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THE GENDER IMPACT OF ALTERNATIVE SOCIAL SECURITY POLICIES

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Introduction

As social security reform is considered in the United States, one of the recurring issues is likely to be the impact on women of various proposed changes. This issue is important because the majority of old people are women, pockets of poverty among the old are largest among very old women, and social security systems affect work incentives for women, therefore help shape their income before and after retirement as well as the economy's labor supply. This Policy Brief summarizes the reasons why the same pension system may have quite different effects on men and women, why a given pension reform may have an inadvertent gender impact, and what policy choices can affect these outcomes. It draws on research that evaluates the gender impact of the new pension systems in Chile, Argentina and Mexico, compares the Latin American systems with recent reforms in the transition economies and Sweden, and discusses implications for the United States. The focus is on gender policies in systems that include individual accounts and how these might differ from or be adapted by policies in pure pay-as-you-go systems. (For a fuller analysis of these issues see James, Edwards and Wong 2003 and 2007 forthcoming).

Why Benefits for Women are Usually Lower Than Those for Men

Most public pension programs—both the traditional defined benefit (DB) plans and the newer multi-pillar systems that include defined contribution (DC) plans known as individual accounts--are contributory, based heavily on labor market experience. Workers pay payroll taxes and receive benefits that depend on wage history, years of work, or more directly on their contributions. These employment-based social security systems pose a problem for women, who are less likely to have worked and contributed for many years, and who earned lower wages when working. Moreover, design features in traditional systems often discourage women from working and demographic factors further depress their income in old age, thereby exacerbating the problem.

Labor Market Differences for Men and Women

Labor Force Participation Rates

Women traditionally have less continuous labor force attachment than men. The intra-family division of labor has typically resulted in men working in the mar-

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ket, women in the home. In the three Latin American countries covered in detail in this Policy Brief, they are in the labor force 50 to 70 percent as many years as men. In OECD countries, women without children work only 12% less than men, but this gap jumps to 32% for women with two or more children (OECD 2003 and Ginn et al 2001). Even when women work, it may be part-time, temporary, and in the informal labor market.

Wages

Women typically earn less per week or year of work than men, even after controlling for age and education. In the Latin American countries covered in this Policy Brief, women earn almost as much as men at 20 but the disparity increases with age and by 50 they earn only 60-70% as much per month of work, holding education constant. In countries like the US, UK, Canada, and Australia, women's hourly wage rates are 15 to 25% less than men's, controlling for age, education and other variables (Ginn et al 2001; U.S. GAO 1997). The combination of fewer years of work and lower wage rates means that any pension system that links benefits to earnings or contributions is likely to produce lower benefits for women. Moreover, the fact that women often have flatter age-earnings profiles than men means that defined benefit systems that place heavier weight on wages earned late in life disadvantage women, compared with systems that place heavier weight on early contributions (as through a compounded rate of return in defined contribution systems).

Different Retirement Ages for Men and Women

Women tend to coordinate their retirement age with that of their husbands (Coile 2003, Butler et al 2004, Munnell and Zhivan 2006). Then, since women are generally younger than their husbands, they retire, on average, at an earlier age. This proclivity is reinforced by social security rules that often allow women to retire earlier than men. For example, women are permitted to retire at 60, men at 65 in Chile and Argentina. Early retirement may seem to be a privilege—but it is a privilege that costs in terms of lower pension rights earned and downward adjustments to the rights already earned, as in actuarially fair defined benefit or defined contribution systems. This cost may not be fully realized until the woman is too old to reverse her decision to retire early.

Demographic Differences Between Men and Women

Longevity

Women at age 60 have a life expectancy that is 3-4 years greater than that of men, in most countries. In Chile, a woman who retires at 60 is likely to live another 23 years, while a 60-year-old man lives another 19 years and a man who retires at 65 lives another 15.5 years, on average (CELADE 1998). Thus, any given retirement accumulation yields lower annual pensions for women, if annuitized on an actuarially fair basis, as in Latin America. In the United States and most other defined benefit systems, unisex mortality tables are implicitly used, so the same average life expectancy is applied to men and women. In a defined contribution system, an explicit decision must be made about whether gender-specific or unisex mortality tables should be used. Their greater longevity also means that the choice between price versus wage versus no indexation of benefits is particularly important for women.

Widowhood and Survivors' Benefits

Since women live longer than men, they are more likely to become widows than men are to become widowers. The social custom for husbands to be older than wives exacerbates this tendency. In Chile, women in urban areas are almost as likely as men to receive a pension. However, for women the pension is a widow's or social assistance pension in almost half the cases, while for men it is almost always an own-earned pension. In the United States, 72% of women age 80 to 84 are widows, but only 27% of men are widowers. In the 85-and-over age group, only 9% of women are living with their spouses (Posner 1995). Hence, survivors' pensions are of key importance to women. Without survivors' benefits, widows who did not work at a market job are likely to find themselves impoverished. Even widows who have a pension of their own will nevertheless find their household income cut by far more than their cost of living when their husband dies, due to household economies of scale combined with the fact that the husband is likely to be the family's main source of monetary income.

Survivor's Benefits and Work Disincentives

In many public systems, women are not allowed to keep their own benefit in addition to the survivor's benefit; they must choose between the two—to save money for the public treasury. This is the case, for example, in the United States and it was also the case in Chile before its pension reform. This means that most women face a pure tax from social security: they must make the same contributions as men, but simply get the same benefit they would have gotten if they had not contributed at all. Also, if women work they have little incentive to postpone retirement, since this typically does not affect the survivor's benefit they will eventually get, which constitutes the bulk of their retirement income. Thus, women's proclivity to work less and retire earlier than men is reinforced by the treatment of survivors' benefits in many traditional defined benefit systems.

Decision-making Power Within the Household

Recent evidence indicates that the individual who generates most income also has most decision-making power. This is usually the husband. If he takes into account primarily his own expected lifetime in making saving and insurance decisions for the family, this may lead to under-saving and insurance for wives in younger years and under-consumption for widows in later years, leaving the widow poor and sometimes a burden on the public treasury (Bernheim et al 2003, Friedberg and Webb 2006).

In Sum:

As a result of women's lower earnings, their pensions are lower. Lower pensions and greater longevity--during which they outlive their husbands and use up their family savings—leads poverty among the old to be concentrated among very old women. In the United States, for example, 72% of those over age 85 are women and 20% of them live in poverty (Posner 1995). Traditional systems have accentuated this problem by discouraging market work for women and encouraging their early retirement.

Gender Outcomes in Countries with Personal Account Systems

Given this background, what has the impact been when countries have adopted multi-pillar systems that include individual accounts—as has been under consideration in the United States? Which design features matter the most? We start with a detailed analysis of three Latin American countries—Chile, Mexico and Argentina—and compare these results with outcomes in Poland, Sweden and other countries with similar reforms.

Some critics have argued that defined contribution (DC) plans, which link benefits more closely with contributions, are likely to produce lower pensions for women. However, individual accounts are always accompanied by a public defined benefit (DB) plan, which has the objective of redistributing to low earners. Indeed, one object of multi-pillar systems is to make these transfers very explicit and transparent, to avoid perverse redistributions that have often occurred in traditional systems. Additionally, payouts from the accounts are usually restricted, required to be annuities or other gradual withdrawals, and include joint pension requirements—which effectively means that husbands must spread out their retirement savings to cover the lifetimes of their wives. This Policy Brief discusses their combined effects on the old age income of women versus men and analyzes the key design features that determine this outcome.

To analyze how these gender-differentiated life experiences affect pension outcomes, we start by constructing the employment histories of representative men and women, based on household survey data that give us wages and participation rates by age, gender and education. For each age-gender-education cell, we calculate an average wage and proportion of time worked. We assume our representative men and women take on the wage and work experience of successive age groups as they progress through life. We then simulate the benefits that these men and women would receive under the new and old system rules. We carry out these calculations for a baseline, moderate growth scenario (economy-wide real wage growth = 2% yearly, real rate of return = 5%) and for a slow growth scenario (0 real wage growth, 3% real rate of return). This Policy Brief focuses on the baseline scenario. Accumulations and pensions are presented in 2002 US dollars.

The analysis is carried out separately for 5 different educational categories, as a proxy for permanent income. We further examine the situation for women with 3 different patterns of labor force attachment—average women (with average wage and work histories), full career women (who have the same wage patterns as women but the work patterns of men), and ten-year women (who work full time from age 21-30 before child-bearing, and then withdraw form the labor force). The summary of results, below, pertains to average women, unless otherwise noted. The analysis is based on women who were single until the median age of marriage in each country, and then married. Sample sizes in some cells were too small to allow us to model women who remained single—which in any event is a rare occurrence in Latin America. However, it appears that the work histories of single women are roughly approximated by those of full career women.

We focus on gender ratios rather than absolute amounts, that is, on the female/male ratios of pensions and lifetime retirement income. The old systems were pay-as-you-go defined benefit systems that were unsustainable, so had to change; that is, the absolute amounts promised could not have been paid. By focusing on relative positions, we implicitly assume that the counterfactual is any system with the same distributional properties that the old system had. Relative positions are analyzed with respect to monthly benefits, expected lifetime benefits and wage-replacement rates in the new systems and whether these relative positions improved as compared with the old systems.

Smaller Monthly Own-Annuities to Women and Importance of Retirement Age

Men do indeed accumulate much larger retirement funds and private annuities than women, in the defined contribution plans of the new systems. Monthly benefits of the average woman are generally 30-40 percent of male benefits. If women postponed their retirement age to 65 (equality with men in Chile and Argentina—it is already equal in Mexico), this would raise their monthly annuity by almost 50 percent, even with work experience unchanged, because interest accumulates for five years more and the annuity is paid for fewer years. But even full career women who work as much and retire at the same age as men get only 65-75 percent as much as men because of large wage disparities. The unavoidable conclusion: Policies regarding retirement age and individual choice regarding labor force participation are very important, but even with equal work histories, own-pensions from the defined contribution plan will be far lower for women than for men, due to their lower wage rates and greater longevity.

The Public Benefit Helps Low Earning Women

However, this effect is mitigated by targeting of the new public benefits toward low earners, many of whom are women. Chile has a minimum pension guarantee (MPG)—providing the worker has contributed for at least 20 years. When the money in the worker's own account is used up, the government steps in and pays the MPG until the worker's death. The average woman works slightly more than 20 years, while most men work much longer and consequently earn more than the MPG floor. As a result, the main recipients of the MPG are low-earning women who engage in formal market work for about half of their adult lives. Only women in the bottom educational group are likely to receive the MPG if it is price-indexed (as it is formally), but if it is wage-indexed (as it has been de facto) the level is higher and some women qualify through the secondary level.

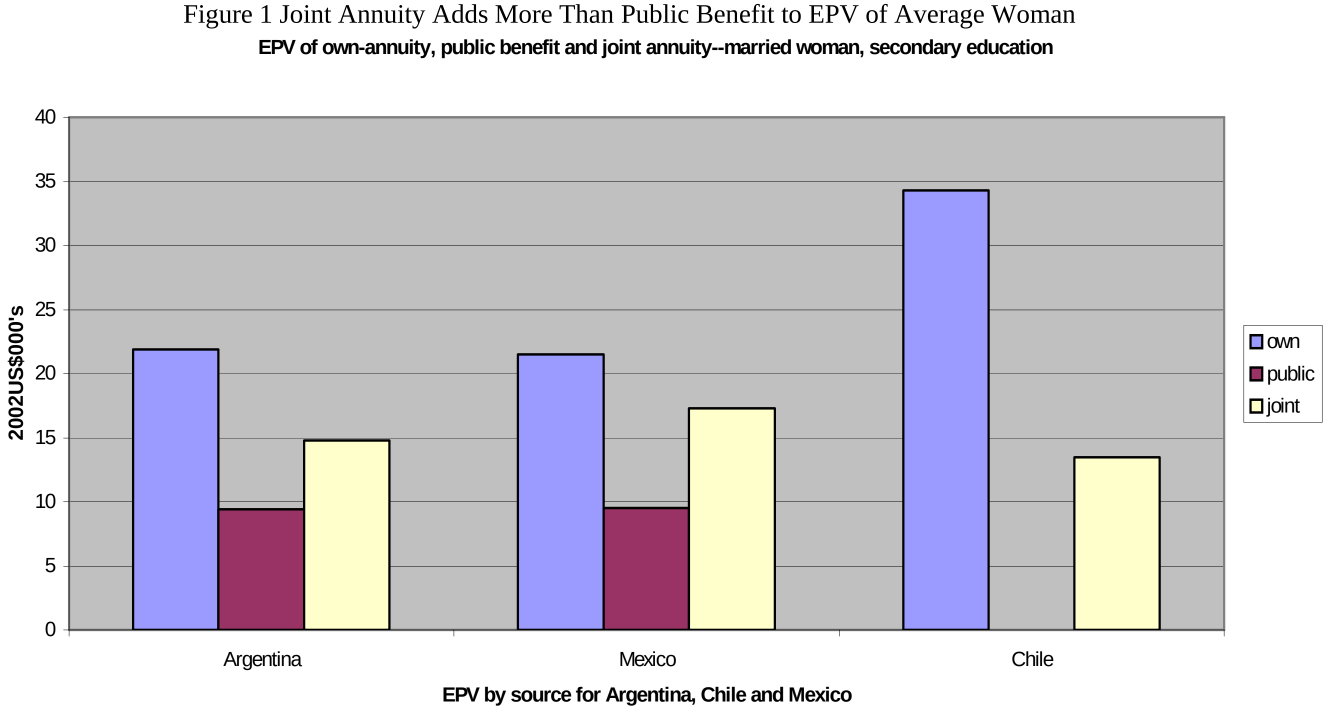
Argentina offers a flat benefit for workers with 30 years of service and a reduced flat benefit at age 70 for retirees with 10 years of work. This is given to all workers who meet the eligibility requirements, rather than only to low earners, hence it is much more expensive than Chile's MPG. Because of the eligibility requirements, men are projected to be the main recipients of the full flat and women are the main recipients of the reduced flat benefit. However, relative to their own-pensions, the reduced flat adds more to the retirement incomes of women than the flat does for men, so it reduces the gender gap. Mexico offers a social quota (SQ)—a uniform payment that is put into the account of every worker, by the government, per day of work. Again, men receive more than women because they work more, but the SQ adds proportionately more to the accounts of women because they earn less.

These public benefits are financed through general revenues in Chile and Mexico, a mix of payroll tax and other revenues in Argentina. Their net impact is to redistribute to low earners more than the old systems did, to raise the rate of return to women above that of men, on average, and to narrow the gender gap in monthly and lifetime benefits.

Replacement Rates for Women From Public Plus Private Benefits Often Exceed Those for Men

One purpose of a pension is to replace the wages that retirees no longer earn. Therefore, monthly wage-replacement (pension/wage) rates are a common measure of pension adequacy. Their shorter contributory period means that, from their own-accumulations and annuities, average women get replacement rates that are only 35-70% those of men—if the reference wage is full time wage earned toward the peak of their career. However, calculations show that full career women actually replace more of their wage than men—because they have flatter age-earnings profiles, hence a larger own-annuity relative to peak wage, and get a larger proportionate increment than men from the public benefit. Even average women have higher replacement ratios than men if we include the public benefit and adjust the reference wage to represent actual wages earned (= full time wage rate*proportion of time worked) rather than full time wages. In that case, women's low pensions are replacing a higher proportion of their low average annual earnings).

Figure 1 Joint Annuity Adds More Than Public Benefit to EPV of Average Woman



The Joint Annuity Raises Lifetime Income of Widows

Most important, the gender gap in lifetime benefits is narrowed by careful design of payout provisions, particularly joint pension requirements, which transfer income from husband to wife within households. When workers retire they are required to take gradual withdrawals or to annuitize, and in either case, the money must be spread over the lives of their spouses as well as themselves (60 percent of the main benefit goes to the survivor in Chile and Mexico, 70 percent in Argentina). This reduces the benefits of the primary beneficiary by 15-20%. On a lifetime expected present value (EPV) basis, these transfers through the joint pension add 30-40% to the EPV from the own-annuity in Chile, 50-90% in Argentina and Mexico--much more than the EPV of the public benefit (Figure 1). 1

Widows who have not worked in the formal labor market get income in very old age from the joint pension. Women who have worked in the formal labor market are allowed to keep the widow's benefit as well as their own benefit, in contrast to the old systems in Chile and Argentina, which forced them to choose between the two. This removes a major work disincentive to women. When the joint pension is included, lifetime benefits for average married women rise to 60-80 percent of lifetime benefits of men, and reach 100 percent for full career women. This is accomplished without imposing a burden on the general treasury.

Female/Male Ratios Increase Due to the Reform in Latin America

Female/male ratios of lifetime benefits in the new systems exceed those in the old systems in all 3 countries, for most educational and labor market attachment groups. Major reasons are the fact that they do not have to give up their own pension to receive the widow's benefit, they benefit disproportionately from the public benefit, and they are no longer disadvantaged by the front-loading of their contributions.

Different Sub-Groups Within Each Gender Benefit Differentially: the Impact on Work Incentives

In all three countries, for both genders, the lowest educational groups are projected to gain relative to those in the highest groups due to the targeted public benefit. Single men gain relative to married men, because they no longer help to finance the widow's benefit. This reduces the tax element faced by single men and may lead them to work longer. Married women gain the most relative to men in Chile and Argentina, because they no longer have to give up their own-pension when they receive the widow's pension. This reduction in the tax component should encourage married women to work more than they did previously. In Mexico, where married women could keep both pensions in the old system, single women gain more in relative position than married women.

We measured the ratio of lifetime incomes from own-pension plus public benefit received by full career women versus ten-year women and found it was much higher in Mexico than Argentina, with Chile in-between. In Mexico both the public and private benefits reward work. In Chile the large private defined contribution plan strongly rewards work while the public benefit is irrelevant except for women in the bottom educational group. Over time, in Mexico and Chile, this may induce women to increase their formal labor force participation rates and thereby to end up with higher pensions, a process that is already underway for exogenous reasons. But in Argentina this ratio is much lower, due to the large redistributive flat benefit for which women are eligible after only ten years of contributions. This may slow down the secular increase in women's labor force participation rates in Argentina.

Single Women Don't Fare as Well as Married Women

Given the importance of the joint annuity, never-married or divorced women end up with lower lifetime retirement incomes than otherwise comparable married women. Divorce is rare in Latin America but it is increasing. In Chile it just became legal in 2004. In Mexico the proportion of divorced women doubled over the last three decade. None of these countries provide for the automatic splitting of accumulations or pension rights upon divorce. Instead, this must be negotiated in each case. Cohabitation is not uncommon among low educated groups in Latin America and many children are born out of wedlock. Non-married women with children are entitled to a small joint pension upon the death of the father, if he has been supporting them. However, we do not know how consistently this regulation has been implemented.

Our data do not allow us to model the work histories of never-married women, but using full career women without widow's benefit as a proxy, we find that the average member of this group is well above the poverty line, receives a lifetime benefit in the new system that is 70-80 percent that of men (while full career married women get 100 percent or more), and obviously does not gain from the treatment of the joint pension in the new system.

Pension Reform May Have Increased the Gender Gap in Other Countries

Preliminary results indicate that women in the transition economies of Eastern and Central Europe have not done as well as in Latin America, because of different initial conditions and design features in the new systems. Special privileges that women previously received (such as credits for time spent in maternity and child care) have been weakened. Survivors' benefits have been greatly reduced and in some cases are being phased out. The new public benefits are less targeted to low earners than in Latin America; instead, they reinforce the close benefit-contribution linkage in the funded defined contribution plan. Payout requirements do not give the same strong protection to widows; joint annuities are generally not required. Retirement age, hence pension accumulations, are lower for women than for men, but this hurts them more in the new DC systems than the old DB systems. At the same time, women's relative wages and labor force participation rates have been decreasing and life expectancy increasing.

Consequently, it appears that the gender gap is rising in the transition economies. Estimated female/male pension ratios have fallen from 95-100% in the old systems to 50-60% projected for the new systems (Castel and Fox 2001; Woycicka 2003). A partial decomposition of the gender gap for Poland indicates that own-annuities received by average women will be only 45% as much as those of men if gender-specific mortality tables are used in pension computations, 57% if unisex mortality tables are used and 73% if retirement age is equalized at 65. The remaining differential of 27% is due mainly to the growing wage disparities between men and women (Woycicka 2003). This decomposition does not take account of survivors' benefits or the minimum pension, which might raise these ratios for low earners and married women.

Sweden has also adopted a pension reform that includes individual accounts. An analysis of its projected gender impact, using the same methodology as for Latin America, produces consistent results. As in all the other countries studied, women's own annuities are smaller than those of men, but their lifetime benefit/contribution rates and replacement rates exceed those of men—because they are disproportionate recipients of redistributions through the minimum pension guarantee and unisex tables, which are required in both the public and private pillars. Sweden does not have a joint annuity requirement nor does the public pillar offer a survivor's benefit, except on a very temporary basis. Moreover, Sweden's reform moved from a wage-indexed flat benefit for all old people to a price-indexed minimum pension guarantee that is more narrowly targeted.

As a result of its minimum pension and higher female labor force participation rates and wages, the gender gap in Sweden is smaller than that in Latin America. But as a result of the changes just described, women's relative position deteriorated in the new system (Stahlberg et al 2006a and b). Since the Swedish MPG does not require any work history in order to qualify, it benefits women who have not worked in the market but produces a work disincentive for women with low potential wage rates, since they get little or no incremental pension for the high required contribution rate.

Which Design Features Matter Most to Women?

Thus, the relative gains to women observed in Latin America are not inevitable--detailed design features matter. Several key lessons emerge for policy-makers who wish to improve gender outcomes during a social security reform:

Rules of the System Should Not Penalize Women's Work in the Labor Market

This means that:

Retirement age should be equalized for men and women. While earlier retirement for women was a privilege in the old systems, it creates a problem in the new systems. Women who underestimate their longevity retire early, but may regret this when they age, their pensions are low and their choice is irreversible. Equalization of retirement ages between the genders would substantially narrow the gender gap in pensions, without requiring public or household transfers. It would ensure that lifetime retirement savings are allocated to old old age instead of young old age. It is especially important for single women who will not receive a boost from the joint pension. It increases the country's labor supply, savings and GDP.

Women who have built their own pension should not have to give it up to get the widow's benefit. In many traditional systems, working women must choose between the two. Thus, women who work for much of their lives pay substantial contributions with no incremental benefit—the contribution is a pure tax. In contrast, in the new Latin American systems the widow keeps her own annuity as well as the joint annuity that her husband purchases. This raises her retirement income when old and also encourages her to work and contribute when she is young.

Women's contributions in early adult years should accumulate pension credits that keep pace with the real rate of return. In many defined benefit systems, the reference wage earned by a woman who works in early adulthood loses relative value compared with the average wage in society by the time she retires. In contrast, in defined contribution systems her accumulated contributions increase with the rate of return, which usually exceeds wage growth. So her early years of work and contributions are more heavily rewarded, which may encourage formal labor market participation.

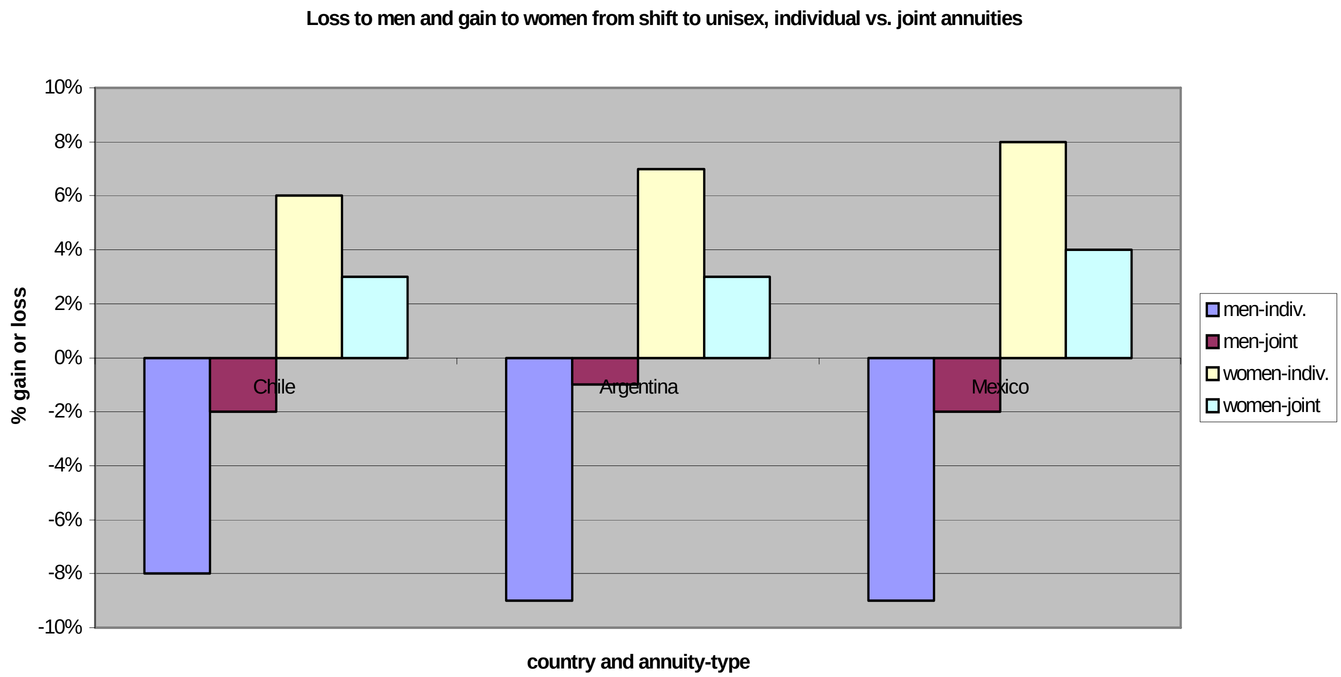
Individual Accounts Should be Accompanied by a Strong Safety Net

Because of their lower lifetime earnings, a redistributive public benefit is particularly important to women. The MPG in Chile, the social quota in Mexico and the flat benefit in Argentina are projected to improve women's lifetime pensions substantially and thereby narrow the gender gap.

Two dangers to be avoided are: eligibility rules that largely exclude women (such as the 24-years required for the MPG in Mexico) *and rules that discourage their participation in the formal labor market* (such as the high marginal tax rate for low earners who have just met the 20-year eligibility rule in Chile).

The public benefit should be at least partially wage-indexed for successive cohorts. It is essential that the public benefit should rise at least as fast as prices. Otherwise, its purchasing power will fall over the lifetime of the retiree, and this will be particularly harmful to women, who live longer than men. But this may not be enough. Our simulations for Chile showed that if the MPG is price-indexed it will have a very limited equalizing role in the future, as wages and own-annuities grow. The floor set by the price-indexed MPG would be far below the average standard of living of workers, for future cohorts. A wage-indexed MPG avoids this danger but it is costlier and produces larger work disincentives for low earners. A compromise method is Swiss indexation—half to wages and half to prices—or longevity indexation,

Figure 2: Loss to Men and Gain to Women From Unisex Requirement is Much Less for Joint Than for Individual Annuity



which decreases a wage-indexed monthly benefit on par with increases in average life expectancy. Policy-makers and citizens will have to evaluate this trade-off between saving money versus maintaining the relevance of the safety net over time. 2

Payout Provisions from the Individual Accounts Strongly Influence Women's Retirement Security

Annuitization, which provides a guaranteed income for life, is especially important for women, in view of their greater longevity. In Latin America workers can either purchase an annuity or take gradual withdrawals. If the person lives longer than expected, the gradual withdrawal may become very small, while voluntary savings have been used up. This problem can be prevented by mandatory annuitization, at least up to a threshold that is well above the poverty line.

Inflation insurance is important for the income from the individual account. Annuities are price-indexed in Chile, facilitated by the prevalence of indexed bonds and other financial instruments in which insurance companies can invest. It will be more difficult and costly in many other countries because of the paucity of indexed instruments.

Joint pensions should be required in the payout stage. Women with low years of market work have often done so as part of an informal family contract in which the husband agrees to support the wife in exchange for the time she spends caring for the family. In Latin America this contract is enforced even after his death by requiring that all husbands purchase survivors' insurance before retirement and joint pensions upon retirement. This is an important requirement to build into any individual account system. It protects widows, whether or not they have worked, while not imposing a tax on single men and women or otherwise burdening the public treasury.

Mechanisms for handling accumulations and joint pensions in the case of divorce should be spelled out. These rights have not yet been defined in Latin America but this is clearly needed. Account-splitting is a logical solution when marriages dissolve.

Unisex tables have only a small impact on joint annuities. Requiring the use of unisex mortality tables has been recommended to remove differential longevity as a reason for differences in annuity payouts between men and women. However, such a requirement is sometimes opposed on grounds that it implies a redistribution of lifetime benefits from men to women and raises potential creaming and selection problems (insurance companies will try to select the "good" risks—men--while men may try to avoid annuitization). Simulations show that, under Latin American conditions, unisex tables raise monthly payouts for women by 6-7% and reduce those for men by 8-9%, if individual annuities are involved. But for joint annuities, these effects are much smaller—only 2-3%. The reason is that mortality rates of both husband and wife are already taken into account in the joint annuity calculation. Thus, an added bonus of joint annuities is that they defuse the contentious unisex issue and the problems that unisex creates (Figure 2).

Applicability to Countries with Pay-as-you-Go Defined Benefit Pension Systems

While our focus has been on multi-pillar reforms, and most of our examples were from countries that had made such reforms, many counterpart policy choices could also be made in traditional pay-as-you-go systems, such as the US. For example, some traditional systems still permit women to retire earlier than men. This reduces the size of women's pensions, thereby contributing to the heavy incidence of female poverty in later years, and at the same time it implies a larger aggregate public expenditure on women's pensions in young-old age, which impedes the systems' fiscal sustainability. Equalized retirement ages should surely be part of a program of gender equality. The US already has equal retirement ages, and other OECD countries either have it or are now moving toward it.

Many countries with traditional systems provide widow's benefits based on the husband's pension size, without requiring the husband to finance it. Since the money then comes out of the public purse, women are often required to give up their own pension to get the widow's pension (which is larger). The US is an example of countries that have such provisions. [3] This is likely to deter women's market work, since the payroll tax has no corresponding benefit to them. While appearing to favor women, it really keeps them in a state of dependence on their husband's earnings. These systems could require married men to finance the widow's benefit by taking a reduced pension of their own, and could then allow women to keep the widow's benefit in addition to their own-pension. The same principle could apply to divorced women for benefit credits that were accumulated during the marriage. This will help to make women more financially independent and less likely to suffer a steep fall in standard of living when their husband dies, and may also increase the female labor supply in the broader economy.

A strong safety net that protects low earners and that rises with the wage level for successive cohorts, is essential for women. Most OECD countries have such a safety net in the form of a flat or broad means-tested pension. The US has a progressive defined benefit plan but no meaningful minimum pension and only a narrow means-tested benefit. As a result, poverty among older women is higher in the US than in other OECD countries, and if the US moves toward pure price indexation of benefits for future cohorts, the relative position of older women will further deteriorate. A wage-indexed minimum pension for the very old would improve the situation of women at the low end of the income spectrum.

More broadly, policies and behaviors that improve women's labor market role during the working stage, will also improve them during the retirement stage, both in the traditional and newer multi-pillar systems. Indeed, this is the only way to ultimately achieve gender equality in pensions.

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Endnotes

1 The survivor's benefit for the husband is worth much less in expected present value terms because he is much less likely to outlive his wife and her primary benefit is smaller than his. In Chile, only husbands are required to purchase joint pensions.

2 The issue of price versus wage indexation of the public benefit has recently surfaced in the US, as part of the debate over how to reform social security. The US social security system right now price indexes the benefit once the individual has retired, but wage indexes the first pension received so that successive cohorts start out with pensions that have gone up with wage growth. Some policy-makers have proposed full price indexation, so that the real benefit amount will be frozen in today's real value. Critics point out that this will lead the benefit to eventually become much smaller relative to the average wage and the average standard of living in society. One compromise would wage index for the bottom half while price indexing for the upper half of the income distribution (progressive indexation). This would lead eventually to a flat benefit. Another compromise would index the entire public benefit half to wages and half to prices (Swiss indexation) or inversely to longevity increases, which is roughly equivalent.

3 In the United States, a spouse over the age of 65 receives a benefit that is 50 percent of her husband's benefit, even if she hasn't worked and contributed, and after he dies she gets 100 percent of his benefit. This means that married couples receive larger benefits than (and are subsidized by) singles with the same total earnings and couples with one wage-earner get larger benefits than (and are subsidized by) couples in which both husband and wife work, with the same total earnings. Furthermore, the nonworking wife in a single-earner family gets a larger benefit than the wife in a dual earner family with the same total family income. For examples see Shirley and Spiegler, 1998.

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