which makes every subsystem meaningful of the steady multilateral system. Similarly to Zhang etc [21], unless stated otherwise, any equivalence relation is the liking relation, any neighboring relation is the loving relation, and any alternate relation is the killing relationship.

Suppose that V is a steady multilateral system having an energy, then V in the steady multilateral system during a normal operation, its energy function for any subsystem of the steady multilateral system has an **average** (or **expected value** in Statistics), this state is called as **normal** when the energy function is nearly to the average. Normal state is the better state.

That a subsystem of the steady multilateral system is **not running properly** (or **disease**, **abnormal**) is that the energy deviation from the average of the subsystems is too large, the high (**real disease**) or the low (**virtual disease**).

In addition to study these real or virtual diseases, TCE is often not only considered the energy change (Attaining or Affording in Zhang [23]) of each element in the corresponding group, but also studied a kind of **relation costs**. There are three kinds of relationship between each two elements of **the Eight-Palaces or Eight Extra Meridians or Eight Veins** system, namely the **merged**, **synthesized** and **combined**.

The **merged** relationship between two the same elements x and y is the joining operation in a set, i.e., $\{x\}\cup\{y\}=\{z\}$. The element z is the result of two the same elements x and y merging. The purpose of merging is in order to get the large result energy of element z through inputting two the same elements x and y.

The **synthesized** relationship between two elements x and y is the multiply operation in the corresponding group system with a multiplication *, i.e., $x*y=z$. The element z is the result of two elements x and y synthesized. The purpose of synthesized is in order to get the result energy of element z through inputting two elements x and y.

The **combined** relationship between two elements x and y is the division operation in the corresponding group system with a multiplication *, i.e., $x^{-1}*y=z$. The element z is the cost of two elements x and y combined. The purpose of combined is in order to maintain or strengthen the relation between x and y through inputting the cost element z. But in **the Eight-Palaces or Eight Extra Meridians or Eight Veins** system, the **synthesized** and **combined** operations are the same since $x^{-1}=x$.

In general, a relationship cost is low if the cost element in the corresponding group is easy to get. A relationship cost is high, on the other hand, if the cost element in the corresponding is hard to come by.

In this case, in general, the one of PACGGF inflation rates $x\in[a,b]$ which means $\rho_0\le\rho_1=\rho(x)\le 1$. This relation cost is low because this relation cost element is easy to get. The low relation cost can make the intervention increasing the sizes of both the intervention reaction coefficients ρ_1,ρ_2 and the self-protection coefficient ρ_3.

But in general, the one of PACGGF inflation rates $x\notin[a,b]$ which means $0<\rho_1=\rho(x)<\rho_0$. This relation cost is high because the relation cost element is hard to come by. The high relation cost can make the sizes of both the intervention reaction coefficients ρ_1,ρ_2 and the self-protection coefficient ρ_3 decreasing response to intervention.

The purpose of intervention is to make the steady multilateral system return to normal state. The method of intervention is to increase or decrease the energy of a subsystem.

What kind of intervening should follow the principle to treat it? Western economics emphasizes directly economic treatments on a disease subsystem after the disease of subsystem has occurred, but the indirect intervening of oriental economics is required before the disease of subsystem will occur. In mathematics, which is more reasonable?

Based on this idea, many issues are worth further discussion. For example, if an intervening has been implemented to a disease subsystem before the disease of subsystem will occur, what relation disease will be low cost which does not need to be intervened? what relation disease will be high cost which needs to be intervened?

3.2 Kinds of Relationship costs of Steady Multilateral Systems

For a steady multilateral system V with two incompatibility relations, suppose that the subsystems X, X_S, X_K, K_X, S_X are the same as those defined in Theorem 3.1. Then the relation diseases can be decomposed into the following classes:

Definition 3.4 (merged （合并）, synthesized （合化或者合成） and combined （化合）) *Suppose that both x and y are two elements of system of **the Eight-Palaces** or **Eight Extra Meridians** or **Eight Veins**.*

*The **merged** relationship between two the same elements x and y is the joining operation in a set, i.e., $\{x\}\cup\{y\}=\{z\}$. The element z is the result of two the same elements x and y merging. The purpose of merging is in order to get the large result energy of element z through inputting two the same elements x and y.*

*The **synthesized** relationship between two elements x and y is the multiply operation in the corresponding group system with a multiplication *, i.e., $x*y=z$. The element z is*

the result of two elements x and y synthesized. The purpose of synthesized is in order to get the result energy of element z through inputting two elements x and y.

*The **combined** relationship between two elements x and y is the division operation in the corresponding group system with a multiplication $*$, i.e., $x^{-1} * y = z$. The element z is the cost of two elements x and y combined. The purpose of combined is in order to maintain or strengthen the relation between x and y through inputting the cost element z.*

*The **synthesized** and **combined** operations in system **the Eight-Palaces** or **Eight Veins** or **Eight Extra Meridians** are the same since $x^{-1} = x$. #*

Property 3.2. *Sixty JiaZi ,meaning of ten heavenly stems, twelve earthly branches to hide stems, synthesized attribute of twelve earthly branches, and integration attribute are in Table 8 .#*

In Table 8, the rule of twelve earthly branches to hide the ten heavenly stems is in Figure 4.

3.3 First Transfer Laws of Economic Society Energies of Steady Multilateral Systems with a healthy Economy

Suppose that a steady multilateral system V having energy function $\varphi(*)$ is normal or healthy. Let x be the GDP inflation rate of V. Taking $\rho_1 = \rho(x), \rho_2 = \rho(x)^2$, and $\rho_3 = c\rho(x)$ where $0 \le c \le 1$ and $\rho(x)$ is defined in Eqs.(3) and (4). The healthy economy means that the conditions $\rho_0 \le \rho(x) \le 1$ and $0 < c \le 1$ hold. By Corollary **2.1**, it is equivalent to the normal range $x \in [a,b]$ or the healthy condition $\rho_1 + \rho_2\rho_3 \ge 1 - \rho_2\rho_3$. That $c \to 0$ implies that the economy is without the ability of self-protection, i.e., $\rho_3 = c\rho(x) \to 0$. Of course, the economy cannot be healthy. It is because for any $x \ne t_0$, , when $c \to 0$, there are

$$\rho_1 + \rho_2\rho_3 = \rho(x) + c\rho(x)^3 \to \rho(x) < 1 \leftarrow 1 - c\rho(x)^3 = 1 - \rho_2\rho_3,$$

such that the healthy condition $\rho_1 + \rho_2\rho_3 \ge 1 - \rho_2\rho_3$ cannot hold.

By using Corollary **2.1** and Theorems **2.1**and **3.1**, the following Theorems **3.2** and **3.3** can be obtained as the transfer law of occurrence and change of economic society energies with a healthy economy.

Theorem 3.2 (**The transfer law of the ten Heavenly Stems with a healthy economy**) *Let the one of PACGGF inflation rates $x \in [a,b]$ which is equivalent to the conditions $\rho_0 \le \rho_1 = \rho(x) \le 1$ and $0 < c \le 1$.*

*The transfer law of each of the 10 kinds of energy in the the **Zangxiang** system or the **ten Heavenly Stems model** is from its **root-causes** to its **symptoms**.*

*Furthermore, for the healthy economy, the transfer law of the **Yang** vital or righteousness energies of the ten heavenly stems is transferring **along** the loving or liking order of the ten heavenly stems as follows:*

$$\xrightarrow{less} \text{real Jia}(1,0)X^+ \overset{less}{\leftrightarrow} \text{real Yi}(0,0)X^-$$
$$\xrightarrow{less} \text{real Bing}(1,1)X_S^+ \overset{less}{\leftrightarrow} \text{real Ding}(0,1)X_S^-$$
$$\xrightarrow{rare} \text{virtual Wu}(1,2)X_K^+ \overset{less}{\leftrightarrow} \text{virtual Ji}(0,2)X_K^-$$
$$\xrightarrow{more} \text{virtual Geng}(1,3)K_X^+ \overset{less}{\leftrightarrow} \text{virtual Xin}(0,3)K_X^-$$
$$\xrightarrow{rare} \text{real Ren}(1,4)S_X^+ \overset{less}{\leftrightarrow} \text{real Gui}(0,4)S_X^-$$
$$\xrightarrow{less} \text{real Jia}(1,0)X^+ \overset{less}{\leftrightarrow} \text{real Yi}(0,0)X^- \xrightarrow{less} \cdots.$$

*And the transfer law of the **Yin** vital or righteousness energies of the ten heavenly stems is transferring **against** the loving or liking order of the ten heavenly stems as follows:*

$$\cdots \overset{less}{\leftarrow} \text{virtual Yi}(0,0)X^- \overset{less}{\leftrightarrow} \text{virtual Jia}(1,0)X^+$$
$$\overset{less}{\leftarrow} \text{virtual Gui}(0,4)\,S_X^- \overset{less}{\leftrightarrow} \text{virtual Ren}(1,4)\,S_X^+$$
$$\overset{rare}{\leftarrow} \text{real Xin}(0,3)K_X^- \overset{less}{\leftrightarrow} \text{real Geng}(1,3)\,K_X^+$$
$$\overset{more}{\leftarrow} \text{real Ji}(0,2)X_K^- \overset{less}{\leftrightarrow} \text{real Wu}(1,2)X_K^+$$
$$\overset{rare}{\leftarrow} \text{virtual Ding}(0,1)X_S^- \overset{less}{\leftrightarrow} \text{virtual Bing}(1,1)X_S^+$$
$$\overset{less}{\leftarrow} \text{virtual Yi}(0,0)X^- \overset{less}{\leftrightarrow} \text{virtual Jia}(1,0)X^+ \overset{less}{\leftarrow} \cdots.$$

*All transfer laws of the **Zangxiang** system or the **ten Heavenly Stems model for a healthy economy** are summarized in Figure 2. It means that only both the liking relation and the loving relation have the transfer law of the **Yang or Yin** vital or righteousness energies of the ten heavenly stems . **Yang** is transferring **along** the loving or liking order of the ten heavenly stems. **Yin** is transferring **against** the loving or liking order of the ten heavenly stems.#*

Theorem 3.3 (**The transfer law of the twelve Earthly Branches with a healthy economy**) *Let the one of PACGGF inflation rates $x \in [a,b]$ which is equivalent to the conditions $\rho_0 \le \rho_1 = \rho(x) \le 1$ and $0 < c \le 1$.*

*The transfer law of each of the 12 kinds of energy in the **Jingluo** system or the **twelve Earthly Branches model** is from its **root-causes** to its **symptoms**.*

*Furthermore, for the healthy economy, the transfer law of the **Yang** vital energies of the twelve earthly branches is transferring **along** the loving or liking order of the twelve earthly branches as follows:*

$\xrightarrow{less}$ virtual Mao	real Zi	real Hai
$K_X^+(1,(12))$	$X^+(0,e) \xrightarrow{less}$	$X_S^{x+}(1,e)$
$\updownarrow$ *less*	$\updownarrow$ *less*	$\updownarrow$ *less*
virtual Yin	real Chou	real Xu
$K_X^-(1,(132)) \overset{more}{\Longrightarrow}$	$X^-(0,(23))$	$X_S^{x-}(1,(23)) \overset{rare}{\Longleftarrow}$
real Shen	real Wei	virtual Chen
$S_X^+(0,(13)) \overset{rare}{\Longrightarrow}$	$X_S^{j+}(1,(13))$	$X_K^+(0,(12)) \xrightarrow{less}$
$\updownarrow$ *less*	$\updownarrow$ *less*	$\updownarrow$ *less*
$\overset{rare}{\Longleftarrow}$ real You	real Wu	virtual Si
$S_X^-(0,(123))$	$X_S^{j-}(1,(123)) \xrightarrow{rare}$	$X_K^-(0,(132))$

*The transfer law of the **Yin** vital energies of the twelve earthly branches is transferring **against** the loving or liking order of the ten heavenly stems as follows:*

real Mao	real Chen	virtual Wei
$K_X^+(1,(12)) \overset{more}{\leftarrow}$	$X_K^+(0,(12))$	$X_S^{j+}(1,(13)) \overset{rare}{\Longleftarrow}$
$\updownarrow$ *less*	$\updownarrow$ *less*	$\updownarrow$ *less*
$\overset{less}{\leftarrow}$ real Yin	real Si	virtual Wu
$K_X^-(1,(132))$	$X_K^-(0,(132)) \overset{rare}{\leftarrow}$	$X_S^{j-}(1,(123))$

$$\begin{array}{ccc} \overset{rare}{\Leftarrow}\text{virtual Shen} & \text{virtual Hai} & \text{virtual Zi} \\ S_X^+(0,(13)) & X_S^{x+}(1,e)\overset{less}{\leftarrow} & X^+(0,e) \\ \updownarrow less & \updownarrow less & \updownarrow less \\ \text{virtual You} & \text{virtual Xu} & \text{virtual Chou} \\ S_X^-(0,(123)\overset{rare}{\Rightarrow} & X_S^{x-}(1,(23)) & X^-(0,(23))\overset{less}{\leftarrow}. \end{array}$$

*All transfer laws of the **Jingluo** system or the **twelve Earthly Branches model for a healthy economy** are summarized in Figure 3. It means that only both the liking relation and the adjacent relation have the transfer law of the **Yang or Yin** vital or righteousness energies of the twelve earthly branches. **Yang** is transferring **along** the loving or liking order of the twelve earthly branches. **Yin** is transferring **against** the loving or liking order of the twelve earthly branches. #*

Remark 3. Theorems **3.2** and **3.3** are called the transfer law of occurrence and change of economy energies with a healthy economy, simply, **the first transfer law**.

For a **Yang** energy of X and the **Zangxiang system or the ten Heavenly Stems model for a healthy economy ,** the first transfer law is transferring **along** the loving or liking order of the ten heavenly stems as follows:

$$\begin{array}{l} \overset{less}{\rightarrow}\text{real } X^+ \overset{less}{\leftrightarrow}\text{real } X^- \\ \overset{less}{\rightarrow}\text{real } X_S^+ \overset{less}{\leftrightarrow}\text{real } X_S^- \\ \overset{rare}{\rightarrow}\text{virtual } X_K^+ \overset{less}{\leftrightarrow}\text{virtual } X_K^- \\ \overset{more}{\rightarrow}\text{virtual } K_X^+ \overset{less}{\leftrightarrow}\text{virtual } K_X^- \\ \overset{rare}{\rightarrow}\text{real } S_X^+ \overset{less}{\leftrightarrow}\text{real } S_X^- \\ \overset{less}{\rightarrow}\text{real } X^+ \overset{less}{\leftrightarrow}\text{real } X^-. \end{array}$$

For a **Yin** energy of X and the **Zangxiang system or the ten Heavenly Stems model for a healthy economy ,** the first transfer law is transferring **against** the loving or liking order of the ten heavenly stems as follows:

$$\begin{array}{l} \text{virtual } X^- \overset{less}{\leftrightarrow}\text{virtual } X^+ \\ \overset{less}{\leftarrow}\text{virtual } S_X^- \overset{less}{\leftrightarrow}\text{virtual } S_X^+ \\ \overset{rare}{\leftarrow}\text{real } K_X^- \overset{less}{\leftrightarrow}\text{real } K_X^+ \\ \overset{more}{\leftarrow}\text{real } X_K^- \overset{less}{\leftrightarrow}\text{real } X_K^+ \\ \overset{rare}{\leftarrow}\text{virtual } X_S^- \overset{less}{\leftrightarrow}\text{virtual } X_S^+ \\ \overset{less}{\leftarrow}\text{virtual } X^- \overset{less}{\leftrightarrow}\text{virtual } X^+. \end{array}$$

For a **Yang** energy of X and the **Jingluo system or the twelve Earthly Branches model for a healthy economy,** the first transfer law is transferring **along** the loving or liking order of the twelve earthly branches as follows:

$$\begin{array}{l} \text{real Chou } X^- \overset{less}{\leftrightarrow}\text{real Zi } X^+ \\ \overset{less}{\rightarrow}\text{real Hai } X_S^{x+} \overset{less}{\leftrightarrow}\text{real Xu } X_S^{x-} \\ \overset{rare}{\Leftarrow}\text{real You } S_X^- \overset{less}{\leftrightarrow}\text{real Shen } S_X^+ \\ \overset{rare}{\Rightarrow}\text{real Wei } X_S^{j+} \overset{less}{\leftrightarrow}\text{real Wu } X_S^{j-} \\ \overset{less}{\rightarrow}\text{virtual Si } X_K^- \overset{less}{\leftrightarrow}\text{virtual Chen } X_K^+ \\ \overset{less}{\rightarrow}\text{virtual Mao } K_X^+ \overset{less}{\leftrightarrow}\text{virtual Yin } K_X^- \\ (\overset{rare}{\rightarrow}\text{real You } S_X^- \overset{less}{\leftrightarrow}\text{real Shen } S_X^+) \\ \overset{less}{\rightarrow}\text{real Chou } X^- \overset{less}{\leftrightarrow}\text{real Zi } X^+. \end{array}$$

For a **Yin** energy of X and the **Jingluo system or the twelve Earthly Branches model for a healthy economy,** the first transfer law is transferring **against** the loving or liking order of the twelve earthly branches as follows

$$\begin{array}{l} \overset{less}{\leftarrow}\text{virtual Zi } X^+ \overset{less}{\leftrightarrow}\text{virtual Chou } X^- \\ (\overset{less}{\leftarrow}\text{virtual Shen } S_X^+ \overset{less}{\leftrightarrow}\text{virtual You } S_X^-) \\ \overset{rare}{\leftarrow}\text{real Yin } K_X^- \overset{less}{\leftrightarrow}\text{real Mao } K_X^+ \\ \overset{more}{\leftarrow}\text{real Chen } X_K^+ \overset{less}{\leftrightarrow}\text{real Si } X_K^- \\ \overset{rare}{\leftarrow}\text{virtual Wu } X_S^{j-} \overset{less}{\leftrightarrow} \text{virtual Wei } X_S^{j+} \\ \overset{rare}{\Leftarrow}\text{virtual Shen } S_X^+ \overset{less}{\leftrightarrow}\text{virtual You } S_X^- \\ \overset{rare}{\Rightarrow}\text{virtual Xu } X_S^{x-} \overset{less}{\leftrightarrow}\text{virtual Hai } X_S^{x+} \\ \overset{less}{\leftarrow}\text{virtual Zi } X^+ \overset{less}{\leftrightarrow}\text{virtual Chou } X^-. \end{array}$$

Because the energy change between $\overset{less}{\leftarrow}\text{virtual Zi } X^+ \overset{less}{\leftrightarrow}\text{virtual Chou } X^-$ and $\overset{less}{\leftarrow}\text{real Yin } K_X^- \overset{less}{\leftrightarrow}\text{real Mao } K_X^+$ needs to be adjusted by the energy of $\overset{less}{\leftarrow}\text{virtual Shen } S_X^+ \overset{less}{\leftrightarrow}\text{virtual You } S_X^-$, so generally believe that the **Yin** energy of X begins with the **Yang** energy of $\text{real Yin } K_X^- \overset{less}{\leftrightarrow}\text{real Mao } K_X^+$. This is in Zi to Yin (11 PM at night to the next day at half past five) need to have a rest.

The transfer relation of the first transfer law running is the loving or liking relationship, denoted by $\rightarrow$ or $\leftrightarrow$. The running condition of the first transfer law is both $(\rho_1+\rho_2\rho_3)\geq(1-\rho_2\rho_3)$ and $\rho_3=c\rho(x)>0$. By Theorem **2.1** and Corollary **2.1**, the running condition is nearly equivalent to both $\rho_0\leq\rho_1=\rho(x)\leq 1$ and $0<c\leq 1$. The best-state condition of the first transfer law is $\rho_3=c\rho(x)$ where $c\rightarrow 1$ which is the best state of ρ_3 for a healthy economy. To follow or utilize the running of the first transfer law is equivalent to the following method. For dong so, it is in order to protect or maintain the loving relationship. The method can strengthen both the value $(\rho_1+\rho_2\rho_3)=(\rho(x)+c\rho(x)^3)$ tending to be large and the value $(1-\rho_2\rho_3)=(1-c\rho(x)^3)$ tending to be small at the same time. In other words, the way can make all of both $\rho(x)$ and c tending to be large. It is because the running condition of the loving or liking relationship $(\rho_1+\rho_2\rho_3)\geq(1-\rho_2\rho_3)$ is the stronger the use, which dues to $\rho_1=\rho(x)$ the greater the use. In other words again, if the treatment principle of the loving relationship disease is to use continuously abiding by the first transfer law, then all of both the intervention reaction coefficients $\rho_1=\rho(x),\rho_2=\rho(x)^2$ and the coefficient of self-protection $\rho_3=c\rho(x)>0$ where $0<c\leq 1$ will tend to be the best state, i.e., $\rho(x)\rightarrow 1$ and $0<c\rightarrow 1$. #

Side effects of medical problems were the question: in the medical process, destroyed the balance of the normal systems which are not sick or intervened subsystems. The energy change of the intervened system is not the true side effects issue. The energy change is called the pseudo or non-true side effects issue since by Attaining Rule in Zhang [23], it is just the food of the second physiological system of the steady multilateral system for a healthy economy. The best state of

the self-protection coefficient $\rho_3 = c\rho(x)$, i.e., $\rho_3 = c\rho(x) \to \rho(x) = \rho_1$, where $c \to 1$, implies the non-existence of any side effects issue if the treatment principle of TCE is used. Therefore any disease that causes side effects issue occurrence in the first place dues to the non-best state of self-protection ability, i.e., $\rho_3 = c\rho(x) < \rho(x) = \rho_1$ .To follow or utilize the running of the first transfer law can make both $\rho(x) \to 1$ and $0 < c \to 1$. At this point, the paper advocates to follow or utilize the first transfer law. It is in order to avoid the side effects issue occurrence for a healthy economy. #

3.4 Second Transfer Laws of Economic Society Energies of Steady Multilateral Systems with an unhealthy Economy

Suppose that a steady multilateral system V having energy function $\varphi(*)$ is abnormal or unhealthy. Let x be the one of PACGGF inflation rate of V . Taking $\rho_1 = \rho(x), \rho_2 = \rho(x)^2$ and $\rho_3 = c\rho(x)$ where $0 \le c \le 1$, and $\rho(x)$ is defined in Eqs.(3) and (4). The unhealthy economy means that the conditions $\rho_0 > \rho_1 = \rho(x) > 0$ and $0 \le c \le 1$ hold, which is equivalent to the abnormal range $x \notin [a,b]$.

From [20] and by using Corollary **2.1** and Theorems **2.1** and **3.1**, the following Theorems **3.4** and **3.5** can be obtained as the transfer law of occurrence and change of economic society energies with an unhealthy economy.

Theorem 3.4 (**The transfer law of the ten Heavenly Stems with an unhealthy economy**) *Let the one of PACGGF inflation rate* $x \notin [a,b]$ *which is equivalent to the conditions* $\rho_0 > \rho_1 = \rho(x) > 0$ *and* $0 \le c \le 1$.

The transfer law of each of the 10 kinds of energy in the ***Zangxiang*** *system or the* ***ten Heavenly Stems model for an unhealthy economy*** *is from its* ***root-causes*** *to its* ***symptoms***.

Furthermore, for the unhealthy economy, if a subsystem X *of a steady multilateral system* V *falls a real disease, then the disease comes from the mother* S_X *of* X *. The transfer law of the* ***Yang*** *vital or righteousness energies of the ten heavenly stems is transferring* ***against*** *the killing or liking order of the ten heavenly stems as follows:*

$$\text{real Jia } (1,0)\ X^+ \overset{less}{\Leftrightarrow} \text{real Yi } (0,0)\ X^-$$
$$\overset{rare}{\Leftarrow} \text{real Geng } (1,3)\ K_X^+ \overset{less}{\Leftrightarrow} \text{real Xin } (0,3)\ K_X^-$$
$$\overset{rare}{\Leftarrow} \text{real Bing } (1,1)\ X_S^+ \overset{less}{\Leftrightarrow} \text{real Ding } (0,1)\ X_S^-$$
$$\overset{rare}{\Leftarrow} \text{real Ren } (1,4)\ S_X^+ \overset{less}{\Leftrightarrow} \text{real Gui } (0,4)\ S_X^-$$
$$\overset{more}{\Leftarrow} \text{virtual Wu } (1,2)\ X_K^+ \overset{less}{\Leftrightarrow} \text{virtual Ji } (0,2)\ X_K^-$$
$$\overset{less}{\Leftarrow} \text{real Jia } (1,0)\ X^+ \overset{less}{\Leftrightarrow} \text{real Yi } (0,0)\ X^-$$

And if a subsystem X *of a steady multilateral system* V *falls a virtual disease, then the disease comes from the son* X_S *of* X *. The transfer law of the* ***Yin*** *vital or righteousness energies of the ten heavenly stems is transferring* ***along*** *the killing or liking order of the ten heavenly stems as follows:*

$$\text{virtual Yi } (0,0)\ X^- \overset{less}{\Leftrightarrow} \text{virtual Jia } (1,0)\ X^+$$
$$\overset{rare}{\Rightarrow} \text{virtual Ji } (0,2)\ X_K^- \overset{less}{\Leftrightarrow} \text{virtual Wu } (1,2)\ X_K^+$$
$$\overset{rare}{\Rightarrow} \text{virtual Gui } (0,4)\ S_X^- \overset{less}{\Leftrightarrow} \text{virtual Ren } (1,4)\ S_X^+$$
$$\overset{rare}{\Rightarrow} \text{virtual Ding } (0,1)\ X_S^- \overset{less}{\Leftrightarrow} \text{virtual Bing } (1,1)\ X_S^+$$
$$\overset{more}{\Rightarrow} \text{real Xin } (0,3)\ K_X^- \overset{less}{\Leftrightarrow} \text{real Geng } (1,3)\ K_X^+$$
$$\overset{less}{\Rightarrow} \text{virtual Yi } (0,0)\ X^- \overset{less}{\Leftrightarrow} \text{virtual Jia } (1,0)\ X^+.$$

All transfer laws of the ***Zangxiang*** *system or the* ***ten Heavenly Stems model for an unhealthy economy*** *are summarized in Figure 2. It means that only both the liking relation and the killing relation have the transfer law of the* ***Yang or Yin*** *vital or righteousness energies of the ten heavenly stems . **Yang** is transferring **against** the killing or liking order of the ten heavenly stems. **Yin** is transferring **along** the killing or liking order of the ten heavenly stems.#*

Theorem 3.5 (**The transfer law of the twelve Earthly Branches with an unhealthy**) *Let the one of PACGGF inflation rate* $x \notin [a,b]$ *which is equivalent to the conditions* $\rho_0 > \rho_1 = \rho(x) > 0$ *and* $0 \le c \le 1$.

The transfer law of each of the 12 kinds of energy in the ***Jingluo*** *system or the* ***twelve Earthly Branches model for an unhealthy economy*** *is from its* ***root-causes*** *to its* ***symptoms***. *Furthermore, for the unhealthy economy, if a subsystem* X *of a steady multilateral system* V *falls a real disease, then the disease comes from the mother* S_X *of* X *. The transfer law of the* ***Yang*** *vital energies of the twelve earthly branches is transferring* ***against*** *the killing or liking order of the twelve earthly branches as follows:*

real Mao	real Hai	real Wei
$K_X^+(1,(12)) \overset{rare}{\Leftarrow}$	$X_S^{x+}(1,e)$	$X_S^{j+}(1,(13)) \overset{rare}{\Leftarrow}$
$\Updownarrow$ less	$\Updownarrow$ less	$\Updownarrow$ less
$\overset{rare}{\Leftarrow}$ real Yin	real Xu	real Wu
$K_X^-(1,(132))$	$X_S^{x-}(1,(23)) \overset{less}{\Leftrightarrow}$	$X_S^{j-}(1,(123))$
$\overset{rare}{\Leftarrow}$ real Shen	virtual Chen	real Zi
$S_X^+(0,(13))$	$X_K^+(0,(12)) \overset{less}{\Leftarrow}$	$X^+(0,e)$
$\Updownarrow$ less	$\Updownarrow$ less	$\Updownarrow$ less
real You	virtual Si	real Chou
$S_X^-(0,(123) \overset{more}{\Leftarrow}$	$X_K^-(0,(132))$	$X^-(0,(23)) \overset{rare}{\Leftarrow}$.

For the unhealthy economy,if a subsystem X *of a steady multilateral system* V *falls a virtual disease, then the disease comes from the son* X_S *of* X *. The transfer law of the* ***Yin*** *vital energies of the twelve earthly branches is transferring* ***along*** *the killing or liking order of the twelve earthly branches as follows:*

real Mao	virtual Zi	virtual Chen
$K_X^+(1,(12)) \overset{less}{\Rightarrow}$	$X^+(0,e)$	$X_K^+(0,(12)) \overset{rare}{\Rightarrow}$
$\Updownarrow$ less	$\Updownarrow$ less	$\Updownarrow$ less
$\overset{more}{\Rightarrow}$ real Yin	virtual Chou	virtual Si
$K_X^-(1,(132))$	$X^-(0,(23)) \overset{rare}{\Rightarrow}$	$X_K^-(0,(132))$

$$\begin{array}{lll} \overset{rare}{\Rightarrow} \text{virtual Shen} & \text{virtual Wei} & \text{virtual Hai} \\ S_X^+(0,(13)) & X_S^{+j}(1,(13)) \overset{less}{\Leftrightarrow} & X_S^{-x}(1,e) \\ \Updownarrow \text{less} & \Updownarrow \text{less} & \Updownarrow \text{less} \\ \text{virtual You} & \text{virtual Wu} & \text{virtual Xu} \\ S_X^-(0,(123) \overset{less}{\Rightarrow} & X_S^{-j}(1,(123)) & X_S^{-x}(1,(23)) \overset{more}{\Rightarrow}. \end{array}$$

*All transfer laws of the **Jingluo** system or the **twelve Earthly Branches model for an unhealthy economy** are summarized in Figure 3. It means that only both the liking relation and the killing relation have the transfer law of the **Yang or Yin** vital or righteousness energies of the twelve earthly branches. **Yang** is transferring **against** the killing or liking order of the twelve earthly branches. **Yin** is transferring **along** the killing or liking order of the twelve earthly branches. #*

Remark 4. Theorems **3.4** and **3.5** are called the transfer law of occurrence and change of energies with an unhealthy economy, simply, **the second transfer law**.

For a **Yin** energy of X and *the **Zangxiang** system or the **ten Heavenly Stems model for an unhealthy economy***, the second transfer law is transferring **along** the killing or liking order of the ten heavenly stems as follows:

$$\begin{aligned} &\overset{less}{\Rightarrow} \text{virtual } X^- \overset{less}{\Leftrightarrow} \text{virtual } X^+ \\ &\overset{rare}{\Rightarrow} \text{virtual } X_K^- \overset{less}{\Leftrightarrow} \text{virtual } X_K^+ \\ &\overset{rare}{\Rightarrow} \text{virtual } S_X^- \overset{less}{\Leftrightarrow} \text{virtual } S_X^+ \\ &\overset{rare}{\Rightarrow} \text{virtual } X_S^- \overset{less}{\Leftrightarrow} \text{virtual } X_S^+ \\ &\overset{more}{\Rightarrow} \text{real } K_X^- \overset{less}{\Leftrightarrow} \text{real } K_X^+ \\ &\overset{less}{\Rightarrow} \text{virtual } X^- \overset{less}{\Leftrightarrow} \text{virtual } X^+. \end{aligned}$$

For a **Yang** energy of X and **the Zangxiang system or the ten Heavenly Stems model for an unhealthy economy,** the second transfer law is transferring **against** the killing or liking order of the ten heavenly stems as follows:

$$\begin{aligned} &\overset{less}{\Leftarrow} \text{real } X^+ \overset{less}{\Leftrightarrow} \text{real } X^- \\ &\overset{rare}{\Leftarrow} \text{real } K_X^+ \overset{less}{\Leftrightarrow} \text{real } K_X^- \\ &\overset{rare}{\Leftarrow} \text{real } X_S^+ \overset{less}{\Leftrightarrow} \text{real } X_S^- \\ &\overset{rare}{\Leftarrow} \text{real } S_X^+ \overset{less}{\Leftrightarrow} \text{real } S_X^- \\ &\overset{more}{\Leftarrow} \text{virtual } X_K^+ \overset{less}{\Leftrightarrow} \text{virtual } X_K^- \\ &\overset{less}{\Leftarrow} \text{real } X^+ \overset{less}{\Leftrightarrow} \text{real } X^-. \end{aligned}$$

For a **Yin** energy of X and **the Jingluo system or the twelve Earthly Branches model for an unhealthy economy ,** the second transfer law is transferring **along** the killing or liking order of the twelve earthly branches as follows:

$$\begin{aligned} &\overset{less}{\Rightarrow} \text{virtual Zi } X^+ \overset{less}{\Leftrightarrow} \text{virtual Chou } X^- \\ &\overset{rare}{\Rightarrow} \text{virtual Si } X_K^- \overset{less}{\Leftrightarrow} \text{virtual Chen } X_K^+ \\ &\overset{rare}{\Rightarrow} \text{virtual Shen } S_X^+ \overset{less}{\Leftrightarrow} \text{virtual You } S_X^- \\ &\overset{rare}{\Rightarrow} \text{virtual Wu } X_S^{j-} \overset{less}{\Leftrightarrow} \text{virtual Wei } X_S^{j+} \\ &\overset{less}{\Leftrightarrow} \text{virtual Hai } X_S^{x+} \overset{less}{\Leftrightarrow} \text{virtual Xu } X_S^{x-} \\ &\overset{more}{\Rightarrow} \text{real Yin } K_X^- \overset{less}{\Leftrightarrow} \text{real Mao } K_X^+ \\ &\overset{less}{\Rightarrow} \text{virtual Zi } X^+ \overset{less}{\Leftrightarrow} \text{virtual Chou } X^-. \end{aligned}$$

For a **Yang** energy of X and **the Jingluo system or the twelve Earthly Branches model for an unhealthy economy,** the second transfer law is transferring **against** the killing or liking order of the twelve earthly branches as follows:

$$\begin{aligned} &\overset{less}{\Leftarrow} \text{real Zi } X^+ \overset{less}{\Leftrightarrow} \text{real Chou } X^- \\ &\overset{less}{\Leftarrow} \text{real Yin } K_X^- \overset{less}{\Leftrightarrow} \text{real Mao } K_X^+ \\ &\overset{rare}{\Leftarrow} \text{real Hai } X_S^{x+} \overset{less}{\Leftrightarrow} \text{real Xu } X_S^{x-} \\ &\overset{less}{\Leftarrow} \text{real Wu } X_S^{j-} \overset{less}{\Leftrightarrow} \text{real Wei } X_S^{j+} \\ &\overset{rare}{\Leftarrow} \text{real Shen } S_X^+ \overset{less}{\Leftrightarrow} \text{real You } S_X^- \\ &\overset{more}{\Leftarrow} \text{virtual Si } X_K^- \overset{less}{\Leftrightarrow} \text{virtual Shen } X_K^+ \\ &\overset{less}{\Leftarrow} \text{real Zi } X^+ \overset{less}{\Leftrightarrow} \text{real Chou } X^-. \end{aligned}$$

The transfer relationship of the second transfer law running is the killing or liking relationship, denoted by $\Rightarrow$ or $\Leftrightarrow$.

The running condition of the second transfer law is both $(\rho_1+\rho_2\rho_3)<(1-\rho_2\rho_3)$ and $\rho_3 = c\rho(x) \geq 0$.

By Theorem **2.1** and Corollary **2.1**, the running condition is equivalent to both $\rho_0 > \rho_1 = \rho(x) > 0$ and $1 \geq c \geq 0$. That $\rho_3 = c\rho(x) \to 0$ means the lack of capability of self-protection. Of course, it is the basis condition of running the second transfer law.

The stopping condition of the second transfer law is both $(\rho_1+\rho_2\rho_3)\geq(1-\rho_2\rho_3)$ and $\rho_3 = c\rho(x) > 0$, which is the running condition of the first transfer law, or, the existence condition of capabilities of both intervention reaction and self-protection.

To follow or utilize the running of the second transfer law is equivalent to the following method. For dong so, it is to protect and maintain the killing or liking relationship of the steady multilateral system. The method can strengthen all of both $\rho_1-\rho_3=\rho(x)(1-c)$ and $\rho_2-\rho_1\rho_3=\rho(x)^2(1-c)$ tending to be small at the same time. In other words, using the method can make c tends to be large for a fixed $\rho(x)>0$. It is because the transferring condition of the killing or liking relation disease $(\rho_1+\rho_2\rho_3)<(1-\rho_2\rho_3)$ is the weaker the use, which dues to $\rho_3 = c\rho(x)$ is the greater the use. The transferring way can make both $\rho_1-\rho_3\to 0$ and $\rho_2-\rho_1\rho_3\to 0$ at the same time such that the killing or liking relation disease cannot be transferred. In other words again, if the treatment principle of the killing relationship diseases is to use continuously abiding by the second transfer law, then the coefficient of self-protection will tend to be the occurrence state, i.e., $\rho_3 = c\rho(x) > 0$ where $1 \geq c \geq \frac{1-\rho(x)}{2\rho(x)^3} \geq 0$, and the coefficients of intervention reaction also will tend to the healthy state, i.e., $\rho_0 \leq \rho_1 = \rho(x) \leq 1$, such that $(\rho_1+\rho_2\rho_3)\geq(1-\rho_2\rho_3)$.#

Medical and drug resistance problem is that such a question, beginning more appropriate medical treatment, but is no longer valid after a period. In the state

$$\rho_1-\rho_3=\rho(x)(1-c)\to 0,$$
$$\rho_2-\rho_1\rho_3=\rho(x)^2(1-c)\to 0,$$

by Theorems **3.2** and **3.3**, any medical and drug resistance problem is non-existence if the treatment principle of TCE is used. But in the state

$$\rho_1-\rho_3=\rho(x)(1-c)\to \rho(x),$$
$$\rho_2-\rho_1\rho_3=\rho(x)^2(1-c)\to \rho(x)^2,$$

by Theorems **3.4** and **3.5**, the medical and drug resistance problem is always existence, even if the treatment principle of TCE has been used. It is because virtual X_K cannot kill real S_X if X is intervened by increasing its energy. In other words, the lack of capability of self-protection, i.e., $\rho_3 = c\rho(x) \to 0$, implies the possible existence of a medical and drug resistance problem, although the treatment principle of TCE has been used. At this point, the paper advocates to follow or utilize the second transfer law in order to prevent and avoid the medical and drug resistance issue occurrence for the unhealthy economy.#

IV. Treatment Principle of TCE

In order to explain treatment principle of TCE , the changes in the range of one of PACGGF inflation rate is divided into four parts. From [20] , Theorems **2.1**, **3.1-3.5**, Properties **3.1-3.2** and Corollary **2.1**, it can be easily proved that the following theorem is true.

Theorem 4.1 *Suppose that the subsystem X of a steady multilateral system falls ill. Let x^{i_0} be the one of PACGGF inflation rates of the falling-ill subsystem X for any i $(1 \le i \le 6)$ of the steady multilateral system. Denoted the parameters of the normal range as follows*

$$(a, b, t_0) = (a^i, b^i, t_0^i), \quad \forall i \in \{1, 2, 3, 4, 5, 6\}.$$

Then the following statements are true.

*(1) Suppose that $x < a$ as **virtual**, in which X or X_K falls a virtual disease with an unhealthy economy. The subsystem X or X_K itself is the root-cause of a happened virtual disease. And the son X_S of X is the symptoms of an expected or a happened virtual disease. The primary treatment is to increase the energy of the subsystem X or X_K directly. And the secondary treatment is to increase the energy of the son X_S of X , and at the same time, to decrease the energy of the prisoner K_X of X_S .*

*(2) Suppose that $x \in [a, t_0)$ as **virtual-normal,** in which X or S_X will fall a virtual disease with a healthy economy. The mother S_X of X is the root-cause of an expected virtual disease. And the subsystem X or S_X is the symptoms of an expected virtual disease. The primary treatment is to increase the energy of the mother subsystem S_X of X which is an indirect treating for X . And the secondary treatment is to increase the energy of X itself, and at the same time, to decrease the energy of the prisoner X_K of X .*

*(3) Suppose that $x \in [t_0, b]$ as **real-normal**, in which X or X_S will encounter a real disease with a healthy economy. The son X_S of X is the root-cause of an expected real disease. And the subsystem X itself is the symptoms of an expected real disease. The primary treatment is to decrease the energy of the son subsystem X_S of X which is an indirect treating for X . And the secondary treatment is to decrease the energy of X itself, and at the same time, to increase the energy of the bane K_X of X .*

*(4) Suppose that $x > b$ as **real**, in which X or K_X encounters a real disease with an unhealthy economy. The subsystem X or K_X itself is the root-cause of an expected or a happened real disease. And the mother S_X of X is the symptoms of an expected real disease. The primary treatment is to decrease the energy of the subsystem X or K_X directly. And the secondary treatment is to decrease the energy of the mother S_X of X , and at the same time, to increase the energy of the bane X_K of S_X . #*

Remark 5. Treatment principle of Theorem **4.1** is based on ranges of the economy inflation rate. The one of PACGGF inflation rate is called **the treatment principle of TCE**, since it is in order to protect and maintain the balance of two incompatibility relations: the loving or liking relationship and the killing or liking relationship.

For the unhealthy economy where $x < a$ or $x > b$, the treatment principle is the method for doing so in the following:

The primary treatment is to increase or decrease the energy of X directly corresponding to $x < a$ or $x > b$ respectively, and the secondary treatment is to increase the energy of X_S or X_K while to decrease the energy of K_X or S_X , respectively.

The primary treatment is in order to protect and maintain the loving or liking relationship, abiding by TCE's ideas "Virtual disease with an unhealthy economy is to fill itself" and "Real disease with an unhealthy economy is to rush down itself". It is because the method for dong so is not only greatly medical diseases of their own, but also provides the pseudo side effects as the food for the second physiological system. The method is to promote the first physiological system running since the second physiological system controls the first physiological system. And it is also to improve the loving or liking relationship to develop since the loving or liking relationship mainly comes from the first physiological system. The loving or liking relationship to develop can strengthen both that $\rho_1 + \rho_2\rho_3 = \rho(x) + c\rho(x)^2$ tends to be large and that $1 - \rho_2\rho_3 = 1 - c\rho(x)^3$ tends to be small at the same time. In other words, the way can make all of both $\rho(x)$ and c tend to be large, at least, c greater than zero for an unhealthy economy and $\rho_0 \le \rho(x) \le 1$, such that the economy from unhealthy to healthy, or the first physiological system works, or, the occurrence of capability of self-protection, or, the running of the first transfer law, or, the stopping of the second transfer law.

The secondary treatment is in order to protect or maintain the killing or liking relationship, abiding by TCE's ideas "Don't have disease cure cure non-ill" and "Strong inhibition of the same time, support the weak". By the second transfer law in Theorems **3.4** and **3.5**, the more serious relation disease is the relation disease between virtual X_S and real K_X , or between real S_X and virtual X_K respectively.

Abiding by TCE's idea "Don't have disease cure cure non-ill", it must be done to prevent or avoid the more serious relation disease between virtual X_S and real K_X, or between real S_X and virtual X_K occurrence respectively.

Abiding by TCE's idea 'Strong inhibition of the same time, support the weak", it must be done to increase the energy of X_S or X_K while decrease the energy of K_X or S_X respectively.

The method for doing so can improve the killing or liking relationship to develop since real X_S or X_K can kill virtual K_X or S_X respectively. The killing or liking relationship to develop means that both $\rho_1-\rho_3=\rho(x)(1-c)$ and $\rho_2-\rho_1\rho_3=\rho(x)^2(1-c)$ tend to be small at the same time. In other words, the way can make, for fixed $\rho(x)$, c tending to be large, at least, greater than zero for an unhealthy economy, such that the economy from unhealthy to healthy, or the first physiological system works, or, the occurrence of capability of self-protection, or, the running of the first transfer law, or, the stopping of the second transfer law.

For the healthy economy where $x\in[a,t_0]$ or $x\in(t_0,b]$, the treatment principle is the method for doing so in the following:

The primary treatment is to increase or decrease the energy of S_X or X_S corresponding to $x\in[a,t_0]$ or $x\in(t_0,b]$ respectively, and the secondary treatment to increase the energy of K_X or X while to decrease the energy of X or X_K, respectively.

The primary treatment is in order to protect and maintain the loving or liking relationship, abiding by TCE's ideas "Virtual disease with a healthy economy is to fill mother" and "Real disease with a healthy economy is to rush down its son". It is because the method for dong so is not only greatly medical diseases of their own, but also provides the pseudo side effects as the food for the second physiological system. The method is to promote the first physiological system running since the second physiological system controls the first physiological system. And it is also to improve the loving or liking relationship developing since the loving or liking relationship mainly comes from the first physiological system. The loving or liking relationship developing can strengthen both that $\rho_1+\rho_2\rho_3=\rho(x)+c\rho(x)^2$ tends to be large and that $1-\rho_2\rho_3=1-c\rho(x)$ tends to be small at the same time. In other words, using the way can make all of both $\rho(x)$ and $0<c$ tending to be large, the best, all equal to 1 for a healthy economy, such that the capability of self-protection is in the best state, or, the non-existence of side effects issue, or, the non-existence of medical and drug resistance problem.

The secondary treatment is in order to protect or maintain the killing or liking relationship, abiding by TCE's ideas "Don't have disease cure cure non-ill" and "Strong inhibition of the same time, support the weak". By the first transfer law, the more serious relation disease is the relation disease between real X and virtual K_X or between virtual X and real X_K corresponding to real X or virtual X, respectively.

Abiding by TCE's idea "Don't have disease cure cure non-ill", it must be done to prevent and avoid the more serious relation disease between real X and virtual K_X or between virtual X and real X_K occurrence corresponding to real X or virtual X respectively.

Abiding by TCE's idea "Strong inhibition of the same time, support the weak", it must be done to increase the energy of K_X or X while decrease the energy of X or X_K respectively.

The method for doing so can improve the killing or liking relationship developing since real K_X or real X can kill virtual X or virtual X_K respectively. The killing or liking relationship developing also means that both $\rho_1-\rho_3=\rho(x)(1-c)$ and $\rho_2-\rho_1\rho_3=\rho(x)^2(1-c)$ tend to be small at the same time. In other words, using the way can make, for fixed $\rho(x)$, $0<c$ tending to be large, the best, equal to 1 for a healthy economy, such that the capability of self-protection is in the best state, or, the non-existence of side effects, or, the non-existence of medical and drug resistance issue. #

In order to explain treatment principle of TCE, the changes in the one range of PACGGF inflation rates are divided into four parts. From [20] , Theorems **2.1, 3.1-3.5**, Properties **3.1-3.2** and Corollary **2.1** , it can be easily proved that the following theorem is true.

Theorem 4.2 *Let x^i be the one of PACGGF inflation rates for any i $(1\le i\le 6)$ of the steady multilateral system. Denoted the parameters of the normal range as follows*

$$a^i, b^i, t_0^i, \quad i=1,2,3,4,5,6.$$

*The Hexagram-image of the **Eight-Palaces or Eight Veins or Eight Extra Meridians** is as follows:*

$$(f_1, f_2, f_3, f_4, f_5, f_6)$$

where

$$f_i = sign(x^i - t_0^i)+(x^i = t_0^i), \quad i=1,2,3,4,5,6.$$

Then the following statements are true.

(1) If the Hexagram-image belongs the Qian palace K_X^+ continuously, then the root-cause of the falling-ill subsystem may be $wood(X)$.

(2) If the Hexagram-image belongs the Dui palace K_X^- continuously, then the root-cause of the falling-ill subsystem may be $fire(X_S)$.

(3) If the Hexagram-image belongs the Li palace X_S^- continuously, then the root-cause of the falling-ill subsystem may be $metal(K_X)$.

(4) If the Hexagram-image belongs the Zhen palace X^+ continuously, then the root-cause of the falling-ill subsystem may be $metal(K_X)$.

(5) If the Hexagram-image belongs the Xun palace X^- continuously, then the root-cause of the falling-ill subsystem may be $metal(K_X)$.

(6) If the Hexagram-image belongs the Kan palace S_X^+ continuously, then the root-cause of the falling-ill subsystem may be $earth(X_K)$.

(7) If the Hexagram-image belongs the Gen palace X_K^+ continuously, then the root-cause of the falling-ill subsystem may be $fire(X_S)$.

(8) If the Hexagram-image belongs the Kun palace X_K^- continuously, then the root-cause of the falling-ill subsystem may be $water(S_X)$.

All laws of Eight palaces are summarized in Figure 5.#

Theorem 4.3 *Let x^i be the one of PACGGF inflation rates for any i $(1 \le i \le 6)$ of the steady multilateral system. Denoted the parameters of the normal range as follows*

$$a^i, b^i, t_0^i, \quad i = 1, 2, 3, 4, 5, 6.$$

The Hexagram-image of the ***Eight-Palaces or Eight Veins or Eight Extra Meridians*** *is as follows:*

$$(f_1, f_2, f_3, f_4, f_5, f_6),$$

where $f_i = sign(x^i - t_0^i) + (x^i = t_0^i), \quad i = 1, 2, 3, 4, 5, 6.$ *The number of Six JiaZi can be obtained by Definition* ***3.2****. Then the following statements are true.*

(1) The Yang or Yin attribute of Sixty Jiazi in Table 1 can be used to determine the Yang or Yin attribute of the number of Six JiaZi. In general, Yang is real, Yin is virtual.

(2) The state of ten heavenly stems in twelve earthly branches of Sixty Jiazi in Table 2 can be used to determine the state of the number of Six JiaZi. In general, growing is good, tomb is bad.

(3) The state of good and bad of Sixty Jiazi in Table 2 can be used to determine the lucky or fierce or plat of the number of Six JiaZi. In general, lucky or plat is good, fierce is bad.

(4) The philosophical meaning of Sixty Jiazi in Table 3 can be used to determine the living momentum of development of the number of Six JiaZi. In general, hope is good, lazy is bad.

(5) *The comprehensive name of Sixty Jiazi in Tables 2 and 3 can be used to predict the living momentum of development of the number of Six JiaZi, hasten lucky avoids disaster. In general, the big tree is good, water in the sky of river is bad. #*

V. Chinese GDP for the Water Subsystem

Suppose that M_2 as issued in the circulation of money and GDP as Gross Domestic Product in Chinese from 1990 to 2014, the annual PACGGF and the annual PACGGF inflation rates can be measured in Tables 4-7.

Watching Tables 4-6, the Hexagram-image belongs to the palace: 2, 7, 1, 1, 1, 1, for 1991-1996, respectively. The main palace is 1 as the Qian palace, except for 2 as the Dui Palace in 1991, and 7 as the Gen Palace in 1992. During this period of time, large-scale goods have been made.

By Theorem **4.2**, it mainly means that the subsystem wood(X) is the root cause of a real or virtual disease. First for real, secondly for virtual.

Also watching Tables 4-6, the number of sixty JiaZi for the GDP inflation rate is: 14, 14, 51, 51, 51, 51, for 1991-1996, respectively. Its philosophy meaning is: wander, wander, drifted, drifted, drifted, respectively. They are "flat", except for 1991-1992 "flat", except for 1991 and 1992 "fierce". The number 51 which is equal to JiaYin is the main momentum of development. Its comprehensive name is "water in the large streams". It is the initial or growing state of water in which the Jia wood of ten heavenly stems is in the Officer state of the Yin wood of twelve earthly branches. The growth of the state of the water not only need a lot of metal, and does not love a lot of wood. This shows that the condition of wood(X) is a very fierce Yang condition. By Theorem **4.3**, the subsystem wood(X) is a Yang issue. It conforms to the judgment of Theorem **4.2 i**n the period of time 1991-1996 by using Eight palaces**.**

Also watching Tables 4-6, the state of the GDP inflation rate is: real-normal, real, real, real, real, real-normal, for 1991-1996, respectively.

It means that the subsystem water(S_X) of the economic social system with an unhealthy economy encounters an expected real economic disease since the GDP inflation rate belongs to the "army-economics" of water(S_X).

Also watching Tables 4-6, the state of the GBR inflation rate is:virtual, virtual-normal, real, real-normal, real-normal, real-normal, for 1991-1996, respectively.

It means that the subsystem metal(K_X) of the economic social system with a healthy economy encounters an expected real economic disease since the GBR inflation rate belongs to "science, education, public facilities" of metal(K_X).

But also watching Tables 4-6, the state of the PPI inflation rate is: virtual-normal, real-normal, real, real, real, real-normal, for 1991-1996, respectively.

It means that the subsystem wood(X) of the economic social system with an unhealthy economy encounters a real economic disease since the PPI inflation rate belongs to "industry" of wood(X).

There are three subsystems wood(X), water(S_X) and metal(K_X) in which both wood(X) and water(S_X) are real but metal(K_X) is real-normal. Both metal(K_X) and wood(X) have the killing relationship and others are the loving relationships. For an unhealthy economy, the key relation disease is killing. By Definition 3.2 in Zhang [23], the relation economic disease between real-normal metal(K_X) and real wood(X) is **rare** because real-normal metal(K_X) cannot kill real wood(X) which cannot destroy the balance of the killing relation from metal(K_X) to wood(X). If the subsystem metal(K_X) is intervened such that it is from real-normal to virtual, then there is **a more serious disease** to occur since virtual metal(K_X) cannot kill real wood(X) which can destroy the balance of the killing relation from metal(K_X) to wood(X). Thus the mainly root-cause is the real disease of the subsystem wood(X).

So, at present the most serious problem is to treat the subsystem wood(X) falling a real disease for an unhealthy sub-economy. It is the case in (4) of Theorem **4.1** for wood(X). It conforms to the judgment of Theorem **4.2** in the period of time 1991-1996 by using Eight palaces**.** It also

conforms to the judgment of Theorem **4.3** in the period of time 1991-1996 by using Sixty JiaZi.

By (4) of Theorem **4.1**, the subsystem wood(X) itself is the root-cause of a happened real disease. And the mother subsystem water(S_X) is the symptoms of an expected real disease.

By (4) of Theorem **4.1** again, the primary treatment is to decrease the energy of the subsystem wood(X) directly. And the secondary treatment is to decrease the energy of the mother water(S_X) of wood(X), and at the same time, to increase the energy of the bane earth(X_K) of water(S_x).

In fact, the Chinese government did just that. For 1993-1999, not only had decreased gradually the financial amounts of investment in the manufacture (to decrease the energy of the subsystem wood(X) directly), but also had decreased investment in the Army , such as, big disarmament, a freeze on a large number of military engineering, etc. (for decreasing the energy of water(S_x)) while had increased little by little the workers' wages, the social security and social welfare, such as, the public accumulation fund for housing construction, pension funds, medical insurance, unemployment insurance, etc.(to increase the energy of earth(X_K)).

Watching Tables 4-6 again, the Hexagram-image belongs to the palace: 6, 6, 6, 2, 6, 6, 8, for 1997-2003, respectively. The main palace is 6 as the Kan palace, except for 2 as the Dui palace in 2000, and 8 as the Kun palace in 2003. During this period of time, mass goods cannot be made. Supplies are still scarce. Rush on still appear on the market.

By Theorem **4.2**, it mainly means that the subsystem earth(X_K) is the root cause of a virtual disease.

Also watching Tables 4-6 again, the number of sixty JiaZi for the GDP inflation rate is: 16, 16, 16, 53, 16, 16, 51, for 1997-2003, respectively.

Its philosophy meaning is: rising, rising, virtual, rising, rising, drifted, for 1997-2003, respectively.

They are "lucky", except for 2000 "fierce" and 2003 "flat". The number 16 which is equal to JiMao is the main momentum of development. Its comprehensive name is "soil in the city walls". It is the growing state of earth in which the Ji earth of ten heavenly stem is in the Disease state of the Mao wood of twelve earthly branches. The Disease earth needs a small mount of water since earth kills water. If water(S_X) is real, **a more serious relation disease** will be to occur since virtual earth(X_K) cannot kill real water(S_X) which can destroy the balance of the killing relationship from earth(X_K) to water(S_X). Thus, a small mount of water are needed. But for an unhealthy economy, by Theorems **3.4** and **3.5,** the small mount of water comes form the son wood(X) of water(S_X). Thus the main root-cause is the wood(X) falling a virtual disease. By Theorem **4.3**, the wood(X) is a Yin issue. It conforms to the judgment of Theorem **4.2** in the period of time 1991-1996 by using Eight palaces. But it does not conform to the judgment of Theorem **4.2** in the period of time 1997-2003 by using Eight palaces.

Also watching Tables 4-6, the state of the GDP inflation rate is: virtual-normal, virtual-normal, virtual-normal, virtual-normal, virtual-normal, virtual-normal, real-normal, for 1997-2003,respectively.

It means that the subsystem water(S_X) is with a healthy sub-economy and falling an expected virtual disease. It is because the GDP inflation rate belongs to the "army-economics" of water(S_X) .

Also watching Tables 4-6, the state of the CPI inflation rate is: virtual-normal, virtual, virtual, virtual, virtual, virtual, virtual, for 1997-2003, respectively.

It means that the subsystem earth(X_K) of the economic social system with an unhealthy economy encounters a virtual economic disease since the CPI inflation rate belongs to the "commerce " of earth(X_K).

Also watching Tables 4-6, the state of the PPI inflation rate is: virtual-normal, virtual, virtual, virtual, virtual, virtual, for 1997-2003, respectively.

It means that the subsystem wood(X) falls a virtual disease for an unhealthy economy since the PPI inflation rate belongs to the "industry" of wood(X).

There are three subsystems wood(X), water(S_X) and earth(X_K) in which both wood(X) and earth(X_K) are virtual but water(S_X) is virtual-normal or real-normal. By Definition 3.2 in Zhang [23], the relation disease between virtual wood(X) and virtual earth(X_K) is **rare** since virtual wood(X) cannot kill virtual earth(X_K) which cannot destroy the balance of the killing order from wood(X) to earth(X_K). But if the subsystem earth(X_K) is intervened such that it is from virtual to real, there is **a more serious relation disease** between virtual wood(X) and real earth(X_K). It is because the virtual wood(X) cannot kill the real earth(X_K) which can destroy the balance of the killing relation from wood(X) to earth(X_K).

So, at present the most serious problem is to treat the subsystem wood(X) falling a virtual disease for an unhealthy sub-economy. It is the case in (1) of Theorem **4.1** for wood(X). It conforms to the judgment of Theorem **4.2** in the period of time 1991-1996 by using Eight palaces. It also conforms to the judgment of Theorem **4.3** in the period of time 1997-2003 by using Sixty JiaZi. But it does not conform to the judgment of Theorem **4.2** in the period of time 1997-2003 by using Eight palaces.

By (1) of Theorem **4.1**, the subsystem wood(X) itself is the root-cause of a happened virtual disease. And the son subsystem fire(X_S) of wood(X) is the symptoms of an expected virtual disease.

By (1) of Theorem **4.1**, the primary treatment is gotten to increase the energy of the subsystem wood(X) directly. And the secondary treatment is gotten to increase the energy of the son fire(X_S) of wood(X), and at the same time, to decrease the energy of the prisoner metal(K_X) of fire(X_S).

In fact, the Chinese government did just that. For 1999-2008, not only had increased gradually the financial amounts of investment in the manufacture (e.g.,to invest in real estate, to increase the energy of the subsystem wood(X) directly), but also had increased to make money, and

investment in the agriculture, such as, exempt from the agricultural taxation, increase of agricultural land expropriation compensation, etc. (to increase the energy of fire(x_S) including jun-fire(x_S^j) and xiang-fire(x_S^x)) while had decreased in the science and education, such as, a small amount of teachers and researchers for a raise, schools and research institutions self-sustaining, etc.(to decrease the energy of metal(κ_X)).

Therefore, application of nature for the treatment principle of TCE by the Chinese government had brought the sustained and rapid growth of industry economy for 1991-2008.

Watching Tables 4-6 again, the Hexagram-image belongs to the palace:4, 4, 4, 1, 1, 8, 4, 1, for 2004-2011, respectively. The main palace is 4 as the Zhen palace, or 1 as the Qian palace, or 8 as the Kun palace. During this period of time, large-scale goods have been still made. But a lot of society problems begin occurring.

By Theorem **4.2**, it means that the subsystem water(s_X), or wood(x), or water(s_X) may be the root cause of a real or virtual disease.

Also watching Tables 4-6 again, the number of sixty JiaZi for the GDP inflation rate is: 48, 48, 48, 48, 48, 27, 48, 48, for 2004-2011, respectively.

Its philosophy meaning is: intelligence, intelligence, intelligence, intelligence, intelligence, restlessness, intelligence, Intelligence, for 2004-2011, respectively.

They are "lucky", except for 2009 "flat". The number 48 which is equal to XinHai is the main momentum of development. Its comprehensive name is "gold in the jewelry of women ". It is the growing state of metal in which the Xin metal of ten heavenly stems is in the Bathing state of the Hai water of twelve earthly branches. A lot of earth and a small mount of water are needed since earth loves metal and metal loves water but earth kills water. Now earth is virtual and water is real . **A more serious disease** is to occur since virtual earth cannot kill real water which can destroy the balance of the killing relationship from earth to water. It shows that the condition of earth(x_K) is a very fierce Yin condition. Thus, by Theorem **4.3**, the subsystem earth(x_K) is a Yin issue. It conforms to the judgment of Theorem **4.2** in the period of time 1997-2003 by using Eight palaces. But it does not conform to the judgment of Theorem **4.2** in the period of time 2004-2011 by using Eight palaces.

Also watching Tables 4-6 again, the state of the GDP inflation rate is: real-normal, real-normal, real-normal, real-normal, real, real-normal, virtual-normal, real-normal, real-normal, for 2004-2011, respectively.

It means the subsystem water(s_X) is mainly with a healthy sub-economy and falls an expected real disease. It is because the GDP inflation rate belongs to the "army-economics" of water(s_X).

Also watching Tables 4-6 again, the state of the CPI inflation rate is: real-normal, virtual, virtual, real-normal, real, virtual, virtual-normal, real-normal, for 2004-2011, respectively.

It means the subsystem earth(x_K) is mainly with an unhealthy sub-economy and falls an expected virtual disease. It is because the CPI inflation rate belongs to the "commerce" of earth(x_K).

Also watching Tables 4-6 again, the state of the PPI inflation rate is virtual-normal, virtual-normal, virtual-normal, real-normal, real-normal, virtual, virtual-normal, real-normal, for 2004-2011, respectively.

It means the subsystem wood(x) is mainly with a healthy sub-economy and falls an expected real disease. It is because the manufacture of large-scale goods or the normal PPI inflation rate belongs to"industry" of the subsystem wood(x).

There are three subsystems wood(x), water(s_X) and earth(x_K) in which both water(s_X) and wood(x) are real-normal but earth(x_K) is virtual. By Definition 3.2 in Zhang [23], the relation disease between virtual earth(x_K) and real water(s_X) is **more serious** since virtual earth(x_K) cannot kill real-normal water(s_X) which can destroy the killing order from earth(x_K) to water(s_X). Now the subsystem earth(x_K) must be intervened such that it is from virtual to real-normal.

So, at present the most serious problem is to treat the subsystem earth(x_K) falling a virtual disease. It is the case in (1) of Theorem **4.1** for earth(x_K). It conforms to the judgment of Theorem **4.2** in the period of time 1997-2003 by using Eight palaces. It also conform to the judgment of Theorem **4.3** in the period of time 2004-2011 by using Sixty Jiazi. But it does not conform to the judgment of Theorem **4.2** in the period of time 2004-2011 by using Eight palaces.

By (1) of Theorem **4.1**, the subsystem earth(x_K) itself is the root-cause of a happened virtual disease. And the son subsystem metal(κ_X) of earth(x_K) is the symptoms of an expected virtual disease.

The x_K as x in theorem 4.1, using (1) of Theorem **4.1** again, the primary treatment is gotten to increase the energy of the subsystem earth(x_K) directly. And the secondary treatment is gotten to increase the energy of the son metal(κ_X) of earth(x_K), where $(X_K)_S = K_X$ in Figure 1, and at the same time, to decrease the energy of the bane wood(x) of earth(x_K),where $K_{(X_K)} = X$ in Figure 1.

In fact, the Chinese government did just that. For 2004-2014, not only had increased the financial amounts of investment in commerce, such as, strengthen the support for the WTO trade, etc. (to increase the energy of the subsystem earth(x_K) directly), but also had increased investment in science, education and public facilities, such as to build high speed rail, etc. (to increase the energy of metal(κ_X)) while had reduced the industrial support, such as, the appreciation of the RMB, etc. (to decrease the energy of wood(x)).

Therefore, again application of nature for the treatment principle of TCE by the Chinese government had brought the 2004-2014 economic taking off again.

Watching Tables 4-6 again and again, the Hexagram-image belongs to 8, 8, 8, for 2012-2014, respectively. The main palace is 8 as the Kun palace.

By Theorem **4.2**, it means that the subsystem water(S_X) is the root cause of a real or virtual disease.

Also watching Tables 4-6 again and again, the number of sixty JiaZi for the GDP inflation rate is: 27, 42, 42, for 2012-2014, respectively.

Its philosophy meaning is: strong, deep, deep, respectively.

They are "flat". The number 42 which is equal to YiSi is the main momentum of development. Its comprehensive name is "fire in the Buddha's lights". It is the weak state of fire in which the Yi wood of ten heavenly stems is in the Bathing state of the Si fire of twelve earthly branches. Now the water(S_X) is virtual, there is a **rare** relation disease since virtual water cannot kill virtual fire. If the fire is intervened such that the fire from virtual to real, then there is **a more serious relation disease** since virtual water cannot kill real fire which can destroy the balance of the killing relationship from water to fire. Thus it is a must that the water is intervened such that it is from virtual to real. It shows that the condition of water(S_X) is a very fierce Yin condition. By Theorem **4.3**, the subsystem water(S_X) is a Yin issue. It conforms to the judgment of Theorems **4.2** in the period of time 2004-2011 about the subsystem water(S_X) by using Eight palaces. It also conforms to the judgment of Theorem **4.2** in the period of time 2012-2014 by using Eight palaces.

Also watching Tables 4-6 again and again, the state of the GDP inflation rate is: virtual-normal, virtual-normal, virtual-normal, for 2012-2014, respectively.

It means the subsystem water(S_X) is mainly with a healthy economy and will fall an expected virtual disease. It is because the GDP inflation rate belongs to the "army-economics" of water(S_X).

Also watching Tables 4-6 again and again, the state of the CPI inflation rate is: virtual-normal, virtual-normal, virtual-normal, for 2012-2014, respectively.

It means the subsystem earth(X_K) is mainly with a healthy economy and will fall an expected virtual disease. It is because the CPI inflation rate belongs to the "commerce" of earth(X_K).

Also watching Tables 4-6 again and again, the state of the PPI inflation rate is: virtual-normal, virtual-normal, virtual-normal, for 2012-2014, respectively.

It means that the the subsystem wood(X) is also an expected virtual disease for a healthy sub-economy. It is because the manufacture of large-scale goods or the PPI inflation rate belongs to the"industry" of the subsystem wood(X).

The virtual-normal disease of wood(X) is not because of its low energy, but because of its energy is too high to make producing products too much, so much so that there is no way to sell products, low profit of industrial production. In the TCE, this disease is Yang irritability turned to deficiency disease. This disease is not the current urgent problems since it cannot destroy the killing order balance of the economy.

There are three subsystems wood(X), water(S_X) and earth(X_K) in which all are virtual-normal. Both earth(X_K) and water(S_X) have the killing relationship. Both wood(X) and earth(X_K) have the killing relationship from wood(X) to earth(X_K). Both water(S_X) and wood(X) have the loving relationship. For a healthy economy, the key relationship is loving. But if this virtual-normal disease of wood(X) is continuously to develop such that it is from virtual-normal to virtual, by Theorems **3.2** and **3.3**, the virtual wood(X) will make its mother subsystem water(S_X) falling a virtual economic disease when it encounters an economic disease. In fact, the economic indicators of GDP which belongs to the subsystem water(S_X) is beginning to decline.

Abiding by TCE's idea "Don't have economic disease cure cure non-ill", the prevention and treatment of the current work is the need to prevent the virtual disease of the subsystem water(S_X) for a healthy sub-economy.

So, at present the most serious problem is to treat the subsystem water(S_X) falling a virtual disease with a healthy sub-economy of the subsystem water(S_X). It is the case in (2) of Theorem **4.1** for water(S_X). It conforms to the judgment of Theorems **4.2** in the period of time 2004-2011 about the subsystem water(S_X) by using Eight palaces. And it also conforms to the judgment of Theorems **4.2** and **4.3** in the period of time 2012-2014 by using Eight palaces and Sixty JiaZi.

By (2) of Theorem **4.1**, the mother subsystem metal(K_X) of water(S_X) is the root-cause of an expected virtual disease. And the subsystem water(S_X) itself is the symptoms of an expected virtual disease.

The S_X as X in (2) of Theorem **4.1**, the primary treatment is gotten to increase the energy of the mother subsystem metal(K_X) of the water(S_X), where $S_{(S_X)} = K_X$ in Figure 1. And the secondary treatment is gotten to increase the energy of the water(S_X) itself while decrease the energy of the prisoner fire(X_S) of the water(S_X) ,where $(S_X)_K = X_S$ in Figure 1.

In fact, the Chinese government also is doing just that. Since 2015, not only has increased continuously investment in science, education and public facilities, such as, One Belt and One Road, etc. (for increasing the energy of metal(K_X)), but also has increased to military spending (to increase the energy of the water(S_X)) while has reduced the number of making money, and reduced the agricultural support, such as, reduce the purchase price of agricultural products, etc. (to decrease the energy of fire(X_S) including jun-fire(X_S^j) and xiang-fire(X_S^x)). Therefore, again and again application of nature for the treatment principle of TCE by the Chinese government will lead to economic continue to glory since 2015.

It can be seen: to diagnose a sick subsystem of the steady multilateral system by using Eight palaces is in advance. But the numbers of Sixty JiaZi for the GDP inflation rate have short-term forecasting properties.

Instead of x^1 of the first index of PACGGF inflation rates to $x^{1'}$ of the RPI inflation rate, the Numbers is in Table 7. From Table 7, similarly to the above conclusions can be obtained.This shows that the selection of indicators, does not affect the diagnosis of diseases of the key system.#

VI. Conclusions

This work shows how to treat the diseases of an economic society by using the one of PACGGF inflation rates x. For the one of PACGGF inflation rates, the range of theory is $x \in [a,b]$, nearly to $x \in [a_0,b_0]$ and the center is t_0 nearly to t_{0*}. From Eight-Palaces or Eight Veins or Eight Extra Meridians, by Theorem **4.2**, the disease problem of subsystems can be easily diagnosed.

According to the treatment principle of TCE:"seize the momentum of development, hasten lucky avoids disaster" (顺势而为,趋吉避凶), using sixty JiaZi philosophy meaning to predict the trend, find the possible problems of subsystem.

Abiding by TCE's idea: "Even if all changed, it is hard to change one's nature"（江山易改, 本性难移）, it can be used as the basis of analyzing after.

There are the first or second transfer law of economic society energies corresponding to a healthy economy or an unhealthy economy respectively. The first or second transfer law of economic society energies changes according to the different PACGGF inflation rates whether in the normal range or not. For the normal range, the first transfer law of economic society energies in Theorems **3.2** and **3.3** run; For the abnormal range, the second transfer law of economic society energies in Theorems **3.4** and **3.5** run.

Assume that the range of the one of PACGGF inflation rates x is divided into four parts from small to large. Both second and third are for a healthy economy with a virtual or real disease respectively. In this case, the root-cause of a virtual or real disease is the mother or son of the falling-ill subsystem X respectively, and the symptoms is the subsystem X itself. Abiding by TCE's idea: "Searching for the primary cause of disease in treatment, cure both symptoms and root-cause at the same times"（治病求本, 标本兼治）, the treating works are first the prevention or the treatment for the mother or son of a virtual or real disease respectively, the second the prevention or the treatment for a more serious relation disease between virtual X and real X_K or between real X and virtual K_X, respectively. Both the root-cause and the symptoms come from the first transfer law of economic society energies in Theorems **3.2** and **3.3**.

And both first and fourth are for an unhealthy economy with a virtual or real disease respectively. In this case, the root-cause of a virtual or real disease is the subsystem X itself, and the symptoms are the son or mother of the fall-ill subsystem X respectively. Abiding by TCE's idea: "Searching for the primary cause of disease in treatment, cure both symptoms and root-cause at the same times"（治病求本, 标本兼治）, the treating works are first the prevention or the treatment for itself of a virtual or real disease respectively, the second are the prevention or the treatment for a more serious relation disease between virtual X_S and real K_X or between real S_X and virtual X_K, respectively. Both the root-cause and the symptoms come from the second transfer law in Theorems **3.4** and **3.5**.

An economic disease treatment should protect and maintain the balance or order of two incompatibility relations: the loving or liking relationship and the killing or liking relationship. The method for doing so can make the $\rho_3 = c\rho(x)$ tending to be large, i.e., all of both $\rho(x)$ and c tend to be large, at least, greater than zero for an unhealthy economy; or, the best, equal to 1 for a healthy economy.

The following way can make the capabilities of both intervention reaction and self-protection become in the best state, the non-existence of side effects issue, the non-existence of medical and drug resistance problem, and so on.

(1) Suppose that $x < a$, as **virtual**, in which X or X_K falls a virtual disease with an unhealthy economy. The subsystem X or X_K itself is the root-cause of a happened virtual disease. And the son X_S of X is the symptoms of an expected or a happened virtual disease. Abiding by TCE's idea: "Searching for a root cause of disease in cure, treatment of both the root-cause and symptoms at the same time"（治病求本, 标本兼治）, it should be done to do in the following.

In order to protect or maintain the loving relationship, abiding by TCE's idea "Virtual disease with an unhealthy economy is to fill itself"(虚则补之), increase the energy of X or X_K directly.

In order to protect or maintain the killing relationship, abiding by TCE's idea "Don't have disease cure cure non-ill"(不治已病治未病), do a preventive treatment for the more serious relation disease between virtual X_S and real K_X.

Through the intervening principle of "Strong inhibition of the same time, support the weak"(抑强扶弱), increase the energy of the son X_S or X while decrease the energy of the prisoner K_X of X_K.

(2) Suppose that $a \le x < t_0$, as **virtual-normal**, in which X or S_X falls a virtual disease with a healthy economy. The mother S_x of the subsystem X is the root-cause of an expected virtual disease. And the subsystem X itself is the symptoms of an expected virtual disease. Abiding by TCE's idea: "Searching for a root cause of disease in cure, treatment of both the root-cause and symptoms at the same time"（治病求本, 标本兼治）, the following works should be done.

In order to protect or maintain the loving relationship, abiding by TCE's idea "Virtual disease with a healthy economy is to fill its mother"(虚则补其母), increase the energy of the mother S_X of X. The treating way is an indirect treating for X.

In order to protect or maintain the killing relationship, abiding by TCE's idea "Don't have disease cure cure non-ill"(不治已病治未病), do a preventive treatment for the more serious relation disease between virtual X and real X_K.

Through the intervening principle of "Strong inhibition of the same time, support the weak" (抑强扶弱), increase the energy of X itself while decrease the energy of the prisoner x_K of X.

(3)Suppose that $t_0 \le x \le b$, as **real-normal**, in which X or x_S falls a real disease with a healthy economy. The son X_S of the subsystem X is the root-cause of an expected real disease. And the subsystem X itself is the symptoms of an expected real disease. Abiding by TCE's idea: "Searching for a root cause of disease in cure, treatment of both the root-cause and symptoms at the same time" (治病求本, 标本兼治), the following works should be done.

In order to protect or maintain the loving relationship, abiding by TCE's idea "Real disease with a healthy economy is to rush down its son" (实则泄其子), decrease the energy of the son x_K of X. The treating way is an indirect treating for X.

In order to protect or maintain the killing relationship, abiding by TCE's idea "Don't have disease cure cure non-ill" (不治已病治未病), do a preventive treatment for the more serious relation isease between real X and virtual K_X.

Through the intervening principle of "Strong inhibition of the same time, support the weak" (抑强扶弱), decrease the energy of X itself while increase the energy of the bane K_X of X.

(4) Suppose that $x > b$, as **real**, in which X or K_X falls a real disease with an unhealthy economy. The subsystem X or K_X itself is the root-cause of a happened real disease. And the mother S_x of X is the symptoms of an expected or a happened real disease. Abiding by TCE's idea: "Searching for a root cause of disease in cure, treatment of both the root-cause and symptoms at the same time" (治病求本, 标本兼治), the following works should be done.

In order to protect or maintain the loving relationship, abiding by TCE's idea "Real disease with an unhealthy economy is to rush down itself" (实则泄之), decrease the energy of X or K_X directly.

In order to protect or maintain the killing relationship, abiding by TCE's idea "Don't have disease cure cure non-ill" (不治已病治未病), do a preventive treatment for the more serious relation disease between real S_X and virtual x_K.

Through the intervening principle of "Strong inhibition of the same time, support the weak" (抑强扶弱), decrease the energy of the mother S_X of x while increase the energy of the bane x_K of S_X.

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APPENDIX

Proofs of Theorems 3.2-3.5 and 4.1-4.2 can be found in Zhang [24-25].

Proof of Property 3.1. In Table 2, Sixty JiaZi meaning of ten heavenly stems of state is from ten heavenly stems grow - strong - die - extinction in twelve earthly branches in Figure 4.

In Table 3, Sixty JiaZi meaning of Philosophy is from the meaning of Philosophy for ten heavenly stems grow - strong - die - extinction in twelve earthly branches in Figure 4.

In Tables 2 and 3, Sixty JiaZi meaning of good of lucky,general of flat and bad of fierce, and comprehensive name is from Sixty JiaZi meaning of ten heavenly stems of state and Philosophy. It completes the proof.#

Proof of Property 3.2. In Table 8, the rule of twelve earthly branches to hide the ten heavenly stems is in Figure 4.

For JiaZi and YiChou, the group elements of JiaZi are (1,0) and (0,4), and the group elements of YiChou are (0,0) and the synthesized (0,4). Since all elements are balance, so can synthesize them. There is

$$((1,0)+(0,4))+((0,0)+(0,4))=(1,3).$$

So the integration of Yang and Yin is (1,3) as Yang metal, namely **Gold in the sea** (海中金).

For BingYin and DingMao, the group elements of BingYin are (1,1) and the synthesized (1,3), and the group elements of YiChou are (0,1) and (0,0). Since Yang (1,1) is significant and Yin (0,0) is significant, so can synthesize them. There is

$$(1,1)+(0,0)=(1,1),\ (1,0)+(0,1)=(1,1).$$

So the integration of Yang and Yin is (1,1) as Yang fire, namely **Fire in the stove** (炉中火).

For WuChen and JiSi, the group elements of WuChen are (1,2) and the synthesized (1,1), and the group elements of JiSi are (0,2) and the synthesized (1,1). Since the synthesized of (1,2) and (1,1) is (0,3) as Yin, and the synthesized of (0,2) and (1,1) is (1,3) as Yang, against their nature, so can combine them. There is

$$-((1,2)+(1,1))+((0,2)+(1,1))=(1,0).$$

So the integration of Yin and Yang is (1,0) as Yang wood, namely **Wood in the big tree** (大林木).

For GengWu and XinWei, the group elements of GengWu are (1,3) and the synthesized (0,3), and the group elements of XinWei are (0,3) and the synthesized (0,3). Since the synthesized of (1,3) and (0,3) is (1,1) as Yang, and the synthesized of (0,3) and (0,3) is (0,1) as Yin, conforms to its natural attribute, so can synthesize them. There is

$$((1,3)+(0,3))+((0,3)+(0,3))=(1,2).$$

So the integration of Yang and Yin is (1,2) as Yang earth, namely **Soil in the roadside** (路旁土).

For RenShen and GuiYou, the group elements of RenShen are (1,4) and the synthesized (1,4), and the group elements of GuiYou are (0,4) and (0,3). Since (1,4) and (0,4) are significant, so can synthesize them. There is

$$(1,4)+(0,4)=(1,3),\ ((1,3)+(1,2))+(0,3)=(0,3).$$

So the integration of Yang and Yin is (1,3) or (0,3) as Yang or Yin metal, namely **Metal of blade** (剑锋金).

For JiaXu and YiHai, the group elements of JiaShen are (1,0) and the synthesized (1,1), and the group elements of YiYou are (0,0) and the synthesized (1,4). Since all (1,0),(1,1),(0,0) and (0,4) are not significant, only a strong joint of freedom, so can combine them. There is

$$(1,1)-(0,0)=(1,1),\ (1,0)-(0,4)=(1,1).$$

So the integration of Yang and Yin is (1,1) as Yang fire, namely **Fire on the hill** (山头火).

For BingZi and DingChou, the group elements of BingWu are (1,1) and the synthesized (0,4), and the group elements of DingWei are (0,1) and the synthesized (0,4). Since the (0,4) is in Yang Yin significantly on both sides, so can merge both sides strength. There are

$\{(0,4)\}\cup\frac{1}{3}\{(0,4)\}=\frac{4}{3}\{(0,4)\}$, (0,4)+((0,1)+(0,4))=(0,4),

((1,1)+(0,4))+(0,4)=(1,4).

So the integration of Yang and Yin is (0,4) or (1,4) as Yin or Yang water, namely **Water in the mountain ravine** (涧下水).

For WuYin and JiMao, the group elements of WuYin are (1,2) and the synthesized (1,3), and the group elements of JiMao are (0,2) and the synthesized (0,0). Since the (1,2) is significant, so can synthesize them. There is

$$((1,2)+(1,3))+((0,2)+(0,0))=(0,2).$$

So the integration of Yin and Yin is (0,2) as Yin earth, namely **Soil in the city wall** (城墙土).

For GengChen and XinSi, the group elements of GengChen are (1,3) and the synthesized (1,1), and the group elements of XinSi are (0,3) and the synthesized (1,1). Since the (1,3) is in Yang Yin significantly on both sides, so can merge both sides strength, also can synthesize them. There are

$$\{(1,3)\}\cup\frac{1}{3}\{(1,3)\}=\frac{4}{3}\{(1,3)\},$$

$$((1,3)+(1,1))+((0,3)+(1,1))=(1,3).$$

So the integration of Yang and Yin is (1,3) as Yang metal, namely **Gold in the ash** (白腊金).

For RenWu and GuiWei, the group elements of RenWu are (1,4) and the synthesized (0,3), and the group elements of GuiWei are (0,4) and the synthesized (0,3). Since the same on both sides of the Wu Xing of attributes, attribute balance to zero,so can combine them. There is

$$((1,4)+(0,3))-((0,4)+(0,3))=(1,0).$$

So the integration of Yang and Yin is (1,0) as Yang wood, namely **Wood in the willow tree** (杨柳木).

For JiaShen and YiYou, the group elements of JiaShen are (1,0) and the synthesized (1,4), and the group elements of YiYou are (0,0) and (0,3). Since all elements are not significant, so can only give up the weaker elements and combine them.There is

$$((1,0)+(1,4))-(0,0)=(0,4).$$

So the integration of Yang and Yin is (0,4) as Yin water, namely **Water in the spring** (泉中水).

For BingXu and DingHai, the group elements of BingXu are (1,1) and the synthesized (1,1), and the group elements of DingHai are (0,1) and the synthesized (0,4). Since (1,1) is significant, so can synthesize them. There is

$$((1,1)+(1,1))+((0,1)+(0,4))=(0,2).$$

So the integration of Yang and Yin is (0,2) as Yin earth, namely **Soil on the house** (屋上土).

For WuZi and JiChou, the group elements of WuZi are (1,2) and (0,4), and the group elements of JiChou are (0,2) and the synthesized (0,4). Since (1,2) is significant, so can synthesize them. There are

$$(1,2)+(0,4)=(1,1),(0,4)+(0,2)=(0,1).$$

So the integration of Yang and Yin is (1,1) or (1,0) as Yang or Yin fire, namely **Fire from the blue fire** (霹雳火).

For GengYin and XinMao, the group elements of GengYin are (1,3) and the synthesized (1,3), and the group elements of XinMao are (0,3) and (0,0). Since (1,3) is not significant, so can combine them.There is

$$(1,3)-((0,3)+(0,0))=(1,0).$$

So the integration of Yang and Yin is (1,0) as Yang wood, namely **Wood in the pine tree** (松柏木).

For RenChen and GuiSi, the group elements of RenChen are (1,4) and the synthesized (1,1), and the group elements of GuiSi are (0,4) and the synthesized (1,1). Since all elements are balance, so can synthesize them. There are

$$((1,4)+(1,1))+(0,4)=(0,4),\ (1,4)+((0,4)+(1,1))=(0,4).$$

So the integration of Yang and Yin is (0,4) as Yin water, namely **Water in the usual running** (常流水).

For JiaWu and YiWei, the group elements of JiaWu are (1,0) and the synthesized (0,3), and the group elements of YiWei are (0,0) and the synthesized (0,3). Since (0,0) is significant, so can synthesize them. There are

$$((1,0)+(0,3))+(0,0)=(0,3),\ (1,0)+((0,3)+(0,0))=(1,3).$$

So the integration of Yang and Yin is (0,3) or (1,3) as Yin or Yang metal, namely **Gold in the sand** (沙中金).

For BingShen and DingYou, the group elements of BingShen are (1,1) and the synthesized (1,4), and the group elements of DingYou are (0,1) and (0,3). Since all elements are not significant, so can combine them. There is

$$((1,1)+(1,4))-((0,1)+(0,3))=(0,1).$$

So the integration of Yang and Yin is (0,1) as Yin fire, namely **Fire under the mountain** (山下火).

For WuXu and JiHai, the group elements of WuXu are (1,2) and the synthesized (1,1), and the group elements of JiHai are (0,2) and the synthesized (0,4). Since (1,2) is significant, so can synthesize them. There is

$$((1,2)+(1,1))+(0,2)=(0,0),(1,1)+(0,4)=(1,0).$$

So the integration of Yang and Yin is (0,0) or (1,0) as Yin or Yang wood, namely **Wood in the ground** (平地木).

For GengZi and XinChou, the group elements of GengZi are (1,3) and (0,4), and the group elements of XinChou are (0,3) and the synthesized (0,4). Since all elements are balance, so can synthesize them. There is

$$((1,3)+(0,4))+((0,4)+(0,3))=(1,2).$$

So the integration of Yang and Yin is (1,2) as Yang earth, namely **Soil in a small wall** (壁上土).

For RenYin and GuiMao, the group elements of RenYin are (1,4) and the synthesized (1,3), and the group elements of GuiMao are (0,4) and (0,0). Since all elements are balance, so can synthesize them. There are

$$(1,4)+(0,4)=(1,3),(1,3)+(0,0)=(1,3).$$

So the integration of Yang and Yin is (1,3) as Yang metal, namely **Gold in the gold foil** (金箔金).

For JiaChen and YiSi, the group elements of JiaChen are (1,0) and the synthesized (1,1), and the group elements of YiSi (0,0) and the synthesized (1,1). Since all elements are balance, so can synthesize them. There are

$$((1,0)+(1,1))+(0,0)=(0,1),(1,0)+(1,1)=(0,1).$$

So the integration of Yang and Yin is (0,1) as Yin fire, namely **Fire in Buddha's lights** (佛灯火).

For BingWu and DingWei, the group elements of BingWu are (1,1) and the synthesized (0,3), and the group elements of DingWei (0,1) and the synthesized (0,3). Since (0,1) is significant, so can synthesize them. There are

$$(0,3)+(0,1)=(0,4),\ (1,1)+(0,3)=(1,4).$$

So the integration of Yang and Yin is (0,4) or (1,4) as Yin or Yang water, namely **Water in the sky of river** (天河水).

For WuShen and JiYou, the group elements of WuShen are (1,2) and the synthesized (1,4), and the group elements of

JiYou (0,2) and (0,3). Since (1,2) is significant, so can synthesize them. There is

$$(1,2)+((0,2)+(0,3))=(1,2),(1,4)+(0,3)=(1,2).$$

So the integration of Yang and Yin is (1,2) as Yang earth, namely **Soil in the great post** (大驿土).

For GengXu and XinHai, the group elements of GengXu are (1,3) and the synthesized (1,1), and the group elements of XinHai (0,3) and the synthesized (0,4). Since (0,3) is significant, so can synthesize and merge them. There are

$$((1,3)+(1,1))+(0,4))=(0,3),\{(0,3)\}\cup\{(0,3)\}=\frac{4}{3}\{(0,3)\}.$$

So the integration of Yang and Yin is (0,3) as Yin metal, namely **Gold in the jewelry of women** (钗钏金) .

For RenZi and GuiChou, the group elements of RenZi are (1,4) and (0,4), and the group elements of GuiChou (0,4) and the synthesized (0,4). Since (0,4) is too significant, extremes meet the reverse, so can combine them. There is

$$((1,4)+(0,4))-((0,4)+(0,4))=(1,0).$$

So the integration of Yang and Yin is (1,0) as Yang wood, namely **Wood in the sang cudrania tricuspidata** (桑柘木).

For JiaYin and YiMao, the group elements of JiaYin are (1,0) and the synthesized (1,3), and the group elements of YiMao (0,0) and (0,0). Since (0,0) is most significantly and (1.0) is also significant, extremes meet the reverse, the weakest element will be stronger. Here, the weakest element is (0,4), so it will be stronger. So can combine them. There is

$$-((1,0)+(1,1))+((0,0)+(0,0))=(0,4).$$

So the integration of Yang and Yin is (0,4) as Yin water, namely **Water in the large streams** (大溪水).

For BingChen and DingSi, the group elements of BingChen are (1,1) and the synthesized (1,1), and the group elements of DingSi (0,1) and the synthesized (1,1). Since (1,1) is significant, so can synthesize them. There are

$$(1,1)+(0,1)=(1,2),(1,1)+(1,1)=(0,2).$$

So the integration of Yang and Yin is (1,2) or (0,2) as Yang or Yin earth, namely **Earth in the sand** (沙中土).

For WuWu and JiWei, the group elements of WuWu are (1,2) and the synthesized (0,3), and the group elements of JiWei (0,2) and the synthesized (0,3). Since (0,2) is too significant, extremes meet the reverse, so can combine them. There are

$$(0,3)-(0,2)=(0,1),(0,3)-(1,2)=(1,1).$$

So the integration of Yang and Yin is (0,1) or (1,1) as Yin or Yang fire, namely **Fire in the sky** (天上火)

For GengShen and XinYou, the group elements of GengShen are (1,3) and the synthesized (1,4), and the group elements of XinYou (0,3) and (0,3). Since (0,3) is too significant and (1,3) is significant, extremes meet the reverse, so can combine and synthesize them. There are

$$(1,3)-(0,3)=(1,0),((1,3)+(1,4))+(0,3)=(0,0).$$

So the integration of Yang and Yin is (1,0) or (0,0) as Yang or Yin wood, namely **Wood in the pomegranate** (石榴木).

For RenXu and GuiHai, the group elements of RenXu are (1,4) and the synthesized (0,1), and the group elements of GuiHai (0,4) and the synthesized (0,4). Since (1,4) is in Yang Yin significantly on both sides, so can merge both sides strength, also can synthesize them.There are

$$\{(1,4)\}\cup\frac{1}{3}\{(1,4)\}=\frac{4}{3}\{(1,4)\},\ ((1,4)+(0,1))+(0,4)=(1,4).$$

So the integration of Yang and Yin is (1,4) as Yang water, namely **Water in the ocean** (大洋水). It completes the proof. #

Proof of Theorem 4.3. By the relations between Sixty JiaZi and eight palaces in Definition **3.2**, the numbers of Six JiaZi can be calculated.

By Property **3.2**, the mathematical meaning can be obtained for each of the numbers of Six JiaZi. It completes the proof.#

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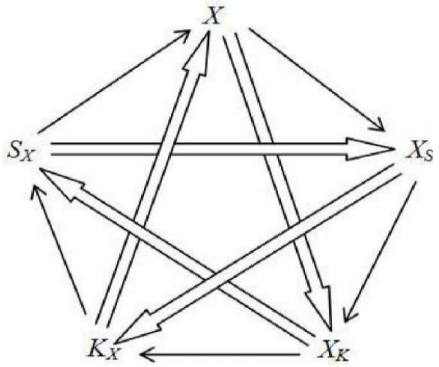

Figure 1. Finding Yin Yang Wu Xing Model

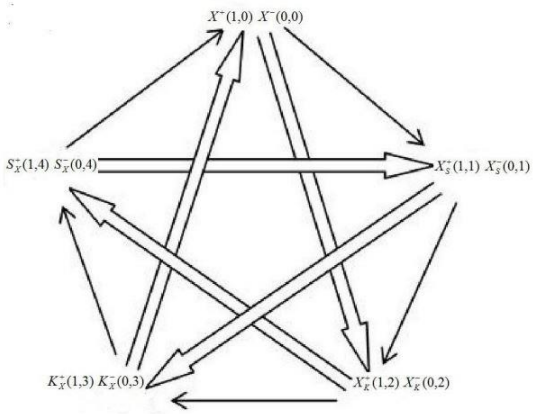

Figure 2. Relations of ten Heavenly Stems

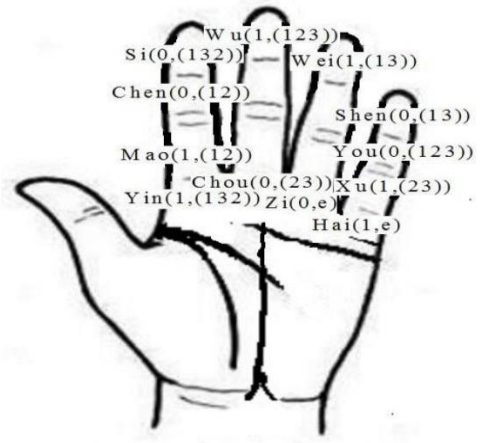

Figure 3. Relations of twelve Earthly Branches

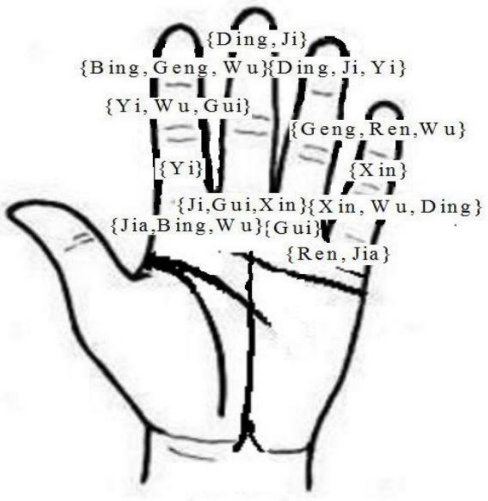

Figure 4. Ten Heavenly Stems Hidden behind Twelve Earthly Branches

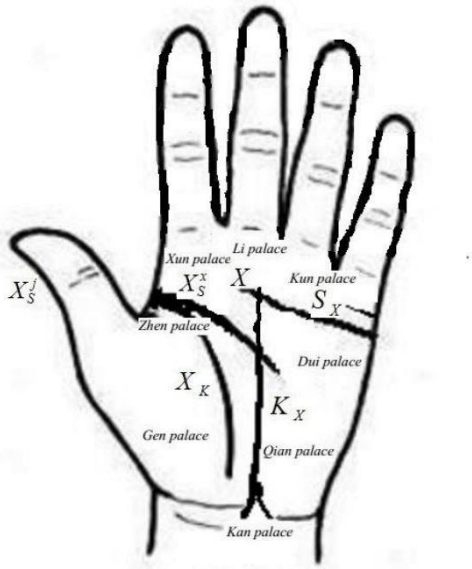

Figure 5. Relations between Eight palaces and Six-fus

Table 0. Sixty JiaZi hidden behind Eight - Palaces

Palace sequence	Yang palace	Ten Stems	Twelve Branches	Yin Palace	Ten Stems	Twelve Branches
			Xu			You
Outside	Qian	Ren	Shen	Kun	Gui	Hai
			Wu			Chou
			Chen			Mao
Inside	Qian	Jia	Yin	Kun	Yi	Si
			Zi			Wei
			Yin			Wei
Outside	Kan	Wu	Zi	Li	Ji	You
			Xu			Hai
			Shen			Chou
Inside	Kan	Wu	Wu	Li	Ji	Mao
			Chen			Si
			Zi			Si
Outside	Gen	Bing	Xu	Dui	Ding	Wei
			Shen			You
			Wu			Hai
Inside	Gen	Bing	Chen	Dui	Ding	Chou
			Yin			Mao
			Xu			Mao
Outside	Zhen	Geng	Shen	Xun	Xin	Si
			Wu			Wei
			Chen			You
Inside	Zhen	Geng	Yin	Xun	Xin	Hai
			Zi			Chou

Table 1. Sixty JiaZi naming of ten heavenly stems,twelve earthly branches and Yin Yang attribute

Sixty JiaZi name	Ten heavenly stems	Twelve earthly branches	Yang attribute	Sixty JiaZi name	Ten heavenly stems	Twelve earthly branches	Yin attribute
JiaZi (甲子)	(1,0)	(0,e)	Yang	YiChou (乙丑)	(0,0)	(0,(23))	Yin
BingYin (丙寅)	(1,1)	(1,(132))	Yang	DingMao (丁卯)	(0,1)	(1,(12))	Yin
WuChen (戊辰)	(1,2)	(0,(12))	Yang	JiSi (己巳)	(0,2)	(0,(132))	Yin
GengWu (庚午)	(1,3)	(1,(123))	Yang	XinWei (辛未)	(0,3)	(1,(13))	Yin
RenShen (壬申)	(1,4)	(0,(13))	Yang	GuiYou (癸酉)	(0,4)	(0,(123))	Yin
JiaXu (甲戌)	(1,0)	(1,(23))	Yang	YiHai (乙亥)	(0,0)	(1,e)	Yin
BingZi (丙子)	(1,1)	(0,e)	Yang	DingChou (丁丑)	(0,1)	(0,(23))	Yin
WuYin (戊寅)	(1,2)	(1,(132))	Yang	JiMao (己卯)	(0,2)	(1,(12))	Yin
GengChen (庚辰)	(1,3)	(0,(12))	Yang	XinSi (辛巳)	(0,3)	(0,(132))	Yin
RenWu (壬午)	(1,4)	(1,(123))	Yang	GuiWei (癸未)	(0,4)	(1,(13))	Yin
JiaShen (甲申)	(1,0)	(0,(13))	Yang	YiYou (乙酉)	(0,0)	(0,(123))	Yin
BingXu (丙戌)	(1,1)	(1,(23))	Yang	DingHai (丁亥)	(0,1)	(1,e)	Yin
WuZi (戊子)	(1,2)	((0,e)	Yang	JiChou (己丑)	(0,2)	(0,(23))	Yin
GengYin (庚寅)	(1,3)	((1,(132))	Yang	XinMao (辛卯)	(0,3)	(1,(12))	Yin
RenChen (壬辰)	(1,4)	((0,(12))	Yang	GuiSi (癸巳)	(0,4)	(0,(132))	Yin
JiaWu (甲午)	(1,0)	((1,(123))	Yang	YiWei (乙未)	(0,0)	(1,(13))	Yin
BingShen (丙申)	(1,1)	((0,(13))	Yang	DingYou (丁酉)	(0,1)	(0,(123))	Yin
WuXu (戊戌)	(1,2)	((1,(23))	Yang	JiHai (己亥)	(0,2)	(1,e)	Yin
GengZ i(庚子)	(1,3)	(0,e)	Yang	XinChou (辛丑)	(0,3)	(0,(23))	Yin
RenYin (壬寅)	(1,4)	(1,(132))	Yang	GuiMao (癸卯)	(0,4)	(1,(12))	Yin
JiaChen (甲辰)	(1,0)	(0,(12))	Yang	YiSi (乙巳)	(0,0)	(0,(132)))	Yin
BingWu (丙午)	(1,1)	(1,(123))	Yang	DingWe i(丁未)	(0,1)	(1,(13))	Yin
WuShen (戊申)	(1,2)	(0,(13))	Yang	JiYou (己酉)	(0,2)	(0,(123)))	Yin
GengXu (庚戌)	(1,3)	(1,(23))	Yang	XinHai (辛亥)	(0,3)	(1,e)	Yin
RenZ i(壬子)	(1,4)	(0,e)	Yang	GuiChou (癸丑)	(0,4)	(0,(23))	Yin
JiaYin (甲寅)	(1,0)	(1,(132))	Yang	YiMao (乙卯)	(0,0)	(1,(12))	Yin
BingChen (丙辰)	(1,1)	(0,(12))	Yang	DingSi (丁巳)	(0,1)	(0,(132))	Yin
WuWu (戊午)	(1,2)	(1,(123))	Yang	JiWei (己未)	(0,2)	(1,(13))	Yin
GengShen (庚申)	(1,3)	(0,(13))	Yang	XinYou (辛酉)	(0,3)	(0,(123))	Yin
RenXu (壬戌)	(1,4)	(1,(23))	Yang	GuiHai (癸亥)	(0,4)	(1,e)	Yin

Table 2. Sixty JiaZi meaning of ten heavenly stems of state, good & bad and comprehensive name

Sixty JiaZi name	Stems of state	good & bad	Sixty JiaZi name	Stems of state	good & bad	comprehensive name
JiaZi	Bathing (沐浴)	Lucky (吉)	YiChou	Decay (衰落)	Fierce (凶)	Gold in the sea (海中金)
BingYin	Growing (生长)	Lucky (吉)	DingMao	Disease (得病)	Fierce (凶)	Fire in the stove (炉中火)
WuChen	Crowned (冠带)	Lucky (吉)	JiSi	Emperor (帝旺)	Lucky (吉)	Wood in the big tree (大林木)
GengWu	Bathing (沐浴)	Lucky (吉)	XinWei	Decay (衰落)	Lucky (吉)	Soil in the roadside (路旁土)
RenShen	Growing (生长)	Fierce (凶)	GuiYou	Disease (得病)	Fierce (凶)	Metal of blade (剑锋金)
JiaXu	Raise (营养)	Lucky (吉)	YiHai	Death (死亡)	Fierce (凶)	Fire on the hill (山头火)
BingZi	Child (着胎)	Lucky (吉)	DingChou	Tomb (墓葬)	Fierce (凶)	Water in the mountain ravine (涧下水)
WuYin	Growing (生长)	Lucky (吉)	JiMao	Disease(得病)	Lucky (吉)	Soil in the city wall (城墙土)
GengChen	Raise (营养)	Lucky (吉)	XinSi	Death (死亡)	Lucky (吉)	Gold in the ash (白腊金)
RenWu	Child (着胎)	Fierce (凶)	GuiWei	Tomb (墓葬)	Fierce (凶)	Wood in the willow tree (杨柳木)
JiaShen	Extinction (绝地)	Lucky (吉)	YiYou	Extinction (绝地)	Fierce (凶)	Water in the spring (泉中水)
BingXu	Tomb (墓葬)	Lucky (吉)	DingHai	Child (着胎)	Lucky (吉)	Soil on the house (屋上土)
WuZi	Child (着胎)	Lucky (吉)	JiChou	Tomb (墓葬)	Fierce (凶)	Fire from the blue fire (霹雳火)
GengYin	Extinction (绝地)	Flat (平)	XinMao	Extinction (绝地)	Fierce (凶)	Wood in the pine tree (松柏木)
RenChen	Tomb (墓葬)	Lucky (吉)	GuiSi	Child (着胎)	Flat (平)	Water in the usual running (常流水)
JiaWu	Death (死亡)	Lucky (吉)	YiWei	Raise (营养)	Lucky (吉)	Gold in the sand (沙中金)
BingShen	Disease (得病)	Lucky (吉)	DingYou	Growing (生长)	Fierce (凶)	Fire under the mountain (山下火)
WuXu	Tomb (墓葬)	Lucky (吉)	JiHai	Child (着胎)	Fierce (凶)	Wood in the ground (平地木)
GengZi	Death (死亡)	Lucky (吉)	XinChou	Raise (营养)	Flat (平)	Soil in a small wall (壁上土)
RenYin	Disease (得病)	Lucky (吉)	GuiMao	Growing (生长)	Fierce (凶)	Gold in the gold foil gold (金箔金)
JiaChen	Decay (衰落)	Lucky (吉)	YiSi	Bathing (沐浴)	Flat (平)	Fire in Buddha's lights (佛灯火)
BingWu	Emperor (帝旺)	Fierce (凶)	DingWei	Crowned (冠带)	Fierce (凶)	Water in the sky of river (天河水)
WuShen	Disease (得病)	Lucky (吉)	JiYou	Growing (生长)	Fierce (凶)	Soil in the great post (大驿土)
GengXu	Decay (衰落)	Lucky (吉)	XinHai	Bathing (沐浴)	Lucky (吉)	Gold in the jewelry of women (钗钏金)
RenZi	Emperor (帝旺)	Flat (平)	GuiChou	Crowned (冠带)	Flat (平)	Wood in the sang cudrania tricuspidata (桑柘木)
JiaYin	Officer (临官)	Flat (平)	YiMao	Officer (临官)	Lucky (吉)	Water in the large streams (大溪水)
BingChen	Crowned (冠带)	Fierce (凶)	DingSi	Emperor (帝旺)	Fierce (凶)	Earth in the sand (沙中土)
WuWu	Emperor (帝旺)	Flat (平)	JiWei	Crowned (冠带)	Fierce (凶)	Fire in the sky (天上火)
GengShen	Officer (临官)	Lucky (吉)	XinYou	Officer (临官)	Flat (平)	Wood in the pomegranate (石榴木)
RenXu	Crowned (冠带)	Fierce (凶)	GuiHai	Emperor (帝旺)	Fierce (凶)	Water in the ocean (大洋水)

Table 3. Sixty JiaZi meaning of philosophy,good & bad and comprehensive name

Sixty JiaZi name	philosophical meaning	good & bad	Sixty JiaZi name	philosophical meaning	good & bad	comprehensive name
JiaZi	Growing (生长数)	lucky	YiChou	Chaos (混沌数)	fierce	Gold in the sea
BingYin	Karma (善缘数)	lucky	DingMao	Tired (劳累数)	fierce	Fire in the stove
WuChen	Smoothly (顺利数)	lucky	JiSi	Help (得助数)	lucky	Wood in the big tree
GengWu	Rouse (奋发数)	lucky	XinWei	Geely (吉发数)	lucky	Soil in the roadside
RenShen	Lazy (懒惰数)	fierce	GuiYou	Fade (消褪数)	fierce	Metal of blade
JiaXu	Vigour (振作数)	lucky	YiHai	Negative (消极数)	fierce	Fire on the hill
BingZi	Superior (超群数)	lucky	DingChou	Wander (漂泊数)	fierce	Water in the mountain ravine
WuYin	Prosper (兴荣数)	lucky	JiMao	Rising (上昇数)	lucky	Soil in the city wall
GengChen	Strong (刚强数)	lucky	XinSi	Reform (改革数)	lucky	Gold in the ash
RenWu	Varied (多变数)	fierce	GuiWei	Feminine (阴柔数)	fierce	Wood in the willow tree
JiaShen	Breeze (春风数)	lucky	YiYou	Hibernation (冬眠数)	fierce	Water in the spring
BingXu	Innovation (革新数)	lucky	DingHai	Chang rong (昌荣数)	lucky	Soil on the house
WuZi	Hope (希望数)	lucky	JiChou	Wizards (奇才数)	fierce	Fire from the blue fire
GengYin	Restlessness (躁动数)	flat	XinMao	Patience (忍耐数)	fierce	Wood in the pine tree
RenChen	Counsel (谋略数)	lucky	GuiSi	Suddenly (豁然数)	flat	Water in the usual running
JiaWu	Resonance (共鸣数)	lucky	YiWei	Victory (胜利数)	lucky	Gold in the sand
BingShen	Exuberant (旺盛数)	lucky	DingYou	Luxus (过盛数)	fierce	Fire under the mountain
WuXu	Civilization (文明数)	lucky	JiHai	Storm (风浪数)	fierce	Wood in the ground
GengZi	Power (掌权数)	lucky	XinChou	Talent (才华数)	flat	Soil in a small wall
RenYin	Glory (荣华数)	lucky	GuiMao	Arrogance (傲慢数)	fierce	Gold in the gold foil
JiaChen	Morality (才德数)	lucky	YiSi	Emotion (情感数)	flat	Fire in the Buddha's lights
BingWu	Vanity (虚华数)	fierce	DingWei	Consumption (消耗数)	fierce	Water in the sky of river
WuShen	Tailwind (顺风数)	lucky	JiYou	Independent (独立数)	fierce	Soil in the great post
GengXu	Enjoy (享受数)	lucky	XinHai	Intelligence (智高数)	lucky	Gold in the jewelry of women
RenZi	Stubborn (固执数)	flat	GuiChou	Unstable (不稳数)	flat	Wood in the sang cudrania tricuspidata
JiaYin	Drifted (渐褪数)	flat	YiMao	Deep (高瞻数)	lucky	Water in large streams
BingChen	Virtual (内虚数)	fierce	DingSi	Confused (迷惑数)	fierce	Earth in the sand
WuWu	Sorrow (内愁数)	flat	JiWei	Meaning less (意弱数)	fierce	Fire in the sky
GengShen	Xu rose (旭升数)	lucky	XinYou	Gradually better (渐佳数)	flat	Wood in the pomegranate
RenXu	Blankly (茫然数)	fierce	GuiHai	Hesitate (犹豫数)	fierce	Water in the ocean

Table 4. Inflation Rates in Finance, GDP and CPI

No.	M_2	rate	GDP	rate	Finance inflation rate	CPI(1984=100)	rate
1990	15293.4	.	18774.3	.	.	216.4	.
1991	19349.9	0.26525	21895.5	0.14255	0.10739	223.8	0.03307
1992	25402.2	0.31278	27068.3	0.19110	0.10216	238.1	0.06006
1993	34579.8	0.36129	35524.3	0.23803	0.09956	273.1	0.12816
1994	46923.5	0.35696	48459.6	0.26693	0.07106	339.0	0.19440
1995	60750.5	0.29467	61129.8	0.20727	0.07240	396.9	0.14588
1996	76094.9	0.25258	71572.3	0.14590	0.09310	429.9	0.07676
1997	90995.3	0.19581	79429.5	0.09892	0.08817	441.9	0.02716
1998	104498.5	0.14839	84883.7	0.06425	0.07906	438.4	-0.00798
1999	119897.9	0.14736	90187.7	0.05881	0.08364	432.2	-0.01435
2000	134610.3	0.12271	99776.3	0.09610	0.02427	434.0	0.00415
2001	158301.9	0.17600	110270.4	0.09517	0.07381	437.0	0.00686
2002	185007.0	0.16870	121002.0	0.08869	0.07349	433.5	-0.00807
2003	221222.8	0.19575	136564.6	0.11396	0.07343	438.7	0.01185
2004	254107.0	0.14865	160714.4	0.15027	-0.00141	455.8	0.03752
2005	298755.7	0.17571	185895.8	0.13546	0.03545	464.0	0.01767
2006	345577.9	0.15672	217656.6	0.14592	0.00943	471.0	0.01486
2007	403442.2	0.16744	268019.4	0.18791	-0.01723	493.6	0.04579
2008	475166.6	0.17778	316751.7	0.15385	0.02074	522.7	0.05567
2009	610224.5	0.28423	345629.2	0.08355	0.18521	519.0	-0.00713
2010	725851.8	0.18948	408903.0	0.15474	0.03009	536.1	0.03190
2011	851590.9	0.17323	484123.5	0.15537	0.01545	565.0	0.05115
2012	974148.8	0.14392	534123.0	0.09361	0.04600	579.7	0.02536
2013	1106525.0	0.13589	588018.8	0.09166	0.04052	594.8	0.02539
2014	1228374.8	0.11012	635910.0	0.07531	0.03237	606.7	0.01961

Assume that M_2 or M_2' as issued in the circulation of generalized money, Gross Domestic Product (GDP) as G or G' and the consumer price index (CPI) as C or C' for today and last year respectively, the actual need of money in real terms in the circulation $P_0 = M_2' \times (G/G')$ for last year's price level. Then the inflation rate of M_2 is $(M_2 - M_2')/M_2'$, the inflation rate of GDP is $(G - G')/G'$, and the annual finance inflation rate can be measured by $(M_2 - P_0)/P_0$.

Table 5. Inflation Rates in PPI,RPI,GBR and AAF

No.	PPI (1984=100)	rate	RPI (1984=100)	rate	GBR	rate	AAF	rate
1990	207.7	.	159.0	.	2937.10	.	7662.1	.
1991	213.7	0.02808	168.9	0.05861	3149.48	0.07231	8157.0	0.06459
1992	225.2	0.05107	180.4	0.06375	3483.37	0.10601	9084.7	0.11373
1993	254.9	0.11652	223.7	0.19356	4348.95	0.24849	10995.5	0.21033
1994	310.2	0.17827	267.3	0.16311	5218.10	0.19985	15750.5	0.43245
1995	356.1	0.12890	307.1	0.12960	6242.20	0.19626	20340.9	0.29144
1996	377.8	0.05744	316.0	0.02816	7407.99	0.18676	22353.7	0.09895
1997	380.8	0.00788	315.0	-.00317	8651.14	0.16781	23788.4	0.06418
1998	370.9	-.02669	302.1	-.04270	9875.95	0.14158	24541.9	0.03168
1999	359.8	-.03085	294.8	-.02476	11444.08	0.15878	24519.1	0.00093
2000	354.4	-.01524	303.1	0.02738	13395.23	0.17049	24915.8	0.01618
2001	351.6	-.00796	299.2	-.01303	16386.04	0.22327	26179.6	0.05072
2002	347.0	-.01326	292.6	-.02256	18903.64	0.15364	27390.8	0.04627
2003	346.7	-.00087	299.3	0.02239	21715.25	0.14873	29691.8	0.08401
2004	356.4	0.02722	317.6	0.05762	26396.47	0.21557	36239.0	0.22051
2005	359.3	0.00807	333.2	0.04682	31649.29	0.19900	39450.9	0.08863
2006	362.9	0.00992	343.2	0.02914	38760.20	0.22468	40810.8	0.03447
2007	376.7	0.03663	353.8	0.02996	51321.78	0.32408	48893.0	0.19804
2008	398.9	0.05565	378.2	0.06452	61330.35	0.19502	58002.2	0.18631
2009	394.1	-.01218	357.8	-.05702	68518.30	0.11720	60361.0	0.04067
2010	406.3	0.03003	377.5	0.05219	83101.51	0.21284	69319.8	0.14842
2011	426.2	0.04669	400.2	0.05672	103874.43	0.24997	81303.9	0.17288
2012	434.7	0.01955	393.4	-.01729	117253.52	0.12880	89453.0	0.10023
2013	440.8	0.01384	385.9	-.01944	129209.64	0.10197	96995.3	0.08432
2014	445.2	0.00988	378.6	-.01928	140370.03	0.08637	102226.1	0.05393

Assume that P or P' as issued in the producer price index (PPI), the retail price index (RPI) as R or R', the general budget revenue (GBR) as G or G', and the total output value of Agriculture Forestry Animal Husbandry and Fishery (AAF) as A or A' for today and last year respectively. Then the inflation rate of PPI is $(P-P')/P'$, the inflation rate of RPI is $(R-R')/R'$, the inflation rate of GBR is $(G-G')/G'$,and the annual AAF inflation rate can be measured by $(A-A')/A'$.

Table 6. Hexagram-images of Eight Palaces (I)

No.	date	energy	image	f_1	f_2	f_3	f_4	f_5	f_6	Palace	State of GDP	Number	Meaning of number
1	1991	11	7	-1	-1	1	-1	1	1	2	real-normal	14	wander
2	1992	43	4	1	-1	1	-1	1	1	7	real	14	wander
3	1993	63	0	1	1	1	1	1	1	1	real	51	drifted
4	1994	63	0	1	1	1	1	1	1	1	real	51	drifted
5	1995	63	0	1	1	1	1	1	1	1	real	51	drifted
6	1996	47	7	1	-1	1	1	1	1	1	real-normal	51	drifted
7	1997	5	6	-1	-1	-1	1	-1	1	6	virtual-normal	16	rising
8	1998	5	6	-1	-1	-1	1	-1	1	6	virtual-normal	16	rising
9	1999	5	6	-1	-1	-1	1	-1	1	6	virtual-normal	16	rising
10	2000	4	5	-1	-1	-1	1	-1	-1	2	virtual-normal	53	virtual
11	2001	5	6	-1	-1	-1	1	-1	1	6	virtual-normal	16	rising
12	2002	5	6	-1	-1	-1	1	-1	1	6	virtual-normal	16	rising
13	2003	7	3	-1	-1	-1	1	1	1	8	real-normal	51	drifted
14	2004	30	6	-1	1	1	1	1	-1	4	real-normal	48	intelligence
15	2005	6	4	-1	-1	-1	1	1	-1	4	real-normal	48	intelligence
16	2006	6	4	-1	-1	-1	1	1	-1	4	real-normal	48	intelligence
17	2007	62	1	1	1	1	1	1	-1	1	real	48	intelligence
18	2008	62	1	1	1	1	1	1	-1	1	real-normal	48	intelligence
19	2009	1	1	-1	-1	-1	-1	-1	1	8	virtual-normal	27	restlessness
20	2010	22	5	-1	1	-1	1	1	-1	4	real-normal	48	intelligence
21	2011	62	1	1	1	1	1	1	-1	1	real-normal	48	intelligence
22	2012	1	1	-1	-1	-1	-1	-1	1	8	virtual-normal	27	restlessness
23	2013	0	0	-1	-1	-1	-1	-1	-1	8	virtual-normal	42	emotion
24	2014	0	0	-1	-1	-1	-1	-1	-1	8	virtual-normal	42	emotion

Let x^i be the one of PACGGF inflation rates for any i $(1 \le i \le 6)$ of the steady multilateral system. Denoted the parameters of the normal range by a^i, b^i, t_0^i, $i = 1,2,3,4,5,6$. The Hexagram-image of the Eight-Palaces or Eight Veins or Eight Extra Meridians is $(f_1, f_2, f_3, f_4, f_5, f_6)$, respectively, where $f_i = sign(x^i - t_0^i) + (x^i = t_0^i)$, $i = 1,2,3,4,5,6$.

Table 7. Hexagram-images of Eight Palaces (II)

No.	date	energy	image	f_1	f_2	f_3	f_4	f_5	f_6	Palace	State of GDP	Number	Meaning of Number
1	1991	43	4	1	-1	1	-1	1	1	7	real-normal	14	wander
2	1992	43	4	1	-1	1	-1	1	1	7	real	14	wander
3	1993	63	0	1	1	1	1	1	1	1	real	51	drifted
4	1994	63	0	1	1	1	1	1	1	1	real	51	drifted
5	1995	63	0	1	1	1	1	1	1	1	real	51	drifted
6	1996	47	7	1	-1	1	1	1	1	1	real-normal	51	drifted
7	1997	5	6	-1	-1	-1	1	-1	1	6	virtual-normal	16	rising
8	1998	5	6	-1	-1	-1	1	-1	1	6	virtual-normal	16	rising
9	1999	5	6	-1	-1	-1	1	-1	1	6	virtual-normal	16	rising
10	2000	36	0	1	-1	-1	1	-1	-1	7	virtual-normal	53	virtual
11	2001	5	6	-1	-1	-1	1	-1	1	6	virtual-normal	16	rising
12	2002	5	6	-1	-1	-1	1	-1	1	6	virtual-normal	16	rising
13	2003	7	3	-1	-1	-1	1	1	1	8	real-normal	51	drifted
14	2004	62	1	1	1	1	1	1	-1	1	real-normal	48	intelligence
15	2005	38	7	1	-1	-1	1	1	-1	5	real-normal	48	intelligence
16	2006	38	7	1	-1	-1	1	1	-1	5	real-normal	48	intelligence
17	2007	62	1	1	1	1	1	1	-1	1	real	48	intelligence
18	2008	62	1	1	1	1	1	1	-1	1	real-normal	48	intelligence
19	2009	1	1	-1	-1	-1	-1	-1	1	8	virtual-normal	27	restlessness
20	2010	54	0	1	1	-1	1	1	-1	5	real-normal	48	intelligence
21	2011	62	1	1	1	1	1	1	-1	1	real-normal	48	intelligence
22	2012	1	1	-1	-1	-1	-1	-1	1	8	virtual-normal	27	restlessness
23	2013	0	0	-1	-1	-1	-1	-1	-1	8	virtual-normal	42	emotion
24	2014	0	0	-1	-1	-1	-1	-1	-1	8	virtual-normal	42	emotion

Instead of the one x^1 of PACGGF inflation rates to $x^{1'}$ of the RPI inflation rate, the Numbers similarly.

Tables 8. Sixty JiaZi meaning of ten heavenly stems, branches to hide stems, synthesized attribute and integration attribute

Sixty JiaZi name	Ten heavenly stems	branches to hide stems	integration attribute	Sixty JiaZi name	Ten heavenly stems	branches to hide stems	synthesized attribute	integration attribute
JiaZi	(1,0)	(0,4)	(0,4)	YiChou	(0,0)	(0,2), (0,4), (0,3)	(0,4)	(1,3)
BingYin	(1,1)	(1,0), (1,1), (1,2)	(1,3)	DingMao	(0,1)	(0,0)	(0,0)	(1,1)
WuChen	(1,2)	(0,0), (1,2), (0,4)	(1,1)	JiSi	(0,2)	(1,1), (1,3), (1,2)	(1,1)	(1,0)
GengWu	(1,3)	(0,1), (0,2)	(0,3)	XinWei	(0,3)	(0,1), (0,2), (0,0)	(0,3)	(1,2)
RenShen	(1,4)	(1,3), (1,4), (1,2)	(1,4)	GuiYou	(0,4)	(0,3)	(0,3)	(1,3)
JiaXu	(1,0)	(0,3), (1,2), (0,1)	(1,1)	YiHai	(0,0)	(1,4),(1,0)	(0,4)	(1,1)
BingZi	(1,1)	(0,4)	(0,4)	DingChou	(0,1)	(0,2), (0,4), (0,3)	(0,4)	(0,4)
WuYin	(1,2)	(1,0), (1,1), (1,2)	(1,3)	JiMao	(0,2)	(0,0)	(0,0)	(0,2)
GengChen	(1,3)	(0,0), (1,2), (0,4)	(1,1)	XinSi	(0,3)	(1,1), (1,3), (1,2)	(1,1)	(1,3)
RenWu	(1,4)	(0,1), (0,2)	(0,3)	GuiWei	(0,4)	(0,1), (0,2), (0,0)	(0,3)	(1,0)
JiaShen	(1,0)	(1,3), (1,4), (1,2)	(1,4)	YiYou	(0,0)	(0,3)	(0,3)	(0,4)
BingXu	(1,1)	(0,3), (1,2), (0,1)	(1,1)	DingHai	(0,1)	(1,4), (1,0)	(0,4)	(0,2)
WuZi	(1,2)	(0,4)	(0,4)	JiChou	(0,2)	(0,2), (0,4), (0,3)	(0,4)	(1,1)
GengYin	(1,3)	(1,0), (1,1), (1,2)	(1,3)	XinMao	(0,3)	(0,0)	(0,0)	(1,0)
RenChen	(1,4)	(0,0), (1,2), (0,4)	(1,1)	GuiSi	(0,4)	(1,1), (1,3), (1,2)	(1,1)	(0,4)
JiaWu	(1,0)	(0,1), (0,2)	(0,3)	YiWei	(0,0)	(0,1), (0,2), (0,0)	(0,3)	(1,3)
BingShen	(1,1)	(1,3), (1,4), (1,2)	(1,4)	DingYou	(0,1)	(0,3)	(0,3)	(0,1)
WuXu	(1,2)	(0,3), (1,2), (0,1)	(1,1)	JiHai	(0,2)	(1,4), (1,0)	(0,4)	(0,0)
GengZi	(1,3)	(0,4)	(0,4)	XinChou	(0,3)	(0,2), (0,4), (0,3)	(0,4)	(1,2)
RenYin	(1,4)	(1,0), (1,1), (1,2)	(1,3)	GuiMao	(0,4)	(0,0)	(0,0)	(1,3)
JiaChen	(1,0)	(0,0), (1,2), (0,4)	(1,1)	YiSi	(0,0)	(1,1), (1,3), (1,2)	(1,1)	(0,1)
BingWu	(1,1)	(0,1), (0,2)	(0,3)	DingWei	(0,1)	(0,1), (0,2), (0,0)	(0,3)	(0,4)
WuShen	(1,2)	(1,3), (1,4), (1,2)	(1,4)	JiYou	(0,2)	(0,3)	(0,3)	(1,2)
GengXu	(1,3)	(0,3), (1,2), (0,1)	(1,1)	XinHai	(0,3)	(1,4), (1,0)	(0,4)	(0,3)
RenZi	(1,4)	(0,4)	(0,4)	GuiChou	(0,4)	(0,2), (0,4), (0,3)	(0,4)	(1,0)
JiaYin	(1,0)	(1,0), (1,1), (1,2)	(1,3)	YiMao	(0,0)	(0,0)	(0,0)	(0,4)
BingChen	(1,1)	(0,0), (1,2), (0,4)	(1,1)	DingSi	(0,1)	(1,1), (1,3), (1,2)	(1,1)	(1,2)
WuWu	(1,2)	(0,1), (0,2)	(0,3)	JiWei	(0,2)	(0,1), (0,2), (0,0)	(0,3)	(1,1)
GengShen	(1,3)	(1,3), (1,4), (1,2)	(1,4)	XinYou	(0,3)	(0,3)	(0,3)	(1,0)
RenXu	(1,4)	(0,3), (1,2), (0,1)	(0,1)	GuiHai	(0,4)	(1,4), (1,0)	(0,4)	(1,4)