Longevity Insurance Annuities for Public Pension Reform: International Lessons

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Longevity insurance annuities are deferred annuities that begin payment at advanced older ages, such as at age 82. These annuities would benefit some older retirees, particularly in countries with modest social security public pension benefits, but the private sector has problems in providing them, particularly when they must be provided on a unisex basis. Originally, public social security program in a number of countries were structured as a longevity insurance program, with roughly 50 percent of those entering the workforce surviving to receive the benefits because of relatively high benefit eligibility ages. Over time, however, as life expectancy has improved, the benefits these programs provide have slowly transformed into benefits that most people entering the work force ultimately receive. This paper argues that reintroduction of a longevity insurance benefit as part of social security public pension programs could be an important policy in particular because this benefit is generally not provided by the private sector. Ireland and China have introduced longevity insurance benefits as part of their social security systems, providing examples of how such a program could be structured. The paper analyzes the functioning of these programs in Ireland and China.

People with low Social Security benefits who are in their 80s and older are economically vulnerable. At that age, few are able to offset their low benefits by working. They may have used up their retirement assets other than their public pension (social security) benefit, and they may have increased expenses due to increased need for medical care. As a matter of national policy, it is desirable that people in this age group are able to live with sufficient resources to

enjoy the last years of their lives with dignity. Social Security provides a guaranteed lifetime benefit, but it is insufficient for most people to maintain their pre-retirement standard of living. As people grow older, especially for those living past their life expectancy and for those relying on 401(k) plans, they risk having exhausted their sources of income other than Social Security.

Longevity insurance is one way to address the income needs of older people who have lived longer than they expected, and have used up their retirement savings other than their Social Security benefit. While all annuities provide retirees a degree of longevity insurance, in recent years the term longevity insurance has been used to refer to a particular type of deferred annuity. Longevity insurance is a deferred annuity that starts at an advanced age, such as age 82. Longevity insurance annuities, an idea advanced by Milevsky (2005), provide insurance against outliving ones assets, but only when that risk becomes substantial at advanced ages.

This article proposes that longevity insurance should be added as a form of benefit provided by Social Security. It builds on a previous literature analyzing various aspects of longevity insurance in the private sector and for Social Security (Webb et al. 2007, Iwry and Turner 2009, Blake and Turner 2011; Turner 2011, 2013; Turner and McCarthy 2013, Chen and Turner 2015). This type of benefit would be particularly valuable as a part of a reform package that included benefit cuts. A social safety net benefit would be needed to offset the effects of Social Security benefit cuts on older retirees.

The target population for this Social Security reform proposal is people age 82 or older. Age 82 is chosen as approximately the life expectancy at age 62 (Arias 2014). Women outnumber men by roughly two to one in this age group (U.S. Census Bureau 2003). In part because of improvements in life expectancy, this age group is growing rapidly.

This paper first discusses the increase in poverty at older ages. Second, it describes longevity insurance annuities. Third, it documents the role of longevity insurance in the early history of Social Security, a role that has been largely overlooked in previous descriptions of the early history of Social Security in the United States. Fourth, it describes problems with the provision of longevity insurance by the private sector. Fifth, it compares the provision of longevity insurance in the private sector to its provision in the public sector, indicating advantages of providing longevity insurance benefits through Social Security rather than through the private sector. Sixth, the paper discusses government provided longevity insurance benefits in Ireland and China. Seventh, it presents an example of a proposal for such a program as part of Social Security. Eighth, it offers concluding comments.

An Increasing Risk of Poverty at Older Ages

Poverty in the United States is high among people age 80 and older-- a third higher than for people age 65-69. Poverty is particularly a problem for older women. Women age 80 and older had a poverty rate of 13.9 percent in 2012, and 22.8 percent had income below 125 percent of the poverty line, compared to 8.9 percent and 13.0 percent for women age 65 to 69, indicating a 56.2 percent increase (5.0 percentage points) in the poverty rate for older women (Social Security Administration 2014). A reason for the increase in poverty is that people at older ages tend to rely on Social Security for an increasing proportion of their retirement income. That increase occurs because of a decline in the importance of other sources of retirement income.

These figures imperfectly measure how poverty rates increase as people age. Due to the greater mortality risk of low-income persons, these figures understate the percentage of older women who have fallen into poverty. For example, a recent study of mortality of males finds that at ages 63 to 71, the higher is lifetime income, at least up to a fairly high level, the lower is mortality risk (Waldron 2013).

People aged 65 and older are at risk of having fallen into poverty even though they had not been in poverty earlier in life. They have greater difficulty leaving poverty than people at younger ages (Lee and Shaw 2008).

Longevity Insurance

Longevity insurance is a deferred annuity that starts at an advanced age, such as 82. Adding longevity insurance to Social Security would address the problem of people falling into poverty at advanced older ages. It would provide cost effective social insurance. While all annuities provide a degree of longevity insurance, in recent years the term has been used to refer to a deferred annuity received at age 80 or older.

This insurance is similar to buying car or home insurance with a large deductible, which optimally deals with catastrophic risk. By analogy, longevity insurance provides insurance against outliving ones assets, but only when that risk becomes substantial at advanced ages (Milevsky 2005).

With a longevity insurance benefit, the problem of asset decumulation with uncertain life expectancy is simplified. Instead of planning for an uncertain period, retirees can plan for the fixed period from the date of their retirement to the date at which they start receiving the longevity insurance benefit. Technically, longevity insurance changes their planning problem from one with a stochastic end point (date of death) to one with a deterministic end point (the date at which longevity insurance begins providing benefits).

Longevity Insurance in the Historical Development of Social Security

In 1940, when benefits were first provided in the United States, the benefit eligibility age was 65. Taking into account that people entered the workforce at earlier ages than currently, from U.S. life tables for 1910 for the population age 18 that year, 54 percent of the population would still be alive at age 65 (Glover 1921). Thus, the U.S. data suggest that slightly more than half of those entering the workforce survived to receive benefits in the early years of Social Security.

Over time, three changes have fundamentally altered the nature of the old-age benefits that Social Security provides. First, the benefit eligibility age has been lowered to age 62. Second, life expectancy has increased. Third, the average age at which workers enter the labor force has increased. With these three changes, the United States Social Security has transitioned from a longevity insurance program to a program providing old-age benefits for a substantial proportion of the population that entered the workforce in their youth. Now, 87.8 percent of those age 20 survive to age 62. By comparison, the percentage age 18 still alive at age 65 is 81.1 percent (Arias 2014), so most of the difference is due to improvements in life expectancy, rather than delayed entry into the labor force or the reduction in the benefit eligibility age.

Longevity Insurance in the Private Sector

Most U.S. life insurance companies do not offer longevity insurance annuities. Recently, however, an increasing number of companies have started offering deferred annuities. Longevity insurance annuities are a type of deferred annuity. Symetra began selling longevity insurance annuities in 2008, while Northwestern Mutual began in 2011 (Tergesen 2012). Five companies began offering deferred annuities in 2013, and by midyear 2014 an additional three companies began offering them (LIMRA 2014). New York Life is the largest seller of this type of annuity in the United States. In 2011, it launched its Guaranteed Future Income Annuity (New York Life 2011). This annuity product provides deferred annuities that start at retirement ages, such as age 62, but it can also be used to provide a longevity insurance annuity starting, for example, at age 82. However, only 4 percent of the people making purchases outside of pension plans of these annuities through New York Life purchase an annuity that is solely a longevity insurance annuity. Most purchase such annuities that also provide death benefits (New York Life 2012).

Consumer Reports, a private sector, consumer-oriented organization, surveyed five life insurance companies and found that the annuity benefits for a hypothetical man age 65, collecting benefits at age 85, varied considerably (Fichera 2013). For a purchase of $100,000, the benefits ranged from $36,305 to $62,950, with the highest being 74 percent higher than the lowest. This large range suggests that the market for longevity insurance annuities is not functioning well.

Annuities provided through employer-provided retirement plans in the United States and the European Union must calculate benefits on a unisex basis. Because of the longer longevity of women, annuities provided outside of pension plans are generally provided on a gender specific basis. Thus, employer-sponsored pension plans are required to use the same mortality rates for men and women, despite the fact that women at typical retirement ages on average live about three years longer than men in the United States (Arias 2014).

The gender difference in life expectancy is considerably greater at older ages. The U.S. life tables for 2009 show that women age 62 are 35 percent more likely than men that age to survive to age 85 (Arias 2014). At age 85, women's life expectancy is 17 percent longer than that of men. Thus, when priced using gender-based mortality rates, women's single life longevity insurance annuities purchased at age 62 and beginning payments at age 85 would cost considerably more than those for men, perhaps as much as 50 percent more. Thus unisex longevity insurance annuities provided by pension plans would not be a good deal for men (Turner and McCarthy 2013).

Problems with the provision of longevity insurance annuities in the private sector, compared to universal provision through social insurance old-age benefit programs, also include that adverse selection may be more of an issue in that they presumably would only be purchased by people with really long life expectancies. Also, potential purchasers may be concerned with the risk of life insurance company insolvency over a long time period, with government reinsurance not providing adequate protection, a concern that may be overstated. New York Life (2012) in the United States expressed the opinion that pure longevity insurance annuities would have limited appeal, but that those annuities combined with another benefit payment feature, in particular a death benefit, would be marketable. While such a benefit would reduce the annuity income provided by the annuity, it would nonetheless provide some longevity insurance benefits.

Longevity Insurance Annuities Provided by Government

The government has several advantages over the private sector in providing longevity insurance annuities. First, it is able to limit its liability against the possibility of an unexpected improvement in life expectancy by indexing to life expectancy improvements the age of eligibility for benefit receipt. While the private sector could do this prospectively for new clients, the government is able to do this for people nearing the age of entitlement for the benefit. For example, adjustments to benefit generosity are made at retirement age in Sweden for immediate annuities received at traditional retirement ages. Since this adjustment is known in advance, and it is made in small increments, it involves little risk or uncertainty for participants.

Second, the government has a hedge against increases in the liability due to unexpectedly large improvements in life expectancy to the extent that people work longer (and pay more taxes) due to improvements in health at older ages or due to raising the eligibility age for Social Security benefits. Currently, no asset exists for the private sector to invest in that provides a full hedge against unexpected improvements in life expectancy.

Third, the government does not have to deal with adverse selection because it provides the benefit to a pre-selected group. In the private sector, insurance companies would provide longevity insurance to people who self-select, in part based on their subjective expectation of long life expectancy.

Longevity Insurance Annuities in Ireland and China

This section discusses the provision of longevity insurance benefits for older persons through government programs in Ireland and China. These programs provide possible models for the United States.

Ireland

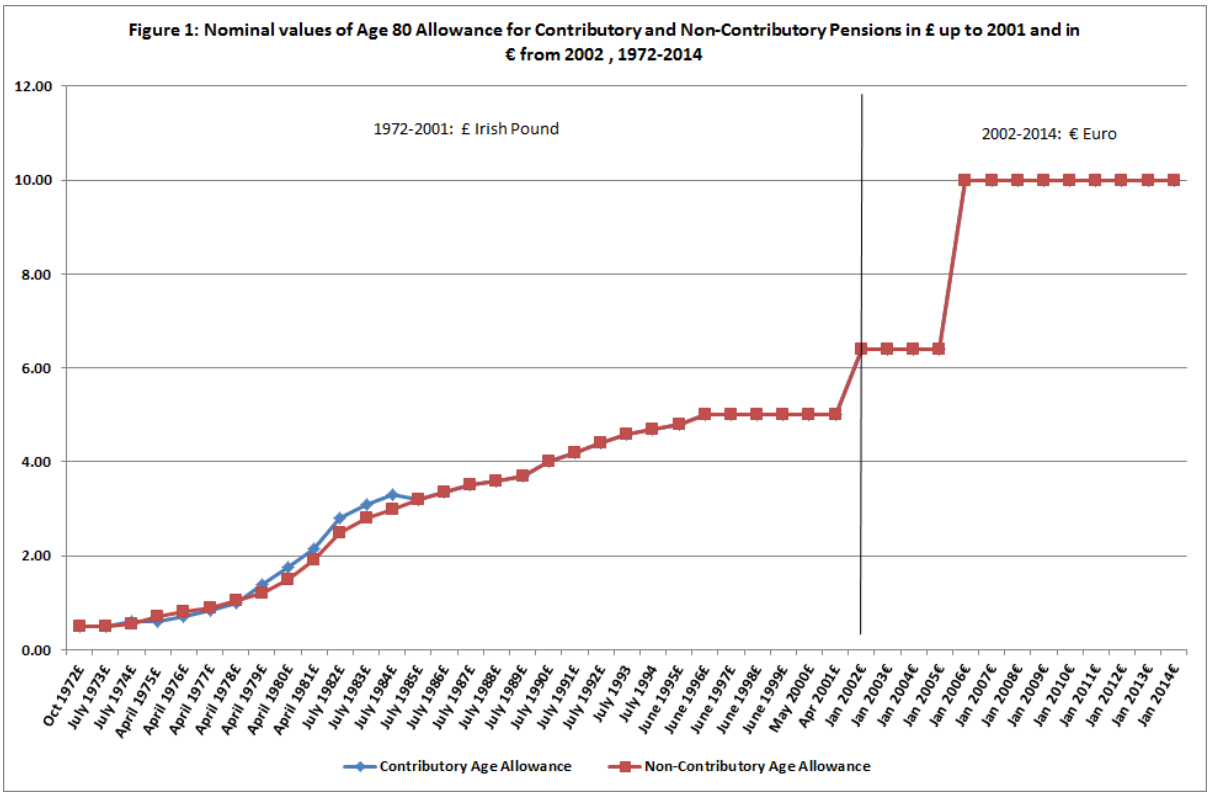
Age 80 Allowance for Means-Tested and Social Insurance Pensions in Ireland

Ireland has had a non-contributory social assistance pension since 1909 and a contributory social insurance pension since 1961. The value of the social assistance pension depends on satisfying a means-test, and a sliding means-scale is used to pay smaller pensions than the maximum flat-rate benefit to those who have some means. The maximum flat-rate value of the social insurance pension depends on having an annual average of 48 or more contributions per year to the social insurance fund during working life. A sliding scale of average number of contributions per year is used to pay smaller pensions to those with average contributions less than 48 per year. Neither pension, therefore, is income-related.

In the national budget for 1972, both the contributory and non-contributory pensions were increased by the introduction of an age allowance for pensioners who were aged 80 years and over. In his budget speech, the Minister for Finance (Ireland 1972) said that the reason for introducing the allowance was that "I am especially conscious of the fact that very old persons are often at a disadvantage because of their inability to do things for themselves and shop around for the best value. In recognition of this, all non-contributory [and contributory] old age and blind pensioners aged 80 and over will receive a further increase of 50p per week."

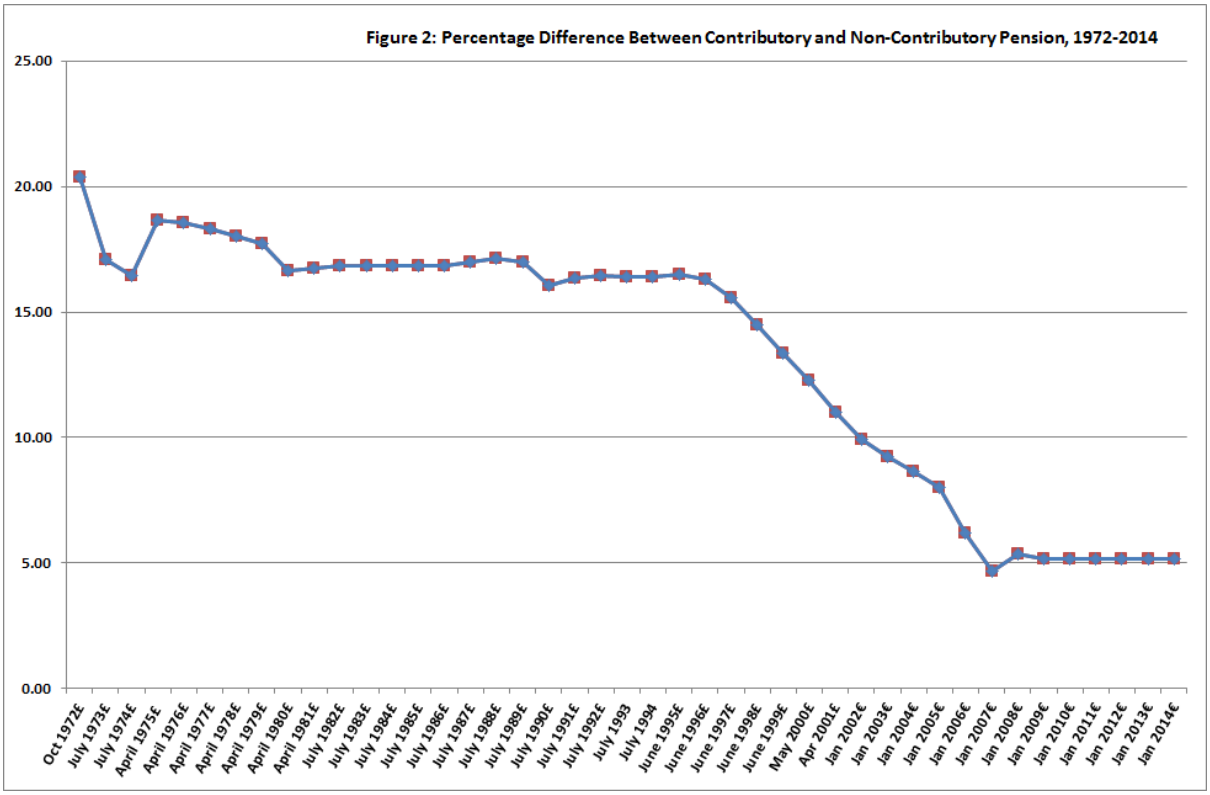
For the first two years, as Appendix Table 1 and Figure 1 show, the value of the age 80 allowance was the same (0.50 pence) for both the contributory and non-contributory pension. In

1974 the allowance was slightly higher for the contributory pension but from 1975 to 1978 it was higher for the non-contributory pension. From 1978 to 1984 the



allowance was higher for the contributory pension. Thereafter, the allowance has been the same nominal value for both pensions. The jump shown in Figure 1 in the nominal value of the allowance in 2002 is due to the change in Ireland's currency from the Irish pound to the Euro. The exchange rate in 2002 was €1.27 per £1 so the £5 allowance in Irish pounds was equivalent to €6.35 and rounding the allowance up to the nearest 10 cent brought it up to €6.40. There was a significant increase in the nominal value of the allowance in 2006 when it was increased to €10. The nominal value of the allowance has remained at €10 since 2006.

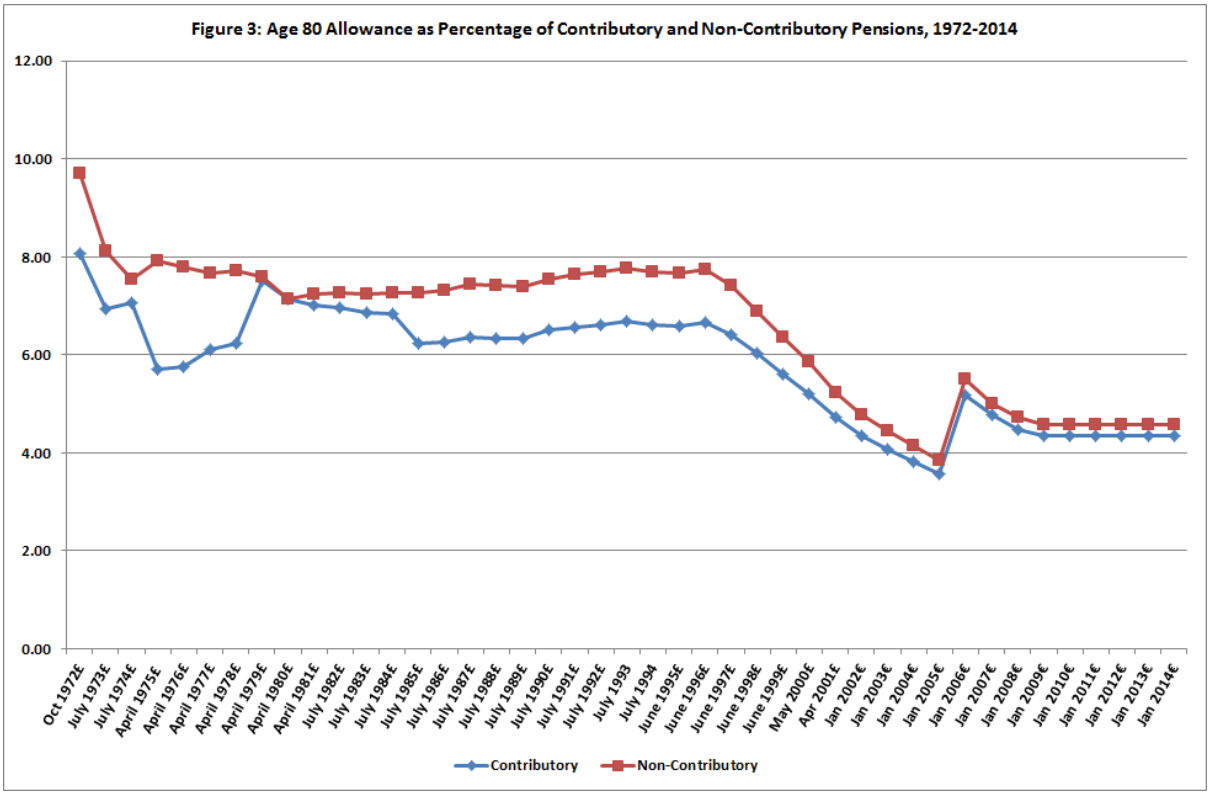
The maximum value of the contributory pension has always been higher than the maximum value of the non-contributory pension, as Figure 2 shows. When the contributory



pension was introduced in 1961, it exceeded the non-contributory pension by around 20 percent. By 1975, the difference had fallen to around 18 percent and it slowly declined to around 16 percent over the next twenty years until 1996. Over the next ten years or so it fell more sharply to around 5 percent and it has remained at that level between 2007 and 2014.

A consequence of the maximum contributory pension being always greater than the non-contributory pension is that the age 80 allowance has always been a higher percentage of the non-contributory pension than of the contributory pension, apart from 1979 when the allowance amounted to 7.14 percent for both pensions, as Figure 3 shows. When the allowance was introduced in 1972, it amounted to nearly 10 percent of the maximum non-contributory pension and to around 8 percent of the contributory pension. The percentage increase in the contributory pension due to the payment of the Age 80 allowance varies depending on the level of the contributory pension. Currently, only about 27 percent of women receive the maximum contributory pension (Duvvury et al. 2012).

In the first few years after its introduction, the percentage increase in pensions due to the Age 80 Allowance declined by about 2 percentage points to around 6 percent for the maximum contributory pension and around 8 percent for the non-contributory pension. Between 1975 and 1996,



the age allowance stabilised at just under 8 percent for the non-contributory pension and just over 6 percent for the maximum contributory pension. In the following ten years up to 2005, the allowance was allowed to decline in percentage terms to around 5 percent for both pensions or about half of what it had been up to 1995. In 2006, there was an increase of about $1^{1}/_{2}$ percentage points in the value of the allowance relative to both pensions and since then the allowance has stabilised at around 4.3 percent for the contributory pension and around 4.5 percent for the non-contributory pension.

Comparing Figures 2 and 3 it is evident that the convergence of the age allowance to around 4.5 percent of the value of both the contributory and non-contributory pension has occurred because the wide difference between the nominal value of the contributory and non-contributory pension has been allowed to slowly erode over the years.

China

In China, the social security old age benefit programs vary across geographic regions, providing examples of a variety of different approaches for providing longevity insurance benefits. Though in some cities in China, an old age allowance was provided for those aged 90 or 100, Ningxia Province has taken the lead in providing an old age allowance in the whole province and provides monthly benefits for those aged 80 and older. In 2009, Ningxia Province first started to provide the old age allowance for those aged 80 and older in rural areas and those aged 80 and older with low income in urban areas. Thus, in urban areas, the old age allowance is a means-tested program. Only those aged 80 and older in a family with per capita income lower than 150 percent of minimum living standard are qualified for an old age allowance in urban areas.

Old age allowance benefits have been increased in Ningxia several times and are different in rural and urban areas. In the year 2009, the old age allowance benefit was related to the minimum living standard of the local area: with the benefit level for those aged 80 to 89 being the level of local minimum living standard; and the benefit level for those aged 90 to 99 being 130 percent of local minimum living standard. The average benefit level of the old age allowance for beneficiaries aged 80 to 89 was 182 yuan (US$29) per month in urban areas and 59 yuan (US$9) per month in rural areas (Xinhuanet 2009). For those aged 100 and older, the benefit level of the old age allowance was 300 yuan (US$48) per month in rural and urban areas. In the years 2011 and 2013, the old age allowance benefit levels were increased.

Since 2009, more cities have started to establish the old age allowance program. In 2011, 14 provinces started to provide the old age allowance. In 2006, only 2.34 million people were receiving the old age allowance, but by the end of 2010, 5.76 million people received the old age allowance. From 2006 to 2010, the percentage of the population age 80 and older receiving the old age allowance benefits increased from 12.9 percent to 27.0 percent.

After Ningxia Province started to provide the old age allowance in 2009, the Ministry of Civil Affairs in China has had the goal to provide a unified monthly old age allowance for those aged 80 and older across China, but thus far no uniform regulation has been established. Variations in the benefit level of the old age allowance exist among provinces, even among cities or counties of the same province.

When old age allowance programs were established, the eligibility age for benefits differed among cities. In some cities, only those aged 90 and older or only those aged 100 and older were eligible for the old age allowance. For instance, in 2009, when Beijing established the old age allowance program, only those aged 90 and older were eligible for benefits. However, currently in most counties or cities, the old age allowance is provided for the residents aged 80 and older who have registration for the area in which they live.

In most cities, the old age allowance is means tested and provides benefits to those with low income. In Heilongjiang Province and Jilin Province, those aged 80 to 89 with income lower than the minimum living standard are eligible for the old age allowance (People News 2012). For those aged 90 and older, no means test is required. All eligible old age people can receive 100 yuan (US$16) per month. Thus, the old age allowance programs in these two provinces are means tested for those age 80 to 89, while being universal for those aged 90 and older (People News 2012). In Shenzhen city, the old age allowance is not means-tested and is universal for those satisfying the age requirement.

Variations in benefit level of the old age allowance are common in China, as no uniform national regulation has been established, and each city can decide whether to provide the old age allowance, and if it does provide that program can decide eligibility requirements and the benefit level. Besides, the old age allowance program differs between rural and urban areas and differs by age range or other qualifications. In table 1, the old age allowance benefit levels of three provinces and two cities are provided. Shenzhen city is one of most developed cities in China and provides the highest benefit level.

Table 1. *Old age allowance benefit variations in cities or provinces in China (yuan per month)*

Age	Jilin	Xinjiang	Shanxi	Wuhan	Shenzhen
80-89	50	50	50	100	200
90-99	100	120	100	200	300
100+	300	200	200	500	500

Sources: Data of Jilin province comes from http://www3.jl.gov.cn/zwxx/zfwj/jzbmd/201012/t20101213_920574.html. Data of Xingjiang province and Shanxi province comes from http://politics.people.com.cn/n/2012/0808/c1001-18693477-1.html. Data of Wuhan comes from http://www.hb.xinhuanet.com/2014-02/21/c_119432937.htm. Data of Shenzhen comes from http://www.szmz.sz.gov.cn/xxgk/ywxx/llfw/zcfg/201108/t20110816_1720387.htm.
Notes: Jilin, Xinjiang and Shanxi are provinces, and Wuhan and Shenzhen are cities.

Policy Proposal

This section provides an example of how a longevity insurance benefit in the United States might be structured as part of Social Security. This proposal combines features of the longevity insurance benefits in Ireland and China. This proposal could be part of a package that otherwise reduced the generosity of Social Security benefits and raised the payroll tax rate to restore solvency.

We propose that starting at age 82, everyone receiving a Social Security benefit would receive an additional $50 a month, which is approximately the level of the benefit in Ireland. That amount would be increased to $100 a month at age 87 and to $150 a month at age 92.

These benefits would be indexed for inflation in the same way that other Social Security benefits are indexed. They would be paid as a supplement to benefits already being paid. The before tax benefit would be the same for everyone within an age bracket. Because of the taxation of Social Security benefits for higher income persons, the after tax benefit would be slightly progressive in absolute terms, and of course, would be progressive in terms of the percentage increase in benefits that persons at different income levels received. The benefits would be financed out of the Social Security OASI Trust Fund, and thus benefit cuts or payroll tax rate increases at younger ages would be needed to fund them.

The start age for this benefit, originally age 82, would be indexed for improvements in longevity at age 60, so that gradually it would rise over time. The two bend point ages would increase in line with the start age.

Recognizing this enhanced insurance protection, Social Security OASI could be renamed Old-Age, Survivors and Longevity Insurance (OASLI). The renaming would help inform people about the benefit. It would positively frame the benefit, rather than the benefit being thought of as an anti-poverty benefit.

Conclusions

Longevity insurance annuities are deferred annuities that begin payment at advanced older ages. The government has several advantages over the private sector in providing longevity insurance annuities. First, it is able to limit its liability against the possibility of an unexpected improvement in life expectancy by indexing the age of eligibility for benefit receipt. While the

private sector could do this prospectively for new clients, the government is able to do this for people nearing the age of entitlement for the benefit. Second, the government has a hedge against the liability to the extent that people work longer (and pay more taxes) due to improvements in health at older ages or due to raising the eligibility age for Social Security old-age benefits. Currently, no assets exist for the private sector to invest in to provide a hedge against unexpected improvements in life expectancy. Third, the government does not face adverse selection because it provides the benefit to a pre-selected group. In the private sector, by comparison, insurance companies would face adverse selection because they provide longevity insurance to people who self-select, in part based on their subjective expectation of long life expectancy.

Ireland and China provide longevity insurance benefits through government social security programs. Because no unified old age allowance program has been established in China, variations exist among provinces, even among counties or cities. The regional variations in China and the approach taken in Ireland provide examples of how longevity insurance benefits could be provided.

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Appendix Table 1: Contributory and Non-Contributory Pensions for Those Under and Over 80,									
Age 80 Allowance for Both Pensions and Age Allowance as Percentage of Maximum Pe3nsin, 1972-2014									
Date of	Contributory				Date	Non-Contributory			
Increase	Under 80	80 and ov	Age Allow	Per Cent		Under 80	80 and ov	Age Allow	Per Cent
Oct 1972£	6.20	6.70	0.50	8.06	Aug 1972£	5.15	5.65	0.50	9.71
July 1973£	7.20	7.70	0.50	6.94	July 1973£	6.15	6.65	0.50	8.13
July 1974£	8.50	9.10	0.60	7.06	July 1974£	7.30	7.85	0.55	7.53
April 1975£	10.50	11.10	0.60	5.71	April 1975£	8.85	9.55	0.70	7.91
April 1976£	12.15	12.85	0.70	5.76	April 1976£	10.25	11.05	0.80	7.80
April 1977£	13.90	14.75	0.85	6.12	April 1977£	11.75	12.65	0.90	7.66
April 1978£	16.05	17.05	1.00	6.23	April 1978£	13.60	14.65	1.05	7.72
April 1979£	18.60	20.00	1.40	7.53	April 1979£	15.80	17.00	1.20	7.59
April 1980£	24.50	26.25	1.75	7.14	April 1980£	21.00	22.50	1.50	7.14
April 1981£	30.65	32.80	2.15	7.01	April 1981£	26.25	28.15	1.90	7.24
July 1982£	40.25	43.05	2.80	6.96	July 1982£	34.45	36.95	2.50	7.26
July 1983£	45.10	48.20	3.10	6.87	July 1983£	38.60	41.40	2.80	7.25
July 1984£	48.25	51.55	3.30	6.84	July 1984£	41.30	44.30	3.00	7.26
July 1985£	51.40	54.60	3.20	6.23	July 1985£	44.00	47.20	3.20	7.27
July 1986£	53.45	56.80	3.35	6.27	July 1986£	45.75	49.10	3.35	7.32
July 1987£	55.10	58.60	3.50	6.35	July1987£	47.10	50.60	3.50	7.43
July 1988£	56.80	60.40	3.60	6.34	July 1988£	48.50	52.10	3.60	7.42
July 1989£	58.50	62.20	3.70	6.32	July 1989£	50.00	53.70	3.70	7.40
July 1990£	61.50	65.50	4.00	6.50	July 1990£	53.00	57.00	4.00	7.55
July 1991£	64.00	68.20	4.20	6.56	July 1991£	55.00	59.20	4.20	7.64
July 1992£	66.60	71.00	4.40	6.61	July 1992£	57.20	61.60	4.40	7.69
July 1993£	68.90	73.50	4.60	6.68	July 1993£	59.20	63.80	4.60	7.77
July 1994£	71.00	75.70	4.70	6.62	July 1994£	61.00	65.70	4.70	7.70
June 1995£	72.80	77.60	4.80	6.59	June1995£	62.50	67.30	4.80	7.68
June 1996£	75.00	80.00	5.00	6.67	June 1996£	64.50	69.50	5.00	7.75
June 1997£	78.00	83.00	5.00	6.41	June 1997£	67.50	72.50	5.00	7.41
June 1998£	83.00	88.00	5.00	6.02	June 1998£	72.50	77.50	5.00	6.90
June 1999£	89.00	94.00	5.00	5.62	June 1999£	78.50	83.50	5.00	6.37
May 2000£	96.00	101.00	5.00	5.21	May 2000£	85.50	90.50	5.00	5.85
April 2001£	106.00	111.00	5.00	4.72	Apr 2001£	95.50	100.50	5.00	5.24
Jan 2002€	147.30	153.70	6.40	4.34	Jan 2002€	134.00	140.40	6.40	4.78
Jan 2003€	157.30	163.70	6.40	4.07	Jan 2003€	144.00	150.40	6.40	4.44
Jan 2004€	167.30	173.70	6.40	3.83	Jan 2004€	154.00	160.40	6.40	4.16
Jan 2005€	179.30	185.70	6.40	3.57	Jan 2005€	166.00	172.40	6.40	3.86
Jan 2006€	193.30	203.30	10.00	5.17	Jan 2006€	182.00	192.00	10.00	5.49
Jan 2007€	209.30	219.30	10.00	4.78	Jan 2007€	200.00	210.00	10.00	5.00
Jan 2008€	223.30	233.30	10.00	4.48	Jan 2008€	212.00	222.00	10.00	4.72
Jan 2009€	230.30	240.30	10.00	4.34	Jan 2009€	219.00	229.00	10.00	4.57
Jan 2010€	230.30	240.30	10.00	4.34	Jan 2010€	219.00	229.00	10.00	4.57
Jan 2011€	230.30	240.30	10.00	4.34	Jan 2011€	219.00	229.00	10.00	4.57
Jan 2012€	230.30	240.30	10.00	4.34	Jan 2012€	219.00	229.00	10.00	4.57
Jan 2013€	230.30	240.30	10.00	4.34	Jan 2013€	219.00	229.00	10.00	4.57
Jan 2014€	230.30	240.30	10.00	4.34	Jan 2014€	219.00	229.00	10.00	4.57
Source: ESRI Paper 120; Social Welfare Acts 1972-1981; Department of Social Welfare, Rates of Payment, 1982-2014.									

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