

Partial equilibrium analysis of integrity of civil servants pension system

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Abstract: China's pension system has not yet covered the Civil Servants, but to achieve full coverage of the system is an inevitable trend. Scholars in achieving full coverage of the pension system after taking the World Bank's multi-pillar pension system model, give full play to the role of occupational pension: in the civil service to make up for the expected retirement income is declining, play a preventive role of corruption, will it as a integrity annuities. Integrity pension system needs to be put China's specific environment full consideration next week. By partial equilibrium analysis of integrity annuities, annuities come integrity only when there is considerable expected return, the normalization of corruption found under the mechanism can play a role, it is also necessary to promote reform and in conjunction with other anti-corruption measures.

Keywords: integrity annuity; pension; equalizer.

INTRODUCTION

By the end of 2013, the State Council Development Research Center to the public of the "383" overall reform program full report submitted to the Third Plenary eighth. The program presents "Building an integrity pension system, public officials have not found a great mistake or corruption before retirement to receive." At present, the domestic scholars do not have much discussion on the clean and honest pension, there is no specific definition of the pension annuity, but will it with the independent fund, the integrity of the security deposit as a class [1, 2], or its equivalent in Singapore "CPF", Hong Kong's "MPF" system [3]. The role of honest scholars annuities primarily from the perspective of an incentive mechanism for discussion, such as "the implementation of pension and retirement housing, medical security system for civil servants, civil servants corruption if it is found not only dismissed, but also to cancel some or all of their pension increase the cost of corruption of civil servants immediate and future risks, making corruption a 'high risk, low return' event [4] and such as clean pension system similar to the civil servants and the government Against a contract entered into between clean and honest civil service pension credit becomes ruler, misconduct not only lose revenue integrity, and their behavior will lose credibility [1]. Or from the point of view of the value of honesty and pension system evaluation, such as conflict and the role of the civil service [5]. As to clean annuity can lead to leveraging effect, really curb corruption of civil servants motivation, not much discussed. This article will clean annuity is defined as the "three pillars" of the civil service pension system in the second pillar, namely individual savings accounts form part, in addition to the

basic pension insurance fund for civil servants to provide retirement income security; if the corruption of civil servants have been punished, will lose this part of the retirement protection. However, at present, China is not suitable for soil clean annuity survival; the regime is just a "Utopia" type concept.

A partial equilibrium corruption trading market

Marshall founded the partial equilibrium theory, the single commodity market as a small part of the overall economy; therefore, it can ignore the income and substitution effects. In the analysis of market equilibrium, supply and demand can be considered a single commodity is only determined by the price of the merchandise.

In the market of corruption, bribery and corruption of civil servants who are the suppliers and demand, that is corrupt according to bribe civil servants who bribe preferences, rather than legal standards, provide scarce resources to bribe, bribes to pay bribes when corruption scarce resources and bribery of civil servants who want to buy and the amount equal to the market clearing. Corruption market unlike perfectly competitive market is characterized by: (1) both sides need to spend some resources to hide the transaction between them, so the price is not known to everyone; the information communication difficulties, lack of price changes; (2) potential traders may own conscience or fear of punishment for refusing to enter; in addition, in order to avoid leakage of the contents of the transaction, the transaction between trusted persons only. Thus, the degree of competition in the market of corruption is lower than the general legal market [6].

Annuity is designed to integrity

Occupational pension reform is often seen as a retirement system "mystery". China's pension system yet to achieve full coverage. In the 1980s, state-owned enterprises to solve the over staffing problem triage, Pension Reform in enterprise employees, expand, and thereafter a gradual transition undertaken by the government retirement system to the pension system, the pension system has been set up in business. But the civil service retirement system reform has been slow, since 90s, the beginning of the pilot reform of the city level, in 2008, began a top-level design, carried out the five pilot institutions. But no reform of substantive progress, since the enterprise employees pension replacement rate decreased year by year, has fallen below the minimum standards of the ILO, with a large gap between the civil service and civil service payment responsibility vacancy, because the Chinese people has always been focusing on the accumulation of savings pension habits, regarded as civil servants pay heavily concentrated industry, it is easy to form a "winner takes all society", if victorious in the civil service exam to become a winner, you can get centralized payment, followed by his subsequent brush who estimates he has the same chance of winning, he is also involved in the competition, and ultimately into the general business, can only be obtained in accordance with the absolute yield marginal returns."Winner takes all market participants attracted too much congestion level rise, leading to inefficient consumption and investment, and so often degenerate culture [7]. Therefore, requires a change "dual track", "fragmentation" of the pension system, the "merged" to establish a "universal" pension system [8] is growing louder. Combined with previous pilot reform ideas we need to implement the occupational pension system, in order to achieve "multi-pillar" goal.

Since the 18th Party Congress of China Decision-makers to increase the anti-corruption efforts. Civil servants conduct more sophisticated constraints, only the first three months of 2014, there are 17 rules were introduced. All along, China's civil services rules constrain not say much, and even formed a large number of the remaining system, the marginal effect of decreasing corruption work [9]. Too harsh regime, lack of health factors, civil servants produce dissatisfied feeling. The resulting decline in enthusiasm for the work and reduced efficiency, corruption is the hidden cost of compliance. On the other hand, China's lack of incentives for civil servants. The current incentives and drawbacks are mainly: (1) tax, non-tax return of surplus revenue. This makes the tax authorities, and non-tax revenues sector "income" impulse, but corruption, meanwhile, is caused by uneven quality among departments. (2) Collective excitation. A variety of year-end spiritual, comprehensive management award, advanced collective reward system and in turn appraised Hence, various "Pratt & Whitney" type of

incentive system caused by "free rider" phenomenon among civil servants. (3) Promotion incentives: Tournament mode lead to political rent-seeking. Thus, policy makers want to embed anti-corruption function in occupational pension which, as a more humane system design, civil servants from the "not greedy" to "do not want to be greedy." Increased product incentives - if the civil servants to keep clean, you can get good annuity. We will motivate behavioral outcomes with combination of administrative incentive to try a wide range of products.

The realization of the anti corrosion function of the clean annuity can be explained by Figure 1. When the honest annuity forms a personal account accumulation in the civil service, other conditions are unchanged, so that the equilibrium quantity of the corrupt transaction can be reduced. Civil servants of the supply curve SS move inward to the SS, is due to the presence integrity annuity, increasing the marginal cost of corruption of civil servants, increasing marginal costs include the loss of integrity after exposure to corruption annuity A*discovered and investigated the probability p, as well as civil servants more do not want to expose the transaction, the transaction costs for both stable contractual relationship consuming.

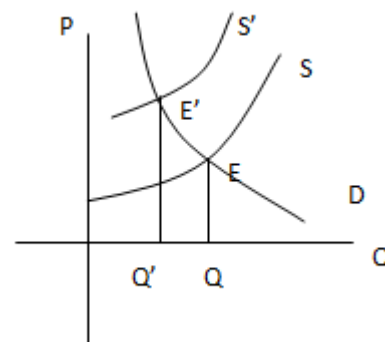


Fig-1: Corruption supply market, the demand curve

The implementation of effect integrity annuity questioned

Pushing up the market price of corruption, corrupt transactions increase invisibility

Described before, corrupt civil servants will be corrupt transaction at a higher price level, that is, those who ask for a bribe civil servants to a higher risk premium level of risk under. Setting integrity annuity may not be completely eliminated corruption. In addition, the alliance of corrupt dealings conspiracy motivation enhancement: on the one hand, the need for more solid alliance between corrupt officials and bribe-givers; on the other hand, corruption among civil servants, including the upper and lower levels, the same level alliance between the need to secure also we need

to win over the inside "whistle blower." Hidden corruption transactions increased.

Transformation of "zero tolerance" rule rot caused by inefficient

Policymakers usually adopt a "zero tolerance" attitude towards corruption, noting that the implementation of integrity annuities, part of the "small corruption" rational civil servants will choose to withdraw from the market, because the marginal revenue of corruption can not cover their marginal costs. However, at this stage, trying to corrupt trading market trading volume decreased to 0, it is not economical. Trading corruption and bribery among public servants of negative externalities, including resource allocation inefficiencies and distortions, undermining reform, systematic destruction. as shown in Fig 2:

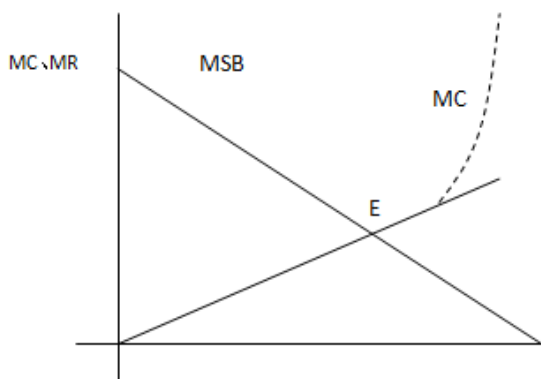


Fig-2: Eradicating Corruption marginal social benefit, the marginal cost curve

Through the implementation of clean pension system can reduce the negative externalities of MSB, with the reduction in corrupt transactions, MSB descending, Meanwhile, the implementation of marginal cost to produce clean pension system, including the cumulative part of serving civil servants charged to the budget of the individual account history, the new civil service, the current accumulating section serving civil servants, as well as the current payment amount also includes the cost of the annuity income fell sharply honest government yield management, to win public support costs and other inputs. MSB amount difficult to measure. Huntington, the modern corruption, reasons include: Modernization involves a change in fundamental values; modernization has opened up new sources of wealth and power; it changes through the modernization of the political system created by the output side to exacerbate corruption [10]. The root of the exogenous variables China is currently in the social transition, corruption generated, such as government authority boundaries, if these exogenous variables is not adjusted the negative externality will be ingrained; it is difficult to rely on the promotion of the clean and honest pension to generate a large number of social marginal revenue; the MC is also difficult to

quantify. MSB and MC intersection E corresponding reduction in the amount of corrupt transactions is the most economical, but it's corruption trading volume is not 0, that is, must tolerate a certain degree of corruption. Otherwise, additional input may be corrupt trading volume dropped to 0, but the marginal cost exceeds the marginal social benefit.

If there is no marginal cost of implementing clean annuity, marginal social benefit good measure, went to implement, will bring waste. In the transition period, the government should seek to enable the public to tolerate low levels of corruption.

Huntington made weed out corruption should be measured by reduced official code of conduct, because for this, some behavior is becoming recognized as a normal part of the political process in order to "be lost" behavior and norms in exchange for greater harmony in general, because violence the prevalence of corruption prevalent than conflicts pose a greater threat [10]. If the public for a minimum of corruption are intolerable, the government is bound to respond to the resulting underlying populist.

People on low limits of tolerance of corruption are easy to achieve. Because corruption is a diluted cost, namely the cost of corruption if a low limit equal shares to each member of the community, the cost will be very small individual members of society, so it will not lead to social discontent; on the other hand, China is the ethical standard society, many low-limit corruption readily understood people as normal human contact.

Clean annuity is low, the number of black corruption too honest annuity failure

After the implementation of clean annuities, corrupt civil servants Q scarce resources for the briber marginal revenue, marginal revenue are: $MR = B + (1 - p) * A$; $MC = p * C + p * A$

Which, B is a bribe income, A is honest annuity account the cumulative size of the transaction being investigated corruption probability p is, C for the rest of the economy, civil service corruption, loss of reputation after being isolated and facing investigation costs.

When $MR > MC$, the rational choice of manufacturing civil servants the opportunity to corrupt transactions, until $MC = MR$. The role of honest annuity, the annuity depends on the size of the transaction being investigated and corruption A probability p.

Scale clean annuity A

Clean annuity is an integral part of the three-pillar pension system. Pension fund system and the management system of the world can be divided into three categories: First, "direct government regulation",

to take a negative investment strategy, DB-type PAYG mode; the second is "indirect government controlled" to take diversified investment strategy, centralized government by decree investment portfolio, fund specific operation rights entrusted to fund managers; third is "completely market-oriented", the main feature is the cumulative DC-type system, pension funds are dispersed in individual investment-type accounts individual investment decisions, the central government plays the role of services [11]. Is regarded as a model of probity annuity Singapore Central Provident Fund "government indirectly controlled", while Hong Kong's "strong fund", although the use of "reserve" this term, but the system is characterized by a typical "fully market-oriented", the market-oriented investment, than the United States "TSP pension fund" even more. States from experience, "indirect government regulation" ineffective. On the one hand, there is a social investment issues, resulting in poor mobility of capital; on the other hand, diversified investment strategy if it fails, there will be government subsidies for SBC's

interest, it is inevitable that suspicion of a planned economy, but also fuzzy systems, account limit; moreover investment performance depends largely on external macro-environment, such as the inflation rate, the savings rate. If you take a clean CPF annuity mode, the above problems in China's current situation will become even more prominent: first, fiscal spending in recent years, is inclined to the people's livelihood, social investment tends to clean pension increase, the expense of the Government to advance the interests of civil servants motivation for government projects ; second, the Chinese capital market imperfections, financial regulation is not in place, the Government will invest to make up for losses through transfer payments; third, China is facing economic slowdown, rising inflation macroeconomic environment. If you learn from Hong Kong's "strong fund" to take "full market-based", that is in accordance with the annuity trusts the current DC mode. The following is the annuity weighted average rate of return between 2008 and 2013:

Chinese enterprise annuity weighted average rate of return over the years (2008 year-2015year)

year	2008	2009	2010	2011	2012	2013	2014	2015
Pensionweighted average rate of return (%)	-1.83	7.78	3.41	-0.78	5.68	3.67	9.3	9.88

As can be seen from the table, the past eight years, the weighted average yield annuity with "size of the year" way volatility, along with the overall market down, lackluster. In the interest rate market-oriented reforms, the development of the Internet finance the moment, the accumulation of personal accounts pension fund clean formed so insignificant, does not change the behavior of corrupt civil servants.

Pension fund size may also be clean by two other ways: (1) improves product cost, is to enhance the contribution rate to push clean pension scale, namely in accordance with the Singapore model, but it is built based on the Singapore model in "high salary" basis in China is clearly difficult to achieve. (2) To streamline the civil service, through the financial subsidies exiting in part the civil service "transferred" to the existing staff. But this requires complementary policies to ease the pressure of hordes, such as increased job opportunities for the private sector, which is difficult to achieve at high unemployment.

In fact, the reference to corrupt honest annuity feature is not new, the existing civil service retirement system design itself has anti-corrosion features. According to the 2010 CPC Central Committee Organization Department, Human Resources and Social Security, Ministry of Supervision, the State Civil Service Bureau jointly issued the "Notice on civil servants to take compulsory administrative measures and criminal penalties by administrative salaries handle

relevant issues" and "Civil Service Retirement He was sentenced to imprisonment or more severe punishment, from the date of entry into force of the people's court to cancel the original pension is treatment. " At present, the Chinese civil servant pension replacement rate in the world is very high, and therefore may not enter the civil service corruption market, but from the occurrence of corruption in recent years, due to the level of pension benefits and bribes compared to the relative scale is too low, coupled with China does not have the "high salary" condition, even if the pension replacement rate, not enough to make a large number of corrupt civil servants adjust the supply. In addition, the impact of the implementation of clean and annuities as well as the effect of the transaction being investigated corruption probability.

Corrupt transactions being investigated probability p

Black refers to the number of corruption has actually occurred, for various reasons have not been found that the relative number of black, or have been found, but the number has not been investigated for corruption, namely absolute black number. Accurate measurement of the number of black corruption is a problem. Some scholars believe that China's corrupt black number is 80%, or even 95% [12]. If the majority of corruption can not be punished, then clean annuity will become a disguised form of welfare, triggering the public question.

Since the relationship between the regulatory authorities and senior civil servants is not enough distance, has been taken against high-level corruption "tigers" campaign-style approach governance, this approach has obvious periodicity. At each new team was established on the occasion will mark the peak: Since 1987, a total of four "Tiger" peak period: 1998 - 1999, 2003, 2009, 2013; in addition, the "retroactive past" feature, namely major to pursue past corruption officials. Therefore, China's high-level corruptions have latent. In this way, it is possible to produce the effect of a warning to others, so that a high degree of corruption market equilibrium point dropped to a low degree of equilibrium, but it is not the norm of the discovery mechanism.

China led to several high black corruption system defects also include the establishment of official property is not public system, inadequate supervision by the NPC and the like. Reduce the number of black realize corruption, not happen overnight.

To clean annuities really play a role, we need to start from the supporting systems, improve the capital market, improve integrity annuity; strengthen the supervision of power, combined with other measures to prevent corruption, reduce the number of black corruption. Otherwise, the mobile SS curve corrupt transactions in the market will not happen, honest reduced pension benefits in disguise.

Implementation of negative externalities caused by honest annuity

Statistical discrimination strengthening people's prejudices, weakened incentives Civil Service Integrity psychological identity. Statistical discrimination under incomplete information and interaction generated perverse incentives that individual circumstances are to be dealt with according to their average case belongs to groups rather than individual traits [7]. Clean pension system design is to assume that every civil servant has maximization motivation to pursue personal interests. Therefore, in the market of corruption, bribes to design a substitute - quite generous pensions of civil servants in corruption transactions increased price elasticity. This design is clearly for civil servants who feel justice done preset to maintain the integrity of their actions, this should be attributed to morality, but only as the risk of losing out on pension avoid that this part Civil servants are not fair, if they found a corrupt civil servants narrowly escaped punishment, it will tear down their moral pillar, in cahoots with them. In addition, the government has increased anti-corruption efforts, the main purpose is to maintain the image of the government, create credibility, but eventually found that the credibility of the public need to make huge clean annuity as collateral, which is bound and designed poles apart. Thus, the second pillar pension occupational pension manifest in anti-corrosion features, known as

"clean" an annuity, although it is intended to emphasize the preservation, but may go into reverse.

At present, China is facing the Civil Servant "stigma" of "label" trend. The public security some negative cases in a group, "and by extension" (People's Daily). Which is mainly due to the presence of special interests. Those who hold this attitude, the implementation of the annuity would be honest distrust, which was seen as the government's "enrich themselves." State Council Development Research Center Publication of the "383" program for reform General Report Third Plenary Session of the 18 submitted, sparked public debate on the integrity annuities. If in the implementation of clean annuity, not get rid of public misunderstanding, actually arouse their sense of injustice, expand the coverage of the pension system to address equity issues will be offset by the effect.

CONCLUSION

At present, China is in the middle stage of social transformation, running and adjustment is the key word at this stage. Corruption occurs, have deep-seated institutional incentives. Focusing on the root causes of annuity is not clean of corruption, but starting from the civil selfish sexual orientation, ignoring the risk averse civil servants holding the vast majority of people wanted stability mentality. Of course, it is undeniable that an annuity can reduce the supply of clean and corruption of civil servants, but it requires a lot of effect on the marginal cost increase expected return clean annuity, reducing the number of black corruption. Marginal costs may far exceed honest annuity can bring social welfare increases, resulting in waste. Meanwhile, some reform is not able to advance overnight. Government by making people keeps a low degree of tolerance of corruption. Prominent in the civil service pension in the second pillar "clean" word, to show the government's determination to cure corruption, may provoke more populism.

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