Retirement, Pension Reform, and Lifecycle Pension Wealth: An International Comparison

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Population aging is the inevitable last stage of the demographic transition. The projected declines in support ratios have occasioned deep concerns in many countries, since they imply an increased dependency burden on the working age population and threaten fiscal instability. They depend on both demographic trends and on the age patterns of consumption and labor income. Some governments have considered policies to reduce the pace and depth of future population aging by modifying the age patterns of consumption and labor income in a way that raises support ratios for a given demographic structure. The incentive structure created by public pension programs can have an important effect on retirement behavior and the design of any new pension programs could be shaped accordingly.

      This study considers the effect of the later retirement and an increase in pensionable age on old age support system by using a larger study of the economic life-cycle, the National Transfer Accounts (NTA). The NTA is a new system of accounts that is consistent with National Income and Product Accounts (NIPA) but provides much-needed age data. The purpose of NTA is to measure, at the aggregate level, the reallocations across age of economic resources that respond to the economic life-cycle. With its age component, the NTA enables us to measure the intergenerational reallocation of economic resources in a comprehensive detail, such as assets and intergenerational transfers, both public and familial. More detailed information on methodology is available from Mason, Lee et al (2009), Lee, Lee, and Mason (2008), or on the project website: http://www.ntaccounts.org.

      More specifically, this study tries to answer the following two questions i) what would be the effect of policy change, for example, an increase in pensionable age?, ii) what would be the effect of delaying retirement on lifecycle pension wealth? The results make use of a similar simulation model to assess the implications of population change for wealth and income. The details of the model are described in Mason and Lee (2007). The key features of the model assume that the age profile of relative productivity does not change, but labor force participation rates shift right, and retirement is delayed accordingly. We consider two cases; one in response to an exogenous delay in retirement, and the other delay in retirement triggered by an increase in pensionable age.

      Consumption at older ages is realized through a combination of intergenerational transfers and lifecycle saving in the model. The importance of transfers relative to lifecycle saving is exogenously determined and treated as a policy variable or a feature of each society. The economy is subject to an aggregate budget constraint on flows that, along with other features of the model, determines the time path of assets, transfer wealth and implicit debt, and income. Wealth defined in this way is a broad measure of wealth that includes both real assets and the present value of current and future net transfers to year t adults, called transfer wealth. Pension transfer wealth is the present value of net transfers that year t adults will receive from year t children and from future generations. These transfers may be familial transfers or public

transfers. The impact of demographic change on asset accumulation and consumption growth depends on the extent to which the economy in question relies on pension transfer wealth versus capital accumulation to support consumption in old age. We treat this as an exogenous variable rooted in each country's institutions, but changeable through policy.

Some preliminary simulation results are as follows.

■ Increasing pensionable age or delaying retirement has a substantial impact on labor income and pension transfers to elderly. But the impact varies a lot depending on our study countries.

Figure. Labor Income as a Source of Financing Consumption for People 65+: Before and After Delaying Retirement by 5 Years from Current Level of Activity Rates of People at 65+
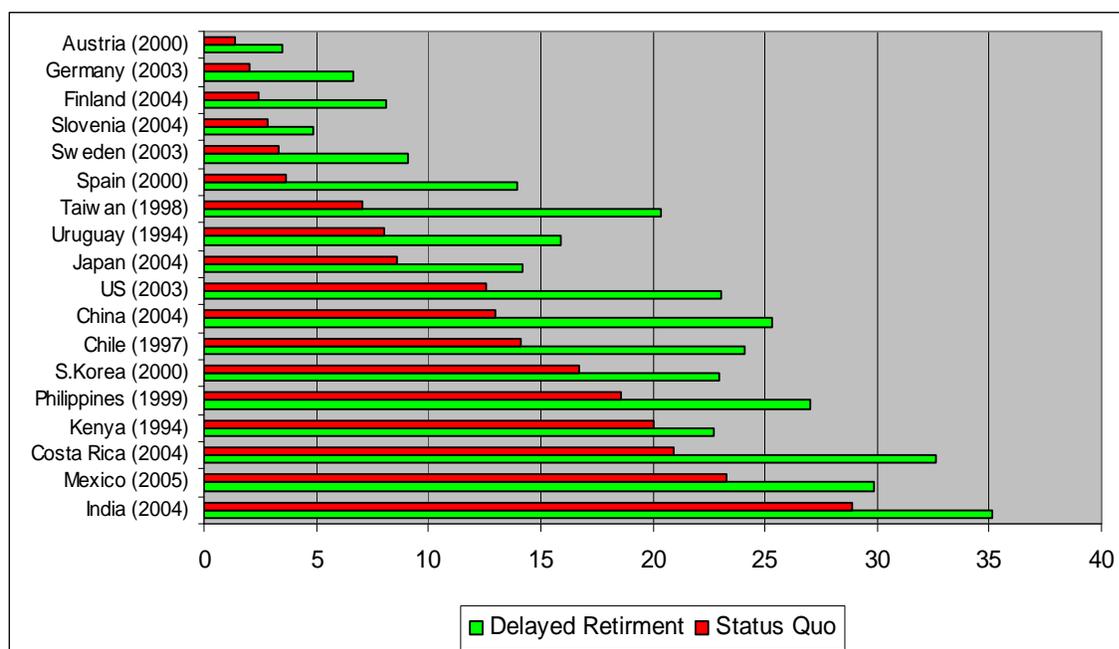
Table. Aggregate Pension Benefit as a Share of Lifecycle Deficit for 65 and older: Before and After the Policy Implementation (Increasing Full Pensionable Age by 5 years).

	Status quo	Policy	% change
US (2003)	0.270	0.230	-15.1%
Chile (1997)	0.728	0.626	-14.0%
Philippines (1999)	0.290	0.252	-13.1%
Sweden (2003)	0.547	0.476	-13.0%
Japan (2004)	0.498	0.442	-11.2%

Uruguay (1994)	**0.512**	**0.461**	**-9.9%**
Spain (2000)	**0.564**	**0.510**	**-9.7%**
Finland (2004)	**0.807**	**0.754**	**-6.5%**
Austria (2000)	**0.878**	**0.844**	**-3.9%**
Slovenia (2004)	**0.628**	**0.616**	**-1.9%**
S. Korea (2000)	**0.151**	**0.150**	**-0.4%**

■ An increase in pensionable age raises the asset to labor income ratio, but delaying retirement lowers it. These effects also vary a lot by country. However, the combined effect generally raises the ratio. The effect will be greater if delaying retirement crowds out some of the familial transfers. The case of Japan is illustrated here.
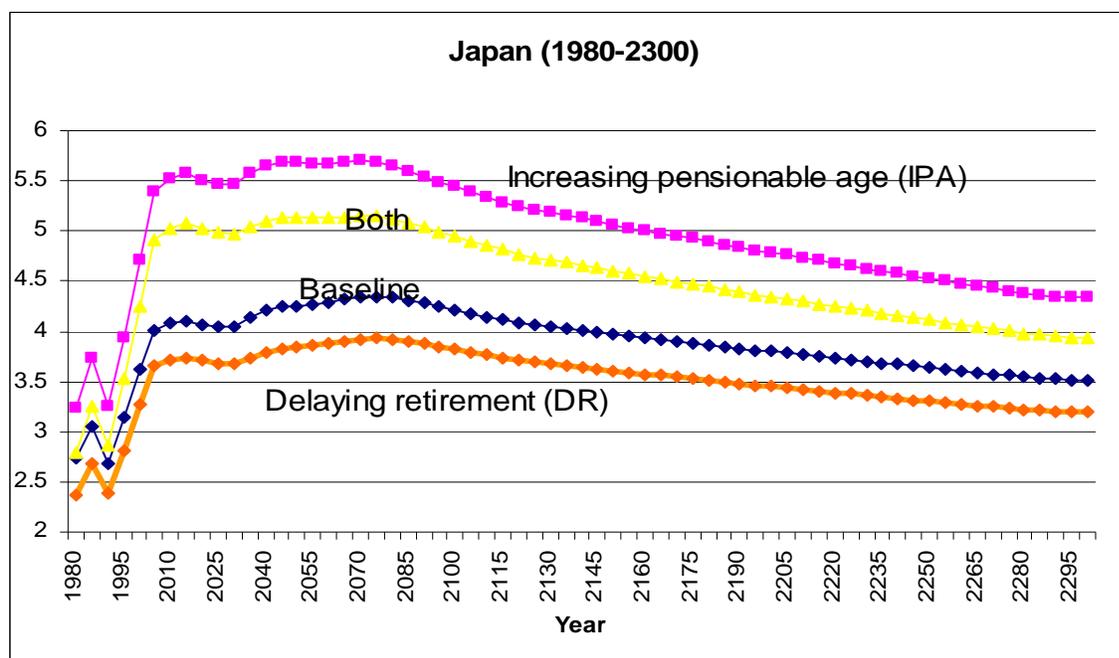
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