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## **Rural Pension Reform in China: Lessons from Latin American Countries**

by

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**Abstract**

Over the last three years, China has made substantial progress in pushing forward its New Rural Pension program that already “covers” more than 60% of rural counties. Currently, this new scheme has two components: (1) a contingent social pension referred to as the “basic pension,” that is financed using general revenues from both the central and local government, and (2) a voluntary funded defined contribution individual account component. However, it is starting to become clear that this new program is facing challenges with respect to both pension coverage and pension benefit adequacy. These two issues have obvious implications for the overall objective of reducing old-age poverty in rural China. The primary goal of our research is to come up with further suggestions for rural pension policy reform in China based lessons drawn from relevant pension schemes in place in several other countries, particularly those in Latin America. Our analysis of the evidence leads us to the conclusion that it would make sense for Chinese pension policymakers to consider a transition to a modestly revised variant of the current NRP. Like the original NRP our proposal includes two components: one is a universal *non-contingent* non-contributory social pension and the other is a voluntary “matching defined contribution” scheme based on the pay-as-you go notional defined contribution model or on the pre-funded IRA defined contribution model.

**Key Words** Social pensions, non-contributory pensions , notional defined contribution pensions, funded defined contribution pensions, China, Latin America.

## Introduction

Since its launch in 2009, China's New Rural Pension (NRP) system has very substantially increased proportion of the rural population covered by an old-age pension scheme, witnessed by a great increase of the number of participants from 71 million in 2009 to 241 million in 2011.<sup>1</sup> This new voluntary pension program is based on two components: (1) a noncontributory contingent social pension component and (2) a funded defined contribution component. Those who are currently of retirement age immediately become eligible for a very modest social pension, but only if their adult children are contributing to the "voluntary" funded defined contribution component of the program. Young workers need to contribute to the voluntary funded defined contribution component for 15 years to establish eligibility for the pension and that pension will be in part based on the social pension component and in part on the amount contributed to the defined contribution component over the years. By the end of 2011, this system had been introduced in about 60% of the counties in China, and recently government officials have projected that it will be implemented in all counties throughout China by the end of 2012.<sup>2</sup>

Despite the evidence that it represents a major step beyond what has been available heretofore in rural China, this new pension system is in reality still a work in progress. The actual pension benefits being received by those elder rural residents who are being grandfathered in and being projected for those who will soon be age-eligible for a pension are less than adequate in many respects: (1) The current pension benefits do not assure that recipients will end up at or near the rural poverty line.<sup>3</sup> (2) The coverage rate among workers turns out to be quite low in many of the "covered counties." To say that this voluntary scheme is available in 60% of the

<sup>1</sup> MHRSS (Ministry of Human Resource and Social Security). 人力资源和社会保障事业发展统计公报 (Statistical Communiqué of Human Resource and Social Security), Retrieved March 15, 2012 from: [http://www.molss.gov.cn/gb/zwxx/node\\_5436.htm](http://www.molss.gov.cn/gb/zwxx/node_5436.htm)

<sup>2</sup> 张平: 新型农村社会养老保险制度已经覆盖 60% 地区 (Zhang Ping. New Rural Pension in China extends to 60% of the Rural Areas), Retrieved March 5, 2012 from: <http://www.cn pension.net/ncsb/ncsbkx/2012-03-06/1302258.html>.

<sup>3</sup> The current minimum benefit of NRP system is about 660 Yuan per year (about US\$100) which is about 28% of rural poverty line in 2011. Discussion about poverty line see, XiaHua net, China raises poverty line by 80 pct to benefit over 100 mln, Retrieved July 14, 2012 from [http://news.xinhuanet.com/english2010/china/2011-11/29/c\\_131277041.htm](http://news.xinhuanet.com/english2010/china/2011-11/29/c_131277041.htm)

counties in China is not to say that 60% of the age eligible residents are receiving an old-age pension linked to this new scheme or to say that 60% of workers have enrolled in the program.<sup>4</sup>(3) There is also evidence of poor administration in many areas.<sup>5</sup>

Rural China is currently undergoing many changes directly or indirectly linked to rapid pace of urbanization taking place in the country as a whole. As millions of young adults are moving from rural areas to the cities in search of employment, many related changes are taking place in rural China that have implications for the ultimate success of the NRP scheme currently being implemented in those areas. Of particular note are the aging of rural population (due largely to the decrease in family size and to the migration of many young adults from the countryside to the cities)<sup>6</sup> and the weakening of filial support for elder parents left in rural areas.<sup>7</sup>

This leads us to the two question that will be the focus of our analysis: (1) Is it likely that the NRP system as currently structured will be able to assure an adequate, affordable, and sustainable form of old age security for most if not all rural residents in China in the foreseeable future? (2) And if not, are there lessons from the experience of other countries, particularly various Latin American countries, that will be helpful to those seeking to reform the NRP in ways that will make it even more effective in reducing rural old-age poverty.

Although some researchers have compared the largely urban pension systems in Latin America with urban pension policy in China,<sup>8</sup> few have attempted to compare pension policy for their respective rural populations. This article will review the performance of pension systems in several Latin American countries, many of which

<sup>4</sup> China State Council(2011). "Twelfth Five-Year Plan." [In Chinese.] Beijing: People's Publishing House.

<sup>5</sup> Wang Guohui, Chen Hongxia (2011). "Issues and Suggestions on the Administration of China's New Rural Pension System". *The World of Social Security* Vol.11.2011.

<sup>6</sup> National Bureau of Statistics(2011). *the Sixth National Population Census*. Retrieved July 14, 2012 from [http://www.stats.gov.cn/tigb/rkpcgb/qgrkpcgb/t20110428\\_402722232.htm](http://www.stats.gov.cn/tigb/rkpcgb/qgrkpcgb/t20110428_402722232.htm).

<sup>7</sup> NBS(2011), *China Population and Employment Statistics Yearbook 2010*, China Statistics Press.

<sup>8</sup> Shen, C., & Williamson, J. B. (2010). "China's new rural pension scheme: Can it be improved?" *International Journal of Sociology and Social Policy*, 30(5/6), 239-250; Calvo, Esteban and Williamson, John B. (2006): "Old-Age Pension Reform and Modernization Pathways: Lessons for China from Latin America". *Journal of Aging Studies*, Vol. 1, No. 22 (2008); Daniel Titelman, Cecilia Vera and Esteban Pérez Caldentey(2009), "Pension System Reform in Latin America and Potential Implications for the Chinese Case", the IDEAs Working Paper Series no. 06/2009

shifted to schemes based on at least partial privatization starting with Chile in 1981 followed by many others, particularly during the 1990s. Our focus will be on two kinds of pension systems: funded contributory schemes and unfunded noncontributory social pensions.

There are four parts to the analysis that follows: In the first we briefly review the development of NRP during the past three years and the challenges it faces. In the second we provide an overview of relevant developments in several Latin American countries. In the third we discuss some of the potential pension policy lessons from Latin America for China. Then in the fourth we outline some suggestions for reforming the NRP in ways that will make it a more successful in achieving its original goals.

### **1. Progress and Challenges in China's "New Rural Pension" Plan**

China's NRP plan introduced in 2009 was an overhaul of the old rural plans that had been in place for many years, but with little evidence that any of them would eventually evolve to provide adequate pension benefits to a large portion of the rural population.<sup>9</sup> The NRP is a voluntary system with two components: a basic pension financed by contributions from both the local and central government<sup>10</sup> and a funded defined contribution personal account component for saving contributions from enrolled individuals. A flat-rate basic pension of 55 Yuan per month (about US\$8) is the minimum benefit, representing roughly half of the very low poverty line in rural China. In terms of the annual contribution for the personal account, participating workers select one of five contribution levels ranging from 100-500 Yuan, and local governments are encouraged to match workers' contributions. In order to qualify, a resident must be at least 60 (for males) or 55 (for females) and have contributed for at least 15 years. Those who currently over age 60 are eligible to receive the 55 Yuan flat-rate minimum pension without having made any prior contributions, but only if

<sup>9</sup> From 1991 to 2009, various rural pension schemes (so-called old rural pension systems) had been piloted in rural areas. However, these schemes only covered a small fraction of rural residents, since they were voluntary and usually run on county levels.

<sup>10</sup> For western provinces, the central government will pay the total cost of the basic pension component; for eastern provinces, the central government will pay 50 per cent and local governments will cover the remaining 50 per cent.

their adult children are enrolled in and contributing to the system. Currently, county social security agencies are responsible for setting up the personal accounts, managing the local pension funds, and distributing the benefits for retirees within the county.<sup>11</sup>

According to the official statistics of the NBS and MHRSS, it is estimated that the NRP system has covered 49.7% (326 million) of the total rural population, among which 36.7%(241 million) are participants and 13%(85.2 million) are pensioners.<sup>12</sup> By 2011, the NRP systems have piloted in 1914 counties (60% of the counties in China) and in 8 provinces all of the counties had been covered. As Table 1 shows, both the number of both participants and beneficiaries has significantly increased in the last three years. In the *2012 Report of on the Work of the Government of China*, Primer Wen Jiabao announced that the country would reach full geographic coverage for rural residents by the end of 2012.<sup>13</sup>

**Table 1 Development of New Rural Pension System 2009-2011**

Year	Participants (thousand)	Beneficiaries (thousand)	Pension Fund accumulated (billion Yuan)
2009	71350	15560	68.1
2010	74440	28330	42.3
2011	241180	85250	119.9

Source: MHRSS (Ministry of Human Resource and Social Security). 人力资源和社会保障事业发展统计公报(Statistical Communiqué of Human Resource and Social Security), Retrieved March 15,2012 from: [http://www.molss.gov.cn/gb/zwxx/node\\_5436.htm](http://www.molss.gov.cn/gb/zwxx/node_5436.htm); 人力资源和社会保障部, 2011年度人力资源和社会保障事业发展统计公报 (Statistical Communiqué on Human Resources and Social Security Development), Retrieved July 14<sup>th</sup>, 2012 from <http://www.mohrss.gov.cn/page.do?pa=402880202405002801240882b84702d7&guid=e578e8be726c4689a32b91e8f7882a45&og=8a81f3f133d01e170133d36bed3c04d3>

China's NRP system is being introduced very rapidly and it already far exceeds

<sup>11</sup> See Shen, C., & Williamson, J. B. (2010). "China's new rural pension scheme: Can it be improved?" *International Journal of Sociology and Social Policy*, 30(5/6), 239-250; Cai, Fang; Giles, John; O'Keefe, Philip; Wang, Dewen(2012). *The Elderly and Old Age Support in Rural China : Challenges and Prospects*, World Bank Publications, 2012.

<sup>12</sup> National Bureau of Statistics(NBS).”中华人民共和国 2011 年国民经济和社会发展统计公报”(Statistical Communiqué of the People's Republic of China on the 2011 National Economic and Social Development). Retrieved March 5, 2012 from: [http://www.stats.gov.cn/tigb/ndtgib/qgndtgib/t20120222\\_402786440.htm](http://www.stats.gov.cn/tigb/ndtgib/qgndtgib/t20120222_402786440.htm); 人力资源和社会保障部, 2011 年度人力资源和社会保障事业发展统计公报 (Statistical Communiqué on Human Resources and Social Security Development), July 14<sup>th</sup>, 2012 Retrieved from <http://www.mohrss.gov.cn/page.do?pa=402880202405002801240882b84702d7&guid=e578e8be726c4689a32b91e8f7882a45&og=8a81f3f133d01e170133d36bed3c04d3>

<sup>13</sup> Wen Jiabao(March 5,2012), *Report on the Work of the Government*. Retrieved March 15,2012 from: [http://news.xinhuanet.com/english/china/2012-03/15/c\\_131469703.htm](http://news.xinhuanet.com/english/china/2012-03/15/c_131469703.htm)

in coverage what was ever available in Rural China in the past, but this system is still quite underdeveloped with respect to its design, structure, and implementation. Several challenges remain to be dealt with in the years ahead:

**Limited Coverage:** The “Full Coverage” goal will be realized with relative ease as it is being supported by the government. However, the term of “Full Coverage” just means that this program will be implemented in all rural counties and every farmer will be given access to system. It does not mean all farmers will participate in the system. As of the end of 2011, although more than 60% of rural counties were covered and 656 million people were living in rural China, only 241 million were participating in the NRP system, representing 48.2% of rural labor force.<sup>14</sup>

There are several factors impeding the extension of the NRP system. Firstly, there is a “bind policy” for those who are age eligible to receive a modest NRP pension without having contributed at all (or without having contributed the statutory 15 years), but this benefit is available only if their adult children are enrolled and contributing to the NRP system. This bind policy limits the pension eligibility for many rural elders, particularly the poorest of the rural elderly who are most in need of pension support. Their children tend to be very poor and as a result find it hard to come up with the modest contribution called for when enrolled in the NRP scheme.<sup>15</sup> Secondly, since there is a great deal of variation in conditions in different rural areas in China, in many of the poorest and most remote rural areas the administrative infrastructure necessary to adequately support the NRP scheme does not exist today and in some such infrastructure may not be in place for quite some time. Such conditions are likely to produce disincentives for those who could afford to contribute to do so.

Thirdly, there is a great deal of variation among rural areas with respect to the

<sup>14</sup> Ministry of Human Resources and Social Security.(MHRSS). “人力资源和社会保障事业发展统计公报”(Statistical Communiqué of Human Resource and Social Security), 2011 年度人力资源和社会保障事业发展统计公报, (Statistical Communiqué on Human Resources and Social Security Development), Retrieved July 14<sup>th</sup>, 2012 from

<http://www.mohrss.gov.cn/page.do?pa=402880202405002801240882b84702d7&guid=e578e8be726c4689a32b91e8f7882a45&og=8a81f3f133d01e170133d36bed3c04d3>

<sup>15</sup> South Daily, 多地新农保捆绑缴费: 子女不参保父母不能享受养老金(Binding contribution policy is widely implemented, and parents can't get pension benefit unless their adult children participate in the NRP systems), Retrieved July 14<sup>th</sup>, 2012 from <http://english.peopledaily.com.cn/90001/90776/90882/6546572.html>

prevalence and severity of poverty. In those with the most and the deepest poverty, it is likely that the rates of enrollment in this voluntary program are likely to be quite low for many years.<sup>16</sup>

***Inadequate benefit:*** The current basic pension benefit of 55 Yuan is too low and makes the system unattractive to many middle income and most high income farmers. According to the data of NBS, this benefit level is just about 29% of the official poverty line in rural areas, 9.45% of the average income in rural areas, and 3.59% of the average pension benefit of urban retirees in 2012.<sup>17</sup> Another fact is that most of the participants under NRP system select the minimal level (100 Yuan of contribution in one year) to contribute to their individual accounts. This is not going to generate much by way of pension credit even after contributing for a period of many years.

***Poor administration:*** The administrative infrastructure relating to contributions collected, benefits paid, and the record keeping with respect to both are relatively underdeveloped in most of rural areas, the shortage of service staff and inadequate financial skills are two of the most problematic issues. According a survey in Zhang Wu County in Liaoning province, there is only one agent in every village in charge of the administration of NRP program including being responsible the education of enrollees, accurately recording relevant information including monthly contributions made, and getting local farmers to enroll or remain enrolled in this voluntary program. On average, it takes about an hour for agents to enroll each farmer and as a result he or she will spend one year to register 1500 farmers even when they are all from the same village. In Zhang Wu County of Liaoning province there were twenty thousand workers to be enrolled in the NRP system and it took more than a year and a half to enroll all of them given the size of the staff charged with the task.<sup>18</sup>

Another difficulty is the poor state of the financial facilities and options available

<sup>16</sup> There were still 14.8 million absolute poverty people who have not solved food and clothes needs in rural China by 2008, and it is believed that they don't have the ability to contribute to NRP system. See People's Daily online, "China's rural population in absolute poverty falls to 14.79 million", Retrieved from <http://english.peopledaily.com.cn/90001/90776/90882/6546572.html>

<sup>17</sup> [http://www.tianshannet.com.cn/news/content/2012-01/20/content\\_6516497.htm](http://www.tianshannet.com.cn/news/content/2012-01/20/content_6516497.htm);  
[http://lrb.dayoo.com/html/2012-01/11/content\\_1585139.htm](http://lrb.dayoo.com/html/2012-01/11/content_1585139.htm)

<sup>18</sup> Wang Guohui, Chen Hongxia (2011). "Issues and Suggestions on the Administration of China's New Rural Pension System". *The World of Social Security Vol.11.2011*.



for the administration of the NRP program in rural areas. Currently, in most rural areas the only financial institution providing financial services that is available in most of the rural areas is the Rural Credit Cooperatives which typically are not staffed at a level that they can easily take on the added workload.

**Financial sustainability:** Some analysts have serious concerns about the financial sustainability of the NRP system.<sup>19</sup> One is the fiscal ability of local government to afford to fund its share of the “basic pension” benefits, especially for those local governments in poor rural areas. Another concern is the low rate of return that most contributing workers are earning on the participants’ voluntary funded individual accounts pension. Currently, these funds are being managed by county level administrative agencies and invested mainly in treasury bonds or CDs paying low rates of return. These low rates of return have adverse implications for the affordability and sustainability of future benefits.<sup>20</sup>

## 2. Pension Reform in Latin American Countries

During the past 30 years a very important and influential series of experiments in social security reform have been underway in Latin America. Since 1981, 12 countries in this region have shifted from old-age pension schemes based on pay-as-you-go (PAYG) defined benefit model to schemes based all or in part on the funded defined contribution model also referred to as the funded individual retirement accounts (IRAs) model, with Chile taking the lead in the development of this model.<sup>21</sup> Many nations around the world followed Latin America down this policy path during the late 20<sup>th</sup> century, but this trend has slowed somewhat due in part to the erratic performance of international financial markets during the first decade of 21st century, especially after the financial crisis that began in late 2007. The IRA schemes have had a number of benefits, but some of the vulnerabilities of the IRA have also come into

<sup>19</sup> Cai, Fang; Giles, John; O’Keefe, Philip; Wang, Dewen(2012). *The Elderly and Old Age Support in Rural China : Challenges and Prospects*, World Bank Publications, 2012; Shen, C., & Williamson, J. B. (2010). “China’s new rural pension scheme: Can it be improved?” *International Journal of Sociology and Social Policy*, 30(5/6), 239-250.

<sup>20</sup> Cai, Fang; Giles, John; O’Keefe, Philip; Wang, Dewen(2012). *The Elderly and Old Age Support in Rural China : Challenges and Prospects*, World Bank Publications, 2012.

<sup>21</sup> Gill, Indermit, Truman Packard and Juan Yermo(2005). *Keeping the Promise of Social Security in Latin America*. Washington, DC: World Bank and Stanford University Press; Kritzer, Barbara. 2005. “Individual Accounts in Other Countries.” *Social Security Bulletin* 66 (1) 31-7.

focus with the emergence of evidence of declining pension coverage, high administration cost, poor distribution function, and so on. In response to this evidence and these criticisms, in recent years there has been a second round of pension reforms initiated to strengthen the public component and address the problems created by individual accounts.<sup>22</sup>

One of the major challenges of IRA based pension schemes in Latin America countries is the issue of low coverage, particularly in rural regions. In 12 countries with the privatized system, pension coverage has generally declined or remained stagnant after the reform, despite promises at the outset that the IRA model would increase coverage. A recent survey shows that coverage levels among the elderly for contributory schemes is very low. Forty percent or less of the elderly currently receive IRA based pension benefits in most those countries.<sup>23</sup> This low coverage rate is particularly problematic for those living in rural areas. This includes the poorest and least educated workers.

Pension protection in Latin America also tends to be much less adequate in rural areas than in urban areas. Since pension benefits are closely tied to past contributions within a context of formal employment markets, it is not surprising that the focus has been on urban workers throughout most of Latin America. Most contributors to IRA pension schemes reside in urban areas, as labor markets are better organized in cities and government agencies have more enforcement power. In Table 2 we present coverage rates for the elderly broken down by urban vs. rural residence. These data show that in most of these countries there is a marked coverage gap between rural and urban residents.<sup>24</sup> On average, the pension coverage rate in rural areas is about two-thirds of what it is in urban areas for these 16 countries. However, such a coverage gap tends to be greater among those countries with less well developed social security system such as Bolivia, Dominican Republic, Honduras, Nicaragua

<sup>22</sup> Calvo, Esteban, Fabio M. Bertranou, and Evelina Bertranou. 2010. "Are Old-age Pension System Reforms Moving Away from Individual Retirement Accounts in Latin America?" *Journal of Social Policy* 39(2):223-234.

<sup>23</sup> R. Rofman, L. Lucchetti, G. Ourens(2008). "Pension Systems in Latin America: Concepts and Measurements of Coverage". World Bank.

<sup>24</sup> R. Rofman, L. Lucchetti, G. Ourens(2008). "Pension Systems in Latin America: Concepts and Measurements of Coverage". World Bank.

Panama, Paraguay, Peru, and El Salvador. It is also clear that pension coverage rate in urban areas are generally about twice as high as those in rural areas.

**Table 2 Pension Coverage Rates of the Elderly, by Region (%)**

Country (Year)	Contributors/Economically Active Population		Contributors/Employed Persons		Beneficiaries/ Population Age 65+	
Region(2006)	Rural	Urban	Rural	Urban	Rural	Urban
Bolivia(2004)	5.60	15.26	5.64	15.69	5.68	25.69
Brazil(2006)	21.71	53.41	22.24	58.00	90.65	84.21
Chile(2006)	53.36	63.85	55.96	68.76	46.87	64.59
Columbia(2006)	29.59	33.97	30.02	34.63	23.63	26.50
Costa Rica(2006)	58.42	65.14	60.76	67.57	29.62	48.41
Dominican Rep. (2006)	13.48	23.51	15.66	27.83	5.56	16.22
Ecuador(2006)	19.90	29.22	20.01	29.86	5.32	25.51
Guatemala(2006)	15.93	34.97	16.03	35.71	8.24	22.04
Honduras(2006)	7.43	31.96	7.56	33.41	0.98	10.23
Mexico(2006)	14.70	41.35	14.73	41.52	9.48	29.28
Nicaragua(2005)	6.53	26.07	6.66	27.46	--	--
Panama (2004)	29.33	52.09	32.38	65.72	18.42	57.69
Paraguay(2006)	5.28	17.80	5.44	19.25	4.17	22.03
Peru(2006)	3.34	19.40	3.38	20.81	5.69	40.15
El Salvador (2005)	15.08	36.19	16.05	38.78	5.23	22.26
Uruguay(2006)	69.71	60.51	72.46	66.92	80.48	85.88
Simple Average	23.02	37.79	24.06	40.75	22.67	38.71

Source: R. Rofman, L. Lucchetti, G. Ourens(2008). "Pension Systems in Latin America: Concepts and Measurements of Coverage". World Bank

Some if not much of the evidence from Latin America points to the limitations of attempting to extend pension coverage through funded defined contribution schemes. The approach is particularly inappropriate for workers in rural areas. Some analysts argue that non-contributory pensions make much better sense as instruments to increase overall social security coverage, particularly in rural areas. Non-contributory schemes, sometimes called tax financed pensions, have become an important option in Latin America not only for extending coverage, but also for reducing poverty.

Table 3 presents an overview of social pensions in 17 Latin American countries. Many of the structural reforms introduced during the 1990s have added a so-called

zero pillar to existing multi-pillar schemes. The focus of this new pillar is to provide some redistribution that is badly needed by those at the bottom of the income distribution. Most of the social pension plans in Latin America are means-tested or pension tested (i.e., means tested for pension income only) except for Bolivia which has a universal system. With respect to benefits, many of these programs provide quite generous benefits which range from 173% to 1286% of poverty line. The total cost of social pension is below 1% of GDP for most countries, except Bolivia which has a universal system.

**Table3 Social Pensions in Latin American Countries**

Country	Year introduced	US\$	% of GDP per capita	% of poverty line	Age	Targeting	% population 60+ covered	Total cost (% of GDP)
Argentina	<i>no data</i>	96	22	631	70	Means-tested	<i>no data</i>	0.23
Bahamas	<i>no data</i>	230	13	744	65	Pensions-tested	<i>no data</i>	<i>no data</i>
Barbados	<i>no data</i>	262	24	962	65.5	Pensions-tested	<i>no data</i>	<i>no data</i>
Belize	<i>no data</i>	51	15	248	67(M) 65 (W)	Means-tested	18%	0.18
Bolivia	1996	28	20	196	60	Universal	95%	1.09
Brazil	<i>no data</i>	286	34	823	60(M) 55(W)	Tested on agricultural or subsistence production.	<i>no data</i>	0.80
Brazil	<i>no data</i>	286	34	823	65	Means-tested	<i>no data</i>	0.20
Chile	<i>no data</i>	143	18	569	65	Means-tested	<i>no data</i>	0.38
Costa Rica	<i>no data</i>	93	20	450	65	Means-tested	<i>no data</i>	0.18
Dominican republic	<i>no data</i>	43	11	200	60	Means-tested	<i>no data</i>	<i>no data</i>
Ecuador	<i>no data</i>	35	10	173	65	Means-tested	30%	0.27
El Salvador	<i>no data</i>	50	16	264	70	Means-tested	<i>no data</i>	<i>no data</i>
Mexico <sup>25</sup>	2003	66	8	261	70	Universal (Mexico city)	45%	0.04
Mexico	2010	40	5	159	70	Universal(small towns/rural)	<i>no data</i>	0.11
Paraguay	<i>no data</i>	<i>no data</i>	<i>no data</i>	<i>no data</i>	65	Means-tested	<i>no data</i>	<i>no data</i>

<sup>25</sup> Since February of 2001 the municipal government of Mexico City has provided all residents 70 years of age and older with free medical care, free public transportation, and a modest pension equal to one-half the minimum wage. The only condition of eligibility, other than age, is that an applicant must reside in the city for at least three years prior to commencement of the benefit.

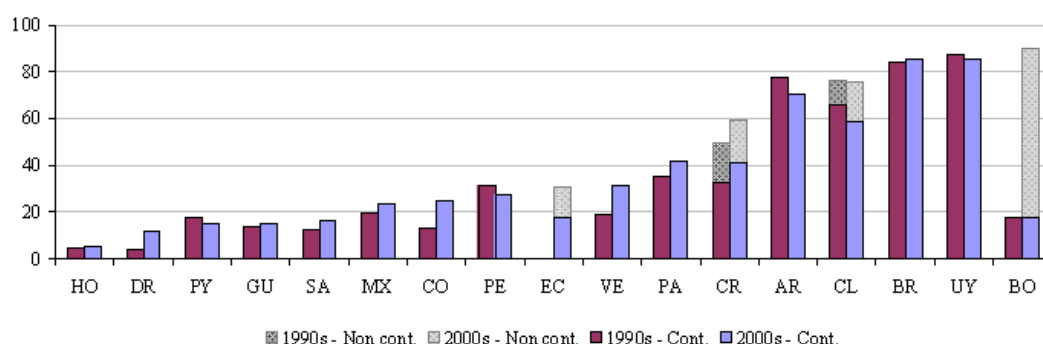
Trinidad and Tobago	<i>no data</i>	396	<i>no data</i>	1286	65	Means-tested	<i>no data</i>	<i>no data</i>
Uruguay	<i>no data</i>	149	21	519	70	Means-tested	<i>no data</i>	<i>no data</i>

Source: Pension Watch Database. Retrieved March 15, 2012 from:

<http://www.pension-watch.net/about-social-pensions/about-social-pensions/social-pensions-database/>.

Data available from a recent World Bank survey suggests that non-contributory pensions make a substantial contribution to coverage in some countries (see Figure 1). Four countries (Chile, Argentina, Uruguay, and Brazil) have substantially higher coverage rates, at 60% or higher. In Bolivia, Ecuador, Chile and Costa Rica, those who receive only non-contributory benefits represent 58%, 17%, 14% and 21% of the elderly, respectively.<sup>26</sup> Uruguay and Argentina have small non-contributory benefits that cover some poor individuals aged 70 or more who do not qualify for contributory retirement benefits. In Brazil, there is a large quasi-non contributory system that covers rural workers. Other countries, like Mexico, have some non-contributory schemes at the sub national level.

**Figure 1 Pension Coverage Rates of the Elderly in Latin America, by Region**



Source: R. Rofman, L. Lucchetti, G. Ourens(2008). Pension Systems in Latin America: Concepts and Measurements of Coverage. World Bank.

Notes: The lighter section of the bars represents beneficiaries that receive only non-contributory pensions.

Brazil provides a particularly useful example case for the viability social pension schemes for rural Latin America. In Brazil the rural population has almost universal access to pension benefits of some sort, at not only at family level, but also the individual level (see Table 4). This has not been easy to achieve given that: (1) rural

<sup>26</sup> R. Rofman, L. Lucchetti, G. Ourens(2008). "Pension Systems in Latin America: Concepts and Measurements of Coverage". World Bank.

workers are dispersed throughout this geographically very large country, (2) many of them are employed in season jobs, (3) the prevalence non-monetary exchanges, and (4) archaic modes and informal ties. At least limited provision of non-contributory social pensions for workers in the rural sector can be traced back to 1963 in Brazil, but the entitlements were restricted to the very old. The scheme was gradually augmented during the 1970s, in response to mobilizations of rural workers and pressures for land reform. The 1988 Constitution recognized the right to social protection for workers in the rural sector, and especially for those in informal employment. This led to a range of reforms which were implemented in 1991. First, the age of pension eligibility was reduced from 65 years of age to 60 for men and 55 for women. Entitlement to old age, disability and survivor pensions was extended to workers in subsistence activities in agriculture, fishing and mining, and to those in informal employment. Whereas prior to 1991 only heads of household were entitled to a pension, the reforms extended entitlement to all qualifying workers, thus expanding coverage to female rural workers who were not heads of household. A key aspect of the program is that access to pension entitlements does not require earnings or inactivity tests. Benefits are not linked in any way to past contributions, but defined in relation with the minimum wage, and the system is heavily subsidized. The value of the pension benefits was raised from 50 to 100 percent of the minimum wage.<sup>27</sup>

**Table 4 Pension Coverage of the Elders in Brazil, by Region 1992-2006**

Year	Contributors/Economic ally Active Population %	Contributors/ Economically Active Population %	Beneficiaries/ Population Age 65+ %	Beneficiaries/ Population Age 65+ %
	Rural	Urban	Rural	Urban
1992	15.91	55.12	80.56	80.85
1993	16.80	54.19	87.55	82.34
1995	16.74	56.57	88.42	82.87
1996	19.15	55.74	88.77	83.33
1997	17.96	56.07	89.79	82.73
1998	3.48	21.74	89.83	83.82
1999	19.77	55.07	89.82	84.73

<sup>27</sup> Kaizo I. Beltrao, Sonoe S. Pinheiro, F. E. B. d. Francisco(2004). "Rural population and social security in Brazil: An analysis with emphasis on constitutional changes". *International Social Security Review*, Vol. 57, No. 4., 19

2001	17.64	50.49	92.04	84.62
2002	17.31	49.94	92.13	85.56
2003	18.33	50.51	93.49	86.06
2004	19.08	51.49	92.32	85.52
2006	21.71	53.41	90.65	84.21

Source: R. Rofman, L. Lucchetti, G. Ourens(2008). "Pension Systems in Latin America: Concepts and Measurements of Coverage". World Bank.

Bolivia is the only country in Latin America which has a near universal non-contributory scheme (BONOSOL). It covers almost 75% of the population in a very egalitarian way. Following the Chile model, in 1996 Bolivia launched a pension reform package in which a universal social pension scheme was included as a compensation benefit for the workers participating in individual account system. As a result, each resident citizen aged 65 years or older was entitled an annual pension known as Bono Solidario, or Bonosol. Since its' implementation in 1997, Bonosol had become a very popular social welfare scheme in Bolivia. The inclusion of Bonosol beneficiaries has a major impact on pension coverage, given that this program is almost universal. Coverage for persons over the age of 65 rose from 14.7% to about 72% in 2002. Since no incompatibilities exist between the contributive and non-contributive approaches, almost 80% of retirees also receive the Bonosol.<sup>28</sup>

Although the benefit level of this program had been adjusted several times for political reasons, both the coverage rate and the aggregate amount transferred generally increased between 1998 and 2004 (see Table 5). In January 2008, the Bonosol was replaced by the Renta Dignidad which pays about Bs200 (US\$25) to all Bolivians over 60 years of age. In 2008, 59% of older people in Bolivia were living on less than US\$1 a day. A recent survey found that for 50% of recipients of the Bonosol, it was their only source of income.<sup>29</sup>

**Table 5 Bolivia: BONOSOL Payments, 1997-2004**

Year	Target Population	Beneficiaries (thousands)	Individual Payment		Total Transfer	
			(US\$)	(% of per	(million	(% of

<sup>28</sup> Rafael Rofman (2005). "Social Security Coverage in Latin America". World Bank.

<sup>29</sup> Global Aging Website, Retrieved March 20<sup>th</sup>, 2012  
<http://www.globalaging.org/pension/world/2008/pensionsbolivia.htm>

	(thousands)			capita GDP)	US\$)	GDP)
1997	324	364 261	248	24.4	90.3	1.1
1998	335	318 544	60	5.6	19.1	0.2
1999	346	340 420	60	5.9	20.4	0.2
2000	357	334 411	60	5.9	20.1	0.2
2001	369	351 206	60	6.3	21.1	0.3
2002	381	-	0		-	-
2003	392	411 063	229	25.6	94.3	1.2
2004	404	410 024	227	24.0	92.9	1.1

Source: Larry Willmore (2006). "Non-Contributory Pensions: Bolivia and Antigua in an International Context", CEPAL.

### 3. Lessons for China Based on Evidence from Several Latin American Countries (LACs)

In this section we ask whether or not there are potential lessons for China based on the experience of one or more of the Latin American countries. Any such effort is necessarily highly tentative as there are many differences between China and various Latin American countries. What is working well in one or more of the Latin American countries, may not work well in China; but evidence as to what is working well or not working well in China is evidence that Chinese policymakers will want to evaluate when reforming Chinese pension policy in the decades ahead.

**Lesson 1: There is much evidence from various LACs that the introduction of an IRA scheme does not tend to increase coverage rates for countries that already have pay-as-you defined benefit schemes in place.** In the 12 Latin American countries listed in Table 6 it is clear that during the early years when the IRA schemes were first introduced up through 2002, the fraction of the population covered in the country as a whole either declined or was relatively stagnant. The promise had been made by some proponents of privatization that the introduction of funded individual accounts would provide an economic incentive leading to increased participation and coverage. This was not true overall and certainly was not true in rural areas. This is a potentially important lesson for those in China who favor the introduction of IRA accounts as part of the NRP scheme.

**Lesson 2: In most LACs there is a substantial coverage gap between urban**



and rural regions. This has long been an issue for China and the evidence from Latin American does not suggest that it is going to be easy to close this gap, particularly with a scheme that includes a mandatory contributory pillar, but no social pension. This lesson is consistent with evidence of an unwillingness of many rural Chinese residents to participate in a scheme that includes a mandatory contributory component.

**Lesson 3: Non-contributory programs (pillars or components) play an important role in several Latin American pension schemes.** They play a particularly important role in reducing poverty levels (See Table 7). Among the most relevant countries in Latin America are: Argentina, Brazil, Bolivia, Chile, and Cost Rica. There is every reason to believe similar schemes could be used to greatly reduce poverty rates in China, including rural China. While the current NRP scheme in China does include a variant of the social pension for retirement age rural residents, it requires contributions from the pensioner's the adult children, who in many cases are too poor or for other reasons unwilling to contribute. When this happens the elder parent is not eligible for the social pension benefit.

**Table 6 Pension Coverage in LAC Countries**

Countries	Year of reform	Before reform, Contributors/ labor force %	Year of 2002 Contributors/ labor force %	Poverty rates
Chile	1980	64	58	21
Bolivia	1996	12	11	61
Mexico	1997	37	30	41
El Salvador	1996	26	19	50
Dominica Republic	2000	30	—	30
Nicaragua	2002	16	16	68
Peru	1993	31	11	48
Colombia	1993	32	24	55
Argentina	1994	50	24 c	25
Uruguay	1997	73	60 d	10
Costa Rica	2000	53	48 e	21
Ecuador	2002	21	21	61
Simple average		38	27	42

Source: Carolin A, Crabbe, A Quarter Century of Pension Reform in Latin America and the Caribbean: Lessons Learned and Next Steps, Inter-American Development Bank 2005.

**Table 7 Impact of Social Pensions on Poverty Rates in Several LACs**

countries	Destitution (extreme poverty)%			Poverty%		
	With Pension	Without Pension	Reduction in Incidence	With Pension	Without Pension	Reduction in Incidence
Argentina (1997)	10.0	30.4	67.1	39.1	56.5	30.8
Brazil (1999)	1.2	26.6	95.5	4.6	6.5	29.2
Costa Rica(2000)	32.0	40.7	21.4	18.7	24.7	24.3
Chile(1990)	12.8	20.3	37.1	25.0	27.5	9.2
Chile(2000)	3.7	12.0	69.0	13.0	16.1	18.7

Source: Fabio M. Bertranou, Wouter van Ginneken and Carmen Solorio, "The Impact of Tax-Financed Pensions on Poverty Reduction in Latin America: Evidence from Argentina, Brazil, Chile, Costa Rica and Uruguay", International Social Security Review, Vol. 57, 4/2004.

#### 4. Suggestions for Reforming China's NRP Scheme

Drawing in part on lessons from Latin America and in part on lessons from a few other countries around the world, particularly those that have introduced notional defined contribution (NDC) schemes, in this section we present some suggestions for rural China. Our goal is to help respond to some of the limitations that are emerging in the NRP scheme currently being implemented in China.

As outlined earlier, the Chinese NRP is a voluntary pension scheme that includes a basic non-contributory pillar plus a contributory funded defined contribution (FDC) pillar. This scheme can be regarded as a quasi-mandatory contribution pension scheme. There is no question as to whether this new scheme represents an improvement over what has previously been in place for the rural population in China.

The reason for this is that to this point there has been almost no old-age pension coverage for the rural population. Old-age security was for almost all rural residents as it had been for centuries, almost exclusively the responsibility of the family. The NRP scheme is already reaching hundreds of thousands of rural residents and it is delivering pension benefits to tens of millions of rural residents, but it is also a scheme that would benefit from further reform. In this section our goal is to lay out some suggestions that we believe could, with further development, serve as a starting point for a number of potentially useful reforms. One of our major proposals is to shift

from the current structure of the NRP to an alternative based largely on a social pension along the lines of what can be found in several Latin American countries and a few African countries such as South Africa and Namibia<sup>30</sup>. Our proposal is that China's current two pillar NRP scheme be reformed by changing the current basic pension pillar (which amounts to a conditional social pension) into a true noncontributory social pension pillar. This leaves open the question as to whether this will be universal pension or in some way conditional as with a means test. We would argue in favor of there being no means test making it a true universal social pension as found in Bolivia and in Namibia. It would also make sense to consider a shift to a means-tested social pension along the lines of what is in place in Chile and several other Latin American countries as well as South Africa today. Such reconsideration would be in order at some future point in time when poverty rates in rural China become much lower than they are today.

#### **4.1 Social Pension Design**

There are three questions that need to be addressed in connection with the proposal to introduce a universal social pension pillar for rural China. The first question is should a universal old-age social pension program be introduced or expanded. According to some World Bank experts,<sup>31</sup> the answer to this question should take into consideration at least three criteria – (a) the current pervasiveness of social assistance programs for elders, (b) poverty rates for the elderly relative to other age groups, and (c) coverage of mandated schemes.<sup>32</sup> Herein we check these criteria for the case of China. First, currently very few of the rural elderly poor are being supported by any form of social assistance and when they do get such assistance it is very minimal. This supports the case for introducing a universal social pension. Secondly, poverty rates among the rural elderly tend to be higher than those of other groups in rural areas and they are higher than for urban elders. This too contributes to

<sup>30</sup> Johnson, Jessica K. M. and John B. Williamson. 2006. "Do Universal Non-Contributory Old-Age Pensions Make Sense for Rural Areas in Low-Income Nations?" *International Social Security Review* 59 (4): 47-65.

<sup>31</sup> Robert Holzmann, David A. Robalino, and Noriyuki Takayama (2009). *Closing the Coverage Gap: the Role of Social Pensions and Other Retirement Income Transfers*. World Bank.

<sup>32</sup> Robert Holzmann, David A. Robalino, and Noriyuki Takayama (2009). *Closing the Coverage Gap: the Role of Social Pensions and Other Retirement Income Transfers*. World Bank.

the case for introducing a universal social pension for rural elders. Finally, the lower the coverage of mandated schemes, the stronger is the argument for core social pensions. Coverage of mandated old-age security schemes in rural China is all but nonexistent because the current NRP scheme is voluntary.

The second question that needs to be addressed is what role the social pension pillar would play as part of China's overall pension system. The criteria we have already discussed do not directly address the issue of how large or small a social pension program should be. The main consideration when determining whether it should be a major part of the pension system or a modest supplement is the current and projected future limits on what the country can afford to spent on social welfare programs and the tradeoffs involved when making a choice between a modest as opposed to generous universal social pension scheme. The cost of any such scheme would vary depending on choices with respect to eligible age, benefit level, the old-age dependency ratio, urbanization trends, and other such factors.

In China a new pension scheme has recently been introduced to cover many elders that are not eligible for pension benefits under the main existing contributory urban pension scheme. This new urban scheme has a structure in some ways similar to NRP system. For this reason it would make sense to consider developing a universal social pension covering both rural and urban elders. Assuming an average benefit level of 100 Yuan per month for all elders aged at 60 and above in both rural and urban areas, the overall expenditure would have been approximately 0.11 per cent of GDP in 2010, rising to 0.31 per cent of GDP in 2040.<sup>33</sup> The cost of this country wide urban-rural social pension could be viewed as a replacement for the current subsidies that are being made to the urban pension system. In 2010, the subsidies taken from general revenue in order to balance the urban pension system came to 0.49 per cent of GDP.<sup>34</sup> Thus, a social pension expenditure of less than 1 per cent of GDP would represent a pragmatic decision, as it would not amount to a major additional burden on general

<sup>33</sup> World Bank. 2010. "China a Vision for Pension Policy Reform. Volume II: Technical Annexes". World Bank. Washington, DC.

<sup>34</sup> MOHRSS. 2010. *China Human Resource and Social Security Statistics Yearbook 2010*, Ministry of Human Resources and Social Security, Beijing. <http://www.mohrss.gov.cn/>, accessed on 11 October 2011.

revenues.

The third question is how to structure a social pension for rural China. The social pension that makes the most sense based on our analysis is a variant of the basic benefit provisions embodied in the current NRP plan, but without the current requirement that the recipient's adult children be contributing to the funded component of this voluntary scheme. The objective of the proposed social pension is to ensure at least a basic subsistence pension for those rural elders who are not eligible for a larger pension from some other source, for example, a pension due based on prior coverage by the urban pension scheme. The existing monthly flat benefit of 55 Yuan is far too low, but it might be necessary to start at that level. Over time as the country's fiscal situation improves, the plan could be to keep increasing this flat-rate pension until it reaches at least the urban poverty line. In addition social pension benefits would have uniform design parameters nationwide, although benefit levels would reflect local characteristics (see table 10).

**Table10 Proposed Parameters for Social Pension**

<b>Applicability</b>	·All rural residents age 60 and over.
<b>Recipients</b>	·Rural elderly that apply and have no pension income
<b>Benefit level</b>	·Minimum benefit: percentage of regional average wage or per capita income. ·Minimum benefit above <i>Dibao</i> <sup>35</sup> standard.
<b>Financing</b>	·No contribution from individuals ·Financed from general revenues ·Shared responsibility between central and sub-national governments.

Source: The Authors.

## 4.2 MDC Scheme Design

In the reform of the NRP that we would propose the current voluntary contributory defined contribution component would be replaced by a voluntary Matching Defined contribution (MDC) scheme. But how do you get poor rural workers to contribute to a voluntary scheme that they will not benefit from for many years and may never live long enough to become eligible for a pension? Many analysts would say poor rural workers are not going to contribute to a voluntary

<sup>35</sup> A means-tested welfare benefit for the poor whose income is below the minimum living cost standard.

old-age pension scheme, but the evidence from rural China today suggests that many Chinese workers can be convinced to voluntarily enrol in such a scheme if given the right incentive for doing so. Currently a major incentive for enrolling and contributing is that doing so makes their retirement age parents eligible for a pension. What we take away from this evidence is that with an adequate incentive many poor rural workers do contribute.

Another and more feasible option might be to provide some matching funds financed by the government making it a Matching Defined Contribution (MDC) scheme. It is likely that any such incentives would be quite modest and as a result in many of the poorest communities very few rural workers would elect to contribute. But over time as rural China becomes more affluent and as evidence accumulates that such contributions do lead to substantially higher retirement pensions, it is reasonable to assume that participation rates would gradually increase. This would mean that over the first few years the rural pension scheme would be primarily a social pension scheme which will be popular and help build support for the overall approach that is being proposed.

The MDC model has attributes that make it attractive for workers in rural areas of developing countries. It does not require a defined wage, is portable across sectors, is flexible with regard to contribution timing, and it allows a transparent and targeted subsidy to encourage voluntary participation. Concerns about investment risk and provision of ancillary insurance can be addressed with relative ease. Examples of MDCs that are already in operation include a new scheme for informal sector workers recently introduced in two Indian states, Rajasthan and Madhya Pradesh. (The state of Andhra Pradesh plans to introduce such a scheme in 2009.) Legislation introducing MDC schemes has been passed in the Dominican Republic, Indonesia, and Vietnam.<sup>36</sup> In some Latin American countries, programs have been introduced that are similar in design to the MDCs in that subsidy are made on contributions from employees. In Mexico workers who participate in the funded system could get a public subsidy

<sup>36</sup> Robert Holzmann, David A. Robalino, and Noriyuki Takayama (2009). *Closing the Coverage Gap: the Role of Social Pensions and Other Retirement Income Transfers*. World Bank.

equivalent to 5.5 percent of the minimum wage in January 1997, indexed to the consumer price index; Self-employed workers who contribute to the new mandatory funded system in the Dominican Republic will also receive a public subsidy. In Colombia another form of account subsidy has been introduced in a solidarity tax on affiliates with higher incomes.<sup>37</sup>

China has already used the MDC mechanism both in the NRP system and in some pension pilot programs for urban residents. Generally, the matching contribution (currently about 30 Yuan per year) is for the individual worker and comes from local the government. Affluent and fiscally sound local governments are urged to provide more matching funds. Since the matching benefit is very small and is not mandatory, this policy does not seem to help increase the rate of participation or the average amount workers contributed. Most of those who are contributing in connection with the voluntary NRP scheme select the minimum allowed contribution level of 100 Yuan per year. Therefore, we suggest a stronger and more defined MDC system based on current policy be implemented in NRP system.

An MDC scheme has several advantages over typical funded defined contribution IRA schemes. Specifically, the model allows flexibility in both the frequency and the level of contributions. It is also portable between sectors and occupations. An important application of this portability is rural- urban migration. In China, many workers move from the countryside to cities, spending part of their working lives in one or the other place. Rural MDCs in China could, in principle, be carried to urban areas. In many of these urban areas there is already a similar scheme in place for those who are not eligible for the main urban pension scheme.

In terms of design, MDCs are voluntary and they could be structured to be funded defined contribution IRA accounts or to be financed on a pay-as-you-go basis with notional credit (with annual credit added based on wage trends) for contributions made. Given the poor capital market and underdeveloped facilities in most rural counties, we would recommend adopting the Notional Defined Contribution (NDC)

<sup>37</sup> Gill Indermit S, Packard Truman G and Yermo Juan(2005), *Keeping the Promise of Social Security in Latin America*, World Bank Publication.

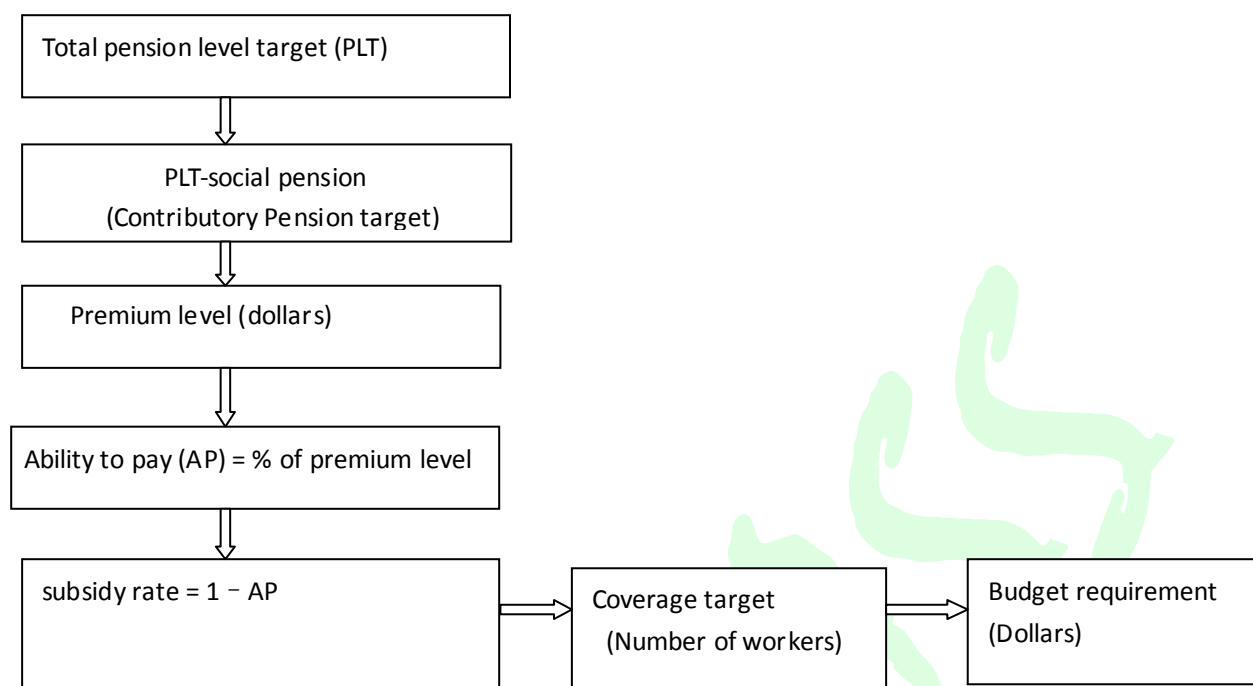
variant of the MDC model as the primary alternative for building credit. However, it might make sense to give rural workers a choice between two variants the MDC one based on the NDC model (which would not be much less vulnerable to fluctuations in financial markets) and another based on the funded defined contribution IRA alternative currently in place in many developing countries around the world. This second alternative would offer the opportunity for higher returns, but also involve exposure to swings in financial markets. For the funded IRA option pension funds accumulated funded in individual accounts could be administrated by at the county or provincial level, and then be pooled by an administrative agency set up by the central government.

Under an MDC system, workers would contribute a flat rate, as opposed to a percentage of earnings, and it could be designed to allow flexible contribution schedules. To create incentives to enroll, the government could match contributions up to a specified level maximum level capital which can be set on the basis of reported earnings or proxy means tests. The MDC approach is relatively new but is being explored in a number of countries. Most OECD countries provide incentives of at least 10 percent of contributions—the average is around 20 percent—although this provision is made through tax deductions for employers on such contributions. A noteworthy example comes from the Indian states of Rajasthan and Madhya Pradesh, both of which have MDC pension schemes for certain categories of informal sector workers. The schemes provide a one-to-one match on contributions from the state governments.<sup>38</sup> Since there is a strong saving and thrift culture in rural China (maybe stronger than urban areas), it is convinced a good MDC design would greatly promote pension contribution in rural areas.

<sup>38</sup> Robert Holzmann, David A. Robalino, and Noriyuki Takayama (2009). *Closing the Coverage Gap: the Role of Social Pensions and Other Retirement Income Transfers*. World Bank



**Figure 6 Steps in Determining the Parameters and Costs of the MDC system**



Source: Robert Holzmann, David A. Robalino, and Noriyuki Takayama (2009). *Closing the Coverage Gap: the Role of Social Pensions and Other Retirement Income Transfers*. World Bank; The Authors.

There are five steps to finish this process as shown in figure 6. First, the pension target benefit level would involve a payout as a lump sum or as a stream of payments to cover up to at least 100 percent of the poverty line in rural China. Second, by deducting the social pension benefits from total pension target, the pension target for the contributory part is determined. Thirdly, the premium level for contribution is derived through the simulations of based on assumptions about rates of return on investments and annuity rates. Fourth, we can now calculate the contribution rate required to reach this target. Five, the final step in this process is to determine the subsidy which involves first assessing the ability to pay, to determine the subsidy for the premium. The budget requirement for the MDC program then will be a function of the total potential pool of participants, the amount of the matching contribution, and the take up rate.

In sum, we recommend combining MDCs with social pensions in the context of a long- term policy strategy for expanding coverage and preventing old- age poverty in rural China. In essence, poverty among the elderly over the short run would be

prevented through social pensions, and for the future elderly through MDCs. This integrated policy approach could significantly reduce the financial burden of population aging and provide a basic pension protection for rural China.

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