



Gender-differentiated impacts of pension reform

Pension reform can have a positive or negative impact on the gender gap in pension benefits. This note uses examples from Latin America and Eastern Europe to illustrate how gender outcomes depend on the combined effect of changes in pension design features.

Many countries have initiated pension reform to cope with aging populations and fiscally unsustainable pension systems. The reforms often aim to separate the safety net and savings functions of pension systems, and to minimize incentive distortions. They usually involve moving from a single public pillar to a multipillar system, with the latter consisting of a private pillar (with defined contributions) and a more targeted public pillar (with defined benefits).

Gender issues arise in pension design because men and women have different employment histories and life expectancies. Women tend to have shorter histories in the formal labor market because they take time off to care for children and are permitted to retire earlier than men. During their working years they also earn less than men, on average (World Bank 2001). As a result, women contribute less to pension systems than men, and are likely to end up with smaller pensions if benefits are closely linked to contributions—as in the defined contribution pillar of new systems. However, the public pillar in new systems often includes a safety net that provides a public transfer to women.

When discussing gender, pensions, and transfers, it is useful to distinguish between individual pension entitlements (based on one's contributions or residency) versus derived entitlements (based on one's relationship to another person with pension entitlements), as well as between benefits that come from contributions from a specified

person versus benefits financed by a broader revenue pool. Table 1 shows the interactions between types of entitlements and sources of benefits, and illustrates how these interactions result in different types of transfers.

Which pension design features affect gender outcomes?

Six pension design features are of particular relevance to gender-specific outcomes: retirement ages of men and women, redistributive benefits, caring credits, survivor benefits and joint annuities, unisex versus single sex annuity tables, and indexation.

Retirement ages

Raising and equalizing the legal retirement ages of women and men can have a significant positive impact on the level of female benefits, particularly in a defined contribution private pillar. Simulations for Argentina and Chile show that raising women's retirement age from 60 to 65 would increase the average monthly benefit of women by 50 percent and narrow the gender gap in benefits by 10–15 percentage points (James and others 2003). Equalizing retirement ages also reduces the public transfer toward women and makes labor market incentives more equal.

Redistributive benefits

In many countries, old-age poverty is concentrated among women. As such, redistributive benefits—such as a minimum pension

Gender issues arise in pension design because men and women have different employment histories and life expectancies

TABLE 1 INTERACTIONS BETWEEN TYPES OF ENTITLEMENT AND SOURCES OF BENEFITS

Sources of benefits	Types of entitlement	
	Individual	Derived
<i>Own or spouse's contributions</i>	No transfer (<i>Example</i> : own annuity)	Private transfer (<i>Examples</i> : survivor benefits based on joint annuity purchased by spouse)
<i>Pooled funds</i>	Public transfer (<i>Examples</i> : minimum pension guarantee, caring credits)	Public transfer (<i>Examples</i> : survivor benefits beyond spouse's contributions)

guarantee or flat benefit—play a particularly crucial role for women. Simulations suggest that topping up benefits in defined contribution schemes through a minimum pension guarantee or flat benefit can strongly reduce poverty among retired women (World Bank 1994). In Chile, adjusting women's pensions with a minimum pension guarantee raises their benefits from 32 percent to 39 percent of average male benefits in the lowest education bracket (James and others 2003). At the same time, the level of a minimum pension guarantee can raise an incentive issue. If women's pensions frequently fall under the level of the guarantee, young workers with low contributions will have little incentive to increase them (Falkingham and Rake 2001).

Caring credits

Most transition economies used to offer public pension credits during maternity leave and the early years of childrearing, but many are eliminating these credits as part of the reforms. Maintaining these credits can mitigate the post-reform widening of the gender gap in benefits. However, state-financed caring credits involve a public transfer toward women, increase the cost of the system (often in a nontransparent way), and create a disincentive to continue participating in the formal labor market during the years of caring. Another way to compensate women for childrearing is by providing private transfers at the household level. This can be done either by encouraging family contributions to women's pension accounts during periods of child care or by introducing joint annuity requirements (see below).

Survivor benefits and joint annuities

Entitlement to survivor benefits or joint annuities can go a long way toward improving pension benefits for women—including women who have never worked for wages. In Argentina and Chile, survivor benefits are guaranteed by requiring married men to take gradual withdrawals spread over their own and their spouse's lifetimes, or to purchase joint annuities that effectively redistribute income from men to women at the household level. The rationale is that women worked in the market less than men in order to work at home, so their husbands should compensate them for this home work in old age. Mandatory joint annuities had the largest positive impact on the female-male ratio in lifetime pension benefits in Argentina and Chile, bringing it up to 60–80 percent (James and others 2003). However, joint annuities will not reduce old-age poverty among single women or women who do not have access to survivor pensions due to divorce.

Unisex and single sex annuity tables

Worldwide, women live longer than men. Hence, the level of female benefits will differ depending on whether single sex or unisex annuity tables are used. Use of unisex tables implies a transfer toward women since they live longer than the unisex average. This will decrease the gender gap in benefits. Simulations for Poland show that using unisex tables instead of single sex tables decreases the gender gap in benefits by 6–8 percent if individual annuities are purchased (Balcerzak-Paradowska and others 2003). If joint annuities are purchased, however, the use of

unisex tables makes little or no difference because both male and female expected lifetimes are taken into account in the annuity calculation—hence, the joint annuity is virtually unisex (James and others 2003).

Indexation

Without indexation the future value of pension entitlements can be considerably lower than expected at the time of contributions, especially in countries with high levels of inflation. Indexation of public and private pillar benefits is particularly important for women because, on average, they live longer than men.

Examples of pension reform

Whether pension reform improves gender equality depends on the combined effect of changes in all of the features discussed above. It also depends on women's ability and willingness to respond to the economic incentives built into the new pension system. Thus, pension reform may improve outcomes for women who work in the labor market most of their adult lives, while causing a deterioration for others.

The pension reforms implemented in *Argentina, Chile, and Mexico* provide a good example of how gender outcomes depend on the combined effect of changes in different pension features. Simulations of the results of pension reform show that in all three countries and across most educational groups, both men and women gain—but women gain more (James and others 2003). In all three countries, the biggest gainers are women with low levels of education.

Several aspects of the reforms were found to have gender-specific impacts:

- Women's individual monthly pension entitlements were reduced to 30–40 percent of men's due to closer links between contributions and benefits.
- Women have become the main recipients of the targeted redistribution through the minimum pension guarantee or flat benefit.
- Married men are required to take out joint annuities at the time of retirement or spread gradual withdrawals over the lives

of both spouses. (In Mexico, this requirement applies to both spouses.)

- Widows are allowed to keep the joint annuity benefit as well as their own benefit. (In Argentina and Chile, women previously had to give up their own-pension in order to get the widow's benefit, so their contributions gave them practically no return.)

The net effect of these changes is positive for women, bringing average lifetime benefits for married women up to 70–90 percent of male lifetime benefits, and benefits for married “full career” women up to 100 percent of male benefits. Pre-reform female lifetime benefits were 59–89 percent of male lifetime benefits in Chile, and 26–81 percent of male benefits in Argentina (James and others 2003).

In contrast, women in the *transition economies* of Eastern Europe and the former Soviet Union seem to have fared less well with pension reform—illustrating how gender outcomes depend on the situation prior to reform, the design features of the new system, and the extent of equality of opportunity in the labor market. The old systems in transition economies were usually very generous toward women. They encouraged women to retire early, provided them with high replacement rates, and gave credits for childrearing—resulting in a large public transfer toward women. The new systems deliberately reward longer careers and later retirement. In most cases the public pillar is not very redistributive toward women, survivor benefits have been weakened, and the joint annuity is not required. At the same time, the male-female wage gap has widened, women's work participation has decreased, and women continue to retire earlier than men. As a result the pension gap between men and women has expanded substantially.

Simulations for Poland show that as a result of the 1998 reform, average yearly female pension benefits will decrease from about 80 percent of male benefits in the old system to 45 percent in the new (Balcerzak-Paradowska and others 2003). If unisex mortality tables were used the new ratio would be 57 percent, and if the retirement age were raised to equal men's the new ratio would rise to 73 percent.

Pension reform may improve outcomes for women who work in the labor market most of their adult lives, while causing a deterioration for others

Gender-sensitive modeling of the potential impacts of pension reforms can prevent unexpected increases in old-age poverty

The remaining differential is mainly due to wage disparities. By linking pension benefits more closely to contributions, pension reform in Poland has made labor market incentives between men and women more equal and has made the system more efficient and financially sustainable. At the same time however, labor market opportunities have become more unequal: the gender pay gap among the highest-paid workers increased 13 percentage points between 1985 and 1997 (Kotowska 1997), the unemployment rate among married women is much higher than average (Kowalska 2000), and women's labor force participation has fallen (Balcerzak-Paradowska and others 2003). Unless compensating changes are made, the new pension system will perpetuate this diminution of labor market equality into old age.

Gender-sensitive modeling of pension reform

The evidence presented above indicates that changes in retirement age or entitlement to survivor benefits can significantly increase the ratio of female to male pension benefits. Moreover, lower individual entitlements for women in the defined contribution private pillar can be compensated by mandatory joint annuities and a redistributive public pillar.

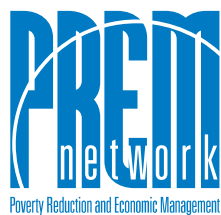
These conclusions point to the need for gender-sensitive analysis prior to reform. Gender-sensitive modeling of the potential impacts of pension reforms can prevent unexpected increases in old-age poverty and reduce future reliance on social assistance. The World Bank's Pension Reform Options Simulation Toolkit (PROST) enables country teams to model detailed gender outcomes and explore the effects of modifications to the relevant design features. For more information on PROST, contact Yee Mun Sin at ysin@worldbank.org.

Further reading

- Balcerzak-Paradowska, B., A. Chlon-Dominczak, I. Kotowska, A. Olejniczuk-Merta, I. Topinska, and I. Woycicka. 2003. "The Gender Dimensions of Social Security Reform in Poland." In E. Fultz, M. Ruck, and S. Steinhilber, eds., *The Gender Dimensions of Social Security Reform in Central and Eastern Europe: Case Studies of the Czech Republic, Hungary, and Poland*. Budapest: International Labour Organization.
- Falkingham, J., and K. Rake. 2001. "Modeling the Gender Impact of British Pension Reforms." In J. Ginn, D. Street, and S. Arber, eds., *Women, Work and Pensions—International Issues and Prospects*. Buckingham, U.K.: Open University Press.
- James, E., A. Cox Edwards, and R. Wong. 2003. "The Gender Impact of Pension Reform: A Cross-Country Analysis." Policy Research Working Paper 3074. World Bank, Washington, D.C.
- Kotowska, I. 1997. "Equality of Women and Men in the Labor Market." In R. Siemieniska, ed., *Problems of Occupational Equality by Gender*. Warsaw: Scholar Publishing Company.
- Kowalska, A. 2000. "Women in the Polish Labor Market." *Studia Demograficzne* 2/138.
- World Bank. 1994. *Averting the Old Age Crisis*. A Policy Research Report. Washington, D.C.
- . 2001. *Engendering Development*. A Policy Research Report. New York: Oxford University Press.

This note was written by Alexandra van Selm (Consultant, PRMGE and WBIHD) under the supervision of Susan Razzaz and Nayantara Mukerji. The author is grateful to Estelle James, Karen Mason, and Cecilia Valdivieso for useful comments.

If you are interested in similar topics, consider joining the Pensions Thematic Group (contact Yee Mun Sin, x37572).



This note series is intended to summarize good practices and key policy findings on PREM-related topics. The views expressed in the notes are those of the authors and do not necessarily reflect those of the World Bank. *PREMnotes* are widely distributed to Bank staff and are also available on the PREM Website (<http://prem>). If you are interested in writing a *PREMnote*, email your idea to Madjiguene Seck. For additional copies of this *PREMnote* please contact the PREM Advisory Service at x87736. *PREMnotes* are laid out by Suzanne Luft.

Prepared for World Bank staff